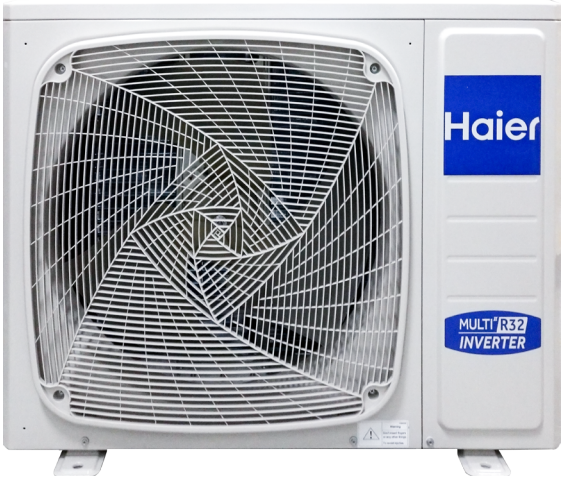



# R32 Super Match Plus Service Manual

SYJS.2022.A Edition: 2022-01

Haier

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# 1 . General Information

## 1.1 Line up

| | Model | Apperance |
|---|---|---|
| Outdoor Unit | 1U71S2SG1FA |  |
| | 1U71S2SR2FA |  |
| | 1U90S2SS2FA<br>1U105S2SS1FA<br>1U105S2SS2FA<br>1U105S2SS1FB |  |
| | 1U125S2SN1FA<br>1U125S2SN1FB<br>1U140S2SP1FA<br>1U140S2SP1FB<br>1U140S2SN1FA<br>1U140S2SN1FB<br>1U160S2SP1FB<br>1U125S2SN2FA<br>1U125S2SN2FB<br>1U140S2SP2FA<br>1U140S2SP2FB |  |
| | 3U55S2SR5FA<br>3U70S2SR5FA |  |
| | 4U75S2SR5FA<br>4U85S2SR5FA |  |
| | 5U90S2SS5FA<br>5U105S2SS5FA<br>5U125S2SN1FA |  |

| | | Model | Appearance |
|---|---|---|---|
| Indoor Unit | 4-Way Cassette | AB25S2SC1FA<br>AB35S2SC1FA |  |
| | | AB35S2SC2FA<br>AB50S2SC2FA |  |
| | | AB50S2SC1FA<br>AB71S2SG1FA |  |
| | | ABH071H1ERG<br>ABH105H1ERG |  |
| | | ABH125K1ERG<br>ABH140K1ERG<br>ABH160K1ERG | |
| | Low ESP Duct | AD25S2SS1FA<br>AD35S2SS1FA<br>AD25S2SS2FA<br>AD35S2SS2FA |  |
| | | AD50S2SS1FA<br>AD50S2SS2FA<br>AD71S2SS1FA<br>AD71S2SS2FA |  |
| | Medium ESP Duct | AD35S2SM3FA |  |
| | | AD50S2SM1FA<br>AD71S2SM1FA |  |
| | | AD50S2SM3FA<br>AD71S2SM3FA<br>AD71S2SM6FA<br>AD90S2SM3FA<br>AD100S2SM6FA |  |
| | | AD105S2SM3FA |  |
| | | AD125S2SM3FA<br>AD125S2SM8FA<br>AD140S2SM3FA<br>AD140S2SM8FA<br>AD160S2SM3FA |  |

| | | Model | Appearance |
|---|---|---|---|
| Indoor Unit | Console | AF25S2SD1FA<br>AF35S2SD1FA<br>AF42S2SD1FA |  |
| | Convertible | AC35S2SG1FA<br>AC50S2SG1FA |  |
| | | AC71S2SG1FA<br>AC105S2SH1FA |  |
| | | AC125S2SK1FA<br>AC140S2SK1FA<br>AC160S2SK1FA |  |
| | Cabinet | AP140S2SK1FA |  |

## 2 . Indoor Units-4-Way Cassette Type

### 2.1 Specification

| Item | | | Model | AB25S2SC1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 2600 | 3200 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.0 | |
| Indoor unit | Power supply | | | 1PH, 220~240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*1 | |
| | | Speed(H-M-L) | r/min | 690/620/560/500 | |
| | | Fan motor output/input power | W | 10/15 | |
| | | Air-flows (H-M-L) | m³/h | 620/520/450/350 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 1 | |
| | | Total area | m² | 0.272 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 570*570*260 | |
| | | Package | mmxmmxmm | 718*680*380 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 26/32 | |
| | Control type(Remote/Wired) | | | Remote YR-HQS01(O)<br>Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | 95 | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 52 | |
| | | Sound pressure level | dB(A) | 36/33/30/27 | |
| | Weight(Net/Shipping) | | kg/kg | 17/20 | |
| Panel | Panel model(Color) | | | PB-700KB | |
| | Dimension | External(L*W*H) | mmxmmxmm | 700/700/60 | |
| | | Package(L*W*H) | mmxmmxmm | 740/750/115 | |
| | Weight(Net/Shipping) | | kg/kg | 2.8/4.8 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35(1/4) | |
| | | Gas | mm | Φ9.52(3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AB25S2SC2FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 2600 | 3200 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.0 | |
| Indoor unit | Power supply | | | 1PH, 220~240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*1 | |
| | | Speed(H-M-L) | r/min | 690/620/560/500 | |
| | | Fan motor output/input power | W | 10/15 | |
| | | Air-flows (H-M-L) | m³/h | 620/520/450/350 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 1 | |
| | | Total area | m² | 0.272 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 570*570*260 | |
| | | Package | mmxmmxmm | 718*680*380 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 26/32 | |
| | Control type(Remote/Wired) | | | Remote YR-HQS01(O)<br>Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | 95 | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 52 | |
| | | Sound pressure level | dB(A) | 36/33/30/27 | |
| | Weight(Net/Shipping) | | kg/kg | 17/20 | |
| Panel | Panel model(Color) | | | PB-620KB(White) | |
| | Dimension | External(L*W*H) | mmxmmxmm | 620*620*60 | |
| | | Package(L*W*H) | mmxmmxmm | 660*660*115 | |
| | Weight(Net/Shipping) | | kg/kg | 2.8/4.8 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35(1/4) | |
| | | Gas | mm | Φ9.52(3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AB35S2SC1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 3500 | 4000 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.5 | |
| Indoor unit | Power supply | | | 1PH, 220~240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*1 | |
| | | Speed(H-M-L) | r/min | 690/620/560/500 | |
| | | Fan motor output/input power | W | 10/15 | |
| | | Air-flows (H-M-L) | m³/h | 620/520/450/350 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.544 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 570*570*260 | |
| | | Package | mmxmmxmm | 718*680*380 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 26/32 | |
| | Control type(Remote/Wired) | | | Remote YR-HQS01(O)<br>Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | 95 | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 52 | |
| | | Sound pressure level | dB(A) | 36/33/30/27 | |
| | Weight(Net/Shipping) | | kg/kg | 18.5/22 | |
| Panel | Panel model(Color) | | | PB-700KB | |
| | Dimension | External(L*W*H) | mmxmmxmm | 700/700/60 | |
| | | Package(L*W*H) | mmxmmxmm | 740/750/115 | |
| | Weight(Net/Shipping) | | kg/kg | 2.8/4.8 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35(1/4) | |
| | | Gas | mm | Φ9.52(3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AB35S2SC2FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 3500 | 4000 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.5 | |
| Indoor unit | Power supply | | | 1PH, 220~240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*1 | |
| | | Speed(H-M-L) | r/min | 690/620/560/500 | |
| | | Fan motor output/input power | W | 10/15 | |
| | | Air-flows (H-M-L) | m³/h | 620/520/450/350 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.544 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 570*570*260 | |
| | | Package | mmxmmxmm | 718*680*380 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 26/32 | |
| | Control type (Remote/Wired) | | | Remote YR-HQS01(O)<br>Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | 95 | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 52 | |
| | | Sound pressure level | dB(A) | 36/33/30/27 | |
| | Weight(Net/Shipping) | | kg/kg | 18.5/22 | |
| Panel | Panel model(Color) | | | PB-620KB(White) | |
| | Dimension | External(L*W*H) | mmxmmxmm | 620*620*60 | |
| | | Package(L*W*H) | mmxmmxmm | 660*660*115 | |
| | Weight(Net/Shipping) | | kg/kg | 2.8/4.8 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35(1/4) | |
| | | Gas | mm | Φ9.52(3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AB50S2SC1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 5000 | 5500 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 2.2 | |
| Indoor Unit | Power Supply | | | 1PH, 220~240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Axial Fiow*1 | |
| | | Speed (H-M-L) | r/min | 800/700/600 | |
| | | Fan Motor Output/Input Power | W | 33/50 | |
| | | Air-Flows (H-M-L) | m³/h | 700/620/500 | |
| | | External Static Pressure | pa | 0 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | 1.25 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 570x570x260 | |
| | | Package | mmxmmxmm | 718x680x380 | |
| | Drainage Pipe (Material, I.D/O.D) | | mm | PVC 27/31 | |
| | Control Type (Remote/Wired) | | | Remote YR-HQS01(O)<br>Wired: YR-E17(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise Level (H-M-L) | Sound Power Level | dB (A) | 55 | |
| | | Sound Pressure Level | dB (A) | 42/37/35 | |
| | Weight (Net/Shipping) | | kg/kg | 18.5/22 | |
| Panel (Optional) | Panel Model (Color) | | | PB-700KB | |
| | Dimension | External (L*W*H) | mmxmmxmm | 700/700/60 | |
| | | Package (L*W*H) | mmxmmxmm | 740/750/115 | |
| | Weight (Net/Shipping) | | kg/kg | 2.8/4.8 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ12.7 (1/2) | |
| | Connecting Method | | | Flared | |

Norminal condition: indoor temperature (Cooling): 27˚C DB/19˚C WB, indoor temperature (Heating): 20˚C DB
Outdoor temperature (Cooling): 35˚C DB/24˚C WB, outdoor temperature (Heating): 7˚C DB/6˚C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AB50S2SC2FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 5000 | 5500 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 2.2 | |
| Indoor Unit | Power Supply | | | 1PH, 220~240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Axial Fiow*1 | |
| | | Speed (H-M-L) | r/min | 800/700/600 | |
| | | Fan Motor Output/Input Power | W | 33/50 | |
| | | Air-Flows (H-M-L) | m³/h | 700/620/500 | |
| | | External Static Pressure | pa | 0 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | 1.25 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 570x570x260 | |
| | | Package | mmxmmxmm | 718x680x380 | |
| | Drainage Pipe (Material, I.D/O.D) | | mm | PVC 27/31 | |
| | Control Type (Remote/Wired) | | | Remote YR-HQS01(O)<br>Wired: YR-E17(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise Level (H-M-L) | Sound Power Level | dB (A) | 55 | |
| | | Sound Pressure Level | dB (A) | 42/37/35 | |
| | Weight (Net/Shipping) | | kg/kg | 18.5/22 | |
| Panel (Optional) | Panel Model (Color) | | | PB-620KB (White) | |
| | Dimension | External (L*W*H) | mmxmmxmm | 620*620*60 | |
| | | Package (L*W*H) | mmxmmxmm | 660*660*115 | |
| | Weight (Net/Shipping) | | kg/kg | 2.8/4.8 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ12.7 (1/2) | |
| | Connecting Method | | | Flared | |

Norminal condition: indoor temperature (Cooling): 27˚C DB/19˚C WB, indoor temperature (Heating): 20˚C DB
Outdoor temperature (Cooling): 35˚C DB/24˚C WB, outdoor temperature (Heating): 7˚C DB/6˚C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AB71S2SG1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 7100 | 8000 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 1.0 | |
| Indoor Unit | Power Supply | | | 1PH, 220~240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 650/600/550/500 | |
| | | Fan Motor Output/Input Power | W | 45/50 | |
| | | Air-Flows (H-M-L) | m³/h | 1260/1070/820/680 | |
| | | External Static Pressure | pa | 0 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | / | |
| | | Temp.Scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 840*840*204 | |
| | | Package | mmxmmxmm | 990*990*310 | |
| | Drainage Pipe (Material, I.D/O.D) | | mm | PVC 26/32 | |
| | Control Type (Remote/Wired) | | | Remote YR-HQS01(O)<br>Wired: YR-E17(O) | |
| | Fresh Air Hole Dimension | | mm | 71.3 | |
| | Electricity Heater | | kW | None | |
| | Noise Level (H-M-L) | Sound Power Level | dB (A) | 55 | |
| | | Sound Pressure Level | dB (A) | 36/33/29/26 | |
| | Weight (Net/Shipping) | | kg/kg | 27/32 | |
| Panel (Optional) | Panel Model (Color) | | | PB-950KB | |
| | Dimension | External (L*W*H) | mmxmmxmm | 950/950/50 | |
| | | Package (L*W*H) | mmxmmxmm | 1000/1000/110 | |
| | Weight (Net/Shipping) | | kg/kg | 6.5/9 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting Method | | | Flared | |

Norminal condition: indoor temperature (Cooling): 27˚C DB/19˚C WB, indoor temperature (Heating): 20˚C DB
Outdoor temperature (Cooling): 35˚C DB/24˚C WB, outdoor temperature (Heating): 7˚C DB/6˚C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | ABH105H1ERG/1U105S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 9.0 (2.5-10.0) | 10.1 (3.0-10.5) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 3.12 (0.5-4.0) | 2.90 (0.5-4.0) |
| Max. power input | | | W | 4.0 | 4.0 |
| EER or COP | | | W/W | 2.88 (A) | 3.45 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 3 | |
| Power cable | | | | 4.0mm$^2$ | |
| Power source | | | N, V, Hz | 1PH, 220~240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 13.6/16.5 | 12.6/16.5 |
| Start Current | | | A | 0.58 | |
| Circuit breaker | | | A | 5 | 5 |
| Indoor unit | Unit model (color) | | | ABH105H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed (H-M-L) | r/min | 650/550/450/400 | |
| | | Fan motor output/ input power | W | 82/134 | |
| | | Air-flow (H-M-L) | m³/h | 1680/1530/1320/1190 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 2 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/246 | |
| | | Package（L×W×H） | mm×mm×mm | 990/990/310 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 26/32 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 95 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB(A) | 62 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 45/42/38/34 | |
| | Pipe | Liquid Pipe | mm | 9.52 | |
| | | Gas Pipe | mm | 15.88 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 31/36 | |
| | Panel | Model | | PB-950KB | |
| | | External dimensions (W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions (W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9 | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27$^O$CDB/19$^O$CWB, indoor temperature (heating): 20$^O$CDB
Outdoor temperature (cooling): 35$^O$CDB/24$^O$CWB, outdoor temperature (heating): 7$^O$CDB/6$^O$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

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| Item | | | Model | ABH105H1ERG/1U105S2SS1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 9.2 (2.5-10.0) | 10.5 (3.0-11.0) |
| Sensible heat ratio | | | | 0.81 | |
| Total power input | | | KW | 3.25 (0.5-4.0) | 3.10 (0.5-4.0) |
| Max. power input | | | W | 4000 | 4000 |
| EER or COP | | | W/W | 3.0 (A) | 3.5 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 1.78 | |
| Power cable | | | | H07RN-F 5G 4.0mm$^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 5.5A(0.5-6.8A)/6.8A | 5.3(0.5-6.8A)/6.8A |
| Start Current | | | A | 1 | |
| Circuit breaker | | | A | 6.5 | 6.5 |
| Indoor unit | Unit model (color) | | | ABH105H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed (H-M-L) | r/min | 750/700/650/500 | |
| | | Fan motor input power | kW | 0.134 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow(H-M-L) | m³/h | 1680/1530/1320/1190 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840*840*246 | |
| | | Package （L×W×H） | mm×mm×mm | 990*990*310 | |
| | Drainage pipe （material , I.D./O.D.） | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(S) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 63 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 45/42/38/34 | |
| | Weight (Net / Shipping) | | kg / kg | 31/36 | |
| | Panel | Model | | PB-950KB/PB-950MB | |
| | | External dimensions (W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions (W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9.0 | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB
Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH125K1ERG/1U125S2SN1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.0 (2.4~12.7) | 12.3 (1.8~13.0) |
| Sensible heat ratio | | | | 0.77 | |
| Total power input | | | KW | 4.3 (0.3-5.6) | 3.8 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.64 (A) | 3.08 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 2.02 | |
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Power source | | | N, V, Hz | 1PH, 220~240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 18.5 (1.5-26.0)/26 | 16.0 (1.5-26.0)/26 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | ABH125K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed(H-M-L) | r/min | 750/650/500/400 | |
| | | Fan motor output/ input power | W | 90/120 | |
| | | Air-flow (H-M-L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990/990/380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 47/44/38/34 | |
| | Panel | Model | | PB-950KB | |
| | | External dimensions(W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions(W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9 | |
| | Pipe | Liquid Pipe | mm | 9.52 | |
| | | Gas Pipe | mm | 15.88 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 32/38 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH125K1ERG/1U125S2SN1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.1 (2.4~12.7) | 12.4 (1.8~13.0) |
| Sensible heat ratio | | | | 0.77 | |
| Total power input | | | KW | 4.2 (0.3-5.6) | 3.7 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.64 (A) | 3.08 (A) |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 2.02 | |
| Power cable | | | | H05RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380~415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.1 (1.3-9.5)/9.5A | 5.7 (2.4-9.5)A/9.5A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | ABH125K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed (H-M-L) | r/min | 750/650/500/400 | |
| | | Fan motor output/ input power | W | 90/120 | |
| | | Air-flow (H-M-L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990/990/380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17 (O) | |
| | | | Infrared | YR-HQS01 (O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 47/44/38/34 | |
| | Panel | Model | | PB-950KB | |
| | | External dimensions (W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions (W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9 | |
| | Pipe | Liquid Pipe | mm | 9.52 | |
| | | Gas Pipe | mm | 15.88 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 32/38 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH125K1ERG/1U125S2SN2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.3(3.0~13.0) | 12.7(3.5~13.5) |
| Sensible heat ratio | | | | 0.77 | |
| Total power input | | | kW | 4.84(0.3-6.0) | 4.44(0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.54 | 2.86 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 2.02 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Running /Max.Running current | | | A / A | 21.0(1.5-26.0)A/26A | 19.3(1.5-26.0)A/26A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | ABH125K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed(H×M×L) | r/min | 750/650/500/400 | |
| | | Fan motor input power | kW | 0.12 | |
| | | Fan motor output power | kW | 0.09 | |
| | | Air-flow(H×M×L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990*990*380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(S) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 47/44/38/34 | |
| | Panel | Model | kg / kg | 32/38 | |
| | | External dimensions (W/D/H) | | PB-950KB/PB-950MB | |
| | | Shipping dimensions (W/D/H) | mm | 950/950/50 | |
| | | Net weight/Shipping weight | mm | 1000/1000/110 | |
| Piping | Refrigerant | Type / Charge | kg | 6.5/9.0 | |
| | | Recharge quantity | g | R32/2300 | |
| | Pipe | Liquid | g/m | 45 | |
| | | Gas | mm | 9.52 | |
| | Between I.D &O.D | MAX.Drop | mm | 15.88 | |
| | | MAX.Piping length | m | 30 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH125K1ERG/1125S2SN2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.4(3.0~13.0) | 12.8(3.5~13.5) |
| Sensible heat ratio | | | | 0.77 | |
| Total power input | | | kW | 4.8(0.3-6.0) | 4.37 (0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.58 | 2.93 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 2.02 | |
| Power cable | | | | H05RN-F 5G 4.0 mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 7.3(1.3-9.1)/9.1A | 6.6(2.4-9.1)A/9.1A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | ABH125K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed(H×M×L) | r/min | 750/650/500/400 | |
| | | Fan motor input power | kW | 0.12 | |
| | | Fan motor output power | kW | 0.09 | |
| | | Air-flow(H×M×L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990*990*380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(S) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 47/44/38/34 | |
| | Panel | Model | kg / kg | 32/38 | |
| | | External dimensions (W/D/H) | | PB-950KB/PB-950MB | |
| | | Shipping dimensions (W/D/H) | mm | 950/950/50 | |
| | | Net weight/Shipping weight | mm | 1000/1000/110 | |
| Piping | Refrigerant | Type / Charge | kg | 6.5/9.0 | |
| | | Recharge quantity | g | R32/2300 | |
| | Pipe | Liquid | g/m | 45 | |
| | | Gas | mm | 9.52 | |
| | Between I.D &O.D | MAX.Drop | mm | 15.88 | |
| | | MAX.Piping length | m | 30 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH140K1ERG/1U140S2SP1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.3 (2.8~14) | 14.5 (3.0~15.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 4.39 | 4.68 |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 2.80(A) | 3.1A) |
| Dehumidifying capacity | | | 10-³×m³/h | 5.2 | |
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Power source | | | N, V, Hz | 1PH, 220~240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19.0 (8.7-32.0)/32.0 | 19.5 (8.7-32.0)/32 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | ABH140K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed (H-M-L) | r/min | 750/650/500/400 | |
| | | Fan motor output/ input power | W | 90/120 | |
| | | Air-flow (H-M-L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990/990/380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 47/44/38/34 | |
| | Panel | Model | | PB-950KB | |
| | | External dimensions (W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions (W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9 | |
| | Pipe | Liquid Pipe | mm | 9.52 | |
| | | Gas Pipe | mm | 15.88 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 32/38 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH140K1ERG/1U140S2SP1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.2(2.8~14) | 14.3(3.0~15.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 4.47 | 4.67 |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 2.73(A) | 3.06A) |
| Dehumidifying capacity | | | 10-³×m³/h | 5.2 | |
| Power cable | | | | H05RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380~415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 7.2/11.0 | 7.4/11.0 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | ABH140K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed(H-M-L) | r/min | 750/650/500/400 | |
| | | Fan motor output/ input power | W | 90/120 | |
| | | Air-flow(H-M-L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990/990/380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 47/44/38/34 | |
| | Panel | Model | | PB-950KB | |
| | | External dimensions(W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions(W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9.0 | |
| | Pipe | Liquid Pipe | mm | 9.52 | |
| | | Gas Pipe | mm | 15.88 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 32/38 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH140K1ERG/1U140S2SP2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.6(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.86 | 4.75 |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.80 | 3.10 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 5.2 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1PH~,220~240, 50/60Hz | |
| Running /Max.Running current | | | A / A | 21.1(8.7-26)/26 | 20.7(8.7-26)/26 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | ABH140K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed(H×M×L) | r/min | 750/650/500/400 | |
| | | Fan motor input power | kW | 0.12 | |
| | | Fan motor output power | kW | | |
| | | Air-flow(H×M×L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990*990*380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(S) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 47/44/38/34 | |
| | Weight (Net / Shipping) | | kg / kg | 32/38 | |
| | Panel | Model | | PB-950KB/PB-950MB | |
| | | External dimensions(W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions(W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9.0 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ABH140K1ERG-1U140S2SP2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.6(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.98 | 4.67 |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.73 | 3.06 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 5.2 | |
| Power cable | | | | H05RN-F 5G 4.0mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 7.6/9.1 | 7.1/9.1 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | ABH140K1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed(H-M-L) | r/min | 750/650/500/400 | |
| | | Fan motor input power | kW | 0.12 | |
| | | Fan motor output power | kW | 0.09 | |
| | | Air-flow(H-M-L) | m³/h | 1950/1600/1440/1200 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 840/840/288 | |
| | | Package（L×W×H） | mm×mm×mm | 990*990*380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(S) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 47/44/38/34 | |
| | Weight (Net / Shipping) | | kg / kg | 32/38 | |
| | Panel | Model | | PB-950KB/PB-950MB | |
| | | External dimensions(W/D/H) | mm | 950/950/50 | |
| | | Shipping dimensions(W/D/H) | mm | 1000/1000/110 | |
| | | Net weight/Shipping weight | kg | 6.5/9.0 | |
| Piping | Refrigerant | Type / Charge | g | R32 / 3500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB
Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

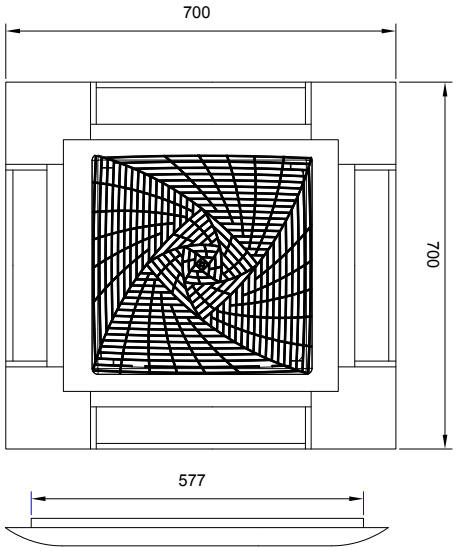
| Item | Model | | | ABH160K1ERG /1U160S2SP1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 15(4.5~16) | 16(5~17) |
| Sensible heat ratio | | | | 0.78 | |
| Total power input | | | KW | 5.03(1.0~6.5) | 5.26(1.0~6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 2.98(A) | 3.04(A) |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 6.49 | |
| Power cable | | | | H05RN-F 5G 4.0mm2 | |
| Power source | | | N, V, Hz | 3N~/380-415V/50/60Hz | |
| Running /Max.Running current | | | A / A | 7.3/10 | 7.6/10 |
| Start Current | | | A | 2 | |
| Circuit breaker | | | A | 5 | |
| Indoor unit | Unit model (color) | | | ABH160K1ERG/INDOOR UNIT | |
| | Fan | Type × Number | | CENTRIFUGALX1 | |
| | | Speed(H-M-L) | r/min | 900/850/750/650/600 | |
| | | Fan motor output/ input power | W | 90/120 | |
| | | Air-flow(H-M-L) | m³/h | 2050/16001440/1220 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 2 | |
| | | Total Are a | m² | / | |
| | Dimension | External | mm×mm×mm | 840*840*288 | |
| | | Package | mm×mm×mm | 990*990*380 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 13/16 | |
| | Controller | | Wired | YR-HD01(O) | |
| | (O-Optional,S-Standard) | | Wireless | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 71 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 65 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 48/44/38/34 | |
| | Pipe | Liquid Pipe mm | | 9.52 | |
| | | Gas Pipe mm | | 19.05 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 38/32 | |
| | Panel | Model | | PB-950 | |
| | | External dimensions(W/D/H) | mm | 950*950*50 | |
| | | Shipping dimensions(W/D/H) | mm | 1000*1000*110 | |
| | | Net weight/Shipping weight | | 6.5/9 | |
| PIPING | Refrigerant | Type / Charge | g | R32/3500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 19.05 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |
| cooling | Pdesignc(kW): | 15 | SEER/CLASS | 5.96/A+ | QCE(Annual electricity consumption for cooling)kWh: 880 |

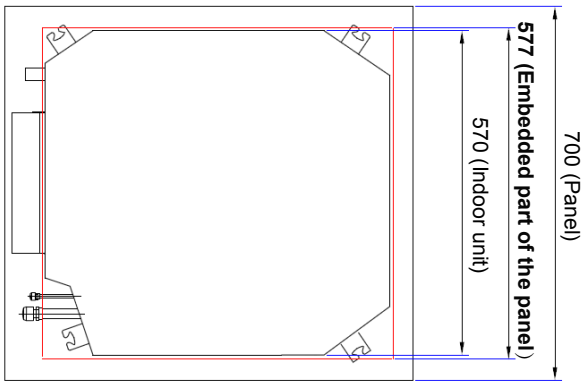
| Item | | | Model | | | ABH160K1ERG /1U160S2SP1FB | |
|---|---|---|---|---|---|---|---|
| heating | Average | Pdesignh(-10°C) | 11kW | SCOP/CLASS | 3.99/A | QHE(Annual electricity consumption for heating)kWh： | 3859 |
| | Warmer | Pdesignh(2°C) | 6.01 | SCOP/CLASS | 5.0/ A++ | QHE(Annual electricity consumption for heating)kWh： | 1707 |
| | Colder | Pdesignh(-22°C) | / | SCOP/CLASS | / | QHE(Annual electricity consumption for heating)kWh： | / |
| Tdesignh：-10˚C | | | Tbivalent：-10˚C | | TOL：-10˚C | Elbu:0 | |
| Max. cooling condition | | | Indoor temperature： 32˚C /23˚C | | Max. heating condition | Indoor temperature：27˚C /-˚C | |
| | | | Outdoor temperature： 46˚C /-˚C | | | Outdoor temperature：24˚C /18˚C | |
| Norminal condition: indoor temperature (cooling): 27˚C DB/19˚C WB, indoor temperature (heating): 20˚C DB<br>Outdoor temperature(cooling): 35˚C DB/24˚C WB, outdoor temperature(heating): 7˚C DB/6˚C WB<br>The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level. | | | | | | | |

## 2.2 Dimension

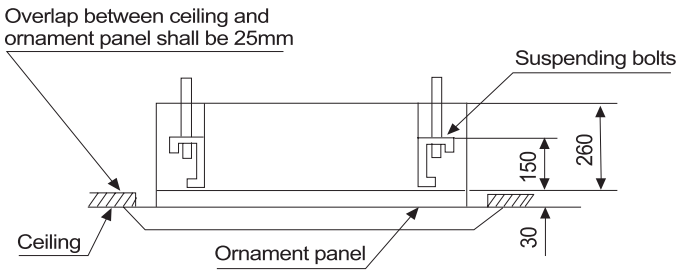
AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA

PB-700KB



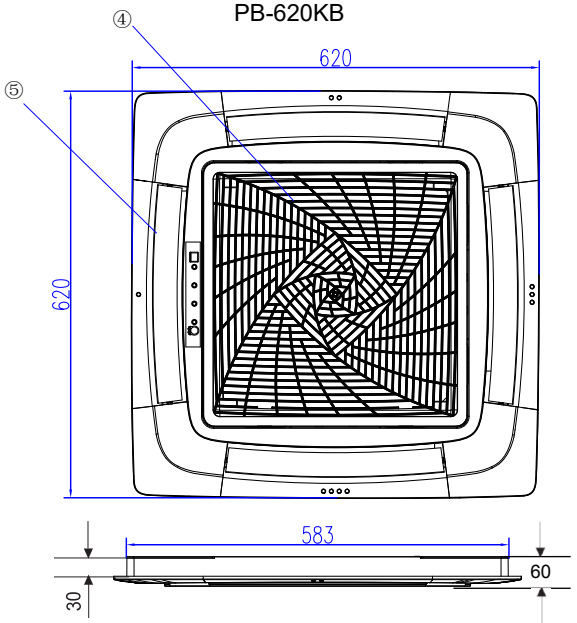

Note: to ensure that the panel can be installed properly, for PB-700KB panel, the minimum opening size of the ceiling should be more than 577mm.

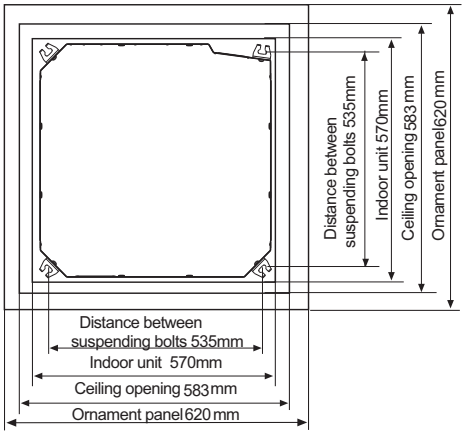



**Note: the design dimension of the embedded part of the panel the PB-700IB is 577*577mm**

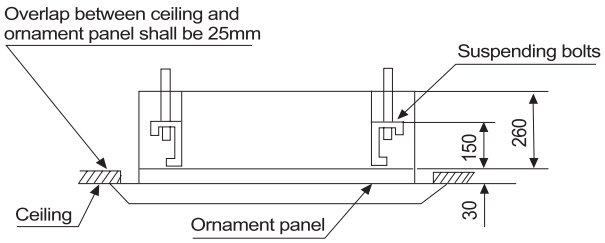
AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA

PB-620KB



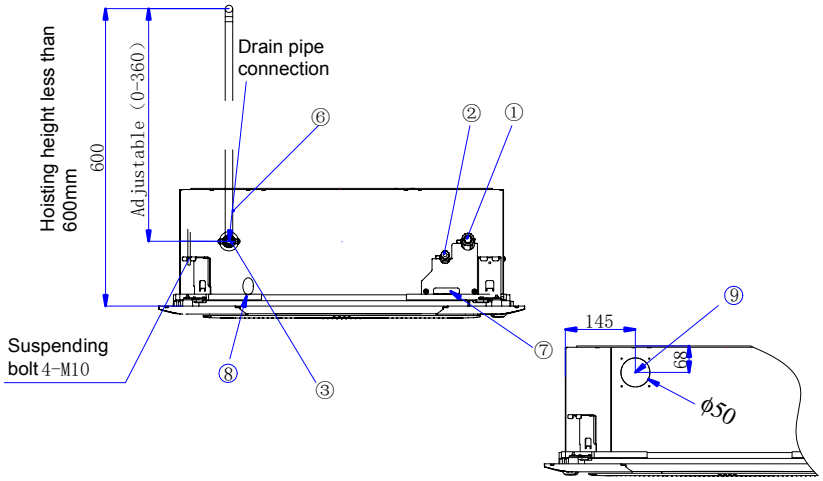




Note: to ensure that the panel can be installed properly, for PB-620KB panel, the minimum opening size of the ceiling should be more than 583mm.



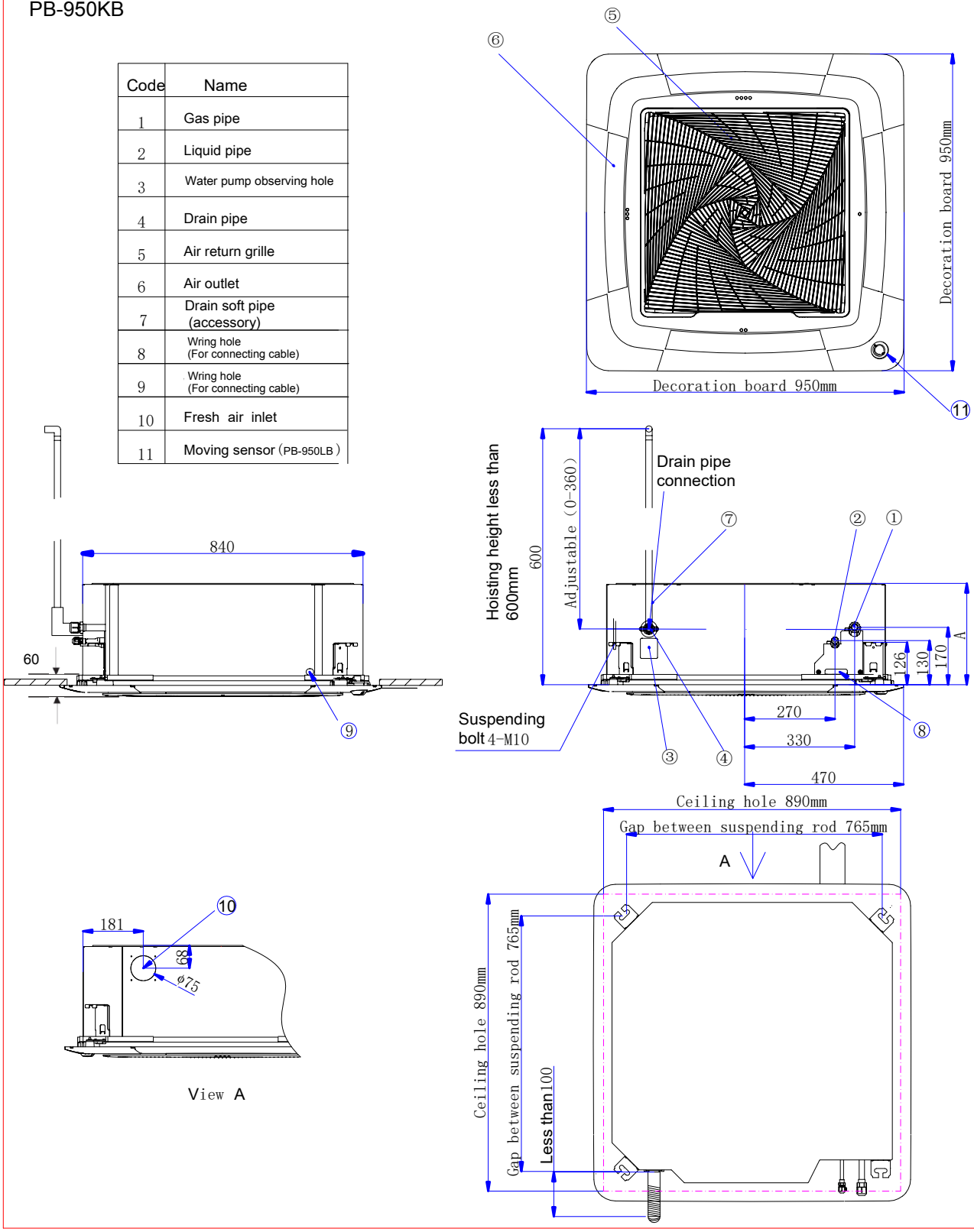

Note: the design dimension of the embedded part of the panel, PB-620KB is 583*583mm

| Code | Name |
|---|---|
| 1 | Gas pipe |
| 2 | Liquid pipe |
| 3 | Drain pipe |
| 4 | Air return grille |
| 5 | Air outlet |
| 6 | Drain soft pipe (accessory) |
| 7 | Wring hole (For connecting cable) |
| 8 | Wring hole (For wired controller) |
| 9 | Fresh air inlet |



PB-950KB

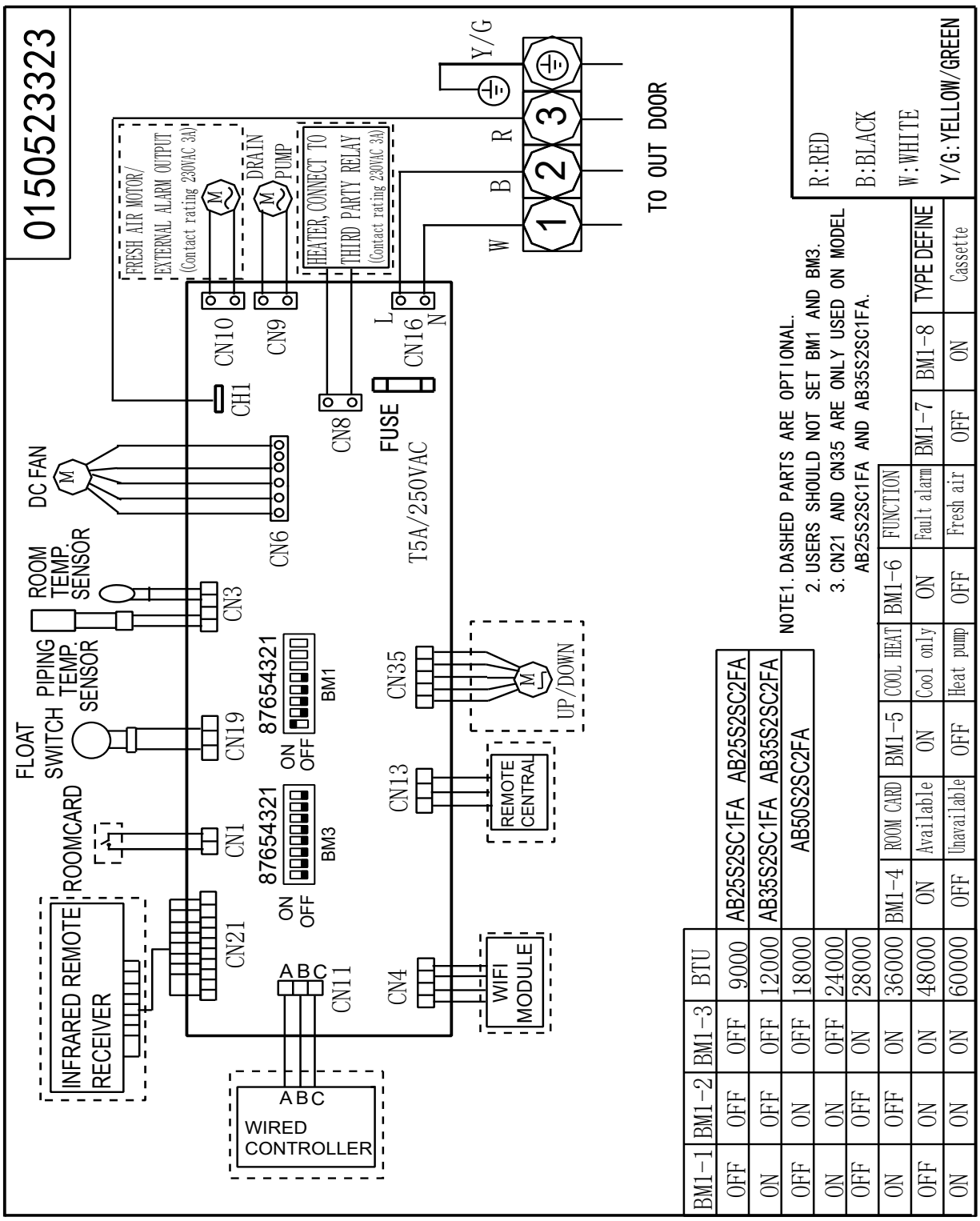
| Code | Name |
|---|---|
| 1 | Gas pipe |
| 2 | Liquid pipe |
| 3 | Water pump observing hole |
| 4 | Drain pipe |
| 5 | Air return grille |
| 6 | Air outlet |
| 7 | Drain soft pipe (accessory) |
| 8 | Wring hole (For connecting cable) |
| 9 | Wring hole (For connecting cable) |
| 10 | Fresh air inlet |
| 11 | Moving sensor (PB-950LB) |




| Model | A (mm) |
|---|---|
| AB71S2SG1FA | 234 |
| ABH071/090/105H1ERG | 276 |
| ABH125/140/160K1ERG | 318 |

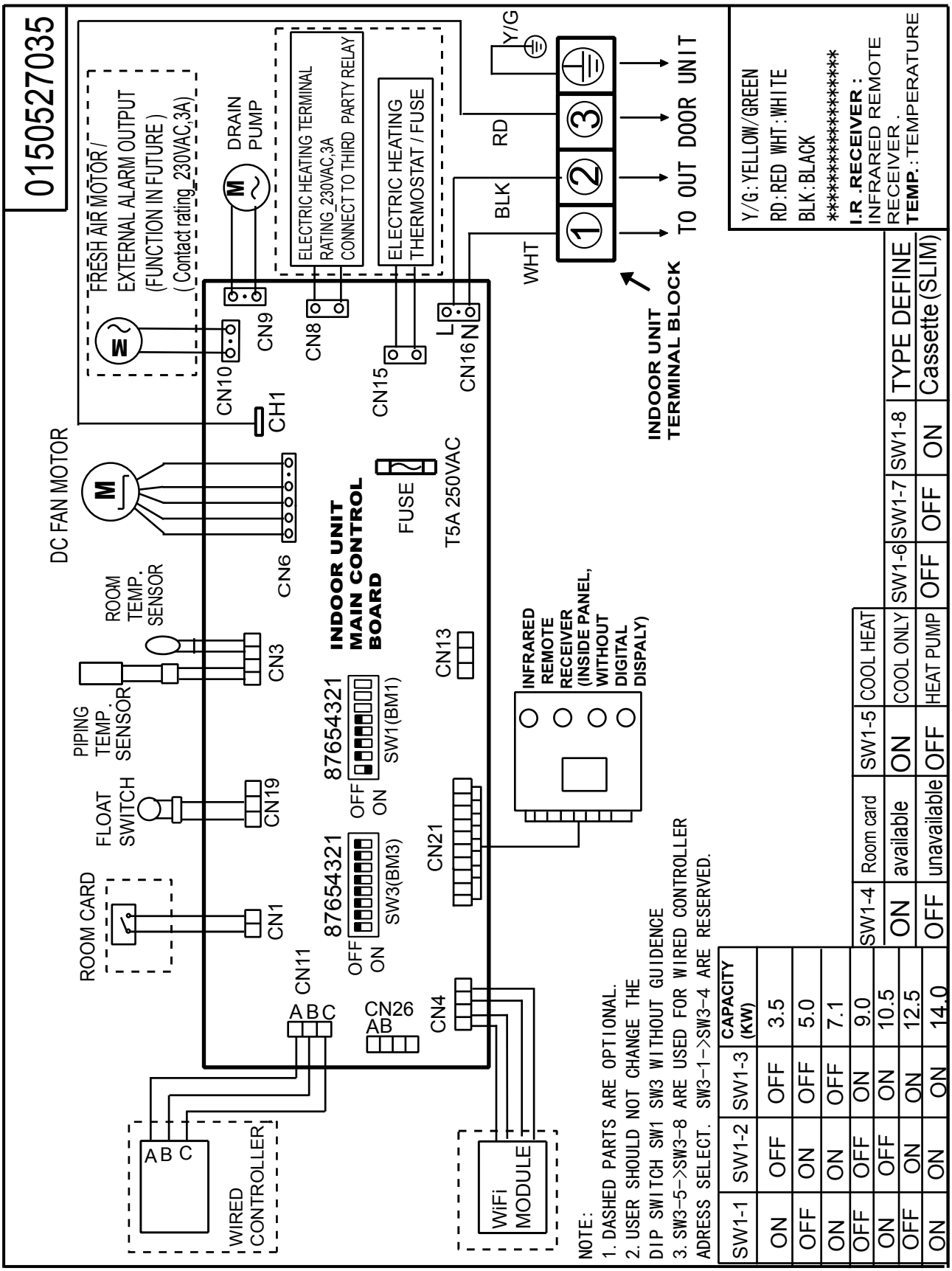
## 2.3 Wiring Diagram

AB25S2SC1FA AB35S2SC1FA




| BM1-1 | BM1-2 | BM1-3 | BTU | | BM1-4 | ROOM CARD | BM1-5 | COOL HEAT | BM1-6 | FUNCTION | BM1-7 | BM1-8 | TYPE DEFINE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | 9000 | AB25S2SC1FA AB25S2SC2FA | ON | Available | ON | Cool only | ON | Fault alarm | OFF | ON | Cassette |
| ON | OFF | OFF | 12000 | AB35S2SC1FA AB35S2SC2FA | OFF | Unavailable | OFF | Heat pump | OFF | Fresh air | | | |
| OFF | ON | OFF | 18000 | AB50S2SC2FA | | | | | | | | | |
| ON | ON | OFF | 24000 | | | | | | | | | | |
| OFF | OFF | ON | 28000 | | | | | | | | | | |
| ON | OFF | ON | 36000 | | | | | | | | | | |
| OFF | ON | ON | 48000 | | | | | | | | | | |
| ON | ON | ON | 60000 | | | | | | | | | | |

AB50S2SC1FA

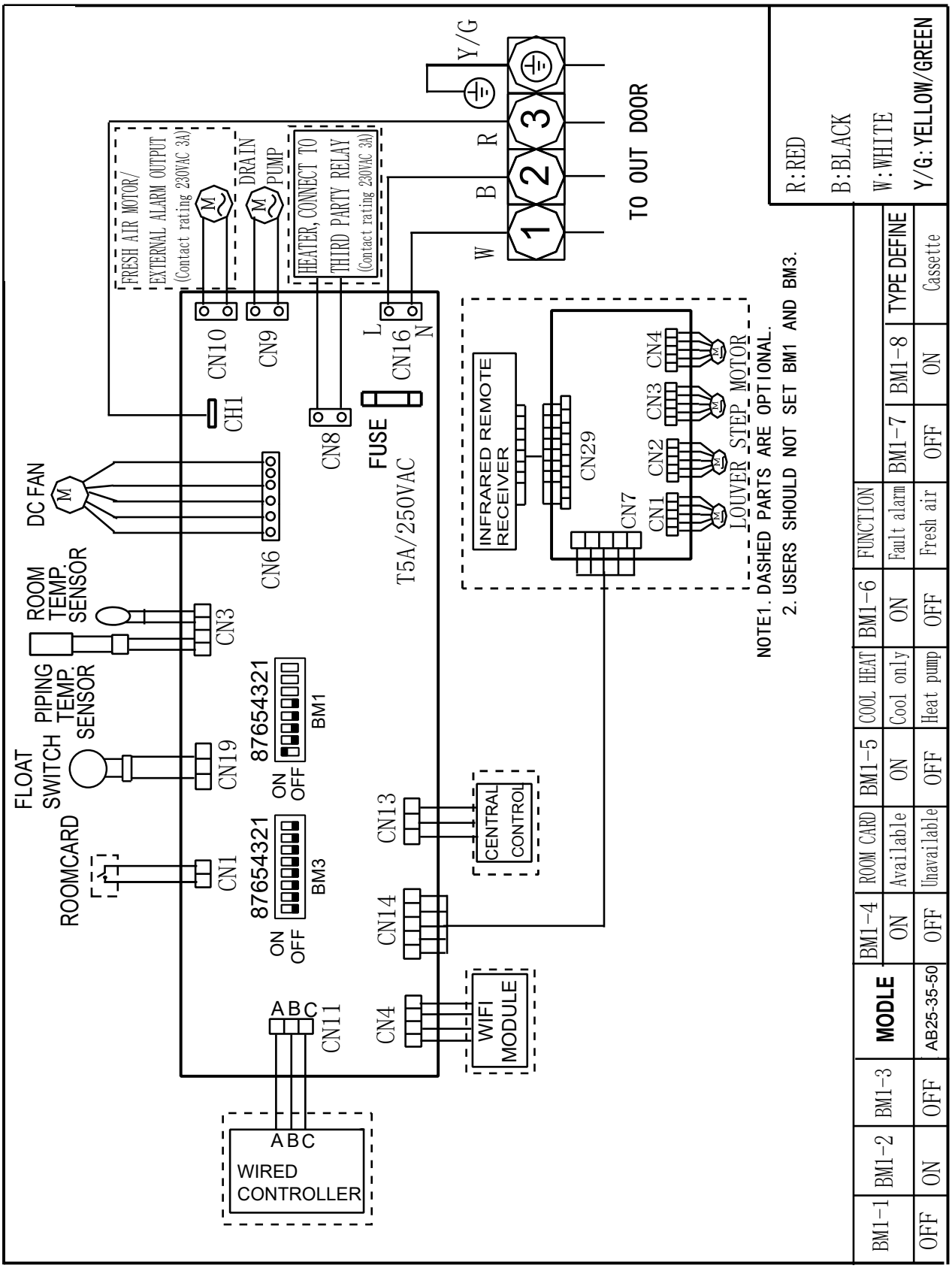



| SW1-1 | SW1-2 | SW1-3 | CAPACITY (KW) |
|---|---|---|---|
| ON | OFF | OFF | 3.5 |
| OFF | ON | OFF | 5.0 |
| ON | ON | OFF | 7.1 |
| OFF | OFF | ON | 9.0 |
| ON | OFF | ON | 10.5 |
| OFF | ON | ON | 12.5 |
| ON | ON | ON | 14.0 |

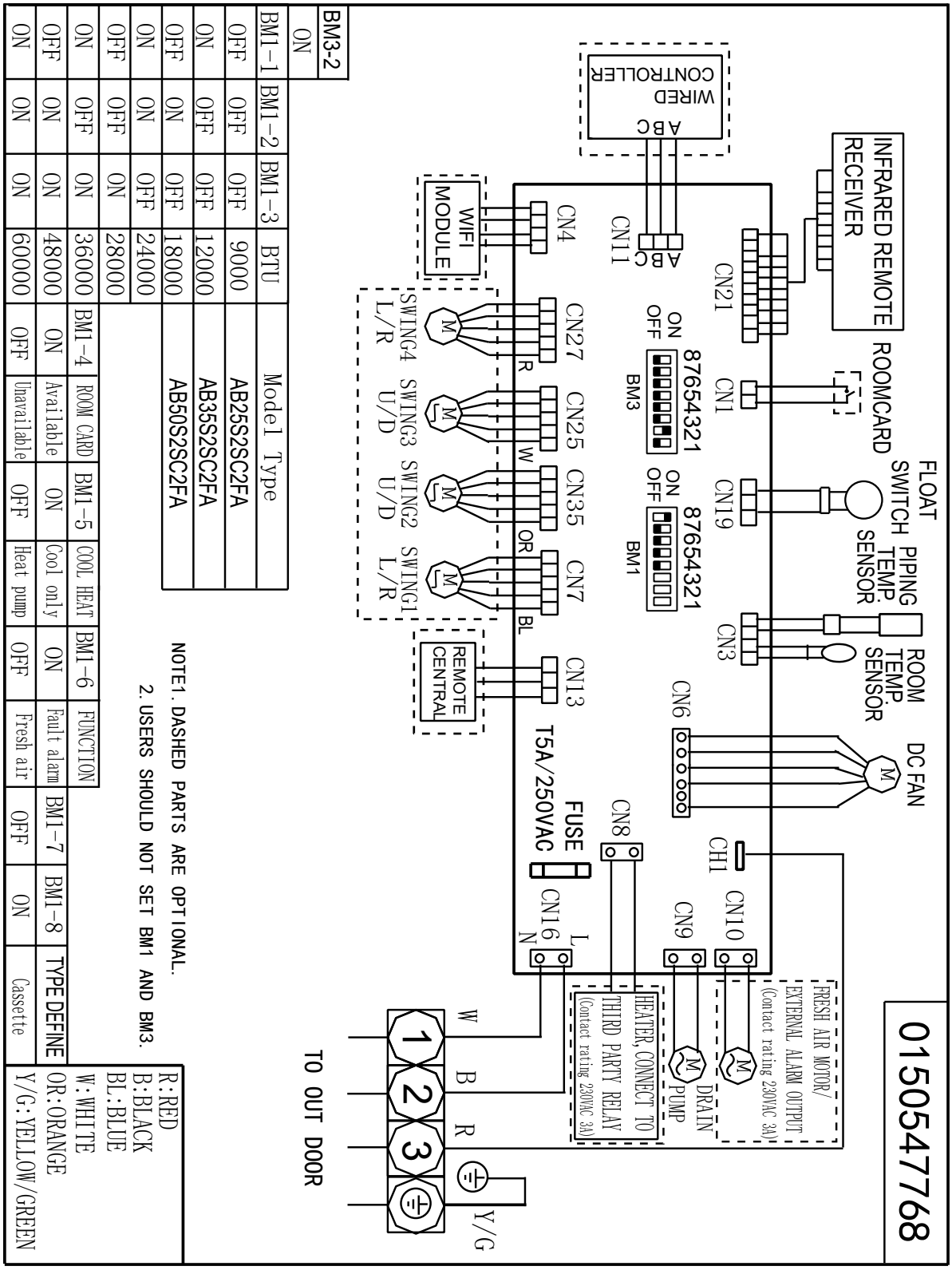
| SW1-4 | Room card | SW1-5 | COOL HEAT |
|---|---|---|---|
| ON | available | ON | COOL ONLY |
| OFF | unavailable | OFF | HEAT PUMP |

| SW1-6 | SW1-7 | SW1-8 | TYPE DEFINE |
|---|---|---|---|
| OFF | OFF | ON | Cassette(SLIM) |

AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA (Manufactured before 6th May. 2021)



AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA (Manufactured after 6th May. 2021)




| BM3-2 | BM1-1 | BM1-2 | BM1-3 | BTU | Model Type |
|---|---|---|---|---|---|
| ON | OFF | OFF | OFF | 9000 | AB25S2SC2FA |
| | ON | OFF | OFF | 12000 | AB35S2SC2FA |
| | OFF | ON | OFF | 18000 | AB50S2SC2FA |
| | ON | ON | OFF | 24000 | |
| | OFF | OFF | ON | 28000 | |

| BM1-4 | ROOM CARD | BM1-5 | COOL HEAT | BM1-6 | FUNCTION |
|---|---|---|---|---|---|
| ON | Available | ON | Cool only | ON | Fault alarm |
| OFF | Unavailable | OFF | Heat pump | OFF | Fresh air |

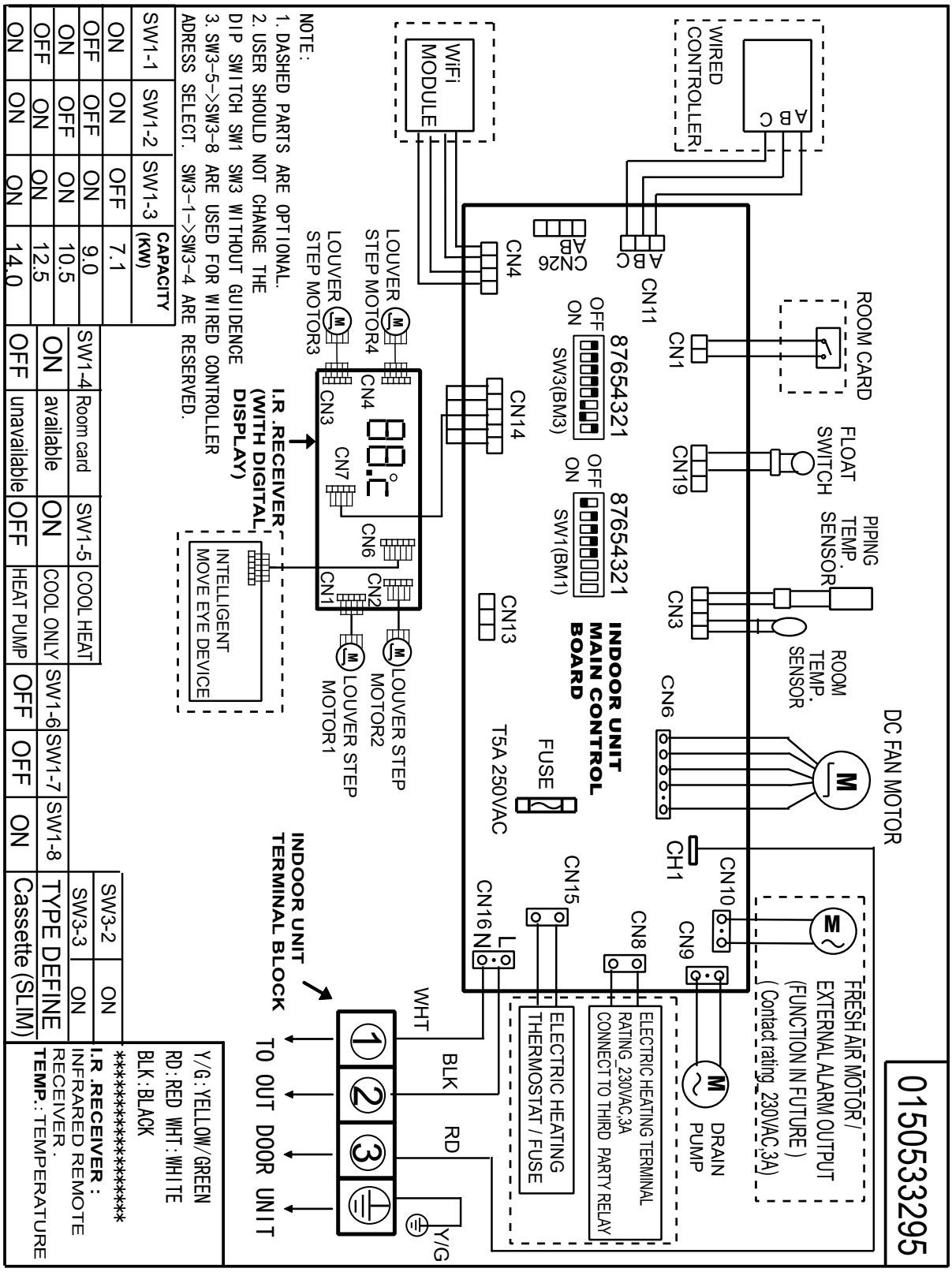
| BM1-7 | BM1-8 | TYPE DEFINE |
|---|---|---|
| OFF | ON | Cassette |
| ON | OFF | |

NOTE1. DASHED PARTS ARE OPTIONAL.

2. USERS SHOULD NOT SET BM1 AND BM3.

R:RED
B:BLACK
BL:BLUE
W:WHITE
OR:ORANGE
Y/G:YELLOW/GREEN

AB71S2SG1FA ABH105H1ERG ABH125/140K1ERG




| SW1-1 | SW1-2 | SW1-3 | CAPACITY (KW) |
|---|---|---|---|
| ON | ON | OFF | 7.1 |
| OFF | OFF | ON | 9.0 |
| ON | OFF | ON | 10.5 |
| OFF | ON | ON | 12.5 |
| ON | ON | ON | 14.0 |

| SW1-4 | Room card |
|---|---|
| ON | available |
| OFF | unavailable |

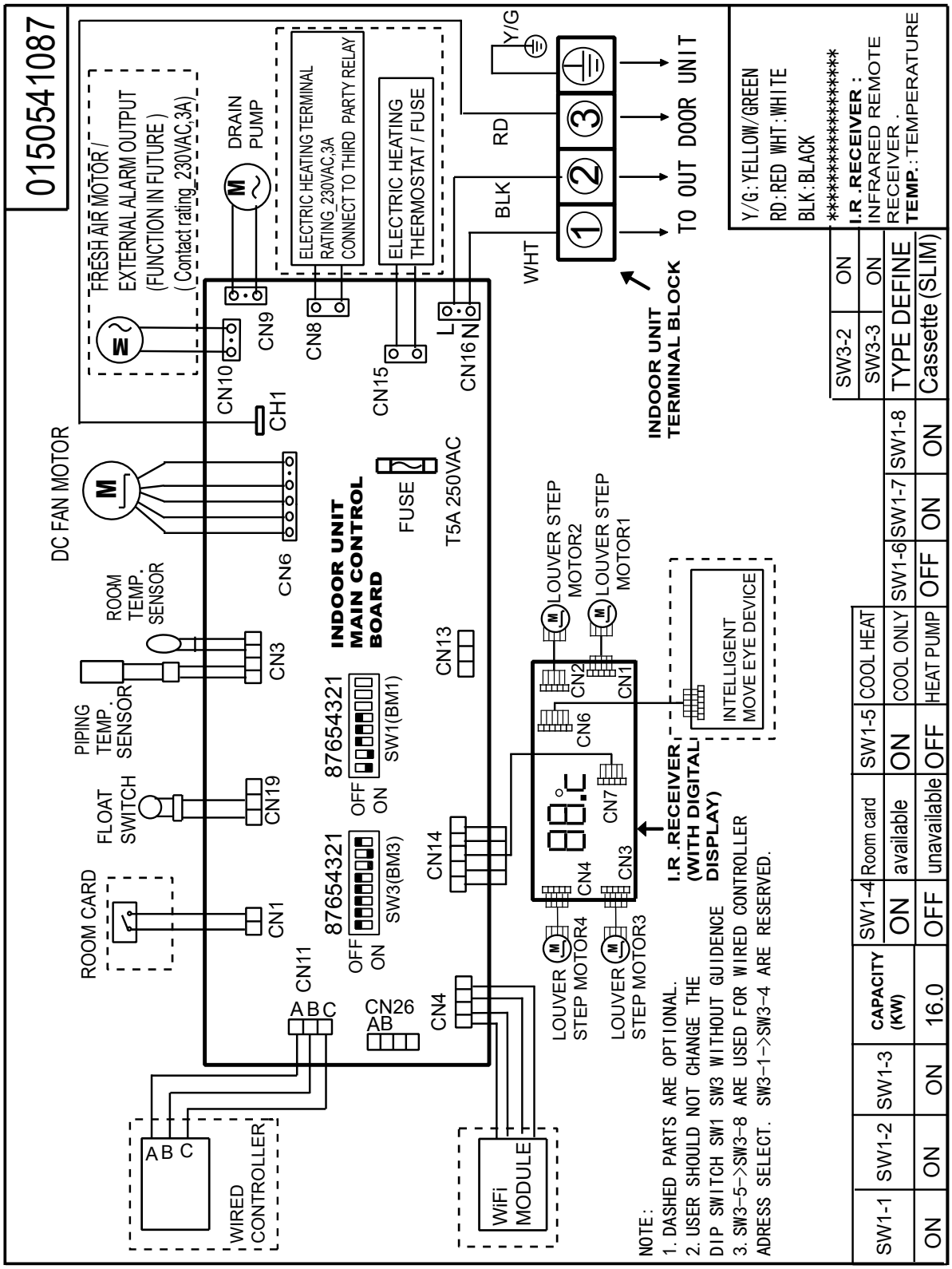
| SW1-5 | COOL HEAT |
|---|---|
| ON | COOL ONLY |
| OFF | HEAT PUMP |

| SW1-6 | SW1-7 | SW1-8 | TYPE DEFINE |
|---|---|---|---|
| OFF | OFF | ON | Cassette (SLIM) |

| SW3-2 | SW3-3 | I.R. RECEIVER : |
|---|---|---|
| ON | ON | INFRARED REMOTE RECEIVER. |

Y/G: YELLOW/GREEN
RD: RED WHT: WHITE
BLK: BLACK
**********
**TEMP.**: TEMPERATURE

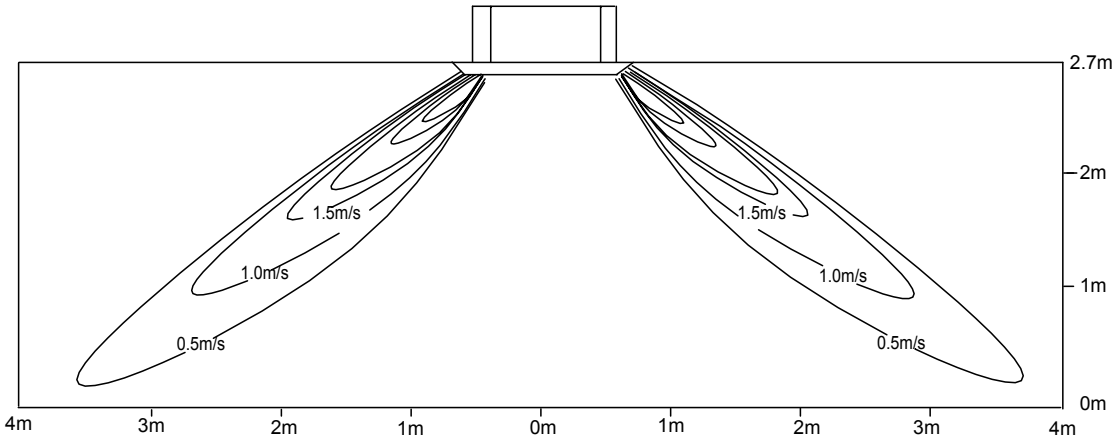
ABH160K1ERG



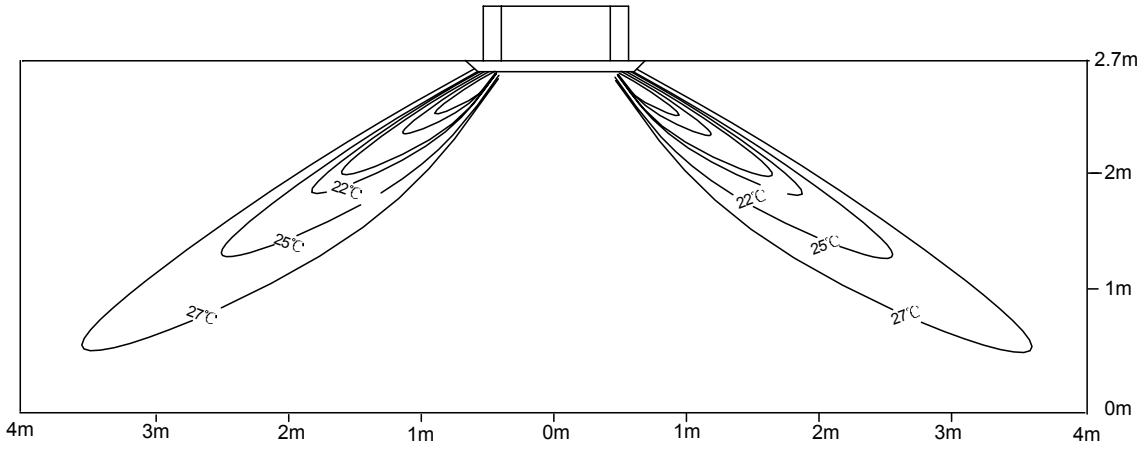
## 2.4 Air Velocity and Temperature Distribution

AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA AB71S2SG1FA
AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA

a. Cooling / air velocity distribution
Cooling
Blowy angle: 40
Air velocity distribution




b. Cooling / temperature distribution
Cooling
Blowy angle:40
Temperature distribution

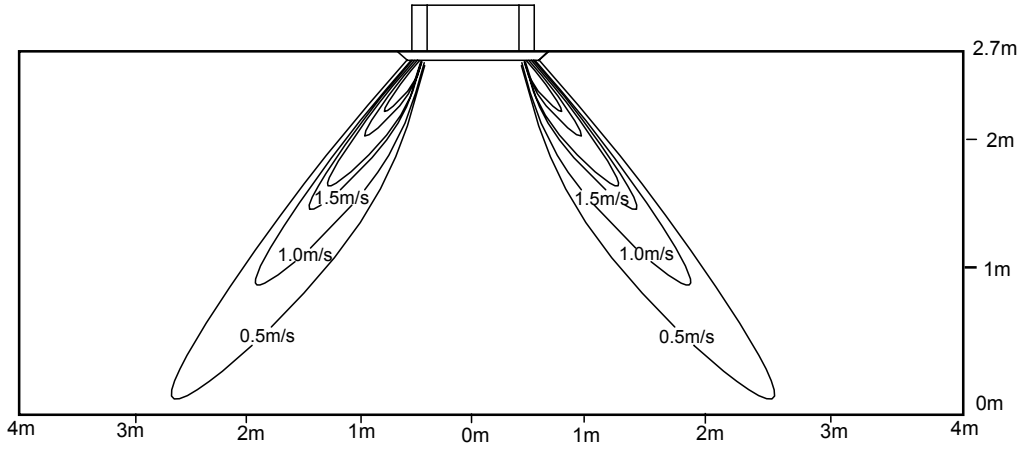


c. Heating / air velocity distribution

Heating

Blowy angle:70

Air velocity distribution

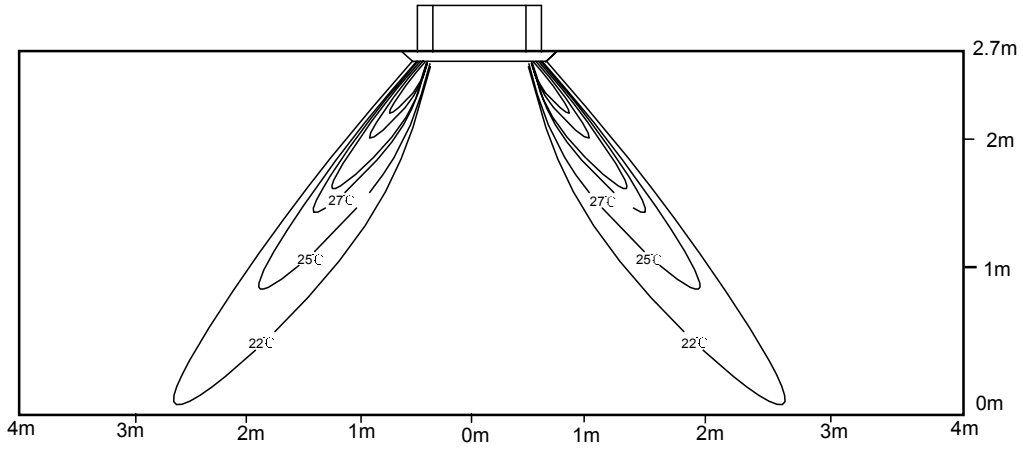



d. Heating / temperature distribution

Heating

Blowy angle:70

TemperAture distribution



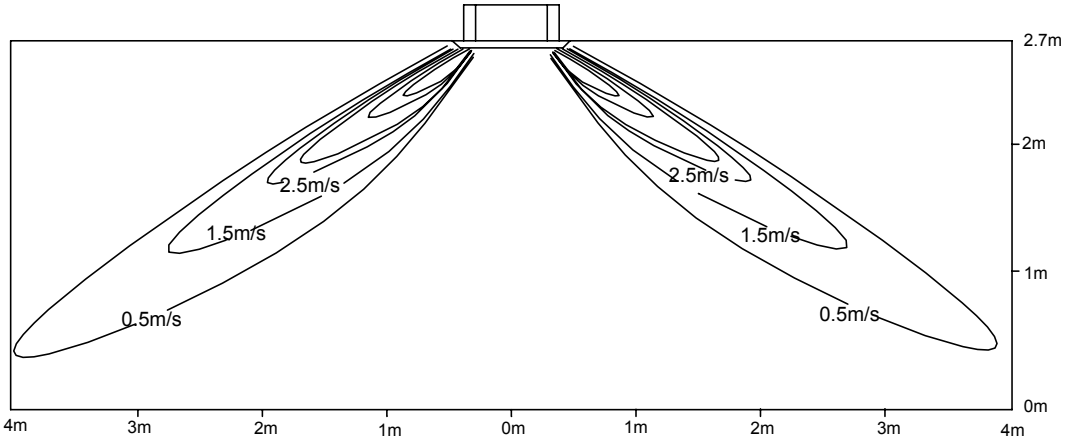
**ABH071/090/105H1ERG:**

a. Cooling/Air velocity distribution

Cooling

Blowy angle: 33

Air velocity distribution

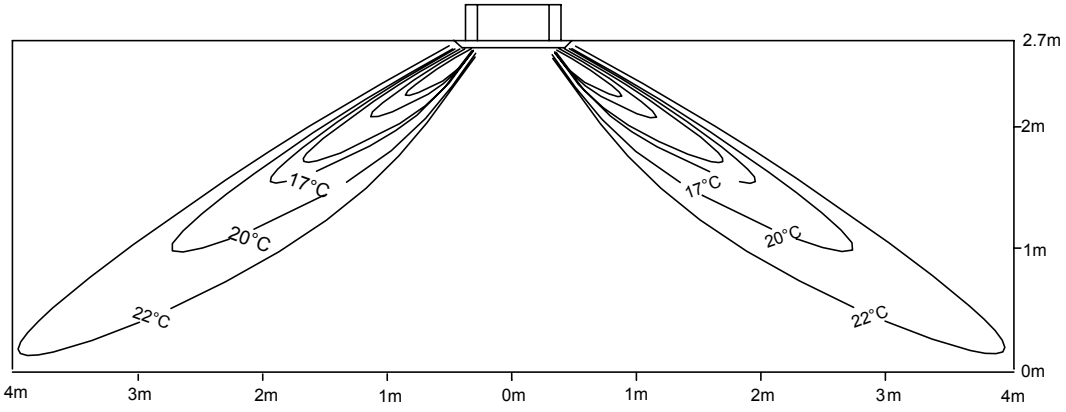



b. Cooling/Temperature distribution

Cooling

Blowy angle: 33

Temperature distribution

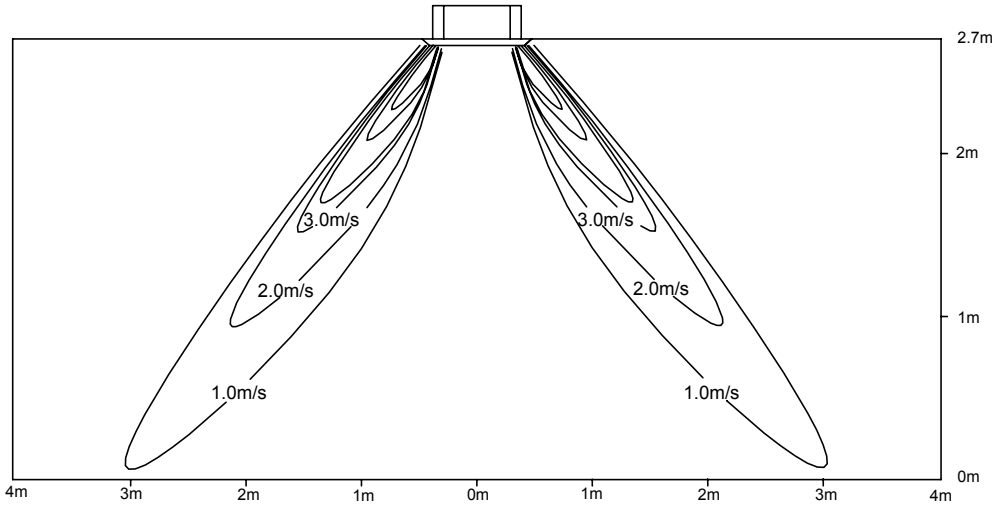


c. Heating/Air velocity distribution

Heating

Blowy angle: 60

Air velocity distribution

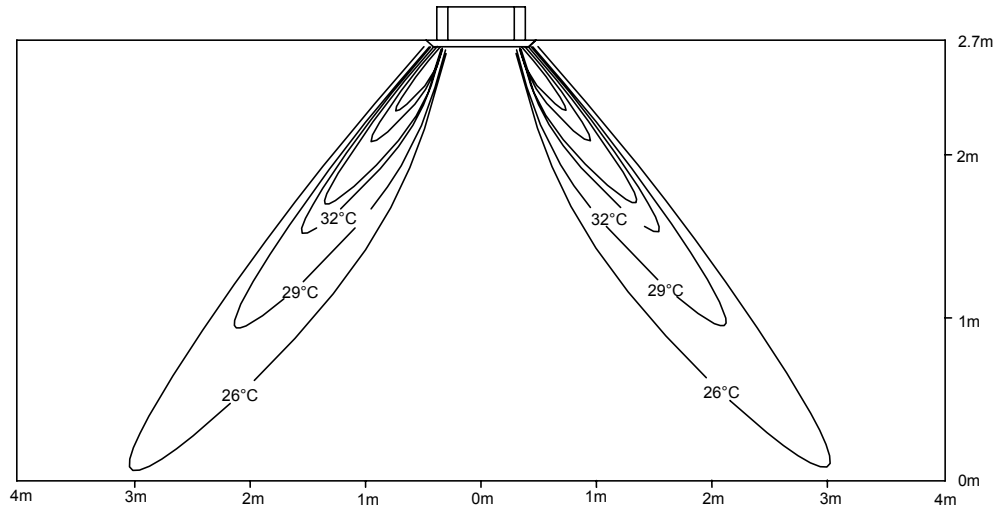



d. Heating/Temperature distribution

Heating

Blowy angle: 60

Temperature distribution



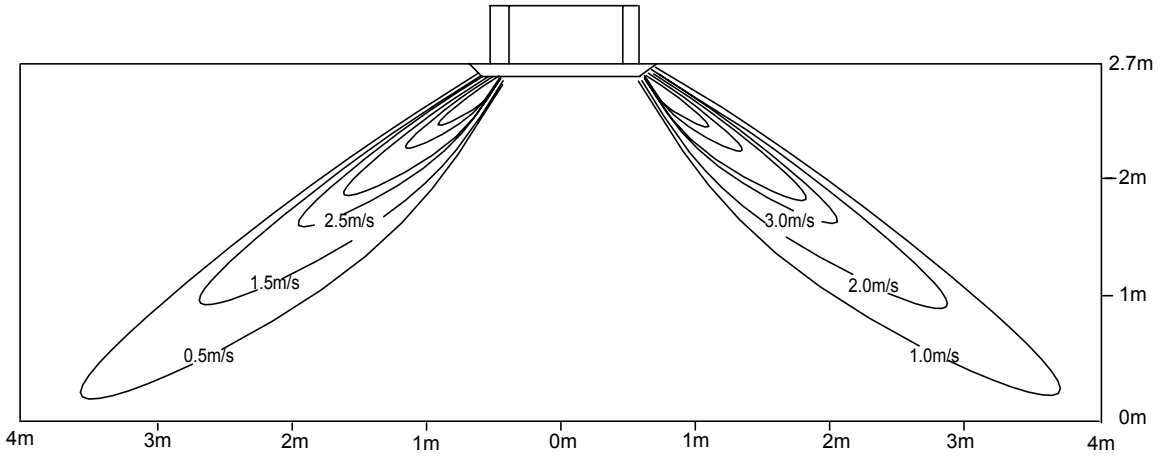
**ABH125/140/160K1ERG**

a. Cooling/Air velocity distribution

Cooling

Blowy angle: 33

Air velocity distribution

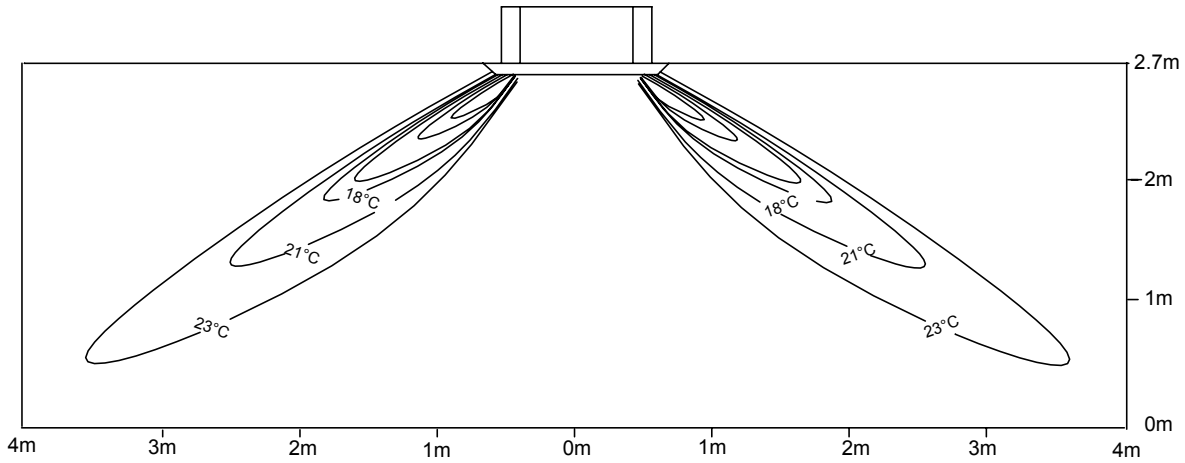



b. Cooling/Temperature distribution

Cooling

Blowy angle: 33

Temperature distribution

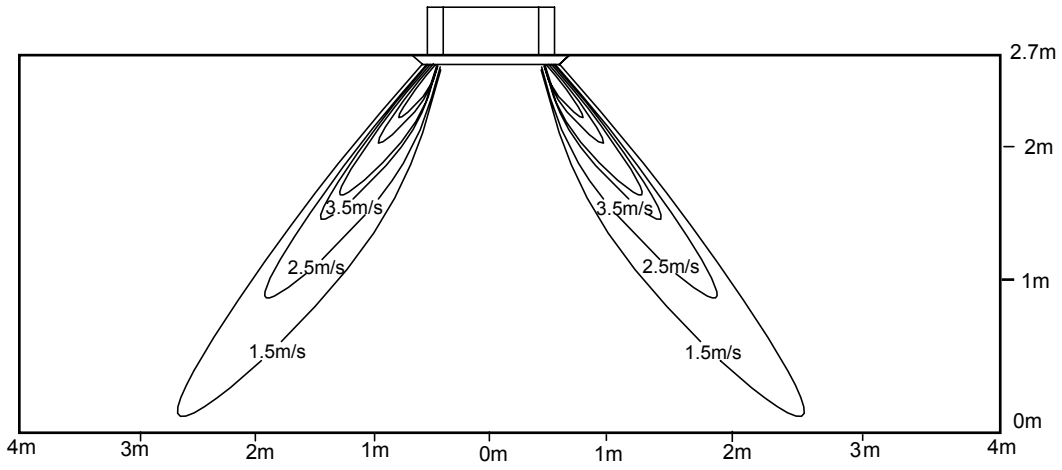


c. Heating/Air velocity distribution

Heating

Blowy angle: 60

Air velocity distribution

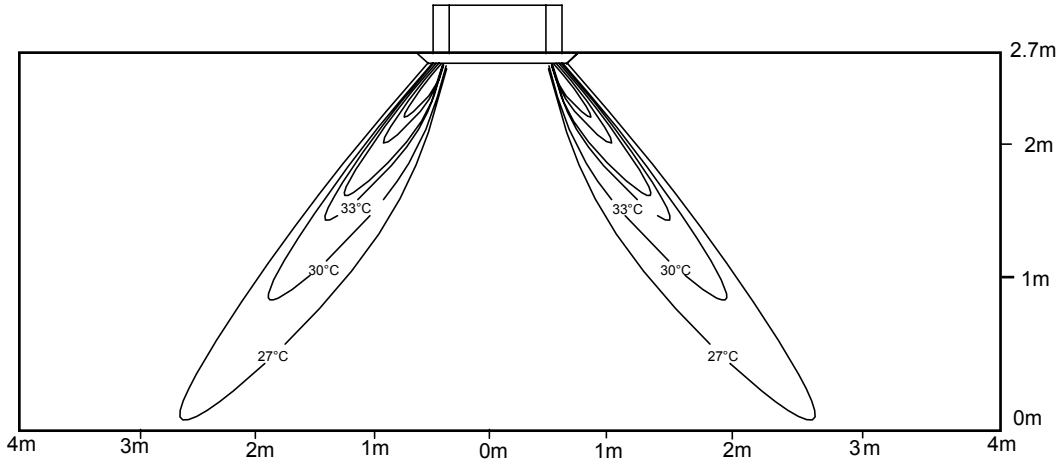



d. Heating/Temperature distribution

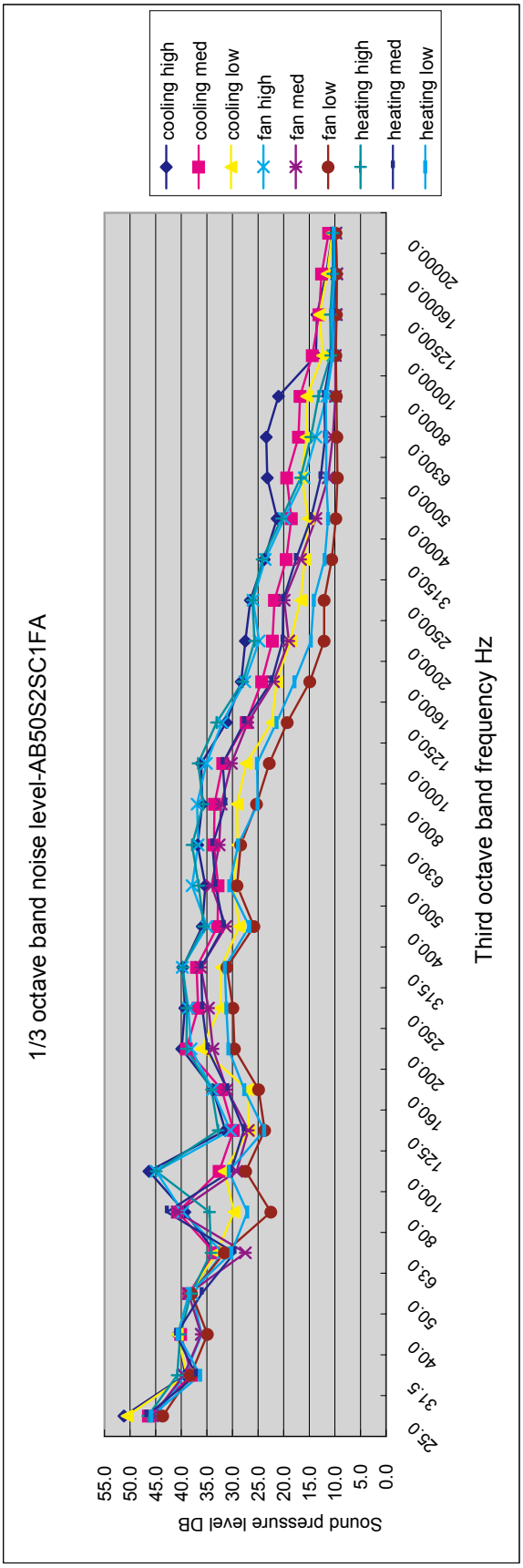
Heating

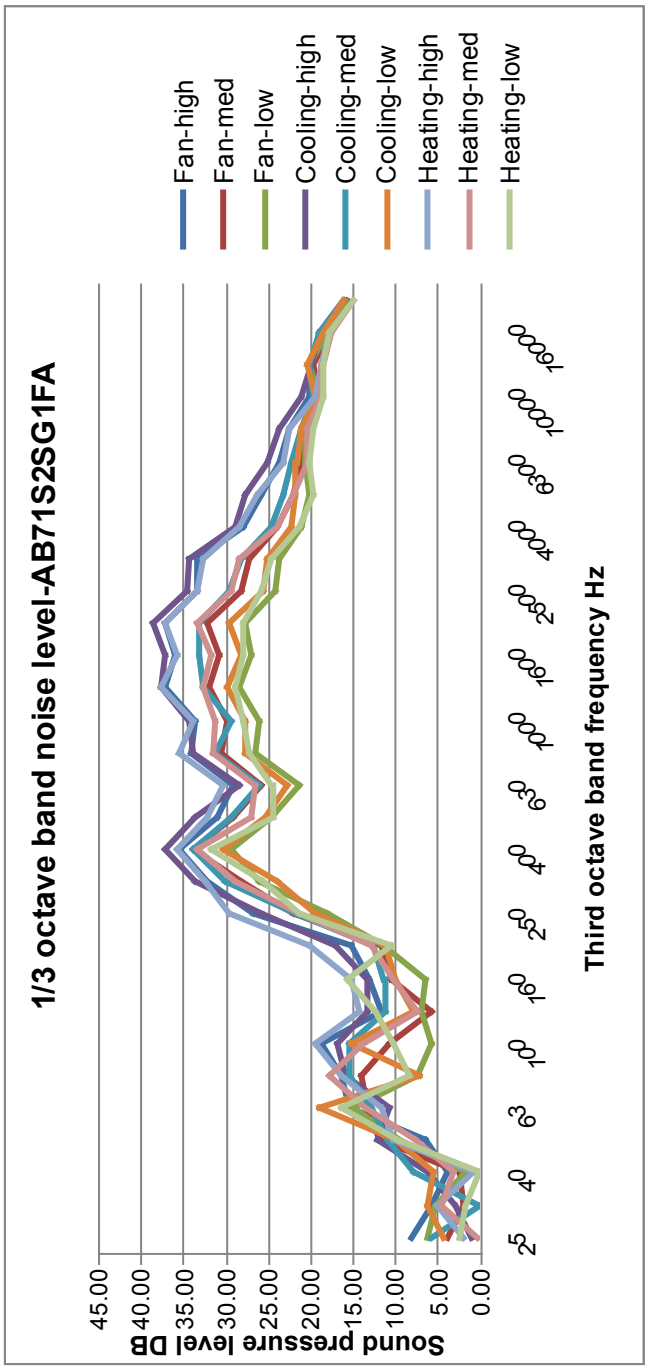
Blowy angle: 60

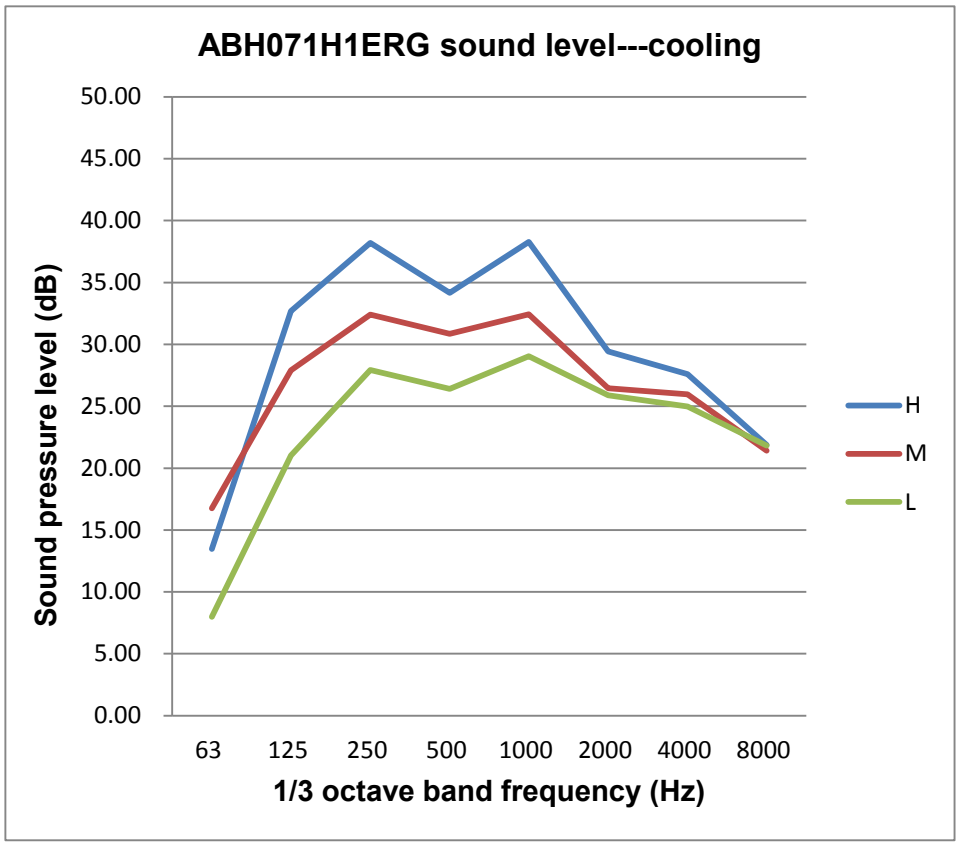
Temperature distribution

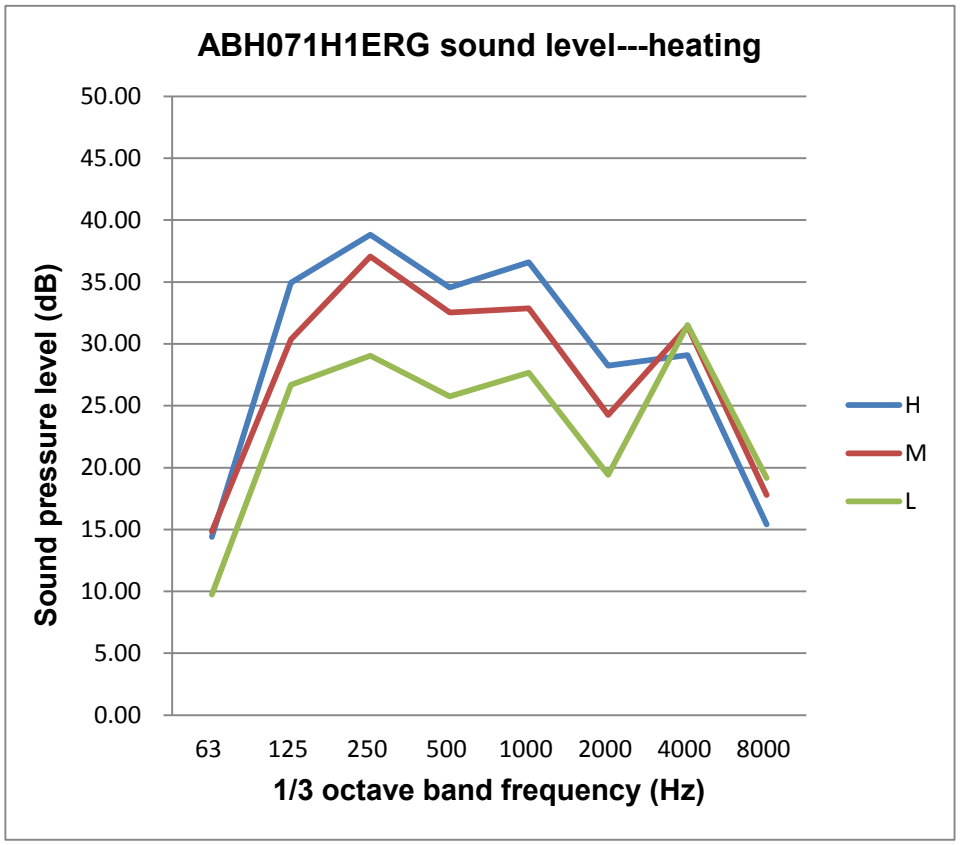


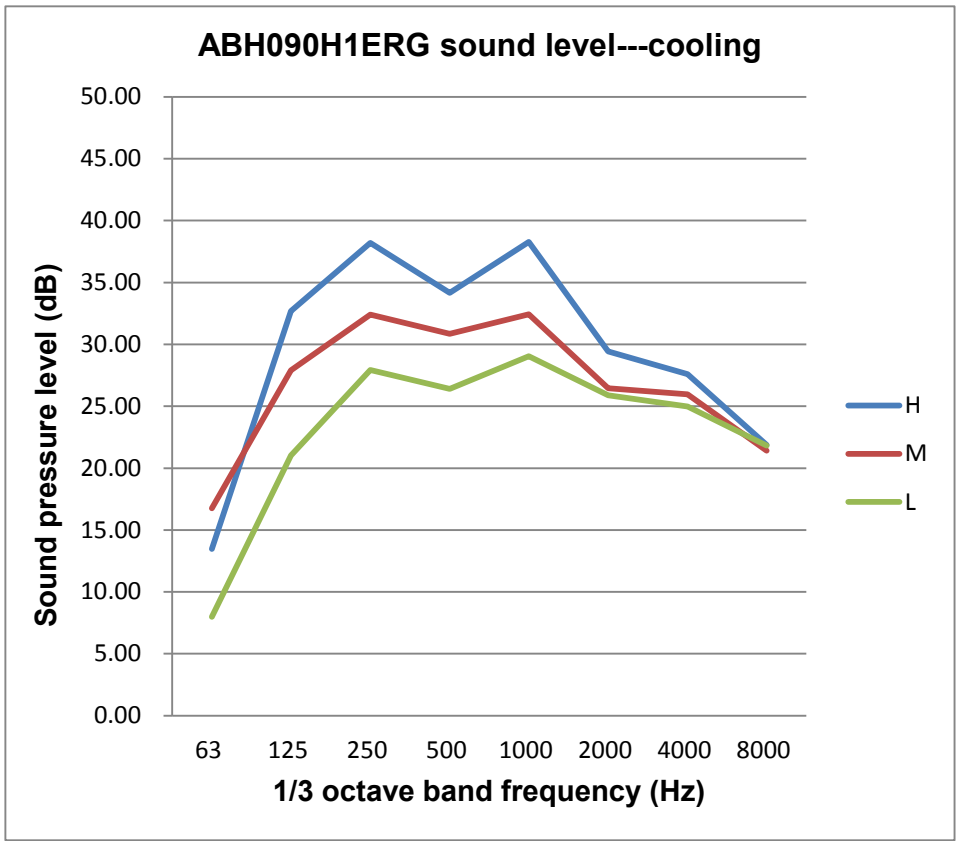
## 2.5 Sound Pressure level

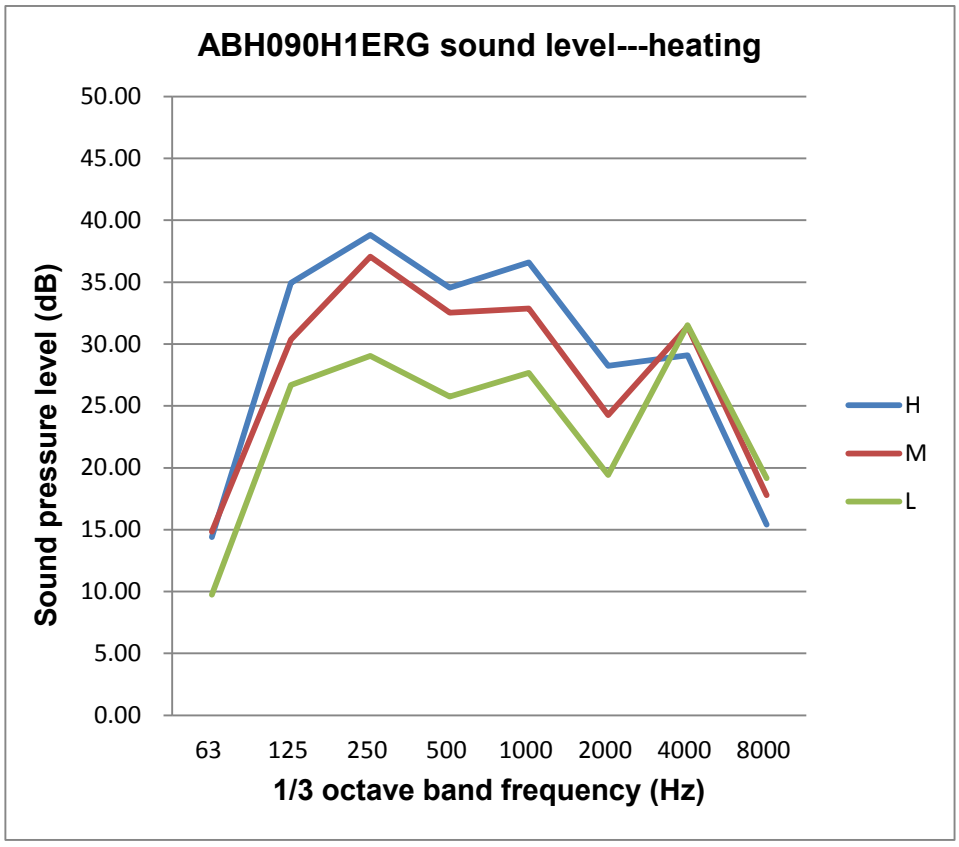


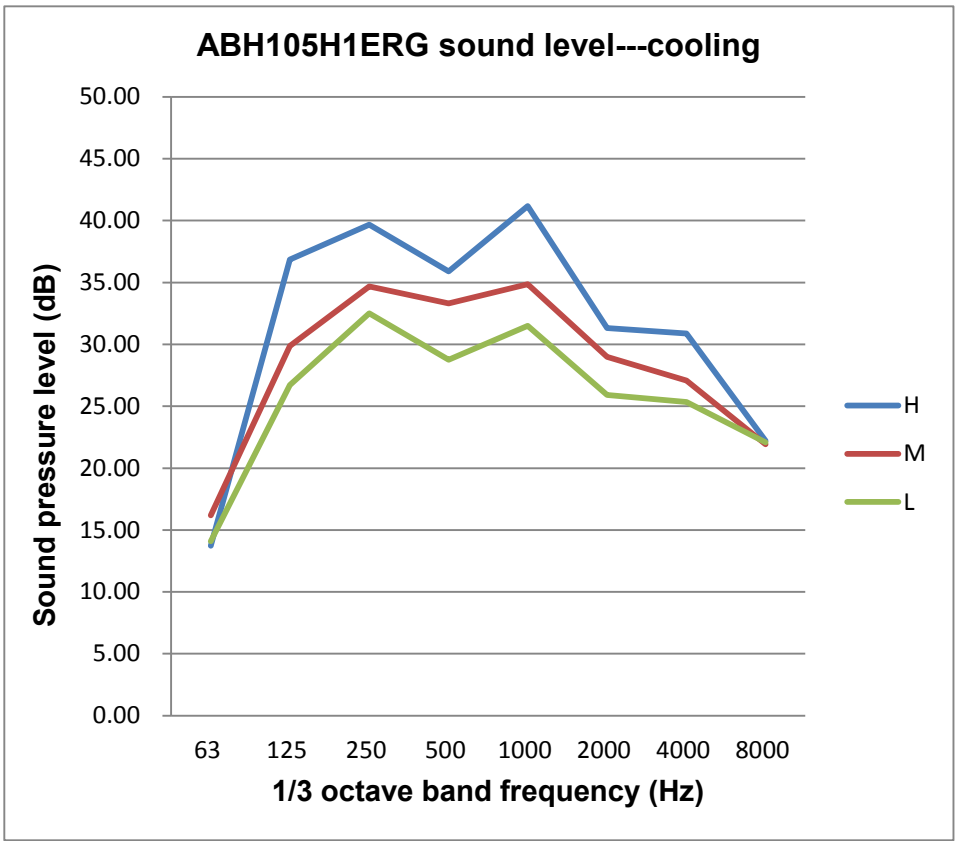

1/3 octave band noise level-AB71S2SG1FA
Fan-high
Fan-med
Fan-low
Cooling-high
Cooling-med
Cooling-low
Heating-high
Heating-med
Heating-low
Sound pressure level DB
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Third octave band frequency Hz
25
40
63
100
160
250
400
630
1000
1600
2500
4000
6300
10000
16000

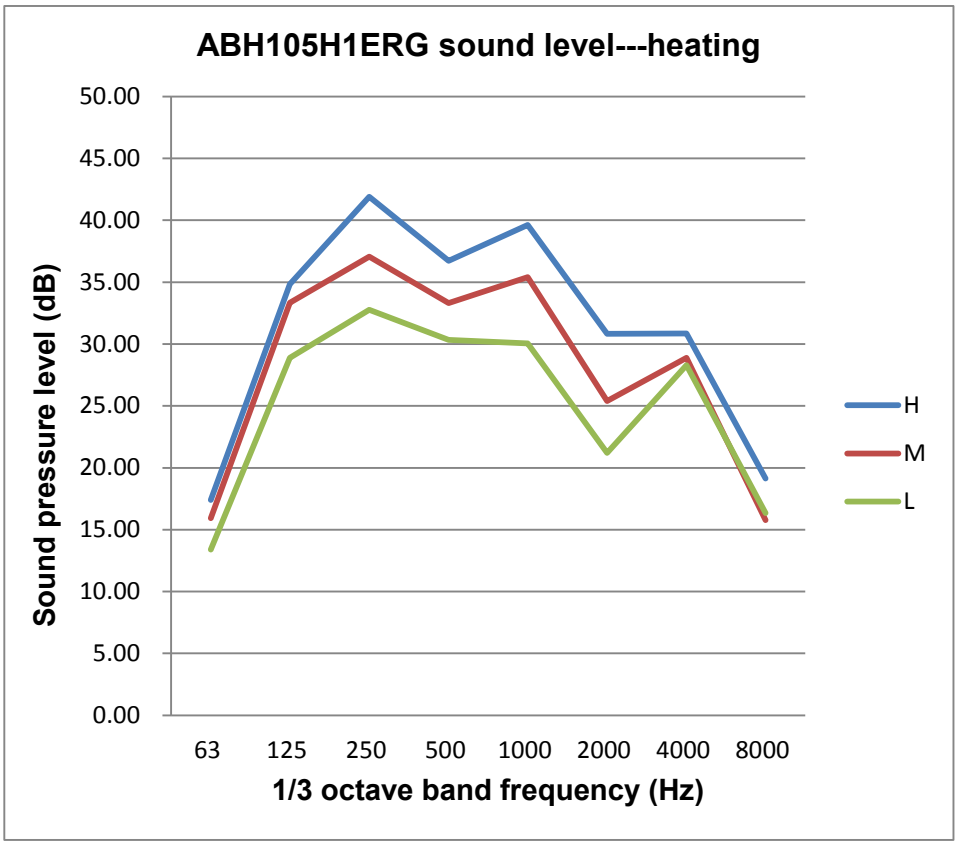

ABH071H1ERG sound level---cooling
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L

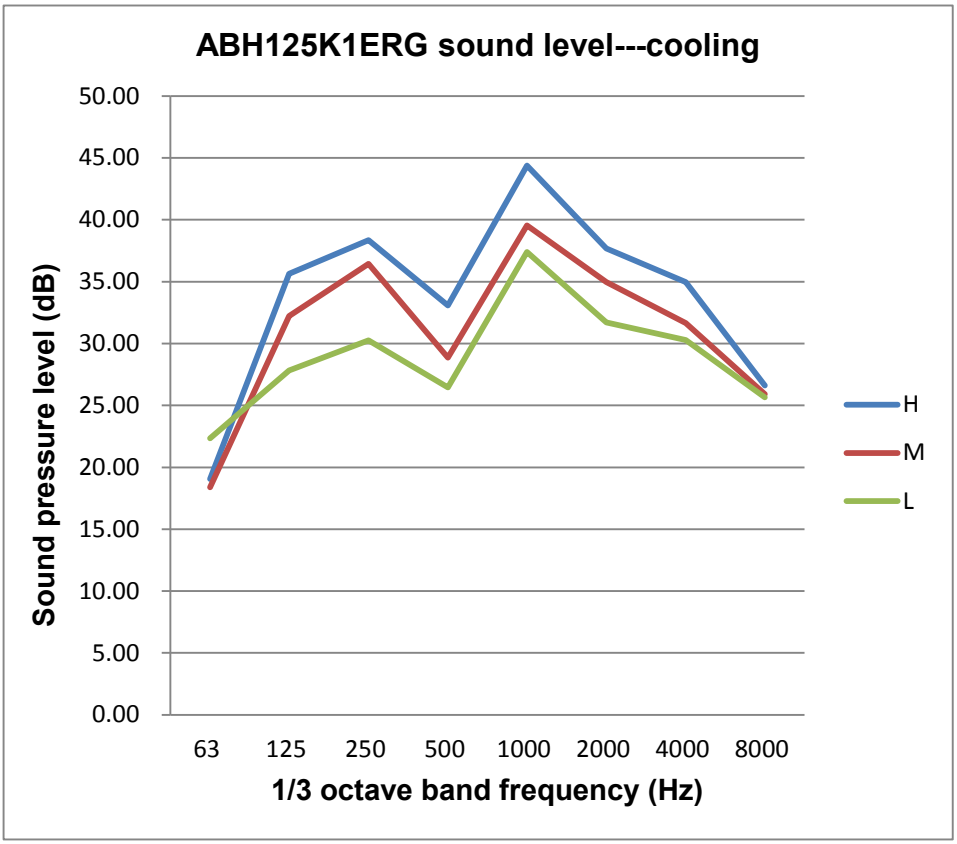

ABH071H1ERG sound level---heating
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L

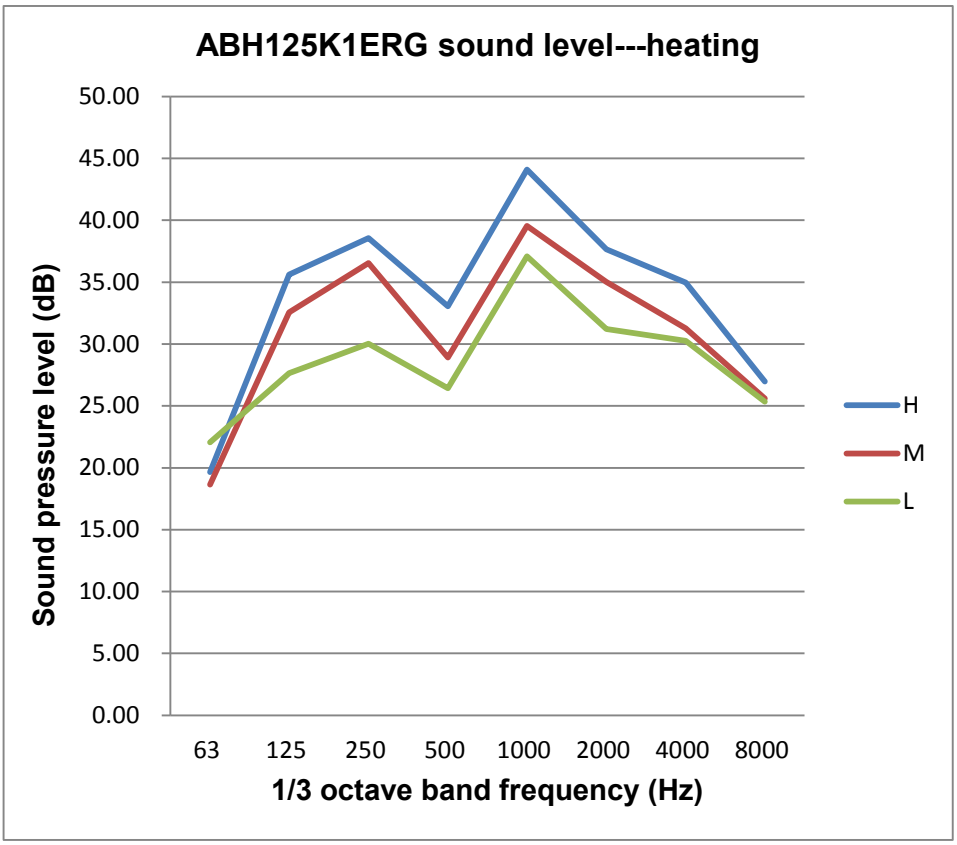

ABH090H1ERG sound level---cooling
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L

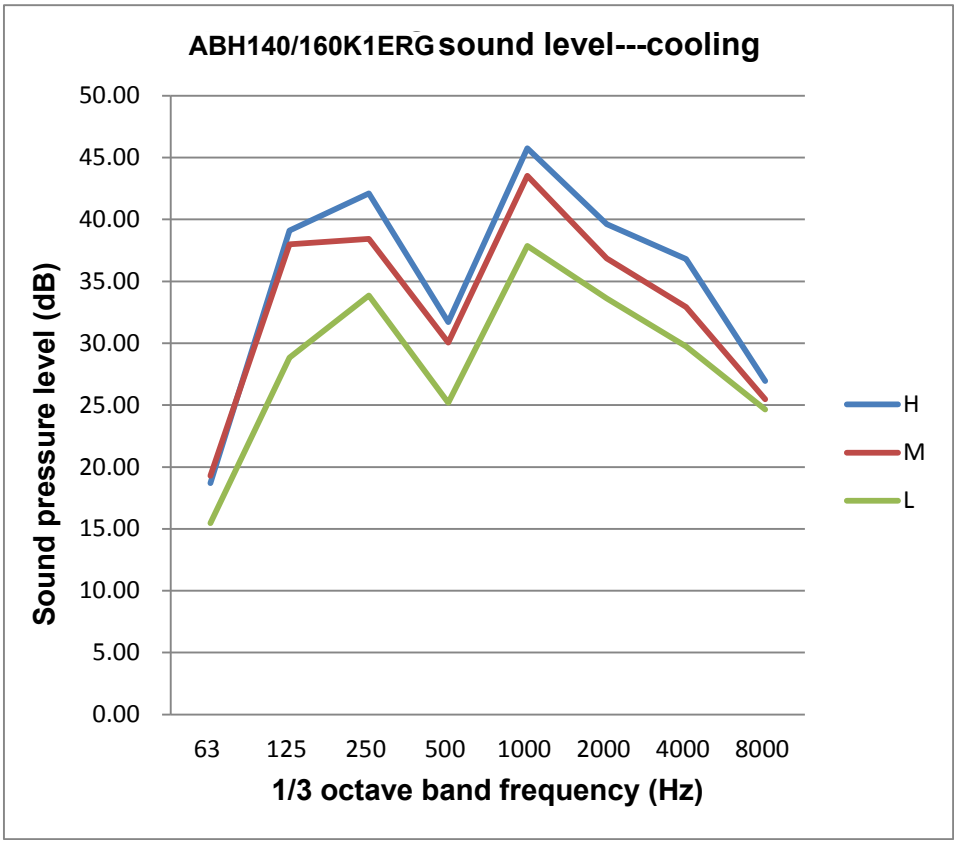

ABH090H1ERG sound level---heating
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L

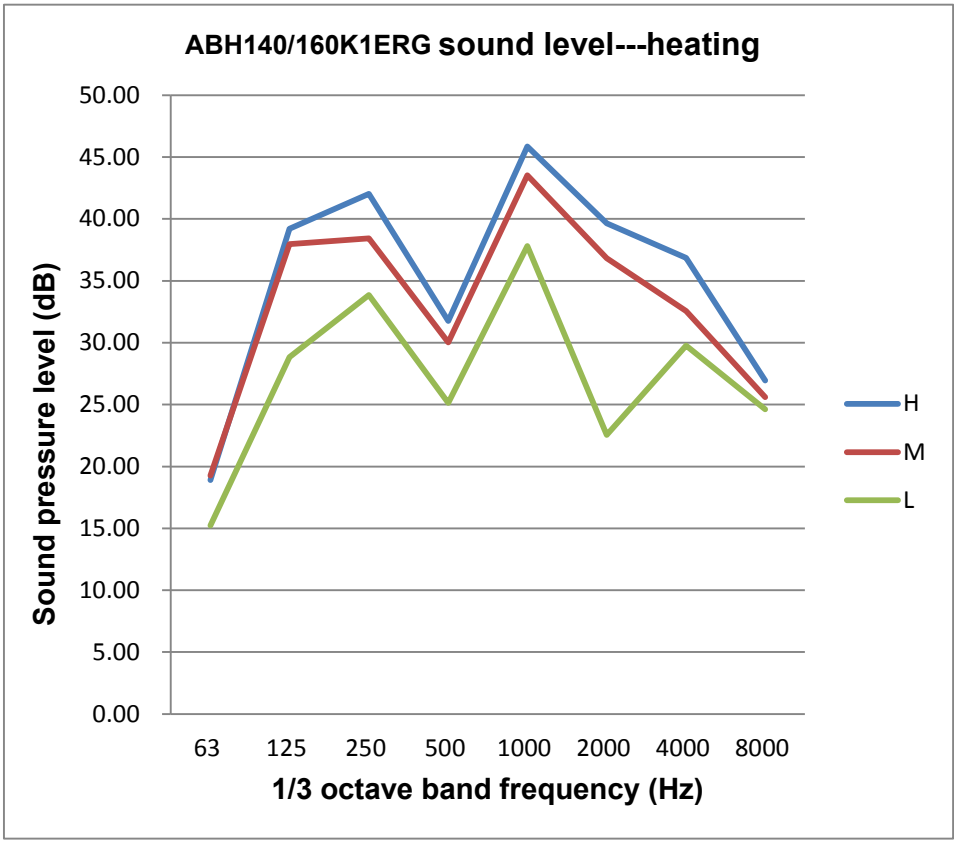

ABH105H1ERG sound level---cooling
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L


ABH105H1ERG sound level---heating
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L


ABH125K1ERG sound level---cooling
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L


ABH125K1ERG sound level---heating
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L


ABH140/160K1ERG sound level---cooling
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L


ABH140/160K1ERG sound level---heating
Sound pressure level (dB)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
63
125
250
500
1000
2000
4000
8000
1/3 octave band frequency (Hz)
H
M
L

## 2.6 Installation

AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA AB71S2SG1FA

• Select the way to carry unit to installation place.
• Don't remove packing until unit reaches installation place.
• When the packaging must be removed, protect unit properly.

② **Selection Of Installation Place**

(1) Installation place shall meet the following requirments and agreed by customers

• Place where proper air flow can be ensured.
• No block to air flow.
• Water drainage is smooth.
• The place should be strong enough to support unit weight.
• No obvious slope of the ceiling at the installation place.
• Enough space for mainenance.
• Indoor and outdoor unit piping length is within limit.
• Indoor and outdoor unit, power cable, inter unit cable are at least 1m away fromT.V. radop. This is helpful to avoid picture disturbance and noise. (Even if 1m iskept, noise can still appear if radio wave is strong)

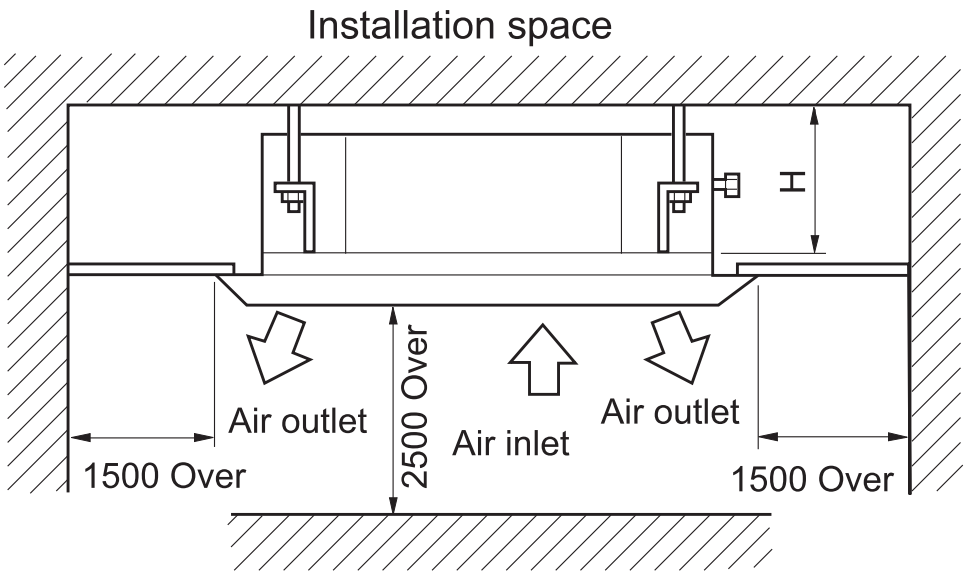
(2) Ceiling height

Indoor unit can be installed within 3m in height between the panel and the ground

(3) Install suspending bolt.

Check if the installation place is strong enough to hold weight. Take necessary measures in case it is not safe. (Distance between holes are marked on paper pattern. Refer to paper pattern for place need be reinforced)

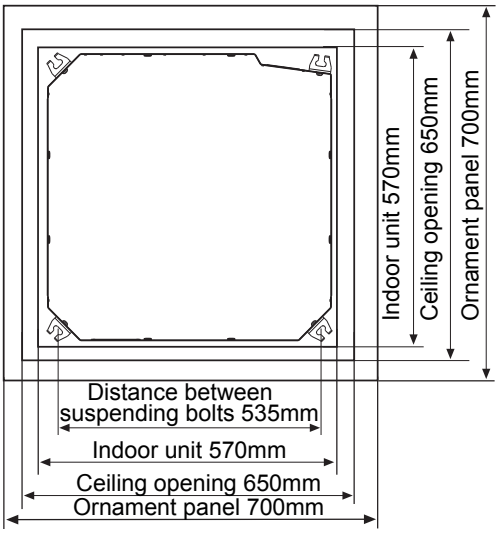
| Model | H |
|---|---|
| AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA | 260 |
| AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA | 260 |
| AB71S2SG1FA | 204 |



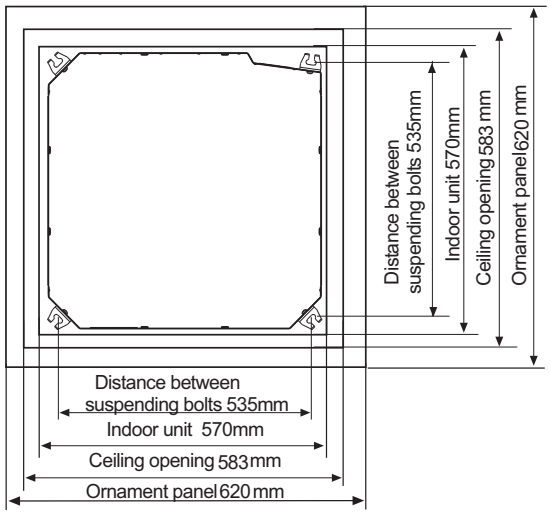
③ **Preparation for the Installation**

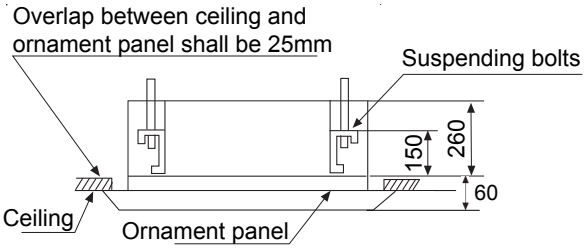
(1) Position of ceiling opening between unit and suspending bolt.

PB-700KB

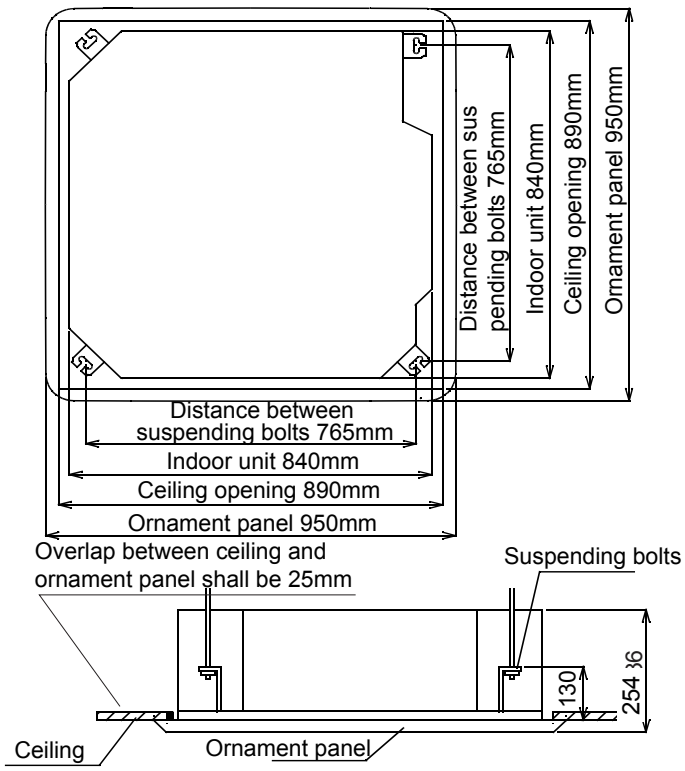



PB-620KB




PB-950KB



| Indoor Unit | Panel |
|---|---|
| AB25S2SC1FA<br>AB35S2SC1FA<br>AB50S2SC1FA | PB-700KB |
| AB25S2SC2FA<br>AB35S2SC2FA<br>AB50S2SC2FA | PB-620KB |
| AB71S2SG1FA | PB-950KB |

(2) Cut an opening in ceiling for installation if necessary. (When ceiling already exists.)

• Refer to paper pattern for dimension of ceiling hole.

• Connect all pipings (Refrigerant, water drainage), wirings (Inter unit cable) to indoor unit, before installation.

• Cut a hole in ceiling, may be a frame should be used to ensure a smooth surface and to prevent vibration.

• Contact your real estate dealer

(3) Install a suspending bolt. (Use a M10 bolt)

• To support the unit weight, anchor bolt shall be used in the case of already exists ceiling. For new ceiling, use builtin type bolt or parts prepared in the field.

• Before going on installing adjust space between ceiling.

***Note:*** All the above mentioned parts shall be prepared in field.

④ **Installation of Indoorunit**
**In The Case of New Ceiling**

(1) Install unit temporally

Put suspending bracket on the suspending bolt.

Be sure to use nut and washer at both ends of the bracket.

(2) As for the dimensions of ceiling hole, see paper pattern. Ask your real estate dealer for details.

Center of the hole is marked on the paper pattern.

Center of the unit is marked on the card in the unit and on the paper pattern.

Mount paper pattern ⑤ onto unit using 3 screws

⑥ Fix the corner of the drain pan at piping outlet.

**<Afler Inslallalion on the Ceiling>**

(3) Adjust unit to its right position.

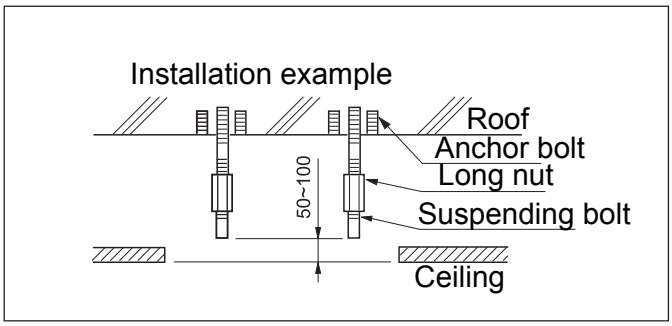
(Refer to preparation for the installation-(1))

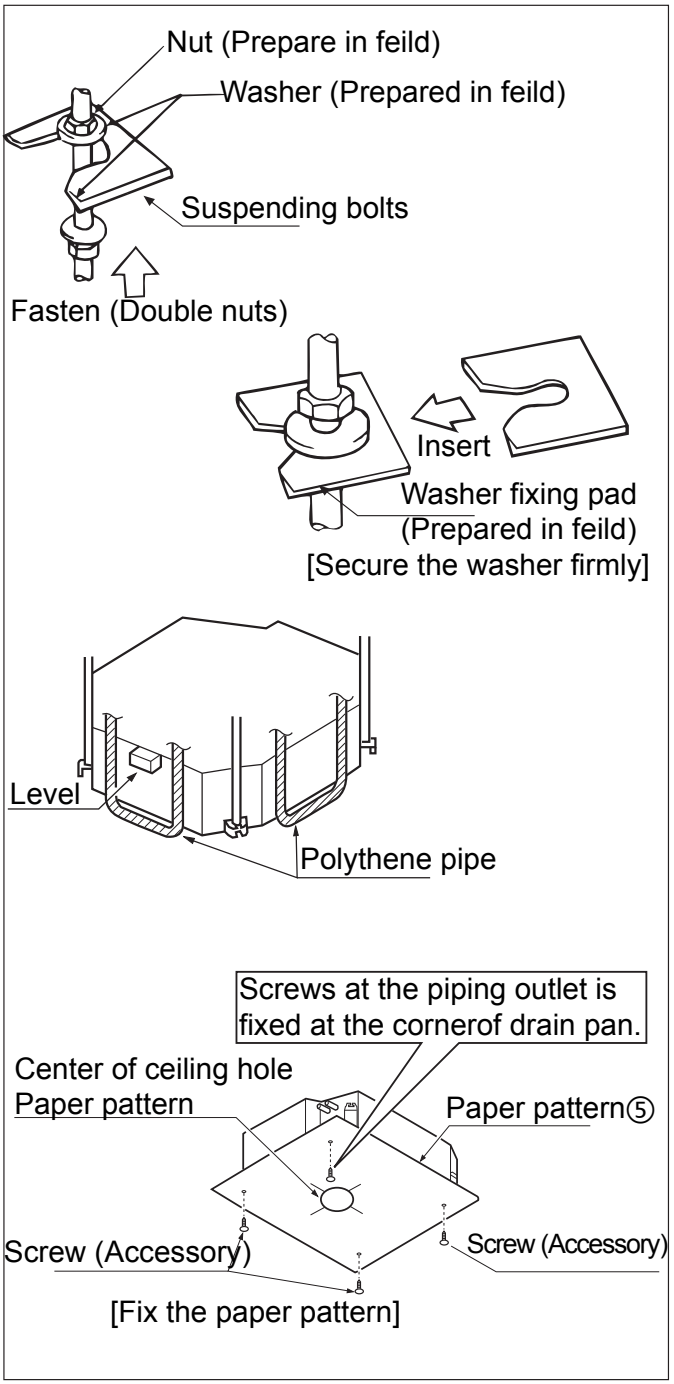
(4) Check units horizontal level.

Watert pump and flating switch is installed inside indoor unit, check four corners of the unit for its level using horizontal compartor or PVC tube with water. (If unit is tilting against the direction of water drainage, problem may occur on floating switch, causing water leakage.)

(5) Remove the washer mounlting ② and tighten the nut above.

(6) Remove the paper pattern.



**In the Case of Ceiling Already Exisls**

(1) Install unit temporally

Put suspending bracket on the suspending bolt.

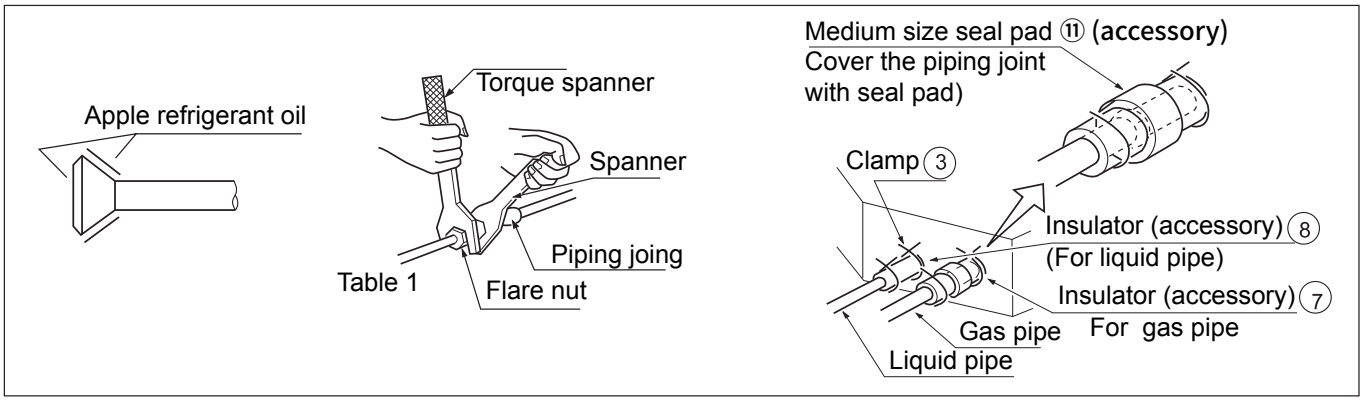
Be sure touse nut and washer at both ends of the bracket. Fix the bracket firmly.

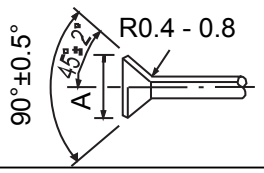
(2) Adjust the height and position of the unit. (Refer to preparation for the installation (1) ).

(3) Proceed with ③ and ④ of "In the case of new ceiling".

⑤ **Refrigerant Piping (As for outdoor piping, please refer to installalion manual of outdoor unit.)**

• Outdoor is precharged with refrigerant.
• Be sure tosee the Fig.1, when connecting and removing piping from unit.
• For the size of the flare nut, please refer to Table 1.
• Apply refrigerant oil at both inside and outsid of lflare nut. Tighten it band tight 3-4 turns then tighten it.
• Use torque specified in Table 1. (Too much force may damage flare nut, causing gas leakage).
• Check piping joints for gas leakage. Insulate piping as shown in Fig. below.
• Cover joint of gas piping and insulator 7 with seal.




| Pipe Size | Tighten Torque | A (mm) | Flare Shape |
|---|---|---|---|
| φ6.35 | 1420-1720N.cm (144-176 kgf.cm) | 8.3-8.7 |  |
| 9.52 | 3270-3990N.cm (333-407 kgf.cm) | 12.0-12.4 | |
| 12.7 | 4950-6030N.cm (490-500 kgf.cm) | 12.4-16.6 | |
| 15.88 | 6180-7540N.cm (630-770 kgf.cm) | 18.6-19.0 | |
| 19.05 | 9720-11860N.cm (990-1210 kgf.cm) | 22.9-23.3 | |

⑥ **Installation of Waterdrainage Pipe**

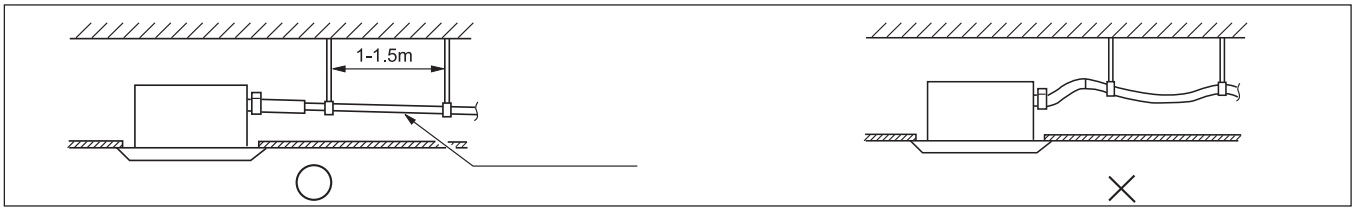
(1) Install water drainage pipe

• Pipe dia, shall be equal or larger than that of unit piping. (Pipe of polyethylent; size 25mm; O.D 32mm)

• Drain pipe should be short, with a downward slope at least 1/100 toprevent air bag from happening.

• If downward slope can t be made, take other measures to lift it up.

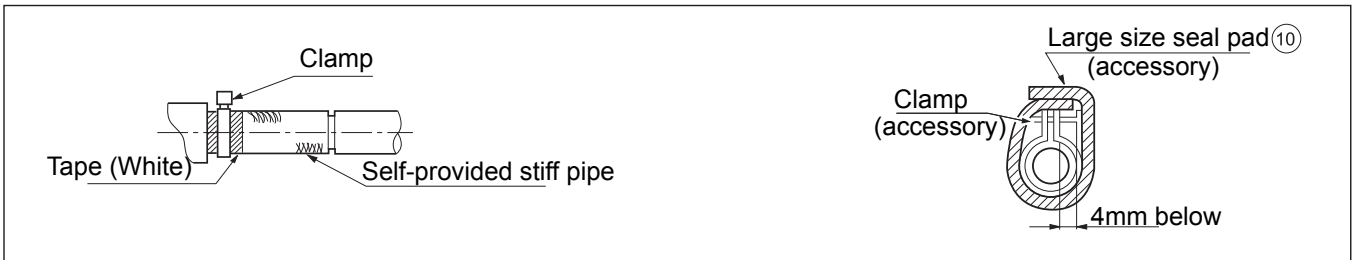
• Keep a distance of 1-1.5m between suspending brackets, tomake water hose straight.




• Use the self-provided stiff pipe and clamp ① with unit. Insert water pipe into water plug until it reaches the white tape. Tighten the clip until head of the screw is less than 4mm from hose.

• Wind the drain hose to the clip using seal pad ⑨ .

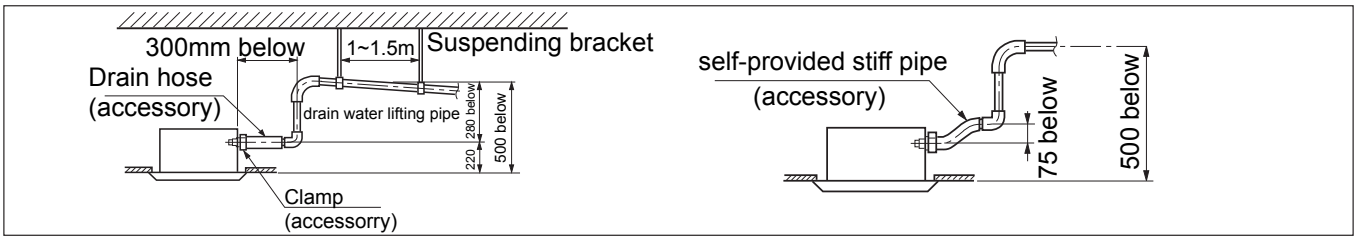
• Insulate drain hose in the room.




**<Caulions for the Drain Waler Lifting Pipe >**

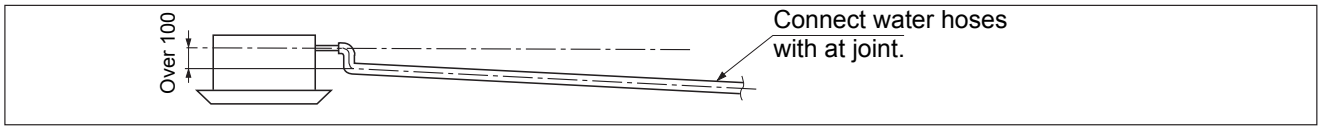
Installation height shall be less than 280mm.

There should be a right angle with unit, 300mm from unit.



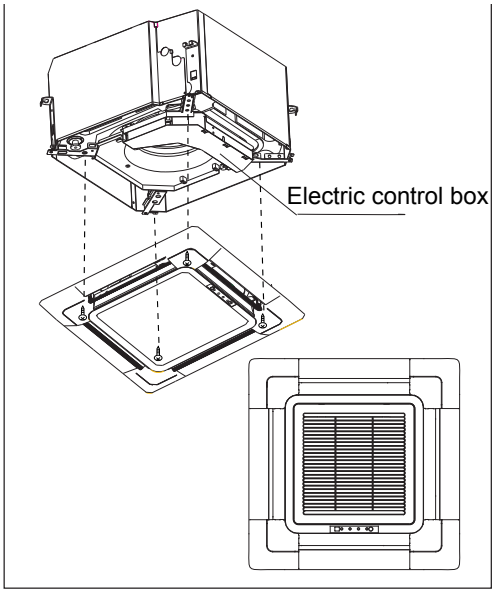
***Note:***

The slope of water drain hose (1) shall be within 75mm, don't apply too much force on it.
If several water hoses join together, do as per following proceedures.
Specifieations of the water hoses shall meet the requirements for the unit running.




(2) Check if water drainage is smooth after installation.

• Check whether indoor unit is horizontal with leveler or polythene pipe filled with water, and check that the dimension of the ceiling opening is correct. Take off the lever gauge before install the ornament panel.
• Fasten the screws to make the height difference between the two sides of indoor unit less than 5mm.
• First fix it with screws temporally.
• Fasten the two temporally fixing screws and other two, and tighten the four screws.
• Connect the wires of synchro-motor.
• Connect the wire of signal.
• If no response of remote controller, check whether the wiring is correct, restart remote controller 10 seconds after shut off power supply.

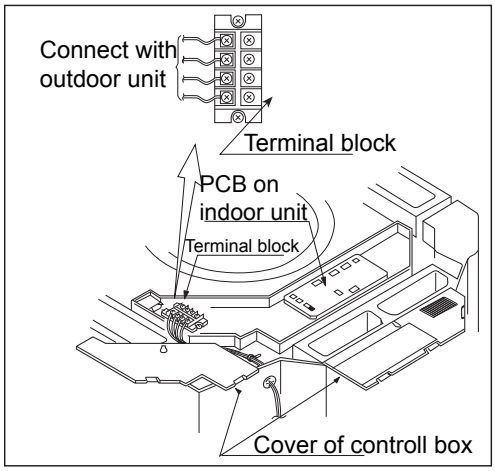



**<Limits of Panel Board Installalion>**

• Install the panel board in the direction shown in the figure. The incorrect direction will result in water leakage, meanwhile swing and signal receiving are displayed that cannot be connected.
• Charge, through air outlet or inspecting hole, 1200ccd water to see water drainage.

**After Wiring**

• Check water drainage in cooling operation.

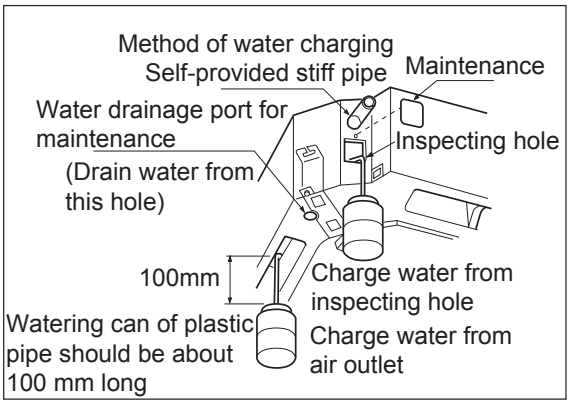


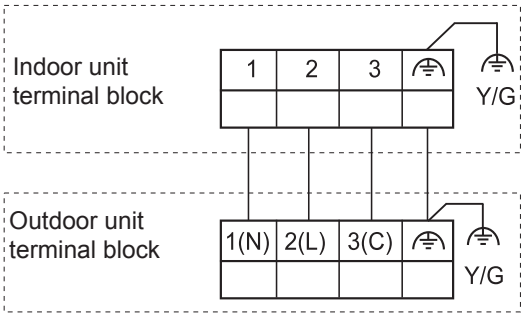
**When Wiring is not Complele**

• Remove cover of control box, connect 1PH power to terminal 1 and 2 on terminal block. Use remote controller to operate the unit.

• Note, in this operation, fan will be running.

• Upon confirmation of a smooth water drainage, be sure to cut off power supply.




⑦ **WIRING**

• All supplied parts. materials and wiring operation must in appliance with local code and regulations.

• Use copper wire only.

• When make wiring, please refer towiring diagram also.

• All wiring work must be done by qualified electricians.

• A circuit breaker must be installed, which can cut power

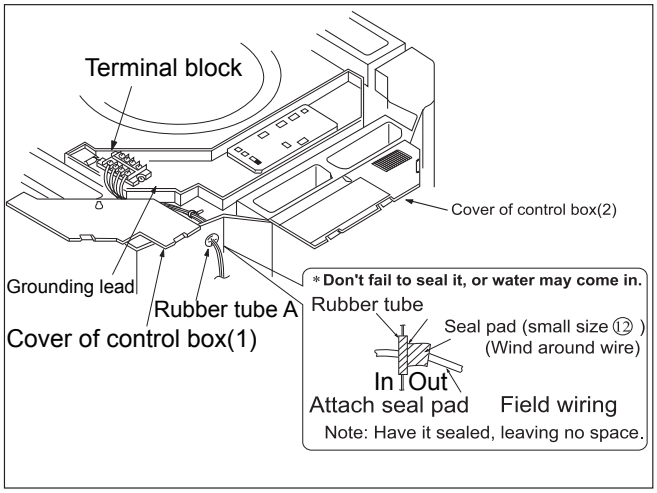
• supply toall system.

• See Installation Manual of outdoor unit for specifications of wires, circuit breaker, switches and wiring etc.

• Connecting of unit

Remove cover of switch box (1), drag wires into rubber tube A, then, after proper wiring with other wires, tighten clamp A. Connect wires of correct pole to the terminal block inside. Wind sea 12 around wires. (Be sure to do that, or, dew may occur).

• Upon connecting, replace control box cover (1) and (2).



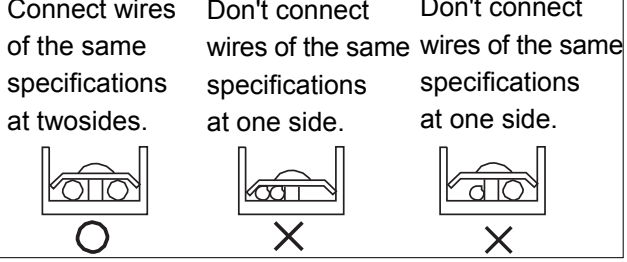

**⚠WARNING:**

Obscrve the following when connecting power supply terminal block.

Don't connect wires of different specifications to the same terminal block.

(Loose wire may cause overheating of circuit)

Connect wires of same specifications as shown in right Fig.



⑧ **Wiring Example**

As for outdoor unit circuit, please see installation manual of outdoor unit.

Note all electric wires have their own poles, poles must match that on terminal block.

Pay special care lo lhe following and check afler inslallalion

| Item to the checked | Unproper inslallalion may cause | Check |
|---|---|---|
| Is indoor unit firmly installed? | Unit might fall down, make vibration or noise. | |
| Is gas leakage check performed? | This may lead togas shortage. | |
| Is unit properly insulated? | Dew or water drop may occur. | |
| Is water drainage smooth? | Dew or water drop may occur. | |
| Is power voltage meet that stipulated on the nameplate? | Problem may occur or parts got burned. | |
| Is wiring and piping correctly arranged? | Problem may occur or parts got burned. | |
| Is unit safely grounded? | There might be a danger of electric shock. | |
| Is wire size correct? | Problem may occur or parts got burned. | |
| Are there any obstacles on air inlet and outlet grill of indoor and outdoor unit? | This may cause poor cooling. | |
| Is record made for piping length and refrigerant charging amount? | It is hard to control refrigerant charging amount. | |

***Attention:*** **After finishing installation, confirm no refrigerant leakage.**

- The installation of pipe-work shall be kept to a minimum.
- Pipe-work shall be protected from physical damage and shall not be installed in an unventilated space, if that space is smaller than amin ($2m^2$).
- Compliance with national gas regulations shall be observed.
- Mechanical connections shall be accessible for maintenance purposes.
- The minimum floor area of the room: $2m^2$.
- The maximum refrigerant charge amount: 1.7 kg.
- Information for handling, installation, cleaning, servicing and disposal of refrigerant.
- Warning: Keep any required ventilation openings clear of obstruction.
- Notice: Servicing shall be performed only as recommended by the manufacturer.

**Unventilated Areas**

- WARNING: The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified.
- WARNING: The appliance shall be stored in a room without continuously operating open flames (e.g.an operating gas appliance) and ignition sources (e.g. an operating electric heater).

**Qualification of Workers**

- Specific information about the required qualification of the working personnel for maintenance, service and repair operations.
- WARNING: Every working procedure that affects safety means shall only be carried out by competent persons.

Examples for such working procedures are:

- Breaking into the refrigerating circuit.
- Opening of sealed components
- opening of ventilated enclosures.

**Information on Servicing**

- Prior to beginning work on systems, safety checks are necessary to ensure that the risk of ignition is minimized.
- Work shall be undertaken under a controlled procedure so as to minimized the risk of flammable gas or vapor being present while the work is being performed.
- Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

**Checking for Presence of Refrigerant**

- The area shall be checked with an appropriate refrigerant detector prior to and during work. The leak detection equipment should be suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

**Presence of Fire Extinguisher**

- If any hot work is to be conducted, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or $CO^2$ fire extinguisher adjacent to the charging area.

**No Ignition Sources**

- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

**Ventilated Area**

- Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

**Checks to the Refrigeration Equipment**

- Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations

- The charge size is in accordance with the room size within which the refrigerant containing parts are installed;
- The ventilation machinery and outlets are operating adequately and are not obstructed;
- If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

**Checks to Electrical Devices**

- Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

- Initial safety checks shall include:

• That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
• That no live electrical components and wiring are exposed while charging, recovering or purging the system;
• That there is continuity of earth bonding.

**Repairs to Sealed Components**

- During repairs to sealed components, all electrical supplies shall be disconnected prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
- Ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected, including damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.
- Ensure that the apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded to the point that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

**Repair to Intrinsically Safe Components**

- Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
- Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere.
- Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

**Cabling**

- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

**Detection of Flammable Refrigerants Removal and Evacuation**

- The refrigerant charge shall be recovered into the correct recovery cylinders and the system shall be “flushed” with OFN to render the unit safe. This process may need to be repeated several times.
- Compressed air or oxygen shall not be used for purging refrigerant systems.
- Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.
- The vacuum pump is not close to any ignition sources and that ventilation is available.

**Charging Procedures**

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept upright.
- Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the refrigeration system.
- Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak- tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

**Decommissioning**

- Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail.
- Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant.
- Electrical power must be available before the task is commenced.

- Become familiar with the equipment and its operation.
- Isolate system electrically.
- Before attempting the procedure, ensure that:
• mechanical handling equipment is available, if required, for handling refrigerant cylinders;
• all personal protective equipment is available and being used correctly;
• the recovery process is supervised at all times by a competent person;
• recovery equipment and cylinders conform to the appropriate standards.

- Pump down refrigerant system, if possible.
- If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- Make sure that cylinder is situated on the scales before recovery takes place.
- Start the recovery machine and operate in accordance with manufacturer's instructions.
- Do not overfill cylinders. (No more than 80% volume liquid charge).
- Do not exceed the maximum working pressure of the cylinder, even temporarily.
- When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

**Labelling**
- Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed.
- Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

**Recovery**
- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
- Ensure that the correct number of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant).
- Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants.
- A set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak- free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release.
- The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged.
- Do not mix refrigerants in recovery units and especially not in cylinders.

- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.
- The evacuation process shall be carried out prior to returning the compressor to the suppliers.
- Only electric heating to the compressor body shall be employed to accelerate this process.

**ABH071H1ERG ABH090H1ERG ABH105H1ERG ABH125K1ERG ABH140K1ERG**

**6.1 Before installation** <Don't discard any accessories until comp>

• Determine the way to carry unit to installation place.
• Don't remove packing until unit reaches installation place.
• If unpacking is unavoidable, protect unit properly.

**6.2 Selection of installation place**

(1) Installation place shall meet the following and agreed by customers:

• Place where proper air flow can be ensured.
• No block to air flow.
• Water drainage is smpoth.
• Place strong enough to support unit weight.
• Place where inclination is not evident on ceiling.
• Enough space for mainenance.
• Indoor and outdoor unit piping length is within limit. (Refer to Installation Manual for outdoor unit.)
• Indoor and outdoor unit, power cable, inter unit cable are at least 1 m away fromT.V. radio. This is helpful to avoid picture disturbance and noise. (Even if 1 m is kept, noise can still appear if radio wave is strong)

(2) Ceiling height

Indoor unit can be installed on ceiling of 2.5-3m in height. (Refer to Foeld setting and Installation Manual of ornament panel.)

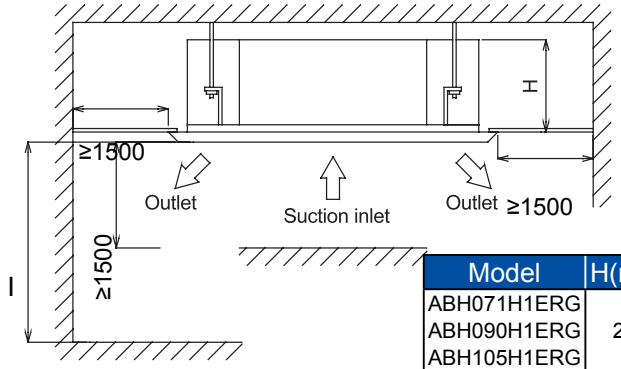
(3) Install suspending bolt.

Check if the installation place is strong enough to hold weight. Take necessary measures in case it is not safe. (Distance between holes are marked on paper pattern. Refer to paper pattern for place need be reinforced)

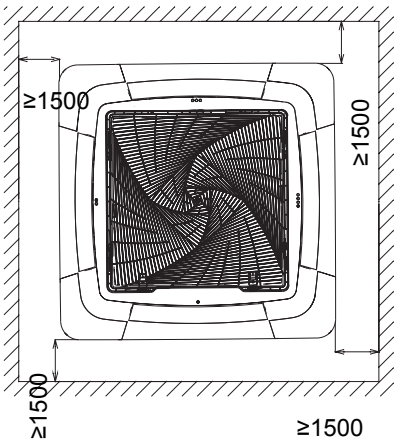
(4) Selection of installation location of outdoor

With consent from the user, installation location shall:

• Be sufficient to bear weight of the units, with air circulation.
• Avoid direct radiation from heat sources or other heat sources.
• Facilitate the drainage of condensate. Holes in wall shall also facilitate drainage.
• Be such that noise and heat air will not disturb neighbors.
• Be free of heavy snow in winter.
• Allow air inlets and outlets to be free of barriers.
• Not allow air outlet to directly face strong airflow.
• Facilitate installation at four corners, with 1m space above the unit.
• Be convenient for maintenance and repair.
• For installation of multiple units, sufficient space shall be ensured to avoid short circuit.
• The air conditioner shall not be mounted on a non-dedicated metal frame (e.g. burglar mesh) .
• When the outdoor unit is installed on a street side, its height shall not be less than 2.5m.



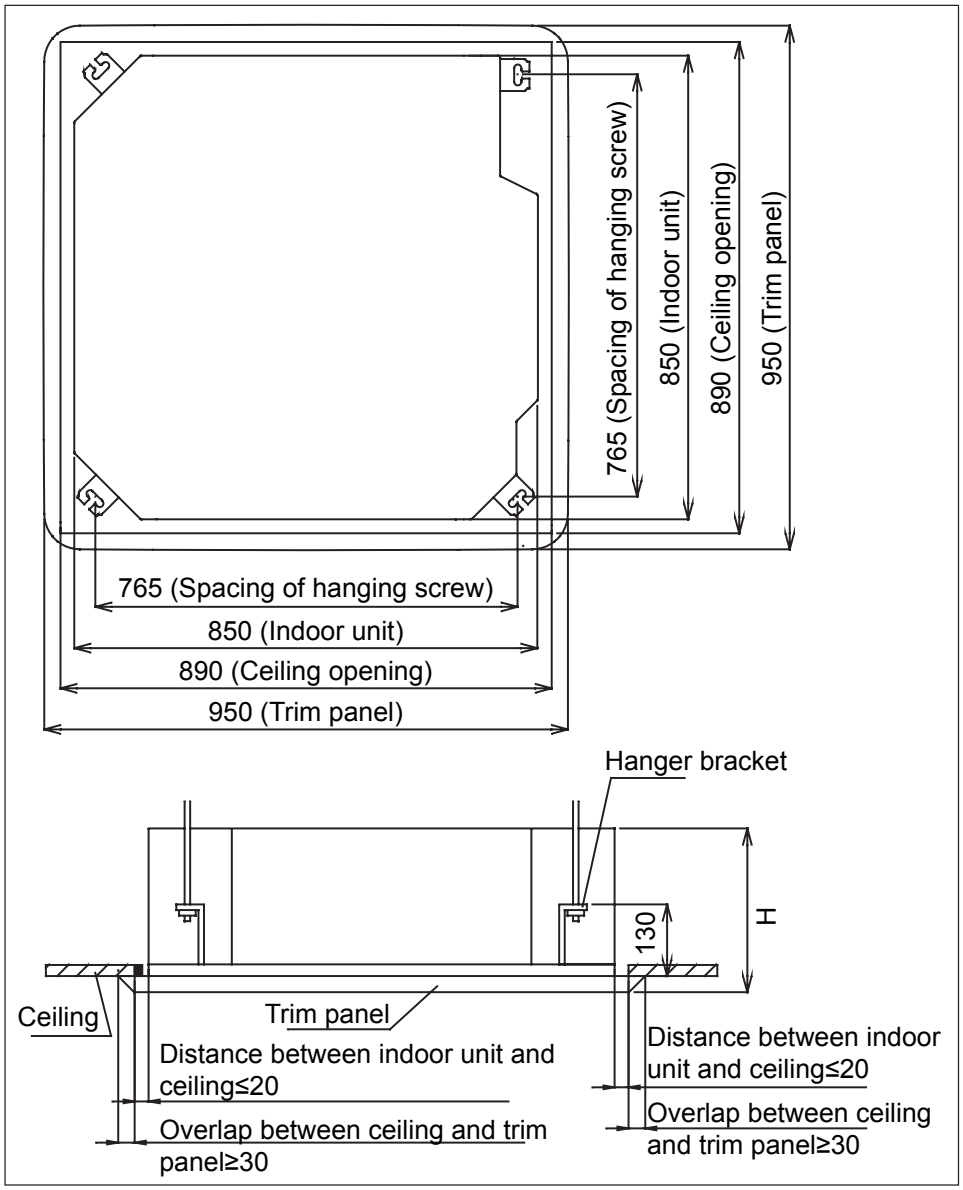

| Model | H(mm) | I(m) |
|---|---|---|
| ABH071H1ERG<br>ABH090H1ERG<br>ABH105H1ERG | 246 | 2.5≤I≤3.5 |
| ABH125K1ERG<br>ABH140K1ERG<br>ABH160K1ERG | 288 | 2.5≤I≤4.2 |




Space required for installation (unit: mm)

### 6.3 Preparation before installation

(1) Location relationships between ceiling opening and hanging screw




| Model | H |
|---|---|
| ABH071H1ERG | |
| ABH090H1ERG | 299 |
| ABH105H1ERG | |
| ABH125K1ERG | |
| ABH140K1ERG | 341 |
| ABH160K1ERG | |

Note:

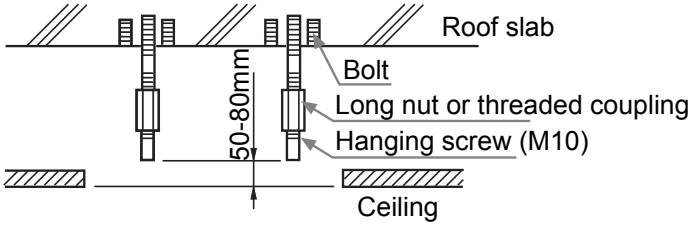
*Overlap between the ceiling and decorative panel shall be 30mm or more. The distance between indoor unit and ceiling shall be 20mm or less. If it's more than 20mm, add ceiling materials at or repair the ceiling.*

(2) Complete all pipes (for refrigerants and drainage) and wires (for connection of indoor and outdoor units) to be connected to indoor unit before installation so that they can be connected to indoor unit immediately after installation.

(3) Install hanging screws

• To bearing the unit weight, use foundation bolts on existing ceilings, or embedded bolts, buried bolts or other parts that is provided on site on new ceilings. Before installation is continued, adjust the distance from ceiling.

<Installation example>




Note:

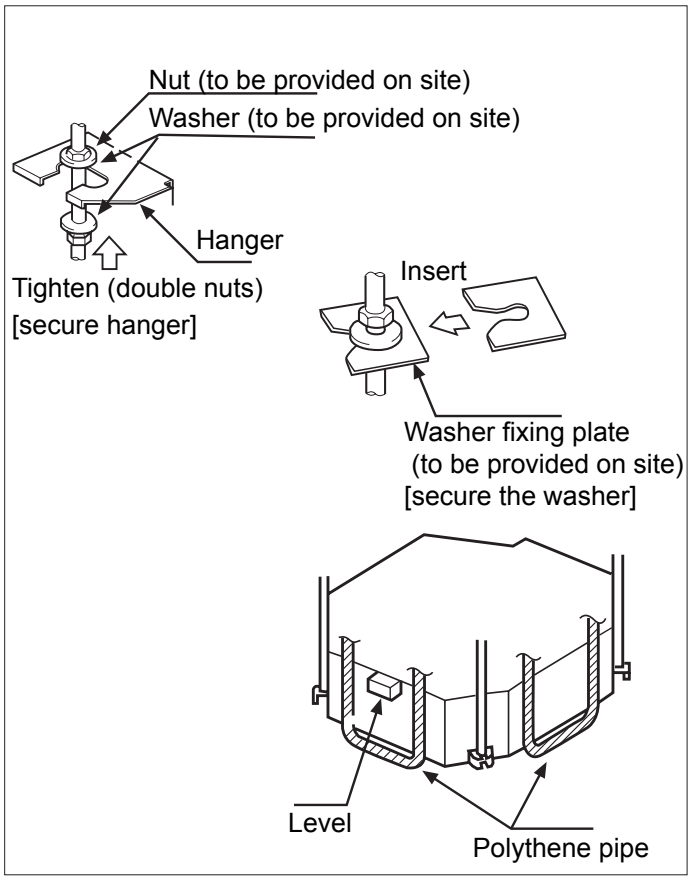
*All the above parts are to be provided on installation sites. Diameter of hanging screws is M10.*

## 6.4 Installation of indoor unit

Installation sequence on new ceiling: (1) → (3) → (4) → (5)

(1) Temporary installation of indoor unit

• Attach hangers to hanging screws, and make sure to use nuts and washers on both upper and lower ends of hangers so as to fix them firmly. A washer fixing plate (to be provided on site) can prevent the washer from dropping off.




<Work at ceilings>

(2) Adjust units to appropriate installation locations. Refer to "7.3 Preparation before installation."

(3) Correct levelness of air conditioner units.

• The indoor unit is equipped with a built-in drainage pump and a float switch. Correct levelness with a level or water-filled polyethylene pipe.

Note:

*If the unit inclines towards reverse direction of condensate flow, the float switch can not work normally and water leakage will be resulted.*

(4) Pull out the original fixing plate that prevents the washer from dropping off, and tighten nuts.

(5) Remove the installation cardboard.

## 6.5 Installation of drain pipe

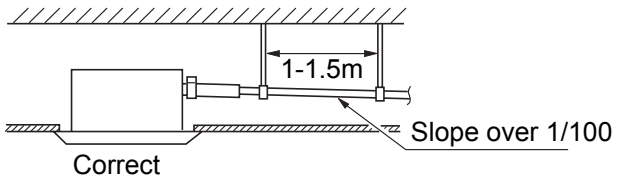
(1) Install drain pipe

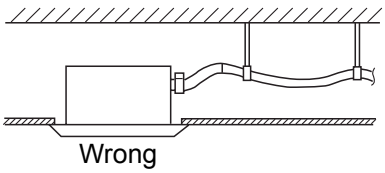
• Diameter of the drain pipe shall be greater than or equal to that of the connecting pipe. (PE pipe: size: I.D.: 25mm; O.D.: 32mm)

• The drain pipe shall be short and have a downward slope of at least 1/100 to prevent pockets.

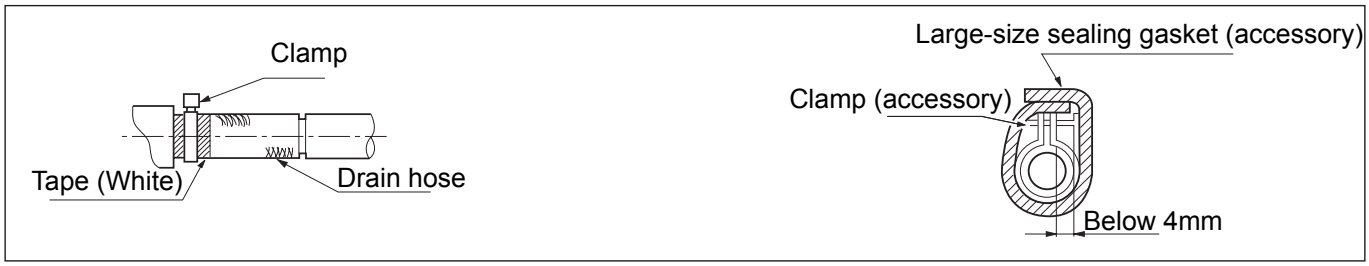
• If it is impossible to provide sufficient slope to the drain pipe, a drain lift pipe shall be installed.

• To avoid bending of the drain pipe, hangers shall be kept 1-1.5m away from each other.

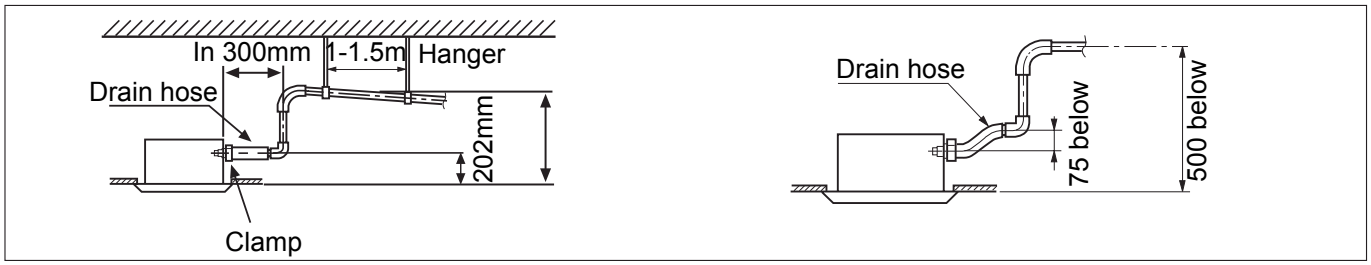


Use a drain hose and clamp.
Insert the drain hose into the drainage outlet until it reaches the white tape. Then tighten the clamp.
For heat insulation, wind the drain hose with sealing gaskets. Provide heat insulation to indoor drain hose.



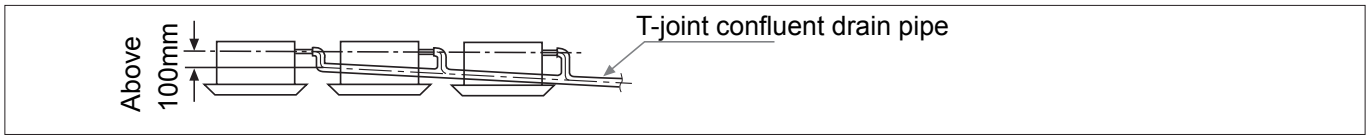

<Precautions for drain lift pipe>
The drain lift pipe shall be installed as low as possible.
The drain lift pipe shall be perpendicular to the unit and not more than 300mm away from the unit.




Note:

• *The slope of accessory drain pipe shall be within 75mm so that the drainage outlet does not necessarily bear excessive external force.*

• *If multiple drain pipes join together, install them as follows.*




The size of confluent drain pipe selected shall be suitable for operating capacity of the units.
(2) Check drainage is smooth after installation.
• Check drainage by filling in 1200cc water slowly from air outlet or inspection hole.

**6.6 Installation instruction for embedded air-conditioning panel**

1. Before installation

**⚠ WARNING**

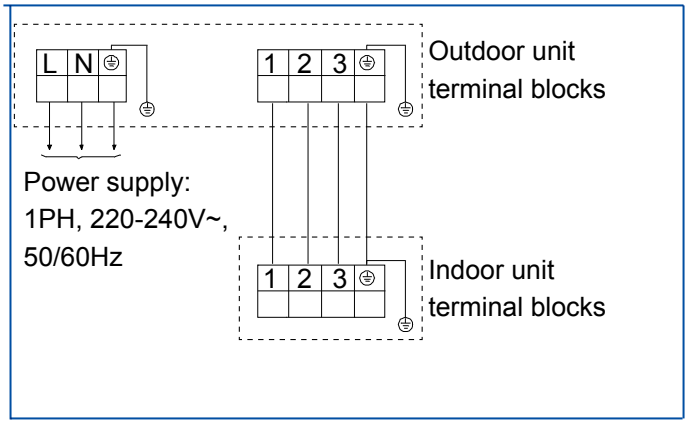
The trim panel shall be put on buffer materials when unpacked to prevent being scratched by hard objects.

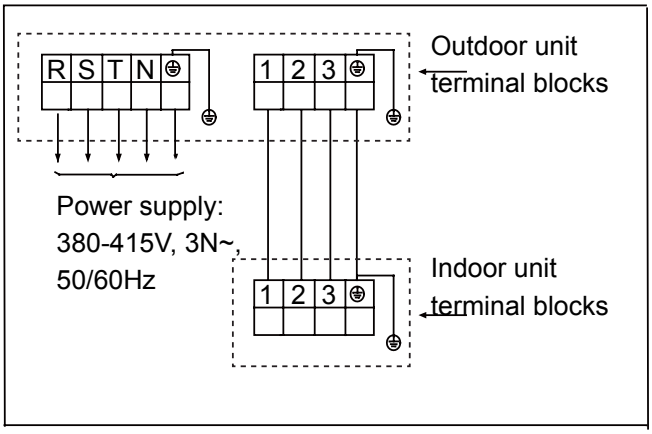
Please confirm the following accessories delivered with the product:


Bolt (M5*25) Qty: 4


Gasket Qty: 4

Connect and fix the power supply cable, indoor-outdoor connection cable as following:



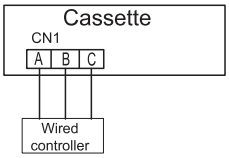

All field supplied parts, materials and electric works must conform to local codes. (ie. AS / NZS 3000)

Indoor and outdoor connection cable:
If the communication cable length ≤ 40m
071/090/105 communication cable: 1.5mm2
125/140/160 communication cable: 2.5mm2
If 40m ＜ the communication cable length ≤ 55m, all models: 4mm2
If 55m ＜ the communication cable length ≤ 75m, all models: 6mm2
Communication line length is not allowed to exceed 75 meters

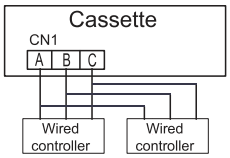
## Wired controller wiring instruction

**Alert! Ensure do any of the operating during power off.**

**A. One Wired controller controls one indoor unit**




**B: Double wired controllers control one indoor unit**

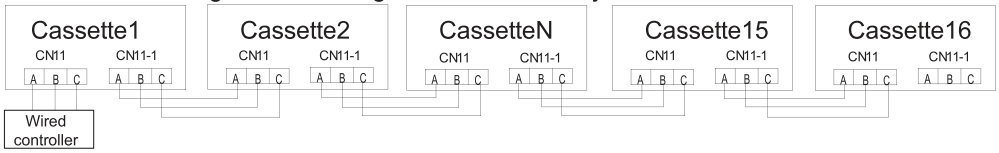



**C. Connection method for ONE wired controller with MULTIPLE indoor units**

For wired controller connect with cassette (AB**SC2VHA)

**Step1:**The wiring connection between 1.wired controller-the master unit(directly connected to the wired controller), 2.master unit-slave unit, 3.slave unit-slave unit should be one to one match of all three lines.

The connection wiring is as following, and max. Quantity of the connected indoor units is16.



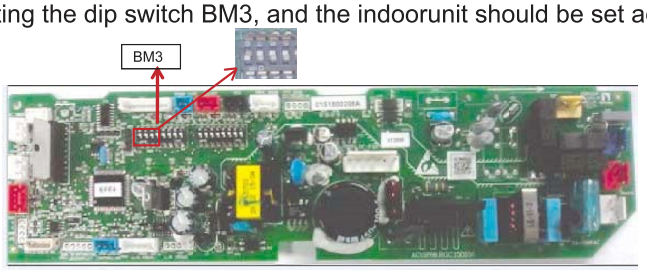

Note:

1) Shielded lays of the communication line should be connected as a daisy chain from the first master unit to the last slave unit.

2)The shielding lay of the communication line must be grounded at the end of the last slave unit.

**Step2**

Setting the dip switch BM3, and the indoorunit should be set according to the following table:




| Wired controller address | BM3-8 | BM3-7 | BM3-6 | BM3-5 |
|---|---|---|---|---|
| Master indoor unit | 0 | 0 | 0 | 0 |
| Slave unit1 | 0 | 0 | 0 | 1 |
| Slave unit2 | 0 | 0 | 1 | 0 |
| Slave unit3 | 0 | 0 | 1 | 1 |
| Slave unit4 | 0 | 1 | 0 | 0 |
| Slave unit5 | 0 | 1 | 0 | 1 |
| Slave unit6 | 0 | 1 | 1 | 0 |
| Slave unit7 | 0 | 1 | 1 | 1 |
| Slave unit8 | 1 | 0 | 0 | 0 |
| Slave unit9 | 1 | 0 | 0 | 1 |
| Slave unit10 | 1 | 0 | 1 | 0 |
| Slave unit11 | 1 | 0 | 1 | 1 |
| Slave unit12 | 1 | 1 | 0 | 0 |
| Slave unit13 | 1 | 1 | 0 | 1 |
| Slave unit14 | 1 | 1 | 1 | 0 |
| Slave unit15 | 1 | 1 | 1 | 1 |

"1" stands for ON," 0" stands for OFF.

Note:

The above step 1, step 2, and step 3 must be operated in power off status.

The power supply terminals L1 L2 of all the outdoor units must be in the same phase sequence.

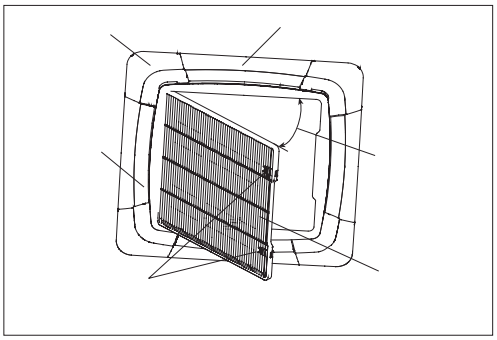
## 2. Installation

(1) Confirming the position of unit hanger

Please confirm the installation position of the hanger for indoor unit is about 130mm above the ceiling. For details, please refer to the Instructions for Installation and Maintenance of indoor unit.

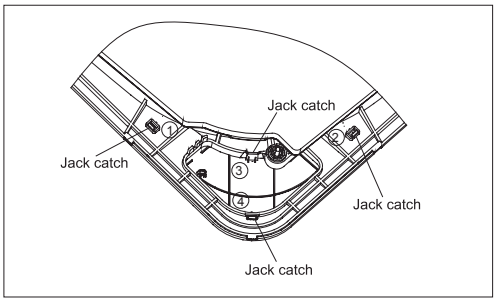
(2) Removing the air-inlet grille

Open the air-inlet grille to make it at an angle of 45° to the trim panel. As shown in the following figure, please remove the air-inlet grille as per the operation requirements.



(3) Installing the panel

1) Please remove the four (4) angle trim panels. Removal method: Flip the jack catches of the angle trim panel in the order of ①②③④ , as shown in the following figure. The flipping direction is indicated by the arrows. Then the angle trim panel can be removed.



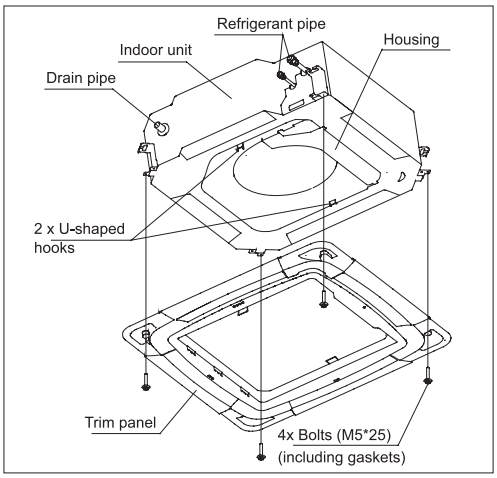

2) Pull out the two (2) U-shaped hooks on the indoor unit from below.

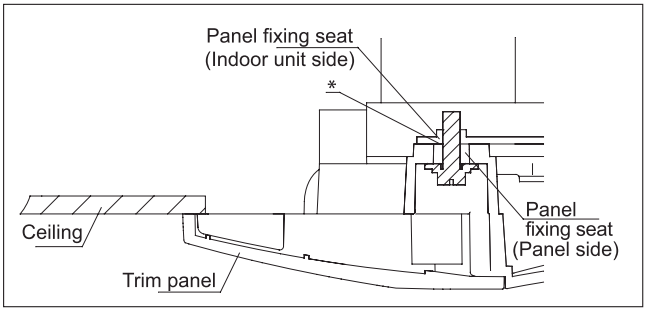
3) Adjust the panel direction to make the angle side engraved with "Pipe side" consistent with the refrigerant pipe of the indoor unit, and make the angle side engraved with "Drain side" consistent with the drain side of the indoor unit. Then hang the 2 hooks in the inner side of the panel on the 2 U-shaped hooks of the indoor unit.

4) Finally fix the panel on the indoor unit with the bolts (M5*25) and gaskets delivered with the unit.

Caution: Gaskets must be used for fixing, or else the panel would be easy to fall off.

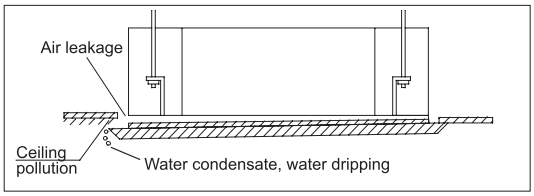
5) When tightening the four (4) bolts, please make sure there is no clearance between the panel fixing seat on the side of the indoor unit and the panel fixing seat on the side of the panel. That is to say: the bolts shall be fully tightened (see * in the figure) . If there is a clearance, air leakage or water leakage is likely to occur.



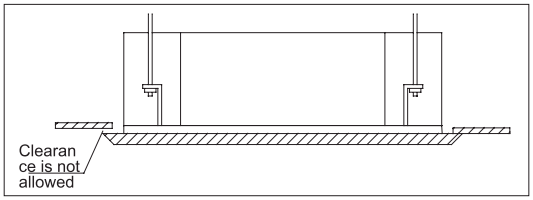



## ⚠ CAUTION

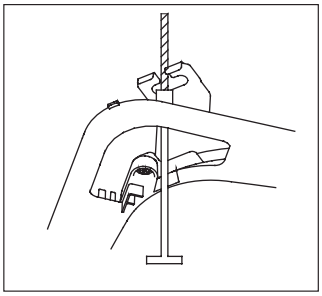
• Improper tightening of bolts would lead to the faults shown in the following figure.




• After tightening the bolts, if there is a clearance between the ceiling and the trim panel, please readjust the height of the indoor unit.

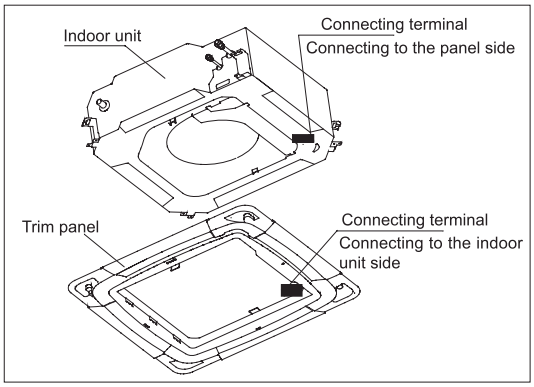



If the elevation level of the indoor unit and drain pipe are not affected, you can adjust the height of the indoor unit through the corner pore on the trim panel. Please keep the unit horizontal in the process of adjustment, or else water leakage is easy to occur.



• Please do not swing the louver blade by hand, or else the blade mechanism would be damaged.

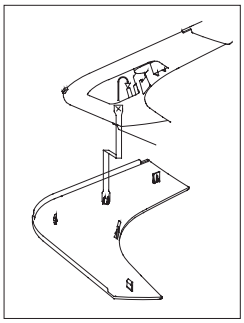
6) Connection of trim panel. Connect the black lead-out terminal of the panel to the black lead-out terminal of the indoor unit housing.



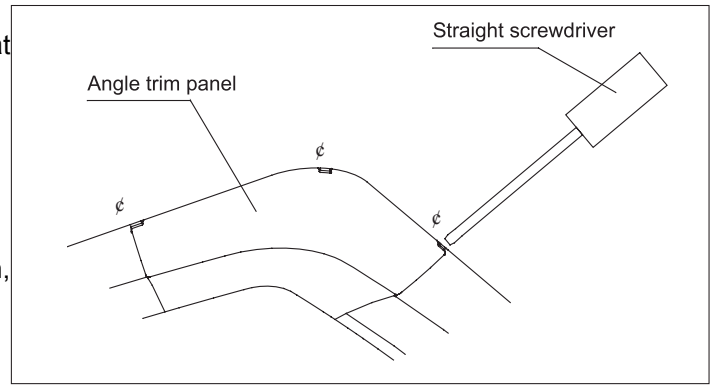

7) When the installation of panel is complete, please fix the four (4) angle trim panels.

• Hang and tighten the strap of the angle trim panel on the shackle of the trim panel, as shown in the figure.

• Fix the angle trim panel on the trim panel.



8) Installing the air-inlet grille.
Install the air-inlet grille with the steps opposite to that for removing.




For reference
The method for removing angle trim panels when the installation of trim panel is complete:
1) Insert a straight screwdriver in the notch ① . Gently turn the screwdriver downward, and slowly insert it in, and then move it up and down to make the angle fall off.
2) Make the angle ② and ③ fall off in the same way.
3) Take off the angle trim panel by hand.

## 7. Test Run

### 7.1 Check items

1. Indoor unit
• Is operation of each button on the remote control unit normal?
• Does each lamp light normally?
• Do not air flow direction louvers operate normally?
• Is the drain normal?

2. Outdoor unit
• Is there any abnormal noise and vibration during operation?
• Will noise, wind, or drain water from the unit disturb the neighbors?
• Is there any gas leakage?

Customer guidance
Explain the following to the customer in accordance with the operation manual:
(1) Starting and stopping method, operation switching, temperature adjustment, timer, air flow switching, and other remote control unit operations.
(2) Air filter removal and cleaning, and how to use air louvers.
(3) Give the operation and installation manuals to the customer.

### 7.2 Test run

**⚠ WARNING**

This unit will be started instantly without "ON" operation when electric power is supplied. Be sure to execute "OFF" operation before electric power is disconnected for servicing.
• This unit has a function of automatic restart system after recovering power stoppage

1. Before starting test run (for Heat pump models)
Confirm whether the power source breaker (main switch) of the unit has been turned on for over 12 hrs to energize the crankcase heater in advance of operation.

2. Test run
• Run the unit continuously for about 30 minutes, and check the following. Suction pressure at check joint of service valve for gas pipe.
• Discharge pressure at check joint on the compressor discharge pipe.
• Temperature difference between return air and supply air for indoor unit.

# 3 . Indoor Units - Convertible type indoor unit

## 3.1 Specification

| Item | | | Model | AC35S2SG1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 3400 | 4200 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.5 | |
| Indoor unit | Power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed(H-M-L) | r/min | 800/700/600/500 | |
| | | Fan motor output/input power | W | 21/30 | |
| | | Air-flows (H-M-L) | m³/h | 750/620/500/400 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.2 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 1000/230/680 | |
| | | Package | mmxmmxmm | 1100/305/779 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 15/20 | |
| | Control type(Remote/Wired) | | | Remote YR-HQS01(O) or Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB (A) | 54 | |
| | | Sound pressure level | dB (A) | 40/35/31/28 | |
| | Weight (Net/Shipping) | | kg/kg | 26/32 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AC50S2SG1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 5200 | 5900 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.8 | |
| Indoor unit | Power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed(H-M-L) | r/min | 910/800/720/600 | |
| | | Fan motor output/input power | W | 21/30 | |
| | | Air-flows (H-M-L) | m³/h | 880/750/650/500 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.2 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 1000/230/680 | |
| | | Package | mmxmmxmm | 1100/305/779 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 15/20 | |
| | Control type (Remote/Wired) | | | Remote YR-HQS01(O) or Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 57 | |
| | | Sound pressure level | dB(A) | 46/40/36/31 | |
| | Weight (Net/Shipping) | | kg/kg | 26/32 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35(1/4) | |
| | | Gas | mm | Φ12.7(1/2) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AC71S2SG1FA/1U71S2SG1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 7.1(1.8-8.0) | 7.5(2.0-8.5) |
| Sensible heat ratio | | | | 0.72 | |
| Total power input | | | kW | 2.20(0.5-3.0) | 2.02(0.5-3.0) |
| Max. power input | | | W | 3.0 | 3.0 |
| EER or COP | | | W/W | 3.23 | 3.71 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 2.4 | |
| Power cable | | | | 4.0mm$^2$ | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 9.5/13.1 | 8.8/13.1 |
| Start Current | | | A | 0.58 | |
| Circuit breaker | | | A | 20 | |
| Indoor unit | Unit model (color) | | | AC71S2SG1FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1050/1000/920/840 | |
| | | Fan motor input power | kW | 0.2 | |
| | | Fan motor output power | kW | 0.12 | |
| | | Air-flow (H-M-L) | m³/h | 1250/1128/930/840 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | 2 | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1325/230/680 | |
| | | Package (L×W×H) | mm×mm×mm | 1425/305/779 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17 | |
| | | | Infrared | YR-HQS01 | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | None | |
| | Sound power Noise level(H-M-L) | | dB(A) | 61 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 43/40/38/35 | |
| | Weight (Net / Shipping) | | kg / kg | 33.5/41.9 | |
| Piping | Refrigerant | Type / Charge | g | R32/1300 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without charge refrigerant | m | 10 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB

Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item / Model | | | | AC105S2SH1FA/1U105S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 9.5 (2.5-10.0) | 10.2 (3.0-10.5) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 3.22（0.5-4.0） | 3.16（0.5-4.0） |
| Max. power input | | | W | 4.0 | 4.0 |
| EER or COP | | | W/W | 2.95 | 3.23 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 3 | |
| Power cable | | | | 4.0mm$^2$ | |
| Power source | | | N, V, Hz | 1ph, 220~240, 50/60 | |
| Running /Max.Running current | | | A / A | 14/16.5 | 13.7/16.5 |
| Start Current | | | A | 0.58 | |
| Circuit breaker | | | A | 25 | |
| Indoor unit | Unit model (color) | | | AC105S2SH1FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1050/1000/920/840 | |
| | | Fan motor output/ input power | W | 260/180 | |
| | | Air-flow (H-M-L) | m³/h | 1600/1400/1280/1160 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 2 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1330/230/680 | |
| | | Package（L×W×H） | mm×mm×mm | 1425/305/779 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17 | |
| | | | Infrared | YR-HQS01 | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 61 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 47/43/41/37 | |
| | Pipe | Liquid Pipe (mm) | | 9.52 | |
| | | Gas Pipe (mm) | | 15.88 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 33.5/41.9 | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27$^O$CDB/19$^O$CWB, indoor temperature (heating): 20$^O$CDB
Outdoor temperature (cooling): 35$^O$CDB/24$^O$CWB, outdoor temperature (heating): 7$^O$CDB/6$^O$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AC105S2SH1FA/1U105S2SS1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 9.5 (2.5-10.0) | 10.5 (3.0-11.0) |
| Sensible heat ratio | | | | 0.81 | |
| Total power input | | | KW | 3.25 (0.5-4.0) | 3.10 (0.5-4.0) |
| Max. power input | | | W | 4000 | 4000 |
| EER or COP | | | W/W | 2.9 (A) | 3.5 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 1.78 | |
| Power cable | | | | H07RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 5.5A(0.5-6.8A)/6.8A | 5.3(0.5-6.8A)/6.8A |
| Start Current | | | A | 1 | |
| Circuit breaker | | | A | 6.5 | 6.5 |
| Indoor unit | Unit model (color) | | | AC105S2SH1FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1130/1050/1000/920±30r/min | |
| | | Fan motor input power | kW | 0.12 | |
| | | Fan motor output power | kW | 0.09 | |
| | | Air-flow (H-M-L) | m³/h | 1600/1400/1280/1160 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1325*230*680 | |
| | | Package （L×W×H） | mm×mm×mm | 1425*305*779 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 15/20 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 63 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 47/43/41/37 | |
| | Weight (Net / Shipping) | | kg / kg | 33.5/41.9 | |
| | Panel | Model | | / | |
| | | External dimensions (W/D/H) | mm | / | |
| | | Shipping dimensions (W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AC125S2SK1FA/1U125S2SN1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.0 (3.0-12.8) | 12.5 (2.9-13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | kW | 4.3 (0.3-5.6) | 3.8 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.75(A) | 3.25(A) |
| AEER or ACOP | | | | 2.72 | 3.21 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 3.03 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 18.5(1.5-26.0) A/26A | 16.0(1.5-26.0) A/26A |
| Start Current | | | A | / | |
| Circuit breaker | | | A | | |
| Indoor unit | Unit model (color) | | | AC125S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1000/920/840/750±30r/min | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H-M-L) | m³/h | 2050/1800/1600/1380m3/h | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1650*680*230 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17 (S) | |
| | | | Infrared | YR-HQS01 (O) | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level(H-M-L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 49/47/45 | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB

Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item \ Model | | | | AC125S2SK1FA/1U125S2SN1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.1 (3.0-12.8) | 12.6 (2.9-13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | kW | 4.2 (0.3-5.6) | 3.7 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.75 (A) | 3.25 (A) |
| AEER or ACOP | | | | 2.72 | 3.21 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 3.03 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.1 (1.3-9.5)A/9.5A | 5.7 (2.4-9.5)A/9.5A |
| Start Current | | | A | / | |
| Circuit breaker | | | A | | |
| Indoor unit | Unit model (color) | | | AC125S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1000/920/840/750±30r/min | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H-M-L) | m³/h | 2050/1800/1600/1380m3/h | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1650*680*230 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17 (S) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 49/47/45 | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AC125S2SK1FA/1U125S2SN2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.3(3.0~13.0) | 12.7(3.5~13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | kW | 4.5 (0.3-6.0) | 3.96(0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.71 | 3.21 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 3.03 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19.6(1.5-26.0) A/26A | 17.2(1.5-26.0) A/26A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AC125S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX4 | |
| | | Speed (H×M×L) | r/min | 1000/920/840/750±30r/min | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H×M×L) | m³/h | 2050/1800/1600/1380m3/h | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1650*680*230 | |
| | | Package (L×W×H) | mm×mm×mm | 1750*779*305 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 15/20 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 46/43/41/38 | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AC125S2SK1FA/1U125S2SN2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.4(3.0~13.0) | 12.8(3.5~13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | kW | 4.52 (0.3-6.0) | 3.92 (0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.74 | 3.26 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 3.03 | |
| Power cable | | | | H05RN-F 5G 4.0 mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.9(1.3-9.1)A/9.1A | 5.9(2.4-9.1)A/9.1A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AC125S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX4 | |
| | | Speed (H×M×L) | r/min | 1000/920/840/750±30r/min | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H×M×L) | m³/h | 2050/1800/1600/1380m3/h | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1650*680*230 | |
| | | Package (L×W×H) | mm×mm×mm | 1750*779*305 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 15/20 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 46/43/41/38 | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB
Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AC140S2SK1FA/1U140S2SP1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.1 (3.0~14.5) | 14.5 (3.5~16) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.37 (1.0-6.5) | 3.92 (1.0-6.5) |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 3.0 (A) | 3.70 (A) |
| AEER or ACOP | | | | 2.72 | 3.21 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19/32 | 17/32 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AC140S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX4 | |
| | | Speed (H-M-L) | r/min | 1050/970/890/800 | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H-M-L) | m³/h | 2050/1980/1800/1600 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1650*680*230 | |
| | | Package (L×W×H) | mm×mm×mm | 1750*305*779 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A (O) | |
| | | | Infrared | YR-HQS01 (S) | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 50/46/43/40 | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AC140S2SK1FA/1U140S2SP1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.9 (3.0~14.5) | 14.1 (3.5~16) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.43 (1.0-6.5) | 4.02 (1.0-6.5) |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 2.91 (A) | 3.51 (A) |
| AEER or ACOP | | | | 2.72 | 3.21 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H05RN-F 5G 4.0mm$^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 7.2/11 | 7/11 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AC140S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX4 | |
| | | Speed (H-M-L) | r/min | 1050/970/890/800 | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H-M-L) | m³/h | 2050/1980/1800/1600 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External(L×W×H) | mm×mm×mm | 1650*680*230 | |
| | | Package(L×W×H) | mm×mm×mm | 1750*305*779 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17 (O) OR YR-E16A (O) | |
| | | | Infrared | YR-HQS01 (S) | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 50/46/43/40 | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB

Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

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| Item | | | Model | AC140S2SK1FA/1U140S2SP2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.6(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.53(1.0-6.0) | 4.17(1.0-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.00 | 3.60 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19.7/26 | 18.1/26 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AC140S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX4 | |
| | | Speed (H×M×L) | r/min | 1050/970/890/800 | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H×M×L) | m³/h | 2150/1980/1800/1600 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External(L×W×H) | mm×mm×mm | 1650*230*680 | |
| | | Package(L×W×H) | mm×mm×mm | 1750*305*779 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 15/20 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(S) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 66 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 48/46/43/40 | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AC140S2SK1FA/1U140S2SP2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.6(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.53(1.0-6.0) | 4.29(1.0-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.00 | 3.50 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H05RN-F 5G 4.0mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.88/9.1 | 6.51/9.1 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AC140S2SK1FA | |
| | Fan | Type × Number | | CENTRIFUGALX4 | |
| | | Speed (H×M×L) | r/min | 1050/970/890/800 | |
| | | Fan motor input power | kW | 0.15 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow (H×M×L) | m³/h | 2050/1980/1800/1600 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External(L×W×H) | mm×mm×mm | 1650*230*680 | |
| | | Package(L×W×H) | mm×mm×mm | 1750*305*779 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 15/20 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(S) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 66 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 48/46/43/40 | |
| | Weight (Net / Shipping) | | kg / kg | | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/3500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

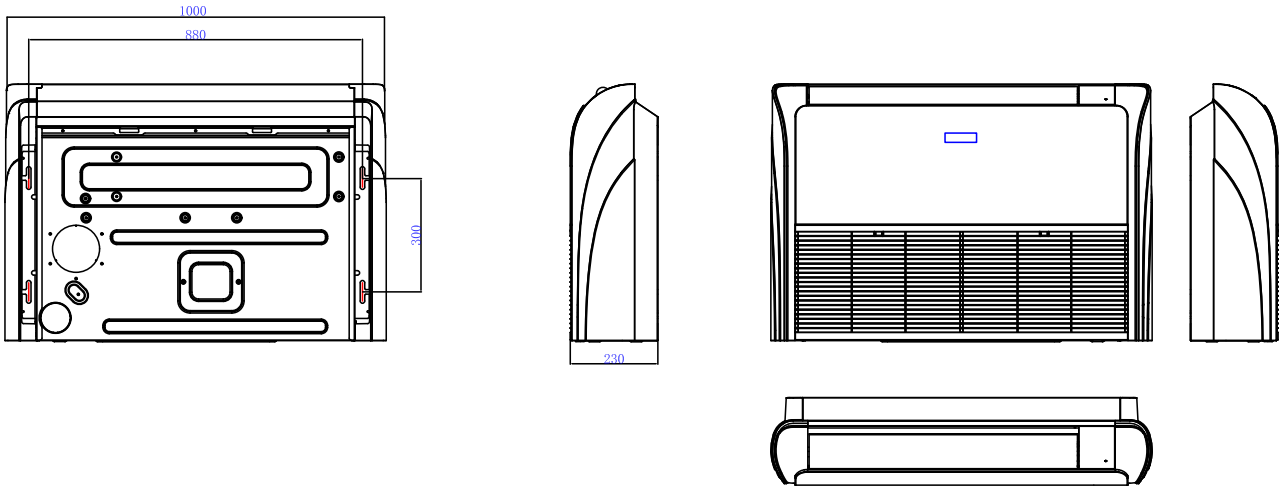
Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | Model | | | AC160S2SK1FA/1U160S2SP1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 16(4.5-16.5) | 17(5.0-18.0) |
| Sensible heat ratio | | | | 0.76 | |
| Total power input | | | KW | 5.39(1.0~6.5) | 4.97(1.0~6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 2.97(A) | 3.42A) |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 6.56 | |
| Power cable | | | | H05RN-F 5G 4.0mm2 | |
| Power source | | | N, V, Hz | 3N~/380-415V/50/60Hz | |
| Running /Max.Running current | | | A / A | 7.9/10 | 7.2/10 |
| Start Current | | | A | 2 | |
| Circuit breaker | | | A | 5 | |
| Indoor unit | Unit model (color) | | | AC160S2SK1FA/INDOOR UNIT | |
| | Fan | Type × Number | | CENTRIFUGALX4 | |
| | | Speed(H-M-L) | r/min | 1250/1210/1100/1010 | |
| | | Fan motor output/ input power | W | 150/210 | |
| | | Air-flow(H-M-L) | m³/h | 2250/2000/1850/1650 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 2 | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1650*230*680 | |
| | | Package (L×W×H) | mm×mm×mm | 1750*305*779 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-HD01(O) | |
| | Fresh air hole dimension | | mm | 124 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 67 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 48/46/43/40 | |
| | Pipe | Liquid Pipe | | 9.52 | |
| | | Gas Pipe | | 19.05 | |
| | | Connecting Method | | flared | |
| | Weight (Net / Shipping) | | kg / kg | 43/51 | |
| Piping | Refrigerant | Type / Charge | g | R32/3500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 19.05 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |

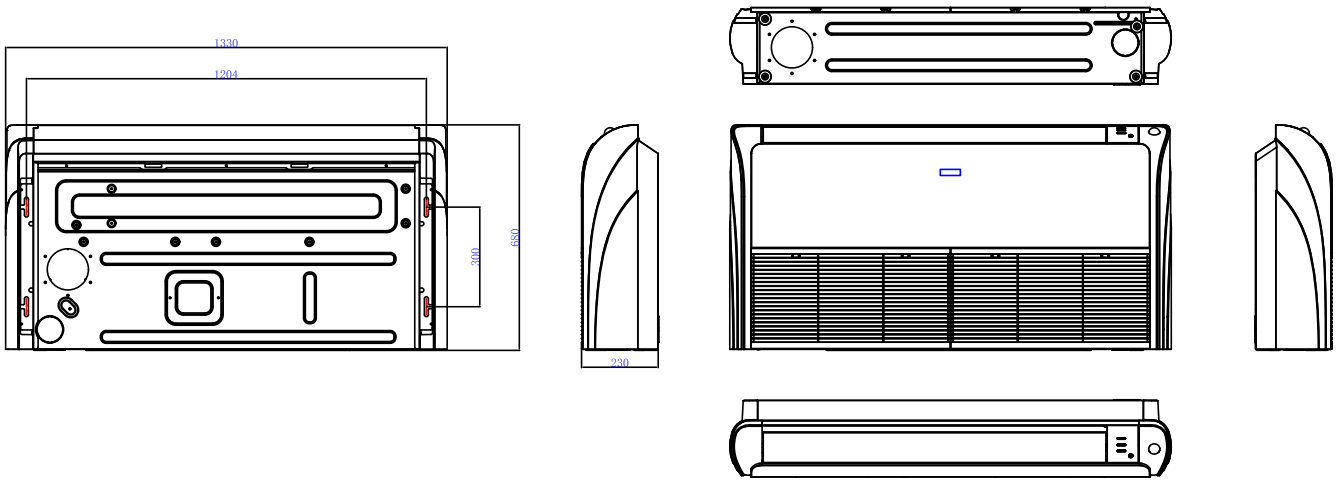
| Item | | | Model | | AC160S2SK1FA/1U160S2SP1FB | |
|---|---|---|---|---|---|---|
| Cooling | | Pdesignc(kW): | 16 | SEER/CLASS | 6.06/A+ | QCE(Annual electricity consumption for cooling)kWh: |
| Heating | Average | Pdesignh(-10℃) | 11kW | SCOP/CLASS | 4.06/A+ | QHE(Annual electricity consumption for heating)kWh: |
| | Warmer | Pdesignh(2℃) | 5.95kW | SCOP/CLASS | 5.0/A++ | QHE(Annual electricity consumption for heating)kWh: |
| Heating | Colder | Pdesignh(-22℃) | / | SCOP/CLASS | / | QHE(Annual electricity consumption for heating)kWh： |
| Tdesignh：-10℃ | | | Tbivalent:-10℃ | | TOL:-10℃ | Elbu:0 |
| Max. cooling condition | | | Indoor temperature：32℃ /23℃ | | Max. heating condition | Indoor temperature：27℃ /-℃ |
| | | | Outdoor temperature：46℃ /-℃ | | | Outdoor temperature：24℃ /18℃ |
| Norminal condition: indoor temperature (cooling): 27℃ DB/19℃ WB, indoor temperature (heating): 20℃ DB<br>Outdoor temperature(cooling): 35℃ DB/24℃ WB, outdoor temperature(heating): 7℃ DB/6℃ WB<br>The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level. | | | | | | |

## 3.2 Dimension

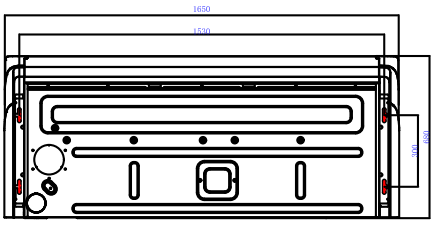
AC35S2SG1FA AC50S2SG1FA

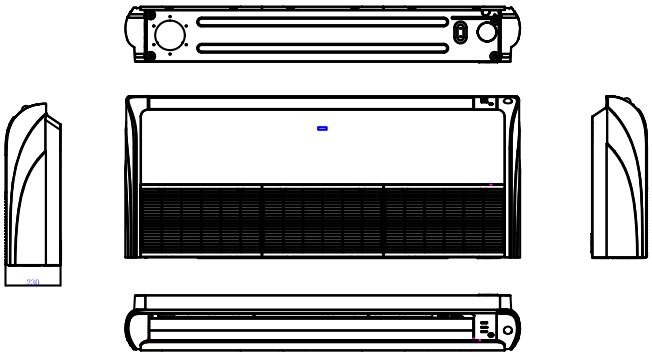



AC71S2SG1FA AC105S2SH1FA



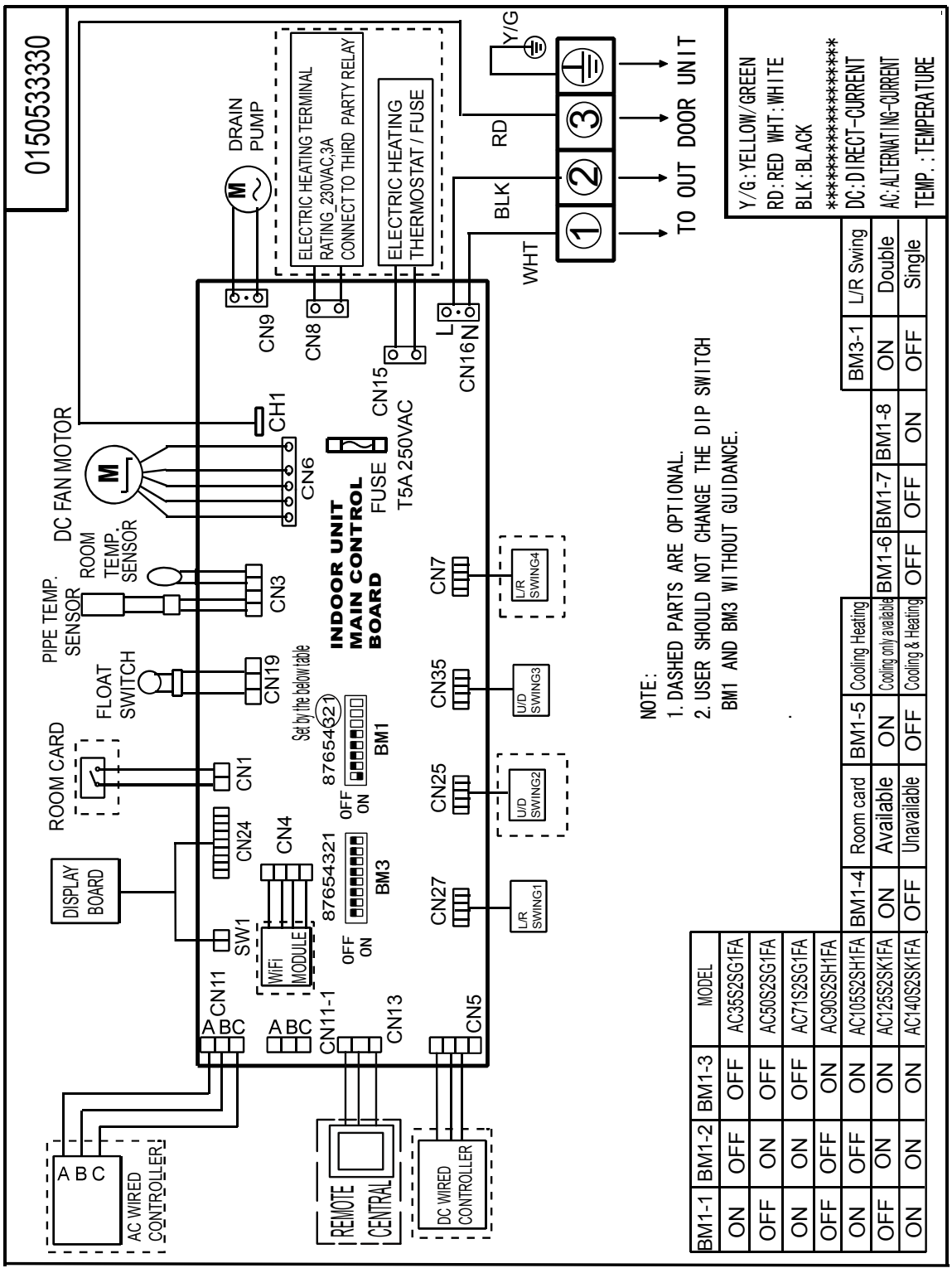
AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA



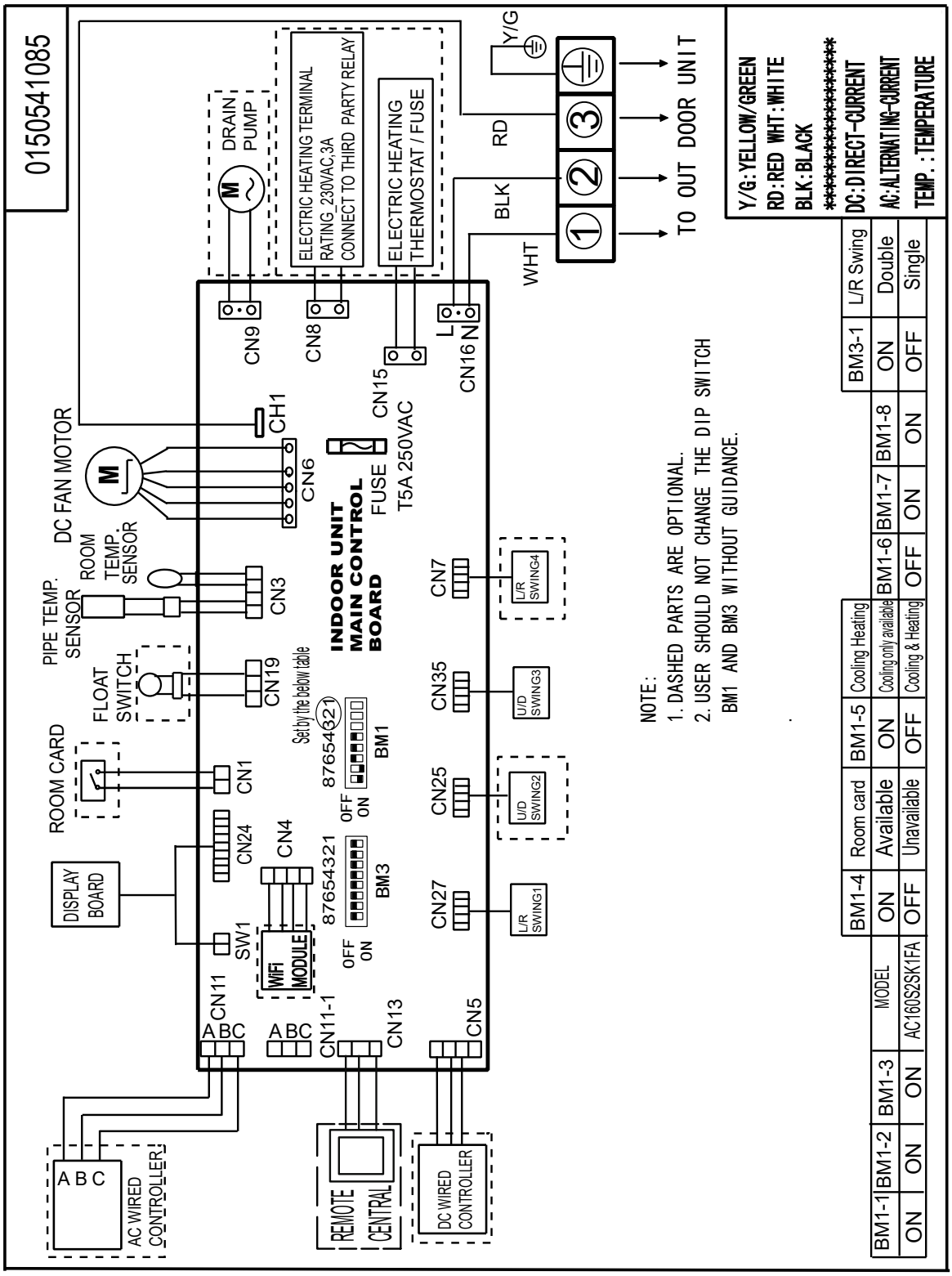


### 3.3 Wiring diagram

AC35S2SG1FA AC50S2SG1FA AC71S2SG1FA AC105S2SH1FA AC125S2SK1FA AC140S2SK1FA



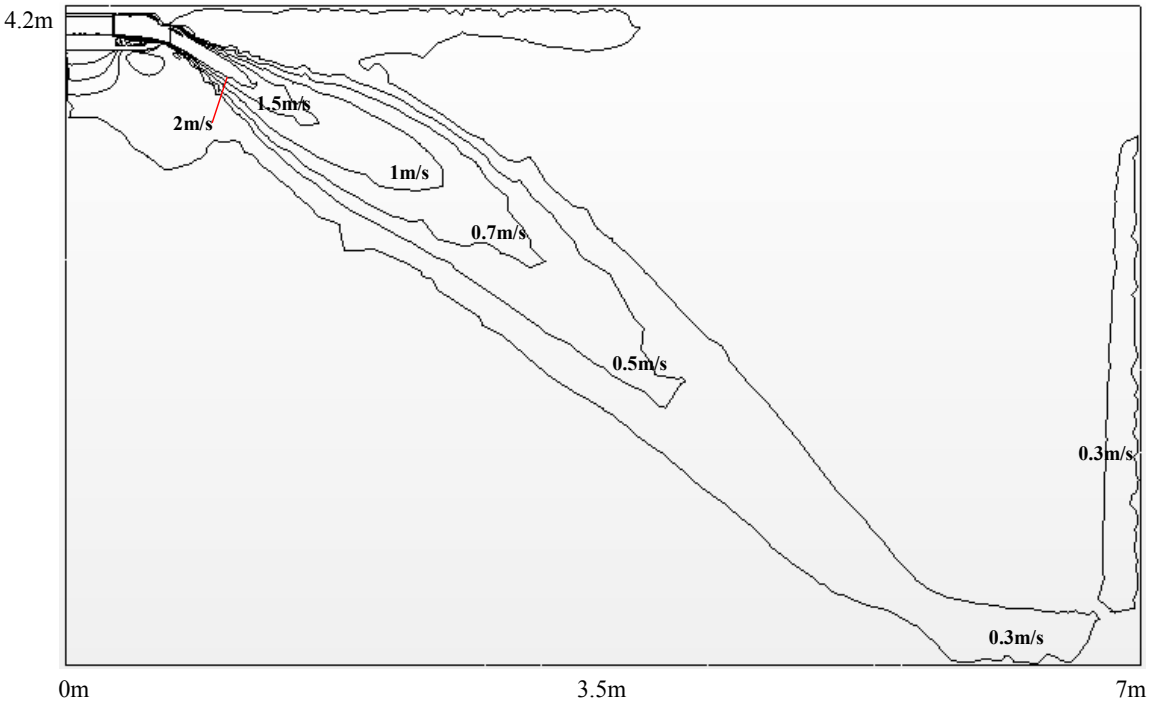
AC160S2SK1FA



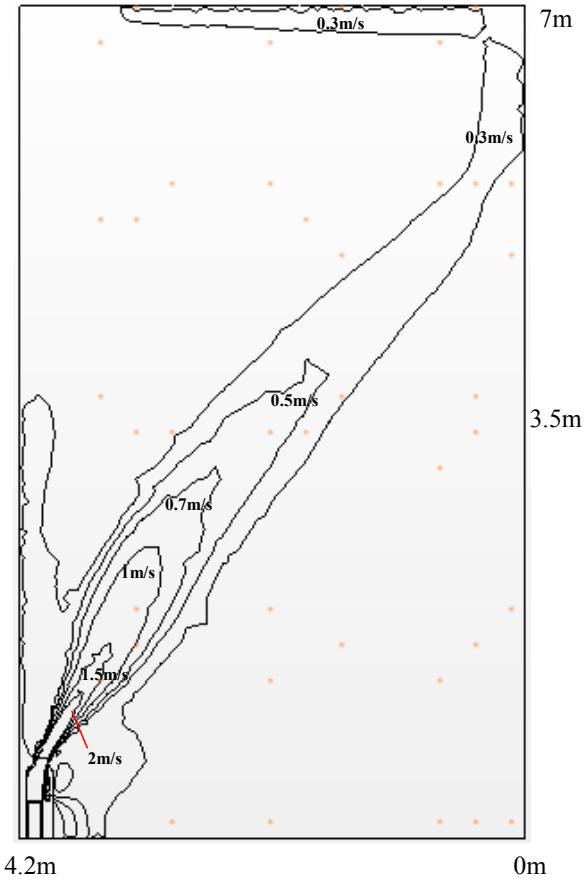
### 3.4 Air velocity distribution

AC35S2SG1FA AC50S2SG1FA

Air velocity distribution at outlet air flow 800CMH (celiling mounted)

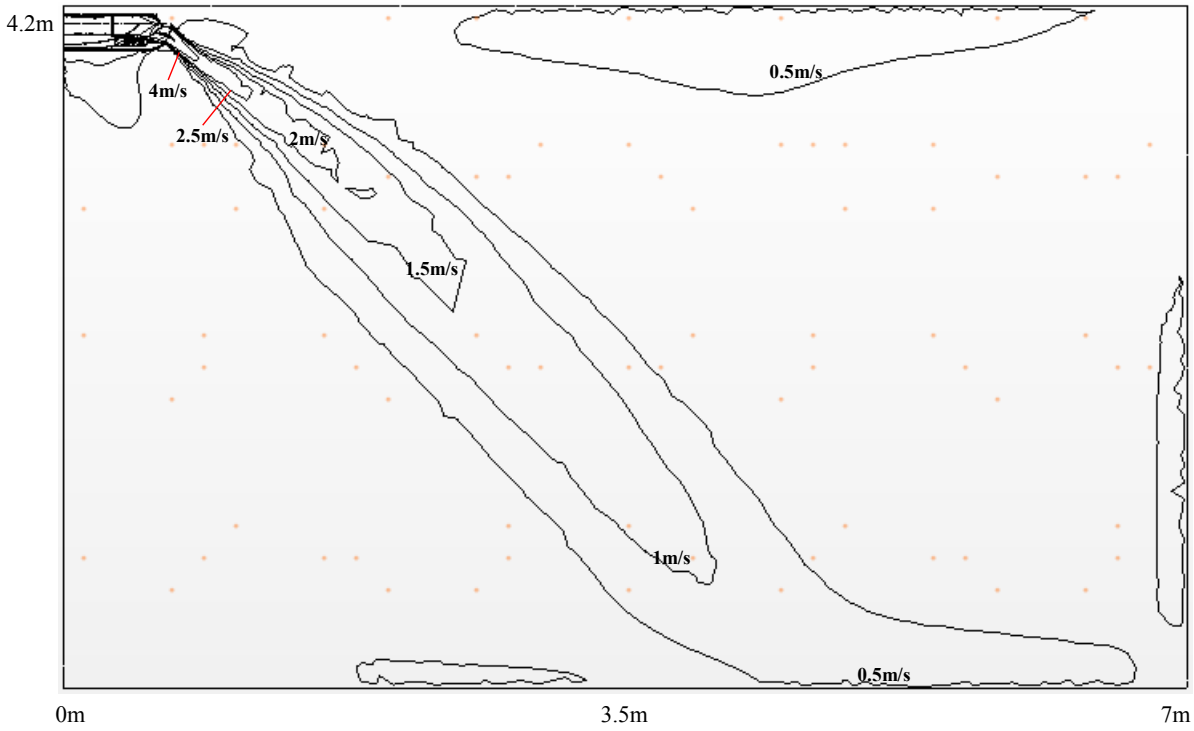



Air velocity distribution at outlet air flow 800CMH (floor mounted)

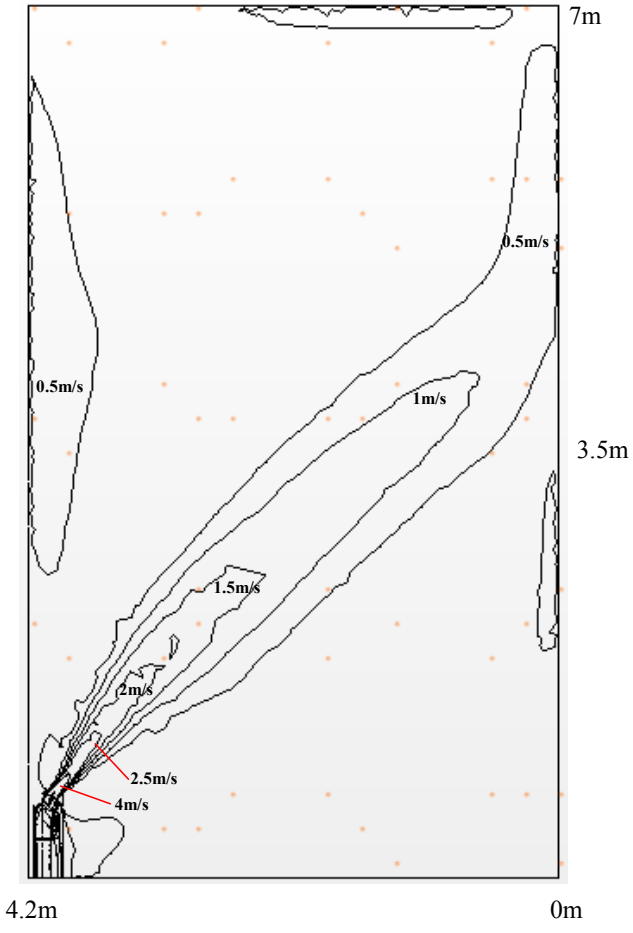


AC71S2SG1FA AC105S2SH1FA

Air velocity distribution at outlet air flow 1600CMH (celiling mounted)

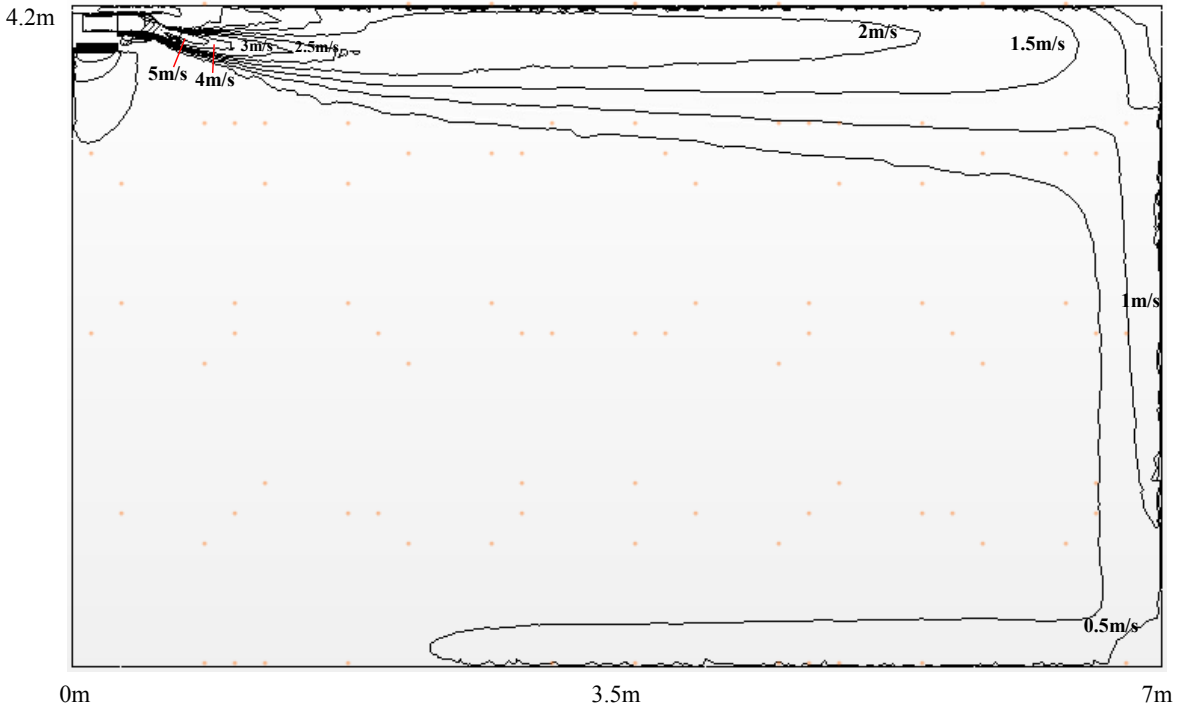



Air velocity distribution at outlet air flow 1600CMH (floor mounted)

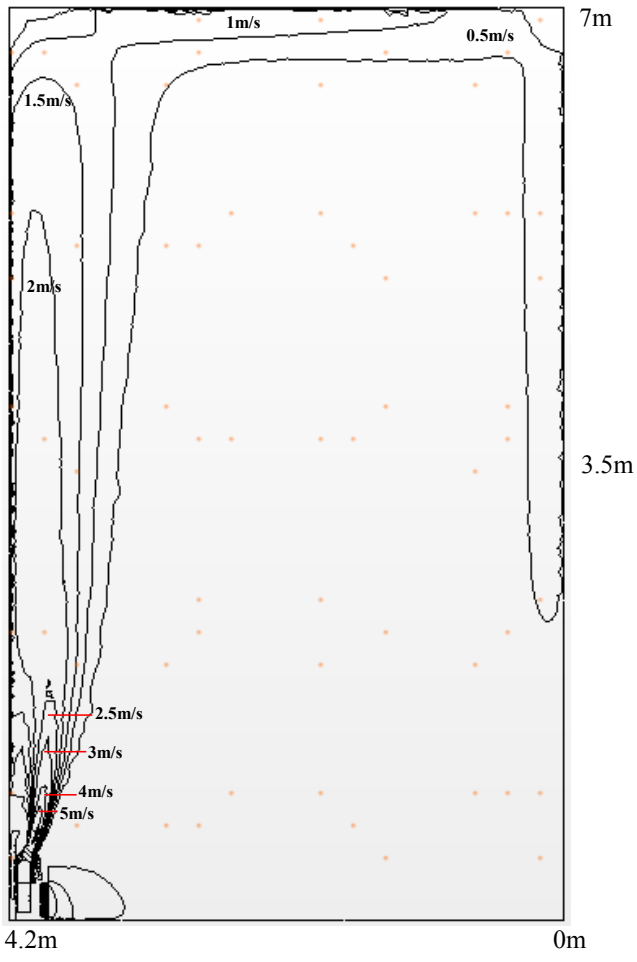


AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA

Air velocity distribution at outlet air flow 2150CMH (celiling mounted)



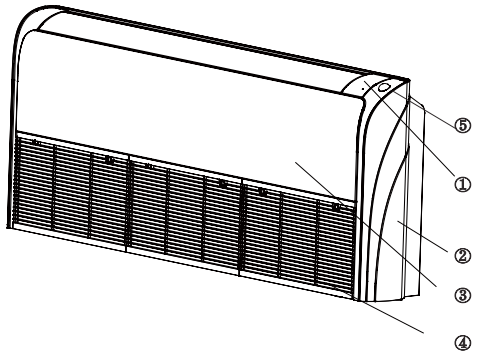

Air velocity distribution at outlet air flow 2150CMH (floor mounted)



### 3.5 Installation

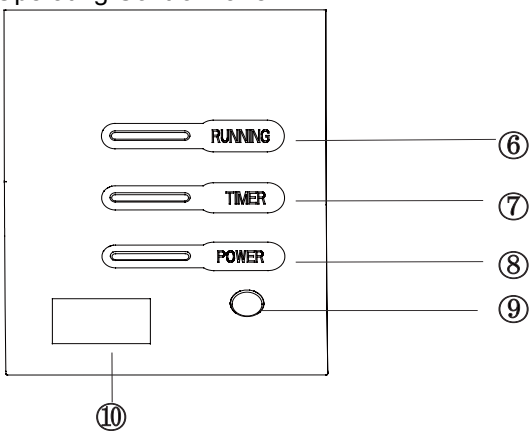
# Parts and Functions

## Indoor Unit



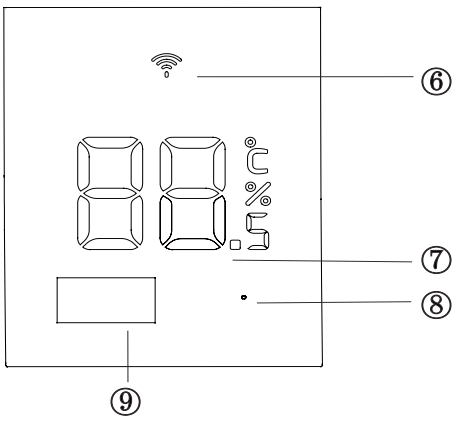

Operating Control Panel 1
(1) Operation Control Panel
(2) Cover Plate
(3) Front Panel
(4) Inlet Grill(Filter inside)
(5) Human Sensor
(6) RUNNING Indicator Lamp
(7) TIMER Indicator Lamp
(8) POWER Indicator Lamp
(9) Emergency Switch
(10) Remote Receiver

Operating Control Panel 1




Operating Control Panel 2
(1) Operation Control Panel
(2) Cover Plate
(3) Front Panel
(4) Inlet Grill(Filter inside)
(5) Human Sensor
(6) WIFI Indicator Lamp
(7) Display Indicator Lamp
(8) Emergency Switch
(9) Remote Receiver

Operating Control Panel 2




**Note:**
For the wired control type unit, the unit state should be checked by the wired controller, instead of the remote receiver.
And if you set the TIMER function, the TIMER LED on the remote receiver will not be on.

2.The different PANEL for different models.

# Installation Procedure

## SELECTING THE MOUNTING POSITION

### WARNING

- Install at a place that can withstand the weight of the indoor unit and install it positively so that the unit will not topple or fall.

### CAUTION

- Do not install the unit where there is the danger of combustible gas leakage.
- Do not install near heat sources.
- If children under 10 years old may approach the unit, take preventive measures so that they cannot reach the unit.

**Decide the mounting position with the customer as follows.**

(1) Install the indoor unit level on a strong wall which is not subject to vibration.
(2) The inlet and outlet ports should not be obstructed, and the air should be able to blow all over the room.
(3) Do not install the unit where it will be exposed to direct sunlight
(4) Install the unit where connection to the outdoor unit is easy.
(5) Install the unit where the drain pipe can be easily installed.
(6) Take servicing, etc. into consideration and leave the spaces shown in "Maintenace space dimension" .
(7) Install the unit where the filter can be removed

## ACCESSORIES FOR INSTALLATION

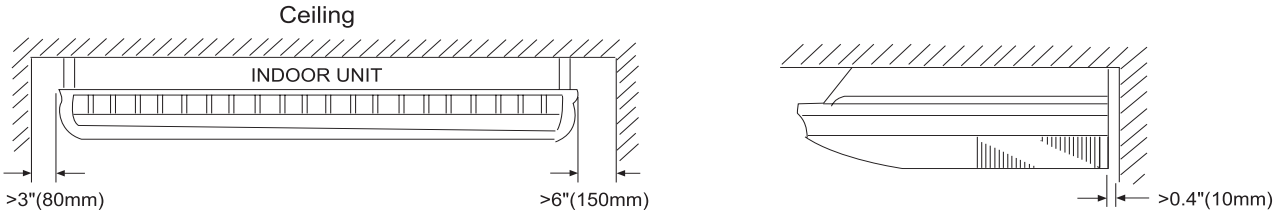
The following installation parts are optional parts. Use them as required.

Optional parts

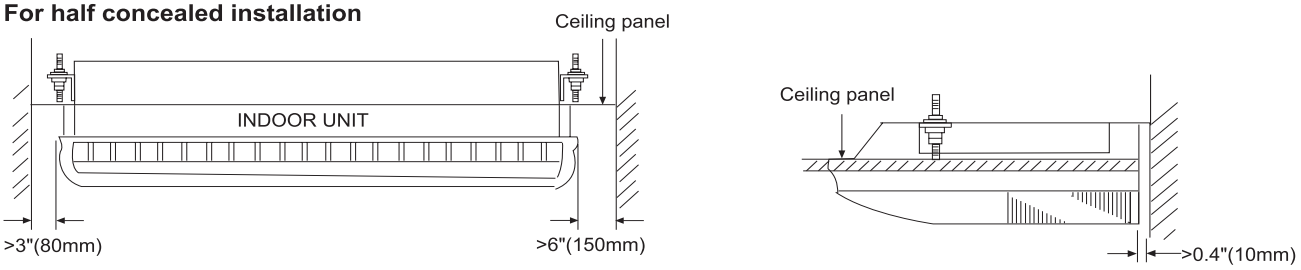
| |
|---|
| Adhesive tape |
| Saddle (L.S) with screws |
| Drain hose |
| Heat insulation material |
| Piping hole cover |
| Putty |
| Plastic clamp |

## MAINTENANCE SPACE DIMENSION

**For ceiling installation**




**For half concealed installation**



# Installation Procedure

**INSTALLING THE INDOOR UNIT**

**Connection pipe requirement**

| Model | Diameter | | Maximum length | Maximum height (between indoor and outdoor) |
|---|---|---|---|---|
| | Liquid side | Gas side | | |
| AC35S2SG1FA | 6.35mm | 9.52mm | 15m | 10m |
| AC50S2SG1FA | 6.35mm | 12.7mm | 20m | 10m |
| AC71S2SG1FA | 9.52mm | 15.88mm | 20m | 10m |
| AC105S2SH1FA AC125S2SK1FA | 9.52mm | 15.88mm | 30m | 20m |
| AC140S2SK1FA | 9.52mm | 15.88mm | 50m | 30m |
| AC160S2SK1FA | 9.52mm | 19.05mm | 70m | 30m |

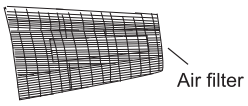
**Install the room air conditioner as follows**

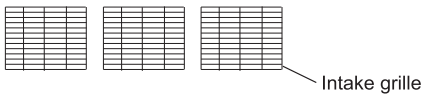
**1. Remove the intake grill and side cover**

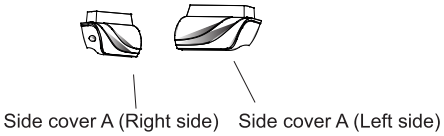
(1) Open the intake grill

(2) Remove the Side cover(Right and left side)

(3) This air conditioner can be set up to intake fresh air. The information about how to install for fresh-air intake, refer to "Fresh air intake".




Open the intake grill

(1) Push the embeding switch according to the direction of the arrowhead.(Refer to Fig.1)

(2)Turn into the intake grill according to the direction of the arrowhead.(Refer to Fig.2)

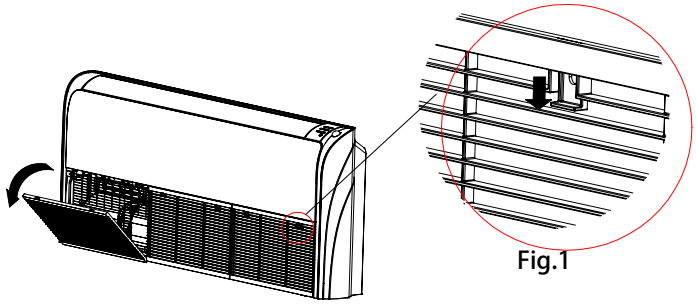


Fig.1



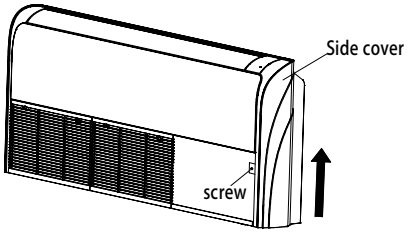
Fig.2

Remove the Side cover

(1) Remove the screw.

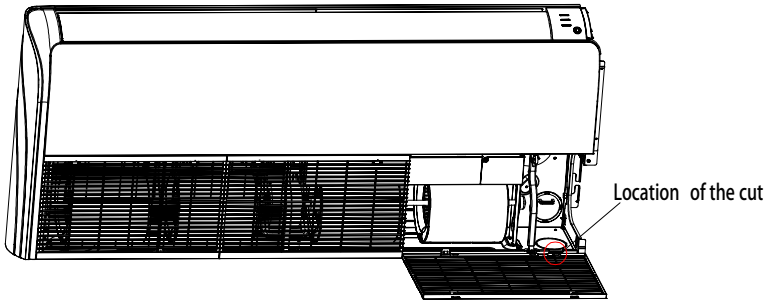
(2) Push the Side cover according to the direction of the arrowhead.

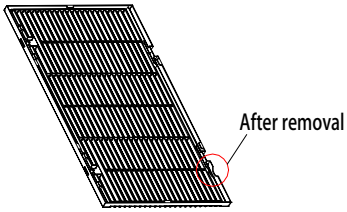
(3) Then remove the Side cover.



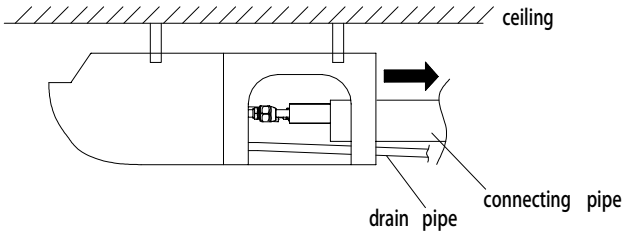
# Installation Procedure

Cut intake grill for drain pipe
(1) Tools:Knife or Pliers.
(2) Cut the intake grill before installing the drain pipe,Then,pass the drain pipe through the hole.As the following schematic.

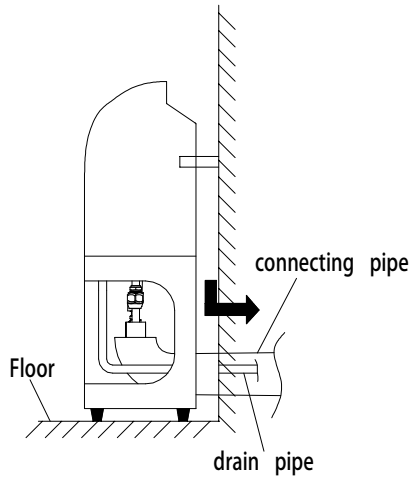



Installing the drain pipe and the connecting pipe
(1) When the unit is installed in the ceiling,Installing them as below

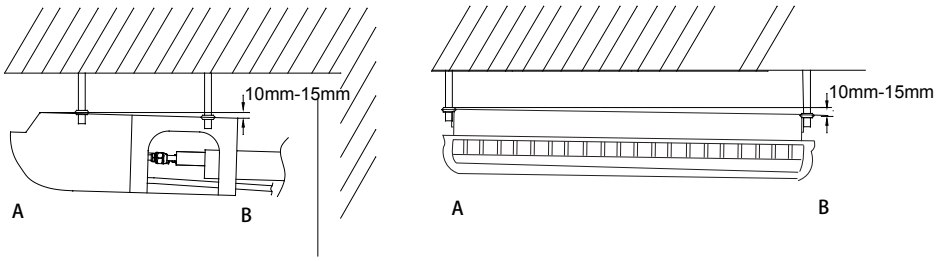



(2) When the unit is installed on the floor,Installing them as below.



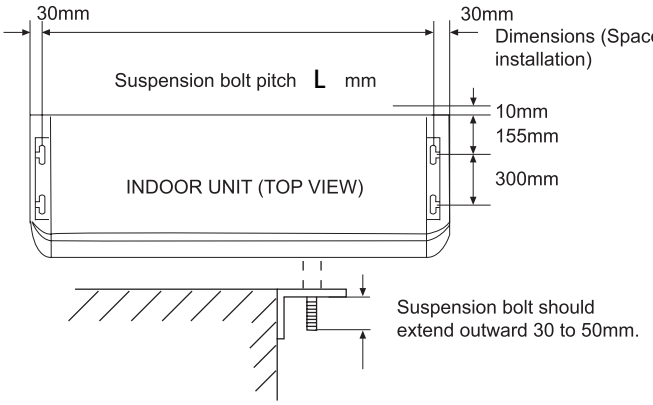

CAUTION

When the unit is installed in the ceiling,side B is lower than side A for condensate discharge.As below.



# Installation Procedure

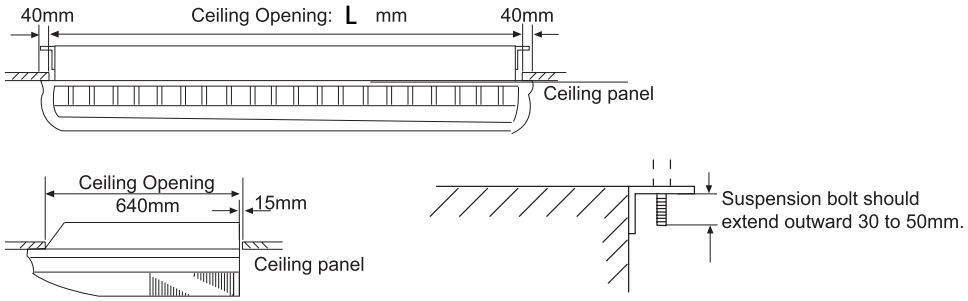
### 2. Location of ceiling supension bolts




| MODEL | L |
|---|---|
| AC35S2SG1FA<br>AC50S2SG1FA | 880 |
| AC90S2SH1FA<br>AC105S2SH1FA | 1204 |
| AC125S2SK1FA<br>AC140S2SK1FA<br>AC160S2SK1FA | 1530 |

**For half-concealed installation**

Supension-bolt pitch should be as shown below

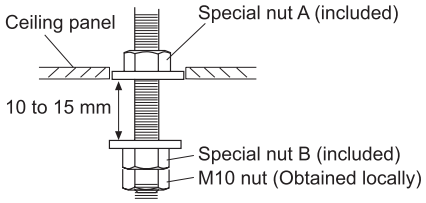



### 3. Drilling the holes and attaching the suspension bolts

(1) Drill Φ25mm holes at the suspension-bolt locations. The two special nuts are provided with the unit. The M10 nut must be obtained locally.

(2) Install the bolts, then temporarily attach Special nuts A and B and a normal M10 nut to each bolt.

*Bolt strength: 980 to 1470 N (100 TO 150 kgf)*

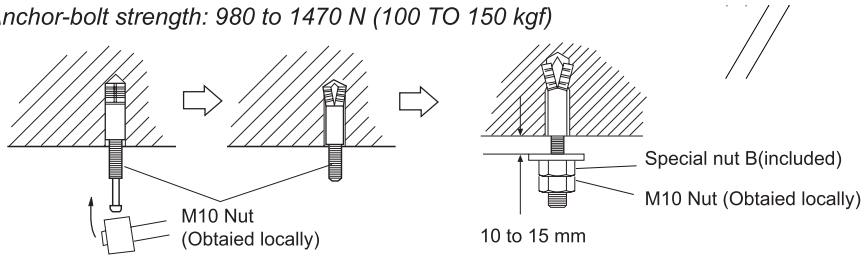



**If using anchor bolts**

(1) Drill holes for anchor bolts at the locations at which you will set the suspension bolts. Note that anchor bolts must be obtained locally.

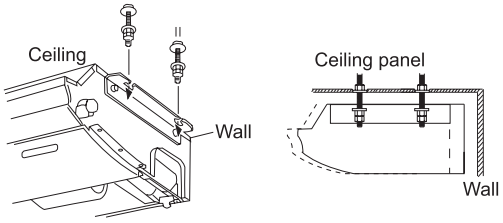
(2) Install the anchor bolts, then temporarily attach special nut "B" (included) and a locally-procured M10 nut to each of the bolts.

*Anchor-bolt strength: 980 to 1470 N (100 TO 150 kgf)*



# Installation Procedure

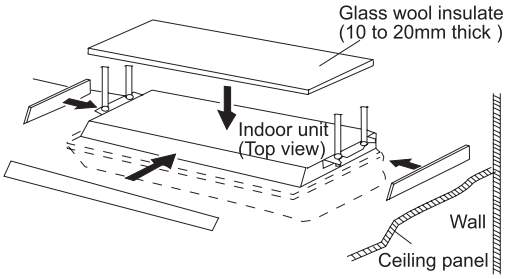
**4.Installing the indoor unit**




(1) Lift unit so that suspension bolts pass through suspension fittings at the sides (four places),and slide the unit back.
(2) Fasten the indoor unit into place by tightening-up the special "B" bolts and the M10 nuts. Make sure that unit is secure and will not shift back and forth.

**For half-concealed installation**

When installing the indoor unit in a semi-concealed orientation, make sure to reinforce the insulation of the unit on all sides. Drops of water may fall from the unit if it is not thoroughly insulated.

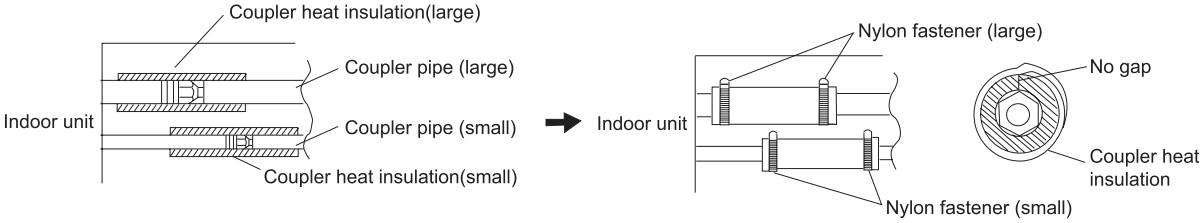



**CAUTION**

In order to check the drainage, be sure to use a level during installation of the indoor unit. If the installation site of the indoor unit is not level, water leakage may occur.

**5.Installing the coupler heat insulation**

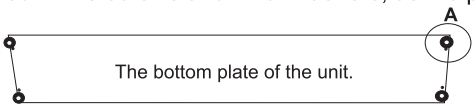
After checking for gas leaks, insulate by wrapping insulation around the two parts (large and small) of the indoor unit coupling, using the coupler heat insulation. After installling the coupler heat insulation, wrap both ends with vinyl tape so that there is no gap. Secure both ends of the heat insulation material using nylon fasteners.

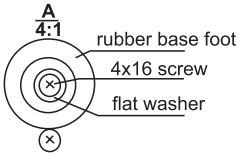



When using an auxiliary pipe, make sure that the fastener used is insulated in the same way.

**Note:**

When installing the unit on the floor, fix the four rubber base feet in the accessories on the bottom plate of the unit with four 4x16 screws and 4 flat washers, as the position in the figure.

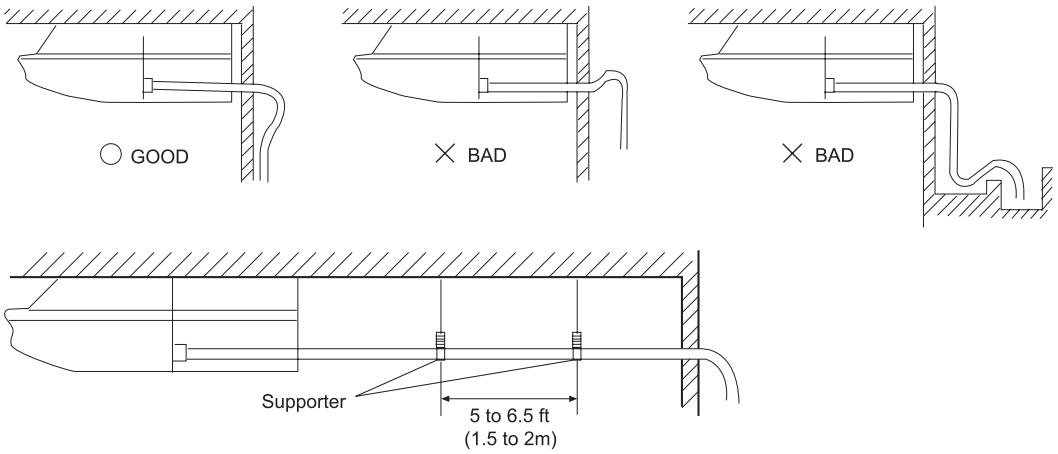


# Installation Procedure

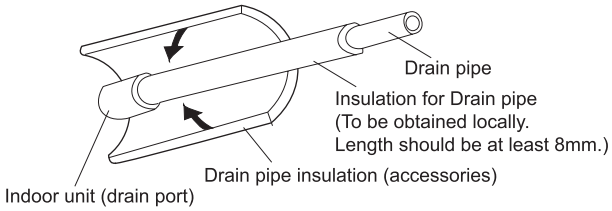
### INSTALLING THE DRAIN HOSE

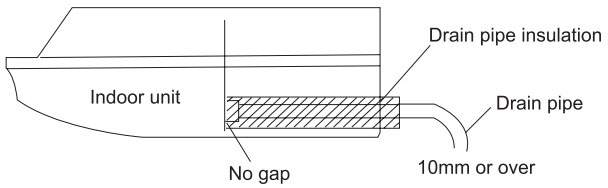
- Install the drain pipe with downward gradient (1/50 to 1/100) and so there are no rises or traps in the pipe.
- Use general hard polyvinyl chloride pipe (VP25) (outside diameter 38 mm)
- During installation of the drain pipe, be careful to avoid applying pressure to the drain point of the unit.
- When the pipe is long, install supporters.
- Do not perform air bleeding.
- Always heat insulate (8mm or over thick) the indoor side of the drain pipe.




### Install insunlation for the drain pipe

Cut the included insulation material to an appropriate size and adhere it to the pipe.

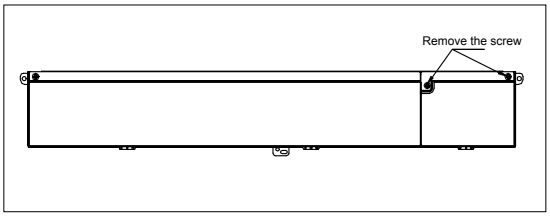


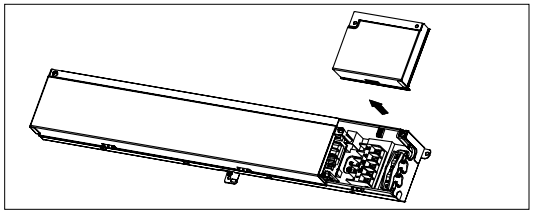

### ELECTRICAL WIRING

### A.Connect wiring to the terminals

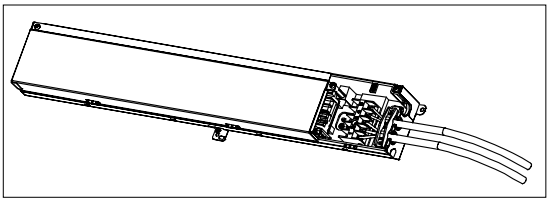
(1) Remove the screw




(2) Remove the cover



(3) Connect the wiring



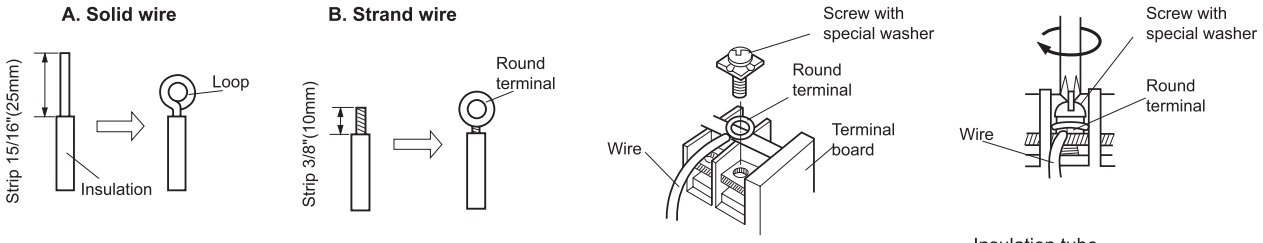
# Installation Procedure

### B.For solid core wiring (or F-cable)

(1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 15/16"(25mm) to expose the solid wire.
(2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
(3) Using pliers, bend the solid wire to form a loop suitable for the terminal screw.
(4) Shape the loop wire properly, place it on the terminal board and tighthen securely with the terminal screw using a screwdriver.

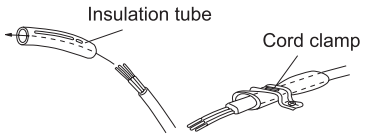
### C.For strand wiring

(1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 3/8"(10mm) to expose the solid wire.
(2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
(3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.
(4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver.




**Fix connection cord and power cable at the cord clamp**

After passing the connection cord and power cable through the insulation tube, fasten it with the cord clamp.
Use VW-1, 0.5 to 1.0 mm thick, PVC tube as the insulation tube.




**Electrical requirement**

Select wire sizes and circuit protection from table below. (This table shows 20m length wires with less than 2% voltage drop).

**CAUTION**

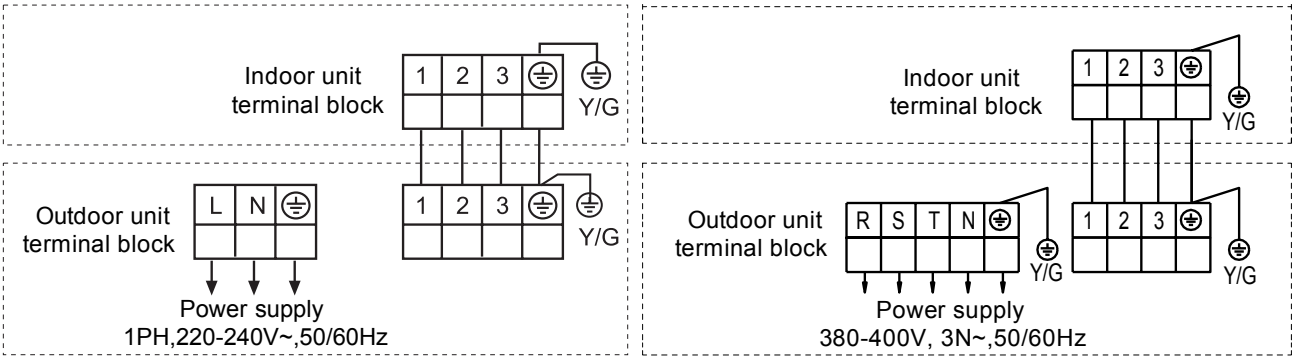
- Match the terminal block numbers and connection cord colors with those of the outdoor unit. Erroneous wiring may cause burning the electric parts.
- Connect the connection cords firmly to the terminal block. Imperfect installation may cause a fire.
- Always fasten the outside covering of the connection cord with the cord clamp. If the insulator is chafed, electric leakage may occur.
- Always connect the ground wire.
- The Unit has default temperature compensation setting, please cancel it when floor standing installation.

**Connect indoor unit and outdoor unit**

(1) Remove the cord clamp.
(2) Process the end of the connection cords to the dimensions shown in wiring diagram.
(3) Connect the end of the connection cord fully into the terminal block.
(4) Fasten the connection cord with a cord clamp.
(5) Fasten the end of the connection cord with the screw.

# Installation Procedure

Wiring diagram




The specification of cable between indoor unit to outdoor unit is HO5RN-F4G 2.5mm²

**WARNING**

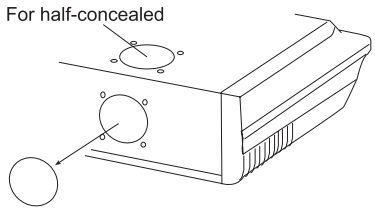
- The power cable and connecting cable are self-provided.
- Always use a special branch circuit and install a special receptacle to supply power to the room air conditioner.
- Use a circuit breaker and receptacle matched to the capacity of the room air conditioner.
- The circuit breaker is installed in the permanent wiring. Always use a circuit that can trip all the poles of the wiring and has an isolation distance of at least 3mm between the contacts of each pole.
- Perform wiring work in accordance with standards so that the room air conditioner can be operated safely and positively.
- Install a leakage circuit breaker in accordance with the related laws and regulations and electric company standards.

**CAUTION**

- The power source capacity must be the sum of the room air conditioner current and the current of other electrical appliances. When the current contracted capacity is insufficient, change the contracted capacity.
- When the voltage is low and the air conditioner is difficult to start, contact the power company the voltage raised.

**FRESH AIR INTAKE**

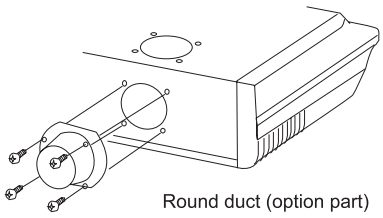
1. Open up the knockout hole for the fresh air intake. If using half-concealed installation, open up the top knockout hole instead.




**CAUTION**

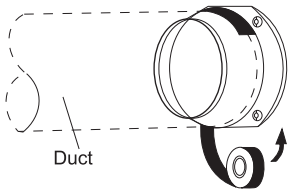
- When removing the cabinet (iron plate), be careful not to damage the indoor unit internal parts and surrounding area (outer case).
- When processing the cabinet (iron plate), be careful not to injury yourself with burrs,etc.

2. Fasten the round flange (optional) to the fresh air intake. If using half-concealed installation, attach to the top.




3. Connect the duct to the round flange.

4. Seal with a band and vinyl tape,etc. so that air does not leak from the connection.



# Test Run

**Check items**

**1. Indoor unit**

- Is operation of each button on the remote control unit normal?
- Does each lamp light normally?
- Do not air flow direction louvers operate normally?
- Is the drain normal?

**2. Outdoor unit**

- Is there any abnormal noise and vibration during operation?
- Will noise, wind, or drain water from the unit disturb the neighbors?
- Is there any gas leakage?

**Customer guidance**

Explain the following to the customer in accordance with the operation manual:

(1) Starting and stopping method, operation switching, temperature adjustment, timer, air flow switching, and other remote control unit operations.
(2) Air filter removal and cleaning, and how to use air louvers.
(3) Give the operation and installation manuals to the customer.

# 4 . Indoor Units -Low Pressure Slim Duct Type

## 4.1 Specification

| Item | | | Model | AD25S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 2500 | 3000 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.0 | |
| Indoor unit | Power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 850/750/650 | |
| | | Fan motor output/input power | W | 11/15 | |
| | | Air-flows (H-M-L) | m³/h | 530/460/390 | |
| | | External static pressure | pa | 0/10/20/40 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.11 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 850x420x185 | |
| | | Package | mmxmmxmm | 1045x540x270 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 27/31 | |
| | control type(Remote/Wired) | | | Wired YR-E17A(O)<br>Remote YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | None | |
| | Electricity heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 51 | |
| | | Sound pressure level | dB(A) | 33/30/26 | |
| | Weight (Net/Shipping) | | kg/kg | 16/21 | |
| panel (optional) | Panel model (Color) | | | P1B-890IA/D | |
| | Dimension | External (L*W*H) | mmxmmxmm | 890/190/100 (Outlet panel)/<br>890/290.5/32.4 (Inlet panel) | |
| | | Package (L*W*H) | mmxmmxmm | 938/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 4/5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD25S2SS2FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 2500 | 3000 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 1.0 | |
| Indoor Unit | Power Supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 850/750/650 | |
| | | Fan Motor Output/Input Power | W | 11/15 | |
| | | Air-Flows (H-M-L) | m³/h | 530/460/390 | |
| | | External Static Pressure | pa | 0/10/20/40 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | 0.11 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 850x420x185 | |
| | | Package | mmxmmxmm | 1045x540x270 | |
| | Control Type (Remote/Wired) | | | Wired YR-E17A(O)<br>Remote YR-HQS01(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise Level (H-M-L) | Sound Power Level | dB(A) | 51 | |
| | | Sound Pressure Level | dB(A) | 33/30/26 | |
| | Weight (Net/Shipping) | | kg/kg | 16/21 | |
| Panel (Optional) | Panel Model (Color) | | | P1B-890IA/D | |
| | Dimension | External (L-W-H) | mmxmmxmm | 890/190/100 (Outlet Panel)/<br>890/290.5/32.4 (Inlet Panel) | |
| | | Package (L-W-H) | mmxmmxmm | 938/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 4/5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting Method | | | Flared | |

Norminal condition: Indoor temperature (Cooling): 27°C DB/19°C WB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD35S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 3500 | 4000 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.5 | |
| Indoor unit | Power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 950/850/750 | |
| | | Fan motor output/input power | W | 16/21 | |
| | | Air-flows (H-M-L) | m³/h | 600/480/420 | |
| | | External static pressure | pa | 0/10/20/40 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.11 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 850x420x185 | |
| | | Package | mmxmmxmm | 1045x540x270 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 27/31 | |
| | control type(Remote/Wired) | | | Wired YR-E17A(O) or Remote YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | None | |
| | Electricity heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 53 | |
| | | Sound pressure level | dB(A) | 33/28/25 | |
| | Weight (Net/Shipping) | | kg/kg | 16/21 | |
| Panel (optional) | Panel model (Color) | | | P1B-890IA/D | |
| | Dimension | External(L*W*H) | mmxmmxmm | 890/190/100 (Outlet panel)/ 890/290.5/32.4 (Inlet panel) | |
| | | Package(L*W*H) | mmxmmxmm | 938/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 4/5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD35S2SS2FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 3500 | 4000 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 1.5 | |
| Indoor Unit | Power Supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 950/850/750 | |
| | | Fan Motor Output/Input Power | W | 16/21 | |
| | | Air-Flows (H-M-L) | m³/h | 600/480/420 | |
| | | External Static Pressure | pa | 0/10/20/40 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | 0.11 | |
| | | Temp.Scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 850x420x185 | |
| | | Package | mmxmmxmm | 1045x540x270 | |
| | Control Type (Remote/Wired) | | | Wired YR-E17A(O)<br>Remote YR-HQS01(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise Level (H-M-L) | Sound Power Level | dB(A) | 53 | |
| | | Sound Pressure Level | dB(A) | 33/28/25 | |
| | Weight (Net/Shipping) | | kg/kg | 16/21 | |
| Panel (Optional) | Panel Model (Color) | | | P1B-890IA/D | |
| | Dimension | External (L-W-H) | mmxmmxmm | 890/190/100 (Outlet Panel)/<br>890/290.5/32.4 (Inlet Panel) | |
| | | Package (L-W-H) | mmxmmxmm | 938/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 4/5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting Method | | | Flared | |

Norminal condition: indoor temperature (Cooling): 27°C DB/19°CWB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD50S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 5000 | 5500 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 2.2 | |
| Indoor Unit | Power Supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*3 | |
| | | Speed (H-M-L) | r/min | 900/800/700/600 | |
| | | Fan Motor Output/Input Power | W | 40/55 | |
| | | Air-Flows (H-M-L) | m³/h | 900/750/600/450 | |
| | | External Static Pressure | pa | 0/10/20/40 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | 0.21 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 1170x420x185 | |
| | | Package | mmxmmxmm | 1365x540x270 | |
| | Drainage Pipe (Material,I.D/O.D) | | mm | PVC 27/31 | |
| | Control Type (Remote/Wired) | | | Wired YR-E17(O)<br>Remote YR-HQS01(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound Power Level | dB(A) | 54 | |
| | | Sound Pressure Level | dB(A) | 36/34/32/27 | |
| | Weight (Net/Shipping) | | kg/kg | 22/28 | |
| Panel (Optional) | Panel Model (Color) | | | P1B-890IA/D | |
| | Dimension | External (L-W-H) | mmxmmxmm | 890/190/100 (Outlet Panel)/<br>890/290.5/32.4 (Inlet Panel) | |
| | | Package (L-W-H) | mmxmmxmm | 938/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 4/5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ12.7 (1/2) | |
| | Connecting Method | | | Flared | |

Norminal condition: indoor temperature (Cooling): 27°C DB/19°C WB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD50S2SS2FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 5000 | 5500 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 2.2 | |
| Indoor Unit | Power Supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*3 | |
| | | Speed (H-M-L) | r/min | 900/800/700/600 | |
| | | Fan Motor Output/Input Power | W | 40/55 | |
| | | Air-Flows (H-M-L) | m³/h | 900/750/600/450 | |
| | | External Static Pressure | pa | 0/10/20/40 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | 0.21 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 1170x420x185 | |
| | | Package | mmxmmxmm | 1365x540x270 | |
| | Drainage Pipe (Material,I.D/O.D) | | mm | PVC 27/31 | |
| | Control Type (Remote/Wired) | | | Wired YR-E17(O)<br>Remote YR-HQS01(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound Power Level | dB(A) | 54 | |
| | | Sound Pressure Level | dB(A) | 36/34/32/27 | |
| | Weight (Net/Shipping) | | kg/kg | 21.5/27.5 | |
| Panel (Optional) | Panel Model (Color) | | | P1B-890IA/D | |
| | Dimension | External (L-W-H) | mmxmmxmm | 890/190/100 (Outlet Panel)/<br>890/290.5/32.4 (Inlet Panel) | |
| | | Package (L-W-H) | mmxmmxmm | 938/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 4/5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ12.7 (1/2) | |
| | Connecting Method | | | Flared | |

Norminal condition: indoor temperature (Cooling): 27°C DB/19°C WB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD71S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 7100 | 7500 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 1.0 | |
| Indoor Unit | Power Supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*3 | |
| | | Speed (H-M-L) | r/min | 1250/1100/1000/900 | |
| | | Fan Motor Output/Input Power | W | 48/55 | |
| | | Air-Flows (H-M-L) | m³/h | 1000/850/750/650 | |
| | | External Static Pressure | pa | 0/10/20/40 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 3 | |
| | | Total Area | m² | 0.11 | |
| | | Temp.Scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 1170x420x185 | |
| | | Package | mmxmmxmm | 1365x540x270 | |
| | Drainage Pipe (Material,I.D/O.D) | | mm | PVC 25/29 | |
| | Control Type (Remote/Wired) | | | Wired YR-E17(O) or<br>Remote YR-HQS01(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound Power Level | dB(A) | 57 | |
| | | Sound Pressure Level | dB(A) | 38/35/33/30 | |
| | Weight (Net/Shipping) | | kg/kg | 24/30 | |
| Panel (Optional) | Panel Model (Color) | | | P1B-1210IA/D | |
| | Dimension | External (L-W-H) | mmxmmxmm | 1210/190/100 (Outlet Panel)/<br>1210/290.5/32.4 (Inlet Panel) | |
| | | Package (L-W-H) | mmxmmxmm | 1258/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 5/6 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting Method | | | Flared | |

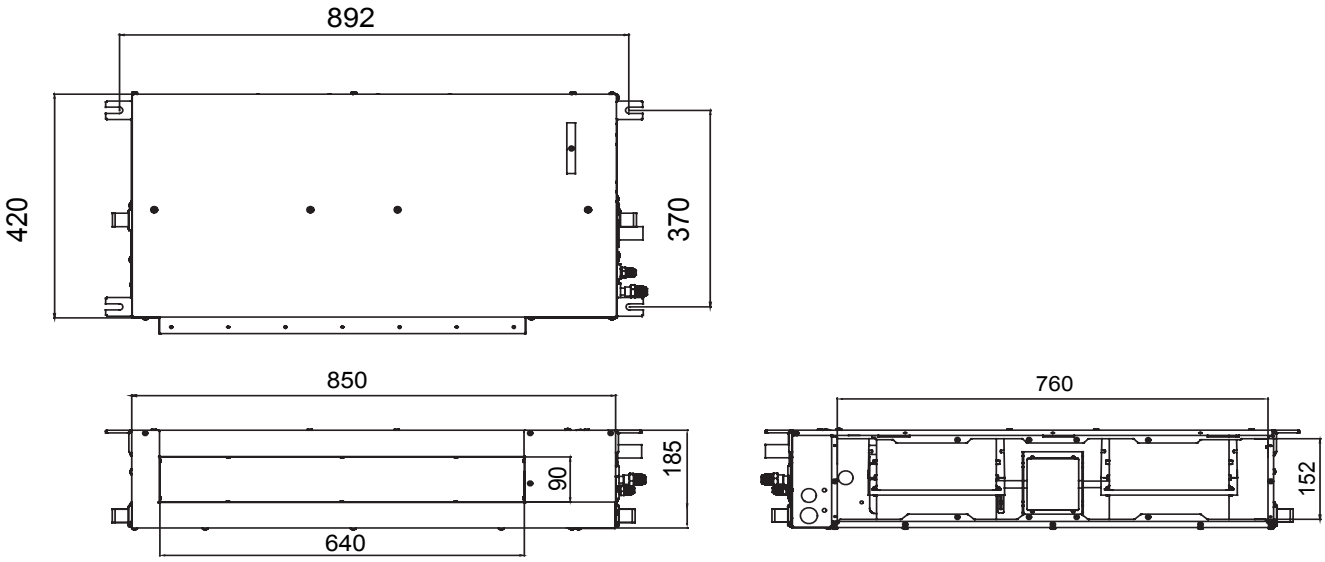
Norminal condition: indoor temperature (Cooling): 27°C DB/19°C WB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD71S2SS2FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 7100 | 7500 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 1.0 | |
| Indoor Unit | Power Supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*3 | |
| | | Speed (H-M-L) | r/min | 1250/1100/1000/900 | |
| | | Fan Motor Output/Input Power | W | 48/55 | |
| | | Air-Flows (H-M-L) | m³/h | 1000/850/750/650 | |
| | | External Static Pressure | pa | 0/10/20/40 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 3 | |
| | | Total Area | m² | 0.11 | |
| | | Temp.Scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 1170x420x185 | |
| | | Package | mmxmmxmm | 1365x540x270 | |
| | Drainage Pipe (Material,I.D/O.D) | | mm | PVC 29 | |
| | Control Type (Remote/Wired) | | | Wired YR-E17(O) or<br>Remote YR-HQS01(O) | |
| | Fresh Air Hole Dimension | | mm | None | |
| | Electricity Heater | | kW | None | |
| | Noise level (H-M-L) | Sound Power Level | dB(A) | 57 | |
| | | Sound Pressure Level | dB(A) | 38/35/33/30 | |
| | Weight (Net/Shipping) | | kg/kg | 23.5/29.5 | |
| Panel (Optional) | Panel Model (Color) | | | P1B-1210IA/D | |
| | Dimension | External (L-W-H) | mmxmmxmm | 1210/190/100 (Outlet Panel)/<br>1210/290.5/32.4 (Inlet Panel) | |
| | | Package (L-W-H) | mmxmmxmm | 1258/335/220 | |
| | Weight (Net/Shipping) | | kg/kg | 5/6 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting Method | | | Flared | |

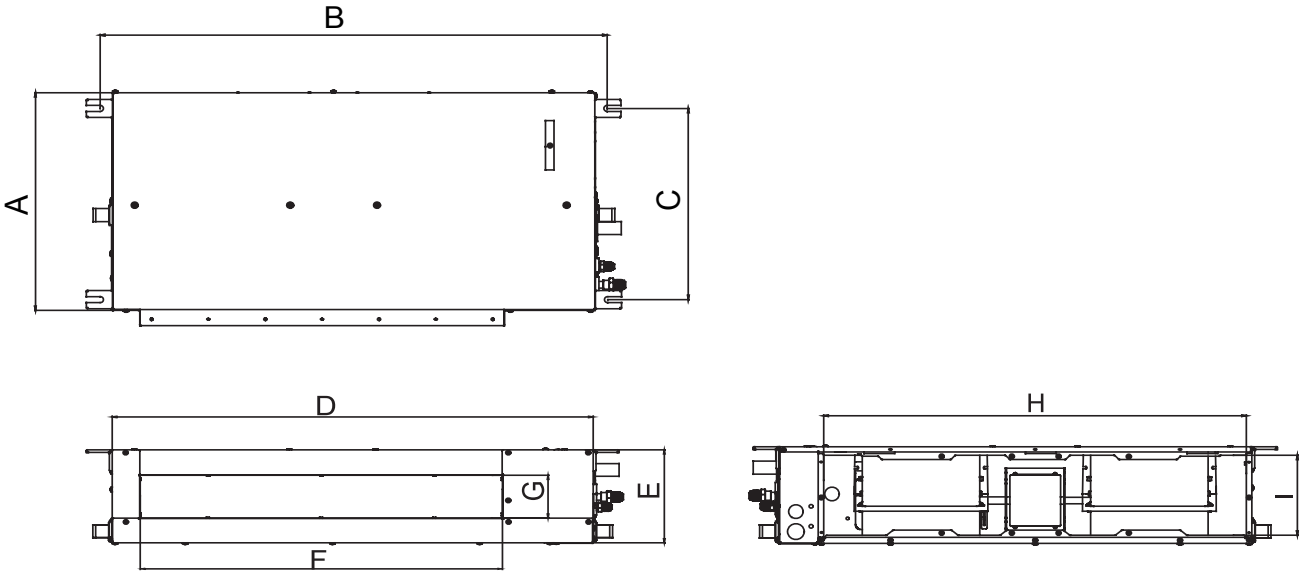
Norminal condition: indoor temperature (Cooling): 27°C DB/19°C WB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

## 4.2 Dimension

AD25S2SS1FA AD25S2SS2FA AD35S2SS1FA AD35S2SS2FA



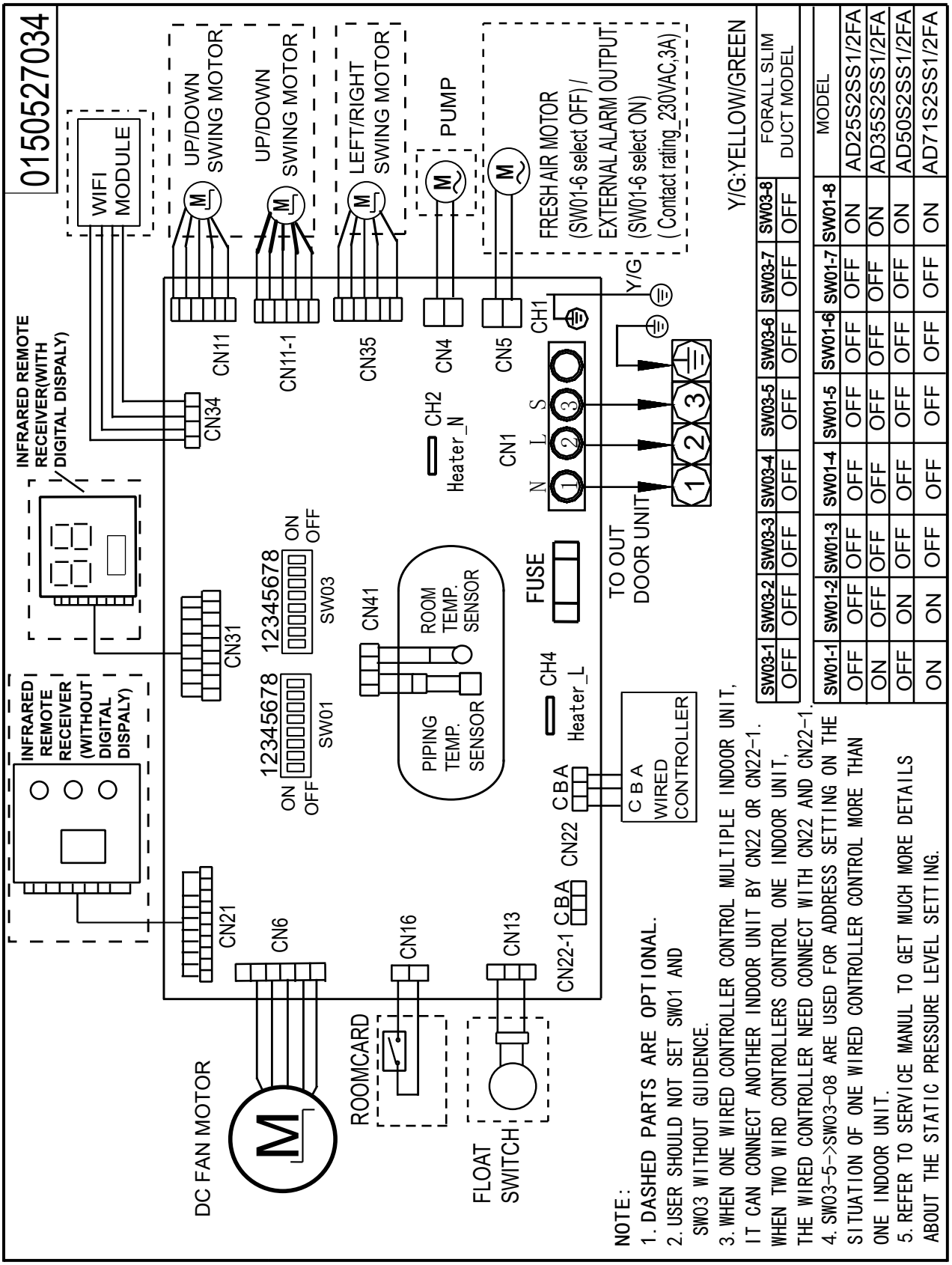

AD50S2SS1FA AD50S2SS2FA AD71S2SS1FA AD71S2SS2FA




| Unit Model | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| AD50S2SS1FA<br>AD50S2SS2FA<br>AD71S2SS1FA<br>AD71S2SS2FA | 420 | 1212 | 370 | 1170 | 185 | 960 | 90 | 1080 | 152 |

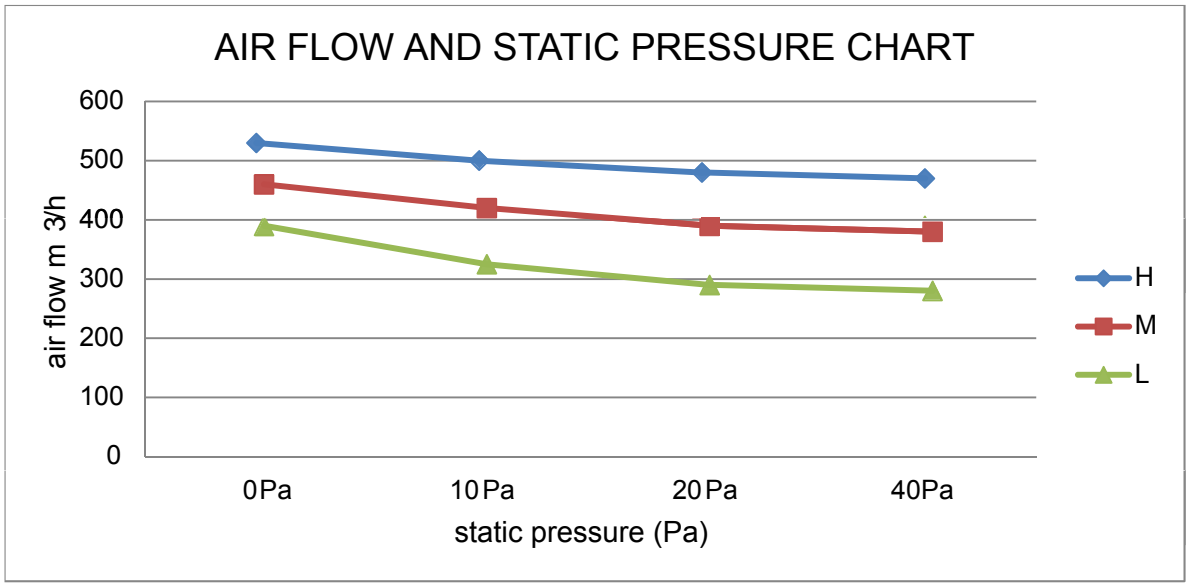
## 4.3 Wiring Diagram

AD25S2SS1FA AD35S2SS1FA AD50S2SS1FA AD71S2SS1FA AD71S2SS2FA

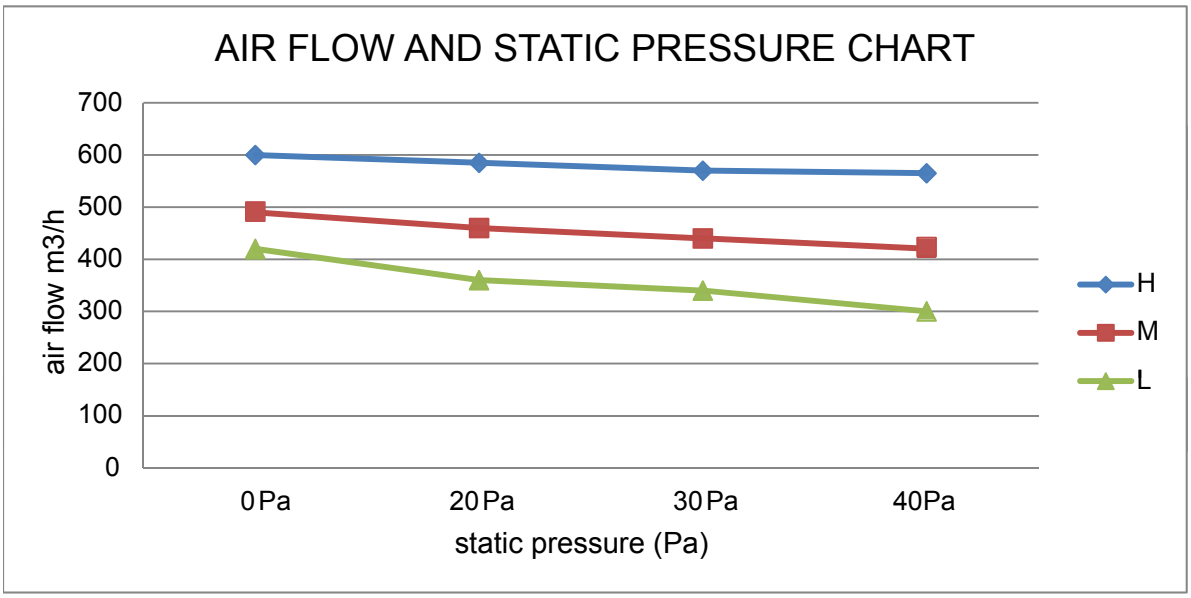


## 4.4 Airflow and Static Pressure Chart

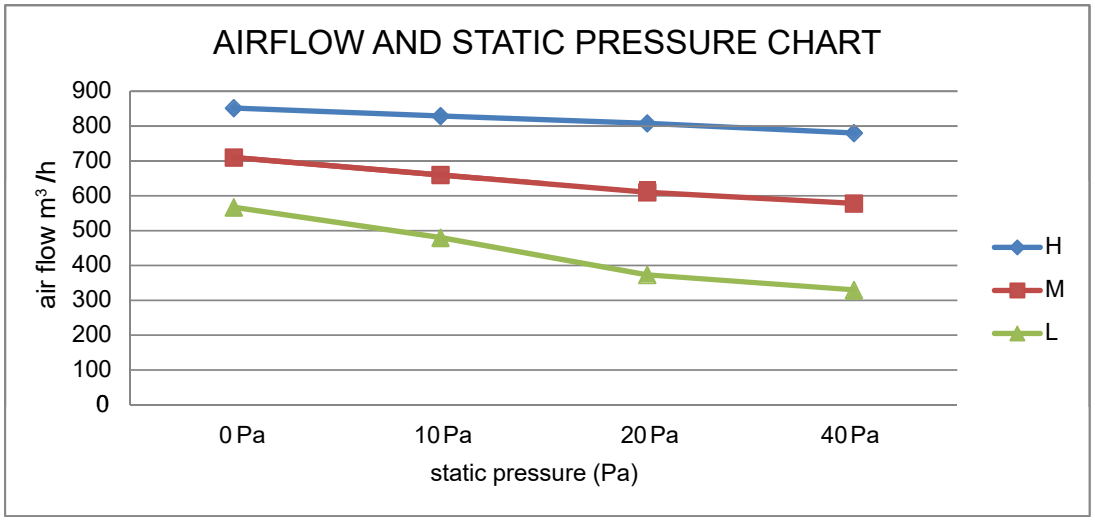
AD25S2SS1FA AD25S2SS2FA



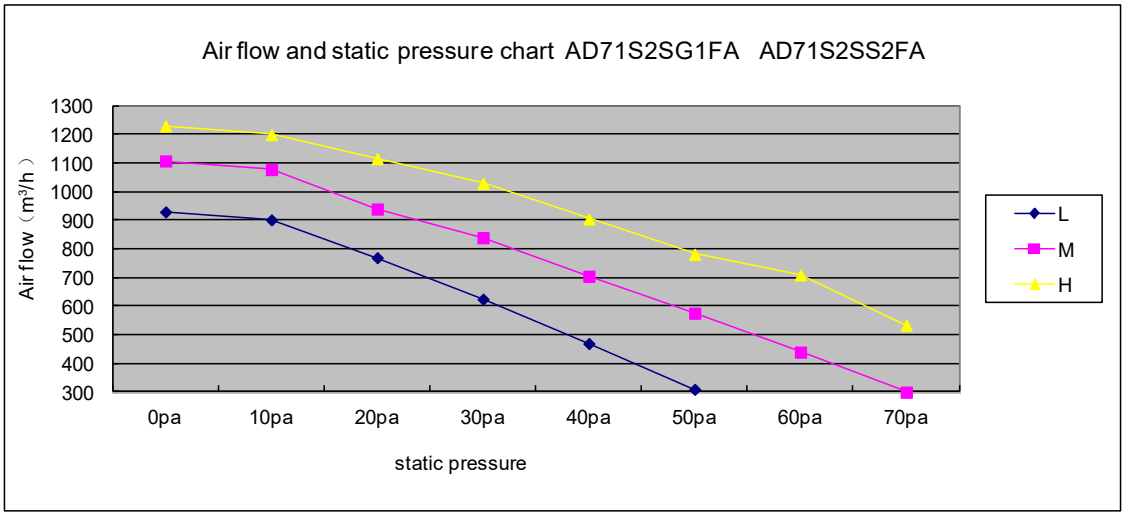

AD35S2SS1FA AD35S2SS2FA



AD50S2SS21FA AD50S2SS2FA




AD71S2SS1FA AD71S2SS2FA



## 4.5 Installation

**AD25S2SS1(2)FA AD35S2SS1(2)FA AD50S2SS1(2)FA AD71S2SS1(2)FA**

**The Machine Is Adaptive In Following Situation**

1. Applicable ambient temperature range:

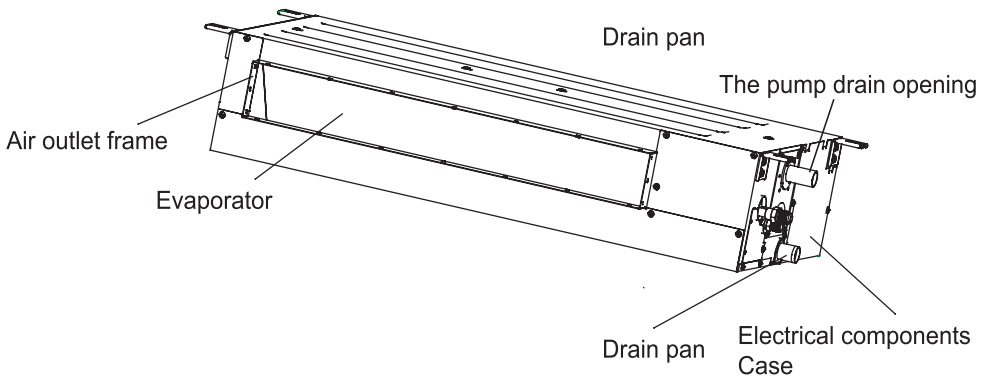
| | | | |
|---|---|---|---|
| Cooling | Heating | Max. DB/WB<br>Min. DB/WB | 32/23 °C<br>18/14 °C |
| | Outdoor Temperature | Max. DB/WB<br>Min. DB/WB | 46/24 °C<br>18 °C |
| Heating | Indoor Temperature | Max. DB/WB<br>Min. DB/WB | 27 °C<br>15 °C |
| | Outdoor Temperature | Max. DB/WB<br>Min. DB/WB | 24/18 °C<br>15 °C |

2. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person.
3. If the fuse on PC board is broken please change it with the type of T3.15A /250VAC.
4. The wiring method should be in line with the local wiring standard.
5. The breaker of the air conditioner should be all pole switch, and the distance between its two contacts should be no less than 3mm. Such means for disconnection must be incorporation in the fixed wiring.
6. The installation height of the indoor unit is recommended from 2.5m to 2.7m.
7. The distance between its two terminal blocks of indoor unit and outdoor unit should not be over 5m. If exceeded, the diameter of the wire should be enlarged according to the local wiring standard.
8. The waste battery shall be disposed properly.

***Attention:*** Cut off the power supply to adjust the SW14, and SW15, or else the operation is invalid.

**Parts and Functions**

AD25S2SS1FA
AD35S2SS1FA
AD50S2SS1FA
AD71S2SS1FA
AD25S2SS2FA
AD35S2SS2FA
AD50S2SS2FA
AD71S2SS2FA



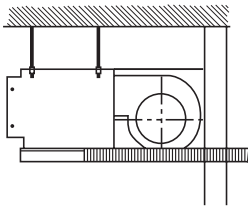
**Selecting the Mounting Position to Install the Indoor Units**

• Select suitable places where the outlet air can be sent to the entire room, and convenient to lay out the connection pipe, connection wire and the drainage pipe to outdoor.

• The ceiling structure must be strong enough to support the unit weight.

• The connecting pipe, drain pipe and connection wire shall be able to go though the building wall to connect between the indoor and outdoor units.

• The connecting pipe between the indoor and outdoor units as well as the drain pipe shall be as short as possible.



• If it is necessary to adjust the filling amount of the refrigerant, please refer to the installation manual attached with the outdoor unit.

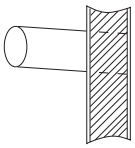
• The connecting flange should be provided by the user himself.

• The indoor unit has two water outlets one of which is obstructed at the factory (with a rubber cap).

• Only the outlet not obstructed (liquid inlet and outlet side) will be generally used during installation. If applicable, both the outlets should be used together.

• An access port must be provided during installation of indoor unit for maintenance.

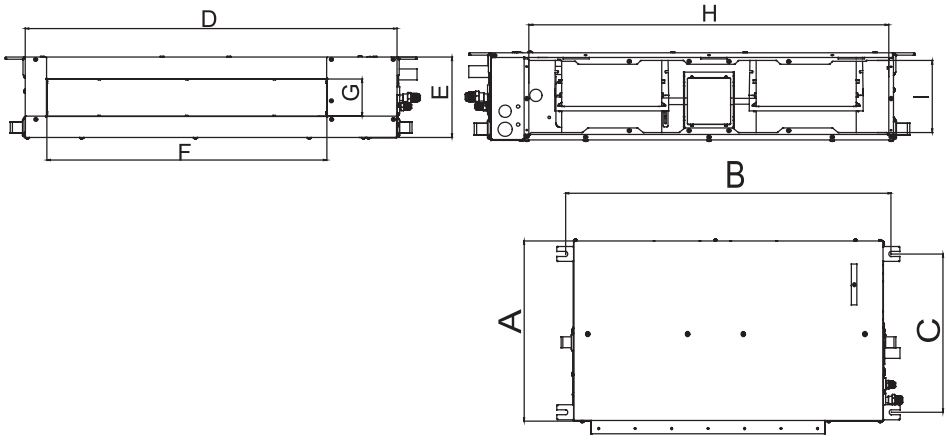
**After Selecting The Unit Installation Location, Proceed The Following Steps:**



1. Drill a hole in the wall and insert the connecting pipe and wire through a PVC wall-through tube purchased locally. The wall hole shall be with a outward down slope of at least 1/100.
2. Before drilling check that there is no pipe or reinforcing bar just behind the drilling position. drilling shall avoid at positions with electric wire or pipe.
3. Mount the unit on a strong and horizontal building roof. f the base is not firm, it will cause noise, vibration or leakage.
4. Support the unit firmly.
5. Change the form of the connection pipe, connection wire and drain pipe so that they can go through the wall hole easily.

**Installation Dimension**

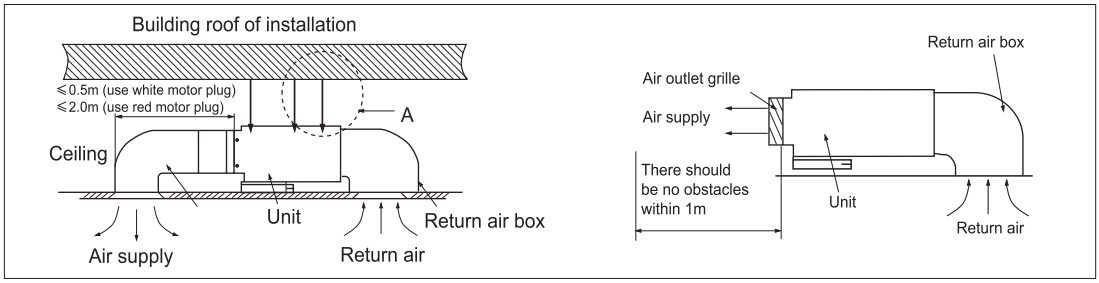
AD25S2SS1FA AD35S2SS1FA
AD50S2SS1FA AD25S2SS2FA
AD35S2SS2FA AD50S2SS2FA
AD71S2SS1FA AD71S2SS2FA



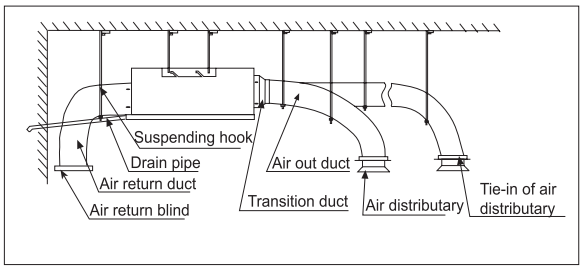

**Indoor Unit Dimensions (Unit:mm)**

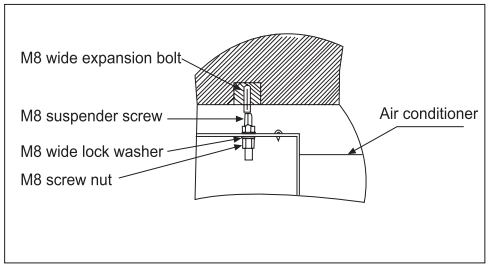
| Unit Model | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| AD25S2SS1FA AD35S2SS1FA AD25S2SS2FA AD35S2SS2FA | 420 | 892 | 370 | 850 | 185 | 640 | 90 | 760 | 152 |
| AD50S2SS1FA AD50S2SS2FA AD71S2SS1FA AD71S2SS2FA | 420 | 1212 | 370 | 1170 | 185 | 960 | 90 | 1080 | 152 |

• Each of the air sending duct and air return duct shall be fixed on the prefabricated panel of the floor by the iron bracket. The recommended distance between the edge of the air return duct and the wall is over 150mm.
• The gradient of the condensate water pipe shall keep over 1%.
• The condensate water pipe shall be thermal insulated.
• When installing the ceiling Concealed type indoor unit, the air return duct must be designed and installed as figure shown



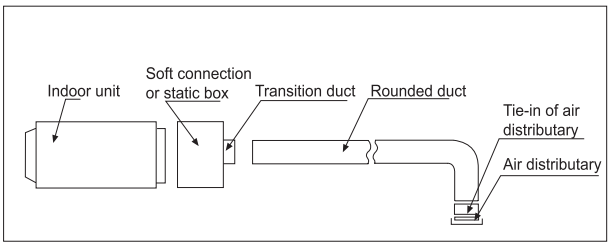

**The sketch map of long duct**



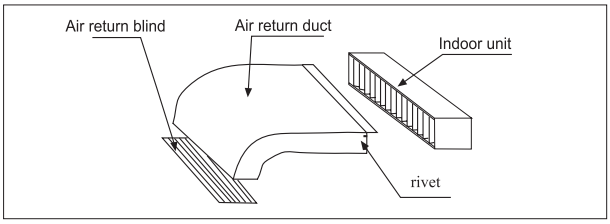

**1. Installation of Air sending duct**

• This unit uses rounded duct, the diameter of the duct is 180mm.
• The rounded duct needs to add a transition duct to connect with the air-sending duct of indoor unit, then connect with respective separator. As Figure shown, all the fan speed of any of the separator's air outlet shall be adjusted approximately the same to meet the requirement for the room air conditioner.



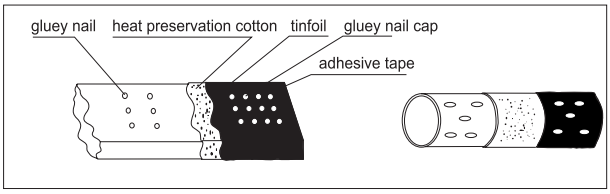

**2. Installation of Air Return Duct**

• Use rivet to connect the air return duct on the air return inlet of the indoor unit, then connect the other end with the air return blind as figure shown.




**3.Thermal Insulation of Duct**

• Air-sending duct and air return duct shall be thermally insulated. First stick the gluey nail on the duct, then attach the heat preservation cotton with a layer of tinfoil paper and use the gluey nail cap to fix. Finally use the tinfoil adhesive tape to seal the connected part. As figure shown.

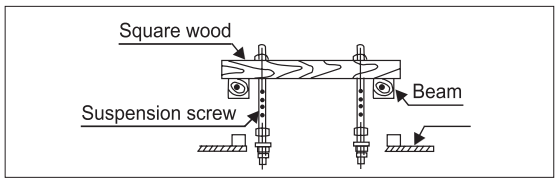


### Installing the Suspension Screw

Use M8 or M10 suspension screws (4, prepared in the field) (When the suspension screw height exceeds 0.9m, M10 size is theonly choice). These screws shall be installed as follows with space adapting to air conditioner overall dimensions according tothe original building structures.

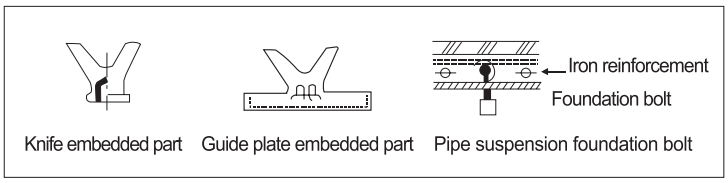
**Wooden Structure**

A square wood shall be supported by the beams and then set the suspension screws.



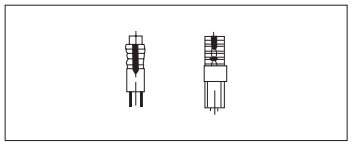

**New Concrete Lab**

To set with embedded parts,foundation bolts etc.



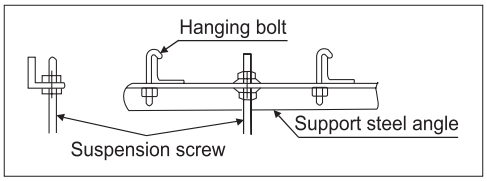

**Orig Inal Concrete Slad**

Use hole hinge, hole plunger or hole bolt



**Steel Reinforcement Structure**

Use steel angle or new support steel angle directly




### Hanging of the indoor unit

- Fasten the nut on the suspens on screw and then hang the suspension screw in the T slot of the suspension part of the unit.
- Aided with a level meter, adjust level of the unit within 5mm

**⚠ CAUTION**

- In installation,if there is refrigerant gas leakage, pleasetake ventilation measures immediately.The refrigerant gas will generate poisonous gas upon contacting fire.
- After installation, please verify that there is no refrigerant leakage. The leaked refrigerant gas will produce poisonous gas when meeting fire source such as heater and furnace etc.

| Model | Gas Side | Liquid Side |
|---|---|---|
| AD25S2SS1FA AD35S2SS1FA AD25S2SS2FA AD35S2SS2FA | φ9.52 | φ6.35 |
| AD50S2SS1FA AD50S2SS2FA | φ12.7 | φ6.35 |
| AD71S2SS1FA AD71S2SS2FA | φ15.88 | φ9.52 |

### Pipe Material

Phosphorus deoxidized copper seamless pipe (TP2M) for air conditioner.

### Allowable Pipe Length and Drop

These parameters differ according to the outdoor unit. See the instruction manual attached with the outdoor unit for details.

### Supplementary Refrigerant

The refrigerant supplementation shall be as specified in the installation instructions attached with the outdoor unit. The adding procedure shall be aided with a measuring meter for a specified amount of supplemented refrigerant.

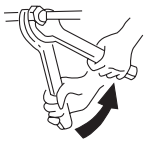
***Note:***

Over filling or underilling of refrigerant will cause compressor fault. The amount of the added refrigerant shall be as specified in the instructions.

| Connecting | Installing Torque (N-m) |
|---|---|
| φ6.35 | 11.8 (1.2 kgf-m) |
| φ9.52 | 24.5 (2.5 kgf-m) |
| φ12.7 | 49.0 (5.0 kgf-m) |
| φ15.88 | 78.4 (8.0 kgf-m) |

**Connection of Refrigerant Pipe**

Conduct flared connection work to connect all refrigerant pipes.



Double-spanner operation

- The connection of indoor unit pipes must use double spanners.
- The installing torque shall be as given in the following table.
- Wall thick ness of connection pipe≥0.8mm

**Creating Vacuum**

With a vacuum pump, create vacuum from the stop valve of the outdoor unit. Emptying with refrigerant sealed in the outdoor unit is absolutely forbidden.

**Open All Valves**

Open all the valves on the outdoor unit.

**Gas Leakage Detection**

Check with a leakage detector or soap water if there is gas leakage at the pipe connections and bonnets.

**Insulation Treatment**

Conduct insulation treatment on both the gas side and liquid side of pipes respectively.
During cooling operation, both the liquid and gas sides are cold and thus shall be insulated so as to avoid dew generation.

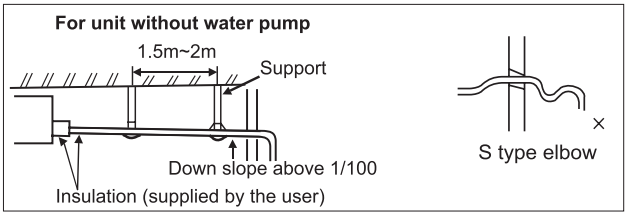
- The insulating material at gas side shall be resistant to a temperature above 120℃
- The indoor unit pipe connection part shall be insulated.

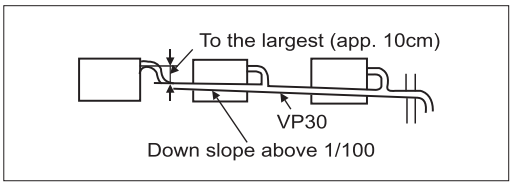
⚠ **CAUTION**

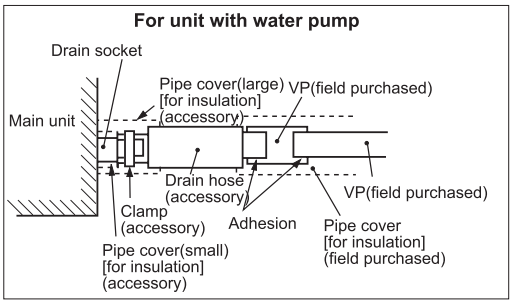
In order to drain water normally, the drain pipe shall be processed as specified in the installation manual and shall be thermal insulated to avoid dew generation. Improper hose connection may cause indoor water leakage.

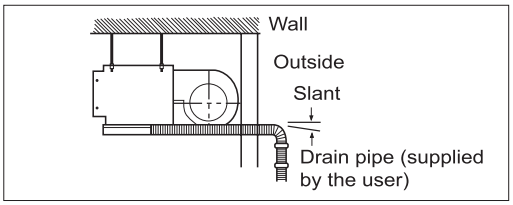
**Requirements**

- The indoor drain pipe shall be thermal insulated.
- The connection part between the drain pipe and the indoor unit shall be insulated so as to prevent dew generation.
- The drain pipe shall be slant downwards (greater than 1/100). The middle part shall not be of stype elbow, otherwise abnormal sound will be produced.
- The horizontal length of the drain pipe shall be less than 20m. In case of long pipe, supports shall be provided every 1.5-2m to prevent wavy form.
- Central piping shall be laid out according to the right figure.
- Take care not to apply external force onto the drain pipe connection part.
- For unit with water pump drain pipeuse hard PVC general purpose pipe VP which can be purchased locally. When connecting, insert a PVC pipe end securely into the drain socket before tightening securely using the attached drain hose and clamp. Adhesive must not be used for connection of the drain socket and drain hose (accessory).




**Pipe and Insulation Material**

| | |
|---|---|
| Pipe | Rigid PVC Pipe VP20 mm (Internal Diameter) |
| Insulation | Foamed PE with Thickness Above 7 mm |

**Hose**

Drain pipe size: (3/4) PVC pipe

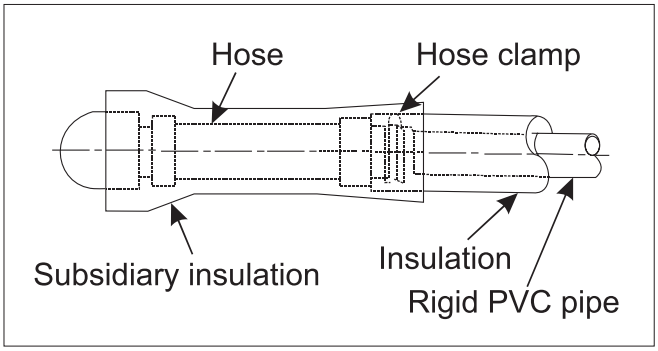
The hose is used for adjusting the off-center and angle of the rigid PVC pipe.

• Directly stretch the hose to install without making any deformation.

• The soft end of the hose must be fastened with a hose clamp.

• Please apply the hose on horizontal part Insulation treatment.

• Wrap the hose and its clamp up to the indoor unit without any clearance with insulating material, as shown in the figure.




**Drain Confirmation**

During trial run, check that there is no leakage at the pipe connection part during water draining even in winter.

| ⚠WARNING |
| --- |
| **Danger of Bodily Injury or Death** |
| Turn off electric power at circuit breaker or power source before making any electric connections. Ground connections must be completed before making line voltage connections. |

**Precautions for Electrical Wiring**

• Electrical wiring work should be conducted only by authorized personnel.

• Do not connect more than three wires to the terminal block. Always use round type crimped terminal lugs with insulated grip on the ends of the wires.

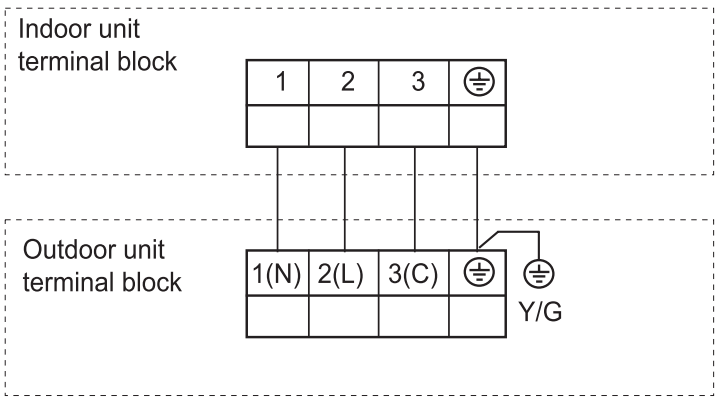
• Use copper conductor only.

**Wiring Connection**

Make wiring to supply power to the outdoor unit, so that the power for the indoor unit is supplied by terminals.

The specification of power cable is HO5RN-F3G 4.0mm$^2$.

The specification of cable between indoor unit to outdoor unit is HO5RN-F4G 2.5mm$^2$.



- The installation of pipe-work shall be kept to a minimum.
- Pipe-work shall be protected from physical damage and shall not be installed in an unventilated space, if that space is smaller than Amin ($2m^2$).
- Compliance with national gas regulations shall be observed.
- Mechanical connections shall be accessible for maintenance purposes.
- The minimum floor area of the room: $2m^2$.
- The maximum refrigerant charge amount: 1.7 kg.
- Information for handling, installation, cleaning, servicing and disposal of refrigerant.
- WARNING: Keep any required ventilation openings clear of obstruction.
- Notice: Servicing shall be performed only as recommended by the manufacturer.

**Unventilated Areas**

- WARNING: The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified.
- WARNING: The appliance shall be stored in a room without continuously operating open flames (e.g.an operating gas appliance) and ignition sources (e.g.an operating electric heater).

**Qualification of Workers**

- Specific information about the required qualification of the working personnel for maintenance, service and repair operations.
- WARNING: Every working procedure that affects safety means shall only be carried out by competent persons Examples for such working procedures are:
- Breaking into the refrigerating circuit.
- Opening of sealed components
- Opening of ventilated enclosures.

**Information on Servicing**

- Prior to beginning work on systems, safety checks are necessary to ensure that the risk of ignition is minimized.
- Work shall be undertaken under a controlled procedure so as to minimized the risk of flammable gas or vapor being present while the work is being performed.
- Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

**Checking for Presence of Refrigerant**

- The area shall be checked with an appropriate refrigerant detector prior to and during work. The leak detection equipment should be suitable for use with all applicable refrigerants, i.e.non-sparking, adequately sealed or intrinsically safe.

**Presence of Fire Extinguisher**

- If any hot work is to be conducted, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or $CO^2$ fire extinguisher adjacent to the charging area.

**No Ignition Sources**

- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. “No Smoking” signs shall be displayed.

**Ventilated Area**

- Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperseany released refrigerant and preferably expel it externally into the atmosphere.

**Checks to the Refrigeration Equipment**

- Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.

**The Following Checks Shall be Applied to Installations**

- The charge size is in accordance with the room size within which the refrigerant containing parts are installed;
- The ventilation machinery and outlets are operating adequately and are not obstructed;
- If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

**Checks to Electrical Devices**

- Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

- Initial safety checks shall include:

• That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
• That no live electrical components and wiring are exposed while charging, recovering or purging the system;
• That there is continuity of earth bonding.

**Repairs to Sealed Components**

- During repairs to sealed components, all electrical supplies shall be disconnected prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
- Ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected, including damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.
- Ensure that the apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded to the point that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

**Repair to Intrinsically Safe Components**

- Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
- Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere.
- Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

**Cabling**

- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

**Detection of Flammable Refrigerants Removal and Evacuation**

- The refrigerant charge shall be recovered into the correct recovery cylinders and the system shall be “flushed” with OFN to render the unit safe. This process may need to be repeated several times.
- Compressed air or oxygen shall not be used for purging refrigerant systems.
- Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.
- The vacuum pump is not close to any ignition sources and that ventilation is available.

**Charging Procedures**

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept upright.
- Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the refrigeration system.
- Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

**Decommissioning**

- Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail.
- Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant.
- Electrical power must be available before the task is commenced.

- Become familiar with the equipment and its operation.
- Isolate system electrically.
- Before attempting the procedure, ensure that:
• Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
• All personal protective equipment is available and being used correctly;
• The recovery process is supervised at all times by a competent person;
• Recovery equipment and cylinders conform to the appropriate standards.

- Pump down refrigerant system, if possible.
- If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- Make sure that cylinder is situated on the scales before recovery takes place.
- Start the recovery machine and operate in accordance with manufacturer's instructions.
- Do not overfill cylinders. (No more than 80% volume liquid charge).
- Do not exceed the maximum working pressure of the cylinder, even temporarily.
- When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

**Labelling**

- Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed.
- Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

**Recovery**

- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
- Ensure that the correct number of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant).
- Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants.
- A set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak- free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release.
- The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged.
- Do not mix refrigerants in recovery units and especially not in cylinders.
- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.
- The evacuation process shall be carried out prior to returning the compressor to the suppliers.
- Only electric heating to the compressor body shall be employed to accelerate this process.

# 5 . Indoor Units -Medium Pressure Slim Duct Type

## 5.1 Specification

| Item | | | Model | AD35S2SM3FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 3500 | 4000 |
| Sensible Heat Ratio | | | W | 0.71 | / |
| Dehumidifying Capacity | | | 10-³xm³/h | 1.0 | |
| Indoor Unit | Power Supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*1 | |
| | | Speed (H-M-L) | r/min | 900/800/700/650 | |
| | | Fan Motor Output/Input Power | W | 110/120 | |
| | | Air-Flows (H-M-L) | m³/h | 840/720/600/450 | |
| | | External Static Pressure | pa | 25(Default)/37/50/70/90/ 100/110/120/130/150 | |
| | Heat Exchanger | Type / Diameter | mm | Inner Grooved Pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total Area | m² | 0.11 | |
| | | Temp.Scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 700/700/248 | |
| | | Package | mmxmmxmm | 950/900/340 | |
| | Drainage Pipe (Material,I.D/O.D) | | mm | PVC 21/25 | |
| | Control Type(Remote/Wired) | | | Wired YR-E17 (O) or Remote YR-HQS01 (O) | |
| | Fresh Air Hole Dimension | | mm | ¢ 123 | |
| | Electricity Heater | | kW | None | |
| | Noise Level (H-M-L) | Sound Power Level | dB (A) | 55 | |
| | | Sound Pressure Level | dB (A) | 41/35/28/26 | |
| | Weight (Net/Shipping) | | kg/kg | 27/31 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting Method | | | Flared | |

Norminal condition: indoor temperature (Cooling): 27°C DB/19°CWB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item / Model | | | | AD50S2SM1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 5000 | 6000 |
| Sensible heat ratio | | | W | 0.73 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.8 | |
| Indoor unit | Power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 900/820/770/720 | |
| | | Fan motor output/input power | W | 45/70 | |
| | | Air-flows (H-M-L) | m³/h | 1080/900/780/660 | |
| | | External static pressure | Pa | 25/37/50/70/90/ 100/110/120/130/150 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | / | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 957/655/250 | |
| | | Package | mmxmmxmm | 1170/860/340 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 25/29 | |
| | Control type(Remote/Wired) | | | Wired YR-E17(O) or Remote YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 145 | |
| | Electricity heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB (A) | 57 | |
| | | Sound pressure level | dB (A) | 37/34/32/29 | |
| | Weight (Net/Shipping) | | kg/kg | 26/33 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ12.7 (1/2) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item / Model | | | | AD50S2SM3FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 5000 | 6000 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.0 | |
| Indoor unit | Power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 750/650/550/500 | |
| | | Fan motor output/input power | W | 140/160 | |
| | | Air-flows (H-M-L) | m³/h | 1020/900/780/550 | |
| | | External static pressure | Pa | 25(default)/37/50/70/90/ 100/110/120/130/150 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | / | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 1100/700/248 | |
| | | Package | mmxmmxmm | 1270/860/340 | |
| | Drainage pipe (Material,I.D/O.D) | | mm | PVC 21/25 | |
| | Control type (Remote/Wired) | | | Wired YR-E17(O) or Remote YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | None | |
| | Noise level (H-M-L) | Sound power level | dB (A) | 56 | |
| | | Sound pressure level | dB (A) | 43/37/30/28 | |
| | Weight (Net/Shipping) | | kg/kg | 35/39 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ12.7 (1/2) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item / Model | | | | AD71S2SM1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 7.1 (2.0~8.2) | 8.0 (2.5~8.5) |
| Sensible heat ratio | | | | 0.74 | / |
| Total power input | | | KW | 2.15 (0.6~2.6) | 2.16 (0.6~2.6) |
| Max. power input | | | W | 3000 | 3000 |
| EER or COP | | | W/W | 3.30 | 3.71 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 2.5 | |
| Power cable | | | | H05RN-F 4G 6.0mm$^2$ | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 9.7 (2.3-12)/16 | 9.8 (2.3-12)/16 |
| Start Current | | | A | 3 | |
| Indoor unit | Unit model (color) | | | AD71S2SM1FA | |
| | Fan | Type × Number | | Centrifugal*2 | |
| | | Speed (H-M-L) | r/min | 1130/950/820/780 | |
| | | Fan motor output/ input power | W | 85/111 | |
| | | Air-flow (H-M-L) | m³/h | 1440/1140/900/800 | |
| | | External static pressure | Pa | 25/37//50/70/90/100/110/120/130/150 | |
| | Heat exchanger | Type / Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | | 3 | |
| | | Total Area | m² | 7.668 | |
| | Dimension | External (L*W*H) | mm×mm×mm | 957/655/250 | |
| | | Package (L*W*H) | mm×mm×mm | 1170/860/340 | |
| | Drainage pipe (Material, I.D./O.D.) | | mm | PVC 25/29 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E16(O)/YR-E17 | |
| | Fresh air hole dimension | | mm | None | |
| | Electricity heater | | kW | None | |
| | Sound power Noise level (H-M-L) | | dB (A) | 58 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 42/38/35 | |
| | Pipe | Liquid Pipe (mm) | | Φ9.52 (3/8) | |
| | | Gas Pipe (mm) | | Φ15.88 (5/8) | |
| | | Connecting method | | Flared | |
| | Weight (Net / Shipping) | | kg / kg | 31.2/36.8 | |

Norminal condition: indoor temperature (Cooling): 27°C DB/19°C WB, indoor temperature (Heating): 20°C DB
Outdoor temperature (Cooling): 35°C DB/24°C WB, outdoor temperature (Heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

| Item | | | Model | AD71S2SM3FA/1UH071N1ERG | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 7.1 (2.0~9.0) | 8 (2.0~10.0) |
| Sensible heat ratio | | | | 0.72 | / |
| Total power input | | | kW | 2.03 (0.4~4.0) | 2.0 (0.4~4.0) |
| Max. power input | | | W | 4000 | 4000 |
| EER or COP | | | W/W | 3.5 (B) | 4 (C) |
| Dehumidifying capacity | | | $10^{-3}$×$m^3$/h | 2.4 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running/Max. Running current | | | A/A | 8.8 (2.0-17.5)/17.5 | 8.0 (2.0-17.5)/17.5 |
| Start current | | | A | 0.52 | |
| Circuit breaker | | | A | 5 | 5 |
| Indoor unit | Unit model (color) | | | AD71S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 950/850/750/700 (37Pa) | |
| | | Fan motor output/ input power | kW | 0.228 | |
| | | Air-flow (H-M-L) | kW | 0.160 | |
| | | External static pressure | $m^3$/h | 1440/1260/1100/900 (25/37(default)/ 50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1100*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1290/840/320 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S) | |
| | | | Infrared | YRHBS(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB (A) | 58 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 42/38/35 | |
| | Weight (Net / Shipping) | | kg / kg | 31/37 | |
| Piping | Refrigerant | Type / Charge | g | R410A/2500 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without charge refrigerant | m | 10 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD71S2SM6FA/1U71S2SR2FA | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 6.8（1.8-8.0） | 7.5（2.0-8.5） |
| Sensible heat ratio | | | | 0.74 | / |
| Total power input | | | kW | 2.26（0.5-3.0） | 2.34 (0.5~3.0) |
| Max. power input | | | W | 3.0 | 3.0 |
| EER or COP | | | W/W | 3.01 (A) | 3.21 (A) |
| Dehumidifying capacity | | | $10^{-3}$×$m^3$/h | 2.5 | |
| Power cable | | | | 2.5$mm^2$ | |
| Power source | | | N, V, Hz | 1ph, 220~240, 50 | |
| Running/Max. Running current | | | A/A | 2.5/3.5 | 2.5/3.5 |
| Start current | | | A | 2 | |
| Circuit breaker | | | A | 5 | 5 |
| Indoor unit | Unit model (color) | | | AD71S2SM6FA/INDOOR UNIT | |
| | Fan | Type×Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 860/750/630 | |
| | | Fan motor output/ input power | W | 80W/180W | |
| | | Air-flow (H-M-L) | m3/h | 1200/980/800 | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | | 2 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1100*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1315/858/320 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | HW-BA116ABK(S) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 62 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 48/45/42 | |
| | Pipe | Liquid Pipe | mm | 9.52 | |
| | | Gas Pipe | mm | 15.88 | |
| | | Connecting Method | flared/welded conneciton | flared | |
| | Weight (Net / Shipping) | | kg / kg | 31/34 | |
| Piping | Refrigerant | Type / Charge | g | R32/1300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

| Item | | | Model | | | AD71S2SM6FA/1U71S2SR2FA | |
|---|---|---|---|---|---|---|---|
| cooling | | Pdesignc(kW) | 6.8Kw | SEER/CLASS | 5.6/A+ | QCE(Annual electricity consumption for cooling) kWh | 425 |
| heating | Average | Pdesignh(-10℃) | 5.0Kw | SCOP/CLASS | 3.8/A | QHE(Annual electricity consumption for heating) kWh | 1840 |
| | Warmer | Pdesignh(2℃) | 2.8Kw | SCOP/CLASS | 4.5/A+ | QHE(Annual electricity consumption for heating) kWh | 859 |
| | Colder | Pdesignh(-22℃) | / | SCOP/CLASS | / | QHE(Annual electricity consumption for heating) kWh | / |
| Tdesignh:-10℃ | | | Tbivalent:-10℃ | TOL:-10℃ | | Elbu:0 | |
| Max. cooling condition | | | Indoor temperature: 32℃/23℃ | Max. heating condition | | Indoor temperature: 27℃/-℃ | |
| | | | Outdoor temperature: 46℃/-℃ | | | Outdoor temperature:24℃/18℃ | |

Norminal condition: indoor temperature (cooling): 27℃ DB/19℃ WB, indoor temperature (heating): 20℃ DB
Outdoor temperature(cooling): 35℃ DB/24℃ WB, outdoor temperature(heating): 7℃ DB/6℃ WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD90S2SM3FA/1UH090N1ERG | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 8.5 (2.5~10) | 9.5 (2.5~11) |
| Sensible heat ratio | | | | 0.72 | / |
| Total power input | | | kW | 2.50 (0.5~4.4) | 2.50 (0.5~4.4) |
| Max. power input | | | W | 4400 | 4400 |
| EER or COP | | | W/W | 3.4 (B) | 3.8 (C) |
| Dehumidifying capacity | | | $10^{-3}$×$m^3$/h | 2.5 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running/Max. Running current | | | A/A | 11.1(2.3-19.2)/19.2 | 11.1(2.3-19.2)/19.2 |
| Start current | | | A | 0.56 | |
| Circuit breaker | | | A | 5 | 5 |
| Indoor unit | Unit model (color) | | | AD90S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 1050/980/920/860(37Pa) | |
| | | Fan motor output/ input power | kW | 0.260 | |
| | | Air-flow (H-M-L) | kW | 0.180 | |
| | | External static pressure | $m^3$/h | 1440/1260/1100/900(25/37(default)/ 50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1100*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1290/840/320 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S) | |
| | | | Infrared | YRHBS(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H-M-L) | | dB (A) | 60 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 44/40/37 | |
| | Weight (Net / Shipping) | | kg / kg | 38/45 | |
| Piping | Refrigerant | Type / Charge | g | R410A/2500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition:

Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB

Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD100S2SM6FA/1U105S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 9.5（2.5-11.0） | 10.5（2.5-12） |
| Sensible heat ratio | | | | 0.74 | / |
| Total power input | | | kW | 3.16（0.5-4.0） | 3.27 (0.5~4.0) |
| Max. power input | | | W | 4.0 | 4.0 |
| EER or COP | | | W/W | 3.01 (A) | 3.21 (A) |
| Dehumidifying capacity | | | $10^{-3}$×$m^3$/h | 3.2 | |
| Power cable | | | | 2.5$mm^2$ | |
| Power source | | | N, V, Hz | 1ph, 220~240, 50 | |
| Running/Max. Running current | | | A/A | 3/4 | 3/4 |
| Start current | | | A | 2 | |
| Circuit breaker | | | A | 5 | 5 |
| Indoor unit | Unit model (color) | | | AD100S2SM6FA/INDOOR UNIT | |
| | Fan | Type×Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 1050/980/920 | |
| | | Fan motor output/ input power | W | 200W/300W | |
| | | Air-flow (H-M-L) | $m^3$/h | 1440/1260/1100 | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Row | | 2 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1100*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1315/858/320 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | HW-BA116ABK(S) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 62 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 44/40/37 | |
| | Pipe | Liquid Pipe | mm | 9.52 | |
| | | Gas Pipe | mm | 15.88 | |
| | | Connecting Method | flared/welded conneciton | flared | |
| | Weight (Net / Shipping) | | kg / kg | 38/45 | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

| Item | | Model | | | | AD100S2SM6FA/1U105S2SS1FA | |
|---|---|---|---|---|---|---|---|
| cooling | | Pdesignc(kW) | 9.5Kw | SEER/CLASS | 5.6/A+ | QCE(Annual electricity consumption for cooling) kWh | 595 |
| heating | Average | Pdesignh(-10℃) | 7.0Kw | SCOP/CLASS | 3.8/A | QHE(Annual electricity consumption for heating) kWh | 2568 |
| | Warmer | Pdesignh(2℃) | 3.6Kw | SCOP/CLASS | 4.8/A++ | QHE(Annual electricity consumption for heating) kWh | 1044 |
| | Colder | Pdesignh(-22℃) | / | SCOP/CLASS | / | QHE(Annual electricity consumption for heating) kWh | / |
| Tdesignh:-10℃ | | Tbivalent:-10℃ | | TOL:-10℃ | | Elbu:0 | |
| Max. cooling condition | | Indoor temperature：32℃ /23℃ | | Max. heating condition | | Indoor temperature：27℃ /-℃ | |
| | | Outdoor temperature：46℃ /-℃ | | | | Outdoor temperature:24℃ /18℃ | |

Norminal condition: indoor temperature (cooling): 27℃ DB/19℃ WB, indoor temperature (heating): 20℃ DB
Outdoor temperature(cooling): 35℃ DB/24℃ WB, outdoor temperature(heating): 7℃ DB/6℃ WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD100S2SM6FA/1U105S2SS1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 9.2 (2.5-10.0) | 10.5 (3.0-11.0) |
| Sensible heat ratio | | | | 0.81 | |
| Total power input | | | KW | 3.25 (0.5-4.0) | 3.27 (0.5-4.0) |
| Max. power input | | | W | 4000 | 4000 |
| EER or COP | | | W/W | 2.9 (A) | 3.21 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 1.78 | |
| Power cable | | | | H07RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 5.5A(0.5-6.8A)/6.8A | 5.3(0.5-6.8A)/6.8A |
| Start Current | | | A | 1 | |
| Circuit breaker | | | A | 6.5 | 6.5 |
| Indoor unit | Unit model (color) | | | AD100S2SM6FA | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 1140/1050/1010/960(37Pa) | |
| | | Fan motor input power | kW | 0.13 | |
| | | Fan motor output power | kW | 0.11 | |
| | | Air-flow(H-M-L) | m³/h | 1440/1260/1100/900m³/h(25/37(default)/50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1100/700/248 | |
| | | Package（L×W×H） | mm×mm×mm | 1315/858/320 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S) OR HW-BA116ABK(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 62 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 44/41/39/36 | |
| | Weight (Net / Shipping) | | kg / kg | 38/45 | |
| | Panel | Model | | / | |
| | | External dimensions (W/D/H) | mm | / | |
| | | Shipping dimensions (W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD105S2SM3FA/1UH105N1ERG | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 10 (2.5~11) | 10.4 (2.5~12.0) |
| Sensible heat ratio | | | | 0.72 | / |
| Total power input | | | kW | 2.93 (0.5~4.5) | 2.8 (0.5~4.5) |
| Max. power input | | | W | 5000.00 | 5000.00 |
| EER or COP | | | W/W | 3.31 (B) | 3.71 (C) |
| Dehumidifying capacity | | | $10^{-3}$×$m^3$/h | 3.2 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running/Max. Running current | | | A/A | 13.3(2.3-19.0)/21.0 | 13.1(2.3-19.0)/21.0 |
| Start current | | | A | 0.52 | |
| Circuit breaker | | | A | 5 | 5 |
| Indoor unit | Unit model (color) | | | AD105S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 900/840/780/750 (37Pa) | |
| | | Fan motor output/ input power | kW | 0.260 | |
| | | Air-flow (H-M-L) | kW | 0.180 | |
| | | External static pressure | m³/h | 2000/1740/1380/1280 (25/37(default)/ 50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17 (S) | |
| | | | Infrared | YRHBS (O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H-M-L) | | dB (A) | 60 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 44/40/37 | |
| | Weight (Net / Shipping) | | kg / kg | 46/55 | |
| Piping | Refrigerant | Type / Charge | g | R410A/2500 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without recharge refrigerant | m | 20 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition:

Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB

Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD105S2SM3FA/1U105S2SS1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 9.2 (2.5-10.0) | 10.2 (3.0-10.5) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 3.23 (0.5-4.0) | 2.92 (0.5-4.0) |
| Max. power input | | | W | 4.0 | 4.0 |
| EER or COP | | | W/W | 2.85 (A) | 3.49 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 3 | |
| Power cable | | | | 4.0mm² | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Running /Max.Running current | | | A / A | 14.0/16.5 | 12.7/16.5 |
| Start Current | | | A | 0.58 | |
| Circuit breaker | | | A | 25 | 25 |
| Indoor unit | Unit model (color) | | | AD105S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 900/840/780/750 (37Pa) | |
| | | Fan motor output/ input power | W | 180/260 | |
| | | Air-flow (H-M-L) | m³/h | 2250/1960/1680/1500 (25/37(default)/50/70/90/ 100/110/120/130/150Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 2 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500*700*248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-) | | dB (A) | 60 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 44/40/37 | |
| | Weight (Net / Shipping) | | kg / kg | 46/55 | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD105S2SM3FA/1U105S2SS1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 9.5 (2.5-10.0) | 10.5 (3.0-11.0) |
| Sensible heat ratio | | | | 0.81 | |
| Total power input | | | KW | 3.25 (0.5-4.0) | 3.10 (0.5-4.0) |
| Max. power input | | | W | 4000 | 4000 |
| EER or COP | | | W/W | 2.9 (A) | 3.5 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 1.78 | |
| Power cable | | | | H07RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 5.5A(0.5-6.8A)/6.8A | 5.3(0.5-6.8A)/6.8A |
| Start Current | | | A | 1 | |
| Circuit breaker | | | A | 6.5 | 6.5 |
| Indoor unit | Unit model (color) | | | AD105S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 960/900/840/810(37Pa) | |
| | | Fan motor input power | kW | 0.2 | |
| | | Fan motor output power | kW | 0.18 | |
| | | Air-flow(H-M-L) | m³/h | 1600/1480/1360/1240m³/h(25/37(default)/50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500*700*248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710*870*330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 64 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 47/44/40/37 | |
| | Weight (Net / Shipping) | | kg / kg | 46/55 | |
| | Panel | Model | | / | |
| | | External dimensions (W/D/H) | mm | / | |
| | | Shipping dimensions (W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/1700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ADH125M1ERG/1U125S2SN1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.0 (3.0-12.8) | 12.2 (2.9-13.5) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 4.38 (0.3-5.6) | 3.8 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.75 (A) | 3.4 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 4.1 | |
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19.5 (1.5-26.0)A/26A | 16.5 (1.5-26.0)A/26A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | ADH125M1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1130/1050/980/930 (50Pa) | |
| | | Fan motor output/ input power | W | 260/320 | |
| | | Air-flow (H-M-L) | m³/h | 2250/1960/1680/1420 (30Pa-120Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/250 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/865/320 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 26/32 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 45/41/42/37 | |
| | Weight (Net / Shipping) | | kg / kg | 52/63 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ADH125M1ERG/1U125S2SN1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.1 (3.0-12.8) | 12.3 (2.9-13.5) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 4.3 (0.3-5.6) | 3.7 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.75 (A) | 3.4 (A) |
| Dehumidifying capacity | | | $10^{-3}\times m^3/h$ | 4.1 | |
| Power cable | | | | H05RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.1 (1.3-9.5)A/9.5A | 5.7 (2.4-9.5)A/9.5A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | ADH125M1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1130/1050/980/930 (50Pa) | |
| | | Fan motor output/ input power | W | 260/320 | |
| | | Air-flow (H-M-L) | $m^3/h$ | 2250/1960/1680/1420 (30Pa-120Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | $m^2$ | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/250 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/865/320 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 26/32 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 45/41/42/37 | |
| | Weight (Net / Shipping) | | kg / kg | 52/63 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB
Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM3FA/1U125S2SN1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 11.9 (3.0-12.8) | 12.2 (2.9-13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | KW | 4.38 (0.3-5.6) | 3.8 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.75 (A) | 3.25 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 3.03 | |
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19.5 (1.5-26.0)A/26A | 16.5 (1.5-26.0)A/26A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AD125S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1070/960/880/850 (37Pa) | |
| | | Fan motor output/ input power | W | 190/272 | |
| | | Air-flow (H-M-L) | m³/h | 2250/1960/1680/1500 (25/37(default)/50/70/90/ | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/250 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/865/320 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 26/32 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 45/41/42/37 | |
| | Weight (Net / Shipping) | | kg / kg | 52/63 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM3FA/1U125S2SN1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 11.9(3.0-12.8) | 12.2(2.9-13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | KW | 4.38 (0.3-5.6) | 3.8 (0.3-5.6) |
| Max. power input | | | W | 5600 | 5600 |
| EER or COP | | | W/W | 2.75 (A) | 3.25 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 3.03 | |
| Power cable | | | | H05RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.1 (1.3-9.5)A/9.5A | 5.7 (2.4-9.5)A/9.5A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD125S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed(H-M-L) | r/min | 1070/960/880/850 (37Pa) | |
| | | Fan motor output/ input power | W | 190/272 | |
| | | Air-flow (H-M-L) | m³/h | 2250/1960/1680/1500 (25/37(default)/50/70/90/ | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/250 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/865/320 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 26/32 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 45/41/42/37 | |
| | Weight (Net / Shipping) | | kg / kg | 52/63 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Recharge quantity | g/m | 45 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM3FA/1UH125P1ERG | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 12.5 (3.5~15.0) | 14 (4~18.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 3.66 (1.0-6.5) | 3.78 (1.0-6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 3.31 (A) | 3.70 (A) |
| Dehumidifying capacity | | | $10^{-3}$×$m^3$/h | 4.9 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running/Max. Running current | | | A/A | 17.0 (8.7-30.0)/30A | 17.2 (8.7-30.0)/30A |
| Start current | | | A | / | |
| Circuit breaker | | | A | | |
| Indoor unit | Unit model (color) | | | AD125S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1070/960/880/850 | |
| | | Fan motor output/ input power | kW | 0.272 | |
| | | Air-flow (H-M-L) | kW | 0.190 | |
| | | External static pressure | $m^3/h$ | 2250/1960/1680/1500 (25/37(default)/ 50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 45/42/37 | |
| | Weight (Net / Shipping) | | kg / kg | 52/62 | |
| Piping | Refrigerant | Type / Charge | g | R410A/3700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition:

Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB

Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB

The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM3FA/1UH125P1ERK | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 12.5 (3.5~15.0) | 14 (4~18.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 3.66 (1.0-6.5) | 3.78 (1.0-6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 3.31 (A) | 3.70 (A) |
| Dehumidifying capacity | | | $10^{-3}\times m^3/h$ | 4.9 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running/Max. Running current | | | A/A | 6.5(2.9-10.0)/11.0 | 6.7(2.9-10.0)/11.0 |
| Start current | | | A | / | |
| Circuit breaker | | | A | | |
| Indoor unit | Unit model (color) | | | AD125S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1070/960/880/850 | |
| | | Fan motor output/ input power | kW | 0.272 | |
| | | Air-flow (H-M-L) | kW | 0.190 | |
| | | External static pressure | $m^3/h$ | 2250/1960/1680/1500 (25/37(default)/ 50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 45/42/37 | |
| | Weight (Net / Shipping) | | kg / kg | 52/62 | |
| Piping | Refrigerant | Type / Charge | g | R410A/3700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM3FA/1U125S2SN2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.3(3.0~13.0) | 12.7(3.5~13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | kW | 4.6 (0.3-6.0) | 3.93 (0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.67 | 3.23 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 3.03 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running/Max. Running current | | | A / A | 20(1.5-26.0)A/26A | 17(1.5-26.0)A/26A |
| Start current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AD125S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H×M×L) | r/min | 1070/960/880/850(37Pa) | |
| | | Fan motor input power | kW | 0.272 | |
| | | Fan motor output power | kW | 0.190 | |
| | | Air-flow(H×M×L) | m³/h | 2250/1960/1680/1500m³/h(25/37(default)/50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H×M×L) | | dB(A) | 65 | |
| | Sound pressure noise level (H×M×L) | | dB(A) | 39/36/33/31 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM3FA/1U125S2SN2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.4(3.0~13.0) | 12.8(3.5~13.5) |
| Sensible heat ratio | | | | 0.84 | |
| Total power input | | | kW | 4.5 (0.3-6.0) | 3.86 (0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.75 | 3.31 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 3.03 | |
| Power cable | | | | H05RN-F 5G 4.0 mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running/Max. Running current | | | A / A | 6.8(1.3-9.1)A/9.1A | 5.86(2.4-9.1)A/9.1A |
| Start current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD125S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H×M×L) | r/min | 1070/960/880/850(37Pa) | |
| | | Fan motor input power | kW | 0.272 | |
| | | Fan motor output power | kW | 0.190 | |
| | | Air-flow(H×M×L) | m³/h | "2250/1960/1680/1500m³/h(25/37(default)/50/70/90/100/110/120/130/150Pa)" | |
| | Heat exchanger | Type/Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H×M×L) | | dB(A) | 65 | |
| | Sound pressure noise level (H×M×L) | | dB(A) | 39/36/33/31 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM8FA/1U125S2SN2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.3(3.0~13.0) | 12.7(3.5~13.5) |
| Sensible heat ratio | | | | 0.78 | |
| Total power input | | | kW | 4.6(1.0~6.0) | 3.93(1.0~6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.67 | 3.23 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 5 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1/220~, 240/50/60 | |
| Running/Max. Running current | | | A / A | 20(1.5-26.0)A/26A | 17(1.5-26.0)A/26A |
| Start current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AD125S2SM8FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H×M×L) | r/min | 1070/960/880/850 | |
| | | Fan motor input power | kW | 0.26 | |
| | | Fan motor output power | kW | 0.18 | |
| | | Air-flow(H×M×L) | m³/h | 2250/1960/1680/1500 | |
| | Heat exchanger | Type/Diameter | mm | TP2M/Φ7.0 | |
| | | Total area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500×700×248 | |
| | | Package (L×W×H) | mm×mm×mm | 1711×870×325 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | / | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17A | |
| | | | Infrared | YR-HQS01+RE-02 | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H×M×L) | | dB(A) | 65 | |
| | Sound pressure noise level (H×M×L) | | dB(A) | 48/45/42/39 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD125S2SM8FA/1U125S2SN2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.4(3.0~13.0) | 12.8(3.5~13.5) |
| Sensible heat ratio | | | | 0.78 | |
| Total power input | | | kW | 4.51(1.0~6.0) | 3.87(1.0~6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.75 | 3.31 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 5 | |
| Power cable | | | | H05RN-F 3G 4.0mm2 | |
| Power source | | | N, V, Hz | 1/220~, 240/50/60 | |
| Running/Max. Running current | | | A / A | 6.8/9.1 | 5.86/9.1 |
| Start current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AD125S2SM8FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H×M×L) | r/min | 1070/960/880/850 | |
| | | Fan motor input power | kW | 0.26 | |
| | | Fan motor output power | kW | 0.18 | |
| | | Air-flow(H×M×L) | m³/h | 2250/1960/1680/1500 | |
| | Heat exchanger | Type/Diameter | mm | TP2M/Φ7.0 | |
| | | Total area | m² | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500×700×248 | |
| | | Package (L×W×H) | mm×mm×mm | 1711×870×325 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | / | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17A | |
| | | | Infrared | YR-HQS01+RE-02 | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H×M×L) | | dB(A) | 65 | |
| | Sound pressure noise level (H×M×L) | | dB(A) | 48/45/42/39 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM3FA/1UH140P1ERG | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 13.4 (3.5~15.0) | 15.5 (4~19.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.05 (1.0-6.5) | 4.18 (1.0-6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 3.31 (A) | 3.70 (A) |
| Dehumidifying capacity | | | $10^{-3}$×$m^3$/h | 4.9 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running/Max. Running current | | | A/A | 18.0 (8.7-30.0)/32A | 18.5 (8.7-30.0)/32A |
| Start current | | | A | / | |
| Circuit breaker | | | A | | |
| Indoor unit | Unit model (color) | | | AD140S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | kW | 0.285 | |
| | | Air-flow (H-M-L) | kW | 0.200 | |
| | | External static pressure | $m^3$/h | 2500/2160/1780/1500 (25/37(default)/ 50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 46/43/38 | |
| | Weight (Net / Shipping) | | kg / kg | 52/62 | |
| Piping | Refrigerant | Type / Charge | g | R410A/3700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM3FA/1UH140P1ERK | |
|---|---|---|---|---|---|
| Function | | | | Cooling | Heating |
| Capacity | | | kW | 13.4 (3.5~15.0) | 15.5 (4~19.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.05 (1.0-6.5) | 4.18 (1.0-6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 3.31 (A) | 3.70 (A) |
| Dehumidifying capacity | | | $10^{-3}\times m^3/h$ | 4.9 | |
| Power cable | | | | / | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running/Max. Running current | | | A/A | 7.0(2.9-11.0)/11A | 7.3(2.9-11.0)/11A |
| Start current | | | A | / | |
| Circuit breaker | | | A | | |
| Indoor unit | Unit model (color) | | | AD140S2SM3FA | |
| | Fan | Type×Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | kW | 0.285 | |
| | | Air-flow (H-M-L) | kW | 0.200 | |
| | | External static pressure | $m^3/h$ | 2500/2160/1780/1500 (25/37(default)/ 50/70/90/100/110/120/130/150Pa) | |
| | Heat exchanger | Type/Diameter | mm | Inner grooved pipe/φ7.0 | |
| | | Total area | $m^2$ | / | |
| | Dimension | External (L×W×H) | mm×mm×mm | 1500*700*248 | |
| | | Package (L×W×H) | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material, I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional, S-Standard) | | Wired | YR-E17(S) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity heater | | kW | 0 | |
| | Sound power noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 46/43/38 | |
| | Weight (Net / Shipping) | | kg / kg | 52/62 | |
| Piping | Refrigerant | Type / Charge | g | R410A/3700 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition:
Indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM3FA/1U140S2SP1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.4 (3~14.5) | 14.7 (3.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 3.84 (1.0-7.2) | 3.94 (1.0-7.2) |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 3.23 (A) | 3.73 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 4.9 | |
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19.0/32 | 17/32 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AD140S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | W | 200/285 | |
| | | Air-flow(H-M-L) | $m^3/h$ | 2500/2160/1780/1500 (25/37(default)/50/70/90/ 100/110/120/130/150Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | $m^2$ | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 46/43/38 | |
| | Weight (Net / Shipping) | | kg / kg | 52/62 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM3FA/1U140S2SP1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 12.5 (3~14.5) | 14.5 (3.5~16) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 3.90 (1.0-6.5) | 3.91 (1.0-6.5) |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 3.21 (A) | 3.71 (A) |
| Dehumidifying capacity | | | $10^{-3}\times m^3/h$ | 4.9 | |
| Power cable | | | | H05RN-F 5G 4.0 $mm^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 7.2/11 | 6.8/11 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD140S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | W | 200/285 | |
| | | Air-flow (H-M-L) | $m^3/h$ | 2500/2160/1780/1500 (25/37(default)/50/70/90/ 100/110/120/130/150Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | $m^2$ | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 46/43/38 | |
| | Weight (Net / Shipping) | | kg / kg | 52/62 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM3FA/1U140S2SP2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.4(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.17(1.0-6.0) | 4.0(1.0-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.21 | 3.71 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1PH, 220-240V~, 50/60Hz | |
| Running /Max.Running current | | | A / A | 18.1/26 | 17.4/26 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | AD140S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed(H×M×L) | r/min | 1180/1080/990/930 | |
| | | Fan motor input power | kW | 0.285 | |
| | | Fan motor output power | kW | 0.200 | |
| | | Air-flow(H×M×L) | m³/h | "2500/2160/1780/1500(25/37(default)/50/70/90/ 100/110/120/130/150Pa)" | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500*700*248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 66 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 41/36/33/31 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM8FA/1U140S2SN1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 13.4(3.5~14.0) | 15.0(4.0~15.5) |
| Sensible heat ratio | | | | 0.78 | |
| Total power input | | | KW | 5.28(1.0~6.5) | 4.92(1.0~6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 2.54 | 3.05 |
| Dehumidifying capacity | | | 10-³×m³/h | 5.5 | |
| Power cable | | | | H07VV-F 3G 6.0 MM2 | |
| Power source | | | N, V, Hz | 1/220~,240/50/60 | |
| Running /Max.Running current | | | A / A | 6.8/9.1 | 5.86/9.1 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD140S2SM8FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | W | 180/260 | |
| | | Air-flow (H-M-L) | m³/h | 2500/2160/1780/1500 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 3 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 48/45/42/39 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM8FA/1U140S2SN1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 13.4(3.5~14.0) | 15.0(4.0~15.5) |
| Sensible heat ratio | | | | 0.78 | |
| Total power input | | | KW | 5.18(1.0~6.5) | 4.79(1.0~6.5) |
| Max. power input | | | W | 6500 | 6500 |
| EER or COP | | | W/W | 2.59 | 3.13 |
| Dehumidifying capacity | | | 10-³×m³/h | 5.5 | |
| Power cable | | | | H05RN-F 5G 4.0MM2 | |
| Power source | | | N, V, Hz | 1/220~,240/50/60 | |
| Running /Max.Running current | | | A / A | 6.8/9.1 | 5.86/9.1 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD140S2SM8FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | W | 180/260 | |
| | | Air-flow (H-M-L) | m³/h | 2500/2160/1780/1500 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 3 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 48/45/42/39 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM8FA/1U140S2SP2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 13.4(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.78 | |
| Total power input | | | KW | 4.17(1.0~6.0) | 4.04(1.0~6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.21 | 3.71 |
| Dehumidifying capacity | | | $10^{-3}\times m^3/h$ | 5.5 | |
| Power cable | | | | H07VV-F 3G 6.0 MM2 | |
| Power source | | | N, V, Hz | 1/220~,240/50/60 | |
| Running /Max.Running current | | | A / A | 18.1/26 | 17.4/26 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD140S2SM8FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | W | 180/260 | |
| | | Air-flow (H-M-L) | $m^3/h$ | 2500/2160/1780/1500 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 3 | |
| | | Total Area | $m^2$ | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 48/45/42/39 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB
Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM8FA/1U140S2SP2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 13.4(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.78 | |
| Total power input | | | KW | 4.15(1.0~6.0) | 4.02(1.0~6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.23 | 3.73 |
| Dehumidifying capacity | | | 10-³×m³/h | 5.5 | |
| Power cable | | | | H05RN-F 5G 4.0MM2 | |
| Power source | | | N, V, Hz | 1/220~,240/50/60 | |
| Running /Max.Running current | | | A / A | 6.3/9.1 | 6.1/9.1 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD140S2SM8FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | r/min | 1180/1080/990/930 | |
| | | Fan motor output/ input power | W | 180/260 | |
| | | Air-flow (H-M-L) | m³/h | 2500/2160/1780/1500 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | 3 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500/700/248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 48/45/42/39 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| Piping | Refrigerant | Type / Charge | g | R32/3500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature (cooling): 35°CDB/24°CWB, outdoor temperature (heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | AD140S2SM3FA/1U140S2SP2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.4(4.0~15.0) | 15(4.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.15(1.0-6.0) | 4.02(1.0-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.23(A) | 3.73(A) |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H05RN-F 5G 4.0mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.3/9.1 | 6.1/9.1 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | AD140S2SM3FA | |
| | Fan | Type × Number | | CENTRIFUGALX3 | |
| | | Speed(H×M×L) | r/min | 1180/1080/990/930 | |
| | | Fan motor input power | kW | 0.285 | |
| | | Fan motor output power | kW | 0.200 | |
| | | Air-flow(H×M×L) | m³/h | "2500/2160/1780/1500(25/37(default)/50/70/90/ 100/110/120/130/150Pa)" | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1500*700*248 | |
| | | Package（L×W×H） | mm×mm×mm | 1710/870/330 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 123 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 66 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 41/36/33 | |
| | Weight (Net / Shipping) | | kg / kg | 48/57 | |
| | Panel | Model | | / | |
| | | External dimensions(W/D/H) | mm | / | |
| | | Shipping dimensions(W/D/H) | mm | / | |
| | | Net weight/Shipping weight | kg | / | |
| Piping | Refrigerant | Type / Charge | g | R32/3500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB
Outdoor temperature (cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature (heating): 7$^{O}$CDB/6$^{O}$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

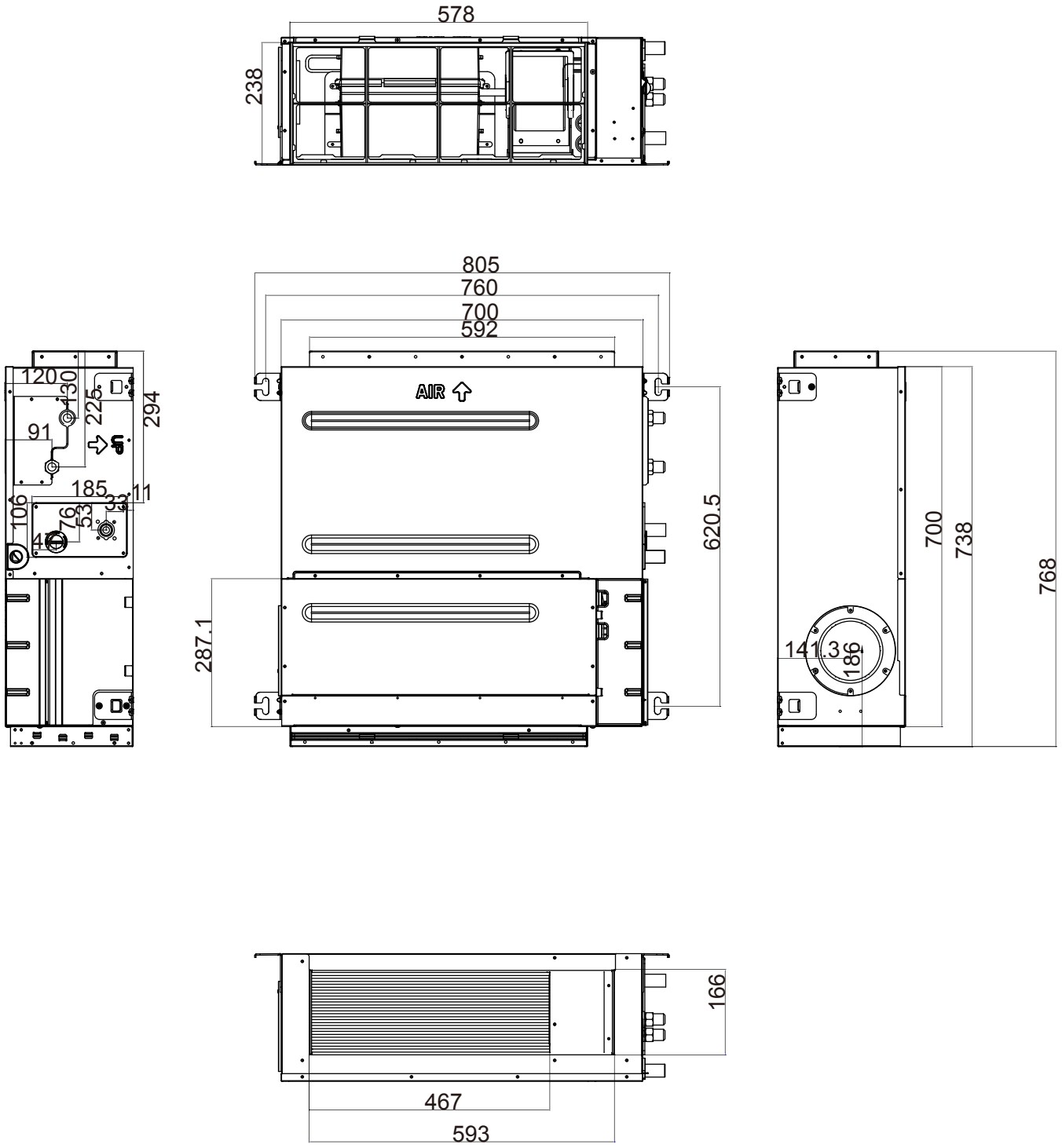
| Item / Model | | | | | AD160S2SM3FA/1U160S2SP1FB | |
|---|---|---|---|---|---|---|
| Function | | | | | cooling | heating |
| Capacity | | | | KW | 16(4.5-16.5) | 17(5.0-18.0) |
| Sensible heat ratio | | | | | 0.76 | |
| Total power input | | | | KW | 5.48(1.0-6.5) | 4.82(1.0-6.5) |
| Max. power input | | | | W | 6500 | 6500 |
| EER or COP | | | | W/W | 2.92(A) | 3.53(A) |
| Dehumidifying capacity | | | | 10-³×m³/h | 6.51 | |
| Power cable | | | | | 2.5 $mm^2$ | |
| Power source | | | | N, V, Hz | 1ph, 220~240, 50/60 | |
| Running /Max.Running current | | | | A / A | 8.0/10 | 7.1/10 |
| Start Current | | | | A | 2 | |
| Circuit breaker | | | | A | 5 | |
| Indoor unit | Unit model (color) | | | | AD160S2SM3FA/INDOOR UNIT | |
| | Fan | Type × Number | | | CENTRIFUGALX3 | |
| | | Speed (H-M-L) | | r/min | 1200/1150/1070/1000 | |
| | | Fan motor output/ input power | | W | 130/180 | |
| | | Air-flow (H-M-L) | | m³/h | 2500/2160/1780/1500 | |
| | Heat exchanger | Type / Diameter | | mm | inner grooved pipe/φ7.0 | |
| | | Row | | | 2 | |
| | | Total Area | | m² | / | |
| | Dimension | External（L×W×H） | | mm×mm×mm | 1500/700/248 | |
| | | Package（L×W×H） | | mm×mm×mm | 1715/858/320 | |
| | Drainage pipe (material , I.D./O.D.) | | | mm | PVC 21/25 | |
| | Controller (O-Optional,S-Standard) | | | Wired | YR-E17(O) | |
| | Fresh air hole dimension | | | mm | 123 | |
| | Electricity Heater | | | kW | 0 | |
| | Sound power Noise level (H-M-L) | | | dB (A) | 67 | |
| | Sound pressure Noise level (H-M-L) | | | dB (A) | 41/36/33/31 | |
| | Pipe | Liquid Pipe | mm | | 9.52 | |
| | | Gas Pipe | mm | | 19.05 | |
| | | Connecting Method | | | flared | |
| | Weight (Net / Shipping) | | | kg / kg | 48/57 | |
| Piping | Refrigerant | Type / Charge | | g | R32/3500 | |
| | | Recharge quantity | | g/m | 45 | |
| | Pipe | Liquid | | mm | 9.52 | |
| | | Gas | | mm | 19.05 | |
| | Between I.D &O.D | MAX.Drop | | m | 30 | |
| | | MAX.Piping length | | m | 70 | |
| cooling | Pdesignc(kW): | 16 | SEER/ CLASS | 5.94/A++ | QCE(Annual electricity consumption for cooling)kWh: | 943 |

| Item | | | Model | | | AD160S2SM3FA/1U160S2SP1FB | |
|---|---|---|---|---|---|---|---|
| cooling | Pdesignc(kW): | | 16 | SEER/ CLASS | 5.94/A++ | QCE(Annual electricity consumption for cooling)kWh: | 943 |
| heating | Average | Pdesignh(-10°C) | 11kW | SCOP/ CLASS | 4.06/A+ | QHE(Annual electricity consumption for heating)kWh: | 3798 |
| | Warmer | Pdesignh(2°C) | 5.95kW | SCOP/ CLASS | 5.0/A++ | QHE(Annual electricity consumption for heating)kWh: | 1665 |
| | Colder | Pdesignh(-22°C) | / | SCOP/ CLASS | / | QHE(Annual electricity consumption for heating)kWh: | / |
| Tdesignh:-10°C | | | Tbivalent:-10°C | TOL:-10°C | | Elbu:0 | |
| Max. cooling condition | Indoor temperature:32°C/23°C | | Max. heating condition | | Indoor temperature:27°C/-°C | | |
| | Outdoor temperature:46°C/-°C | | | | Outdoor temperature:24°C/18°C | | |

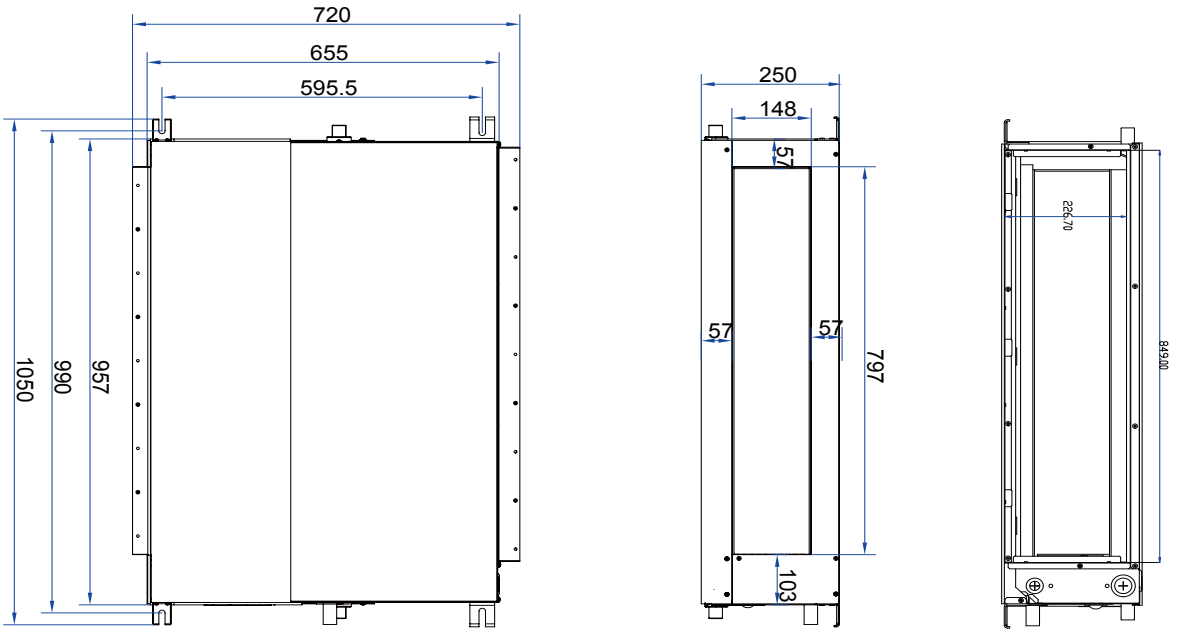
Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

## 5.2 Dimension

AD35S2SM3FA

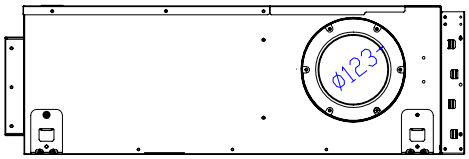


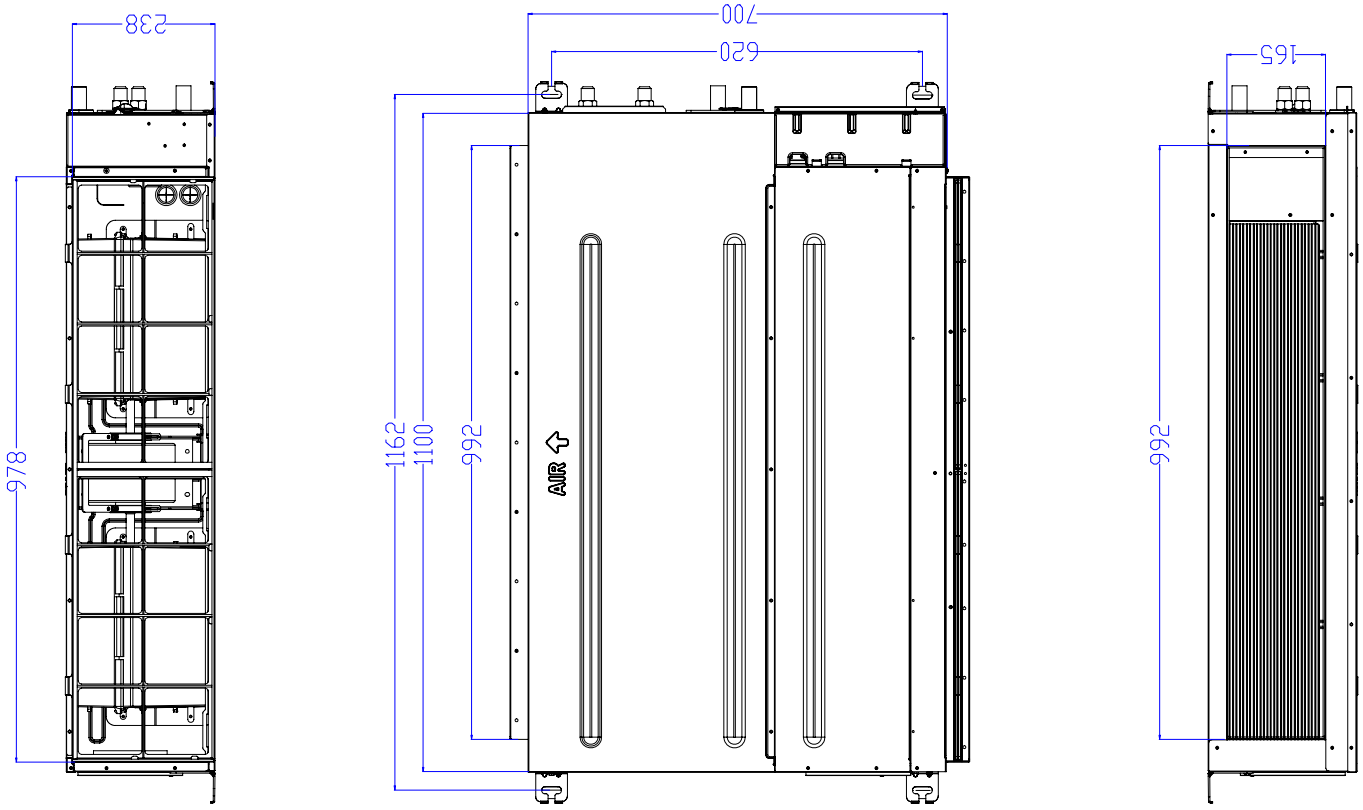
AD50S2SM1FA AD71S2SM1FA

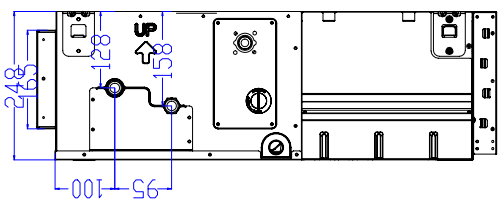



Note: The cushion pasted in the bottom plate isn't included in the thickness data.

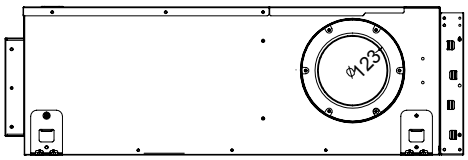
AD50S2SM3FA

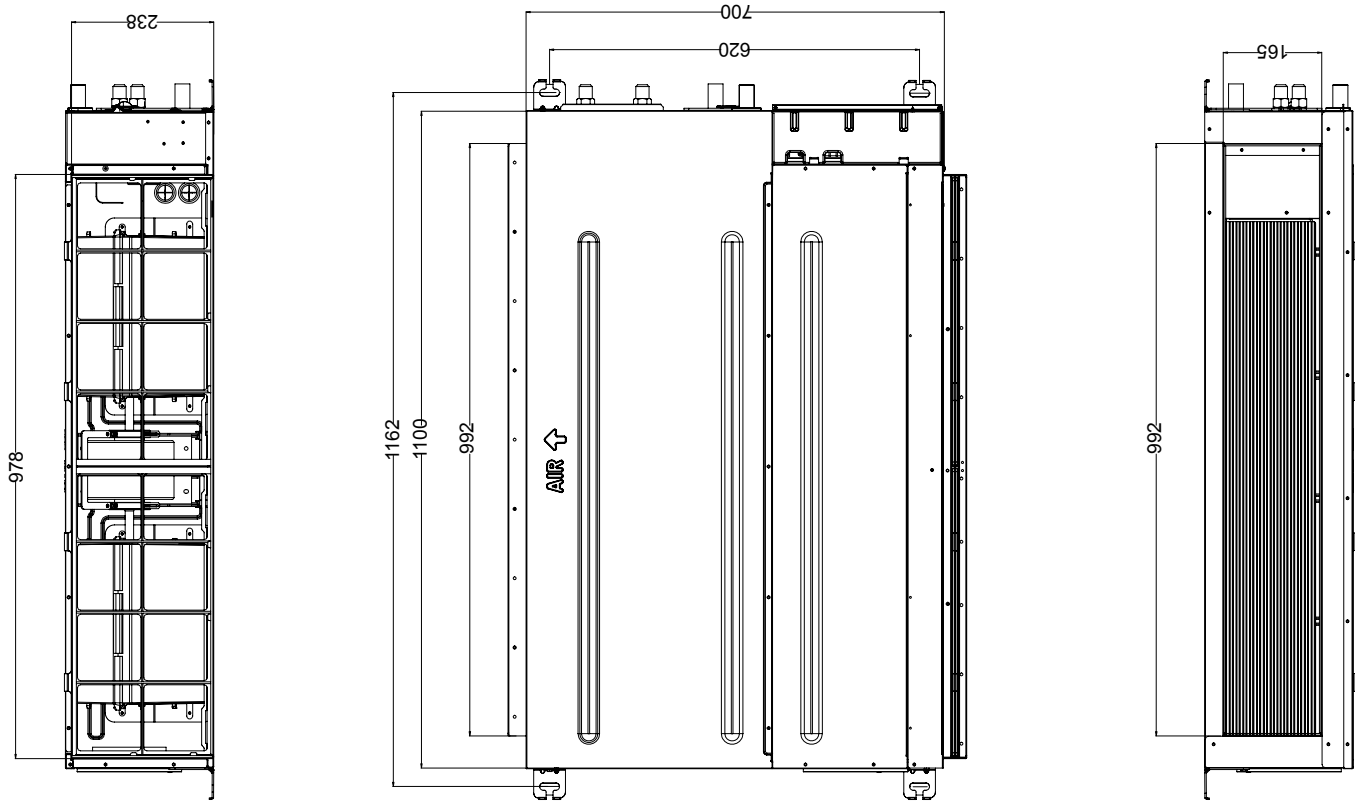


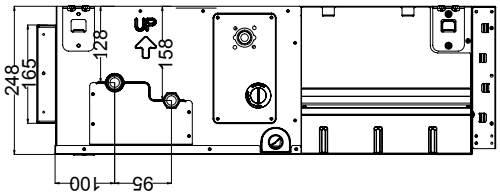



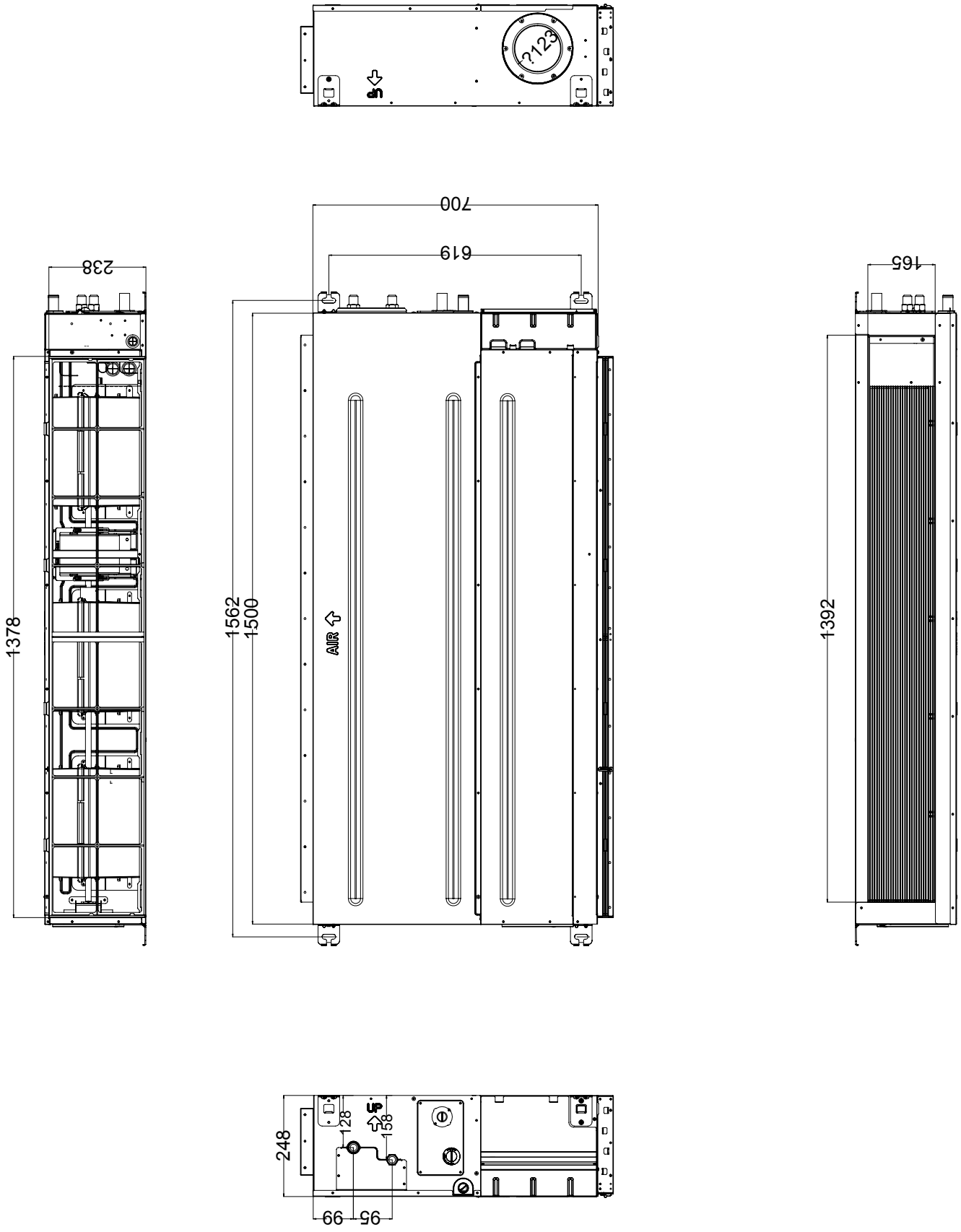
AD71S2SM3FA AD90S2SM3FA AD71S2SM6FA AD100S2SM6FA



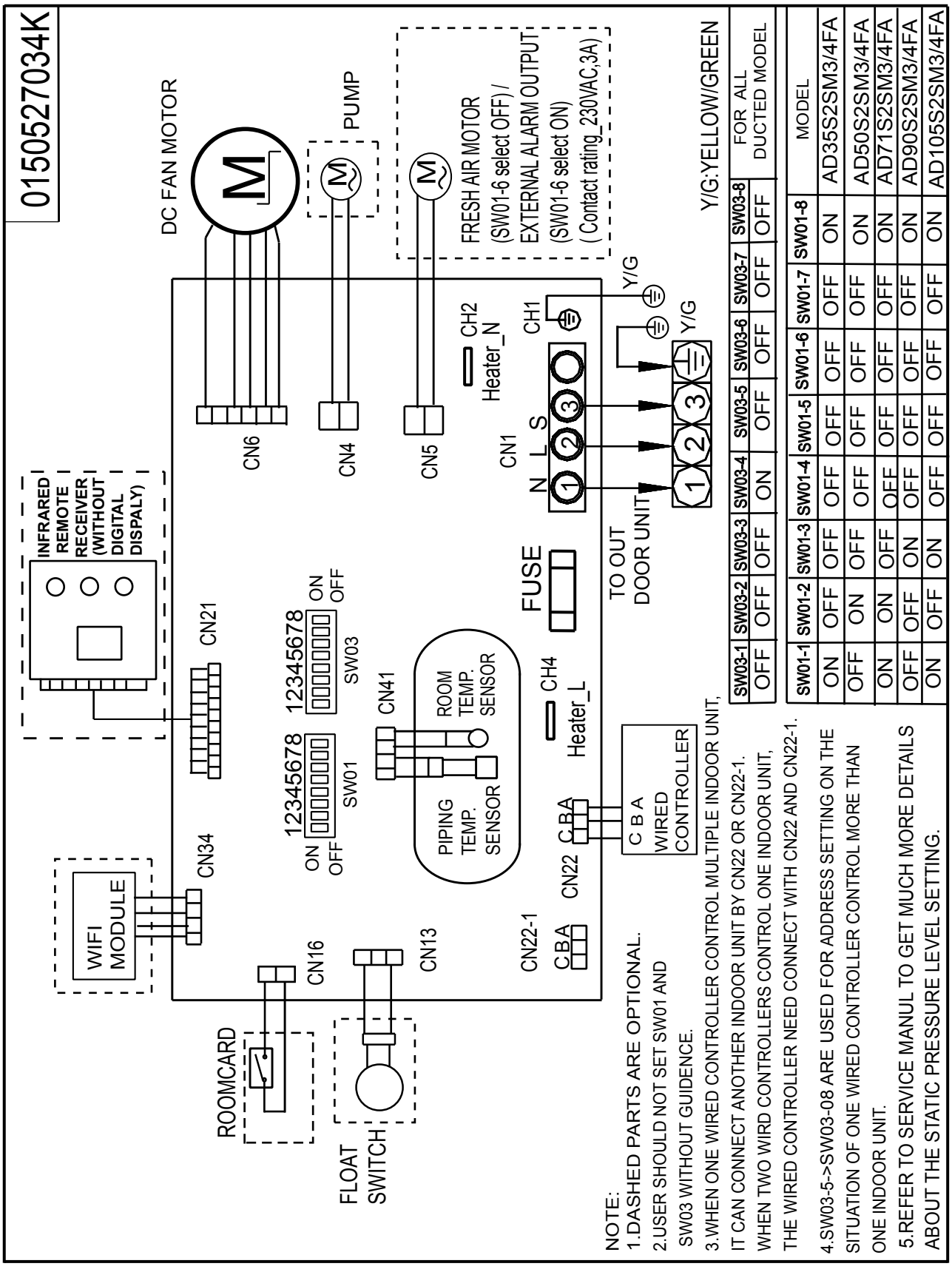



AD105S2SM3FA AD125S2SM3FA AD140S2SM3FA AD160S2SM3FA
AD125S2SM8FA AD140S2SM6FA



## 5.3 Wiring Diagram

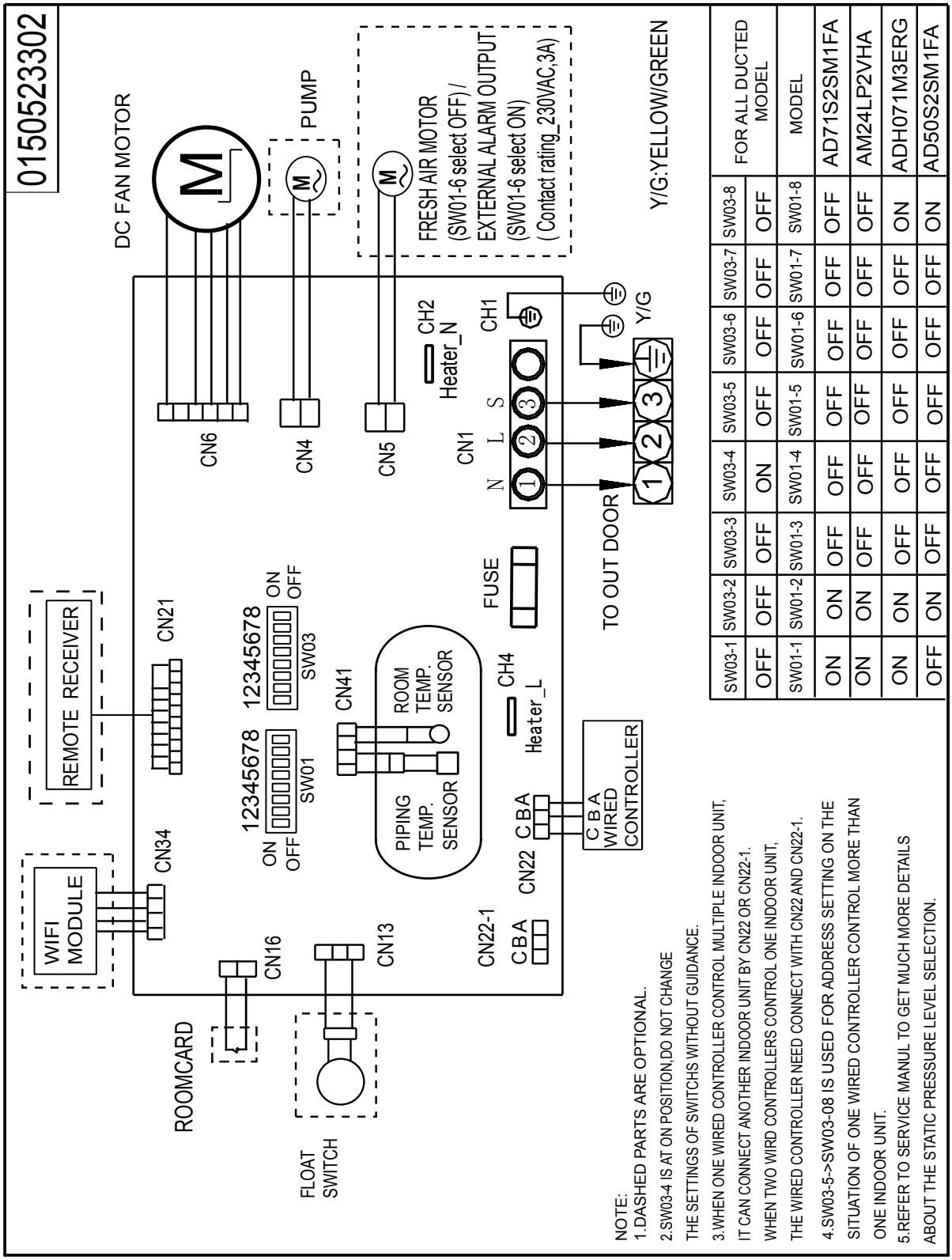
AD35S2SM3FA




| SW03-1 | SW03-2 | SW03-3 | SW03-4 | SW03-5 | SW03-6 | SW03-7 | SW03-8 | FOR ALL DUCTED MODEL |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | ON | OFF | OFF | OFF | OFF | |

| SW01-1 | SW01-2 | SW01-3 | SW01-4 | SW01-5 | SW01-6 | SW01-7 | SW01-8 | MODEL |
|---|---|---|---|---|---|---|---|---|
| ON | OFF | OFF | OFF | OFF | OFF | OFF | ON | AD35S2SM3/4FA |
| OFF | ON | OFF | OFF | OFF | OFF | OFF | ON | AD50S2SM3/4FA |
| ON | ON | OFF | OFF | OFF | OFF | OFF | ON | AD71S2SM3/4FA |
| OFF | OFF | ON | OFF | OFF | OFF | OFF | ON | AD90S2SM3/4FA |
| ON | OFF | ON | OFF | OFF | OFF | OFF | ON | AD105S2SM3/4FA |

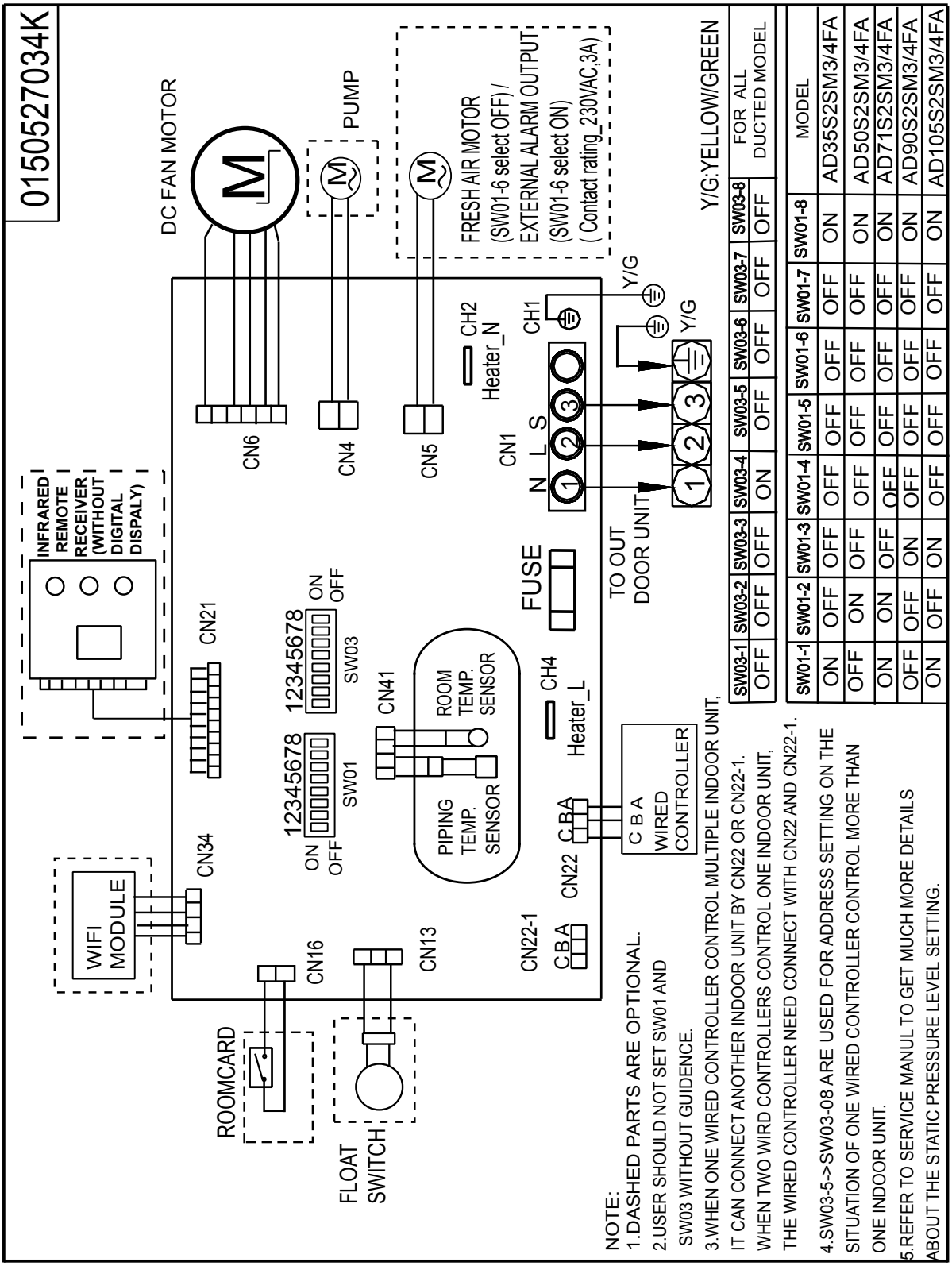
AD50S2SM1FA AD71S2SM1FA




NOTE:
1.DASHED PARTS ARE OPTIONAL.
2.SW03-4 IS AT ON POSITION,DO NOT CHANGE THE SETTINGS OF SWITCHS WITHOUT GUIDANCE.
3.WHEN ONE WIRED CONTROLLER CONTROL MULTIPLE INDOOR UNIT, IT CAN CONNECT ANOTHER INDOOR UNIT BY CN22 OR CN22-1. WHEN TWO WIRD CONTROLLERS CONTROL ONE INDOOR UNIT, THE WIRED CONTROLLER NEED CONNECT WITH CN22 AND CN22-1.
4.SW03-5->SW03-08 IS USED FOR ADDRESS SETTING ON THE SITUATION OF ONE WIRED CONTROLLER CONTROL MORE THAN ONE INDOOR UNIT.
5.REFER TO SERVICE MANUL TO GET MUCH MORE DETAILS ABOUT THE STATIC PRESSURE LEVEL SELECTION.

| SW03-1 | SW03-2 | SW03-3 | SW03-4 | SW03-5 | SW03-6 | SW03-7 | SW03-8 | FOR ALL DUCTED MODEL |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | ON | OFF | OFF | OFF | OFF | |
| SW01-1 | SW01-2 | SW01-3 | SW01-4 | SW01-5 | SW01-6 | SW01-7 | SW01-8 | MODEL |
| ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | AD71S2SM1FA |
| ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | AM24LP2VHA |
| ON | ON | OFF | OFF | OFF | OFF | OFF | ON | ADH071M3ERG |
| OFF | ON | OFF | OFF | OFF | OFF | OFF | ON | AD50S2SM1FA |

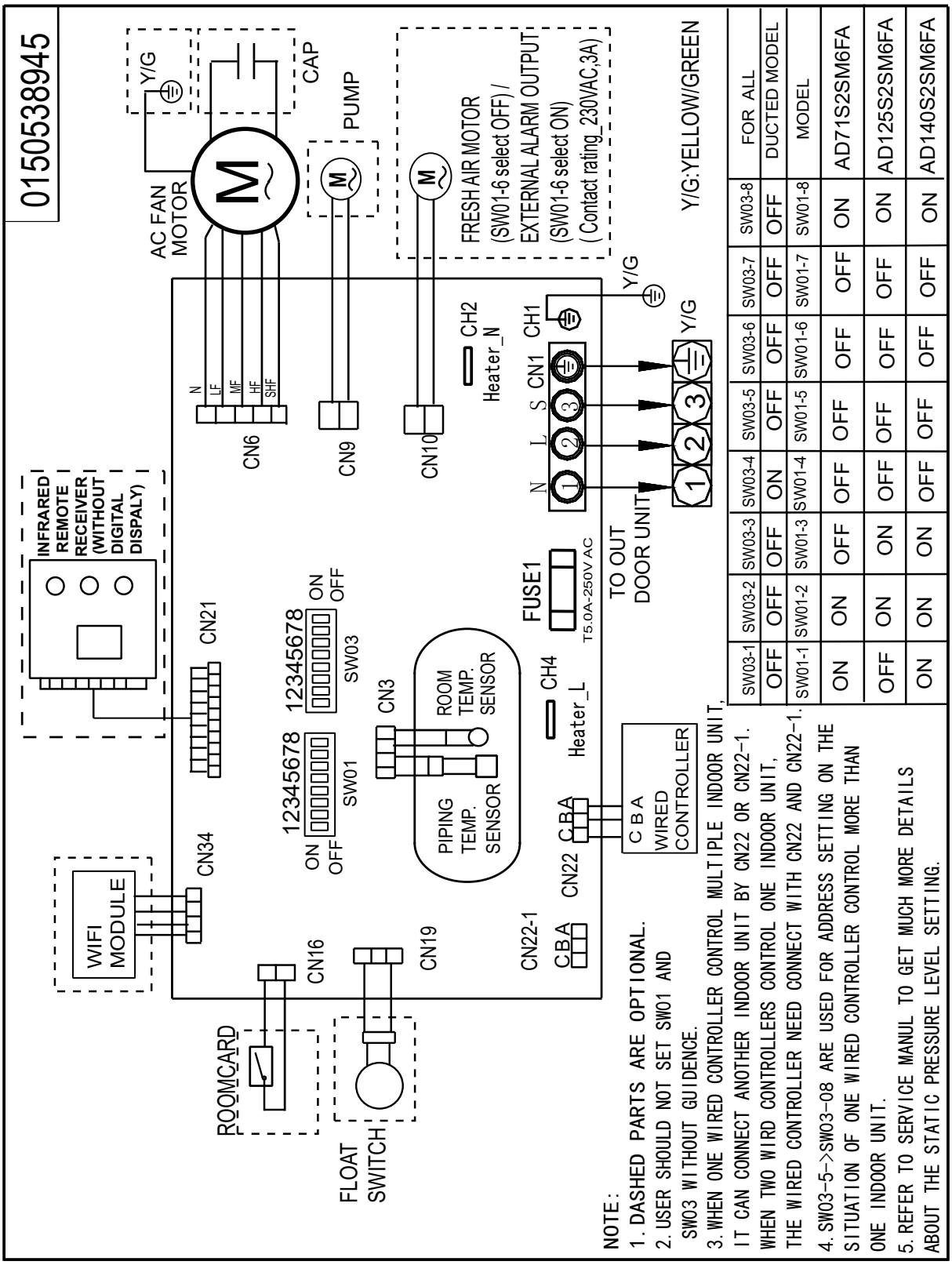
**AD71S2SM3FA AD90S2SM3FA AD105S2SM3FA**




| SW03-1 | SW03-2 | SW03-3 | SW03-4 | SW03-5 | SW03-6 | SW03-7 | SW03-8 | FOR ALL DUCTED MODEL |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | ON | OFF | OFF | OFF | OFF | |

| SW01-1 | SW01-2 | SW01-3 | SW01-4 | SW01-5 | SW01-6 | SW01-7 | SW01-8 | MODEL |
|---|---|---|---|---|---|---|---|---|
| ON | OFF | OFF | OFF | OFF | OFF | OFF | ON | AD35S2SM3/4FA |
| OFF | ON | OFF | OFF | OFF | OFF | OFF | ON | AD50S2SM3/4FA |
| ON | ON | OFF | OFF | OFF | OFF | OFF | ON | AD71S2SM3/4FA |
| OFF | OFF | ON | OFF | OFF | OFF | OFF | ON | AD90S2SM3/4FA |
| ON | OFF | ON | OFF | OFF | OFF | OFF | ON | AD105S2SM3/4FA |

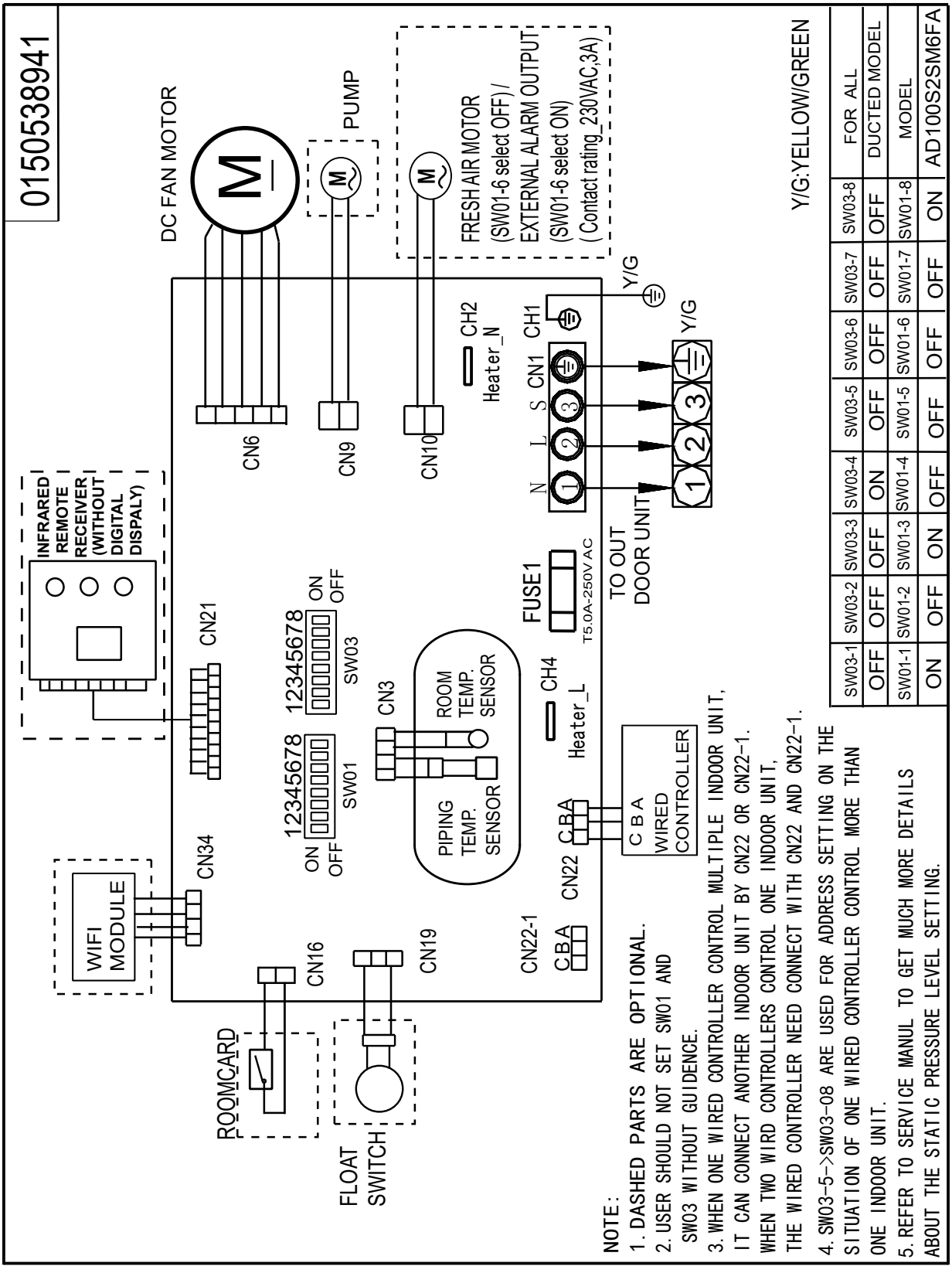
**AD71S2SM6FA**



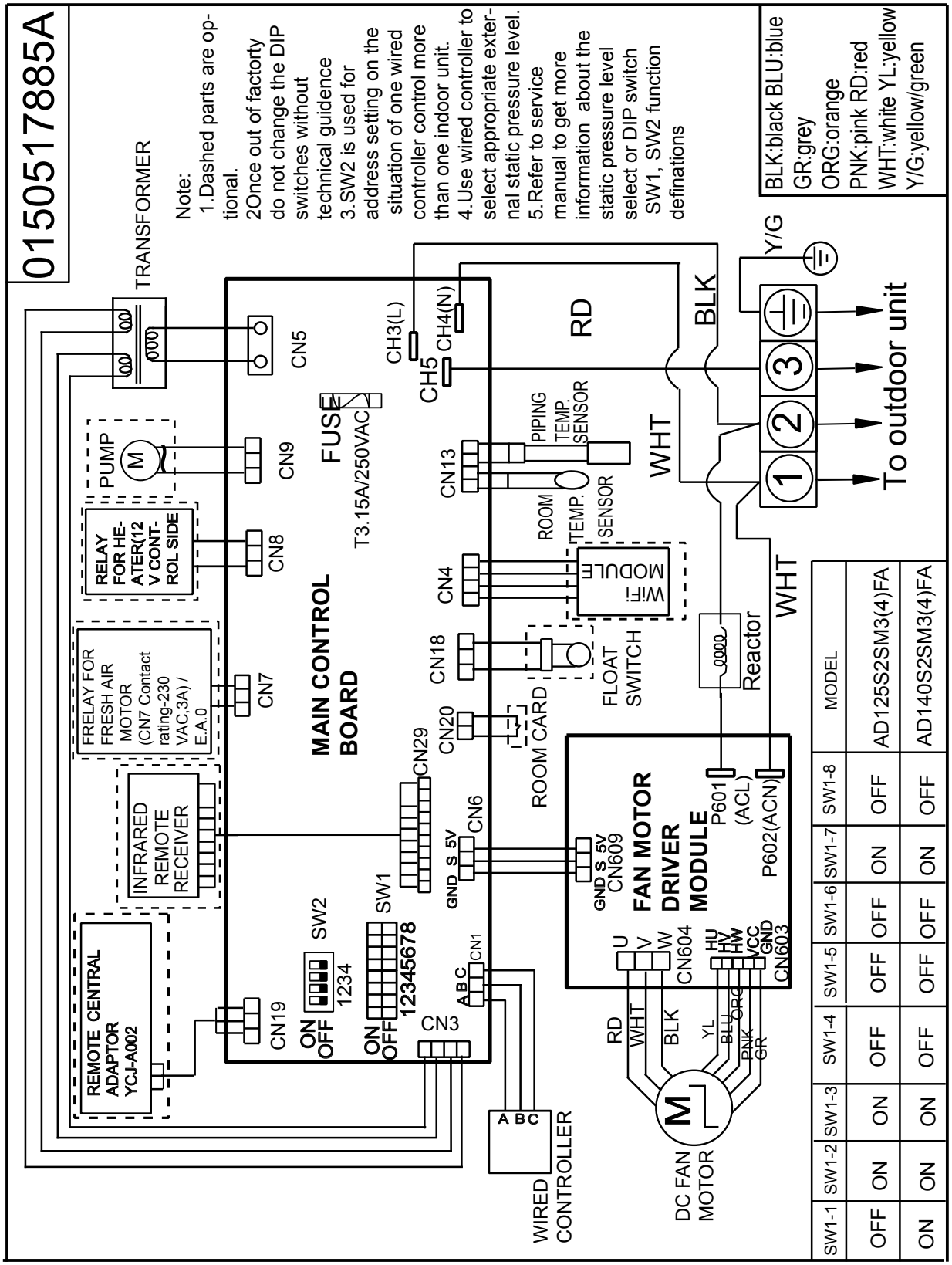

NOTE:
1. DASHED PARTS ARE OPTIONAL.
2. USER SHOULD NOT SET SW01 AND SW03 WITHOUT GUIDENCE.
3. WHEN ONE WIRED CONTROLLER CONTROL MULTIPLE INDOOR UNIT, IT CAN CONNECT ANOTHER INDOOR UNIT BY CN22 OR CN22-1. WHEN TWO WIRD CONTROLLERS CONTROL ONE INDOOR UNIT, THE WIRED CONTROLLER NEED CONNECT WITH CN22 AND CN22-1.
4. SW03-5->SW03-08 ARE USED FOR ADDRESS SETTING ON THE SITUATION OF ONE WIRED CONTROLLER CONTROL MORE THAN ONE INDOOR UNIT.
5. REFER TO SERVICE MANUL TO GET MUCH MORE DETAILS ABOUT THE STATIC PRESSURE LEVEL SETTING.

| SW03-1 | SW03-2 | SW03-3 | SW03-4 | SW03-5 | SW03-6 | SW03-7 | SW03-8 | FOR ALL |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | ON | OFF | OFF | OFF | OFF | DUCTED MODEL |
| SW01-1 | SW01-2 | SW01-3 | SW01-4 | SW01-5 | SW01-6 | SW01-7 | SW01-8 | MODEL |
| ON | ON | OFF | OFF | OFF | OFF | OFF | ON | AD71S2SM6FA |
| OFF | ON | ON | OFF | OFF | OFF | OFF | ON | AD125S2SM6FA |
| ON | ON | ON | OFF | OFF | OFF | OFF | ON | AD140S2SM6FA |

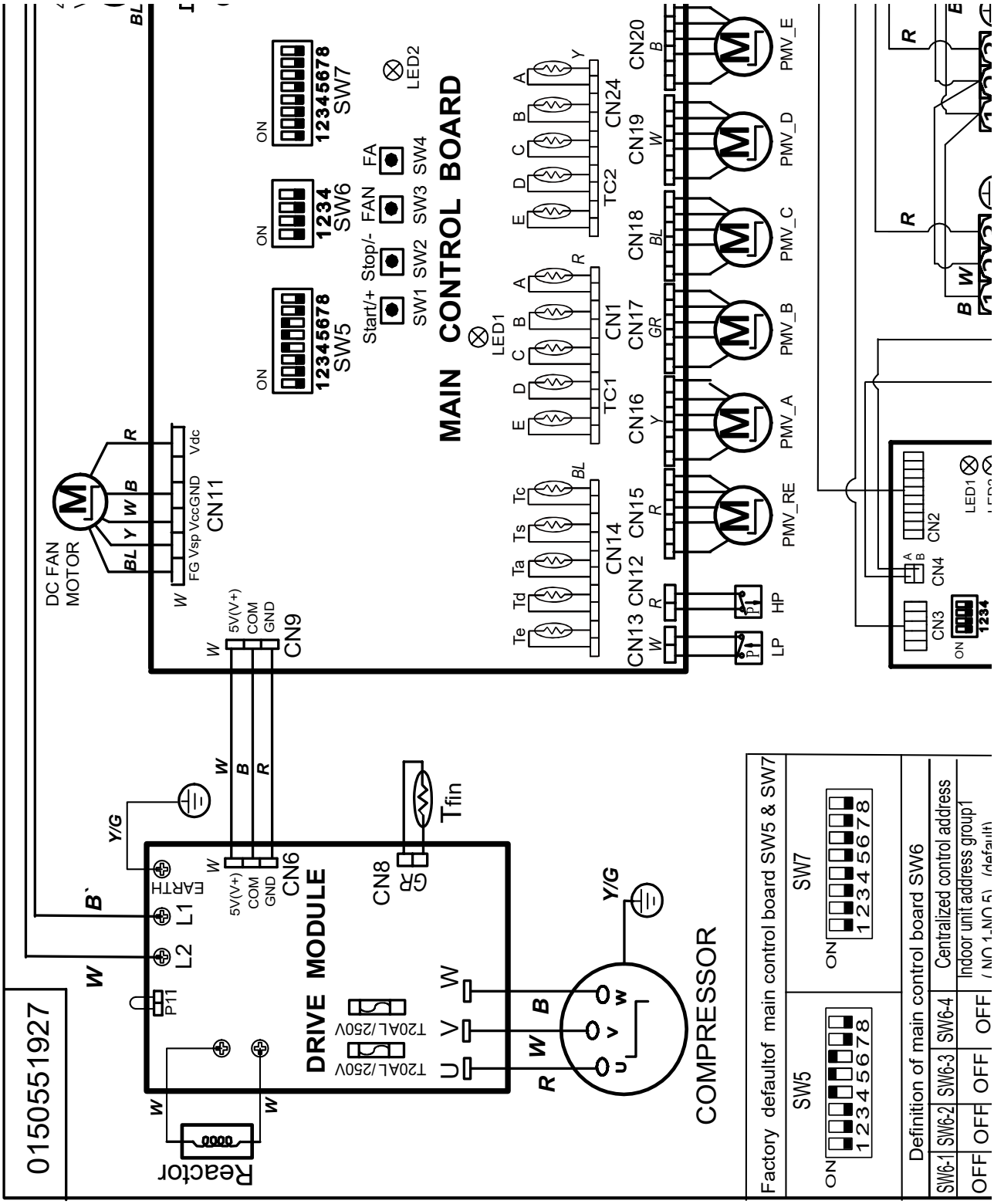
**AD100S2SM6FA**



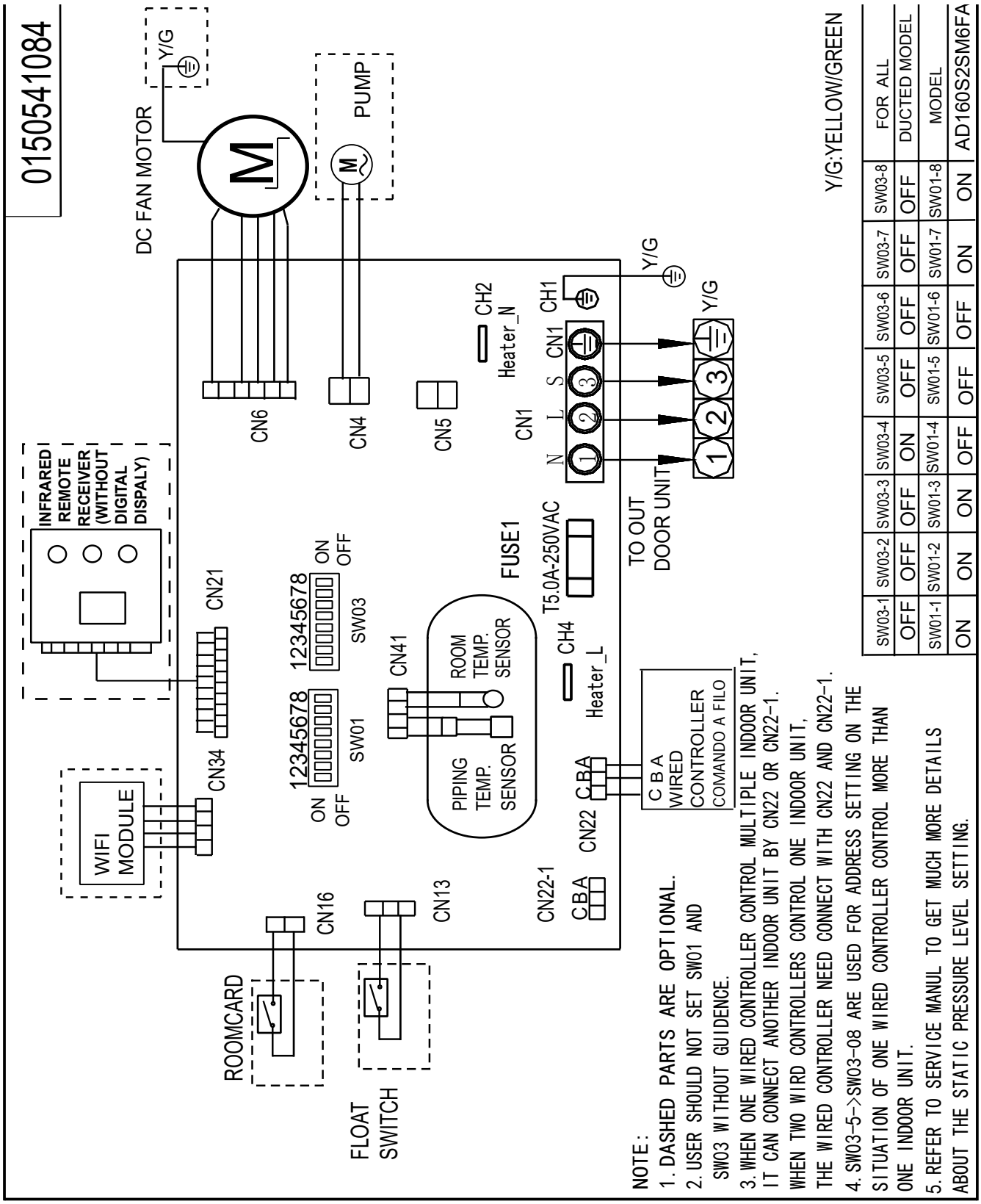
**AD125S2SM3FA AD140S2SM3FA**



**AD125S2SM8FA AD140S2SM8FA**



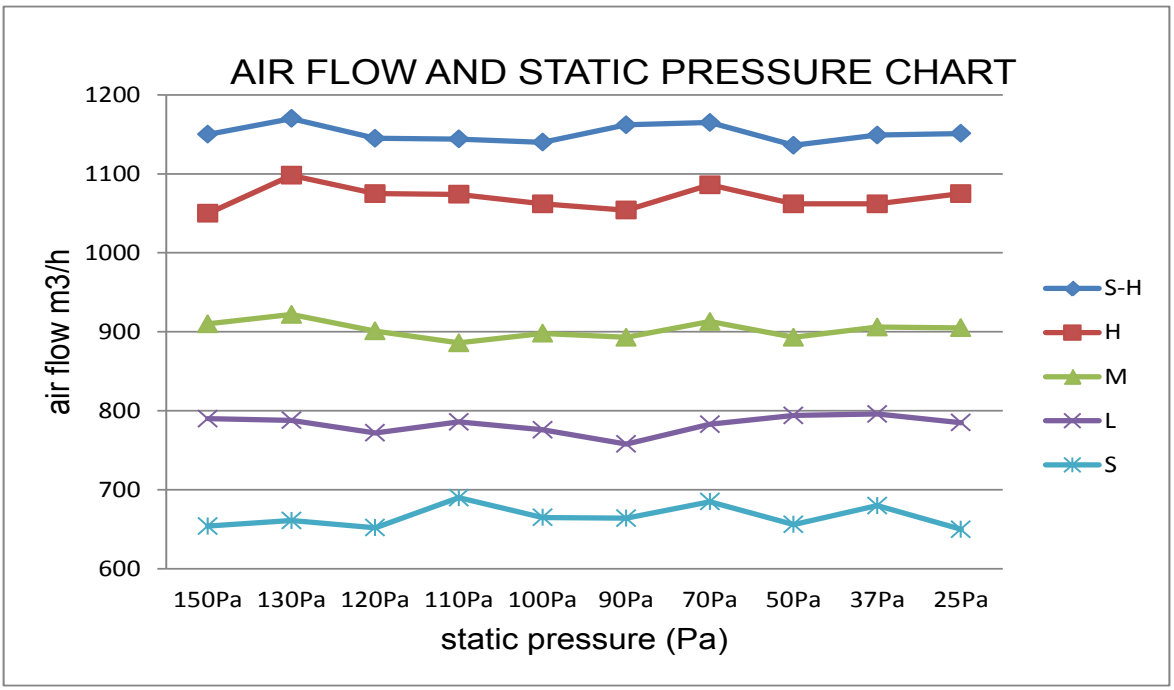
**AD160S2SM3FA**



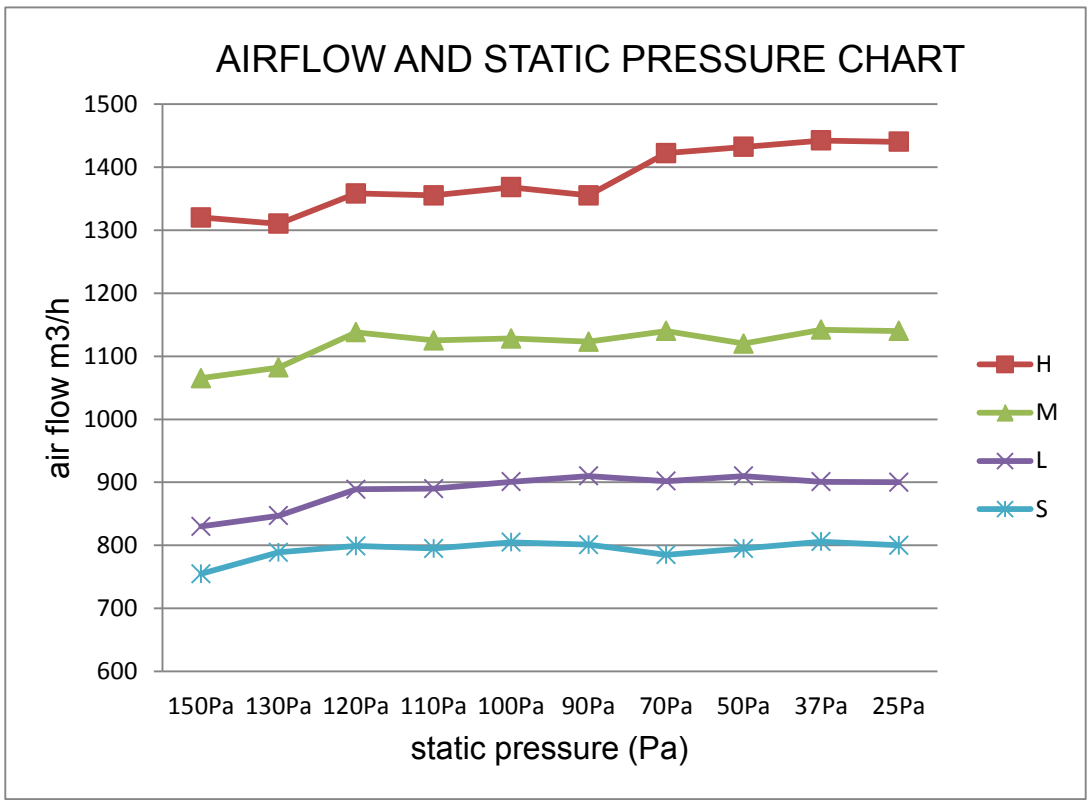

| SW03-1 | SW03-2 | SW03-3 | SW03-4 | SW03-5 | SW03-6 | SW03-7 | SW03-8 | FOR ALL |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | ON | OFF | OFF | OFF | OFF | DUCTED MODEL |
| SW01-1 | SW01-2 | SW01-3 | SW01-4 | SW01-5 | SW01-6 | SW01-7 | SW01-8 | MODEL |
| ON | ON | ON | OFF | OFF | OFF | ON | ON | AD160S2SM6FA |

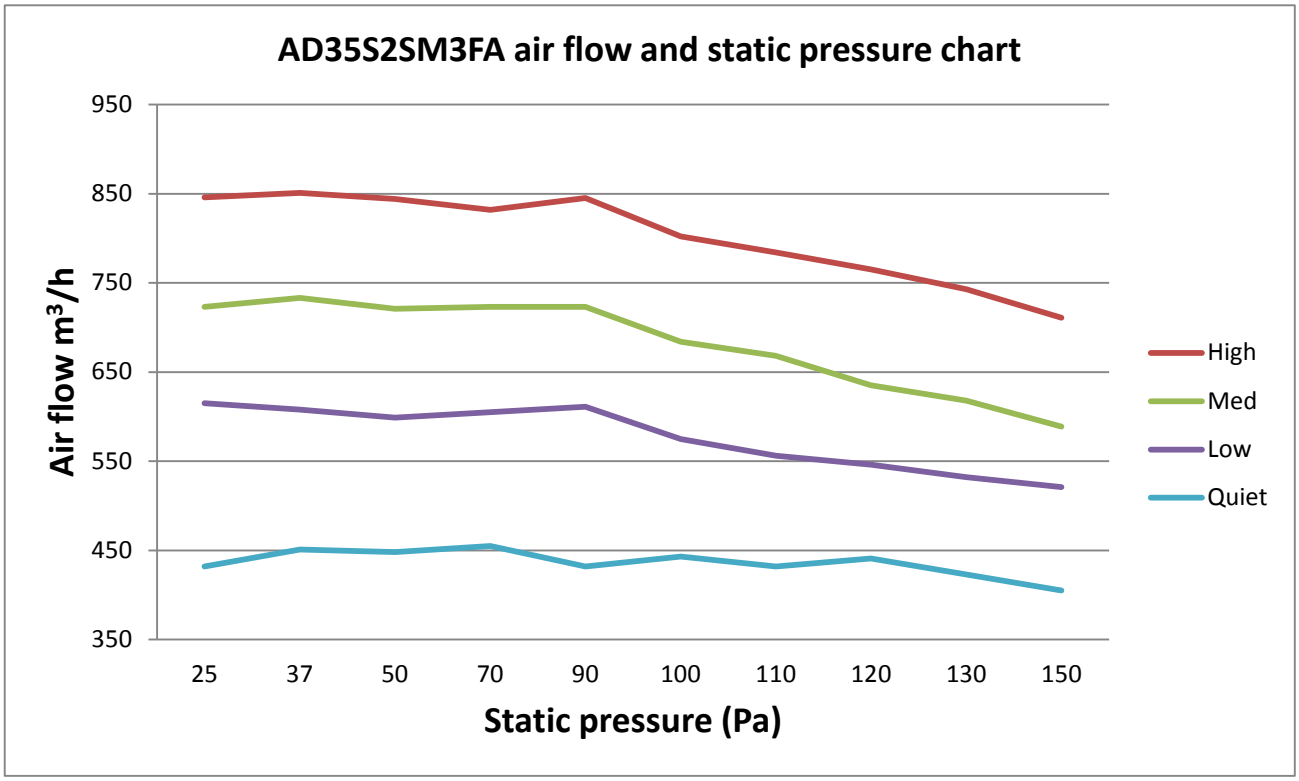
## 5.4 Airflow and Static Pressure Chart

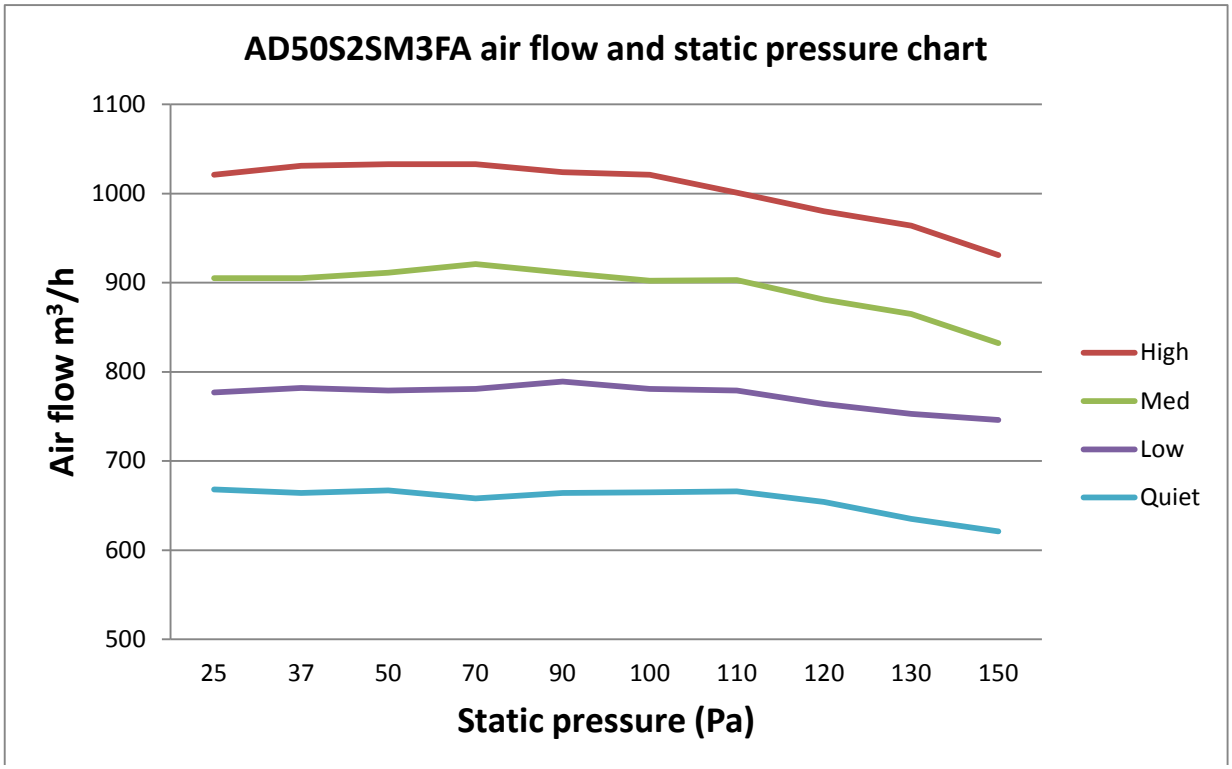
AD50S2SM1FA

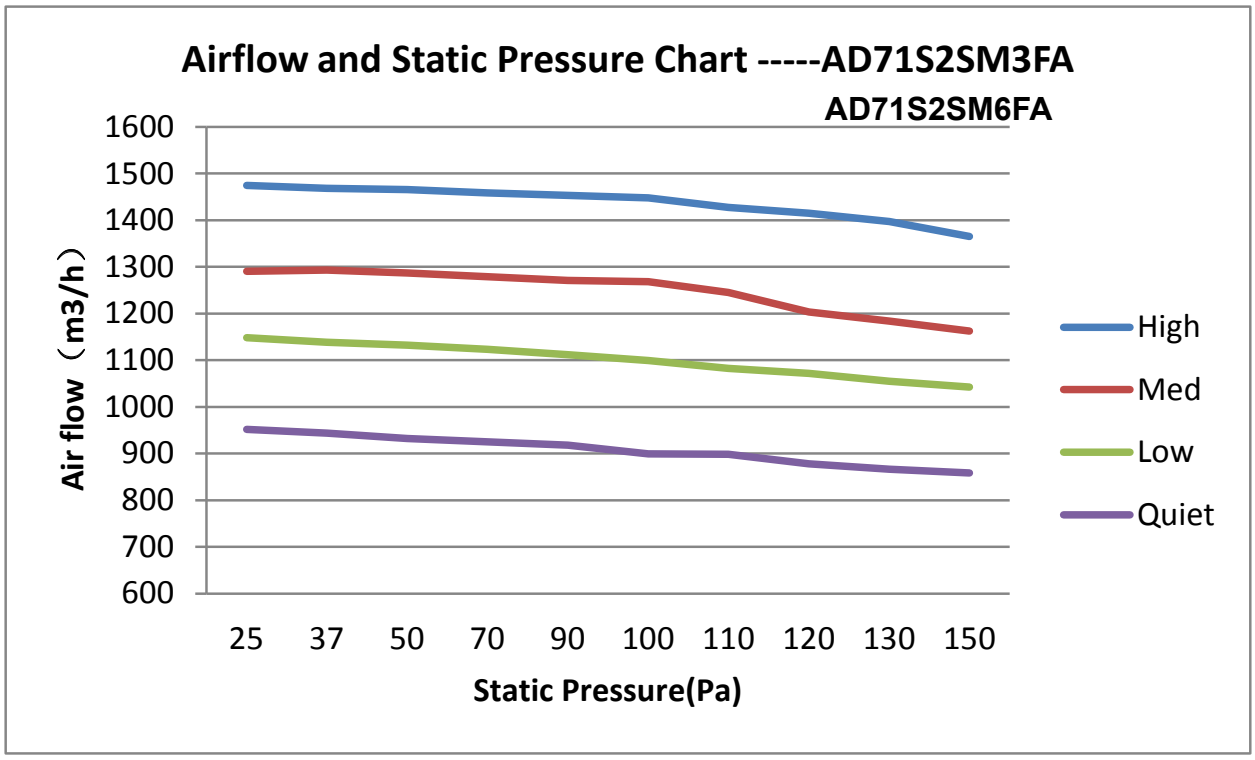


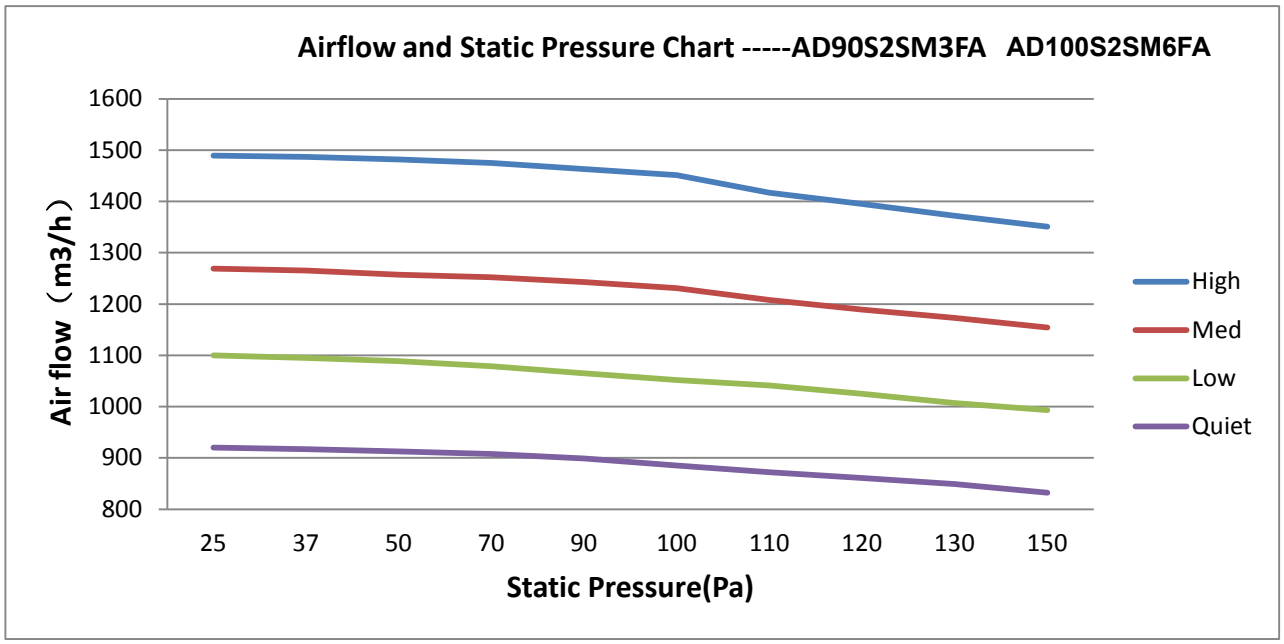

AD71S2SM1FA

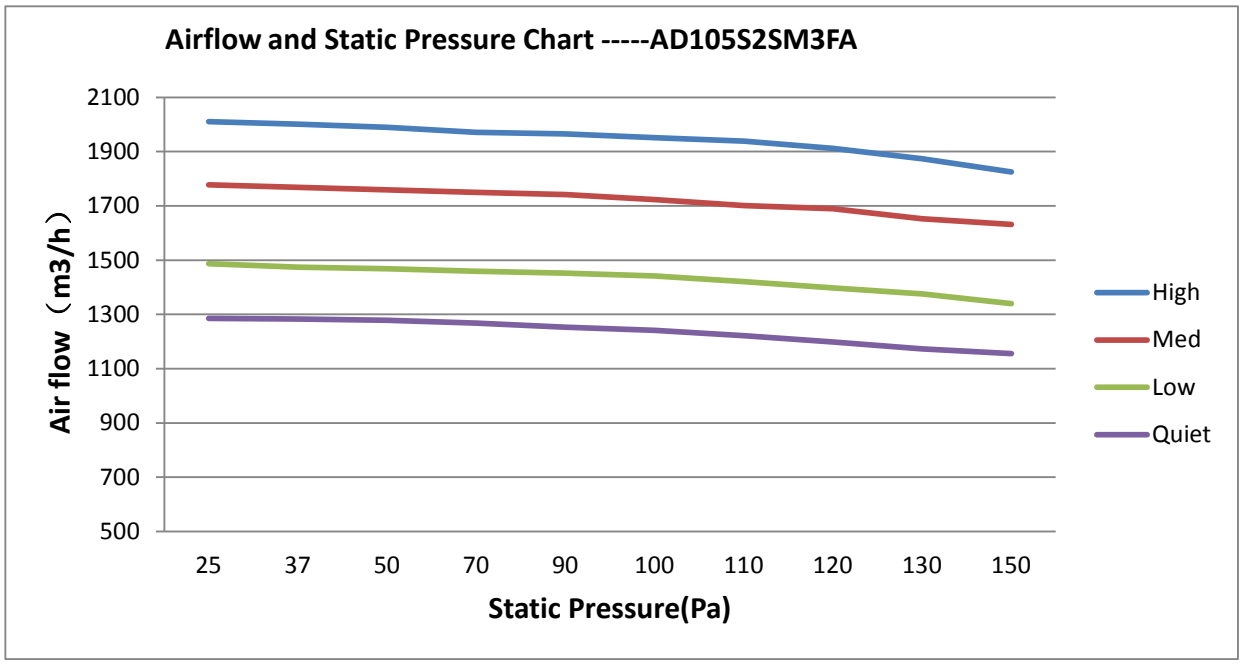


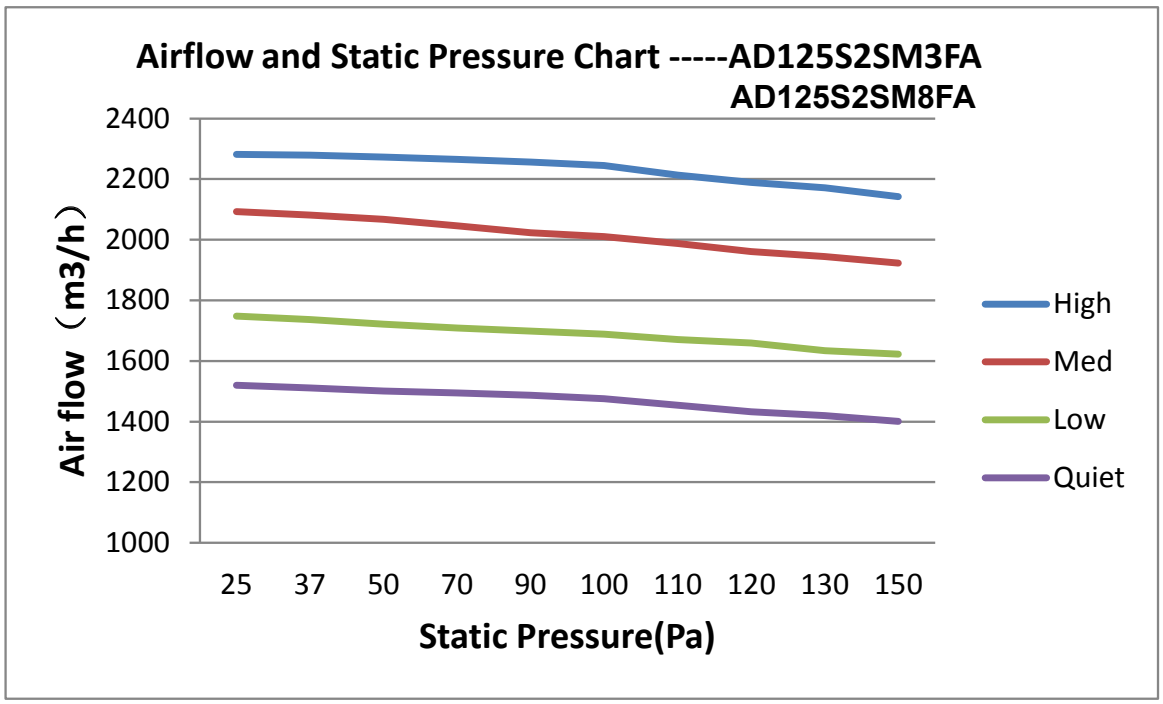

AD35S2SM3FA air flow and static pressure chart
Air flow m³/h
950
850
750
650
550
450
350
25
37
50
70
90
100
110
120
130
150
Static pressure (Pa)
High
Med
Low
Quiet

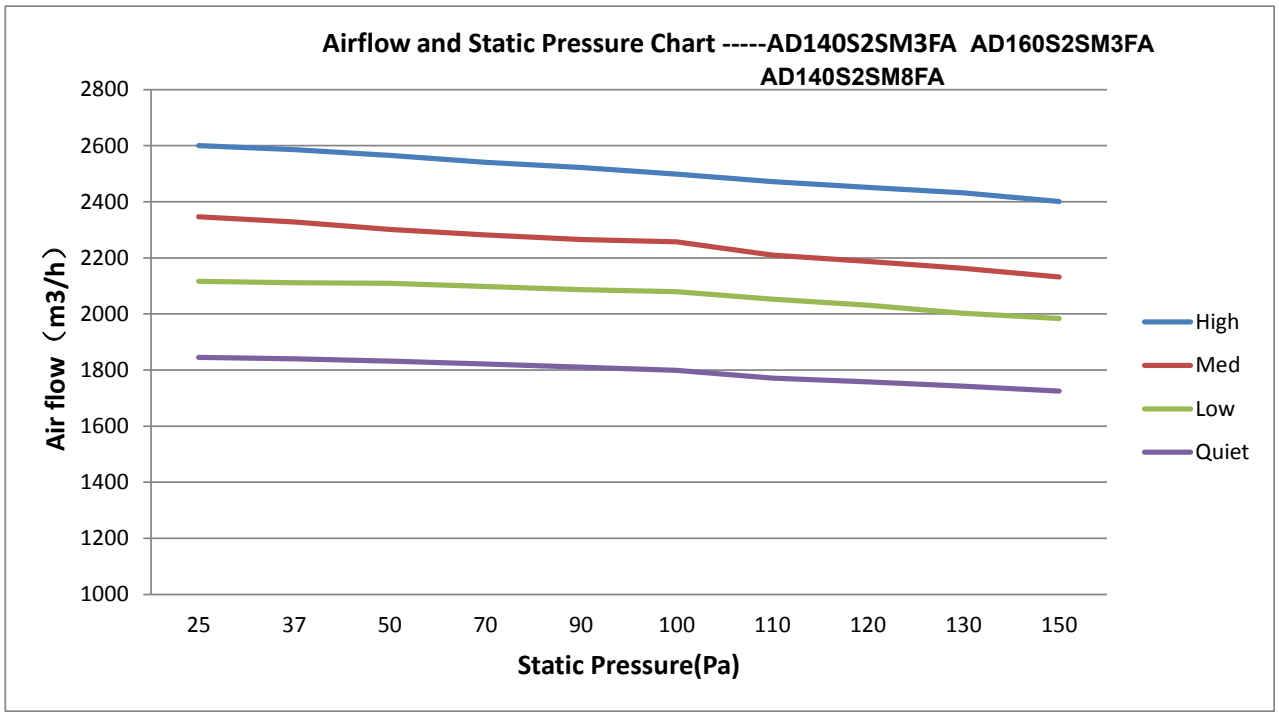

AD50S2SM3FA air flow and static pressure chart
Air flow m³/h
1100
1000
900
800
700
600
500
25
37
50
70
90
100
110
120
130
150
Static pressure (Pa)
High
Med
Low
Quiet


Airflow and Static Pressure Chart -----AD71S2SM3FA
AD71S2SM6FA
Air flow（m3/h）
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
25 37 50 70 90 100 110 120 130 150
Static Pressure(Pa)
High
Med
Low
Quiet

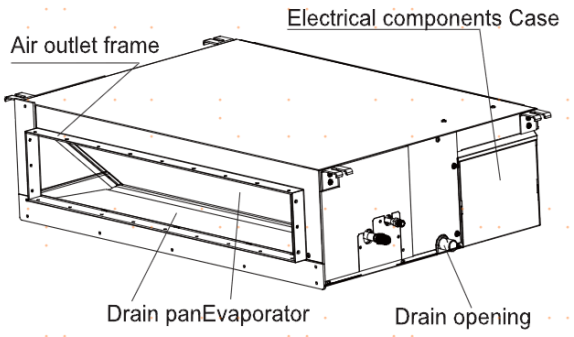

Airflow and Static Pressure Chart -----AD90S2SM3FA AD100S2SM6FA
Air flow（m3/h）
1600
1500
1400
1300
1200
1100
1000
900
800
25 37 50 70 90 100 110 120 130 150
Static Pressure(Pa)
High
Med
Low
Quiet


Airflow and Static Pressure Chart -----AD105S2SM3FA
Air flow（m3/h）
2100
1900
1700
1500
1300
1100
900
700
500
25
37
50
70
90
100
110
120
130
150
Static Pressure(Pa)
High
Med
Low
Quiet


Airflow and Static Pressure Chart -----AD125S2SM3FA
AD125S2SM8FA
Air flow（m3/h）
2400
2200
2000
1800
1600
1400
1200
1000
25
37
50
70
90
100
110
120
130
150
Static Pressure(Pa)
High
Med
Low
Quiet


Airflow and Static Pressure Chart -----AD140S2SM3FA AD160S2SM3FA
AD140S2SM8FA
Air flow（m3/h）
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
25
37
50
70
90
100
110
120
130
150
Static Pressure(Pa)
High
Med
Low
Quiet

## 5.5 Instalaltion




AD35S2SM3FA AD50S2SM3FA
AD71S2SM3FA AD90S2SM3FA
AD71S2SM6FA AD100S2SM6FA
AD105S2SM3FA AD125S2SM3FA
AD125S2SM8FA AD140S2SM8FA
AD140S2SM3FA AD160S2SM3FA

### Installation procedure

The machine is adaptive in following situation

1. Applicable ambient temperature range:

| | | | |
|---|---|---|---|
| Cooling | Indoor temperature | max.DB/WB<br>min.DB/WB | 32/23°C<br>18/14°C |
| | Outdoor temperature | max.DB/WB<br>min.DB/WB | 46/26°C<br>10/6°C |
| Heating | Indoor temperature | max.DB/WB<br>min.DB/WB | 27°C<br>15°C |
| | Outdoor temperature | max.DB/WB<br>min.DB/WB | 24/18°C<br>-15°C |

2. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person.

3. If the fuse on the indoor PC board is broken please change it with the type of T5.0/250V(for series AD35/50/71S2SM3/4FA), T 3.15A/250V(For AD160S2SM3FA)

4. The wiring method should be in line with the local wiring standard.

5. The power cable should be:

H05RN-F 3G 4.0mm²(outdoor unit 1UH071/105N1ERG),or H05RN-F 3G 6.0mm²(outdoor unit 1UH125/140P1ERG), or H05RN-F 5G 4.0mm²(outdoor unit 1UH125/140P1EK/1U160S2SP1FB)

The connecting cable should be:

H05RN-F 4G 2.5mm2

All the cables shall have got the European authentication certificate. During installation, when the connecting cables break off, it must be assured that the grouding wire is the last one to be broken off.

6. The power cable and connect cable should be self-provided.

7. The breaker of the air conditioner should be all-pole switch, and the distance between its two contacts should be no less than 3mm.

8. The indoor unit installation height is at least 2.5m.

9. A leakage breaker must be installed.

10.For AD35S2SM3FA/AD50S2SM3FA/AD71S2SM3FA/AD90S2SM3FA/AD105S2SM3FA/AD125S2SM3FA/AD125S2SM8FA/AD140S2SM3FA/AD140S2SM8FA/AD160S2SM3FA,we can get the 10 different ESP through adjust wired controllerYR-E17,For AD71S2SM6FA/AD100S2SM6FA,we can get only 2 different ESP:50Pa/100Pa,please refer below:

| Stactic pressure grade | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Stactic pressure | 25pa | 37pa | 50pa | 70pa | 90pa | 100pa | 110pa | 120pa | 130pa | 150pa |

Adjsutment metchod bywired controller YR-E17: In the state of ON and non screen saving state, press Fan+ Set keys for 5s to enter static pressure grade adjustmentstate with static pressure icon flashing and current staticpressure
grade statically displaying. Press key↑↓ to changestatic pressure grade, then press Set key to confirm.
Details please refer to wired controller operation & installation manual.
Adjsutment metchod by Infrared remote controller+Infrared receiver RE-02: Step a:set the Infrared remote controller at condition: FAN mode, fan speed high Step b:then aim the remote controller at the infrared remote receiver RE-02, press HEALTH button 4+N times (1≤N≤10, integer) within 12 seconds, then the receiver will beep N+1 times, the static pressure level N is been set successfully.
Note: For Infrared remote controller YR-HQS01, need press ON/OFF button make the controller's at OFF status first, then open the button cover press FRESH button will enter FAN mode interface.

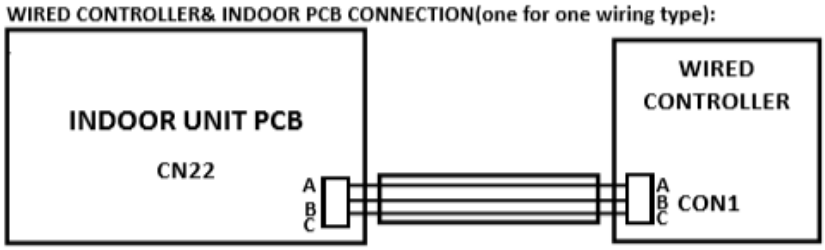
## Wiring connections of wire controller:

There are three methods to connection wire controller and the indoor units:
A.One wired controller can control max. up to 16 sets of indoor units, and 3 pieces of polar wire must connect the wire controller and the master unit (the indoor unit connected with wire controller directly), the others connect with the master unit through 2 pieces of polar wire
B. One wire controller controls one indoor unit, and the indoor unit connects with the wire controller through 3 pieces of polar wire.
C. Two wired controllers control one indoor unit. The wire controller connected with indoor unit is called master one, the other is called slave one. Master wire controller and indoor unit; master and slave wire controllers are all connected through 3 pieces of polar wire.

Communication wiring:
The wire controller is equipped with special communication wiring in the accessories. 3-core terminal (1-white 2-yellow 3-red) is connected with the terminal A, B, C of wire controller respectively.
The communication wiring is 5 meter long; if the actual length is more than it, please distribute wiring according to below table:

| Communication wiring length(m) | Dimensions of wiring |
|---|---|
| < 100 | 0.3mm2x3-core shielded wire |
| ≥100 and <200 | 0.5mm2x3-core shielded wire |
| ≥200 and <300 | 0.75mm2x3-core shielded wire |
| ≥300 and <400 | 1.25mm2x3-core shielded wire |
| ≥400 and <600 | 2mm2x3-core shielded wire |

*One side of the shielded sheet of communication wire must be earthed.




Note: When do the wired controller & indoor PCB wiring work ,do not connect the shielded wired to the unit's shell,do not parallel wiring with strong electric lines within 0.3 meters, please keep strong lines and the signal lines separately

## Installation procedure

**NOTE**

All wiring of this installation must comply with NATIONAL, STATE AND LOCAL REGULATIONS. These instructions do not cover all variations for every kind of installation circumstance. Should further information be desired or should particular problems occur, the matter should be referred to your local distributor.

**WARNING**

*BE SURE TO READ THESE INSTRUCTIONS CAREFULLY BEFORE BEGINNING INSTALLATION. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD CAUSE SERIOUS INJURY OR DEATH, EQUIPMENT MALFUNCTION AND/OR PROPERTY DAMAGE.*

**Preparation of indoor unit**

Before or during the installation of the unit, assemble necessary optional panel etc. depending on the specific type.

**Select places for installation satisfying following conditions and at the same time obtain the consent on the part of your client user.**

a.Places where chilled or heated air circulates freely. When the installation height exceeds 3m warmed air stays close to the ceiling. In such cases, suggest your client users to install air circulators.

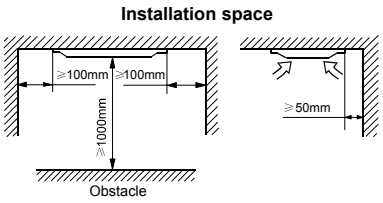
Places where perfect drainage can be prepared and sufficient drainage.

Places free from air disturbances to the suction port and blowout hole of the indoor unit, places where the fire alarm may not malfunction or short-circuit.

Places with the environmental dew-point temperature is lower than 28 and the relative humidity is less than 80 %. (When installing at a place under a high humidity environment, pay sufficient attention to the prevention of dewing such as thermal insulation of the unit. )

Ceiling height shall have the following height.

| | |
|---|---|
| | AD35S2SM3FA AD50S2SM3FA AD71S2SM3FA AD90S2SM3FA AD105S2SM3FA AD125S2SM3FA AD140S2SM3FA AD71S2SM6FA AD100S2SM6FA AD125S2SM8FA AD140S2SM8FA AD160S2SM3FA |
| Combination with silent panel | 366mm |




**Avoid installation and use at those places listed below.**

a.Places exposed to oil splashes or steam (e.g. kitchens and machine plants).

Installation and use at such places incur deteriorations in the performance or corrosion with the heat exchanger or damage in molded synthetic resin parts.

b. Places where corrosive gas (such as sulfurous acid gas) or inflammable gas (thinner, gasoline etc.) in generated or remains. Installation and use at such places cause corrosion in the heat exchanger and damage in molded synthetic resin parts.

c. Places adjacent to equipment generating electromagnetic waves or high-frequency waves such as in hospitals. Generated noise may cause malfunctioning of the controller.

**Pipe size**

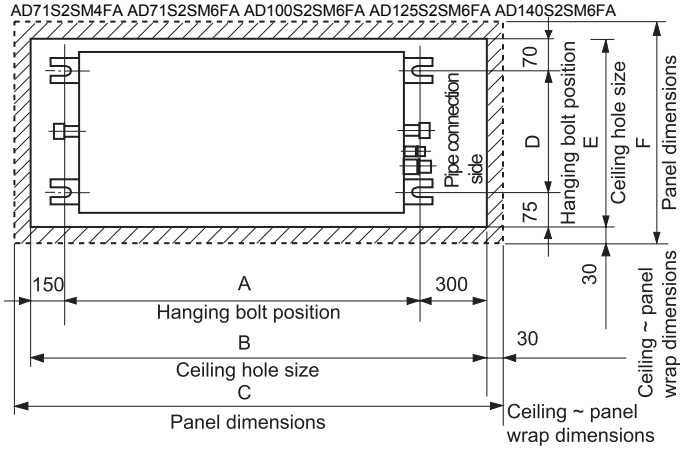
| Model | Liquid side | Gas side |
|---|---|---|
| AD35S2SM3FA | φ6.35mm | φ9.52mm |
| AD50S2SM3FA | φ6.35mm | φ12.7mm |
| AD71S2SM3FA AD90S2SM3FA AD105S2SM3FA AD125S2SM3FA AD140S2SM3FA AD71S2SM6FA AD100S2SM6FA | φ9.52mm | φ15.88mm |
| AD160S2SM3FA | φ9.52mm | φ19.05mm |

## 1. Preparation for suspending the unit

### a. Size of hole at ceiling and position of hanging bolts

<Combination with silent panel >

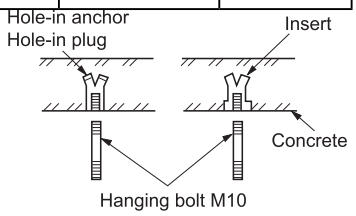
AD35S2SM3FA AD35S2SM4FA AD50S2SM3FA AD50S2SM4FA AD71S2SM3FA
AD71S2SM4FA AD71S2SM6FA AD100S2SM6FA AD125S2SM6FA AD140S2SM6FA




| Model \ Dimensions | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) |
|---|---|---|---|---|---|---|
| AD35S2SM3FA | 762 | 1212 | 1272 | 620 | 765 | 825 |
| AD50S2SM3FA AD71S2SM3FA AD90S2SM3FA AD71S2SM6FA AD100S2SM6FA | 1162 | 1612 | 1672 | 620 | 765 | 825 |
| AD125S2SM3FA AD140S2SM3FA AD125S2SM8FA AD140S2SM8FA AD160S2SM3FA | 1562 | 2012 | 2072 | 620 | 765 | 825 |

### b.Hanger bolts installation

Use care of the piping direction when the unit is installed.

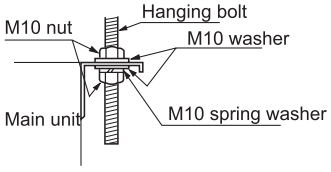



## 2.Installation of indoor unit

Fix the indoor unit to the hanger bolts.

If required it is possible to suspend the unit to the beam etc.

Directly by use of the bolts without using the hanger bolts.



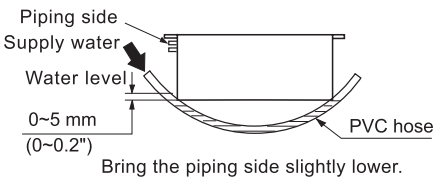

**Note**

When the dimensions of main unit and ceiling holes does not match, it can be adjusted with the slot holes of hanging bracket.

**Adjusting to the levelness**

(a) Adjust the out-of levelness using a level or by the following method. Make adjustment so that the relation between the lower surface of the unit proper and water level in the hose becomes as given below.

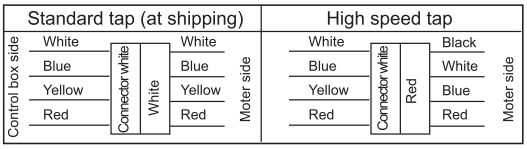
(b) Unless the adjustment to the levelness is made properly, malfunctioning or failure of the float switch may occur.




**Tap selection on blower unit**

(When the high performance filter is used.)

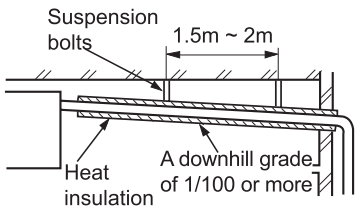
Taps of blower unit are set at the standard selection at the shipping from factory. Where the static pressure is raised by employing such option as the high performance filter, etc., change the connection of connectors provided at the flank of control box as shown below.



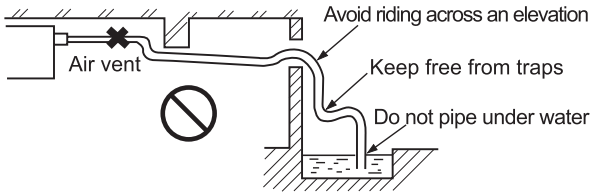
## Drain Piping

(a) Drain piping should always be in a down hill grade (1/50-1/100) and avoid riding across an elevation or making traps.

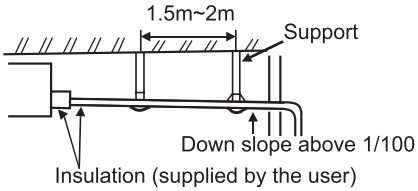
**Good piping**




**Improper piping**




**For unit without water pump**

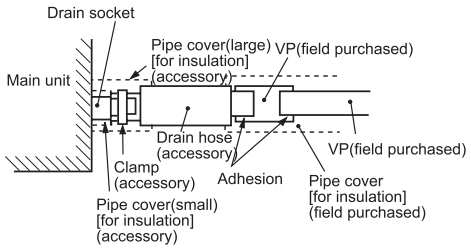


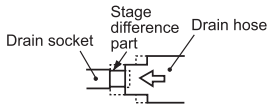

| Unit model | The size of drain opening |
|---|---|
| AD35S2SM3FA AD50S2SM3FA<br>AD71S2SM3FA AD90S2SM3FA<br>AD71S2SM6FA AD100S2SM6FA<br>AD105S2SM3FA AD125S2SM3FA<br>AD125S2SM8FA AD140S2SM3FA<br>AD140S2SM8FA AD160S2SM3FA | φ25mm |

(b) When connecting the drain pipe to unit pay suffcient attention not to apply excess force to the piping on the unit side. Also fix the piping at a point as close as possible to the unit.

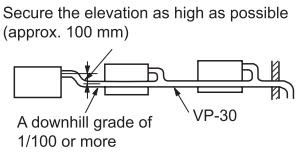
(c) For unit without water pump, please refer to the digram and select drain pipe size according to drain opening inner diameter size.
The drain pipe shall be slant downwards (greater than 1/100).
The horizontal length of the drain pipe shall be less than 20 m.
In case of long pipe, supports shall be provided every 1.5-2m to prevent wavy form.
Central piping shall be laid out according to the right figure.
Take care not to apply external force onto the drain pipe connection part.

**For unit with water pump**



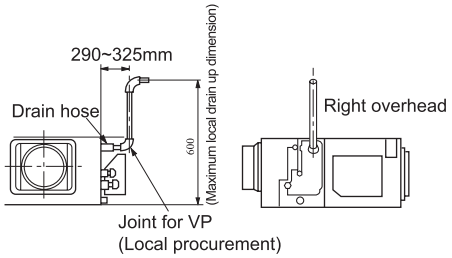

(d) For unit with water pump drain pipeuse hard PVC general purpose pipe VP which can be purchased locally. When connecting, insert a PVC pipe end securely into the drain socket before tightening securely using the attached drain hose and clamp. Adhesive must not be used for connection of the drain socket and drain hose (accessory).




(e) When constructing drain piping for several units, position the common pipe about 100 mm below the drain outlet of each unit as shown in the sketch Use VP-30(11/4") or thicker pipe for this purpose.

(f) The hard PVC pipe put indoor side should be heat insulated. Do not ever provide an air vent.

(g) The height of the drain head can be elevated up to a point 500 mm above the ceiling, and when an obstacle exists in the ceiling space, elevate the piping to avoid the obstacle using an elbow or corresponding gadget. When doing this, if the stretch for the needed height is higher than 500mm, the back-flow quantity of drain at the event of interruption of the operation gets too much and it may cause overflow at the drain pan. Therefore, make the height of the drain pipe within the distance given in the sketch below.




(h) Avoid positioning the drain piping outlet at a place where generation of odor may be stimulated. Do not lead the drain piping direct into a sewer from where sulfur gas may generate.

**Drainage Test**

(1) Conduct a drainage test after completion of the electrical work.

(2) During the trial, make sure that drain flows properly through the piping and that no water leaks from connections.

(3) In case of a new building, conduct the test before it is furnished with the ceiling.

(4) Be sure to conduct this test even when the unit is installed in the heating season.

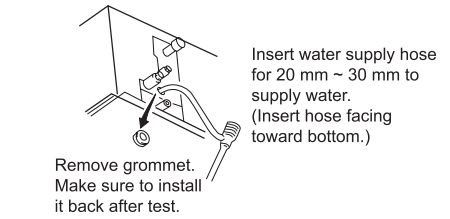
**Procedures**

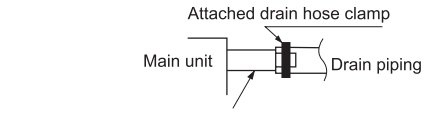
(a) Supply about 1000 cc of water to the unit through the air outlet using a feed water pump.

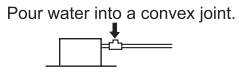
(b) Check the drain while cooling operation.

Before the electrical work has not been completed, connect a convex joint in the drain pipe connection to provide a water inlet. Then, check if water leaks from the piping system and that drain flows through the drain pipe normally.

**Drain Pipe**




**Installation Procedure**

Calculate the draft and external static pressure and select the length, shape and blowout.

• Blowout duct

• 2-spot, 3-spot and 4-spot with φ200 type duct are the standard specifications.

Note (1) Shield the central blowout hole for 2-spot.

(2) Shield the blowout hole around the center or 3-spot.

• Limit the difference in length between spots at less than 2:1.

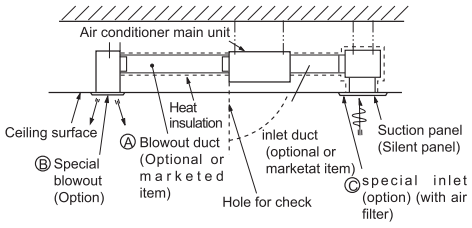
• Reduce the length of duct as much as possible.

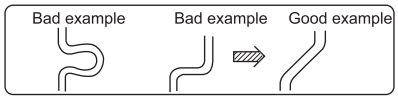
• Reduce the number of bends as much as possible. (Corner R should be as larger as possible.)

• Use a band. etc. to connect the main unit and the blowout duct flange.

• Conduct the duct installation work before finishing the ceiling.

**Air Duct**




**Connection of suction, exhaust ducts**

**a.Fresh air inlet**

• Inlet can be selected from the side or rear faces depending on the working conditions.

• Use the rear fresh air inlet when the simultaneous intake and exhaust is conducted. (Side inlet cannot be used.)

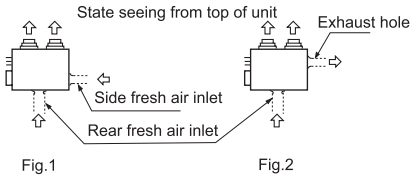



Fig.1 Fig.2

**b.Exhaust (Make sure to use also the suction.)**

• Use the side exhaust port.

| ⚠ WARNING |
|---|
| **DANGER OF BODILY INJURY OR DEATH**<br>• TURN OFF ELECTRIC POWER AT CIRCUIT BREAKER OR POWER SOURCE BEFORE MAKING ANY ELECTRIC CONNECTIONS.<br>• GROUND CONN ECTIONS MUST BE COMPLETED BEFORE MAKING LINE VOLTAGE CONNECTIONS. |

**Precautions for electrical wiring**

Electrical wiring work should be conducted only by authorized personnel.

Do not connect more than three wires to the terminal block. Always use round type crimped terminal lugs with insulated grip on the ends of the wires.

Use copper conductor only.

**Selection of size of power supply and interconnecting wires**

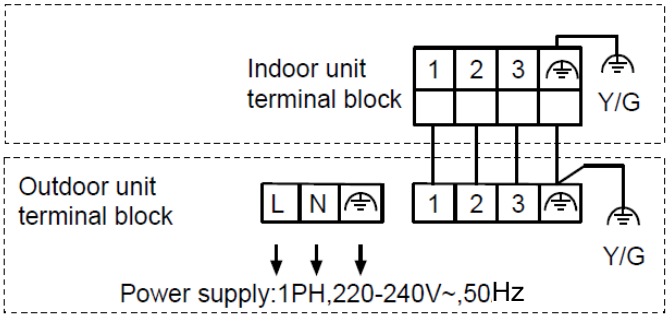
Select wire sizes and circuit protection from table below. (This table shows 20 m length wires with less than 2% voltage drop.)

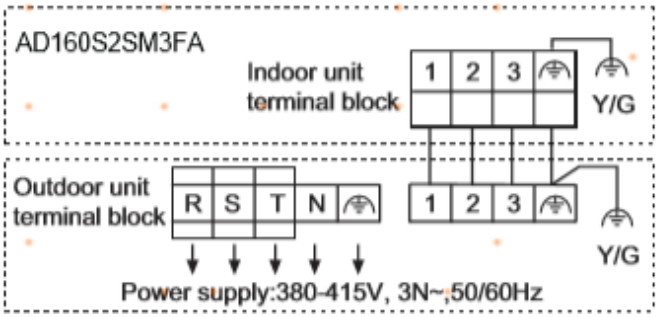
| Model \ Item | Phase | Circuit breaker | | Power source wire size (minimum)($mm^2$) | Earth leakage breaker | |
|---|---|---|---|---|---|---|
| | | Switch breaker(A) | Overcurrent protector rated capacity | | Switch breaker(A) | Leak current(mA) |
| AD35S2SM3FA AD50S2SM3FA AD71S2SM3FA AD71S2SM6FA AD100S2SM6FA | 1 | 40 | 26 | 4.0 | 40 | 30 |
| AD90S2SM3FA AD105S2SM3FA AD125S2SM3FA AD140S2SM3FA AD125S2SM8FA AD140S2SM8FA AD160S2SM3FA | 1 | 40 | 30 | 6.0 | 40 | 30 |

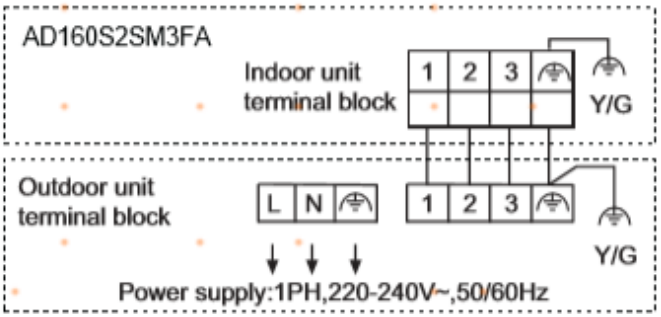
The specification of power cable is HO5RN-F3G 4.0$mm^2$
The specification of cable between indoor unit to outdoor unit is HO5RN-F4G 2.5$mm^2$

**POWER SUPPLY & INDOOR-OUTDOOR CONNECTION:**

Make wiring to supply power to the outdoor unit, so that the power for the indoor unit is supplied by outdoor unit terminal blocks.



## 6. Indoor Units -High Pressure Slim Duct Type

### 6.1 Specification

| Item | | | Model | ADH125H1ERG/1U125S2SN2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.3(3.0~13.0) | 12.7(3.5~13.5) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.47 (0.3-6.0) | 3.73 (0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.75(A) | 3.4(A) |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.1 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Running /Max.Running current | | | A / A | 19.4(1.5-26.0)A/26A | 16.2(1.5-26.0)A/26A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | ADH125H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed(H×M×L) | r/min | 1130/1050/980/930±50r/min(50Pa) | |
| | | Fan motor input power | kW | 0.30*2 | |
| | | Fan motor output power | kW | 0.24*2 | |
| | | Air-flow(H×M×L) | m³/h | 3250/2750/2250/1750(37Pa-210Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1350/490/425 | |
| | | Package（L×W×H） | mm×mm×mm | 1565/724/510 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | / | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | 100 | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | | 64 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 47/43/40/37 | |
| | Weight | (Net / Shipping) | kg / kg | 61/72 | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ADH125H1ERG/1U125S2SN2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 12.4(3.0~13.0) | 12.8(3.5~13.5) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.56 (0.3-6.0) | 3.73 (0.3-6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 2.72 | 3.43 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.1 | |
| Power cable | | | | H05RN-F 5G 4.0 mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.9(1.3-9.1)A/9.1A | 5.7(2.4-9.1)A/9.1A |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | ADH125H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed(H×M×L) | r/min | 1130/1050/980/930±50r/min(50Pa) | |
| | | Fan motor input power | kW | 0.30*2 | |
| | | Fan motor output power | kW | 0.24*2 | |
| | | Air-flow(H×M×L) | m³/h | 3250/2750/2250/1750(37Pa-210Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | / | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1350/490/425 | |
| | | Package（L×W×H） | mm×mm×mm | 1565/724/510 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | / | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | | 64 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 47/43/40/37 | |
| | Weight (Net / Shipping) | | kg / kg | 61/72 | |
| Piping | Refrigerant | Type / Charge | g | R32/2300 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ADH140H1ERG/1U140S2SP1FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 13.6 (3~15.0) | 15.1 (3.5~17) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 4.22 (2.0---7.2) | 4.03 (2.0---7.2) |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 3.22 (A) | 3.75 (A) |
| Dehumidifying capacity | | | 10-³×m³/h | 4.9 | |
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Running /Max.Running current | | | A / A | 18.1/32 | 18/32 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 40 | 40 |
| Indoor unit | Unit model (color) | | | ADH140H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 1140/1060/980/900±50r/min (50Pa) | |
| | | Fan motor output/ input power | W | 240/300 | |
| | | Air-flow (H-M-L) | m³/h | 3600/3100/2600/2100 (37Pa-210Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | 0.45 | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1350/490/425 | |
| | | Package（L×W×H） | mm×mm×mm | 1565/724/510 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | / | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 49/45/42/38 | |
| | Weight (Net / Shipping) | | kg / kg | 61/72 | |
| Piping | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ADH140H1ERG/1U140S2SP1FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | KW | 13.5(3~15.0) | 15(3.5~17.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | KW | 4.21(2.0---7.2) | 4.02(2.0---7.2) |
| Max. power input | | | W | 7200 | 7200 |
| EER or COP | | | W/W | 3.21)A) | 3.73(A) |
| Dehumidifying capacity | | | 10-³×m³/h | 4.9 | |
| Power cable | | | | H05RN-F 5G 4.0mm$^2$ | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 7/11 | 7/11 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | 30 |
| Indoor unit | Unit model (color) | | | ADH140H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed (H-M-L) | r/min | 1140/1060/980/900±50r/min(50Pa) | |
| | | Fan motor output/ input power | W | 240/300 | |
| | | Air-flow (H-M-L) | m³/h | 3600/3100/2600/2100(37Pa-210Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Row | | / | |
| | | Total Area | m² | 0.45 | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1350/490/425 | |
| | | Package（L×W×H） | mm×mm×mm | 1565/724/510 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | / | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(O)/YR-E16(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | dB (A) | 65 | |
| | Sound pressure Noise level (H-M-L) | | dB (A) | 49/45/42/38 | |
| | Weight | (Net / Shipping) | kg / kg | 61/72 | |
| PIPING | Refrigerant | Type / Charge | g | R32/2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27$^O$CDB/19$^O$CWB, indoor temperature (heating): 20$^O$CDB
Outdoor temperature(cooling): 35$^O$CDB/24$^O$CWB, outdoor temperature(heating): 7$^O$CDB/6$^O$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ADH140H1ERG/1U140S2SP2FA | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.6(4.0~15.0) | 15.0(4.5~16.0) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.24(2.0---6.0) | 4.04(2.0---6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.21 | 3.71 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H07VV-F 3G 6.0 mm2 | |
| Power source | | | N, V, Hz | 1ph, 220~240, 50/60 | |
| Running /Max.Running current | | | A / A | 18.4/26 | 17.6/26 |
| Start Current | | | A | 3 | 3 |
| Circuit breaker | | | A | 40 | |
| Indoor unit | Unit model (color) | | | ADH140H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed(H×M×L) | r/min | 1140/1060/980/900±50r/min(50Pa) | |
| | | Fan motor input power | kW | 0.30*2 | |
| | | Fan motor output power | kW | 0.24*2 | |
| | | Air-flow(H×M×L) | m³/h | 3600/3100/2600/2100(37Pa-210Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | 0.45 | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1350/490/425 | |
| | | Package（L×W×H） | mm×mm×mm | 1565/724/510 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 65 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 49/46/43/40 | |
| | Weight | (Net / Shipping) | kg / kg | 61/72 | |
| PIPING | Refrigerant | Type / Charge | g | R32 /2900 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

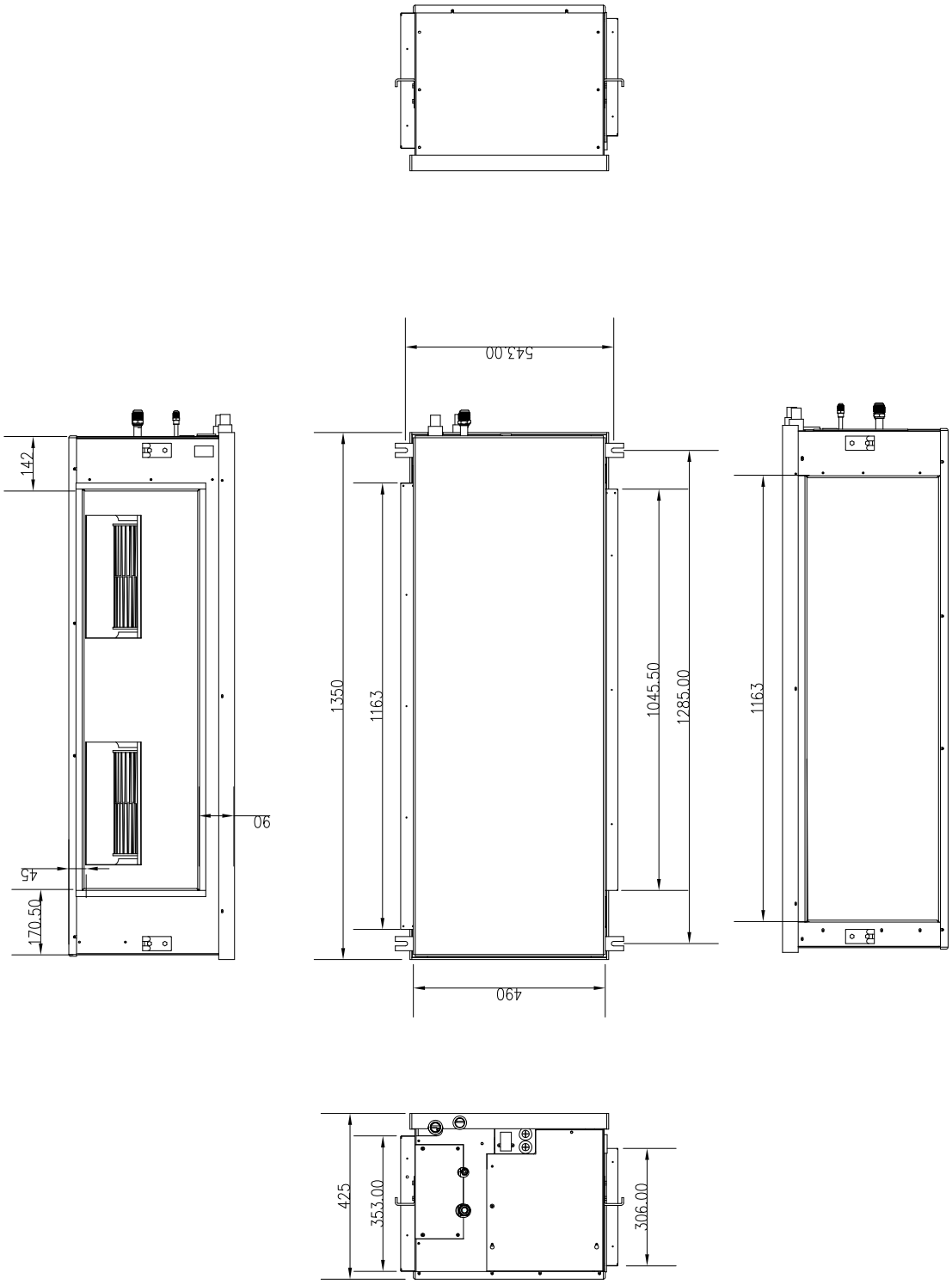
Norminal condition: indoor temperature (cooling): 27$^{O}$CDB/19$^{O}$CWB, indoor temperature (heating): 20$^{O}$CDB
Outdoor temperature(cooling): 35$^{O}$CDB/24$^{O}$CWB, outdoor temperature(heating): 7$^{O}$CDB/6$^{O}$CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | ADH140H1ERG/1U140S2SP2FB | |
|---|---|---|---|---|---|
| Function | | | | cooling | heating |
| Capacity | | | kW | 13.6(4.0~15.0)) | 15(4.5~16.0)) |
| Sensible heat ratio | | | | 0.74 | |
| Total power input | | | kW | 4.22(2.0---6.0) | 4.02(2.0---6.0) |
| Max. power input | | | W | 6000 | 6000 |
| EER or COP | | | W/W | 3.22 | 3.73 |
| Dehumidifying capacity | | | $10^{-3}$×m³/h | 4.9 | |
| Power cable | | | | H05RN-F 5G 4.0mm2 | |
| Power source | | | N, V, Hz | 3N~380-415V,50/60Hz | |
| Running /Max.Running current | | | A / A | 6.4/9..1 | 6.1/9.1 |
| Start Current | | | A | 3 | |
| Circuit breaker | | | A | 30 | |
| Indoor unit | Unit model (color) | | | ADH140H1ERG | |
| | Fan | Type × Number | | CENTRIFUGALX2 | |
| | | Speed(H×M×L) | r/min | 1140/1060/980/900±50r/min(50Pa) | |
| | | Fan motor input power | kW | 0.30*2 | |
| | | Fan motor output power | kW | 0.24*2 | |
| | | Air-flow(H×M×L) | m³/h | 3600/3100/2600/2100(37Pa-210Pa) | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/φ7.0 | |
| | | Total Area | m² | 0.45 | |
| | Dimension | External（L×W×H） | mm×mm×mm | 1350/490/425 | |
| | | Package（L×W×H） | mm×mm×mm | 1565/724/510 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | PVC | |
| | Controller (O-Optional,S-Standard) | | Wired | YR-E17(S) OR YR-E16A(O) | |
| | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | 0 | |
| | Sound power Noise level (H×M×L) | | dB(A) | 65 | |
| | Sound pressure Noise level (H×M×L) | | dB(A) | 49/46/43/40 | |
| | Weight (Net / Shipping) | | kg / kg | 61/72 | |
| PIPING | Refrigerant | Type / Charge | g | R32 /3500 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

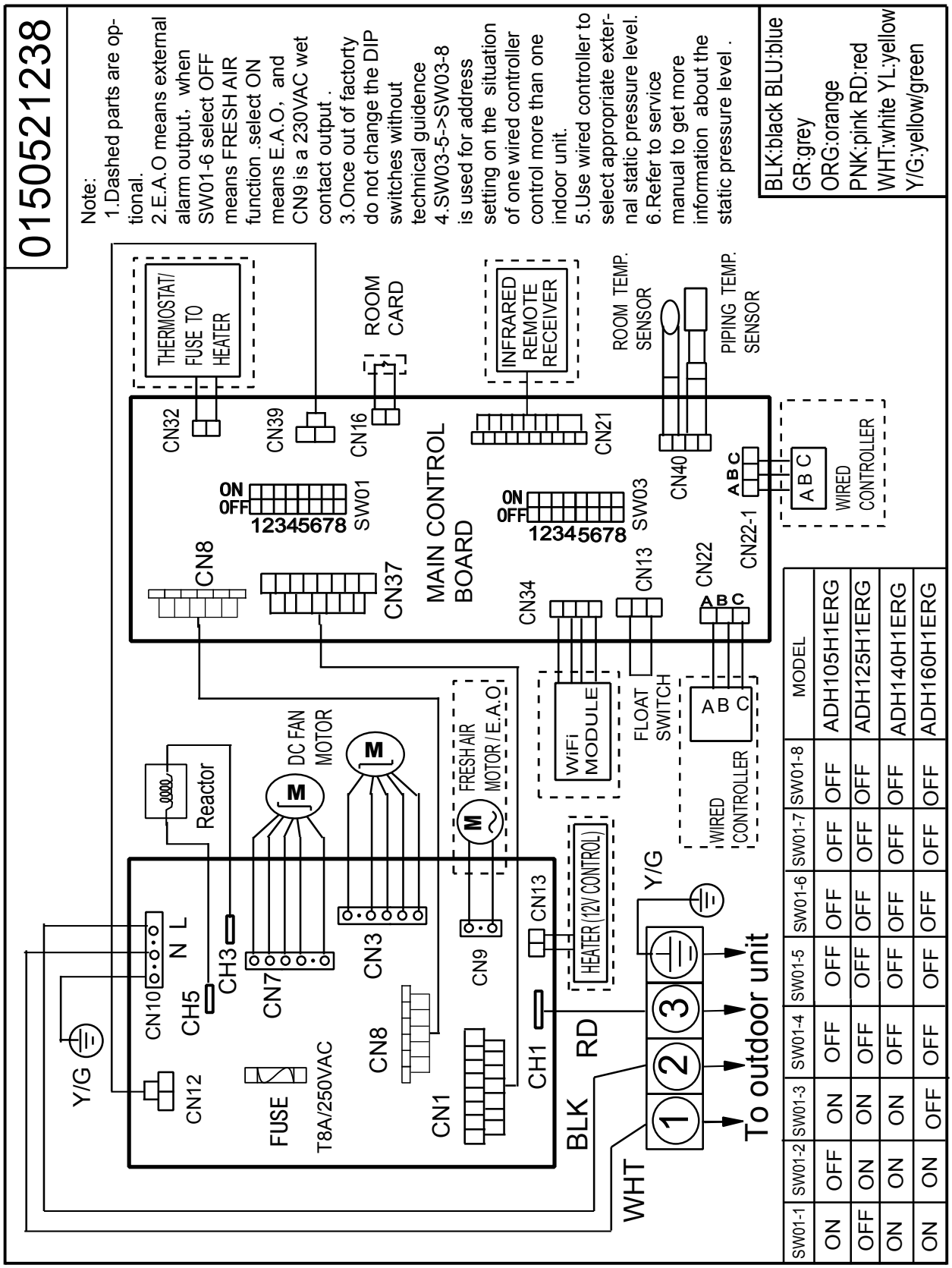
## 5.7 Dimension

ADH140H1ERG



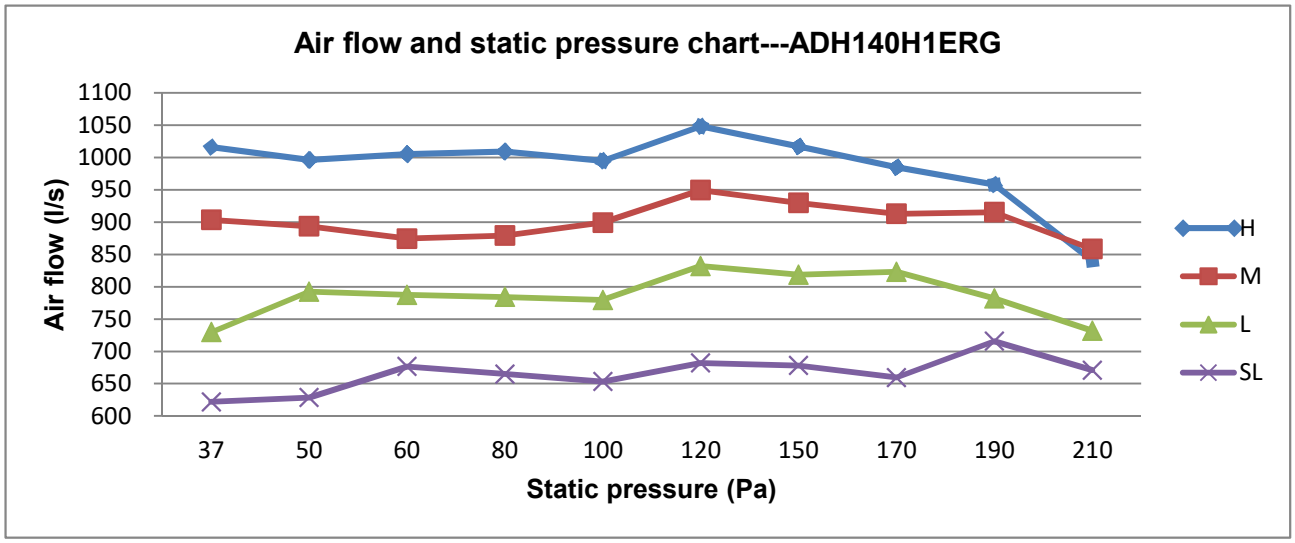
## 8. Wiring Diagram

**ADH140H1ERG**



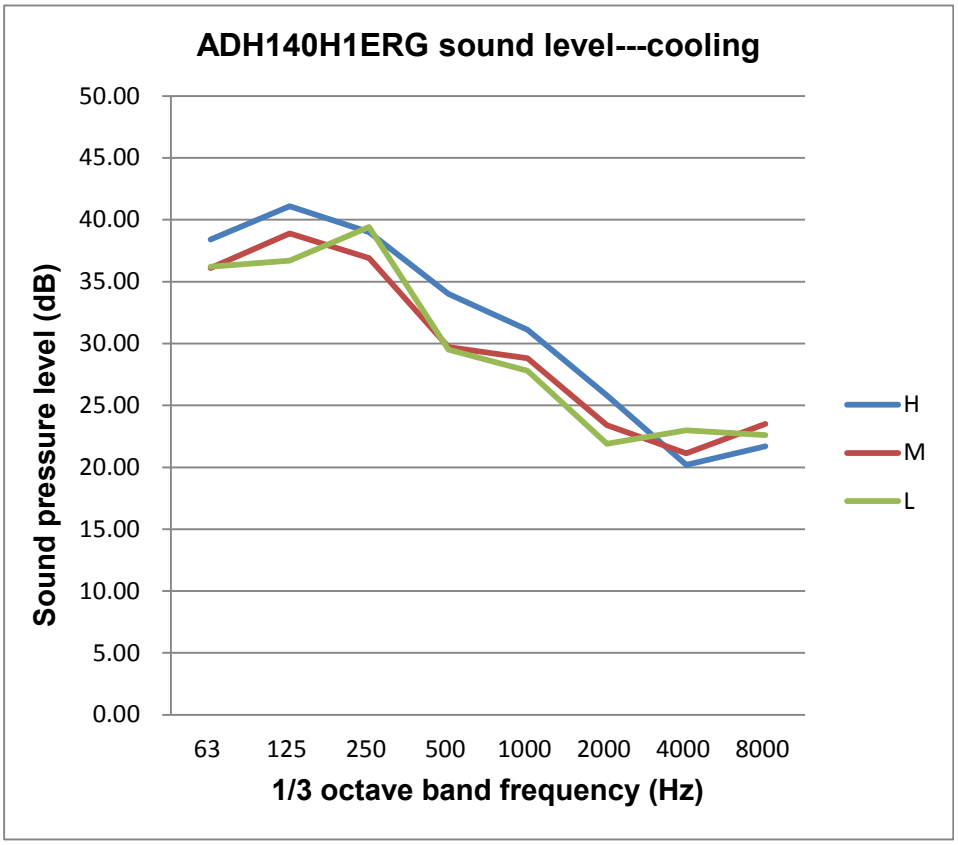
## 9. Airflow and Static Pressure Chart

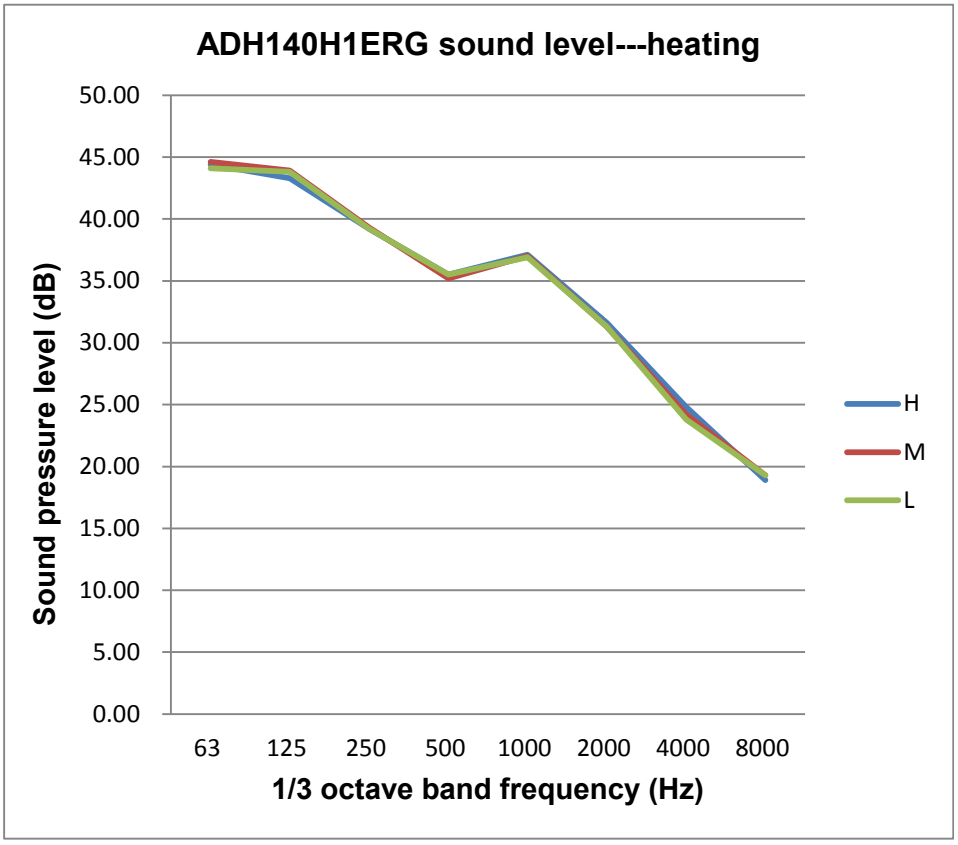
**ADH140H1ERG**



## 10. Sound Pressure Level

### ADH140H1ERG



## 11. Installation

### 10.1 Safety precautions

**The machine is adaptive in following situation**

1. Applicable ambient temperature range:

| | | | |
|---|---|---|---|
| Cooling | Indoor temperature | max. DB/WB<br>min. DB/WB | 32/23°C<br>18/14°C |
| | Outdoor temperature | max. DB/WB<br>min. DB/WB | 43/26°C<br>10/6°C |
| Heating | Indoor temperature | max. DB/WB<br>min. DB/WB | 27°C<br>15°C |
| | Outdoor temperature | max. DB/WB<br>min. DB/WB | 24/18°C<br>15°C |

2. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person.

3. If the fuse on the indoor PC board is broken please change it with the type.
T8A/250V(For ADH140H1ERG)

4. The wiring method should be in line with the local wiring standard.

6. The power cable and connect cable should be self provided.

7. The breaker of the air conditioner should be all pole switch, and the distance between its two contacts should be no less than 3mm.

8. The indoor unit installation height is at least 2.5m.

9. A leakage breaker must be installed.

10.

10.1 For ADH140H1ERG static pressure selection need achieved by wired controller, refer wired controller's manual to get details

| Static pressure level (N) | External static pressure (pa) |
|---|---|
| | ADH140H1ERG |
| 1 | 40 |
| 2 | 50 |
| 3 | 60 |
| 4 | 80 |
| 5 | 100 |
| 6 | 120 |
| 7 | 150 |
| 8 | 180 |
| 9 | 200 |
| 10 | 250 |

For ADH140H1ERG, static pressure level selection can also be achieved by controller

(1) YR HBS01setting method

Step a: set the Infrared remote controller at condition:FAN mode, fan speed high.

Step b:then aim the remote controller at the infrared remote receiver RE 02, press HEALTH button 4+N times(1≤N ≤10, integer) within 12 seconds, then the receiver will beep N+1 times, the static pressure level N is been set successfully.

Note:For Infrared remote controller YR HBS01,need press ON/OFF button make the controller's at OFF status firstthen open the button cover press FRESH button will enter FAN mode interface.

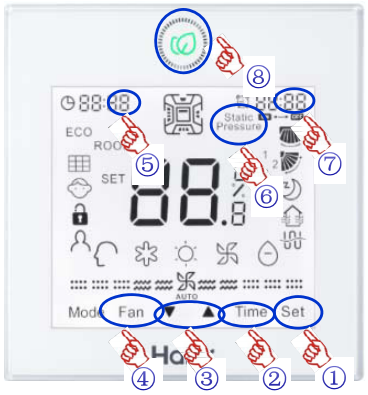
(2) YR-E17 setting method

Step a: When ⑧ is ON and non screen saving, press Set key ( ① ) and Fan key ( ④ ) together for 5s to enter static pressure grade adjustment with static pressure icon (position ⑥) flashing And current static pressure displaying.

Step b: Press Time key ② to shift unit NO. and the unit NO. will display on pos▼▲⑤ from 00-15

Step c: Press ③ to change static pressure grade and The static pressure grade will display on position ⑦ from 01-04

Step d: Press ① to confirm




(3) YR-E16A setting method

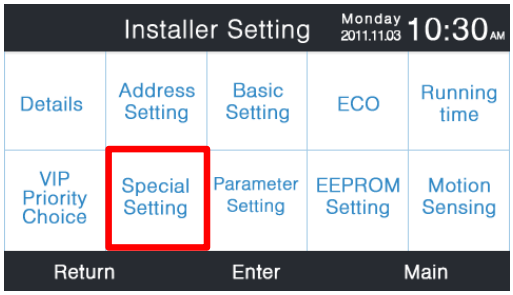
Step a: In main interface press menu key enter the menu interface

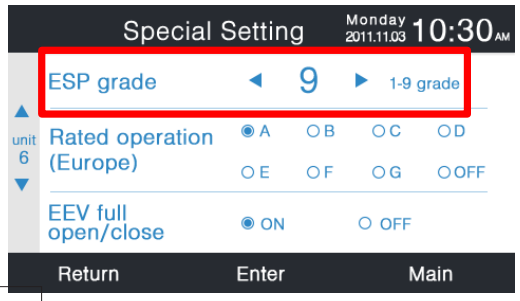
Step b: Move the cursor to the installerl setting position, then press menu key enter the installerl setting interface

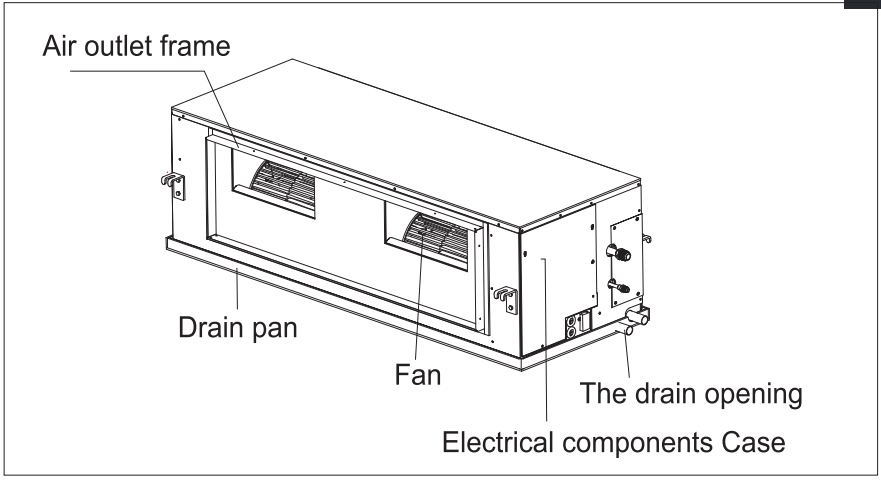
Step c: Move the cursor to the special setting position, then press menu key enter the special setting interface

Step d: Flip up and down to find the item of ESP grade

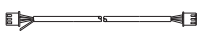
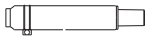
Step e: Setting the ESP grade



Accessories supplied with the indoor unit:

| No. | Name of parts | Quantity | Note | Shape |
|---|---|---|---|---|
| 1 | Signal line | 1 | Connection between the wired remote control and electric control board |  |
| 2 | Wired controller | 1 | For Air conditioner operation |  |
| 3 | 3/8" Brass nut (liquid side) | 1 | For tightening the Connecting pipe |  |
| 4 | 5/8" Brass nut (gas side) | 1 | |  |
| 5 | Coupler heat insulation(gas side) | 1 | For indoor side pipe joint(gas side) |  |
| 6 | Coupler heat insulation(liquid side) | 1 | For indoor side pipe joint(liquid side) |  |
| 7 | Drain pipe | 1 | Drainage fittings group (For ADHM series only) |  |
| 8 | Instructions | 1 | Air conditioner operation |  |
| 9 | Cable tie(Large) | 7 | For fixing the heat insulation (For ADHH series only) |  |
| 10 | Cable tie(small) | 4 | For fixing the remote controller cable and connecting cable (For ADHH series only) |  |

***Note***

All wiring of this installation must comply with NATIONAL, STATE AND LOCAL REGULATIONS. These instructions do not cover all variations for every kind of installation circumstance. Should further information be desired or should particular problems occur, the matter should be referred to your local distributor.

**WARNING**

Be sure to read these instructions carefully before beginning installation. Failure to follow these instructions could cause serious injury or death, equipment malfunction and/or property damage.

**Preparation of indoor unit**

Before or during the installation of the unit, assemble necessary optional panel etc. depending on the specific type. Select places for installation satisfying following conditions and at the same time obtain the consent on the part of your client user.

a.Places where chilled or heated air circulates freely. When the installation height exceeds 3m warmed air stays close to the ceiling. In such cases, suggest your client users to install air circulators.

b.Places where perfect drainage can be prepared and sufficient drainage.

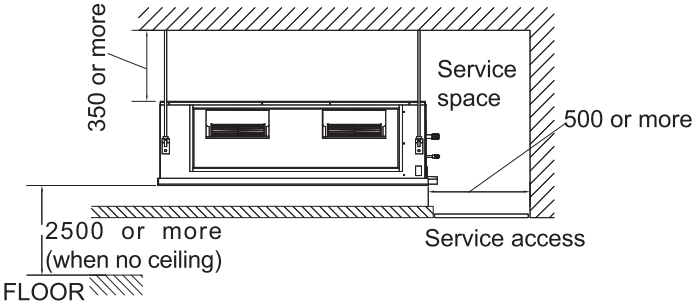
c. Places free from air disturbances to the suction port and blowout hole of the indoor unit, places where the fire alarm may not malfunction or short circuit.

d.Places with the environmental dew point temperature is lower than 28 C and the relative humidity is less than 80 %. (When installing at a place under a high humidity environment, pay sufficient attention to the prevention of dewing such as thermal insulation of the unit. )

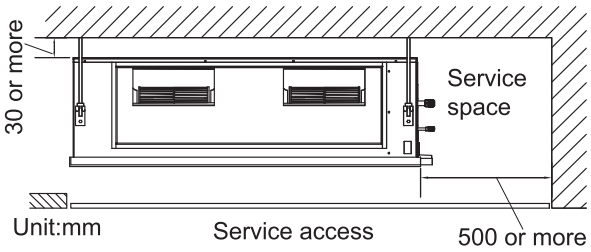
e.Installation dimension is the following.

(1) Installation by which service space is made on top of the unit (recommended)

Install the unit away from the ceiling by 350mm or more




(2) Installation by which service is carried out from the bottom of the unit




Avoid installation and use at those places listed below.

a. Places exposed to oil splashes or steam (e.g. kitchens and machine plants).
Installation and use at such places incur deteriorations in the performance or corrosion with the heat exchanger or damage in molded synthetic resin parts.

b. Places where corrosive gas (such as sulfurous acid gas) or inflammable gas (thinner, gasoline etc.) in generated or remains. Installation and use at such places cause corrosion in the heat exchanger and damage in molded synthetic resin parts.

c. Places adjacent to equipment generating electromagnetic waves or high frequency waves such as in hospitals. Generated noise may cause malfunctioning of the controller.

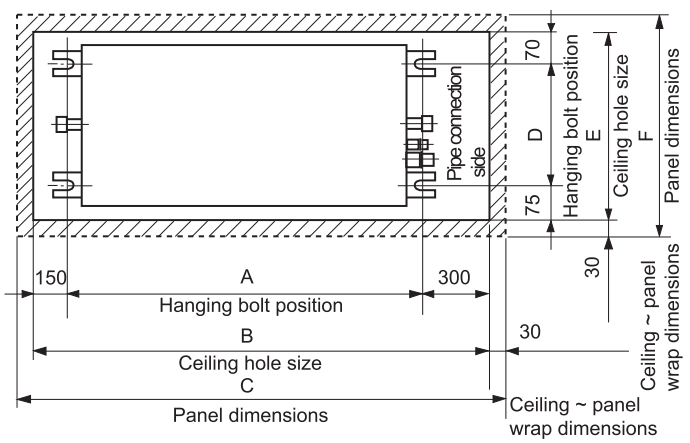
Pipe size

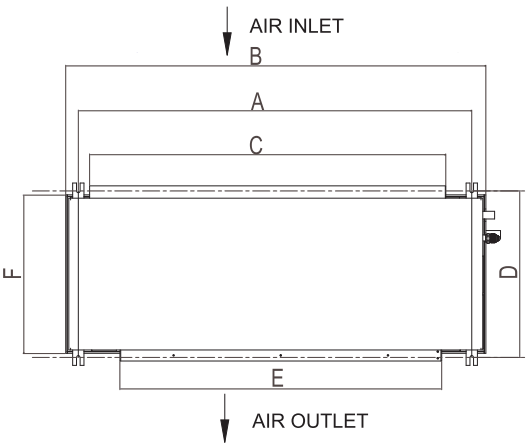
| Model | Liquid side | Gas side |
|---|---|---|
| ADH140H1ERG | Φ9.52mm | Φ15.88mm |

1. Preparation for suspending the unit

a.Size of hole at ceiling and position of hanging bolts

ADH140H1ERG



| Model \ Dimensions | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) |
|---|---|---|---|---|---|---|
| ADH140H1ERG | 1285 | 1373 | 1163 | 543 | 1046 | 518 |

b.Hanger bolts installation

Use care of the piping direction when the unit is installed.

2.Installation of indoor unit Fix the indoor unit to the hanger bolts. If required, it is possible to suspend the unit to the beam, etc. Directly by use of the bolts without using the hanger bolts.

***Note***

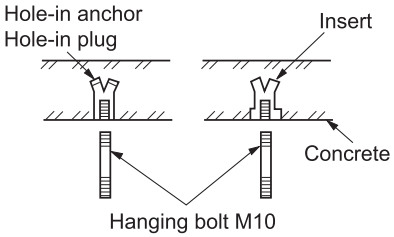
When the dimensions of main unit and ceiling holes does not match, it can be adjusted with the slot holes of hanging bracket.

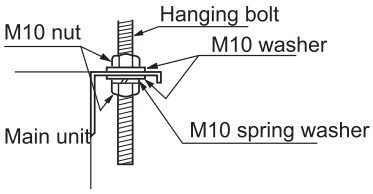
Adjusting to the levelness

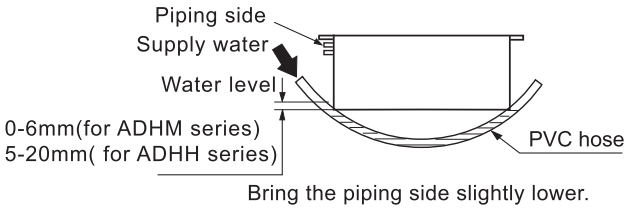
(a) Adjust the out of levelness using a level or by the following method.

Make adjustment so that the relation between the lower surface of the unit proper and water level in the hose becomes as given below.

(b) Unless the adjustment to the levelness is made properly malfunctioning or failure of the float switch may occur.



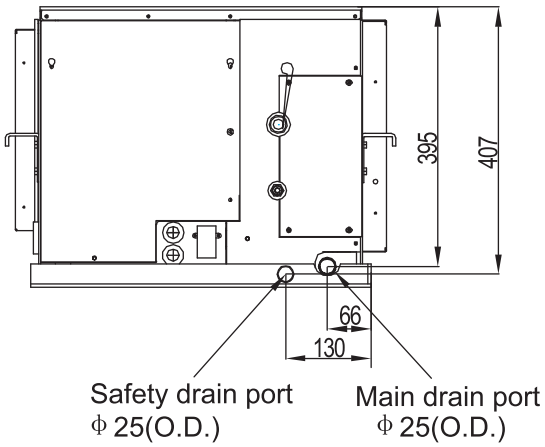



Installing Drain Pipes

| ⚠CAUTION |
|---|
| Install the drain pipe in accordance with the instructions in this installation Manual and keep the area warm enough to prevent condensation.Problems with the piping may lead |
| to water leaks. |
| Be sure to properly insulate the drain pipes. |
| The position of the installed drain pipe should have a downward gradient of 1/100 or more. |
| Do not connect the drain pipe in which ammonia or other |
| types of gas affecting the unit is generated. |

Install the drain pipes according to the measurements given in the following figure.

• Flange positions for connecting the drain pipes.

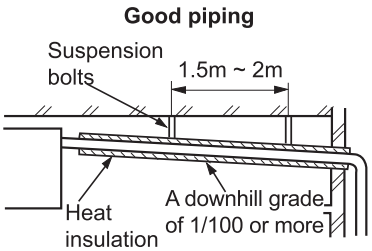


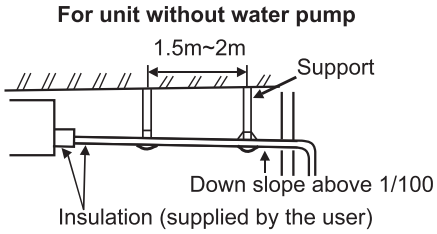

• The size of drain opening

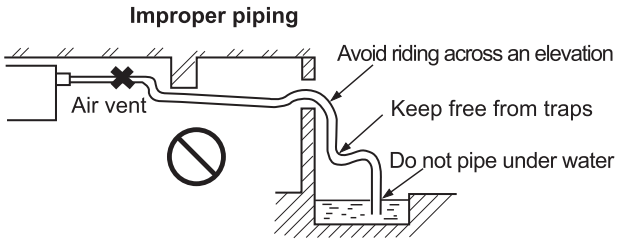
| Unit model | The size of drain opening |
|---|---|
| ADH140H1ERG | Φ25mm(O.D.) |

Please refer to the diagram and select drain pipe size according to drain opening inner diameter size.

(a) Drain piping should always be in a downhill grade (1/50-1/100) and avoid riding across an elevation or making traps.






(b) When connecting the drain pipe to unit, pay sufficient attention not to apply excess force to the piping on the unit side. Also, fix the piping at a point as close as possible to the unit.

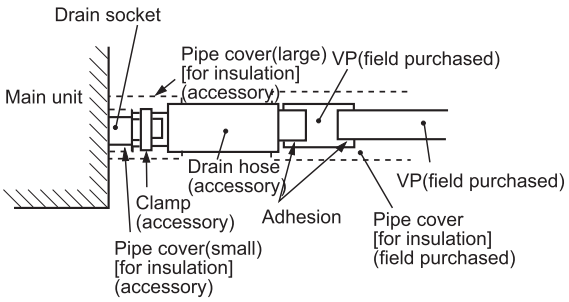
(c) For unit without water pump, the drain pipe shall be slant downwards (greater than 1/100).

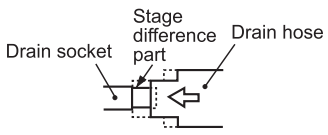
The horizontal length of the drain pipe shall be less than 20 m. In case of long pipe, supports shall be provided every 1.5-2m to prevent wavy form.

Central piping shall be laid out according to the right figure.

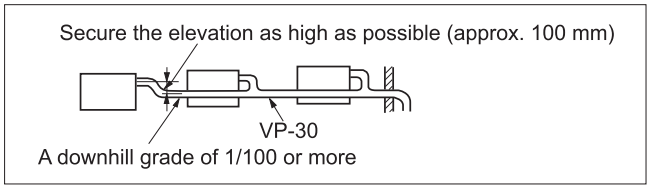
Take care not to apply external force onto the drain pipe connection part.

(d) For unit with water pump drain pipe use hard PVC general purpose pipe VP which can be purchased locally. When connecting, insert a PVC pipe end securely into the drain socket before tightening securely using the attached drain hose and clamp. Adhesive must not be used for connection of the drain socket and drain hose (accessory).

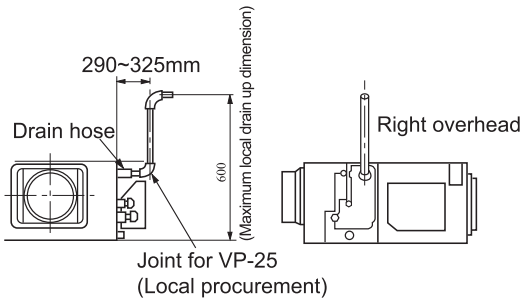


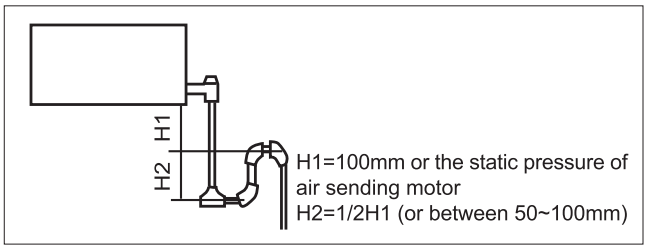

(e) When constructing drain piping for several units, position the common pipe about 100 mm below the drain outlet of each unit as shown in the sketch. Use VP 30(11/4") or thicker pipe for this purpose.



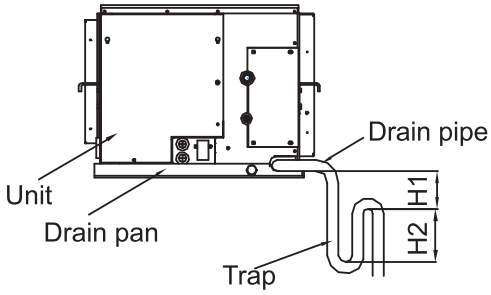
(f) The stiff PVC pipe put indoor side should be heat insulated. The height of the drain head can be elevated up to a point 500 mm above the ceiling, and when an obstacle exists in the ceiling space, elevate the piping to avoid the obstacle using an elbow or corresponding gadget. When doing this, if the stretch for the needed height is higher than 500 mm, the back flow quantity of drain at the event of interruption of the operation gets too much and it may cause overflow at the drain pan. Therefore, make the height of the drain pipe within the distance given in the sketch below.




(g) Avoid positioning the drain piping outlet at a place where generation of odor may be stimulated. Do not lead the drain piping direct into a sewer from where sulfur gas may generate.
(h) Because the drain spout is at the position, which negative pressure may occur. So with the rise of water level in the drain pan, water leakage may occur. In order to prevent water leakage, we designed a backwater bend. The structure of backwater bend should be able to be cleaned. As the below figure shown, use T type joint. The backwater bend is set near the air conditioner.
As figure shown, set a backwater bend in the middle of drain hose.

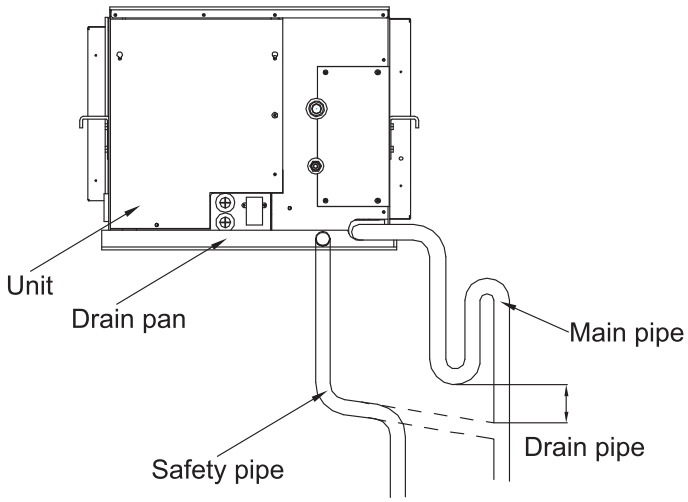



Taking the ADH**H serials as an example, the installation of the drain pipe is the following.
Use general hard polyvinyl chloride (VP25) and connect it with adhesive (polyvinyl chloride) so that there is no leakage. Do not perform air bleeding.
• Main drain pipe
provide one trap on the main drain pipe near the indoor unit.



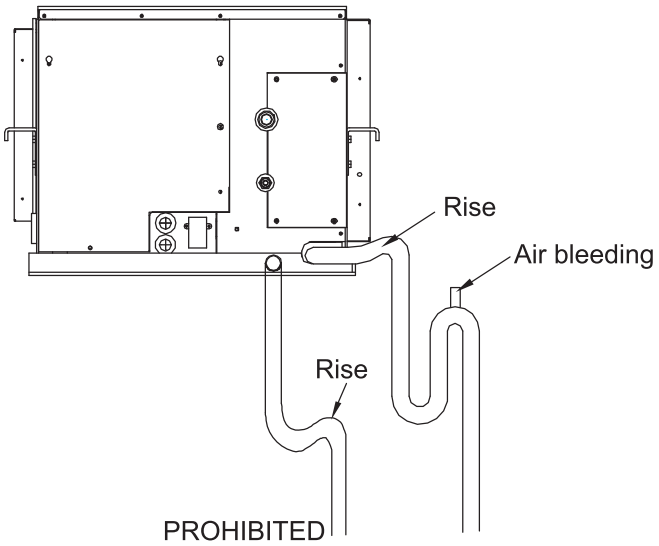
• Safety drain

There is no need to provide a trap for the safety drain pipe.If the safety drain pipe is connected to the main drain pipe, make the connection below the trap on the main drain pipe.



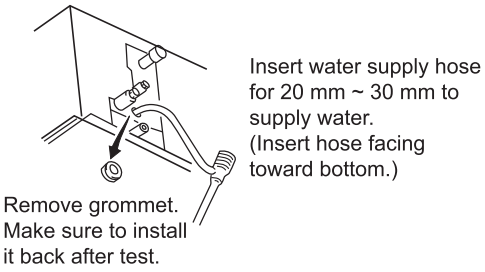

• Make sure that drain pipe is installed without rises.

• Do not perform air bleeding.



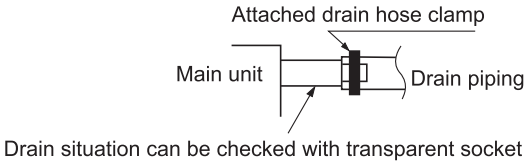
**Drainage Test**

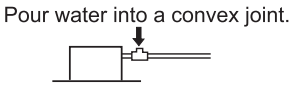
(1) Conduct a drainage test after completion of the electrical work.
(2) During the trial, make sure that drain flows properly through the piping and that no water leaks from connections.
(3) In case of a new building, conduct the test before it is furnished with the ceiling.
(4) Be sure to conduct this test even when the unit is installed in the heating season.




**Procedures**

(a) Supply about 1000 cc of water to the unit through the air outlet using a feed water pump.
(b) Check the drain while cooling operation.
Before the electrical work has not been completed, connect a convex joint in the drain pipe connection to provide a water inlet. Then, check if water leaks from the piping system and that drain flows through the drain pipe normally.

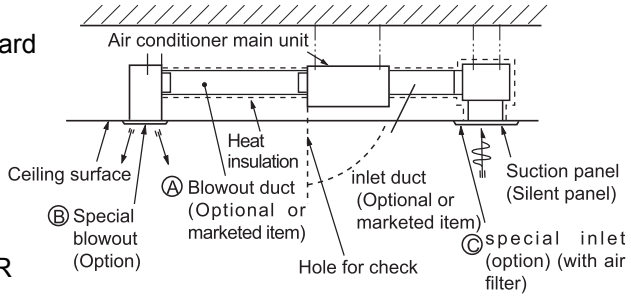


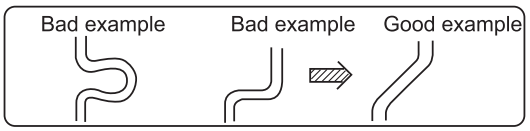




Installation work for air outlet ducts
Calculate the draft and external static pressure and select the length, shape and blowout.

**Blowout duct**

• 2-spot, 3-spot and 4-spot with Φ 200 type duct are the standard specifications.
Note (1) Shield the central blowout hole for 2 spot.
(2) Shield the blowout hole around the center for 3 spot.
• Limit the difference in length between spots at less than 2:1.
• Reduce the length of duct as much as possible.
• Reduce the number of bends as much as possible. (Corner R should be as larger as possible.)
• Use a band. etc. to connect the main unit and the blowout duct flange.
• Conduct the duct installation work before finishing the ceiling.




Connection of suction, exhaust ducts
a.Fresh air inlet
Inlet can be selected from the side or rear faces depending on the working conditions.
Use the rear fresh air inlet when the simultaneous intake and exhaust is conducted. (Side inlet cannot be used.)
b.Exhaust (Make sure to use also the suction.)
Use the side exhaust port.

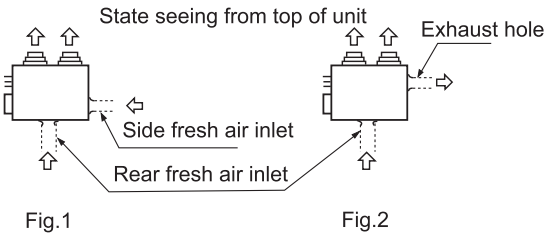



Fig.1 Fig.2

| ⚠WARNING |
| --- |
| Danger of bodily injury or death |
| • Turn off electric power at circuit breaker or power source before making any electric connections. |
| • Ground connections must be completed before making line voltage connections. |

Precautions for electrical wiring

• Electrical wiring work should be conducted only by authorized personnel.

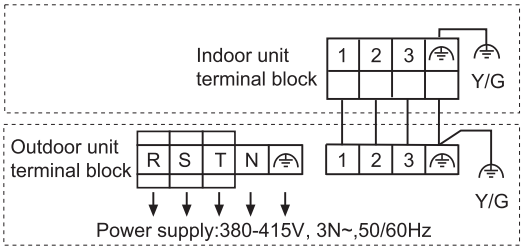
• Do not connect more than three wires to the terminal block. Always use round type crimped terminal lugs with insulated grip on the ends of the wires.

• Use copper conductor only.

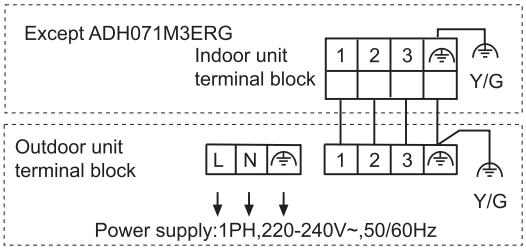
Wiring connection

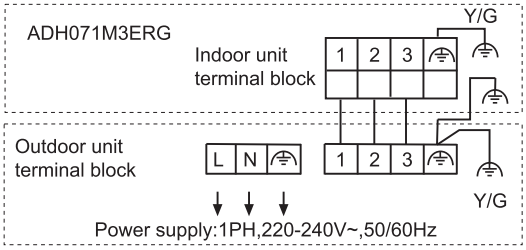
Make wiring to supply power to the outdoor unit, so that the power for the indoor unit is supplied by outdoor unit.

Outdoor 3 phase type




Outdoor single phase type

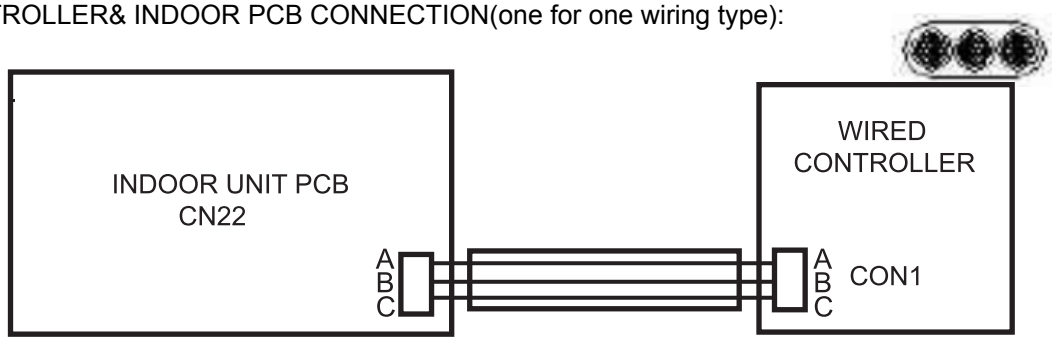



All field supplied parts, materials and electric works must conform to local codes. (ie. AS / NZS 3000)
Power supply cable:
select the wire diameter refer to the MCA value in specification table.

Indoor and outdoor connection cable:
If the communication cable length ≤ 40m
105 communication cable: 1.5mm2
125/140/160/200/250 communication cable: 2.5mm2
If 40m ＜ the communication cable length ≤ 55m, all models: 4mm2
If 55m ＜ the communication cable length ≤ 75m, all models: 6mm2
Communication line length is not allowed to exceed 75 meters

WIRED CONTROLLER& INDOOR PCB CONNECTION(one for one wiring type):




Note: When do the wired controller & indoor PCB wiring work for model ADH071M3ERG, do not connect the shielded wired to the unit's shell, do not parallel wiring with strong electric lines within 0.3 meters, please keep strong lines and the signal lines separately.

# 6 . Indoor Units--Console Type

## 6.1 Specification

| Item\Model | | | | AF25S2SD1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 2500 | 2800 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.2 | |
| Indoor unit | power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | centrifugal*1 | |
| | | Speed (H-M-L) | r/min | 650/600/520/450/400 | |
| | | Fan motor output/ input power | W | 30/40 | |
| | | Air-flows (H/M/L) | m³/h | 450/400/350/300/250 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/ ϕ 7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.193 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 700/210/600 | |
| | | Package | mmxmmxmm | 783/303/695 | |
| | Drainage pipe (material,I.D/O.D) | | mm | PVC 20/26 | |
| | Control type (Remote/Wired) | | | Remote YR-HQS01(S) or Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | none | |
| | Noise level(H-M-L) | Sound power level | dB(A) | 52 | |
| | | Sound pressure level | dB(A) | 42/38/34/31 | |
| | weight (Net/Shipping) | | kg/kg | 16.5/18.5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35(1/4) | |
| | | Gas | mm | Φ9.52(3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27℃ DB/19℃ WB, indoor temperature (heating): 20℃ DB
Outdoor temperature (cooling): 35℃ DB/24℃ WB, outdoor temperature (heating): 7℃ DB/6℃ WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

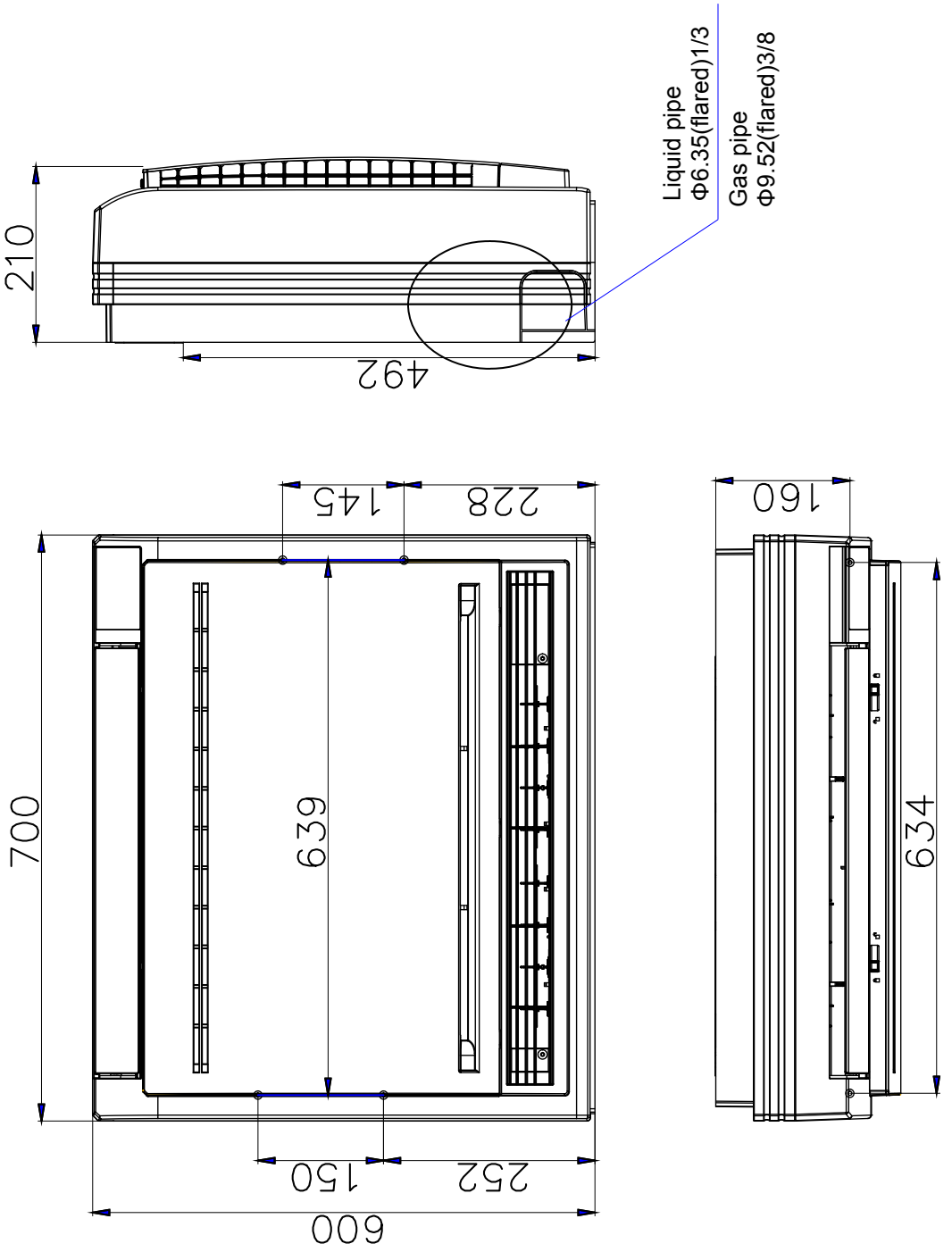
| Item\Model | | | | AF35S2SD1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 3400 | 3500 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.5 | |
| indoor unit | power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | centrifugal*1 | |
| | | Speed (H-M-L) | r/min | 700/650/570/500/450 | |
| | | Fan motor output/ input power | W | 30/40 | |
| | | Air-flows (H/M/L) | m³/h | 500/450/400/350/300 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/ ϕ 7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.193 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 700/210/600 | |
| | | Package | mmxmmxmm | 783/303/695 | |
| | Drainage pipe (material,I.D/O.D) | | mm | PVC 20/26 | |
| | Control type (Remote/Wired) | | | Remote YR-HQS01(S) or Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | none | |
| | Noise level (H-M-L) | Sound power level | dB(A) | 55 | |
| | | Sound pressure level | dB(A) | 46/42/38/36 | |
| | weight (Net/Shipping) | | kg/kg | 16.5/18.5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27℃ DB/19℃ WB, indoor temperature (heating): 20℃ DB
Outdoor temperature (cooling): 35℃ DB/24℃ WB, outdoor temperature (heating): 7℃ DB/6℃ WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

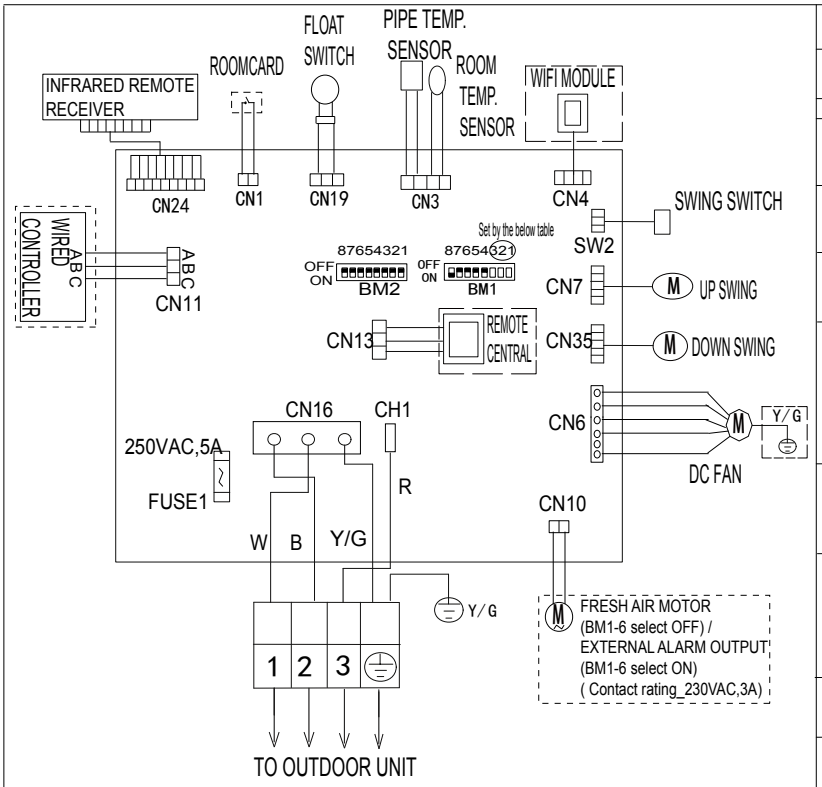
| Item\Model | | | | AF42S2SD1FA | |
|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating |
| Capacity | | | W | 4200 | 4700 |
| Sensible heat ratio | | | W | 0.71 | / |
| Dehumidifying capacity | | | 10-³xm³/h | 1.8 | |
| indoor unit | power supply | | | 1PH, 220-240V~, 50/60Hz | |
| | Fan | Type × Number | —— | centrifugal*1 | |
| | | Speed (H-M-L) | r/min | 800/750/670/600/550 | |
| | | Fan motor output/ input power | W | 30/40 | |
| | | Air-flows (H/M/L) | m³/h | 580/530/480/430/380 | |
| | Heat exchanger | Type / Diameter | mm | inner grooved pipe/ ϕ 7.0 | |
| | | Row | —— | 2 | |
| | | Total area | m² | 0.193 | |
| | | Temp.scope | °C | 2.0-7.0 | |
| | Dimension (LxWxH) | External | mmxmmxmm | 700/210/600 | |
| | | Package | mmxmmxmm | 783/303/695 | |
| | Drainage pipe (material,I.D/O.D) | | mm | PVC 20/26 | |
| | Control type (Remote/Wired) | | | Remote YR-HQS01(S) or Wired YR-E17(O) | |
| | Fresh air hole dimension | | mm | / | |
| | Electricity Heater | | kW | none | |
| | Noise level (H-M-L) | Sound power level | dB (A) | 58 | |
| | | Sound pressure level | dB (A) | 49/46/43/41 | |
| | weight (Net/Shipping) | | kg/kg | 16.5/18.5 | |
| Piping | Refrigerant | Type | | R32 | |
| | Pipe | Liquid | mm | Φ6.35 (1/4) | |
| | | Gas | mm | Φ9.52 (3/8) | |
| | Connecting method | | | Flared | |

Norminal condition: indoor temperature (cooling): 27℃ DB/19℃ WB, indoor temperature (heating): 20℃ DB
Outdoor temperature (cooling): 35℃ DB/24℃ WB, outdoor temperature (heating): 7℃ DB/6℃ WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter.

## 6.2 Dimension



## 6.3 Wiring diagram




| BM1-1 | BM1-2 | BM1-3 | BTU | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | 9000 | AF25S2SD1FA | | | | | | | |
| ON | OFF | OFF | 12000 | AF35S2SD1FA | | | | | | | |
| OFF | ON | OFF | 18000 | AF42S2SD1FA | | | | | | | |
| ON | ON | OFF | 24000 | | | | | | | | |
| OFF | OFF | ON | 28000 | | | | | | | | |
| ON | OFF | ON | 36000 | BM1-4 | BM1-5 | Room card | | | | | |
| OFF | ON | ON | 48000 | ON | OFF | Available | BM1-6 | BM1-7 | BM1-8 | TYPE DEFINE | |
| ON | ON | ON | 60000 | OFF | OFF | Unavailable | OFF | OFF | ON | Floor standing | |

NOTE 1.DASHED PART ARE OPTIONAL.
2. USER SHOULD NOT TO SET BM1 AND BM2.

R:RED
B:BLACK
W:WHITE
Y/G:YELLOW/GREEN

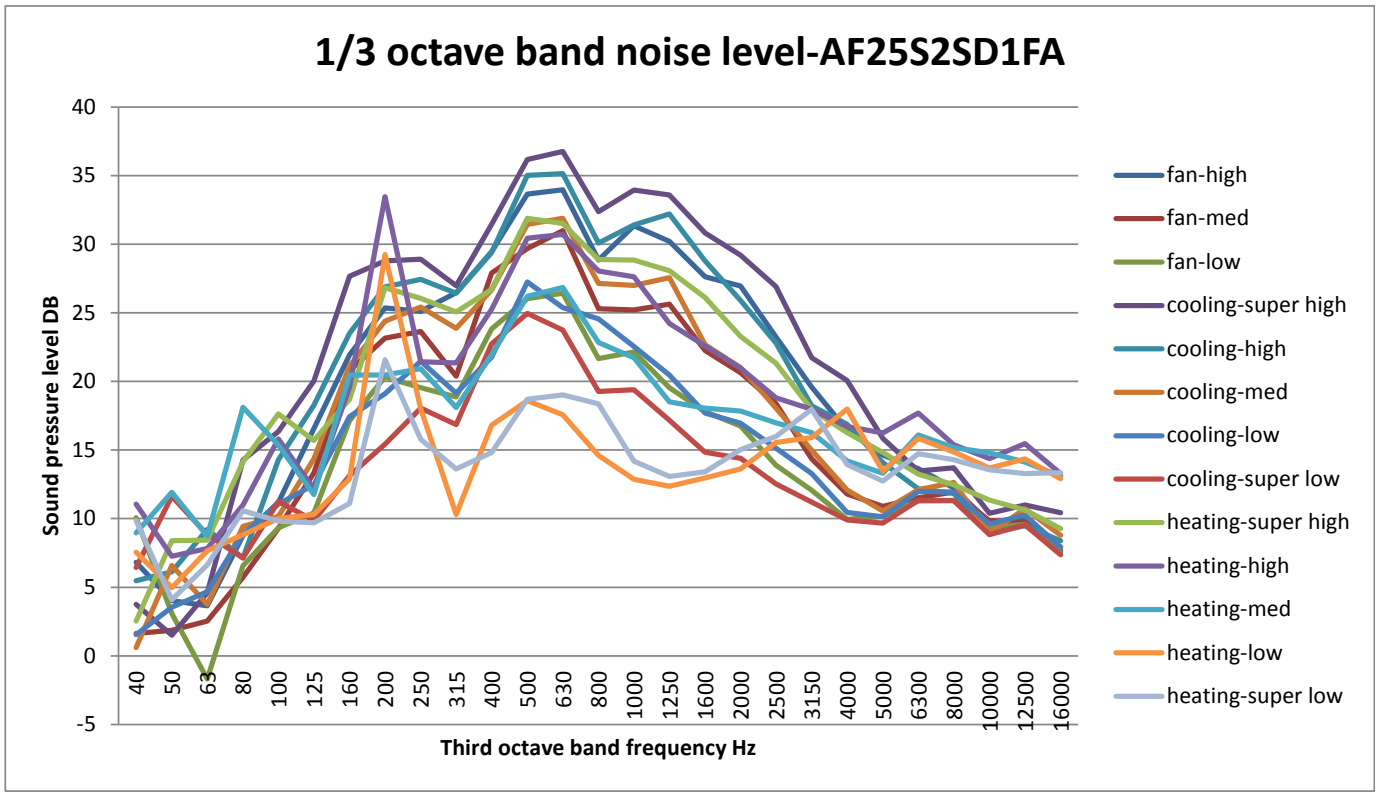
## INDOOR UNIT TROUBLE SHOOTING

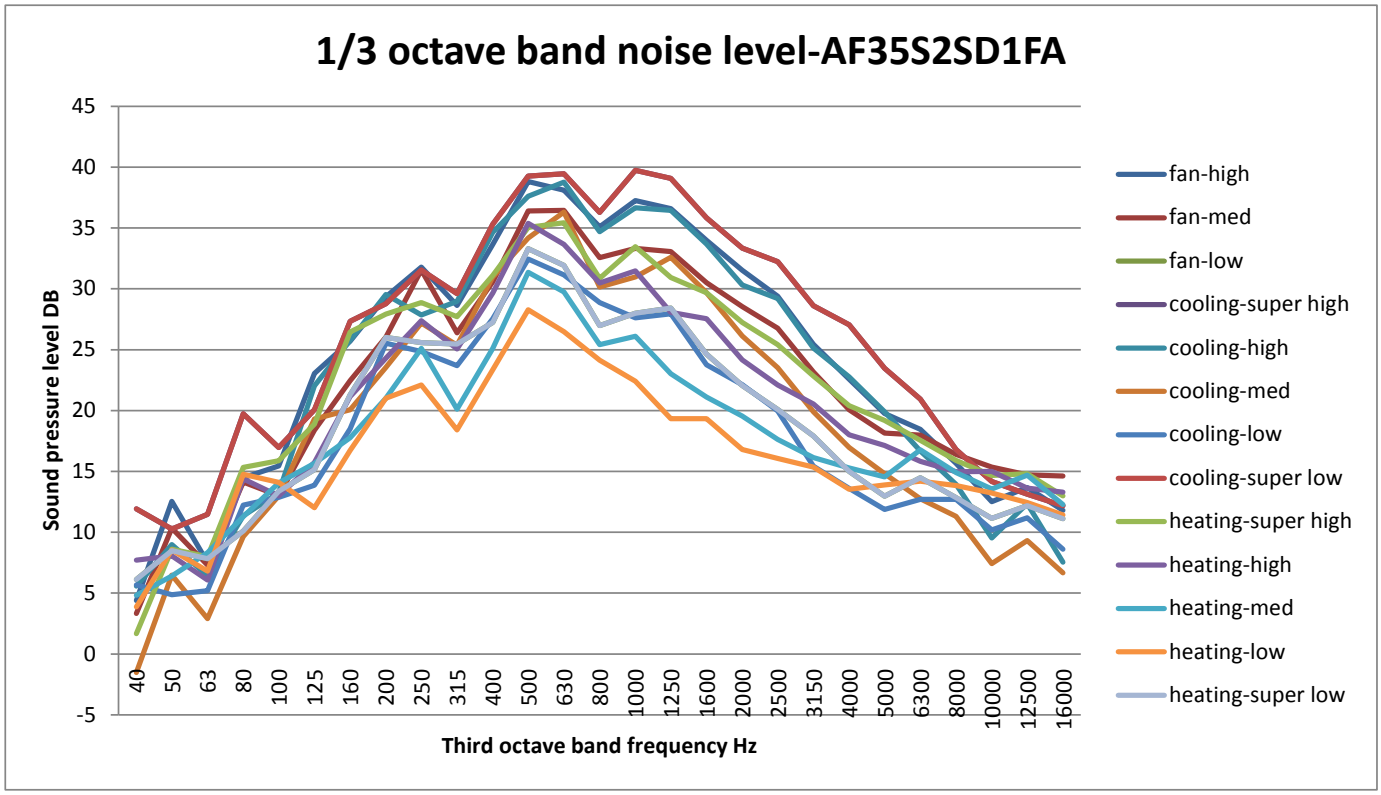
| LED flash times of indoor PCB | | Malfunction display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED6 | LED1 | | | |
| 0 | 1 | E1 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 2 | E2 | Malfunction of indoor unit piping temperature sensor | Sensor disconected, or broken,or at wrong position,or short circuit |
| 0 | 4 | E4 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong programmed,or PCB broken |
| 0 | 7 | E7 | Abnormal communication between indoor and outdoor units | Wrong connection,or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB or slave unit malfunction in MAXI system |
| 0 | 8 | E8 | Abnormal communication between wired controller and indoor unit | Wrong connection or wired controller broken,or PCB faulty |
| 0 | 12 | E10 | Malfunction of drain system | Pump motor disconnected or at wrong position,or the float switch,disconnected, or at wrong position,or the short circuit bridge disconnected |
| 0 | 13 | C1 | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | E14 | Indoor unit DC fan motor abnormal | DC Fan motor disconnected or DC Fan broken or circuit broken |

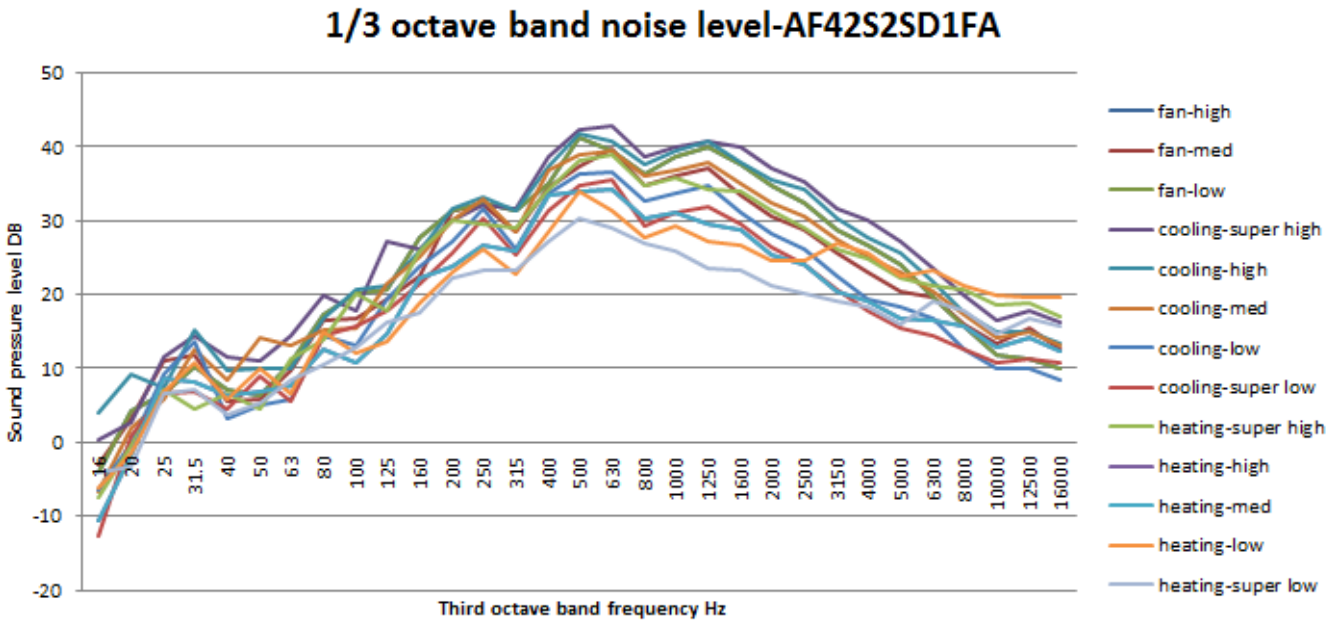
Note:
1.The outdoor failure can also be indicated by the indoor unit,the checking method as follows: LED6 flash times stands for tens digit,and LED1 flash times stands for units digit, use this bidigitate figure minus 20,then will get the outdoor error code.For example,if the outdoor error code is 15,LED6 will flash 3 times firstly,two seconds later,LED1 will flash 5 times , and four seconds later the process will repeat again.
2.LED6 is a green one on the indoor PCB,LED1 is a yellow one.
3.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

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## 6.4 Sound pressure level

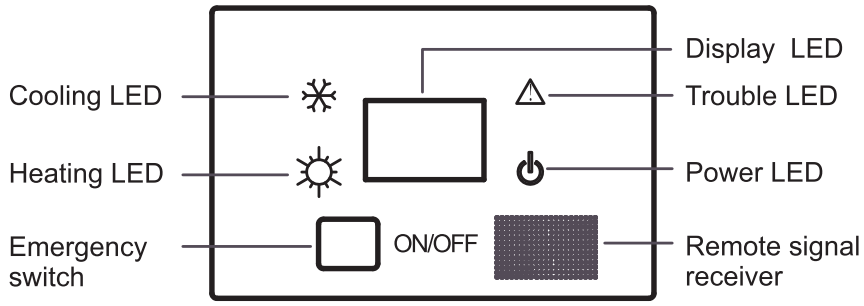



1/3 octave band noise level-AF42S2SD1FA
Sound pressure level DB
50
40
30
20
10
0
-10
-20
16
20
25
31.5
40
50
63
80
100
125
160
200
250
315
400
500
630
800
1000
1250
1600
2000
2500
3150
4000
5000
6300
8000
10000
12500
16000
Third octave band frequency Hz
fan-high
fan-med
fan-low
cooling-super high
cooling-high
cooling-med
cooling-low
cooling-super low
heating-super high
heating-high
heating-med
heating-low
heating-super low

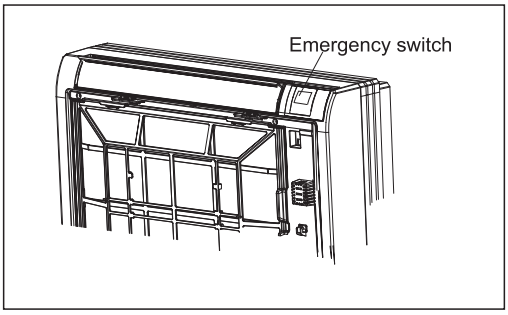
## 6.5 Installation

# Special functions and instructions




### Emergency operation of indoor unit

- When the remote controller is lost or damaged, the emergency switch can be operated under the panel. (as shown in the figure).
- In the OFF state, pressing the emergency switch can turn on automatic operation. Air conditioning automatically selects
- operation mode according to indoor temperature (cooling or heating).
  However, temperature setting and wind speed can not be changed. In the ON state, press this button to stop the air conditioner.



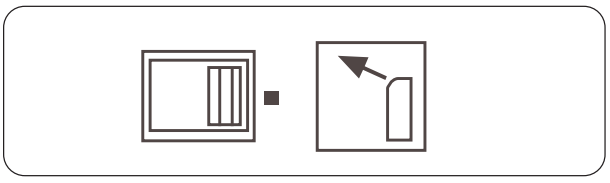

### Indoor air supply control

**CAUTION**

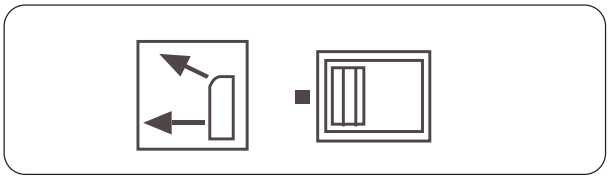
Before opening the front frille, be sure to stop the operation and tum the breaker OFF.

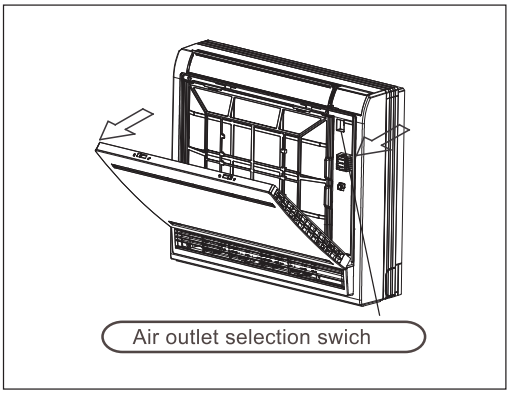
Do not touch the metal parts on the inside of the indoor unit, as it may result in injury.

- Regardless of the operating mode or situation, air blows from the upper air outlet.
- Use this swich when you do not want air coming out of lower air outlet.(While sleeping etc..)



- Air conditioner automatically decides the appropriate blowing pattern depending on the operating mode and situation.
  During Cool/Dry and Fan mode, so that cold air does not come
- into direct contact with people, air is blown upper air outlet.





# Installation Procedure

**CAUTIONS:**

To ensure proper installation, read "Cautions" carefully before working. After installation, start the unit correctly and show customers how to operate and maintain the unit.

**Meanings of Warning and Cautions:**

⚠ **WARNING:** Serious injury or even death might happen, if it is not observed.

⚠ **CAUTION:** Injury to people of damages to machine might happen, if it is not observed.

⚠ **WARNING:**

- Installation shall be done by professional people, don't install unit by yourself. Incorrect installation will cause water leakage, electric shock or fire.
- Install unit as per the Manual. Incorrect installation will cause water leakage, electric shock or fire accident.
- Be sure to use specified accessaries and parts. Otherwise, water leakage, electric shock, fire accident or unit falling down may happen.
- Unit should be placed on a place strong enough to hold the unit. Or, unit will fall down causing injuries.
- When install the unit, take in consideration of storms, typhoom, earthquake. Incorrect installation may cause unit to fall down.
- All electric work shall be done by experienced people as per eocal code, regulations and this Manual.
- Use exclusive wire for the unit. Incorrect installation or undersized electric wire may cause electric shock or fire accident.
- All the wires and circuit shall be safe. Use exclusive wire firmly fixed. Be sure that external force will not affect terminal bolck and electric wire. Poor contact and installation may cause fire accident.
- Arrange wire correctly when connectin indoor and outdoor power supply. Fix terminal cover firmly to avoid overheat, electric shock or even fire accident.
- In case retrigerant leakage occurred during unit installation, keep a good ventilation in the room.
- Poisonous gas will occur when meet with fire.
- Check the unit upon installation. Be sure there is no leakage. Refrigerant will induce poisonous gas when meet heat source as heater, oven, etc.
- Cut power supply before touching terminal bolck.

⚠ **CAUTION:**

- Unit shall be grounded. But grounding shall not be connected to gas pipe water pipe, telephone line. Poor grounding will cause electric shock.
- Be sure to install a leakage breaker to avoid electric shock.
- Arrange water drainage according to this Manual. Cover pipe with insulation materials in case dew may occur. Unproper installation of water drainage will cause water leakage and wer your furniture.
- To maintain good picture or reduce noise, keep at least 1 m from T.V. radio, when install indoor and outdoor unit, connecting wire and power line. (If the radio wave is relatively strong, 1 m is not enough to reduce noise).
- Don't install unit in following places:
  (a) Oil mist or oil gas exists, such as kitchen, or, plastic parts may got aged, or water leakage.
  (b) Where there is corrosive gas. Copper tube and welded part may be damaged due to corrosion, causing leakage.
  (c) Where there is strong radiation. This will affect unit's control system, causing malfunction of the unit
  (d) Where flamable gas, dirt, and volatile matter (thinner, gasoline) exist, These matter might cause fire accident.
- Refer to paper pattern when installing unit.



Earthing

**Cautions for the installation personnel**

Don't fail to show customers how to operate unit.

# Installation Procedure

❶ **BEFORE INSTALLATION** <Don't discard any accessories until comp>

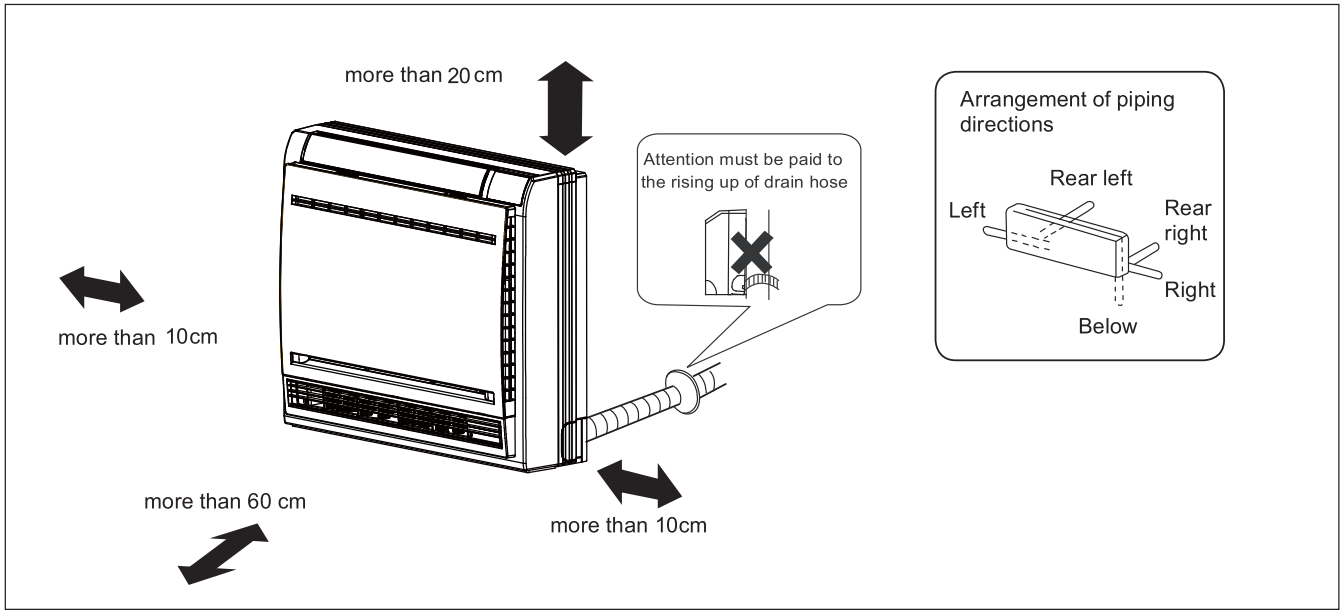
- Determine the way to carry unit to installation place.
- Don't remove packing until unit reaches installation place.
- If unpacking is unkavoidable, protect unit properly.

❷ **SELECTION OF INSTALLATION PLACE**

(1) Installation place shall meet the following and agreed by customers:

- Place where proper air flow can be ensured.
- No block to air flow.
- Water drainage is smpoth.
- Place strong enough to support unit weight.
- Place where inclination is not evident on ceiling.
- Enough space for mainenance.
- Indoor and outdoor unit piping length is within limit. (Refer to Installation Manual for outdoor unit.)
- Indoor and outdoor unit, power cable, inter unit cable are at least 1 m away fromT.V. radop. This is helpful to avoid picture disturbance and noise. (Even if 1 m iskept, noise can still appear if radio wave is strong)

❸ Drawing for the installation of indoor units

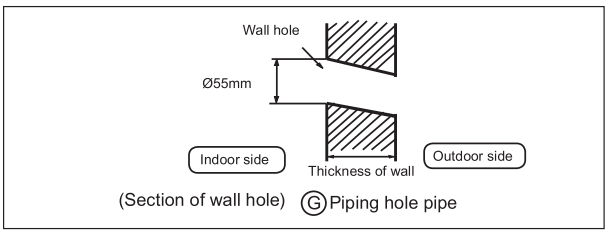


# Installation Procedure

## Indoor Unit Installation

(1)Making a Hole on the Wall and Fitting the Piping Hole Cover

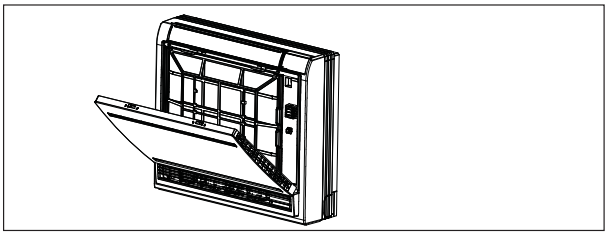
- Make a hole of 55mm in diameter, slightly descending to outside the wall.
- Install piping hole cover and seal it off with putty after installation.



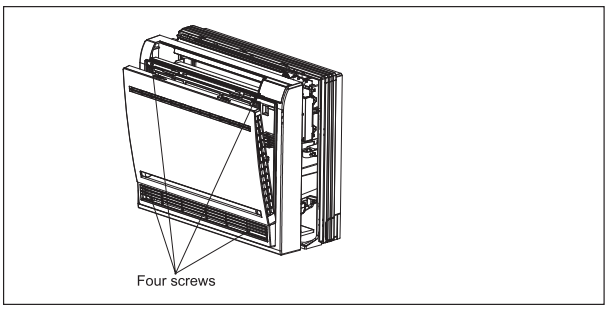

(2)Installation of the Indoor Unit

### Removal of Front Grille

- Hole the front panel by the tabs on the both sides and lift it until it stops with a click.



- Loosen the marked four screws and open the grille.




### Drawing of pipe

[Rear piping]

- Draw pipes and the drain hose, then fasten them with the adhesive tape.

[Left-Left-rear piping]

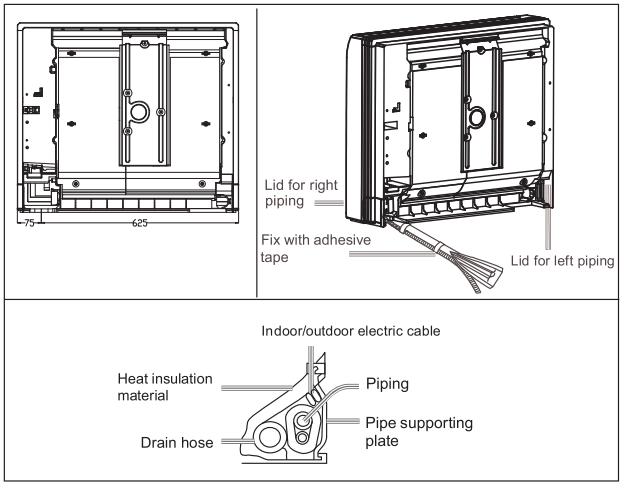
- In case of left side piping, cut away, with a nipper, the lid for left piping.
- In case of left-rear piping, bend the pipes according to the piping direction to the mark of hole for left-rear piping which is marked on heat insulation materials.

1.Insert the drain hose into the dent of heat insulation materials of indoor unitl.

2.Insert the indoor/outdoor electric cable from backside of indoor unit, and pull it out on the front side, then connect them.

3.Coat the flaring seal face with refrigerant oil and connect pipes.

Cover the connection part with heat insulaiton materials closely, and make sure fixing with adhesive tape.




- Indoor/outdoor electric cable and drain hose must be hound with efrigerant piping by protecting tape.

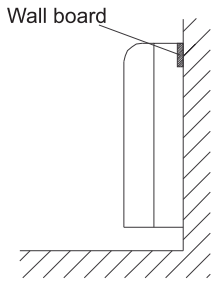
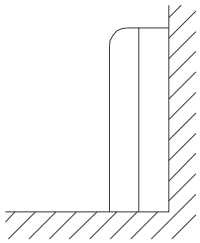
[Other direction piping]

- Cut away, with a nipper, the lid for piping according to the piping direction and then bend the pipe according to the position of wall hole, When bending,be careful not to crash pipes.
- Connect beforehand the indoor/outdoor electric cable, and then pull out the connected to the heat insulation of connecting part specially.

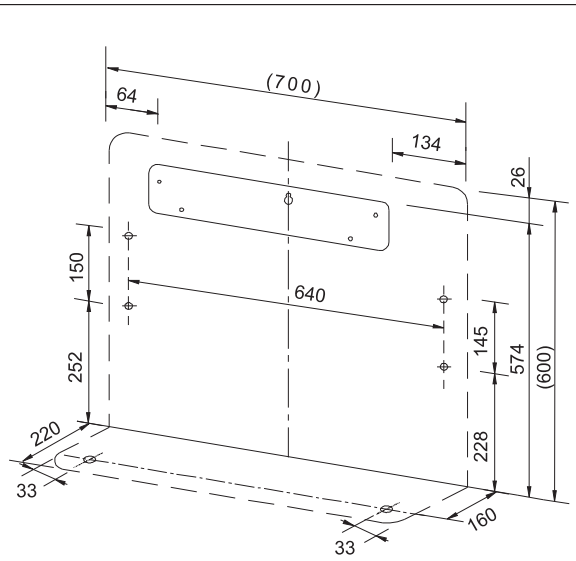
# Installation Procedure

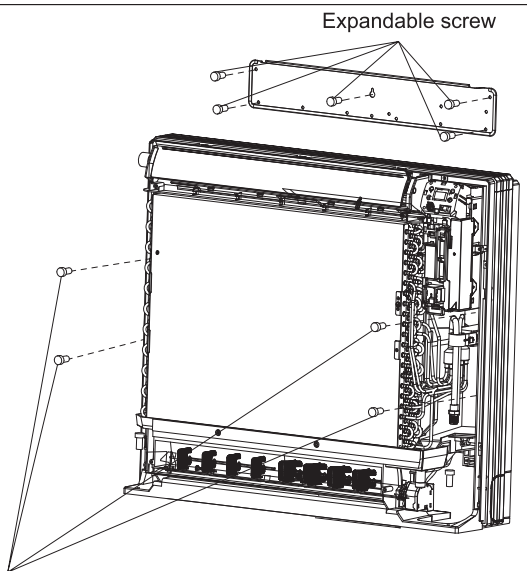
## Fixing the indoor unit body

**Indoor installation can be done in any of the following two ways:**

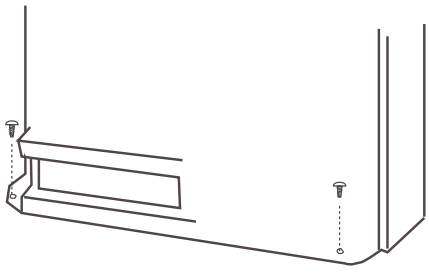
| Hanging wall | Console mode |
| --- | --- |
|   |  |

•Fix the wall board,then use four screws to fix the unit on the wall. As the figure shown.




• Remove the front panel, then use two fastening screws to fix the unit on the floor. As the figure shown.

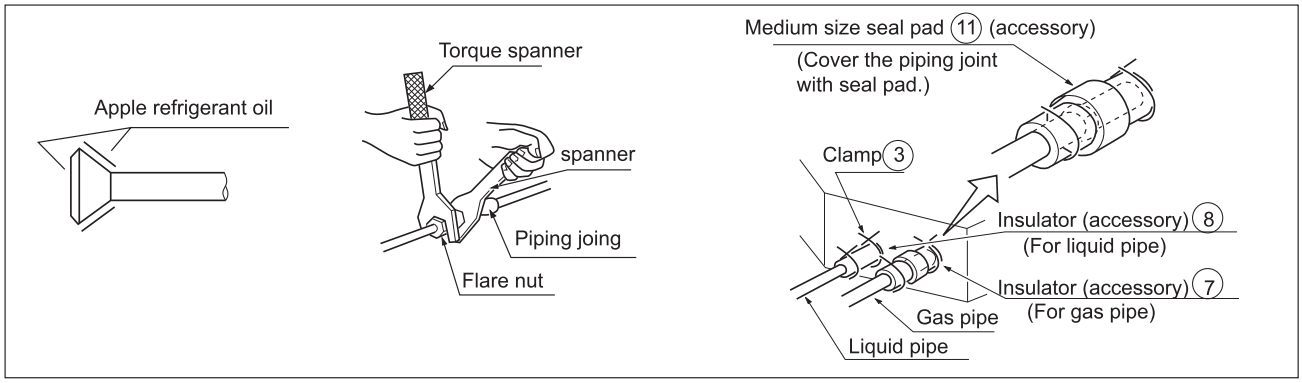


• Once refrigerant piping and drain piping connections are complete, fill the gap of the through hole with putty. A
the front panel and front grille in their orginal positions once all connections are complete.

# Installation Procedure

## ❺ REFRIGERANT PIPING (As for outdoor piping, please refer to installation Manual of outdoor unit.)

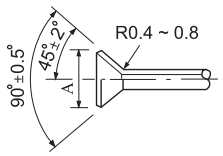
- Outdoor is precharged with refrigerant.
- Be sure to see the Fig.1, when connecting and removing piping from unit.
- For the size of the flare nut, please refer to Table 1.
- Apply refrigerant oil at both inside and outsid of flare nut. Tighten it band tight 3-4 turns then tighten it.
- Use torque specified in Table 1. (Too much force may damage flare nut, causing gas leakage).
- Check piping joints for gas leakage. Insulate piping as shown in Fig. below.
- Cover joint of gas piping and insulator ⑦ with seal.




**Pipe size**

| Model | Liquid side | Gas side |
|---|---|---|
| AF25S2SD1FA<br>AF35S2SD1FA<br>AF42S2SD1FA | Ø6.35mm | Ø9.52mm |

**Table 1**

| Pipe size | Tighten torque | A(mm) | Flare shape |
|---|---|---|---|
| Φ6.35 | 1420~1720N.cm (144~176kgf.cm) | 8.3~8.7 |  |
| Φ9.52 | 3270~3990N.cm (333~407kgf.cm) | 12.0~12.4 | |
| Φ12.7 | 4950~6030N.cm (490~500kgf.cm) | 12.4~16.6 | |
| Φ15.88 | 6180~7540N.cm (630~770kgf.cm) | 18.6~19.0 | |
| Φ19.05 | 9720~11860 N.cm (990~1210 kgf.cm) | 22.9~23.3 | |

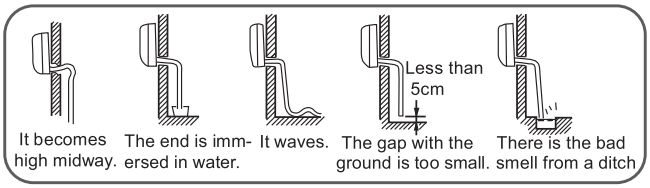


## ❻ INSTALLATION OF WATER DRAINAGE PIPE

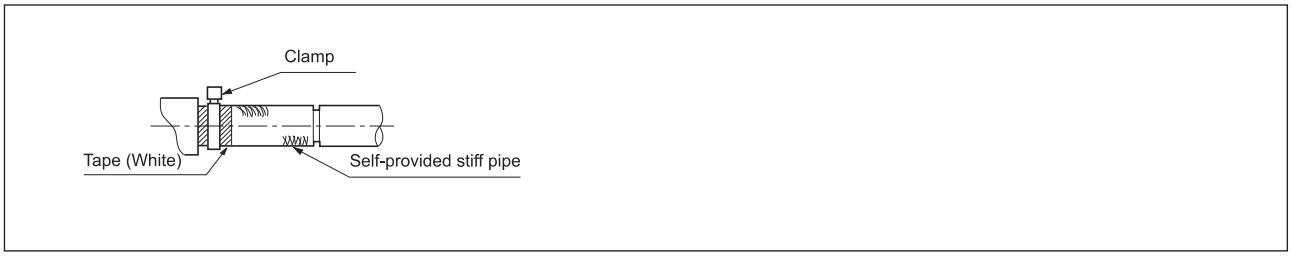
(1) Install water drainage pipe

- Pipe dia, shall be equal or larger than that of unit piping.(pipe of polyethylene; size: 20mm; O.D:26mm)
- Drain pipe should be short, with a downward slope at least 1/100 to prevent air bag from happening.
- If downward slope can't be made, take other measures to lift it up.

- Please install the drain hose so as to be downward slope without fail.
- Please don't do the drainage as shown below.
- Please pour water in the drain pan of the indoor unit, and confirm that drainage is carried out surely to outdoor.
- In case that the attached drain hose is in a room, please apply heat insulation to it without fail.




- Use the self-provided stiff pipe and clamp with unit. Insert water pipe into water plug until it reaches the white tape.
- Insulate drain hose in the room.

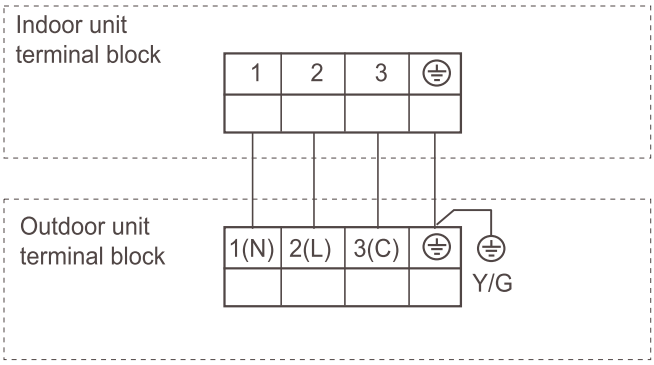


# Installation Procedure

**Wiring connection**

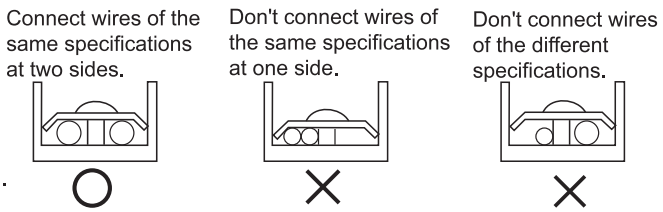
Make wiring to supply power to the outdoor unit, so that the power for the indoor unit is supplied by terminals.
The specification of power cable is H05RN-F3G 4.0mm $^2$
The specification of cable between indoor unit to outdoor unit is H05RN-F4G 2.5mm $^2$

AF25S2SD1FA
AF35S2SD1FA
AF42S2SD1FA




**⚠ WARNING:**

Obscrve the following when connecting power supply terminal block:
Don't connect wires of different specifications to the same terminal block.
(Loose wire may cause overheating of circuit)
Connect wires of same specifications as shown in right Fig.




## ❽ WIRING EXAMPLE

As for outdoor unit circuit, please see Installation Manual of outdoor unit.
Note: All electric wires have their own poles, poles must match that on terminal block.

**Pay special care to the following and check after installation**

| Item to the checked | Unproper installation may cause | Check |
|---|---|---|
| Is indoor unit firmly installed? | Unit might fall down, make vibration or noise. | |
| Is gas leakage check performed? | This may lead to gas shortage. | |
| Is unit properly insulated? | Dew or water drop may occur. | |
| Is water drainage smooth? | Dew or water drop may occur. | |
| Is power voltage meet that stipulated on the nameplate? | Problem may occur or parts got burned. | |
| Is wiring and piping correctly arranged? | Problem may occur or parts got burned. | |
| Is unit safely grounded? | There might be a danger of electric shock. | |
| Is wire size correct? | Problem may occur or parts got burned. | |
| Are there any obstacles on air inlet and outlet grill of indoor and outdoor unit? | This may cause poor cooling. | |
| Is record made for piping length and refrigerant charging amount? | It is hard to control refrigerant charging amount. | |

**Attention:** after finishing installation,confirm no refrigerant leakage.

# 7 . Indoor Units--Cabinet

## 7.1 Specification

| Item | | | Model | | AP140S2SK1FA/1U140S2SN1FA | |
|---|---|---|---|---|---|---|
| Function | | | | | cooling | heating |
| Capacity | | | | KW | 13.4(3.5-14) | 15(4.0-15.5) |
| Sensible heat ratio | | | | | 0.76 | |
| Total power input | | | | KW | 5.83(1.0-6.5) | 5.45(1.0-6.5) |
| Max. power input | | | | W | 6500 | 6500 |
| EER or COP | | | | W/W | 2.3(A) | 2.75(A) |
| Dehumidifying capacity | | | | $10^{-3}$×m³/h | 3.8 | |
| Power cable | | | | | 2.5 mm2 | |
| Power source | | | | N, V, Hz | 1ph, 220-240, 50/60 | |
| Running /Max.Running current | | | | A / A | 25.6/30 | 24.1/30 |
| Start Current | | | | A | 2 | |
| Circuit breaker | | | | A | 5 | |
| Indoor unit | Unit model (color) | | | | AP140S2SK1FA/INDOOR UNIT | |
| | Fan | Type × Number | | | CENTRIFUGALX1 | |
| | | Speed(H-M-L) | | r/min | 520/450/380 | |
| | | Fan motor output/ input power | | W | 130/180 | |
| | | Air-flow(H-M-L) | | m³/h | 1850/1500/1350 | |
| | Heat exchanger | Type / Diameter | | mm | inner grooved pipe/φ7.0 | |
| | | Row | | | 2 | |
| | | Total Area | | m² | / | |
| | Dimension | External | (L×W×H) | mm×mm×mm | 600*350*1850 | |
| | | Package | (L×W×H) | mm×mm×mm | 680*423*2022 | |
| | Drainage pipe (material , I.D./O.D.) | | | mm | / | |
| | Controller | | | Wired | / | |
| | (O-Optional,S-Standard) | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | | mm | NONE | |
| | Electricity Heater | | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | | dB(A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | | dB(A) | 52/49/46 | |
| | Pipe | Liquid Pipe | mm | | 9.52 | |
| | | Gas Pipe | mm | | 15.88 | |
| | | Connecting Method | | | flared | |
| | Weight (Net / Shipping) | | | kg / kg | 50/61 | |

| Item | | Model | | | AP140S2SK1FA/1U140S2SN1FA | | |
|---|---|---|---|---|---|---|---|
| PIPING | | Refrigerant | Type / Charge | | g | R32/2300 | |
| | | | Recharge quantity | | g/m | 45 | |
| | | Pipe | Liquid | | mm | 9.52 | |
| | | | Gas | | mm | 15.88 | |
| | | Between I.D&O.D | MAX.Drop | | m | 30 | |
| | | | MAX.Piping length | | m | 70 | |
| cooling | | Pdesignc(kW) | 13.4 | SEER/ CLASS | 5.6/A+ | QCE(Annual electricity consumption for cooling)kWh | 837 |
| heating | Average | Pdesignh(-10°C) | 8.5kW | | 3.93/A | QHE(Annual electricity consumption for heating)kWh | 3018 |
| | Warmer | Pdesignh(2°C) | 4.59kW | | 4.84/A++ | | 1327 |
| | Colder | Pdesignh(-22°C) | / | | / | | / |
| Tdesignh:-10°C | | | Tbivalent:-10°C | TOL:-10°C | | Elbu:0 | |
| Max. cooling condition | | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature:27°C/-°C | |
| | | | Outdoor temperature:46°C/-°C | | | Outdoor temperature:24°C/18°C | |

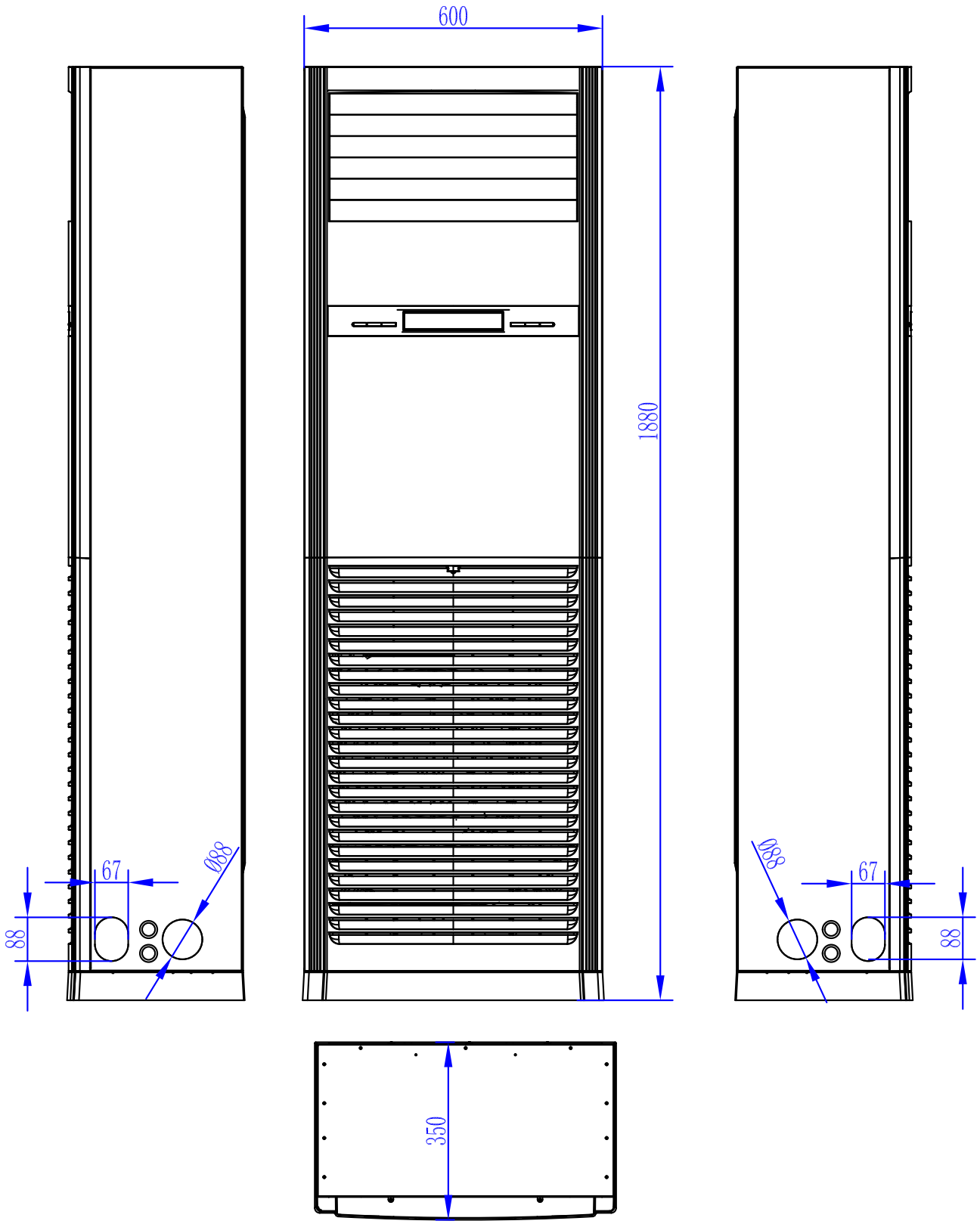
Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | | Model | | AP140S2SK1FA/1U140S2SN1FB | |
|---|---|---|---|---|---|---|---|
| Function | | | | | | cooling | heating |
| Capacity | | | | | KW | 13.4（3.5-14） | 15(4.0-15.5) |
| Sensible heat ratio | | | | | | 0.76 | |
| Total power input | | | | | KW | 5.40(1.0-6.5) | 5.43(1.0-6.5) |
| Max. power input | | | | | W | 6500 | 6500 |
| EER or COP | | | | | W/W | 2.48(A) | 2.76(A) |
| Dehumidifying capacity | | | | | $10^{-3}$×m³/h | 3.83 | |
| Power cable | | | | | | 2.5 mm2 | |
| Power source | | | | | N, V, Hz | 1ph, 220-240, 50/60 | |
| Running /Max.Running current | | | | | A / A | 7.9/10 | 8.0/10 |
| Start Current | | | | | A | 2 | |
| Circuit breaker | | | | | A | 5 | |
| Indoor unit | Unit model (color) | | | | | AP140S2SK1FA/INDOOR UNIT | |
| | Fan | Type × Number | | | | CENTRIFUGALX1 | |
| | | Speed(H-M-L) | | | r/min | 520/450/380 | |
| | | Fan motor output/ input power | | | W | 130/180 | |
| | | Air-flow(H-M-L) | | | m³/h | 1850/1500/1350 | |
| | Heat exchanger | Type / Diameter | | | mm | inner grooved pipe/φ7.0 | |
| | | Row | | | | 2 | |
| | | Total Area | | | m² | / | |
| | Dimension | External | (L×W×H) | | mm×mm×mm | 600*350*1850 | |
| | | Package | (L×W×H) | | mm×mm×mm | 680*423*2022 | |
| | Drainage pipe (material , I.D./O.D.) | | | | mm | / | |
| | Controller | | | | Wired | / | |
| | (O-Optional,S-Standard) | | | | Infrared | YR-HQS01(O) | |
| | Fresh air hole dimension | | | | mm | NONE | |
| | Electricity Heater | | | | kW | NONE | |
| | Sound power Noise level (H-M-L) | | | | dB(A) | 66 | |
| | Sound pressure Noise level (H-M-L) | | | | dB(A) | 52/49/46 | |
| | Pipe | Liquid Pipe | mm | | | 9.52 | |
| | | Gas Pipe | mm | | | 15.88 | |
| | | Connecting Method | | | | flared | |
| | Weight (Net / Shipping) | | | | kg / kg | 50/61 | |

| Item | | | Model | | | AP140S2SK1FA/1U140S2SN1FB | |
|---|---|---|---|---|---|---|---|
| PIPING | | Refrigerant | Type / Charge | | g | R32/2300 | |
| | | | Recharge quantity | | g/m | 45 | |
| | | Pipe | Liquid | | mm | 9.52 | |
| | | | Gas | | mm | 15.88 | |
| | | Between I.D&O.D | MAX.Drop | | m | 30 | |
| | | | MAX.Piping length | | m | 70 | |
| cooling | | Pdesignc(kW) | 13.4 | SEER/ CLASS | 5.6/A+ | QCE(Annual electricity consumption for cooling)kWh | 837 |
| heating | Average | Pdesignh(-10°C) | 8.5kW | | 3.93/A | QHE(Annual electricity consumption for heating)kWh | 3018 |
| | Warmer | Pdesignh(2°C) | 4.59kW | | 4.84/A++ | | 1327 |
| | Colder | Pdesignh(-22°C) | / | | / | | / |
| Tdesignh:-10°C | | | Tbivalent:-10°C | TOL:-10°C | | Elbu:0 | |
| Max. cooling condition | | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature:27°C/-°C | |
| | | | Outdoor temperature:46°C/-°C | | | Outdoor temperature:24°C/18°C | |

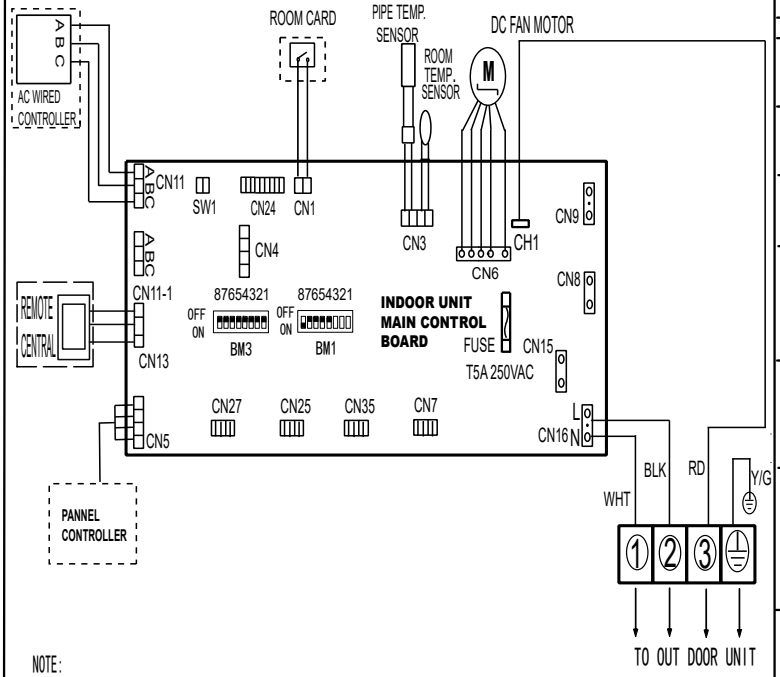
Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

## 7.2 Dimension



## 7.3 Wiring Diagram

**INDOOR UNIT WIRING DIAGRAM &TROUBLE SHOOTING** 0150541083




NOTE:
1. DASHED PARTS ARE OPTIONAL.
2. USER SHOULD NOT CHANGE THE DIP SWITCH BM1 AND BM3 WITHOUT GUIDANCE.

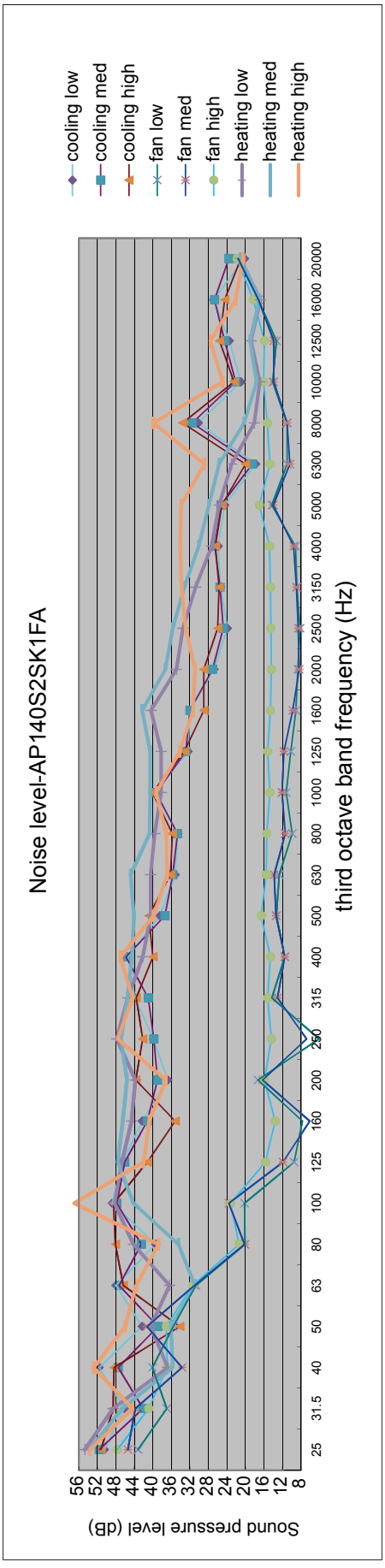
| SW1-1 | SW1-2 | SW1-3 | MODEL | BM1-4 | Room card | BM1-5 | Cooling Heating | BM1-6 | BM1-7 | BM1-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| ON | ON | ON | AP140S2SK1FA | OFF | Unavailable | OFF | Cooling & Heating | OFF | OFF | ON |

Y/G: YELLOW/GREEN
RD: RED WHT: WHITE
BLK: BLACK
DC: DIRECT-CURRENT
AC: ALTERNATING-CURRENT
TEMP.: TEMPERATURE

| LED flash times of indoor PCB | | display panel | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED6 | LED1 | | | |
| 0 | 1 | E1 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 2 | E2 | Malfunction of indoor unit piping temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 6 | E6 | Outdoor high pressure exceeds the setpoint | The pressure switch is damaged or bad control board |
| 0 | 7 | E7 | Over-voltage protection | The power supply voltage,or the control board is damaged |
| 0 | 8 | E8 | Abnormal communication between panel and indoor unit | Wrong connection or panel broken,or PCB faulty |
| 0 | 9 | E9 | Indoor and outdoor unit communication failure | Indoor or outdoor control board is damaged; or the communication wiring is damaged |
| 0 | 14 | EA | Indoor unit DC fan motor abnormal | DC Fan motor disconected，or DC Fan broken or circuit broken |
| 0 | / | FC | Indoor pipe temperature is too high | The compressor is not running or damaged |

Note:
1.The outdoor failure can also be indicated by the indoor unit,the checking method as follows: LED6 flash times stands for ten's place,and LED1 flash times stands for one's place, use this ten-digit number minus 20,then will get the outdoor error code.For example,if the outdoor error code is 15,LED6 will flash 3 times firstly,two seconds later,LED1 will flash 5 times , and four seconds later the process will repeat again.
2.LED6 is a green one on the indoor PCB,LED1 is a yellow one.
3.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

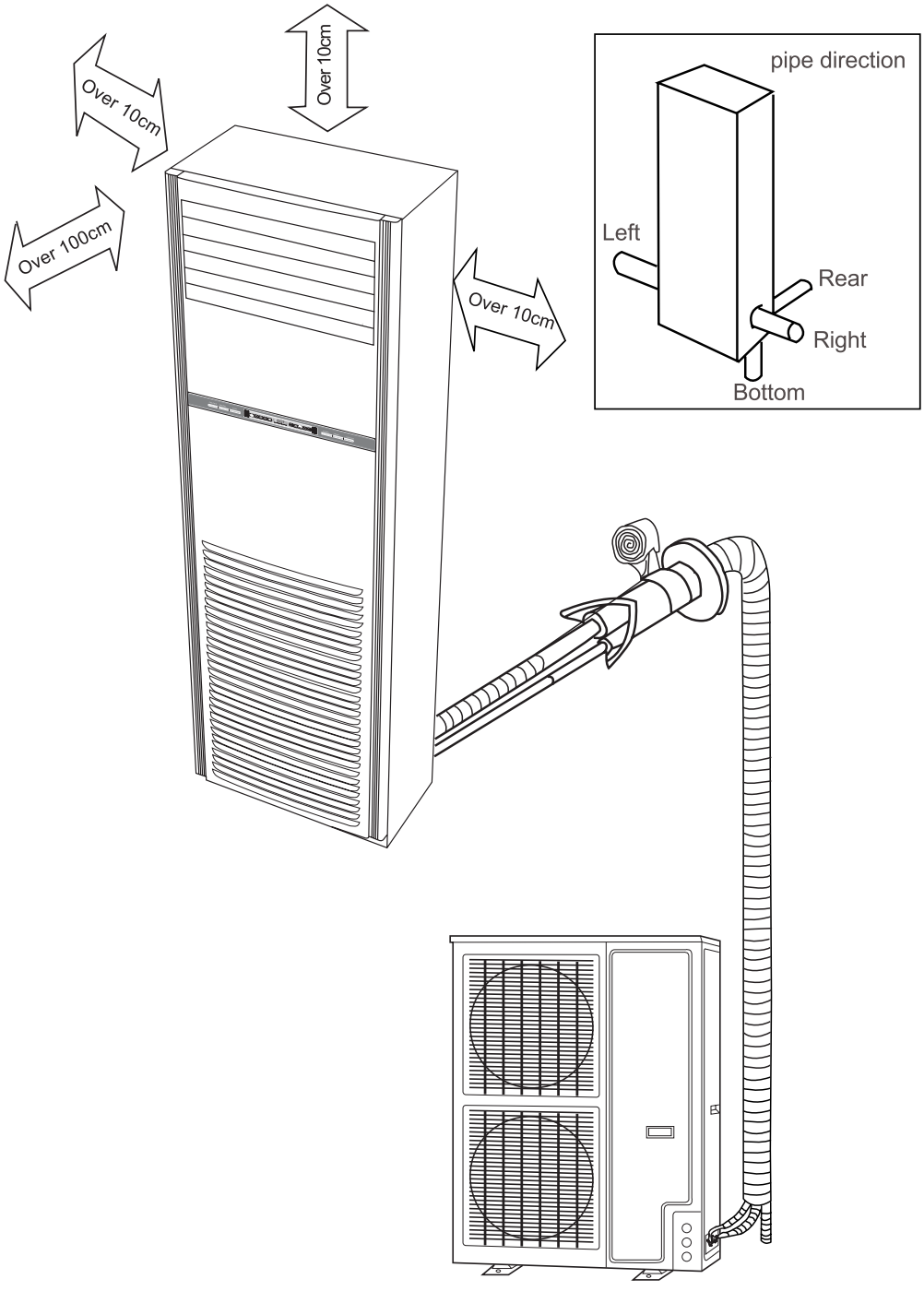
## 7.4 Sound Pressure Level



## 7.5 Installation

# Indoor & Outdoor Unit Connection

Installation figure please refers to AP60KS1ERA(S)



# Installation Procedure



**Tools necessary**

1. Screw driver
2. Hacksaw
3. 70mm dia. hole core drill
4. Spanner (dia. 22, 36mm)
5. Spanner (16, 18, 22, 36mm)
6. Pipe cutter
7. Flaring tool
8. Knife
9. Nipper
10. Gas leakage detector or soap water
11. Measuring tape
12. Reamer
13. Refrigerant oil

**Installation accessories**

Following parts shall be field supplied

| Part name |
|---|
| Adhesive tape |
| Pipe clip |
| Connecting hose |
| Insulation material |
| Putty |
| Drain hose |

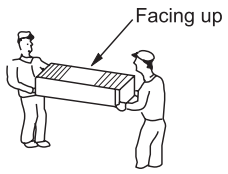
# Installation Procedure



**Before installation**

- Try to bring the packed unit to the installation place.
- When it is inevitable to unpack the unit, be careful not to damage the unit. Wrap it with nylon etc.
- After unpacking, be sure to put it with the front side of the unit facing up.
- When delivering, don't hold plastic parts like inlet and outlet grill etc.

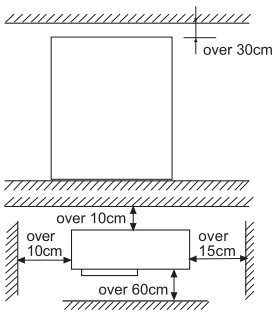
**Delivery**




**Installation of outdoor unit**

**Selection of outdoor unit installation place**

- Place strong enough to support the unit and will not cause vibration and noise.
- Place where discharged wind and noise doesn't cause a nuisance to the neighbors.
- Place where is less affected by rain or direct sunlight and is sufficiently ventilated, or to install a shield.
- Place with enough space for smooth air flow.




**Fixing of the outdoor unit**

- Fix outdoor unit using M10 bolt to concrete floor horizontally.
- If installed on the wall or on top of a roof, bracket should be fixed securely to resist earthquake or storms.
- Use rubber pad during installation against unit vibration.

# Installation Procedure



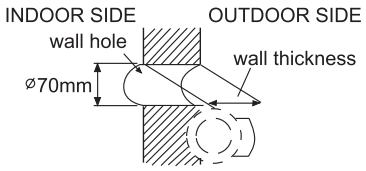
### Selection of indoor unit installation place

- Place where it is easy to route drainage pipe and outdoor piping.
- Place away from heat source and with less direct sunlight.
- Place where cool and warm air could be delivered evenly to every corner of the room.
- Place near power supply socket. Leave enough space around the unit (refer to installation drawings).

### Installation of indoor unit

1.Position of the wall hole

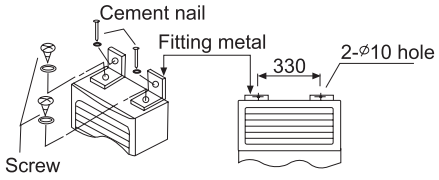
Wall hole should be decided according to installtion place and piping direction. (refer to installation drawings)




( Cross section of wall hole )

2.Making a wall hole

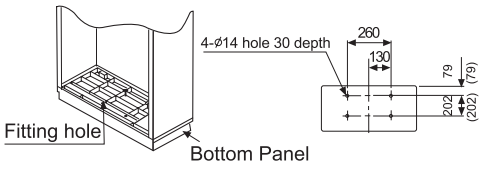
Drill a hole of 70mm dia. with a little slope towards outside. Install piping hole cover and seal it with putty after installation.

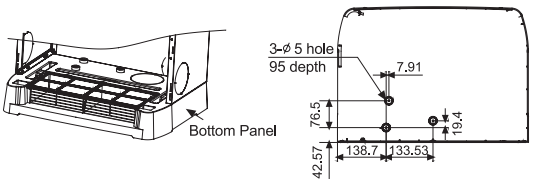



3.Fixing of indoor unit

With the unit set up vertically, fix the fitting metal to the unit with screws, then fix the fitting metal to the wall with cement nail and washer, as shown right:

Moreover, if wanting to fix the unit more firmly, you should fix the bottom panel to the ground with concrete bolts, as shown right:



# Installation Procedure



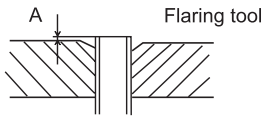
### Connecting method

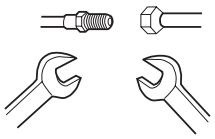
- Apply refrigerant oil at half union and flare nut.
- To bend a pipe, give the roundness as large as possible not to crash the pipe.
- When connecting pipe, hold the pipe centre to centre then screw nut on by hand, refer to Fig.
- Be careful not to let sundries, such as sands enter the pipe.

### Pipe cutting and flaring

- Be sure to carry out deburring after pipe cutting with a pipe cutter.
- Insert flaring tool to make a flare.

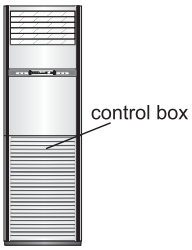
*Forced fastening without centering may damage the threads and cause a gas leakage.*

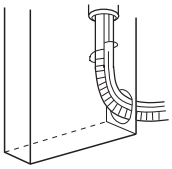


| | Pipe dia. | Dimension A | Fastening torque |
|---|---|---|---|
| Liquid pipe | ∅9.52mm (3/8") | 1.0 ~ 1.8(mm) | 32.7-39.9N.m |
| Gas pipe | ∅15.88mm(5/8") | 1.2 ~ 2.0(mm) | 61.8-75.4N.m |

| Correct | Incorrect | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| | Lean | Damaged flare | Crack | Partial | Too outside |



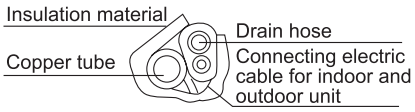



### Piping connection of indoor unit

**1.Arrangement of piping and drainage pipe**

- After opening inlet grill, you will see a control box as shown in the Fig. Remove the cover before wiring work.

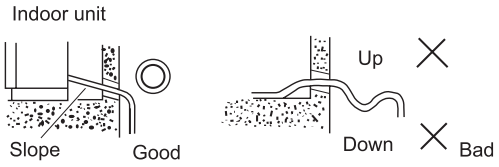
- Cut away, with a hammer or a saw, the lid for piping according to piping direction.




- According to the piping method, connect the piping on indoor unit with union of connecting pipe.
  Arrange the piping as per the wall hole and bind drain hose, connecting electric cable and piping together with polyethylene tape.
  Insert the bound piping, connecting electric cable and drain hose through wall hole to connect with outdoor unit.

**2.Arrangement of drain hose**

- Drain hose shall be placed in under place.
- There should be a slope when arrange drain hose. Avoid up and down waves in drain hose.
- If humidity is high, drain pipe( especially in room and indoor unit ) must be covered with insulation material.




### Piping connection of outdoor unit.

Connect the connecting pipe and inlet / outlet liquid pipe according to the piping method.

### Vacuumizing

Discharge the air out of the indoor unit and the refrigerant pipe by vacuumizing.

(1) Fasten all the nuts of the indoor and outdoor pipes to make these parts out of leakage.

(2) Under the condition of the complete close of the indoor and outdoor valve center (both liquid and gas side), dismount the service valve cap. Vacuumizing through the charge mouth of the service valve.

(3) After vacuumizing, fasten the service valve and dismount the cap of the big and small stop valve, then loosen the stop valve center completely and fasten the big and small stop valve.

# Installation Procedure



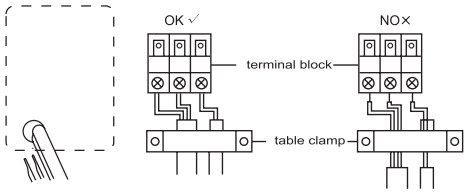
**Note:**

- Electrical wiring must be done by qualified person.
- The power supply connects from the outdoor unit.
- The connecting cable and power cable are self-provided.
- Use copper wire only.
- Air conditioner must use an exclusive line (over 30A)
- When installing air conditioner in a wet place, try to use a circuit breaker against current leakage.
- When installing in other places, use circuit breaker as far as possible.
- The breaker of the air conditioner should be all-pole switch; and the distance between its two contacts should be no less than 3 mm.
- Such means for disconnection must be incorporation in the fixed wiring

The parameter of connecting cable is H05RN-F 4G 2.5mm$^2$.
The parameter of the power cable should be over H07RN-F 5G 4.0mm$^2$

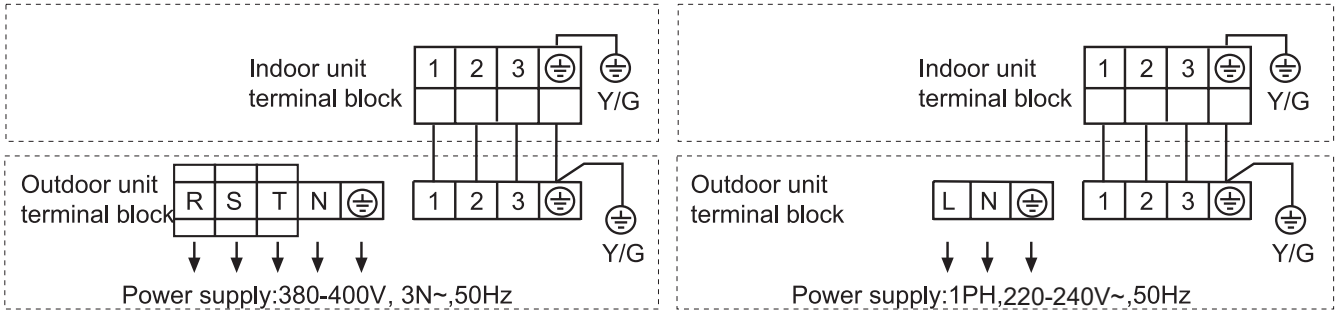
**Wiring of indoor unit**

- Insert the cable from outside the wall hole where piping already exist.
- Pull it out from front.
- Loosen terminal screws and insert cable end fully into terminal block, then tighten it.
- Pull the cable gently to make sure it is tight.
- Replace cover after wiring.




**Wiring of outdoor unit**

- Insert the cable from inside the wall hole where piping already exists.
- Pull it out from front.
- Loose terminal screw and insert cable end fully into terminal block, then tighten it.
- Pull the cable gently to make sure it is tight.
- Replace cover after wiring.




**Note:**

When connecting indoor and outdoor wire, check the number on indoor and outdoor terminal blocks. Incorrect wiring may damage air conditioner's controller or cause operation failure.

# 8 . Outdoor Units

## 8.1 Specification

| Item | | | Model | 1U71S2SG1FA | |
|---|---|---|---|---|---|
| Power cable | | | | H05RN-F 4G 6.0mm$^2$ | |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5mm$^2$ | |
| Power source | | | N, V, Hz | 1PH,220-230VAC,50/60HZ | |
| Start current | | | A | 3 | 3 |
| Outdoor unit | Unit model (color) | | | 1U71S2SG1FA (WHITE) | |
| | Compressor | Model / Manufacture | | SNB130FGYM2/SNB130FGYMC-L1 (MGC) | |
| | | Oil model | | FV50S | |
| | | Oil type | | PVE | |
| | | Oil charging | | 500CC | |
| | | Type | | Rotary | |
| | Fan | Type × Number | | axial×1 | |
| | | Speed | r/min | 950/830/750/700/500/420/300 | |
| | | Fan motor output/Input Power pow | W | 97/70 | |
| | | Air-flow(H-M-L) | m³/h | 3000 | |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.9 | |
| | | Row / Fin pitch | | 2/1.65 | |
| | Dimension | External (L*W*H) | mm×mm×mm | 860/308/730 | |
| | | Package (L*W*H) | mm×mm×mm | 995x420x815 | |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / | |
| | Refrigerant control method | | mm/mm | 1.8mmEEV+Φ3.0*Φ1.8*200mmCapillary | |
| | Defrosting | | | Auto | |
| | Volume of accumulator | | L | None | |
| | Sound power noise level (H-M-L) | | dB (A) | 70 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 57 | |
| | Type of four way valve | | | Shf-4-10a | |
| | Material of reduce noise | | | Felt | |
| | Crankcase heater power | | W | / | |
| | Weight (Net / Shipping) | | kg / kg | 49/52 | |
| Piping | Refrigerant | Type / Charge | g | R32/1300 | |
| | | Maximum pipe length without recharge refrigerant | m | 10 | |
| | | GWP | | 675 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting method | | | Flared | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |
| Working temp. | Cooling (Min-Max) | | °C | -10~46 | |
| | Heating (Min-Max) | | °C | -15~24 | |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | 1U71S2SR2FA |
|---|---|---|---|---|
| Power cable | | | | H05RN-F 3G 4.0mm$^2$ |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5mm$^2$ |
| Power source | | | N, V, Hz | 1PH~,220~240, 50/60Hz |
| Start current | | | A | 5A |
| Outdoor unit | Unit model (color) | | | 1U71S2SR2FA/OUTDOOR UNIT(WHITE) |
| | Compressor | Model / Manufacture | | SVB140FCAMC-L /MITSUBISHI/Guang Zhou |
| | | Oil model | | FW68S |
| | | Oil charging | | 500CC |
| | | Type | | Twin Rotary 1 |
| | Fan | Type × Number | | axial×1 |
| | | Speed | r/min | 800 |
| | | Fan motor output/Input Power pow | W | 90/130 |
| | | Air-flow(H-M-L) | m³/h | 3000 |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 |
| | | Row / Fin pitch | | 2/1.4 |
| | | Total area | | / |
| | Dimension | External （W×D×H） | mm×mm×mm | 890/353/697 |
| | | Package （W×D×H） | mm×mm×mm | 1046/460/780 |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 1.65MM |
| | Defrosting | | | Auto |
| | Volume of accumulator | | L | None |
| | Sound power noise level (H-M-L) | | dB (A) | 67 |
| | Sound pressure noise level (H-M-L) | | dB (A) | 54 |
| | Type of four way valve | | | HSU-22HC03/R2 |
| | Material of reduce noise | | | XPE |
| | Crankcase heater power | | W | / |
| | Weight (Net / Shipping) | | kg / kg | 48/53 |
| Piping | Refrigerant | Type / Charge | g | R32/1300 |
| | | Maximum pipe length without recharge refrigerant | m | 10 |
| | | Recharge quantity | g/m | 45 |
| | Pipe | Liquid | mm | Φ9.52 (3/8) |
| | | Gas | mm | Φ15.88 (5/8) |
| | Connecting method | | | Flared |
| | Between I.D &O.D | MAX.Drop | m | 30 |
| | | MAX.Piping length | m | 50 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | 1U90S2SS2FA |
|---|---|---|---|---|
| Power cable | | | | H05RN-F 3G 4.0mm2 |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5mm2 |
| Power source | | | N, V, Hz | 1PH~,220~240, 50/60Hz |
| Start current | | | A | 0.28 |
| Outdoor unit | Unit model (color) | | | 1U90S2SS2FA/OUTDOOR UNIT(WHITE) |
| | Compressor | Model / Manufacture | | SVB220F(AL) /MITSUBISHI/Guang Zhou |
| | | Oil model | | FW68S |
| | | Oil charging | | 800CC |
| | | Type | | Twin Rotary 1 |
| | Fan | Type × Number | | axial×1 |
| | | Speed | r/min | 700±40 |
| | | Fan motor output/Input Power | W | 100/120 |
| | | Air-flow(H-M-L) | m³/h | 3500 |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 |
| | | Row / Fin pitch | | 2/1.4 |
| | | Total area | | / |
| | Dimension | External （W×D×H） | mm×mm×mm | 920/372/760 |
| | | Package （W×D×H） | mm×mm×mm | 1036/478/820 |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 1.8MM |
| | Defrosting | | | Auto |
| | Volume of accumulator | | L | None |
| | Sound power noise level (H-M-L) | | dB (A) | 66 |
| | Sound pressure noise level (H-M-L) | | dB (A) | 53 |
| | Type of four way valve | | | Shf-4-10a |
| | Material of reduce noise | | | XPE |
| | Crankcase heater power | | W | / |
| | Weight (Net / Shipping) | | kg / kg | 60/65 |
| Piping | Refrigerant | Type / Charge | g | R32/1700 |
| | | Maximum pipe length without recharge refrigerant | m | 30 |
| | | Recharge quantity | g/m | 45 |
| | Pipe | Liquid | mm | Φ9.52 (3/8) |
| | | Gas | mm | Φ15.88 (5/8) |
| | Connecting method | | | Flared |
| | Between I.D &O.D | MAX.Drop | m | 30 |
| | | MAX.Piping length | m | 50 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | 1U105S2SS1FA | |
|---|---|---|---|---|---|
| Power cable | | | | H05RN-F 3G 4.0mm$^2$ | |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5mm$^2$ | |
| Power source | | | N, V, Hz | 1PH,220-230VAC,50/60HZ | |
| Start current | | | A | 3 | 3 |
| Outdoor unit | Unit model (color) | | | 1U105S2SS1FA (WHITE) | |
| | Compressor | Model / Manufacture | | SVB220F (AL) /MITSUBISHI/Guang Zhou | |
| | | Oil model | | FW68S | |
| | | Oil type | | PVE | |
| | | Oil charging | | 800CC | |
| | | Type | | Twin Rotary | |
| | Fan | Type × Number | | axial×1 | |
| | | Speed | r/min | 700±40 | |
| | | Fan motor output/Input Power pow | W | 100/120 | |
| | | Air-flow (H-M-L) | m³/h | 3500 | |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 | |
| | | Row / Fin pitch | | 2/1.4 | |
| | Dimension | External (L*W*H) | mm×mm×mm | 920/372/760 | |
| | | Package (L*W*H) | mm×mm×mm | 1036/478/820 | |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / | |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 1.8MM | |
| | Defrosting | | | Auto | |
| | Volume of accumulator | | L | None | |
| | Sound power noise level (H-M-L) | | dB (A) | 66 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 53 | |
| | Type of four way valve | | | Shf-4-10a | |
| | Material of reduce noise | | | XPE | |
| | Crankcase heater power | | W | / | |
| | Weight (Net / Shipping) | | kg / kg | 49/52 | |
| Piping | Refrigerant | Type / Charge | g | R32/1600 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting method | | | Flared | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |
| Working temp. | Cooling (Min-Max) | | °C | -10~46 | |
| | Heating (Min-Max) | | °C | -15~24 | |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | | 1U105S2SS2FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | | Heating | |
| Rating capacity | | | KW | 9(2.5-10) | | 9.5(3.0-10.5) | |
| Cooling Pdesign | | | KW | 9 | | | |
| Heating Pdesign(-10°C) | | | KW | 7.2 | | | |
| Rated power input (indoor + outdoor) | | | W | 3.0(0.8-3.7) | | 2.56(0.8-4.0) | |
| Rated current input (indoor + outdoor) | | | A | 13.7 (3.7-16.8) | | 11.6 (3.6-18.2) | |
| EER / COP | | | W/W | 3.0 | | 3.71 | |
| SEER / SCOP | | | W/W | 6.1 | | 4.0 | |
| Power source | | | —— | 1PH/220~240V/50Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 16.8 | | 18.2 | |
| Starting current | | | A | 3 | | | |
| Power cable | | | | H05RN-F 3G 4.0mm2 | | | |
| Connecting cable | | | | H05RN-F 4G 2.5mm2 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | SVB220F (AL) /MITSUBISHI/Guang Zhou | | | |
| | | Oil model | | FW68S | | | |
| | | Oil charge and type | —— | 800CC/PVE | | | |
| | | Type | —— | Twin Rotary | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | 700±40 | | | |
| | | Motor output/input power | w | 100/120 | | | |
| | | Air-flows | m³/h | 3500 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M Φ7.0 | | | |
| | | row/fin pitch | —— | 2/1.4 | | | |
| | Dimension (WxDxH) | External | mm | 920/372/760 | | | |
| | | Package | mm | 1036/478/820 | | | |
| | Refrigerant control method | | —— | ELECTRONIC VAVE 1.8MM | | | |
| | Defrosting method | | —— | Automatic | | | |
| | Noise level | Sound power level | dB(A) | 66 | | | |
| | | Sound pressure level | dB(A) | 53 | | | |
| | Type of 4-way valve | | | Shf-4-10a | | | |
| | Material of reduce noise | | | XPE | | | |
| | Weight | Net / Shipping | kg / kg | 49/52 | | | |
| Piping | Refrigerant | Type / Charge | g | R32/1600 | | | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | | | |
| | | Recharge | g/m | 45 | | | |
| | Pipe | Liquid | mm | Φ9.52 | | | |
| | | Gas | mm | Φ15.88 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | MAX.Drop | m | 30 | | | |
| | | MAX.Piping length | m | 50 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -10°C | |
| cooling | A (Cap/EER) | 9.0kw/3.0 | heating | A (Cap/COP) | 6.37kw/2.8 | Tol (Cap/COP) | 6.0kw/2.4 |
| | B (Cap/EER) | 6.63kw/4.6 | | B (Cap/COP) | 3.88kw/3.8 | Tb (Cap/COP) | 6.34kw/2.8 |
| | C (Cap/EER) | 4.26kw/7.0 | | C (Cap/COP) | 2.49kw/5.4 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 2.21kw/14 | | D (Cap/COP) | 1.9kw/6.0 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | | Indoor temperature: 20°C/-°C | |
| | | Outdoor temperature: 43°C/-°C | | | | Outdoor temperature: 2°C/1°C | |
| 1. The above performance data are from the combination of AS30FFAHRA+1U105S2SS2FA | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

| Item | | | Model | 1U105S2SS1FB |
|---|---|---|---|---|
| Power cable | | | | H07RN-F 5G 4.0mm$^2$ |
| Communication cable | | | | / |
| Connecting cable | | | | H07RN-F 4G 2.5mm$^2$ |
| Power source | | | N, V, Hz | 3N~,380 ～ 415V, 50/60Hz |
| Start current | | | A | 1 |
| Outdoor unit | Unit model (color) | | | 1U105S2SS1FB（CAMEL GRAY） |
| | Compressor | Model / Manufacture | | TVB220FAEMC-L/MITSUBISHI/Guang Zhou |
| | | Oil model | | FW68S |
| | | Oil charging | | 870CM$^3$ |
| | | Type | | Twin Rotary 1 |
| | Fan | Type × Number | | axial×1 |
| | | Speed | r/min | 900/850/800/650/500/400/300/200 |
| | | Fan motor input power | kW | 0.12 |
| | | Fan motor output power | kW | 0.10 |
| | | Air-flow (H-M-L) | m³/h | 3500 |
| | Heat exchanger | Type / Diameter | mm | TP2M Φ7.0 wide fin |
| | | Row/Fin pitch | | 2 1.40 |
| | | Total area | m² | / |
| | Dimension | External (L*W*H) | mm×mm×mm | 920/372/760 |
| | | Package (L*W*H) | mm×mm×mm | 1085/487/843 |
| | Drainage pipe (Material , I.D./O.D.) | | mm | none |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.5mm |
| | Defrosting | | | Auto |
| | Volume of accumulator | | L | None |
| | Sound power noise level (H-M-L) | | dB (A) | 68 |
| | Sound pressure noise level (H-M-L) | | dB (A) | 54 |
| | Type of four way valve | | | SHF-4-10A |
| | Material of reduce noise | | | felt |
| | Crankcase heater power | | W | / |
| | Weight (Net / Shipping) | | kg / kg | 61/66 |
| Piping | Refrigerant | Type / Charge | g | R32/1700 |
| | | Maximum pipe length without recharge refrigerant | m | 30 |
| | | Recharge quantity | g/m | 45 |
| | Pipe | Liquid | mm | 9.52 |
| | | Gas | mm | 15.88 |
| | Connecting method | | | Flared |
| | Between I.D &O.D | MAX.Drop | m | 30 |
| | | MAX.Piping length | m | 50 |
| Working temp. | Cooling (Min-Max) | | °C | -10~46 |
| | Heating (Min-Max) | | °C | -15~24 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item / Model | | | | 1U125S2SN1FA | |
|---|---|---|---|---|---|
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ | |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5$mm^2$ | |
| Power source | | | N, V, Hz | 1PH,220-230VAC,50/60HZ | |
| Start current | | | A | 3 | 3 |
| Outdoor unit | Unit model (color) | | | 1U125S2SN1FA (WHITE) | |
| | Compressor | Model / Manufacture | | TVB306(AL)/MITSUBISHI/Guang Zhou | |
| | | Oil model | | FW68S | |
| | | Oil type | | PVE | |
| | | Oil charging | | 870CC | |
| | | Type | | Twin Rotary | |
| | Fan | Type × Number | | axial×1 | |
| | | Speed | r/min | 800/780/750/600/500/400/300/200±40 | |
| | | Fan motor output/Input Power pow | W | 100/120 | |
| | | Air-flow (H-M-L) | $m^3/h$ | 7000 | |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 | |
| | | Row / Fin pitch | | 2/1.65 | |
| | Dimension | External (L*W*H) | mm×mm×mm | 965×370×950 | |
| | | Package (L*W*H) | mm×mm×mm | 1095×450×1050 | |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / | |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.2MM | |
| | Defrosting | | | Auto | |
| | Volume of accumulator | | L | 2.1 | |
| | Sound power noise level (H-M-L) | | dB (A) | 69 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 57 | |
| | Type of four way valve | | | Shf-4-10a | |
| | Material of reduce noise | | | felt | |
| | Crankcase heater power | | W | / | |
| | Weight (Net / Shipping) | | kg / kg | 82.69/88.50 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting method | | | Flared | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |
| Working temp. | Cooling (Min-Max) | | °C | -10~50 | |
| | Heating (Min-Max) | | °C | -20~24 | |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | 1U125S2SN1FB | |
|---|---|---|---|---|---|
| Power cable | | | | H05RN-F 5G 2.5mm$^2$ | |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5mm$^2$ | |
| Power source | | | N, V, Hz | 3N~,380~415V, 50/60Hz | |
| Start current | | | A | 3 | 3 |
| Outdoor unit | Unit model (color) | | | 1U125S2SN1FB(WHITE) | |
| | Compressor | Model / Manufacture | | MNB42FFAMC-L/MITSUBISHI/Guang Zhou | |
| | | Oil model | | FW68S | |
| | | Oil charging | | 870CM3 | |
| | | Type | | Twin Rotary | |
| | Fan | Type × Number | | axial×1 | |
| | | Speed | r/min | 800/780/750/600/500/400/300/200±40 | |
| | | Fan motor output/Input Power pow | W | 0.10×2/ 0.12×2 | |
| | | Air-flow (H-M-L) | m³/h | 4000 | |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 wide fin | |
| | | Row / Fin pitch | | 2/1.65 | |
| | Dimension | External (L*W*H) | mm×mm×mm | 965×370×950 | |
| | | Package (L*W*H) | mm×mm×mm | 1095×450×1050 | |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / | |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.2MM | |
| | Defrosting | | | Auto | |
| | Volume of accumulator | | L | 2.1 | |
| | Sound power noise level (H-M-L) | | dB (A) | 69 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 57 | |
| | Type of four way valve | | | Shf-4-10a | |
| | Material of reduce noise | | | felt | |
| | Crankcase heater power | | W | / | |
| | Weight (Net / Shipping) | | kg / kg | 82.69/88.50 | |
| Piping | Refrigerant | Type / Charge | g | R32/2000 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting method | | | Flared | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 50 | |
| Working temp. | Cooling (Min-Max) | | °C | -10~50 | |
| | Heating (Min-Max) | | °C | -20~24 | |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | | 1U125S2SN2FA | |
|---|---|---|---|---|---|
| Power cable | | | | H05RN-F 3G 6.0mm2 | |
| Communication cable | | | | / | |
| Connecting cable | | | | H05RN-F 4G 2.5mm2 | |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz | |
| Start Current | | | A | 5 | |
| Outdoor unit | Unit model (color) | | | 1U125S2SN2FA/OUTDOOR UNIT (WHITE) | |
| | Compressor | Model / Manufacture/place | | TVB306FHTMC /MITSUBISHI/Guang Zhou | |
| | | OIL model | | FW68S | |
| | | Oil charging | | 870cc | |
| | | Type | | Twin Rotary | 1 |
| | Fan | Type × Number | | AXIAL×1 | |
| | | Speed | r/min | 950/850/750/650/500/350/250 | |
| | | Fan motor input power | kW | 0.12 | |
| | | Fan motor output power | kW | 0.09 | |
| | | Air-flow(H-M-L) | m³/h | 4700/4200/3800/3300/2300/1600/1400 | |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 | |
| | | Row/Fin pitch | | 2 | 1.4 |
| | | Total area | m² | 0.93 | |
| | Dimension | External (W×D×H) | mm×mm×mm | 950/370/965 | |
| | | Package (W×D×H) | mm×mm×mm | 1050/485/1130 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | none | |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.6MM | |
| | Defrosting | | | auto | |
| | Volume of Accumulator | | L | 2.8 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 72 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 58 | |
| | Type of Four way valve | | | SHF-9H-35U-00 | |
| | material of reduce noise | | | XPE | |
| | crankcase heater power | | W | 0 | |
| | Weight(Net / Shipping) | | kg / kg | 84/89 | |
| PIPING | Refrigerant | Type / Charge | g | R32 / 2300 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 15.88 | |
| | Connecting Method | | | FLARED | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB
Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | | Model | 1U125S2SN2FB |
|---|---|---|---|---|---|
| Power cable | | | | | H05RN-F 5G 4.0mm2 |
| Communication cable | | | | | / |
| Connecting cable | | | | | H05RN-F 4G 2.5mm2 |
| Power source | | | | N, V, Hz | 3N~,380-415V, 50/60Hz |
| Outdoor unit | Start Current | | | A | 5 |
| | Unit model (color) | | | | 1U125S2SN2FB/OUTDOOR UNIT(WHITE) |
| | Compressor | Model / Manufacture/place | | | TVB306FHTMC /MITSUBISHI/Guang Zhou |
| | | OIL model | | | FW68S |
| | | Oil charging | | | 870cc |
| | | Type | | | Twin Rotary / 1 |
| | Fan | Type × Number | | | AXIAL×1 |
| | | Speed | | r/min | 950/850/750/650/500/350/250 |
| | | Fan motor input power | | kW | 0.12 |
| | | Fan motor output power | | kW | 0.09 |
| | | Air-flow(H×M×L) | | $m^3/h$ | 4700/4200/3800/3300/2300/1600/1400 |
| | Heat exchanger | Type / Diameter | | mm | TP2M/Φ7.0 |
| | | Row/Fin pitch | | | 2 / 1.4 |
| | | Total area | | $m^2$ | 0.93 |
| | Dimension | External | (W×D×H) | mm×mm×mm | 950/370/965 |
| | | Package | (W×D×H) | mm×mm×mm | 1050/480/1130 |
| | Drainage pipe (material , I.D./O.D.) | | | mm | none |
| | Refrigerant control method | | | mm/mm | "ELECTRONIC VAVE 2.6MM" |
| | Defrosting | | | | auto |
| | Volume of Accumulator | | | L | 2.8 |
| | Sound power Noise level (H×M×L) | | | dB(A) | 72 |
| | Sound pressure Noise level (H×M×L) | | | dB(A) | 58 |
| | Type of Four way valve | | | | SHF-9H-35U-00 |
| | material of reduce noise | | | | XPE |
| | crankcase heater power | | | W | 0 |
| | Weight(Net / Shipping) | | | kg / kg | 85/90 |
| | Refrigerant | Type / Charge | | g | R32 / 2300 |
| | | Maximum pipe length without recharge refrigerant | | m | 30 |
| | | Recharge quantity | | g/m | 45 |
| PIPING | Pipe | Liquid | | mm | 9.52 |
| | | Gas | | mm | 15.88 |
| | Connecting Method | | | | FLARED |
| | Between I.D &O.D | MAX.Drop | | m | 30 |
| | | MAX.Piping length | | m | 70 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | 1U140S2SP1FA |
|---|---|---|---|---|
| Power cable | | | | H07VV-F 3G 6.0 $mm^2$ |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5$mm^2$ |
| Power source | | | N, V, Hz | 1PH,220-230VAC,50/60HZ |
| Start current | | | A | 3 / 3 |
| Outdoor unit | Unit model (color) | | | 1U140S2SP1FA (WHITE) |
| | Compressor | Model / Manufacture | | MVB33F (AL) /MITSUBISHI/Guang Zhou |
| | | Oil model | | FW68S |
| | | Oil type | | PVE |
| | | Oil charging | | 1250CC |
| | | Type | | Twin Rotary |
| | Fan | Type × Number | | axial×2 |
| | | Speed | r/min | 700±40 |
| | | Fan motor output/Input Power pow | W | 100/120 |
| | | Air-flow (H-M-L) | $m^3/h$ | 7000 |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 |
| | | Row / Fin pitch | | 10/1.4 |
| | Dimension | External (L*W*H) | mm×mm×mm | 950×370×1350 |
| | | Package (L*W*H) | mm×mm×mm | 1023×485×1500 |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 3.0MM |
| | Defrosting | | | Auto |
| | Volume of accumulator | | L | 4.0 |
| | Sound power noise level (H-M-L) | | dB (A) | 70 |
| | Sound pressure noise level (H-M-L) | | dB (A) | 53 |
| | Type of four way valve | | | SHF-20D-46 |
| | Material of reduce noise | | | XPE |
| | Crankcase heater power | | W | 38 |
| | Weight (Net / Shipping) | | kg / kg | 108/118 |
| Piping | Refrigerant | Type / Charge | g | R32/2900 |
| | | Maximum pipe length without recharge refrigerant | m | 30 |
| | | Recharge quantity | g/m | 45 |
| | Pipe | Liquid | mm | Φ9.52 (3/8) |
| | | Gas | mm | Φ15.88 (5/8) |
| | Connecting method | | | Flared |
| | Between I.D &O.D | MAX.Drop | m | 30 |
| | | MAX.Piping length | m | 75 |
| Working temp. | Cooling (Min-Max) | | °C | -10~46 |
| | Heating (Min-Max) | | °C | -15~24 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | 1U140S2SP1FB | |
|---|---|---|---|---|---|
| Power cable | | | | H05RN-F 5G 4.0 $mm^2$ | |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5$mm^2$ | |
| Power source | | | N, V, Hz | 3N~,380~415V, 50/60Hz | |
| Start current | | | A | 3 | 3 |
| Outdoor unit | Unit model (color) | | | 1U140S2SP1FB (WHITE) | |
| | Compressor | Model / Manufacture | | MVB33F (AL) /MITSUBISHI/Guang Zhou | |
| | | Oil model | | FW68S | |
| | | Oil type | | PVE | |
| | | Oil charging | | 1250CC | |
| | | Type | | Twin Rotary | |
| | Fan | Type × Number | | axial×1 | |
| | | Speed | r/min | 700±40 | |
| | | Fan motor output/Input Power pow | W | 100/120 | |
| | | Air-flow (H-M-L) | $m^3/h$ | 7000 | |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 | |
| | | Row / Fin pitch | | 10/1.4 | |
| | Dimension | External (L*W*H) | mm×mm×mm | 950×370×1350 | |
| | | Package (L*W*H) | mm×mm×mm | 1023×485×1500 | |
| | Drainage pipe (Material , I.D./O.D.) | | mm | / | |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.4MM | |
| | Defrosting | | | Auto | |
| | Volume of accumulator | | L | 4.0 | |
| | Sound power noise level (H-M-L) | | dB (A) | 70 | |
| | Sound pressure noise level (H-M-L) | | dB (A) | 53 | |
| | Type of four way valve | | | SHF-20D-46 | |
| | Material of reduce noise | | | XPE | |
| | Crankcase heater power | | W | / | |
| | Weight (Net / Shipping) | | kg / kg | 108/121 | |
| Piping | Refrigerant | Type / Charge | g | R32/3700 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | Φ9.52 (3/8) | |
| | | Gas | mm | Φ15.88 (5/8) | |
| | Connecting method | | | Flared | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 75 | |
| Working temp. | Cooling (Min-Max) | | °C | -10~46 | |
| | Heating (Min-Max) | | °C | -15~24 | |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item / Model | | | | 1U140S2SN1FA |
|---|---|---|---|---|
| Power cable | | | | H05RN-F 3G 6.0mm$^2$ |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5mm$^2$ |
| Power source | | | N, V, Hz | 1PH~,220~240V, 50/60Hz |
| Start current | | | A | 5 |
| Outdoor unit | Unit model (color) | | | 1U140S2SN1FA/OUTDOOR UNIT(WHITE) |
| | Compressor | Model / Manufacture | | TVB306FHTMC /MITSUBISHI/Guang Zhou |
| | | Oil model | | FW68S |
| | | Oil charging | | 870cm3 |
| | | Type | | Twin Rotary 1 |
| | Fan | Type × Number | | AXIAL×1 |
| | | Speed | r/min | 950/850/750/650/500/350/250 |
| | | Fan motor output/Input Power pow | W | 0.09/ 0.12 |
| | | Air-flow (H-M-L) | m³/h | 4700/4200/3800/3300/2300/1600/1400 |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 |
| | | Row / Fin pitch | | 2 1.4 |
| | Dimension | External (L*W*H) | mm×mm×mm | 950/450/966 |
| | | Package (L*W*H) | mm×mm×mm | 1050/480/1095 |
| | Drainage pipe (Material , I.D./O.D.) | | mm | none |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.6MM |
| | Defrosting | | | auto |
| | Volume of accumulator | | L | 2.8 |
| | Sound power noise level (H-M-L) | | dB (A) | 72 |
| | Sound pressure noise level (H-M-L) | | dB (A) | 58 |
| | Type of four way valve | | | SHF-9H-35U-00 |
| | Material of reduce noise | | | XPE |
| | Crankcase heater power | | W | 0 |
| | Weight (Net / Shipping) | | kg / kg | 84/89 |
| Piping | Refrigerant | Type / Charge | g | R32 / 2300 |
| | | Maximum pipe length without recharge refrigerant | m | 30 |
| | | Recharge quantity | g/m | 45 |
| | Pipe | Liquid | mm | 9.52 |
| | | Gas | mm | 15.88 |
| | Connecting method | | | FLARED |
| | Between I.D &O.D | MAX.Drop | m | 30 |
| | | MAX.Piping length | m | 70 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | Model | 1U140S2SN1FB |
|---|---|---|---|---|
| Power cable | | | | H05RN-F 5G 4.0mm$^2$ |
| Communication cable/Connecting cable | | | | H05RN-F 4G 2.5mm$^2$ |
| Power source | | | N, V, Hz | 3N~,380-415V, 50/60Hz |
| Start current | | | A | 5 |
| Outdoor unit | Unit model (color) | | | 1U140S2SN1FA/OUTDOOR UNIT(WHITE) |
| | Compressor | Model / Manufacture | | TVB306FHTMC /MITSUBISHI/Guang Zhou |
| | | Oil model | | FW68S |
| | | Oil charging | | 870cm3 |
| | | Type | | Twin Rotary 1 |
| | Fan | Type × Number | | AXIAL×1 |
| | | Speed | r/min | 950/850/750/650/500/350/250 |
| | | Fan motor output/Input Power pow | W | 0.09 / 0.12 |
| | | Air-flow (H-M-L) | m³/h | 4700/4200/3800/3300/2300/1600/1400 |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 |
| | | Row / Fin pitch | | 2 1.4 |
| | Dimension | External (L*W*H) | mm×mm×mm | 950/450/966 |
| | | Package (L*W*H) | mm×mm×mm | 1050/480/1095 |
| | Drainage pipe (Material , I.D./O.D.) | | mm | none |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.6MM |
| | Defrosting | | | auto |
| | Volume of accumulator | | L | 2.8 |
| | Sound power noise level (H-M-L) | | dB (A) | 72 |
| | Sound pressure noise level (H-M-L) | | dB (A) | 58 |
| | Type of four way valve | | | SHF-9H-35U-00 |
| | Material of reduce noise | | | XPE |
| | Crankcase heater power | | W | 0 |
| | Weight (Net / Shipping) | | kg / kg | 85/90 |
| Piping | Refrigerant | Type / Charge | g | R32 / 2300 |
| | | Maximum pipe length without recharge refrigerant | m | 30 |
| | | Recharge quantity | g/m | 45 |
| | Pipe | Liquid | mm | 9.52 |
| | | Gas | mm | 15.88 |
| | Connecting method | | | FLARED |
| | Between I.D &O.D | MAX.Drop | m | 30 |
| | | MAX.Piping length | m | 70 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | | 1U140S2SP2FB |
|---|---|---|---|---|
| Power cable | | | | H05RN-F 5G 4.0mm2 |
| Communication cable | | | | / |
| Connecting cable | | | | H05RN-F 4G 2.5mm2 |
| Power source | | | N, V, Hz | 3N~,380-415V, 50/60Hz |
| Start Current | | | A | 5 |
| Outdoor unit | Unit model (color) | | | 1U140S2SP2FB/OUTDOOR UNIT (WHITE) |
| | Compressor | Model / Manufacture/place | | MVB40FJMMC-L /MITSUBISHI/Guang Zhou |
| | | OIL model | | FW68S |
| | | Oil charging | | 1250cc |
| | | Type | | Twin Rotary \| 1 |
| | Fan | Type × Number | | AXIAL×2 |
| | | Speed | r/min | 800/750/650/500/350/200 |
| | | Fan motor input power | kW | 0.12×2 |
| | | Fan motor output power | kW | 0.10×2 |
| | | Air-flow(H-M-L) | m³/h | 7400/6900/6000/4600/3200/1900 |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 |
| | | Row/Fin pitch | | 10 \| 1.4 |
| | | Total area | m² | 1.3 |
| | Dimension | External (W×D×H) | mm×mm×mm | 950/370/1350 |
| | | Package (W×D×H) | mm×mm×mm | 1050/485/1500 |
| | Drainage pipe (material , I.D./O.D.) | | mm | none |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.6MM |
| | Defrosting | | | auto |
| | Volume of Accumulator | | L | 4.5 |
| | Sound power Noise level (H-M-L) | | dB(A) | 72 |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 58 |
| | Type of Four way valve | | | SHF-20D-46-04 |
| | material of reduce noise | | | XPE |
| | crankcase heater power | | W | 38 |
| | Weight(Net / Shipping) | | kg / kg | 101/116 |
| PIPING | Refrigerant | Type / Charge | g | R32 / 3500 |
| | | Maximum pipe length without recharge refrigerant | m | 30 |
| | | Recharge quantity | g/m | 45 |
| | Pipe | Liquid | mm | 9.52 |
| | | Gas | mm | 15.88 |
| | Connecting Method | | | FLARED |
| | Between I.D &O.D | MAX.Drop | m | 30 |
| | | MAX.Piping length | m | 70 |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | | Model | 1U140S2SP2FA |
|---|---|---|---|---|---|
| Power cable | | | | | H07VV-F 3G 6.0 mm2 |
| Communication cable | | | | | / |
| Connecting cable | | | | | H05RN-F 4G 2.5mm2 |
| Power source | | | | N, V, Hz | 1PH~,220~240, 50/60Hz |
| Outdoor unit | Start Current | | | A | 3 |
| | Unit model (color) | | | | 1U140S2SP2FA（WHITE） |
| | Compressor | Model / Manufacture/place | | | MVB33FKQMC-L/MITSUBISHI/Guang Zhou |
| | | OIL model | | | PVE（FW68S） |
| | | Oil charging | | | 1250cc |
| | | Type | | | Twin Rotary / 1 |
| | Fan | Type × Number | | | axial×2 |
| | | Speed | | r/min | 700±40 |
| | | Fan motor input power | | kW | 0.12×2 |
| | | Fan motor output power | | kW | 0.10×2 |
| | | Air-flow(H×M×L) | | m³/h | 7000 |
| | Heat exchanger | Type / Diameter | | mm | TP2M/Φ7.0 |
| | | Row/Fin pitch | | | 10 / 1.4 |
| | | Total area | | m² | 1.3 |
| | Dimension | External | (W×D×H) | mm×mm×mm | 950×370×1350 |
| | | Package | (W×D×H) | mm×mm×mm | 1050×485×1500 |
| | Dra inage pipe (material , I.D./O.D.) | | | mm | none |
| | Refrigerant control method | | | mm/mm | ELECTRONIC VAVE 3.0MM |
| | Defrosting | | | | auto |
| | Volume of Accumulator | | | L | 4.0 |
| | Sound power Noise level (H×M×L) | | | dB(A) | 70 |
| | Sound pressure Noise level (H×M×L) | | | dB(A) | 53 |
| | Type of Four way valve | | | | SHF-20D-46 |
| | material of reduce noise | | | | XPE |
| | crankcase heater power | | | W | 38 |
| | Weight(Net / Shipping) | | | kg / kg | 105/118 |
| | Refrigerant | Type / Charge | | g | R32 / 2900 |
| | | Maximum pipe length without recharge refrigerant | | m | 30 |
| | | Recharge quantity | | g/m | 45 |
| PIPING | Pipe | Liquid | | mm | 9.52 |
| | | Gas | | mm | 15.88 |
| | Connecting Method | | | | FLARED |
| | Between I.D &O.D | MAX.Drop | | m | 30 |
| | | MAX.Piping length | | m | 75 |
| | Working temp. | Cooling(Min-Max) | | ℃ | -15~50 |
| | | Heating(Min-Max) | | ℃ | -20~24 |

Norminal condition: indoor temperature (cooling): 27°C DB/19°C WB, indoor temperature (heating): 20°C DB
Outdoor temperature (cooling): 35°C DB/24°C WB, outdoor temperature (heating): 7°C DB/6°C WB
The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item | | | | 1U160S2SP1FB | |
|---|---|---|---|---|---|
| Power cable | | | | H05RN-F 5G 4.0mm2 | |
| Communication cable | | | | / | |
| Connecting cable | | | | H05RN-F 4G 2.5mm2 | |
| Power source | | | N, V, Hz | 3N~,380-415V, 50/60Hz | |
| Start Current | | | A | 5 | |
| Outdoor unit | Unit model (color) | | | 1U160S2SP1FB/OUTDOOR UNIT (WHITE) | |
| | Compressor | Model / Manufacture/place | | MVB40FJMMC-L /MITSUBISHI/Guang Zhou | |
| | | OIL model | | FW68S | |
| | | Oil charging | | 1250cm3 | |
| | | Type | | Twin Rotary | 1 |
| | Fan | Type × Number | | AXIAL×2 | |
| | | Speed | r/min | 800/750/650/500/350/200 | |
| | | Fan motor input power | kW | 0.12 | |
| | | Fan motor output power | kW | 0.09 | |
| | | Air-flow(H-M-L) | m³/h | 7400/6900/6000/4600/3200/1900 | |
| | Heat exchanger | Type / Diameter | mm | TP2M/Φ7.0 | |
| | | Row/Fin pitch | | 2 | 1.4 |
| | | Total area | m² | 1.3 | |
| | Dimension | External (W×D×H) | mm×mm×mm | 950/370/1350 | |
| | | Package (W×D×H) | mm×mm×mm | 1050/485/1500 | |
| | Drainage pipe (material , I.D./O.D.) | | mm | none | |
| | Refrigerant control method | | mm/mm | ELECTRONIC VAVE 2.6MM | |
| | Defrosting | | | auto | |
| | Volume of Accumulator | | L | 4.5 | |
| | Sound power Noise level (H-M-L) | | dB(A) | 72 | |
| | Sound pressure Noise level (H-M-L) | | dB(A) | 58 | |
| | Type of Four way valve | | | SHF-20D-46-04 | |
| | material of reduce noise | | | XPE | |
| | crankcase heater power | | W | 0 | |
| | Weight(Net / Shipping) | | kg / kg | 101/116 | |
| PIPING | Refrigerant | Type / Charge | g | R32 / 3500 | |
| | | Maximum pipe length without recharge refrigerant | m | 30 | |
| | | Recharge quantity | g/m | 45 | |
| | Pipe | Liquid | mm | 9.52 | |
| | | Gas | mm | 19.05 | |
| | Connecting Method | | | FLARED | |
| | Between I.D &O.D | MAX.Drop | m | 30 | |
| | | MAX.Piping length | m | 70 | |

Norminal condition: indoor temperature (cooling): 27°CDB/19°CWB, indoor temperature (heating): 20°CDB Outdoor temperature(cooling): 35°CDB/24°CWB, outdoor temperature(heating): 7°CDB/6°CWB The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.

| Item / Model | | | | 3U55S2SR3FA | |
|---|---|---|---|---|---|
| Function | | | - | Cooling | Heating |
| Rating Capacity | | | W | 5500 | 6800 |
| Cooling Pdesign | | | W | 5500 | |
| Heating Pdesign (-10°C) | | | W | 4700 | |
| Rated Power Input (Indoor + Outdoor) | | | W | 1350 | 1650 |
| Rated Current Input (Indoor + Outdoor) | | | A | 6.1 | 7.3 |
| EER/COP | | | W/W | 4.0 | 4.1 |
| SEER/SCOP | | | W/W | 8.5 | 4.0 |
| Minimum Capacity | | | W | 2100 | 1700 |
| Minimum Power Input | | | W | 550 | 550 |
| Maximum Capacity | | | W | 7000 | 7600 |
| Maximum Power Input (Indoor + Outdoor) | | | W | 2500 | 2200 |
| Power Source | | | - | 1PH, 220-240V~, 50/60Hz | |
| Max. Running Current (Indoor + Outdoor) | | | A/A | 10.8 | 9.5 |
| Power Facor (Under Rating Power Input) | | | - | 99% | 99% |
| Starting Current | | | A | 4 | |
| Fuse Size (Recommended Size) | | | A | 25 | |
| Outdoor Unit | Compressor | Model / Manufacture | - | SVB140FCAMC-L/ MELCOM | |
| | | Oil Charge and Type | - | 500CC/ FW68S | |
| | | Type | - | Twin Rotary (DC inverter) | |
| | | Number | - | 1 | |
| | Fan | Type × Number | - | Axial × 1 | |
| | | Speed | r/min | High 700 | |
| | | Motor Output/Input Power | W | 90/130 | |
| | | Air-Flows (H/M/L) | m³/h | about 3000 | |
| | Heat Exchanger | Type / Diameter | mm | TP2M / 9.52 | |
| | | Row | - | 1 | |
| | | Face Area | m² | about 0.6 | |
| | Dimension (WxDxH) | External | mm | 890/340/700 | |
| | | Package | mm | 998/443/770 | |
| | Refrigerant Control Method | | - | PMVs | |
| | Defrosting Method | | - | Automatic by reversible cycle | |
| | Crankcase Heater Power | | W | NONE | |
| | Noise Level | Sound Power Level | dB (A) | 64 | |
| | | Sound Pressure Level | dB (A) | 51 | |
| | Weight | Net/Shipping | kg / kg | 51/55 | |

| Item | | | Model | 3U55S3SR3FA |
|---|---|---|---|---|
| Piping | Refrigerant | Type / Charge | kg | R32 / 1.6 |
| | | GWP | | 675 |
| | | No Need to Recharge | m | 30 |
| | | Recharge | g/m | 20 |
| | Pipe | Liquid | mm | 3* Φ6.35 |
| | | Gas | mm | 3* Φ9.52 |
| | Connecting Method | | - | Flared |
| | Between I.D &O.D | Drop Between IU & OU | m | ≤7.5 |
| | | Piping Length Between IU & OU | m | ≤10 |
| | | Total Liquid Piping Length | m | ≤30 |
| | | Drop Between Indoor Units | m | ≤1 |
| | | Max. Drop Between IU &OU | m | 15 |
| | | Max. Drop Between Indoor Units | m | 7.5 |
| | | Max. Piping Length Between IU & OU | m | 25 |
| | | Max. Cable Length Between IU & OU | m | 30 |
| | | Max. Total Length | m | 50 |
| Working Temperature | | Cooling | °C | -10~46 |
| | | Heating | °C | -15~24 |

| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
|---|---|---|---|---|---|---|---|
| Pto: 30W | | Psb: 12W | | Pck: 0W | | Poff: 0W | |
| Cooling | A (Cap/EER) | 5545W/4.10 | Heating | A (Cap/COP) | 4019W/2.69 | Tol (Cap/COP) | 4.296W/2.67 |
| | B (Cap/EER) | 3745W/7.09 | | B (Cap/COP) | 2.693W/3.90 | Tb (Cap/COP) | 4019W/2.69 |
| | C (Cap/EER) | 2156.5W/11.35 | | C (Cap/COP) | 1.969W/4.96 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 2306W/18.56 | | D (Cap/COP) | 1.837W/6.51 | Cd (heating) | 0.25 |
| Max.Cooling Condition | | Indoor Temperature: 32°C/23°C | Max. Heating Condition | | | Indoor Temperature: 27°C/-°C | |
| | | Outdoor Temperature: 46°C/-°C | | | | Outdoor Temperature: 24°C/18°C | |
| kWh/Annum | | 227 | kWh/Annum-Average | | 1678 | kWh/Annum-Warm | 782 |
| 1. The above performance data are from the combination of 3U55S2SR5FA+3*AS25S2SF2FA. | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

| Item / Model | | | | 3U70S3SR3FA | |
|---|---|---|---|---|---|
| Function | | | - | Cooling | Heating |
| Rating Capacity | | | W | 7000 | 7600 |
| Cooling Pdesign | | | W | 7000 | |
| Heating Pdesign (-10°C) | | | W | 6000 | |
| Rated Power Input (Indoor + Outdoor) | | | W | 1750 | 1800 |
| Rated Current Input (Indoor + Outdoor) | | | A | 8.3 | 8.3 |
| EER/COP | | | W/W | 3.81 | 4.1 |
| SEER/SCOP | | | W/W | 7.5 | 4.2 |
| Minimum Capacity | | | W | 2400 | 2900 |
| Minimum Power Input | | | W | 550 | 550 |
| Maximum Capacity | | | W | 7600 | 8500 |
| Maximum Power Input (Indoor + Outdoor) | | | W | 2700 | 2300 |
| Power Source | | | - | 1PH, 220-240V~, 50/60Hz | |
| Max. Running Current (Indoor + Outdoor) | | | A / A | 11.9 | 9.7 |
| Power Facor (Under Rating Power Input) | | | - | 99% | 99% |
| Starting Current | | | A | 4 | |
| Fuse Size (Recommended Size) | | | A | 25 | |
| Outdoor Unit | Compressor | Model/Manufacture | - | SVB140FCAMC-L/ MELCOM | |
| | | Oil Charge and Type | - | 500CC/ FW68S | |
| | | Type | - | Twin Rotary (DC inverter) | |
| | | Number | - | 1 | |
| | Fan | Type × Number | - | Axial × 1 | |
| | | Speed | r/min | High 700 | |
| | | Motor Output/Input Power | W | 90/130 | |
| | | Air-Flows (H/M/L) | m³/h | about 3000 | |
| | Heat Exchanger | Type/Diameter | mm | TP2M / 7.0 | |
| | | Row | - | 2 | |
| | | Face Area | m² | about 0.6 | |
| | Dimension (WxDxH) | External | mm | 890/340/700 | |
| | | Package | mm | 998/443/770 | |
| | Refrigerant Control Method | | - | PMVs | |
| | Defrosting Method | | - | Automatic by reversible cycle | |
| | Crankcase Heater Power | | W | NONE | |
| | Noise Level | Sound Power Level | dB (A) | 66 | |
| | | Sound Pressure Level | dB (A) | 53 | |
| | Weight | Net/Shipping | kg / kg | 54/58 | |

| Item | | | Model | 3U70S2SR3FA |
|---|---|---|---|---|
| Piping | Refrigerant | Type/Charge | kg | R32 / 1.6 |
| | | GWP | | 675 |
| | | No Need to Recharge | m | 30 |
| | | Recharge | g/m | 20 |
| | Pipe | Liquid | mm | 3* Φ6.35 |
| | | Gas | mm | 3* Φ9.52 |
| | Connecting Method | | - | Flared |
| | Between I.D &O.D | Drop Between IU & OU | m | ≤7.5 |
| | | Piping Length Between IU & OU | m | ≤10 |
| | | Total Liquid Piping Length | m | ≤30 |
| | | Drop Between Indoor Units | m | ≤1 |
| | | Max. Drop Between IU &OU | m | 15 |
| | | Max. Drop Between Indoor Units | m | 7.5 |
| | | Max. Piping Length Between IU & OU | m | 25 |
| | | Max. Cable Length Between IU & OU | m | 30 |
| | | Max. Total Length | m | 60 |
| Working Temperature | | Cooling | °C | -10~46 |
| | | Heating | °C | -15~24 |

| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
|---|---|---|---|---|---|---|---|
| Pto: 30W | | Psb: 13W | | Pck: 0W | | Poff: 0W | |
| Cooling | A (Cap/EER) | 7128W/3.83 | Heating | A (Cap/COP) | 4755W/2.92 | Tol (Cap/COP) | 5518W/2.62 |
| | B (Cap/EER) | 5065W/5.82 | | B (Cap/COP) | 3221W/4.01 | Tb (Cap/COP) | 4755W/2.92 |
| | C (Cap/EER) | 3362W/9.72 | | C (Cap/COP) | 2080W/5.42 | Cd (Cooling) | 0.25 |
| | D (Cap/EER) | 2706W/14.87 | | D (Cap/COP) | 1602W/6.46 | Cd (Heating) | 0.25 |
| Max. Cooling Condition | | Indoor Temperature: 32°C/23°C | Max. Heating Condition | | | Indoor Temperature: 27°C/-°C | |
| | | Outdoor Temperature: 46°C/-°C | | | | Outdoor Temperature: 24°C/18°C | |
| kWh/Annum | | 332 | kWh/Annum-Average | | 2012 | kWh/Annum-Warm | 845 |
| 1. The above performance data are from the combination of 3U70S3SR3FA+3*AS25S2SF2FA. | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

| Item | | | | 3U55S2SR5FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | | Heating | |
| Rating capacity | | | W | 5000 | | 6400 | |
| Cooling Pdesign | | | W | 5000 | | | |
| Heating Pdesign(-10°C) | | | W | 4500 | | | |
| Rated power input (indoor + outdoor) | | | W | 1250 | | 1600 | |
| Rated current input (indoor + outdoor) | | | A | 5.7 | | 7.0 | |
| EER / COP | | | W/W | 4.0 | | 4.0 | |
| SEER / SCOP | | | W/W | 8.5 | | 4.6 | |
| Minimum capacity | | | W | 2100 | | 1700 | |
| Minimum power input | | | W | 550 | | 550 | |
| Maximum capacity | | | W | 6600 | | 7200 | |
| Maximum power input (indoor + outdoor) | | | W | 2500 | | 2200 | |
| Power source | | | —— | 1PH, 220-240V~, 50/60Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 10.8 | | 9.5 | |
| Power facor(under rating power input) | | | —— | 99% | | 99% | |
| Starting current | | | A | 4 | | | |
| Fuse size (recommended size) | | | A | 25 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | SVB140FCAMC-L/ MELCOM | | | |
| | | Oil charge and type | —— | 500CC/ FW68S | | | |
| | | Type | —— | Twin Rotary (DC inverter) | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | High 700 | | | |
| | | Motor output/input power | W | 90/130 | | | |
| | | Air-flows (H/M/L) | m³/h | about 3000 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M / 7.0 | | | |
| | | row | —— | 1 | | | |
| | | Face area | m² | about 0.6 | | | |
| | Dimension (WxDxH) | External | mm | 890/340/700 | | | |
| | | Package | mm | 1010/455/835 | | | |
| | Refrigerant control method | | —— | PMVs | | | |
| | Defrosting method | | —— | Automatic by reversible cycle | | | |
| | Crankcase heater power | | W | NONE | | | |
| | Noise level | Sound power level | dB(A) | 64 | | | |
| | | Sound pressure level | dB(A) | 51 | | | |
| | Weight | Net / Shipping | kg / kg | 50/59 | | | |
| Piping | Refrigerant | Type / Charge | kg | R32 / 1.4 | | | |
| | | GWP | | 675 | | | |
| | | No need to recharge | m | 30 | | | |
| | | Recharge | g/m | 20 | | | |
| | Pipe | Liquid | mm | 3* Φ6.35 | | | |
| | | Gas | mm | 3* Φ9.52 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | Drop between IU & OU | m | ≤7.5 | | | |
| | | Piping length between IU & OU | m | ≤10 | | | |
| | | Total liquid piping length | m | ≤30 | | | |
| | | Drop between indoor units | m | ≤1 | | | |
| | | Max.Drop between IU &OU | m | 15 | | | |
| | | Max.Drop between indoor units | m | 7.5 | | | |
| | | Min.Piping length between IU & OU | m | 3 | | | |
| | | Max.Piping length between IU & OU | m | 25 | | | |
| | | Max Cable length between IU & OU | m | 30 | | | |
| | | Max.Total length | m | 50 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
| Pto: 20W | | Psb: 12W | | Pck: 0W | | Poff: 0W | |
| cooling | A (Cap/EER) | 5204W/4.15 | heating | A (Cap/COP) | 3885W/3.11 | Tol (Cap/COP) | 4171W/2.8 |
| | B (Cap/EER) | 3450W/6.65 | | B (Cap/COP) | 2440W/4.57 | Tb (Cap/COP) | 3885W/3.11 |
| | C (Cap/EER) | 2110W/11.28 | | C (Cap/COP) | 1913W/5.92 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 2200W/22 | | D (Cap/COP) | 1836W/7.71 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature: 27°C/-°C | | |
| | | Outdoor temperature: 46°C/-°C | | | Outdoor temperature: 24°C/18°C | | |
| kWh/annum | | 207 | kWh/annum-average | | 1366 | kWh/annum-warm | 615 |
| 1. The above performance data are from the combination of 3U55S2SR5FA+3*AS25S2SJ1FA-3 | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

| Item | | | | 3U70S2SR5FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | Heating | | |
| Rating capacity | | | W | 7000 | 7600 | | |
| Cooling Pdesign | | | W | 7000 | | | |
| Heating Pdesign(-10°C) | | | W | 6000 | | | |
| Rated power input (indoor + outdoor) | | | W | 1750 | 1900 | | |
| Rated current input (indoor + outdoor) | | | A | 7.8 | 8.4 | | |
| EER / COP | | | W/W | 4.0 | 4.0 | | |
| SEER / SCOP | | | W/W | 8.5 | 4.6 | | |
| Minimum capacity | | | W | 2400 | 2900 | | |
| Minimum power input | | | W | 550 | 550 | | |
| Maximum capacity | | | W | 7600 | 8500 | | |
| Maximum power input (indoor + outdoor) | | | W | 2700 | 2300 | | |
| Power source | | | —— | 1PH, 220-240V~, 50/60Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 11.9 | 9.7 | | |
| Power facor(under rating power input) | | | —— | 99% | 99% | | |
| Starting current | | | A | 4 | | | |
| Fuse size (recommended size) | | | A | 25 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | SVB140FCAMC-L/ MELCOM | | | |
| | | Oil charge and type | —— | 500CC/ FW68S | | | |
| | | Type | —— | Twin Rotary (DC inverter) | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | High 700 | | | |
| | | Motor output/input power | W | 90/130 | | | |
| | | Air-flows (H/M/L) | m³/h | about 3000 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M / 7.0 | | | |
| | | row | —— | 2 | | | |
| | | Face area | m² | about 0.6 | | | |
| | Dimension (WxDxH) | External | mm | 890/340/700 | | | |
| | | Package | mm | 1010/455/835 | | | |
| | Refrigerant control method | | —— | PMVs | | | |
| | Defrosting method | | —— | Automatic by reversible cycle | | | |
| | Crankcase heater power | | W | NONE | | | |
| | Noise level | Sound power level | dB(A) | 66 | | | |
| | | Sound pressure level | dB(A) | 53 | | | |
| | Weight | Net / Shipping | kg / kg | 54/63 | | | |
| Piping | Refrigerant | Type / Charge | kg | R32 / 1.6 | | | |
| | | GWP | | 675 | | | |
| | | No need to recharge | m | 30 | | | |
| | | Recharge | g/m | 20 | | | |
| | Pipe | Liquid | mm | 3* Φ6.35 | | | |
| | | Gas | mm | 3* Φ9.52 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | Drop between IU & OU | m | ≤7.5 | | | |
| | | Piping length between IU & OU | m | ≤10 | | | |
| | | Total liquid piping length | m | ≤30 | | | |
| | | Drop between indoor units | m | ≤1 | | | |
| | | Max.Drop between IU &OU | m | 15 | | | |
| | | Max.Drop between indoor units | m | 7.5 | | | |
| | | Min.Piping length between IU & OU | m | 3 | | | |
| | | Max.Piping length between IU & OU | m | 25 | | | |
| | | Max Cable length between IU & OU | m | 30 | | | |
| | | Max.Total length | m | 60 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
| Pto: 20W | | Psb: 12W | | Pck: 0W | | Poff: 0W | |
| cooling | A (Cap/EER) | 7200W/4.04 | heating | A (Cap/COP) | 5100W/2.98 | Tol (Cap/COP) | 4980W/2.86 |
| | B (Cap/EER) | 5100W/6.9 | | B (Cap/COP) | 3020W/4.76 | Tb (Cap/COP) | 5100W/2.98 |
| | C (Cap/EER) | 3200W/11.6 | | C (Cap/COP) | 2020W/6.05 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 1880W/20 | | D (Cap/COP) | 2160W/7.99 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature: 27°C/-°C | | |
| | | Outdoor temperature: 46°C/-°C | | | Outdoor temperature: 24°C/18°C | | |
| kWh/annum | | 283 | kWh/annum-average | | 1760 | kWh/annum-warm | 728 |
| 1. The above performance data are from the combination of 3U70S2SR5FA+3*AS25S2SJ1FA-3 | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

| Item | | | | 4U75S2SR5FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | | Heating | |
| Rating capacity | | | W | 7500 | | 8600 | |
| Cooling Pdesign | | | W | 7500 | | | |
| Heating Pdesign(-10°C) | | | W | 6300 | | | |
| Rated power input (indoor + outdoor) | | | W | 1970 | | 2150 | |
| Rated current input (indoor + outdoor) | | | A | 9.1 | | 9.5 | |
| EER / COP | | | W/W | 3.8 | | 4.0 | |
| SEER / SCOP | | | W/W | 7.0 | | 4.0 | |
| Minimum capacity | | | W | 2400 | | 3100 | |
| Minimum power input | | | W | 550 | | 550 | |
| Maximum capacity | | | W | 8700 | | 10000 | |
| Maximum power input (indoor + outdoor) | | | W | 3400 | | 3100 | |
| Power source | | | —— | 1PH, 220-240V~, 50/60Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 14.7 | | 13.5 | |
| Power facor(under rating power input) | | | —— | 99% | | 99% | |
| Starting current | | | A | 5 | | | |
| Fuse size (recommended size) | | | A | 25 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | TVB220FAEMC-L/ MELCOM | | | |
| | | Oil charge and type | —— | 870CC/ FW68S | | | |
| | | Type | —— | Twin Rotary (DC inverter) | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | High 770 | | | |
| | | Motor output/input power | W | 90/130 | | | |
| | | Air-flows (H/M/L) | m³/h | about 4000 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M / 7.0 | | | |
| | | row | —— | 2 | | | |
| | | Face area | m² | about 0.6 | | | |
| | Dimension (WxDxH) | External | mm | 890/340/700 | | | |
| | | Package | mm | 1010/455/835 | | | |
| | Refrigerant control method | | —— | PMVs | | | |
| | Defrosting method | | —— | Automatic by reversible cycle | | | |
| | Crankcase heater power | | W | NONE | | | |
| | Noise level | Sound power level | dB(A) | 68 | | | |
| | | Sound pressure level | dB(A) | 55 | | | |
| | Weight | Net / Shipping | kg / kg | 61/70 | | | |
| Piping | Refrigerant | Type / Charge | kg | R32 / 2.2 | | | |
| | | GWP | | 675 | | | |
| | | No need to recharge | m | 40 | | | |
| | | Recharge | g/m | 20 | | | |
| | Pipe | Liquid | mm | 4* Φ6.35 | | | |
| | | Gas | mm | 3* Φ9.52+1*Φ12.7 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | Drop between IU & OU | m | ≤7.5 | | | |
| | | Piping length between IU & OU | m | ≤10 | | | |
| | | Total liquid piping length | m | ≤40 | | | |
| | | Drop between indoor units | m | ≤1 | | | |
| | | Max.Drop between IU &OU | m | 15 | | | |
| | | Max.Drop between indoor units | m | 7.5 | | | |
| | | Min.Piping length between IU & OU | m | 3 | | | |
| | | Max.Piping length between IU & OU | m | 25 | | | |
| | | Max Cable length between IU & OU | m | 30 | | | |
| | | Max.Total length | m | 70 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
| Pto: 42W | | Psb: 16W | | Pck: 0W | | Poff: 0W | |
| cooling | A (Cap/EER) | 7629W/3.65 | heating | A (Cap/COP) | 5450W/2.82 | Tol (Cap/COP) | 6106W/2.7 |
| | B (Cap/EER) | 5511W/5.95 | | B (Cap/COP) | 3421W/3.93 | Tb (Cap/COP) | 5450W/2.82 |
| | C (Cap/EER) | 3796W/9.47 | | C (Cap/COP) | 2403W/5.22 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 4116W/13.11 | | D (Cap/COP) | 2695W/6.36 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature: 27°C/-°C | | |
| | | Outdoor temperature: 46°C/-°C | | | Outdoor temperature: 24°C/18°C | | |
| kWh/annum | | 379 | kWh/annum-average | | 2179 | kWh/annum-warm | 977 |
| 1. The above performance data are from the combination of 4U75S2SR5FA+3*AS25S2SF2FA+1*AS35S2SF2FA. | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

| Item | | | | 4U85S2SR5FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | | Heating | |
| Rating capacity | | | W | 8500 | | 9600 | |
| Cooling Pdesign | | | W | 8500 | | | |
| Heating Pdesign(-10°C) | | | W | 7000 | | | |
| Rated power input (indoor + outdoor) | | | W | 2500 | | 2400 | |
| Rated current input (indoor + outdoor) | | | A | 12.0 | | 11.2 | |
| EER / COP | | | W/W | 3.4 | | 4.0 | |
| SEER / SCOP | | | W/W | 7.0 | | 4.0 | |
| Minimum capacity | | | W | 3200 | | 4400 | |
| Minimum power input | | | W | 550 | | 550 | |
| Maximum capacity | | | W | 9500 | | 10500 | |
| Maximum power input (indoor + outdoor) | | | W | 3500 | | 3400 | |
| Power source | | | —— | 1PH, 220-240V~, 50/60Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 15.5 | | 14.6 | |
| Power facor(under rating power input) | | | —— | 99% | | 99% | |
| Starting current | | | A | 5 | | | |
| Fuse size (recommended size) | | | A | 25 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | TVB220FAEMC-L/ MELCOM | | | |
| | | Oil charge and type | —— | 870CC/ FW68S | | | |
| | | Type | —— | Twin Rotary (DC inverter) | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | High 770 | | | |
| | | Motor output/input power | W | 90/130 | | | |
| | | Air-flows (H/M/L) | m³/h | about 4000 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M / 7.0 | | | |
| | | row | —— | 2 | | | |
| | | Face area | m² | about 0.6 | | | |
| | Dimension (WxDxH) | External | mm | 890/340/700 | | | |
| | | Package | mm | 1010/455/835 | | | |
| | Refrigerant control method | | —— | PMVs | | | |
| | Defrosting method | | —— | Automatic by reversible cycle | | | |
| | Crankcase heater power | | W | NONE | | | |
| | Noise level | Sound power level | dB(A) | 68 | | | |
| | | Sound pressure level | dB(A) | 55 | | | |
| | Weight | Net / Shipping | kg / kg | 61/70 | | | |
| Piping | Refrigerant | Type / Charge | kg | R32 / 2.2 | | | |
| | | GWP | | 675 | | | |
| | | No need to recharge | m | 40 | | | |
| | | Recharge | g/m | 20 | | | |
| | Pipe | Liquid | mm | 4* Φ6.35 | | | |
| | | Gas | mm | 3* Φ9.52+1*Φ12.7 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | Drop between IU & OU | m | ≤7.5 | | | |
| | | Piping length between IU & OU | m | ≤10 | | | |
| | | Total liquid piping length | m | ≤40 | | | |
| | | Drop between indoor units | m | ≤1 | | | |
| | | Max.Drop between IU &OU | m | 15 | | | |
| | | Max.Drop between indoor units | m | 7.5 | | | |
| | | Min.Piping length between IU & OU | m | 3 | | | |
| | | Max.Piping length between IU & OU | m | 25 | | | |
| | | Max Cable length between IU & OU | m | 30 | | | |
| | | Max.Total length | m | 70 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
| Pto: 42W | | Psb: 16W | | Pck: 0W | | Poff: 0W | |
| cooling | A (Cap/EER) | 8652W/3.2 | heating | A (Cap/COP) | 6073W/2.78 | Tol (Cap/COP) | 7020W/2.64 |
| | B (Cap/EER) | 5746W/5.73 | | B (Cap/COP) | 3702W/3.87 | Tb (Cap/COP) | 6073W/2.78 |
| | C (Cap/EER) | 3449W/8.27 | | C (Cap/COP) | 2299W/4.67 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 3834W/11.55 | | D (Cap/COP) | 2563W/5.92 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature: 27°C/-°C | | |
| | | Outdoor temperature: 46°C/-°C | | | Outdoor temperature: 24°C/18°C | | |
| kWh/annum | | 456 | kWh/annum-average | | 2503 | kWh/annum-warm | 1123 |
| 1. The above performance data are from the combination of 4U85S2SR5FA+3*AS25S2SF2FA+1*AS35S2SF2FA. | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

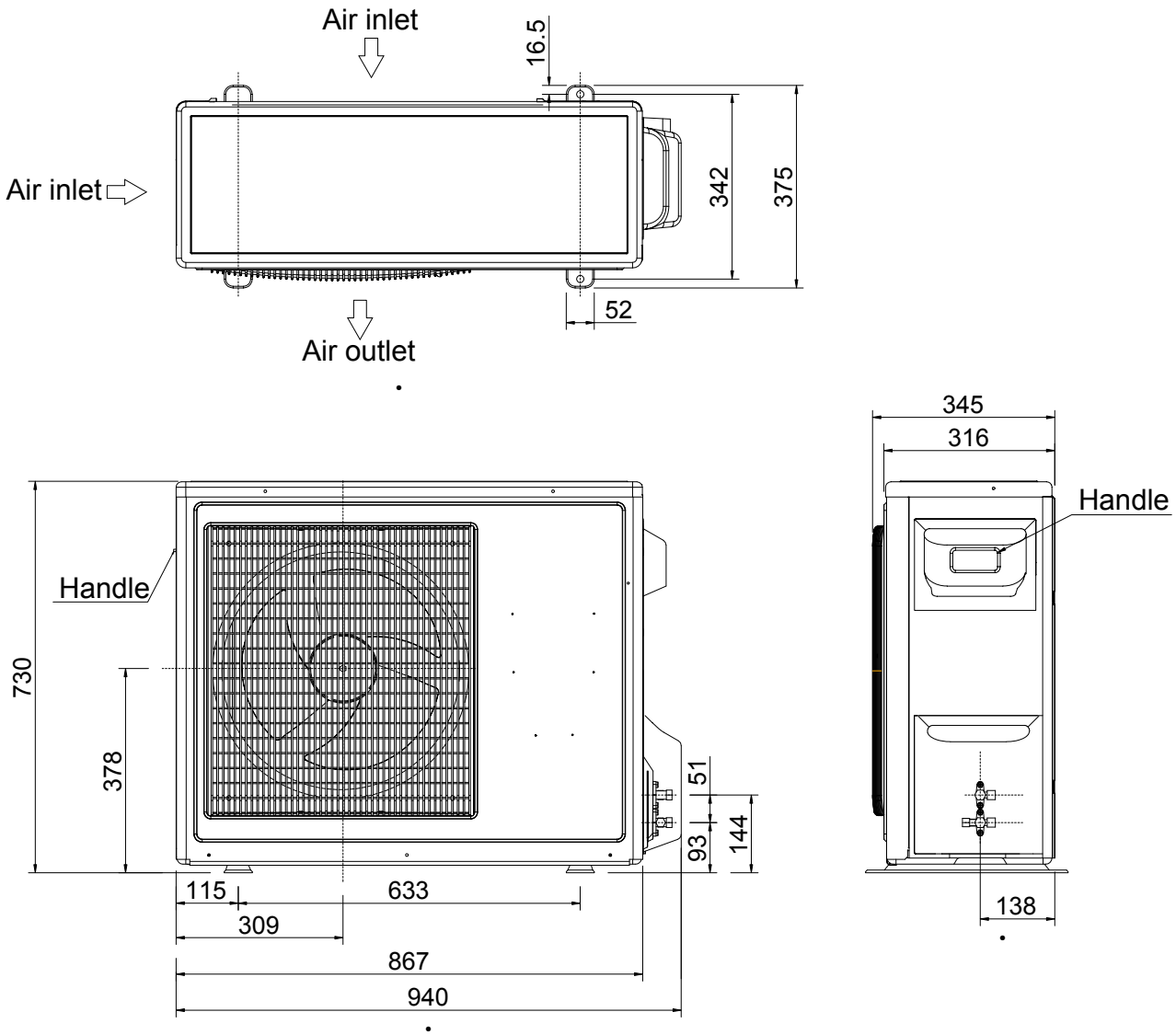
| Item | | | | 5U90S2SS5FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | | Heating | |
| Rating capacity | | | W | 9000 | | 10400 | |
| Cooling Pdesign | | | W | 9000 | | | |
| Heating Pdesign(-10°C) | | | W | 7200 | | | |
| Rated power input (indoor + outdoor) | | | W | 2790 | | 2790 | |
| Rated current input (indoor + outdoor) | | | A | 12.5 | | 12.1 | |
| EER / COP | | | W/W | 3.23 | | 3.73 | |
| SEER / SCOP | | | W/W | 7.0 | | 4.0 | |
| Minimum capacity | | | W | 3200 | | 4400 | |
| Minimum power input | | | W | 550 | | 550 | |
| Maximum capacity | | | W | 11000 | | 11500 | |
| Maximum power input (indoor + outdoor) | | | W | 4100 | | 3400 | |
| Power source | | | —— | 1PH, 220-240V~, 50/60Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 18.2 | | 14.6 | |
| Power facor(under rating power input) | | | —— | 99% | | 99% | |
| Starting current | | | A | 5 | | | |
| Fuse size (recommended size) | | | A | 25 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | TVB220FAEMC-L/ MELCOM | | | |
| | | Oil charge and type | —— | 870CC/ FW68S | | | |
| | | Type | —— | Twin Rotary (DC inverter) | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | High 770 | | | |
| | | Motor output/input power | W | 90/130 | | | |
| | | Air-flows (H/M/L) | m³/h | about 4200 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M / 7.0 | | | |
| | | row | —— | 2 | | | |
| | | Face area | m² | about 0.65 | | | |
| | Dimension (WxDxH) | External | mm | 920/372/760 | | | |
| | | Package | mm | 1045/488/890 | | | |
| | Refrigerant control method | | —— | PMVs | | | |
| | Defrosting method | | —— | Automatic by reversible cycle | | | |
| | Crankcase heater power | | W | NONE | | | |
| | Noise level | Sound power level | dB(A) | 70 | | | |
| | | Sound pressure level | dB(A) | 55 | | | |
| | Weight | Net / Shipping | kg / kg | 66/77 | | | |
| Piping | Refrigerant | Type / Charge | kg | R32 / 2.4 | | | |
| | | GWP | | 675 | | | |
| | | No need to recharge | m | 40 | | | |
| | | Recharge | g/m | 20 | | | |
| | Pipe | Liquid | mm | 5* Φ6.35 | | | |
| | | Gas | mm | 3* Φ9.52+2*Φ12.7 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | Drop between IU & OU | m | ≤7.5 | | | |
| | | Piping length between IU & OU | m | ≤10 | | | |
| | | Total liquid piping length | m | ≤40 | | | |
| | | Drop between indoor units | m | ≤1 | | | |
| | | Max.Drop between IU &OU | m | 15 | | | |
| | | Max.Drop between indoor units | m | 7.5 | | | |
| | | Min.Piping length between IU & OU | m | 3 | | | |
| | | Max.Piping length between IU & OU | m | 25 | | | |
| | | Max Cable length between IU & OU | m | 30 | | | |
| | | Max.Total length | m | 80 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
| Pto: 47W | | Psb: 16W | | Pck: 0W | | Poff: 0W | |
| cooling | A (Cap/EER) | 9456W/3.25 | heating | A (Cap/COP) | 6533W/2.77 | Tol (Cap/COP) | 7038W/2.57 |
| | B (Cap/EER) | 7265W/5.38 | | B (Cap/COP) | 4271W/4.03 | Tb (Cap/COP) | 6533W/2.77 |
| | C (Cap/EER) | 4553W/9.35 | | C (Cap/COP) | 3047W/5.58 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 3310W/14.21 | | D (Cap/COP) | 2988W/7.29 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature: 27°C/-°C | | |
| | | Outdoor temperature: 46°C/-°C | | | Outdoor temperature: 24°C/18°C | | |
| kWh/annum | | 457 | kWh/annum-average | | 2441 | kWh/annum-warm | 1092 |
| 1. The above performance data are from the combination of 5U90S2SS5FA+2*AS25S2SF2FA+1*AS35S2SF2FA+1*AS50S2SF2FA. | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

| Item | | | | 5U105S2SS5FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | | Heating | |
| Rating capacity | | | W | 10000 | | 10500 | |
| Cooling Pdesign | | | W | 10000 | | | |
| Heating Pdesign(-10°C) | | | W | 8000 | | | |
| Rated power input (indoor + outdoor) | | | W | 3470 | | 2840 | |
| Rated current input (indoor + outdoor) | | | A | 15.5 | | 12.2 | |
| EER / COP | | | W/W | 2.88 | | 3.70 | |
| SEER / SCOP | | | W/W | 7.0 | | 4.0 | |
| Minimum capacity | | | W | 3200 | | 4400 | |
| Minimum power input | | | W | 550 | | 550 | |
| Maximum capacity | | | W | 11000 | | 11500 | |
| Maximum power input (indoor + outdoor) | | | W | 4100 | | 3400 | |
| Power source | | | —— | 1PH, 220-240V~, 50/60Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 18.2 | | 14.6 | |
| Power facor(under rating power input) | | | —— | 99% | | 99% | |
| Starting current | | | A | 5 | | | |
| Fuse size (recommended size) | | | A | 25 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | TVB220FAEMC-L/ MELCOM | | | |
| | | Oil charge and type | —— | 870CC/ FW68S | | | |
| | | Type | —— | Twin Rotary (DC inverter) | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | High 800 | | | |
| | | Motor output/input power | W | 90/130 | | | |
| | | Air-flows (H/M/L) | m³/h | about 4200 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M / 7.0 | | | |
| | | row | —— | 2 | | | |
| | | Face area | m² | about 0.65 | | | |
| | Dimension (WxDxH) | External | mm | 920/372/760 | | | |
| | | Package | mm | 1045/488/890 | | | |
| | Refrigerant control method | | —— | PMVs | | | |
| | Defrosting method | | —— | Automatic by reversible cycle | | | |
| | Crankcase heater power | | W | NONE | | | |
| | Noise level | Sound power level | dB(A) | 70 | | | |
| | | Sound pressure level | dB(A) | 55 | | | |
| | Weight | Net / Shipping | kg / kg | 66/77 | | | |
| Piping | Refrigerant | Type / Charge | kg | R32 / 2.4 | | | |
| | | GWP | | 675 | | | |
| | | No need to recharge | m | 40 | | | |
| | | Recharge | g/m | 20 | | | |
| | Pipe | Liquid | mm | 5* Φ6.35 | | | |
| | | Gas | mm | 3* Φ9.52+2*Φ12.7 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | Drop between IU & OU | m | ≤7.5 | | | |
| | | Piping length between IU & OU | m | ≤10 | | | |
| | | Total liquid piping length | m | ≤40 | | | |
| | | Drop between indoor units | m | ≤1 | | | |
| | | Max.Drop between IU &OU | m | 15 | | | |
| | | Max.Drop between indoor units | m | 7.5 | | | |
| | | Min.Piping length between IU & OU | m | 3 | | | |
| | | Max.Piping length between IU & OU | m | 25 | | | |
| | | Max Cable length between IU & OU | m | 30 | | | |
| | | Max.Total length | m | 80 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
| Pto: 47W | | Psb: 16W | | Pck: 0W | | Poff: 0W | |
| cooling | A (Cap/EER) | 9511W/2.8 | heating | A (Cap/COP) | 6457W/2.63 | Tol (Cap/COP) | 7046W/2.56 |
| | B (Cap/EER) | 7170W/5.12 | | B (Cap/COP) | 4691W/3.74 | Tb (Cap/COP) | 6457W/2.63 |
| | C (Cap/EER) | 4095W/9.04 | | C (Cap/COP) | 3108W/5.26 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 4026W/11.98 | | D (Cap/COP) | 2835W/6.52 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature: 27°C/-°C | | |
| | | Outdoor temperature: 46°C/-°C | | | Outdoor temperature: 24°C/18°C | | |
| kWh/annum | | 537 | kWh/annum-average | | 2889 | kWh/annum-warm | 1279 |
| 1. The above performance data are from the combination of 5U105S2SS5FA+2*AS25S2SF2FA+1*AS35S2SF2FA+1*AS50S2SF2FA. | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

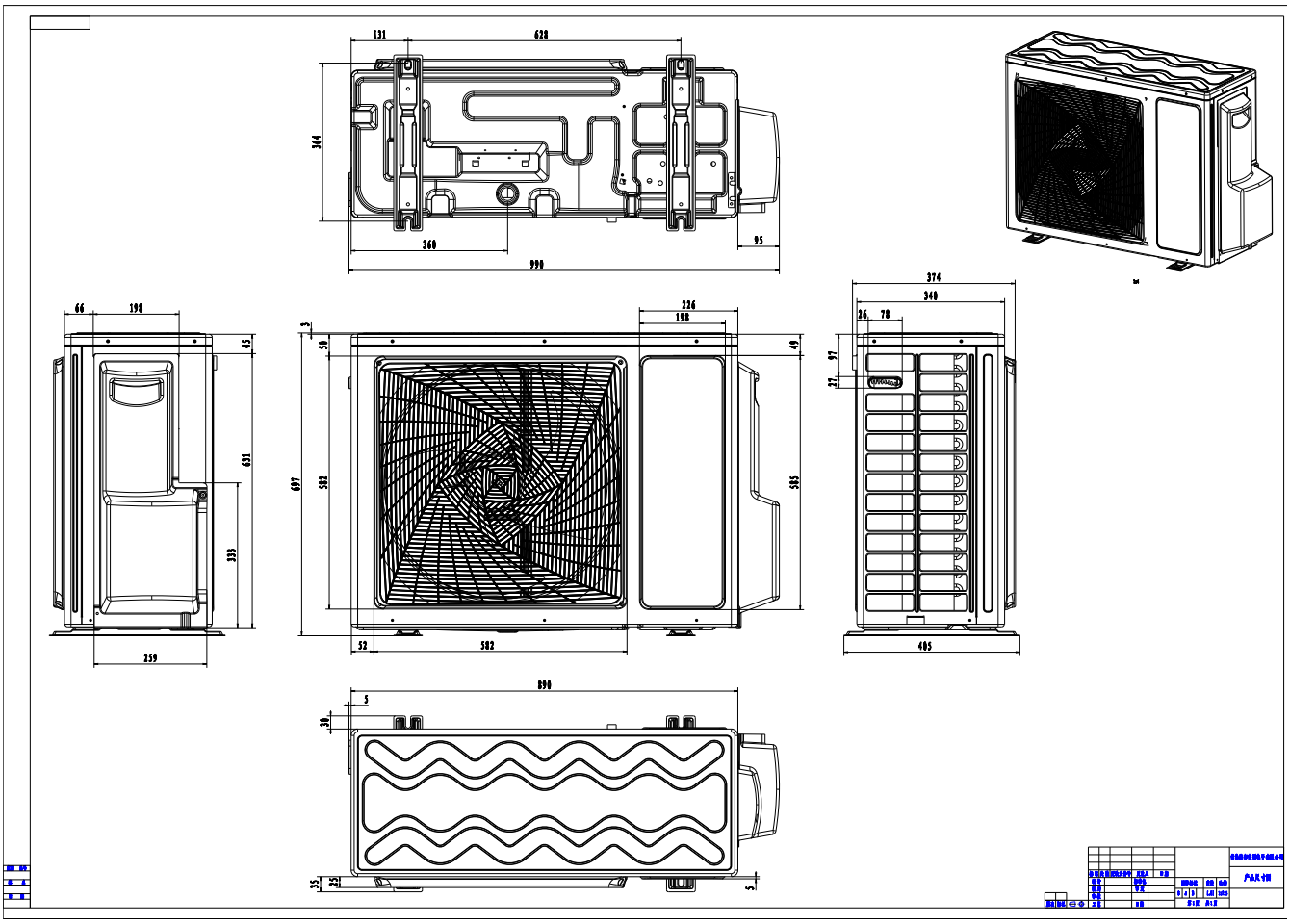
| Item | | | | 5U125S2SN1FA | | | |
|---|---|---|---|---|---|---|---|
| Function | | | —— | Cooling | | Heating | |
| Rating capacity | | | W | 12500 | | 12700 | |
| Cooling Pdesign | | | W | 12500 | | | |
| Heating Pdesign(-10°C) | | | W | 9500 | | | |
| Rated power input (indoor + outdoor) | | | W | 3870 | | 3400 | |
| Rated current input (indoor + outdoor) | | | A | 17.5 | | 15.2 | |
| EER / COP | | | W/W | 3.23 | | 3.73 | |
| SEER / SCOP | | | W/W | 7.1 | | 4.05 | |
| Minimum capacity | | | W | 3200 | | 4400 | |
| Minimum power input | | | W | 550 | | 550 | |
| Maximum capacity | | | W | 13800 | | 14300 | |
| Maximum power input (indoor + outdoor) | | | W | 5200 | | 4300 | |
| Power source | | | —— | 1PH, 220-240V~, 50/60Hz | | | |
| Max.Running current (indoor + outdoor) | | | A / A | 23.0 | | 18.7 | |
| Power facor(under rating power input) | | | —— | 99% | | 99% | |
| Starting current | | | A | 5 | | | |
| Fuse size (recommended size) | | | A | 30 | | | |
| Outdoor unit | Compressor | Model / Manufacture | —— | SYB280FBAMC-L/ MELCOM | | | |
| | | Oil charge and type | —— | 870CC/ FW68S | | | |
| | | Type | —— | Twin Rotary (DC inverter) | | | |
| | | Number | —— | 1 | | | |
| | Fan | Type × Number | —— | Axial × 1 | | | |
| | | Speed | r/min | High 880 | | | |
| | | Motor output/input power | W | 90/130 | | | |
| | | Air-flows (H/M/L) | m³/h | about 4200 | | | |
| | Heat exchanger | Type / Diameter | mm | TP2M / 7.0 | | | |
| | | row | —— | 2 | | | |
| | | Face area | m² | about 0.93 | | | |
| | Dimension (WxDxH) | External | mm | 950/370/965 | | | |
| | | Package | mm | 1050×485×1170 | | | |
| | Refrigerant control method | | —— | PMVs | | | |
| | Defrosting method | | —— | Automatic by reversible cycle | | | |
| | Crankcase heater power | | W | NONE | | | |
| | Noise level | Sound power level | dB(A) | 73 | | | |
| | | Sound pressure level | dB(A) | 58 | | | |
| | Weight | Net / Shipping | kg / kg | 79/91 | | | |
| Piping | Refrigerant | Type / Charge | kg | R32 / 2.5 | | | |
| | | GWP | | 675 | | | |
| | | No need to recharge | m | 50 | | | |
| | | Recharge | g/m | 15 | | | |
| | Pipe | Liquid | mm | 5* Φ6.35 | | | |
| | | Gas | mm | 3* Φ9.52+2*Φ12.7 | | | |
| | Connecting method | | —— | Flared | | | |
| | Between I.D &O.D | Drop between IU & OU | m | ≤7.5 | | | |
| | | Piping length between IU & OU | m | ≤10 | | | |
| | | Total liquid piping length | m | ≤50 | | | |
| | | Drop between indoor units | m | ≤1 | | | |
| | | Max.Drop between IU &OU | m | 15 | | | |
| | | Max.Drop between indoor units | m | 7.5 | | | |
| | | Min.Piping length between IU & OU | m | 3 | | | |
| | | Max.Piping length between IU & OU | m | 25 | | | |
| | | Max Cable length between IU & OU | m | 30 | | | |
| | | Max.Total length | m | 100 | | | |
| working temperature | | Cooling | °C | -10~46 | | | |
| | | Heating | °C | -15~24 | | | |
| Tdisignh: -10°C | | | Tbivalent: -7°C | | | TOL: -15°C | |
| Pto: 47W | | Psb: 16W | Pck: 0W | | | Poff: 0W | |
| cooling | A (Cap/EER) | 12500W/3.23 | heating | A (Cap/COP) | 8350W/2.74 | Tol (Cap/COP) | 10005W/2.91 |
| | B (Cap/EER) | 8950W/5.43 | | B (Cap/COP) | 5230W/4.15 | Tb (Cap/COP) | 8350W/2.74 |
| | C (Cap/EER) | 5600W/9.39 | | C (Cap/COP) | 3350W/4.47 | Cd (cooling) | 0.25 |
| | D (Cap/EER) | 4230W/14.1 | | D (Cap/COP) | 3340W/6.26 | Cd (heating) | 0.25 |
| Max. cooling condition | | Indoor temperature: 32°C/23°C | Max. heating condition | | Indoor temperature: 27°C/-°C | | |
| | | Outdoor temperature: 46°C/-°C | | | Outdoor temperature: 24°C/18°C | | |
| kWh/annum | | 622 | kWh/annum-average | | 3346 | kWh/annum-warm | 1793 |
| 1. The above performance data are from the combination of 5U125S2SN1FA+2*AS25S2SF2FA-2+2*AS35S2SF2FA-2+1*AS50S2SF2FA-2. | | | | | | | |
| 2. Large drop and long piping installation will obviously reduce the total capacity. | | | | | | | |

## 8.2 Dimension

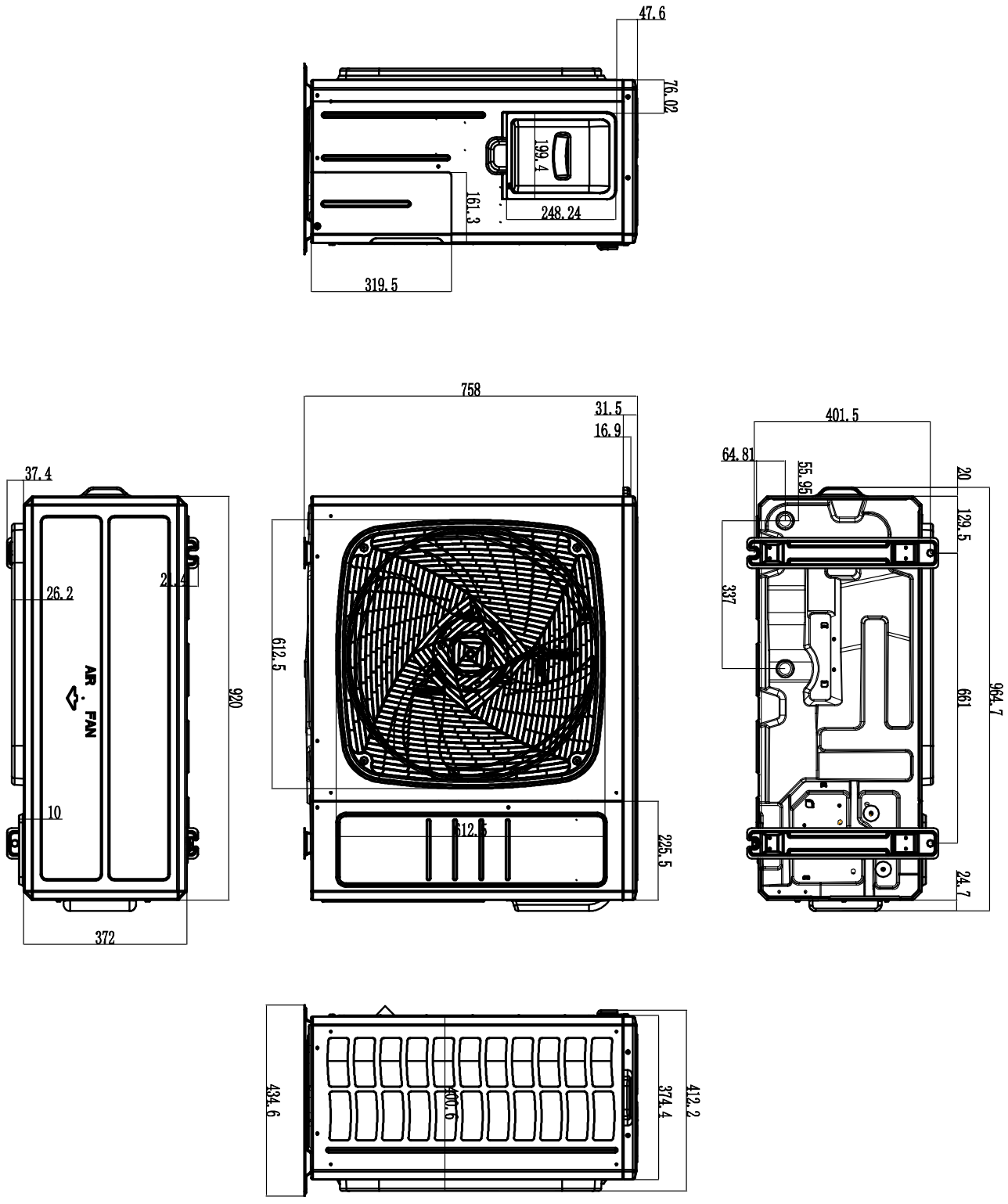
1U71S2SG1FA



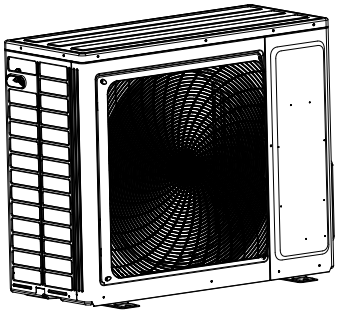
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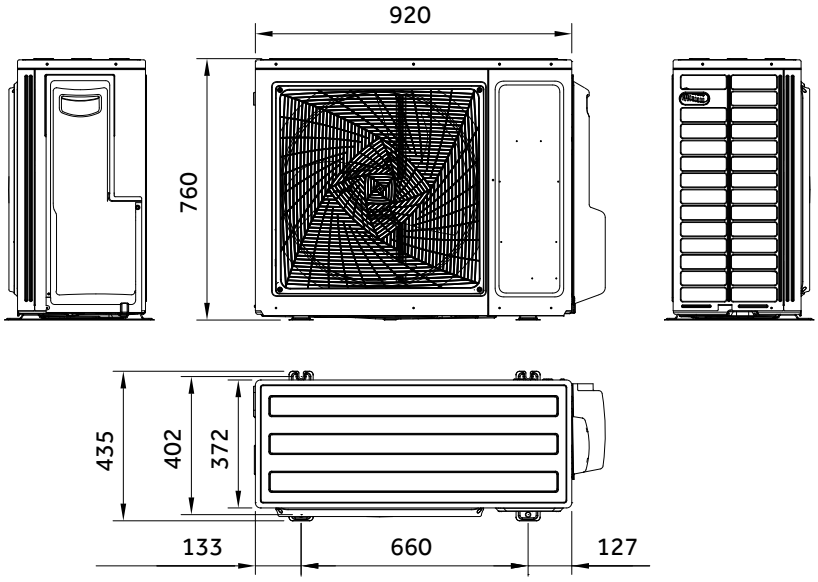


1U90S2SS2FA 1U105S2SS1FA 1U105S2SS2FA

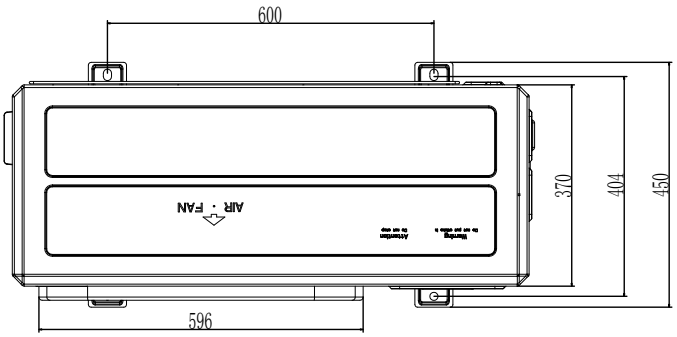


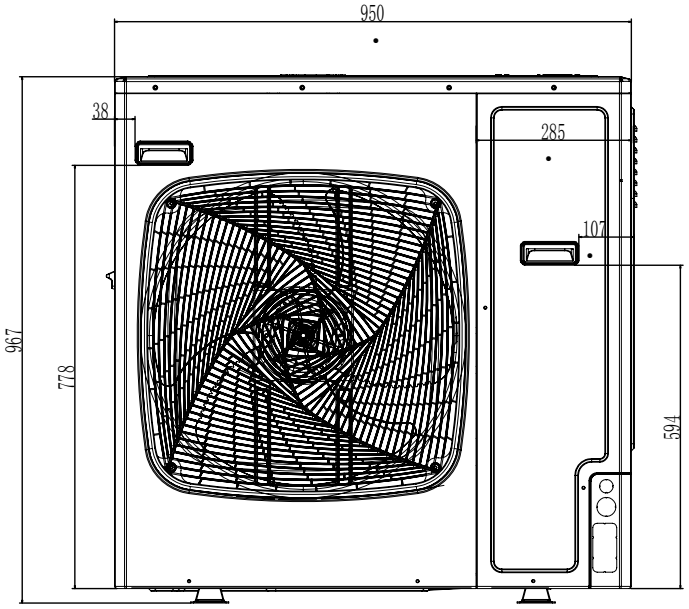
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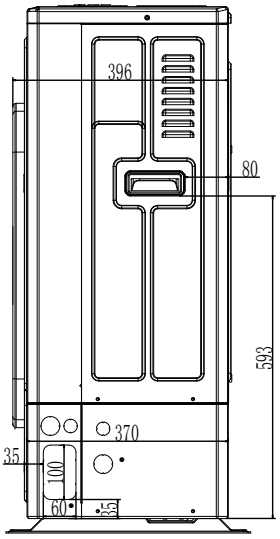




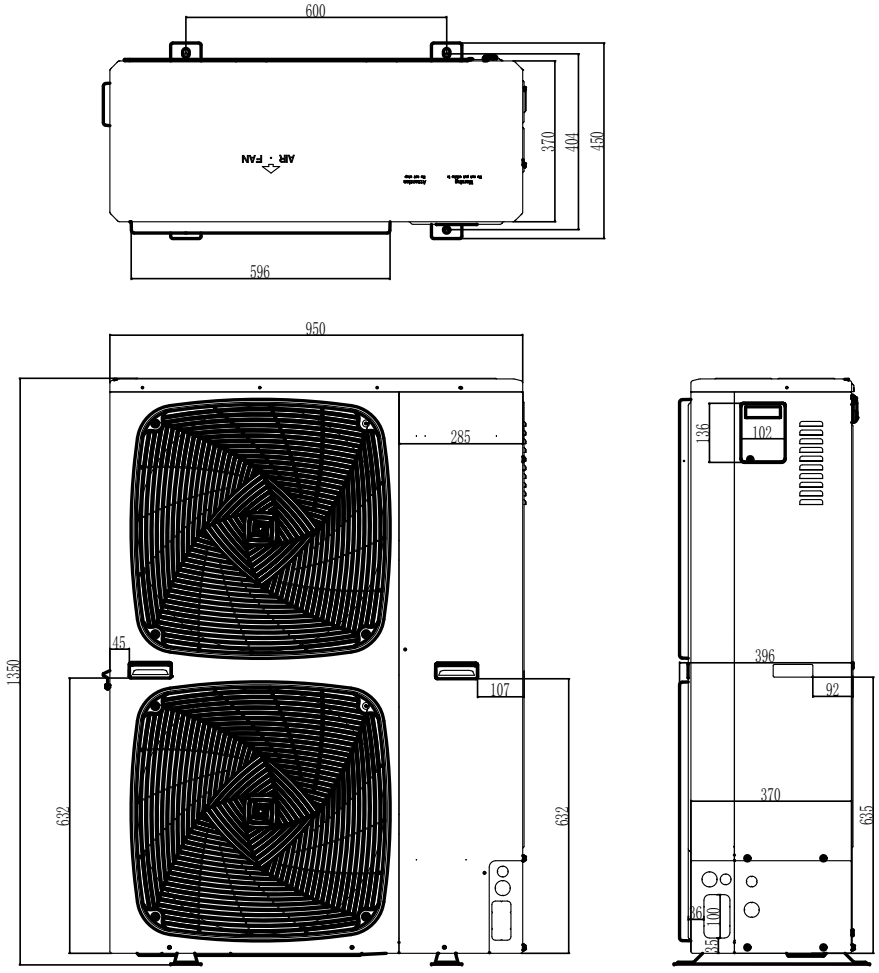
1U125S2SN1FA 1U125S2SN1FB 1U125S2SN2FA 1U125S2SN2FB 1U140S2SN1FA 1U140S2SN1FB



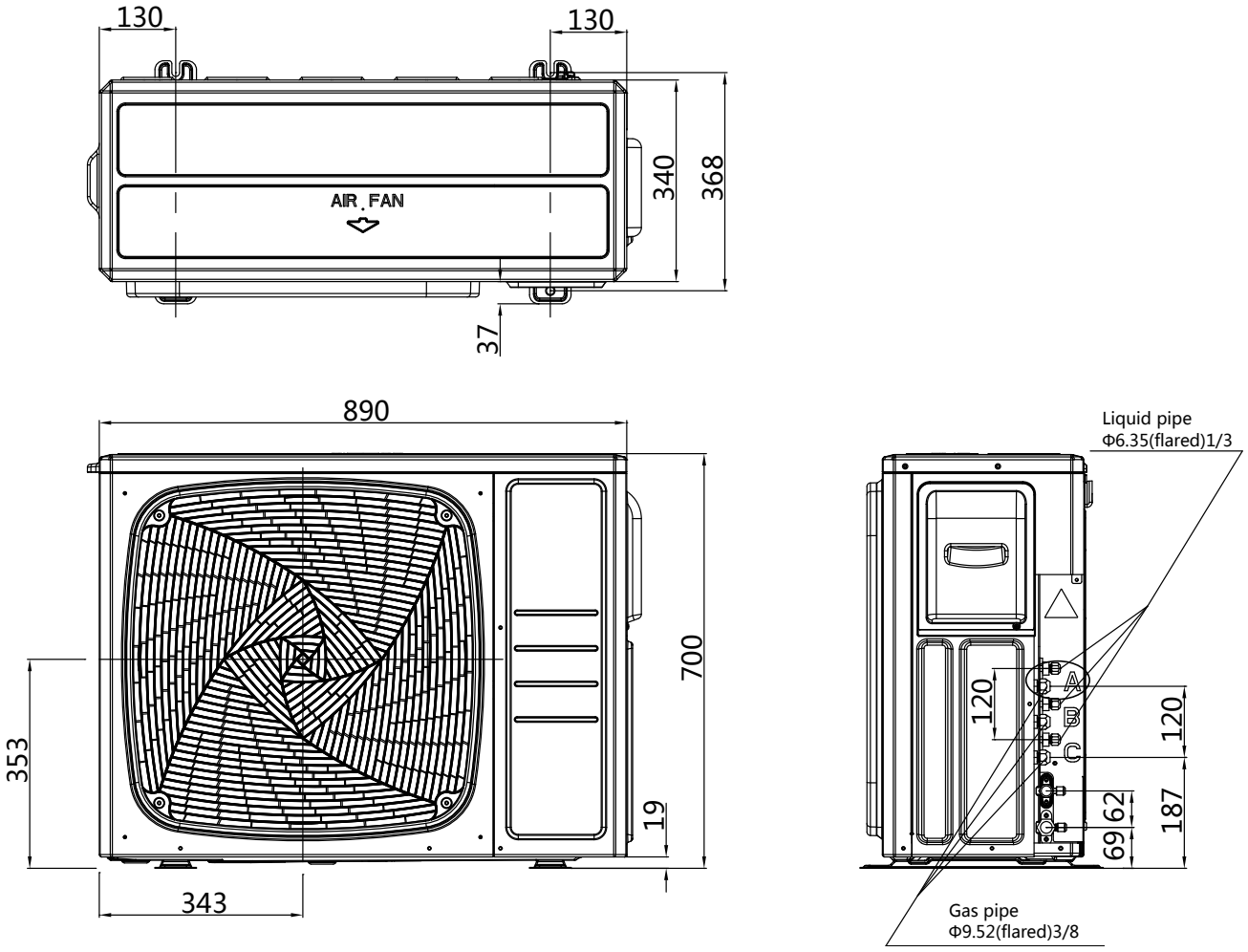



1U140S2SP1FA 1U140S2SP1FB 1U140S2SP2FA 1U140S2SP2FB 1U160S2SP1FB

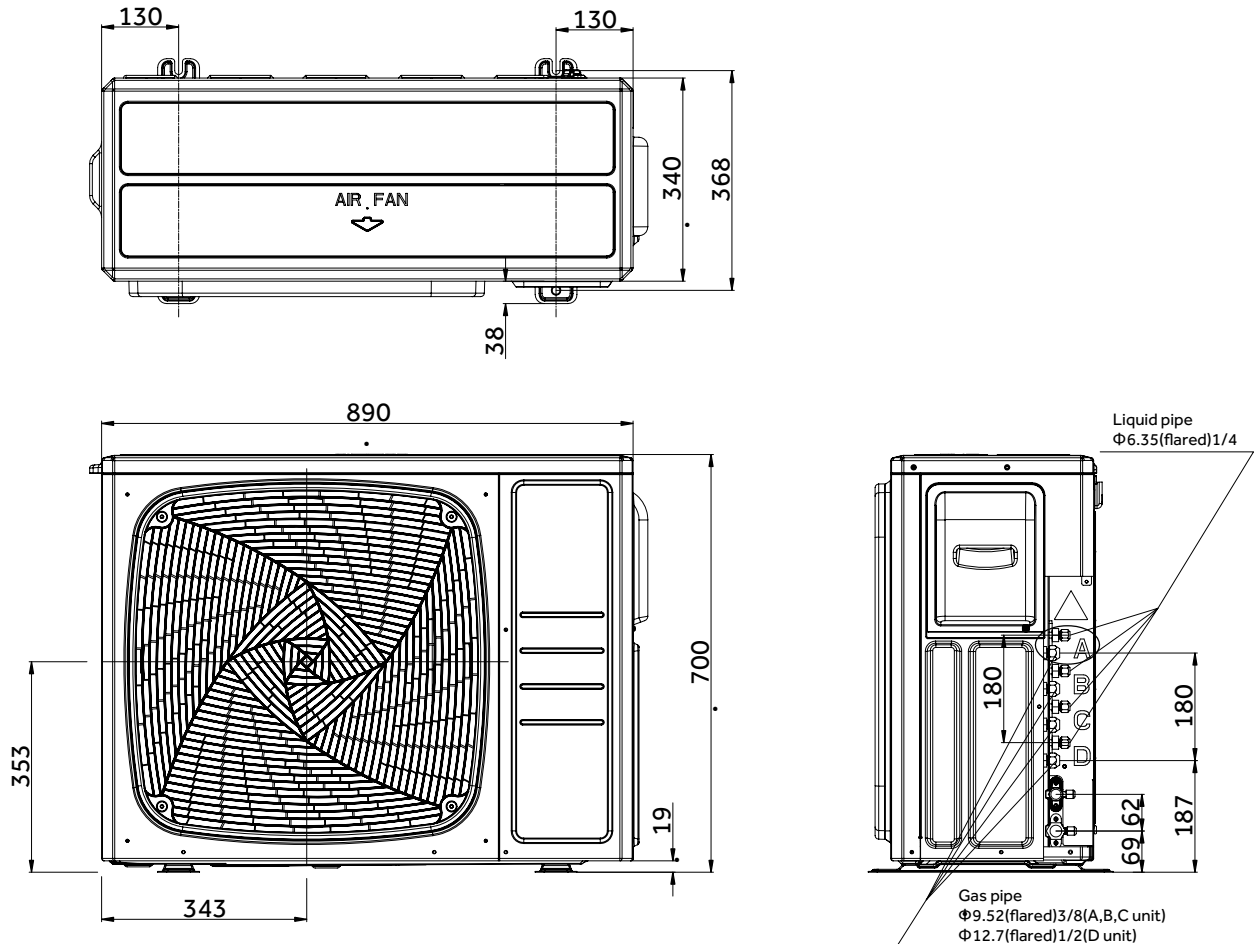


3U55S2SR5FA 3U70S2SR5FA



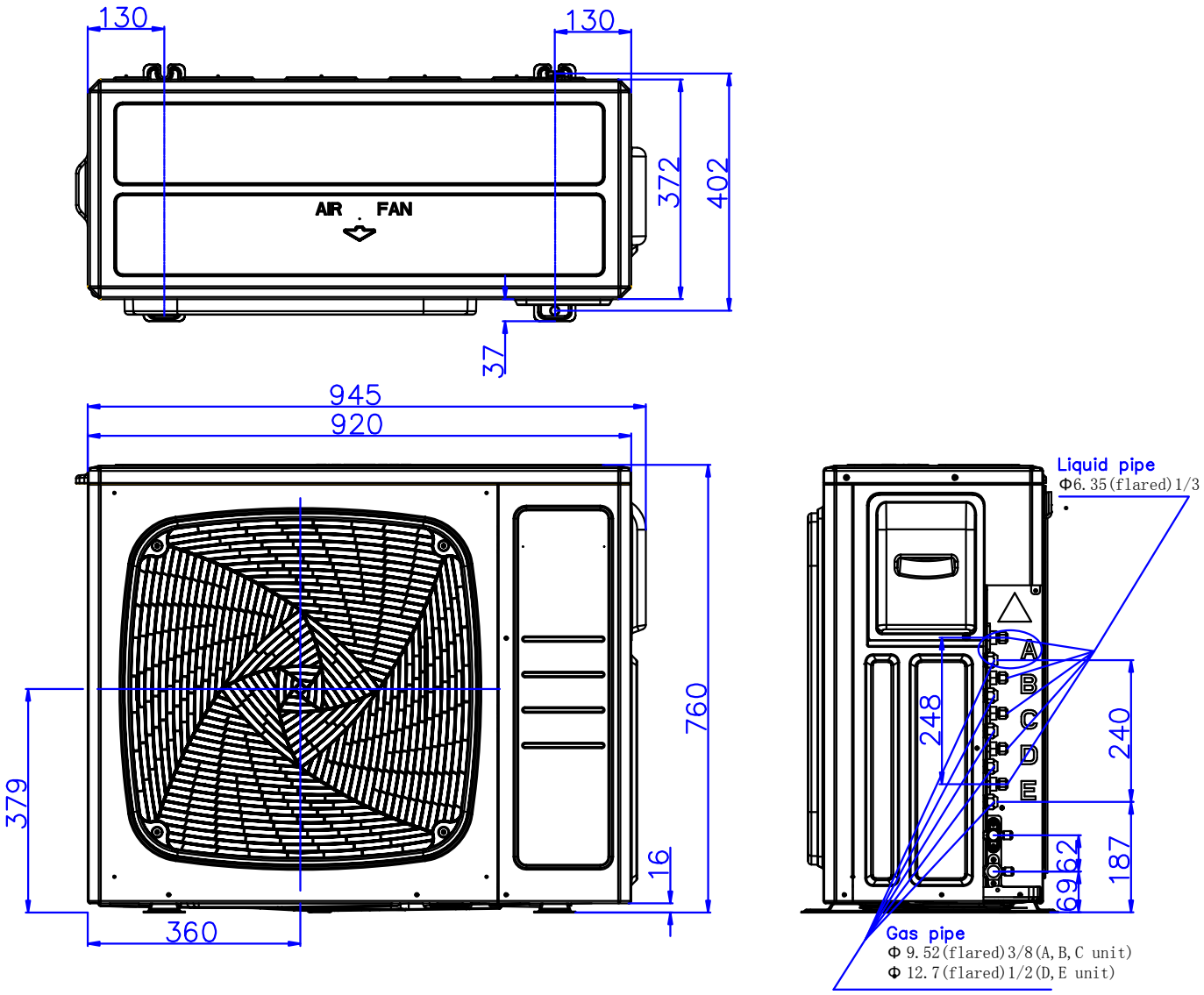

| 3U55S2SR5FA<br>3U70S2SR5FA | Liquid pipe<br>mm(in) | Gas pipe<br>mm(in) | Connection type |
|---|---|---|---|
| A | 6.35(1/4) | 9.52(3/8) | Flared |
| B | 6.35(1/4) | 9.52(3/8) | Flared |
| C | 6.35(1/4) | 9.52(3/8) | Flared |

4U75S2SR5FA 4U85S2SR5FA



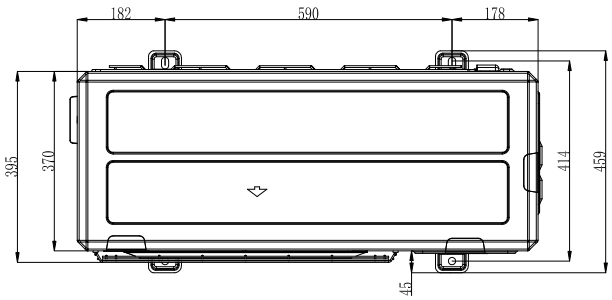

| 4U75S2SR5FA<br>4U85S2SR5FA | Liquid pipe<br>mm(in) | Gas pipe<br>mm(in) | Connection type |
|---|---|---|---|
| A | 6.35(1/4) | 9.52(3/8) | Flared |
| B | 6.35(1/4) | 9.52(3/8) | Flared |
| C | 6.35(1/4) | 9.52(3/8) | Flared |
| D | 6.35(1/4) | 12.7(1/2) | Flared |

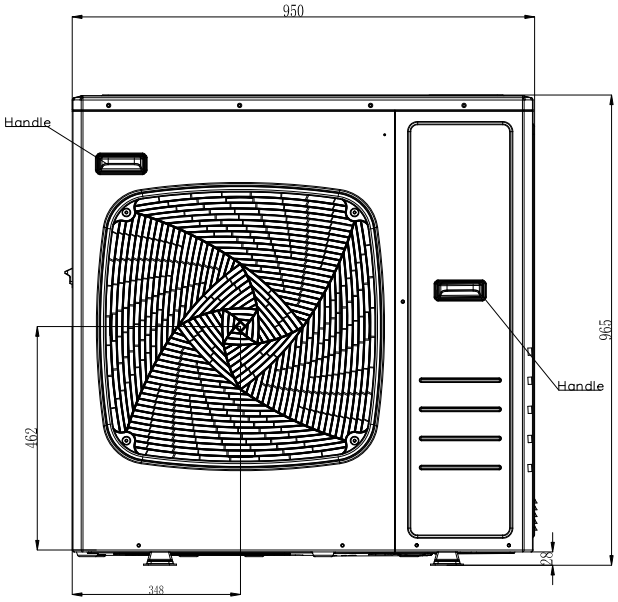
5U90S2SS5FA 5U105S2SS5FA

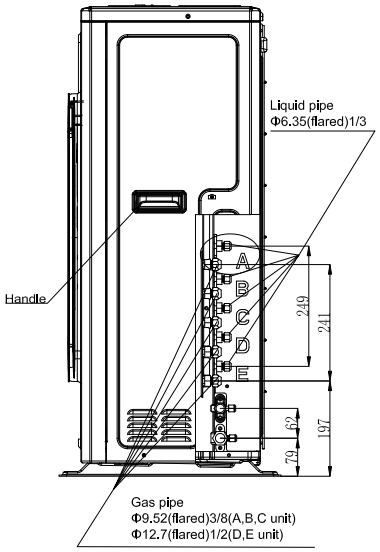



| 5U90S2SS5FA<br>5U105S2SS5FA | Liquid pipe<br>mm(in) | Gas pipe<br>mm(in) | Connection type |
|---|---|---|---|
| A | 6.35(1/4) | 9.52(3/8) | Flared |
| B | 6.35(1/4) | 9.52(3/8) | Flared |
| C | 6.35(1/4) | 9.52(3/8) | Flared |
| D | 6.35(1/4) | 12.7(1/2) | Flared |
| E | 6.35(1/4) | 12.7(1/2) | Flared |

5U125S2SN1FA



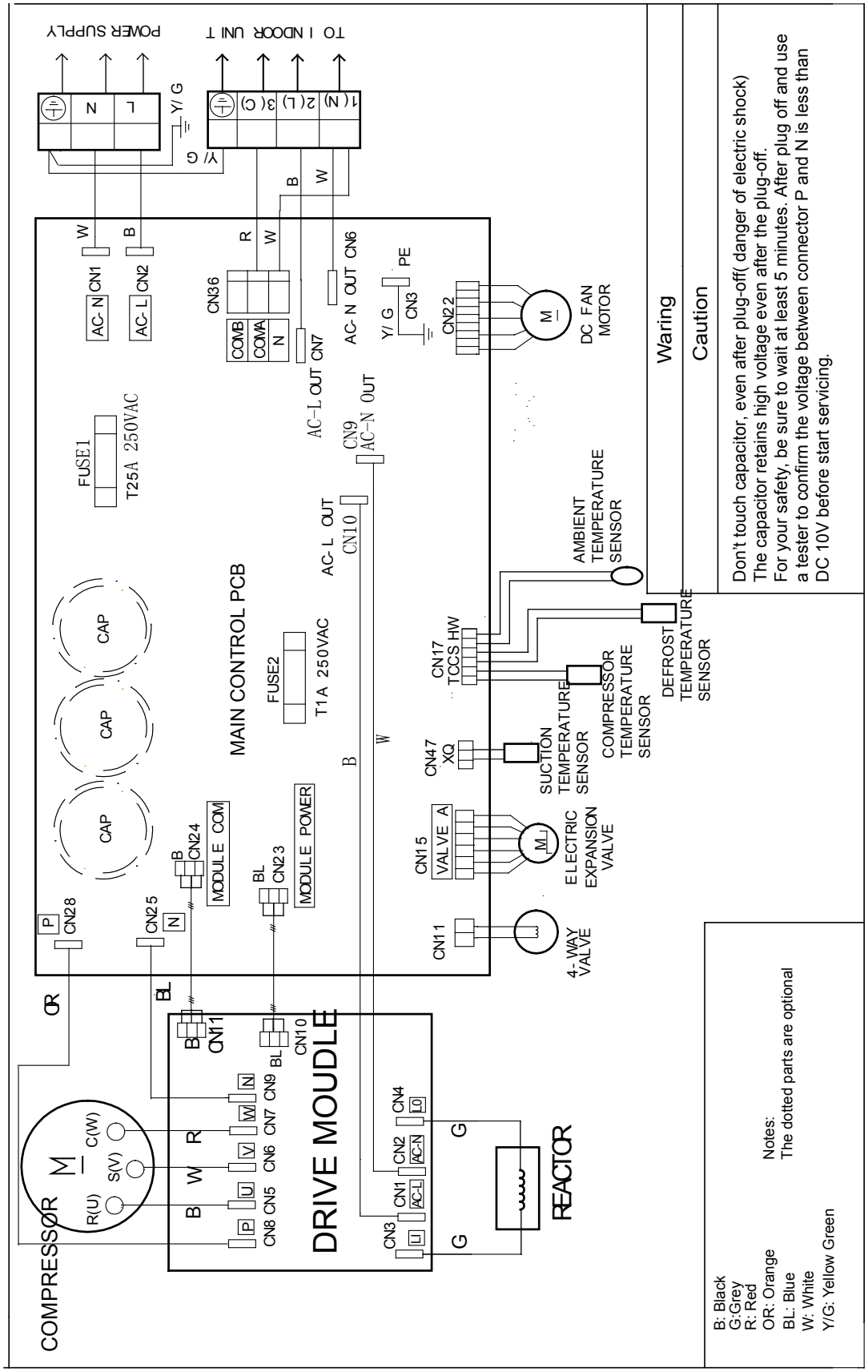



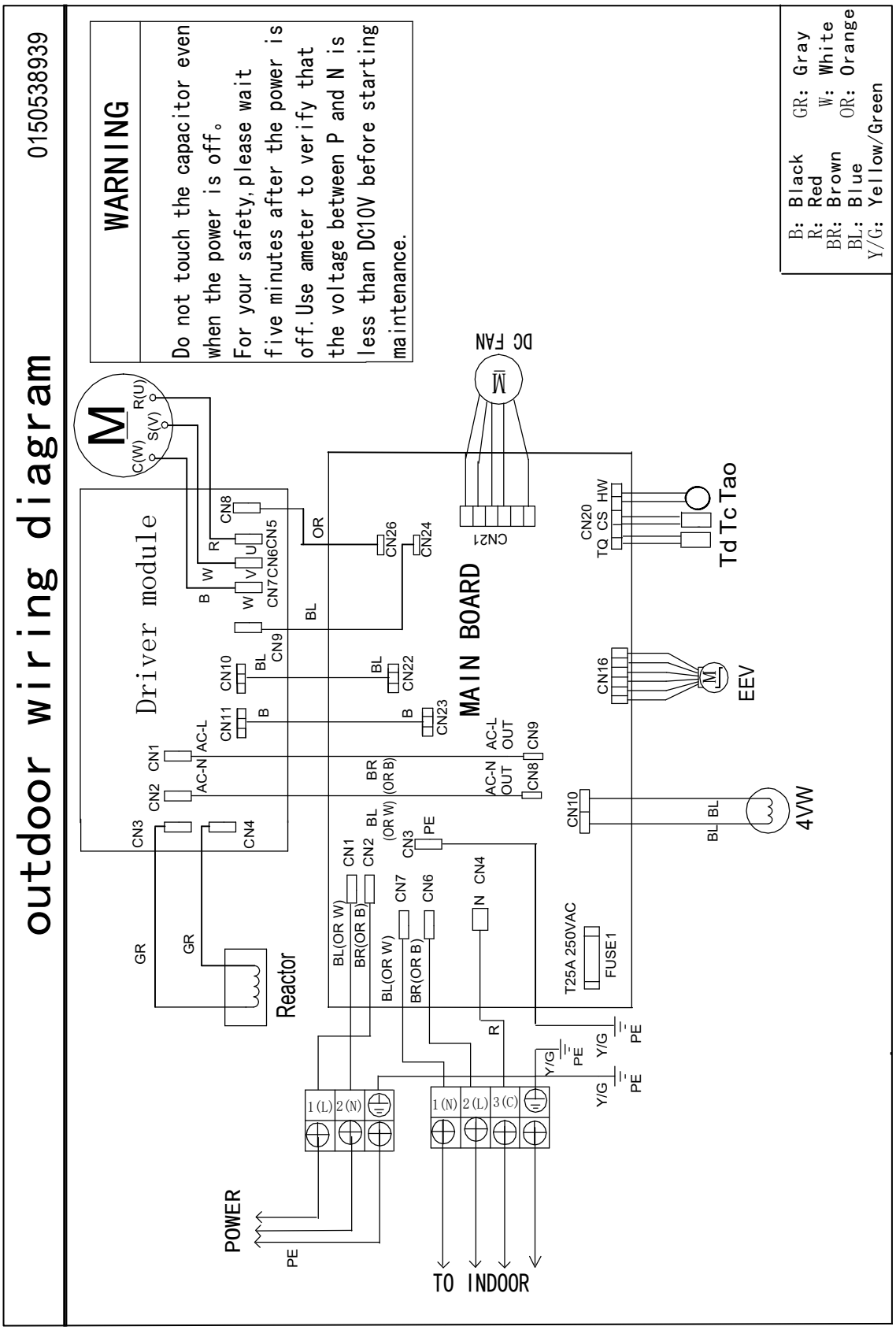

| 5U125S2SN1FA | Liquid pipe mm(in) | Gas pipe mm(in) | Connection type |
|---|---|---|---|
| A | 6.35(1/4) | 9.52(3/8) | Flared |
| B | 6.35(1/4) | 9.52(3/8) | Flared |
| C | 6.35(1/4) | 9.52(3/8) | Flared |
| D | 6.35(1/4) | 12.7(1/2) | Flared |
| E | 6.35(1/4) | 12.7(1/2) | Flared |

## 8.3 Wiring Diagram

1U71S2SM1FA

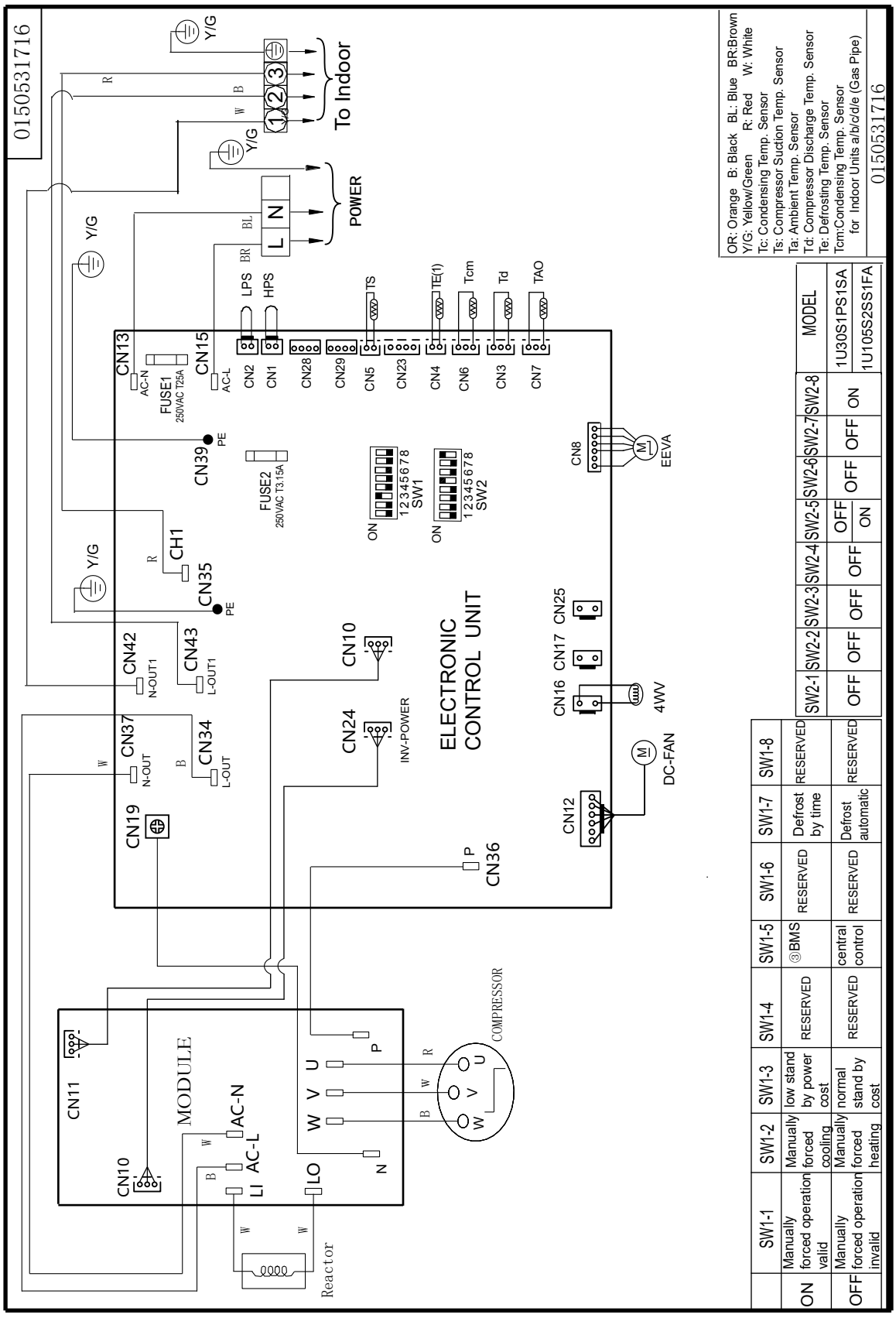


1U71S2SR2FA




2019.10.31 -

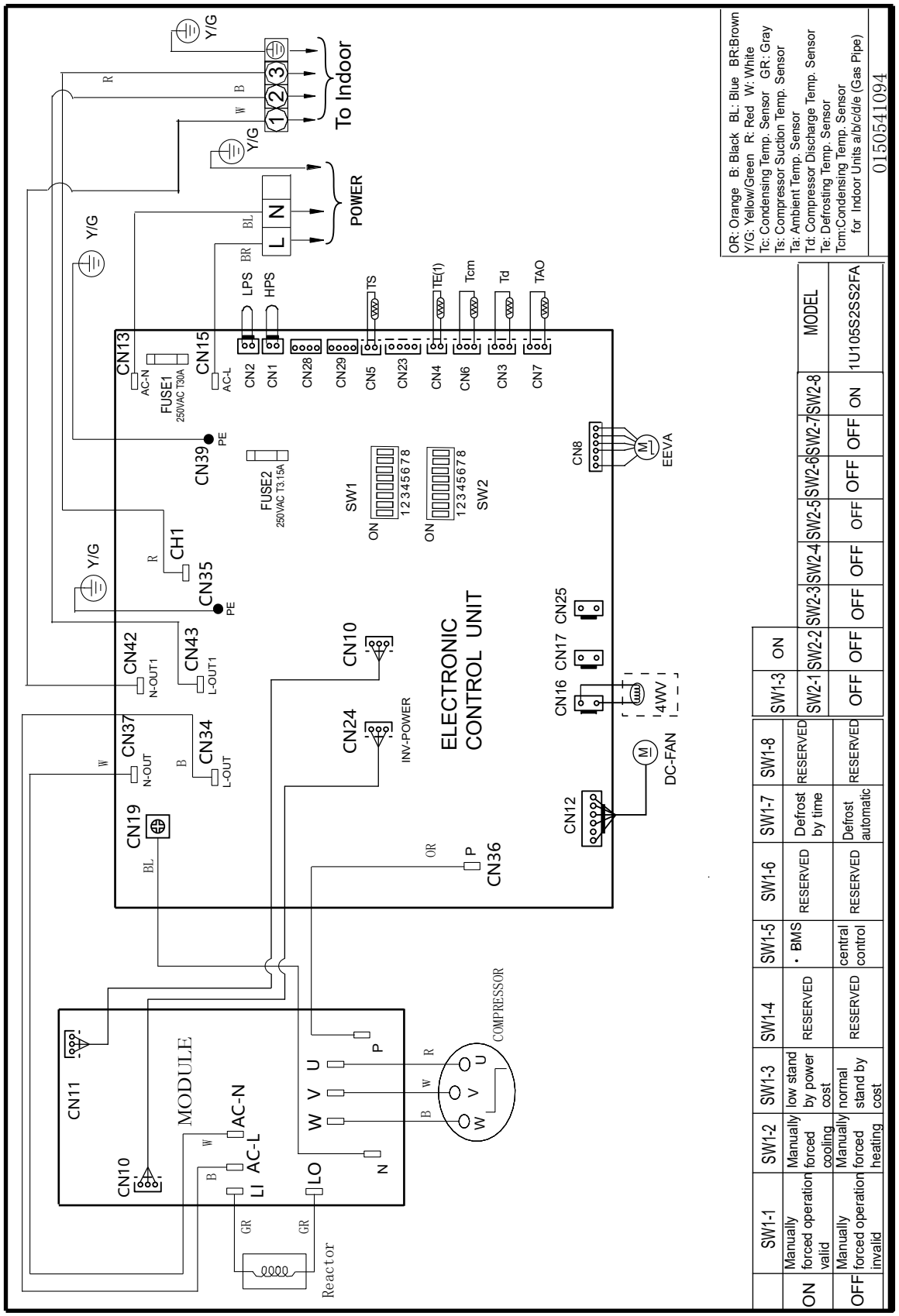
1U105S2SS1FA (Used before 7th May. 2021 )



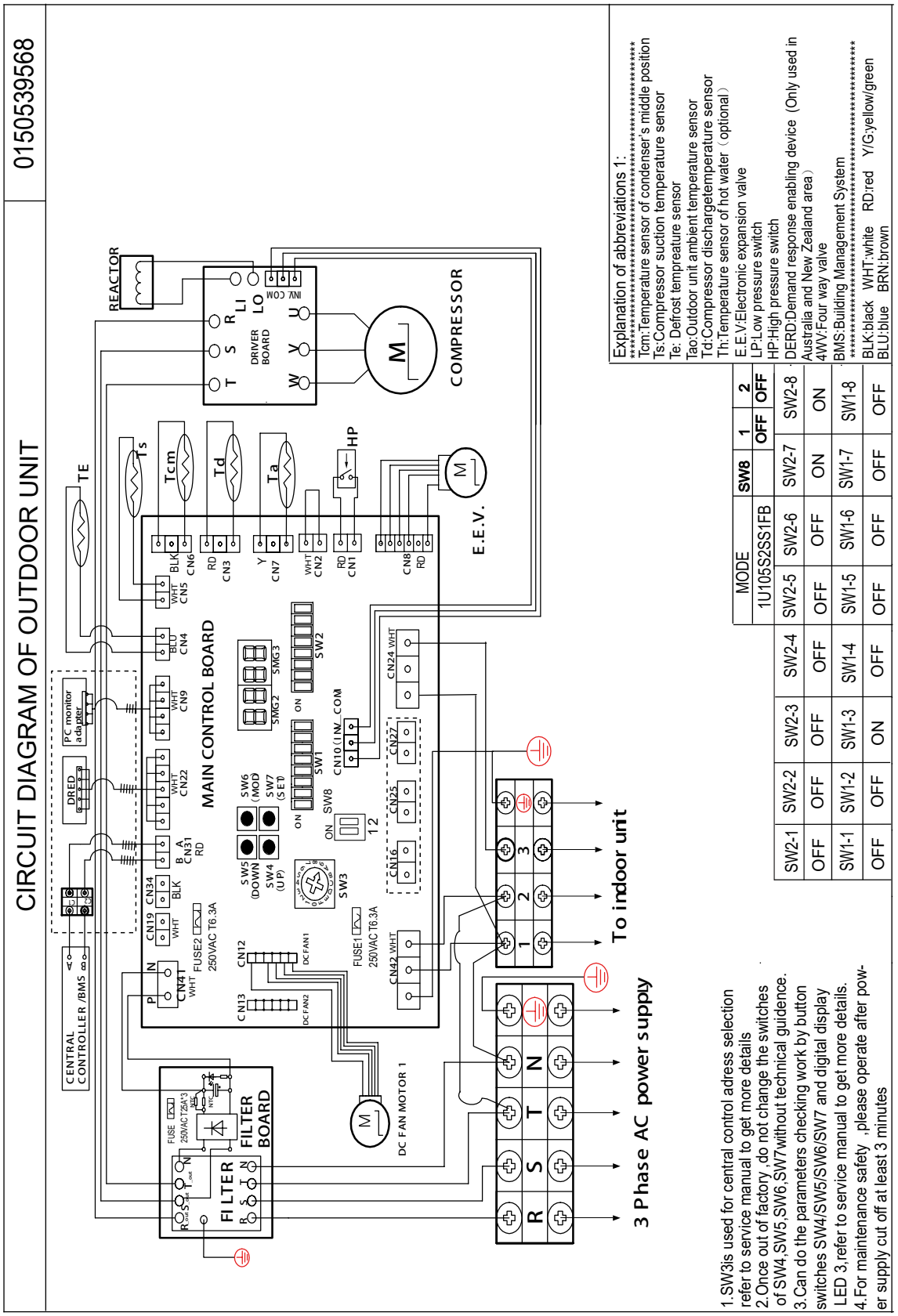

| | SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 |
|---|---|---|---|---|---|---|---|---|
| ON | Manually forced operation valid | Manually forced cooling | low stand by power cost | RESERVED | ⑧BMS | RESERVED | Defrost by time | RESERVED |
| OFF | Manually forced operation invalid | Manually forced heating | normal stand by cost | RESERVED | central control | RESERVED | Defrost automatic | RESERVED |

| | SW2-1 | SW2-2 | SW2-3 | SW2-4 | SW2-5 | SW2-6 | SW2-7 | SW2-8 | MODEL |
|---|---|---|---|---|---|---|---|---|---|
| | OFF | OFF | OFF | OFF | OFF<br>ON | OFF | OFF | ON | 1U30S1PS1SA |
| | | | | | | | | | 1U105S2SS1FA |

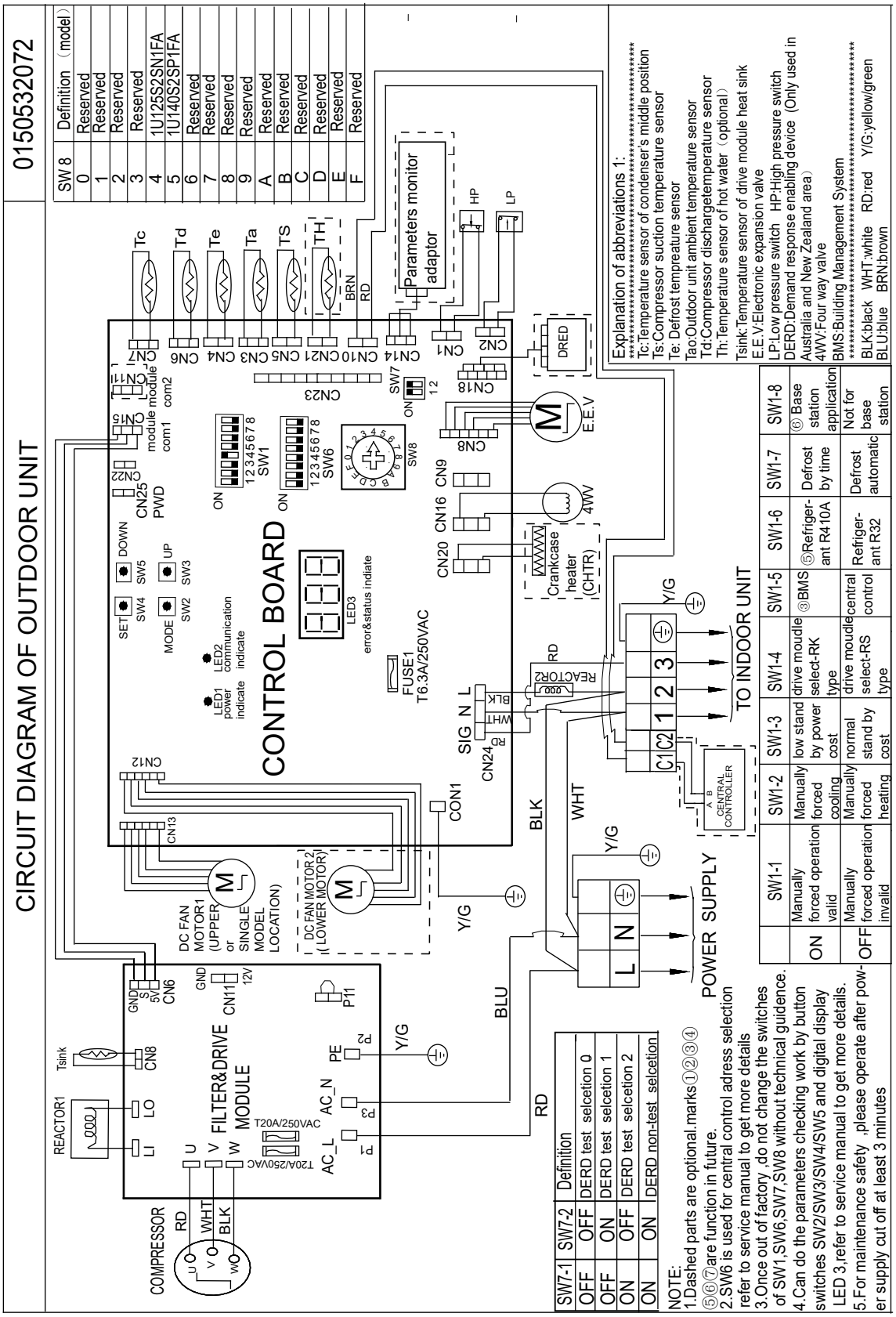
1U105S2SS1FA (Used after 7th May. 2021)
1U90S2SS2FA 1U105S2SS2FA



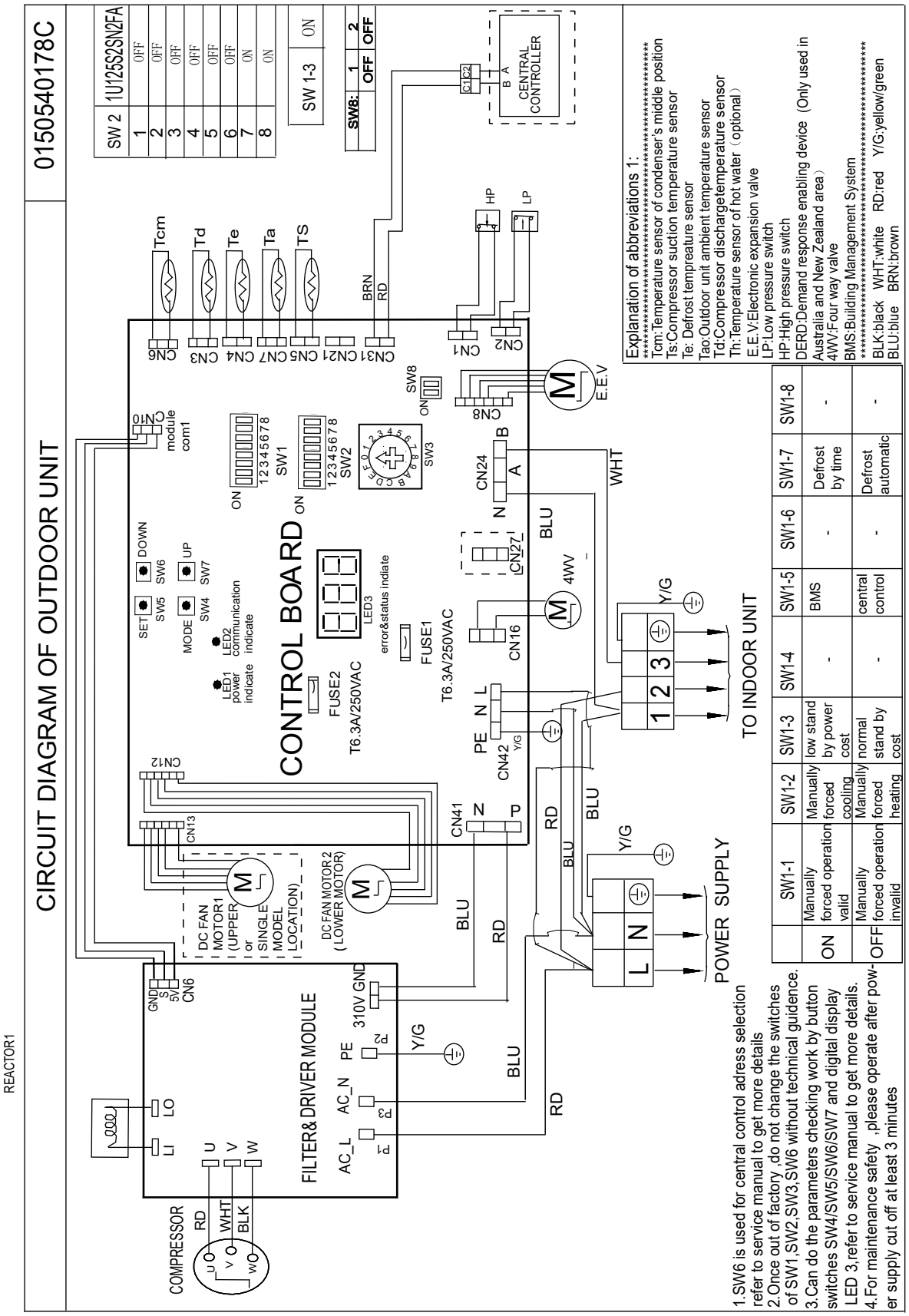
1U105S2SS1FB

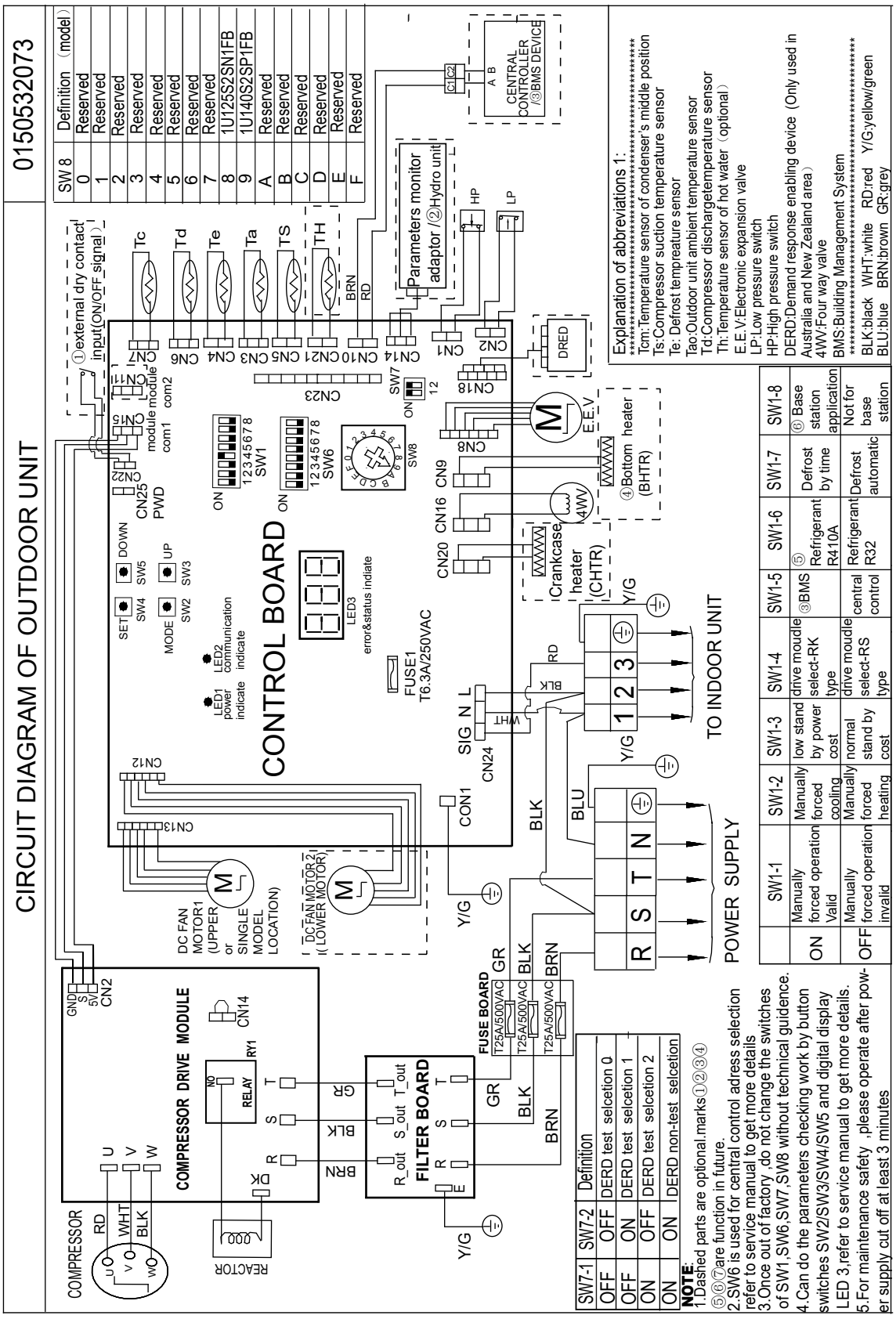



| MODE | SW8 | 1 | 2 |
|---|---|---|---|
| 1U105S2SS1FB | | OFF | OFF |
| | SW2-5 | SW2-6 | SW2-7 | SW2-8 |
| | SW2-4 | SW2-3 | SW2-2 | SW2-1 |
| | OFF | OFF | ON | ON |
| | OFF | OFF | OFF | OFF |
| | SW1-5 | SW1-6 | SW1-7 | SW1-8 |
| | SW1-4 | SW1-3 | SW1-2 | SW1-1 |
| | OFF | ON | OFF | OFF |
| | OFF | OFF | OFF | OFF |

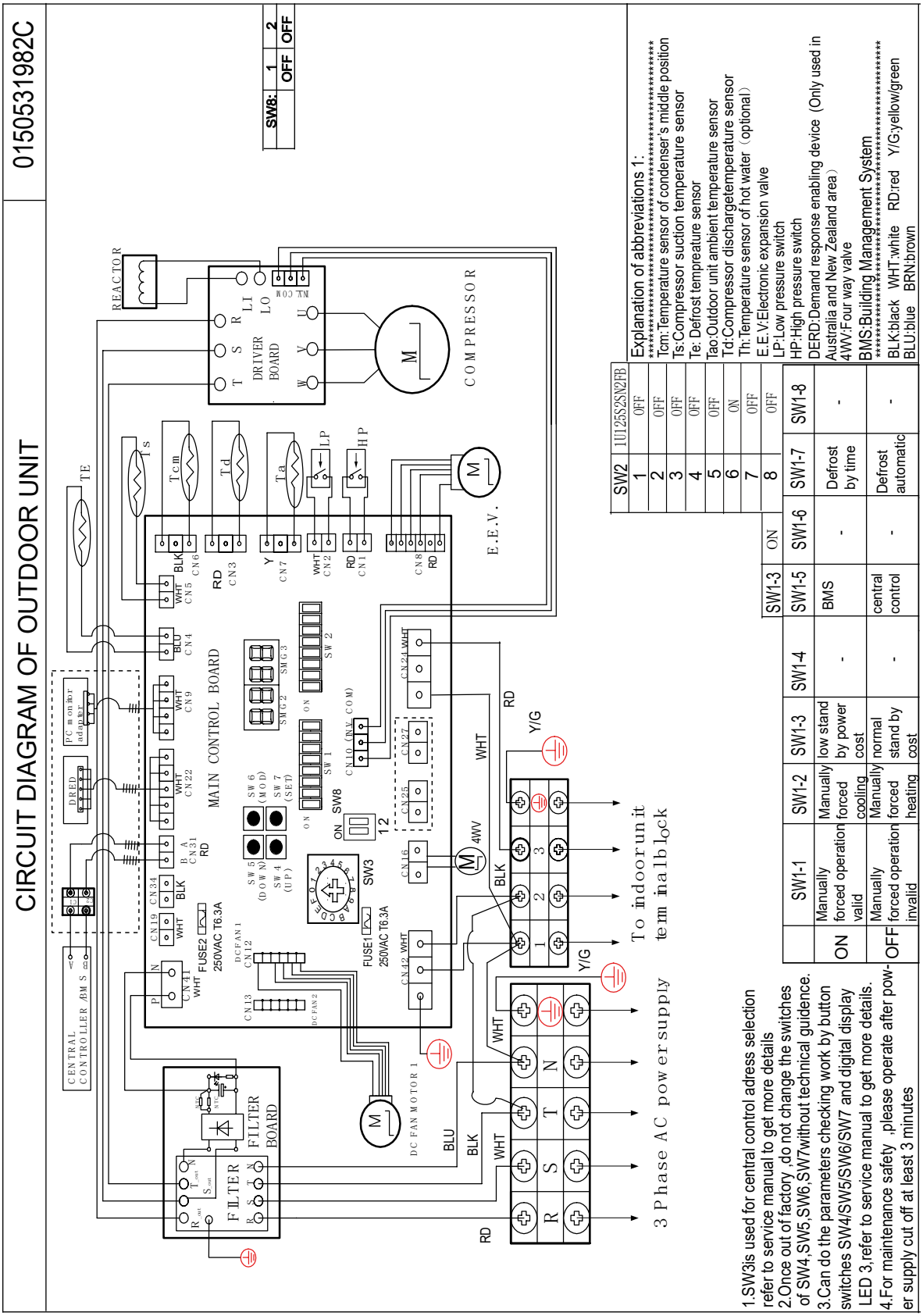

CIRCUIT DIAGRAM OF OUTDOOR UNIT
0150532072
CONTROL BOARD
FILTER&DRIVE MODULE
POWER SUPPLY
TO INDOOR UNIT
COMPRESSOR
REACTOR1
Tsink
DC FAN MOTOR1 (UPPER or SINGLE MODEL LOCATION)
DC FAN MOTOR 2 (LOWER MOTOR)
CENTRAL CONTROLLER
Crankcase heater (CHTR)
4WV
E.E.V
DRED
Parameters monitor adaptor
HP
LP
Tc
Td
Te
Ta
TS
TH
FUSE1 T6.3A/250VAC
T20A/250VAC
SW1
SW6
SW8
SW7
SW4 SET
SW5 DOWN
SW2 MODE
SW3 UP
LED1 power indicate
LED2 communication indicate
LED3 error&status indicate
CN1 CN2 CN3 CN4 CN5 CN6 CN7 CN8 CN9 CN10 CN11 CN12 CN13 CN14 CN16 CN18 CN20 CN21 CN22 CN23 CN24 CN25 PWD
com1 com2 module
P1 P2 P3 P11
AC_L AC_N PE
SIG N L
C1 C2 1 2 3
L N
U V W
LI LO
BLK WHT RD BLU Y/G
Explanation of abbreviations 1:
Tc:Temperature sensor of condenser's middle position
Ts:Compressor suction temperature sensor
Te: Defrost tempreature sensor
Tao:Outdoor unit ambient temperature sensor
Td:Compressor dischargetemperature sensor
Th:Temperature sensor of hot water (optional)
Tsink:Temperature sensor of drive module heat sink
E.E.V:Electronic expansion valve
LP:Low pressure switch HP:High pressure switch
DERD:Demand response enabling device (Only used in Australia and New Zealand area)
4WV:Four way valve
BMS:Building Management System
BLK:black WHT:white RD:red Y/G:yellow/green
BLU:blue BRN:brown
SW 8 Definition (model)
0 Reserved
1 Reserved
2 Reserved
3 Reserved
4 1U125S2SN1FA
5 1U140S2SP1FA
6 Reserved
7 Reserved
8 Reserved
9 Reserved
A Reserved
B Reserved
C Reserved
D Reserved
E Reserved
F Reserved
SW1-1 SW1-2 SW1-3 SW1-4 SW1-5 SW1-6 SW1-7 SW1-8
ON Manually forced operation valid | Manually forced cooling | low stand by power cost | drive moudle select-RK type | ③BMS central control | ⑤Refriger-ant R410A | Defrost by time | ⑥ Base station application
OFF Manually forced operation invalid | Manually forced heating | normal stand by cost | drive moudle select-RS type | Refriger-ant R32 | Defrost automatic | Not for base station
SW7-1 SW7-2 Definition
OFF OFF DERD test selcetion 0
OFF ON DERD test selcetion 1
ON OFF DERD test selcetion 2
ON ON DERD non-test selcetion
NOTE:
1.Dashed parts are optional.marks①②③④⑤⑥⑦are function in future.
2.SW6 is used for central control adress selection refer to service manual to get more details
3.Once out of factory ,do not change the switches of SW1,SW6,SW7,SW8 without technical guidence.
4.Can do the parameters checking work by button switches SW2/SW3/SW4/SW5 and digital display LED 3,refer to service manual to get more details.
5.For maintenance safety ,please operate after power supply cut off at least 3 minutes

1U125S2SN2FA

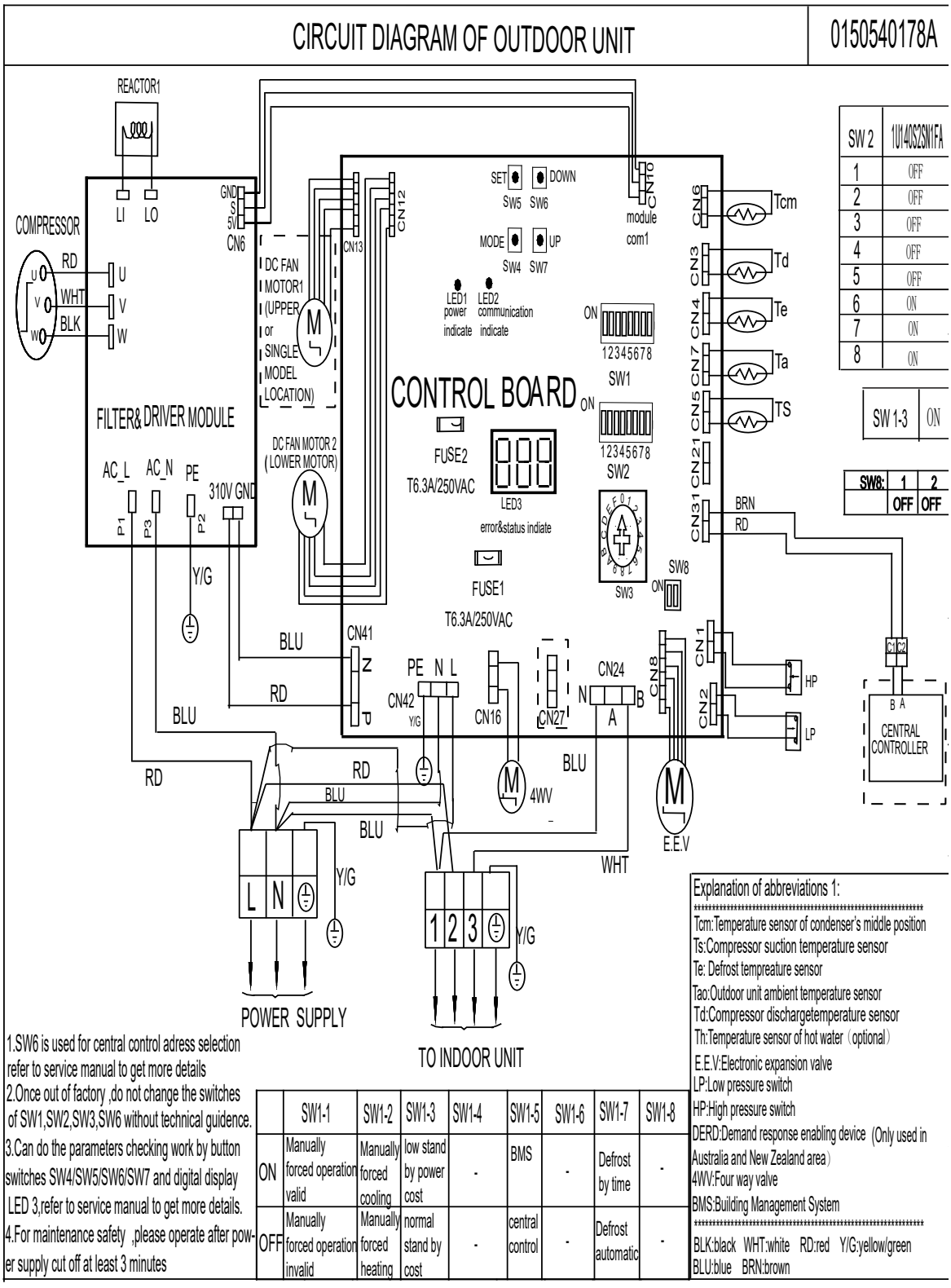



CIRCUIT DIAGRAM OF OUTDOOR UNIT
0150532073
CONTROL BOARD
COMPRESSOR DRIVE MODULE
FILTER BOARD
FUSE BOARD
POWER SUPPLY
TO INDOOR UNIT
DC FAN MOTOR1 (UPPER or SINGLE MODEL LOCATION)
DC FAN MOTOR2 (LOWER MOTOR)
COMPRESSOR
REACTOR
FUSE1 T6.3A/250VAC
Crankcase heater (CHTR)
4WV
E.E.V
DRED
HP
LP
Parameters monitor adaptor /②Hydro unit
CENTRAL CONTROLLER /③BMS DEVICE
①external dry contact input(ON/OFF signal)
Tc
Td
Te
Ta
TS
TH
④Bottom heater (BHTR)
SW 8 Definition (model)
0 Reserved
1 Reserved
2 Reserved
3 Reserved
4 Reserved
5 Reserved
6 Reserved
7 Reserved
8 1U125S2SN1FB
9 1U140S2SP1FB
A Reserved
B Reserved
C Reserved
D Reserved
E Reserved
F Reserved
Explanation of abbreviations 1:
Tcm:Temperature sensor of condenser's middle position
Ts:Compressor suction temperature sensor
Te: Defrost tempreature sensor
Tao:Outdoor unit ambient temperature sensor
Td:Compressor dischargetemperature sensor
Th:Temperature sensor of hot water (optional)
E.E.V:Electronic expansion valve
LP:Low pressure switch
HP:High pressure switch
DERD:Demand response enabling device (Only used in Australia and New Zealand area)
4WV:Four way valve
BMS:Building Management System
BLK:black WHT:white RD:red Y/G:yellow/green
BLU:blue BRN:brown GR:grey
SW1-1 SW1-2 SW1-3 SW1-4 SW1-5 SW1-6 SW1-7 SW1-8
ON Manually forced operation Valid | Manually forced cooling | low stand by power cost | drive moudle select-RK type | ③BMS | ⑤ Refrigerant R410A | Defrost by time | ⑥ Base station application
OFF forced operation invalid | forced heating | stand by cost | drive moudle select-RS type | central control | Refrigerant R32 | Defrost automatic | Not for base station
SW7-1 SW7-2 Definition
OFF OFF DERD test selcetion 0
OFF ON DERD test selcetion 1
ON OFF DERD test selcetion 2
ON ON DERD non-test selcetion
NOTE:
1.Dashed parts are optional.marks①②③④⑤⑥⑦are function in future.
2.SW6 is used for central control adress selection refer to service manual to get more details
3.Once out of factory ,do not change the switches of SW1,SW6,SW7,SW8 without technical guidence.
4.Can do the parameters checking work by button switches SW2/SW3/SW4/SW5 and digital display LED 3,refer to service manual to get more details.
5.For maintenance safety ,please operate after power supply cut off at least 3 minutes

1U125S2SN2FB



1U140S2SN1FA




1.SW6 is used for central control adress selection refer to service manual to get more details

2.Once out of factory ,do not change the switches of SW1,SW2,SW3,SW6 without technical guidence.

3.Can do the parameters checking work by button switches SW4/SW5/SW6/SW7 and digital display LED 3,refer to service manual to get more details.

4.For maintenance safety ,please operate after power supply cut off at least 3 minutes

| | SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 |
|---|---|---|---|---|---|---|---|---|
| ON | Manually forced operation valid | Manually forced cooling | low stand by power cost | - | BMS | - | Defrost by time | - |
| OFF | Manually forced operation invalid | Manually forced heating | normal stand by cost | - | central control | - | Defrost automatic | - |

Explanation of abbreviations 1:

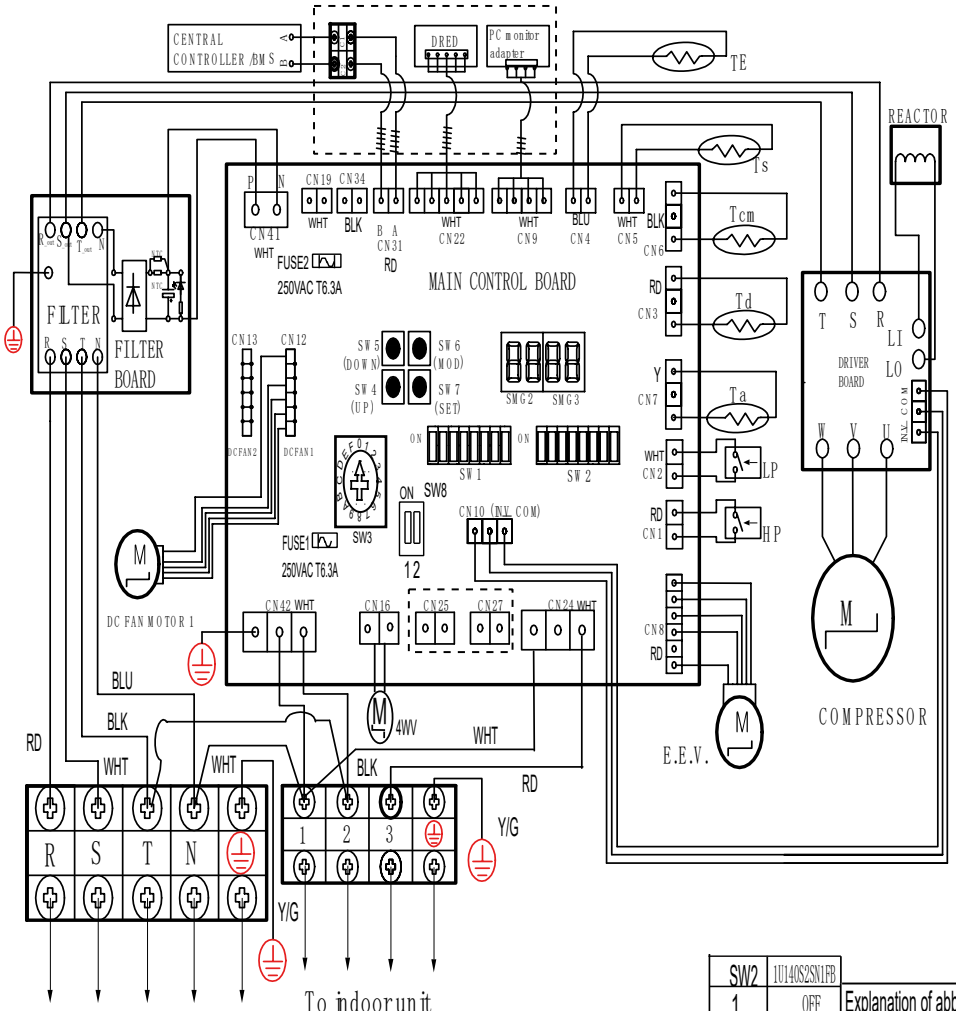
Tcm:Temperature sensor of condenser's middle position
Ts:Compressor suction temperature sensor
Te: Defrost tempreature sensor
Tao:Outdoor unit ambient temperature sensor
Td:Compressor dischargetemperature sensor
Th:Temperature sensor of hot water（optional）
E.E.V:Electronic expansion valve
LP:Low pressure switch
HP:High pressure switch
DERD:Demand response enabling device （Only used in Australia and New Zealand area）
4WV:Four way valve
BMS:Building Management System

BLK:black WHT:white RD:red Y/G:yellow/green
BLU:blue BRN:brown

1U140S2SN1FB

# CIRCUIT DIAGRAM OF OUTDOOR UNIT

0150531982A




| SW8: | 1 | 2 |
|---|---|---|
| | OFF | OFF |

| SW2 | 1U140S2SN1FB |
|---|---|
| 1 | OFF |
| 2 | OFF |
| 3 | OFF |
| 4 | OFF |
| 5 | ON |
| 6 | OFF |
| 7 | OFF |
| 8 | OFF |

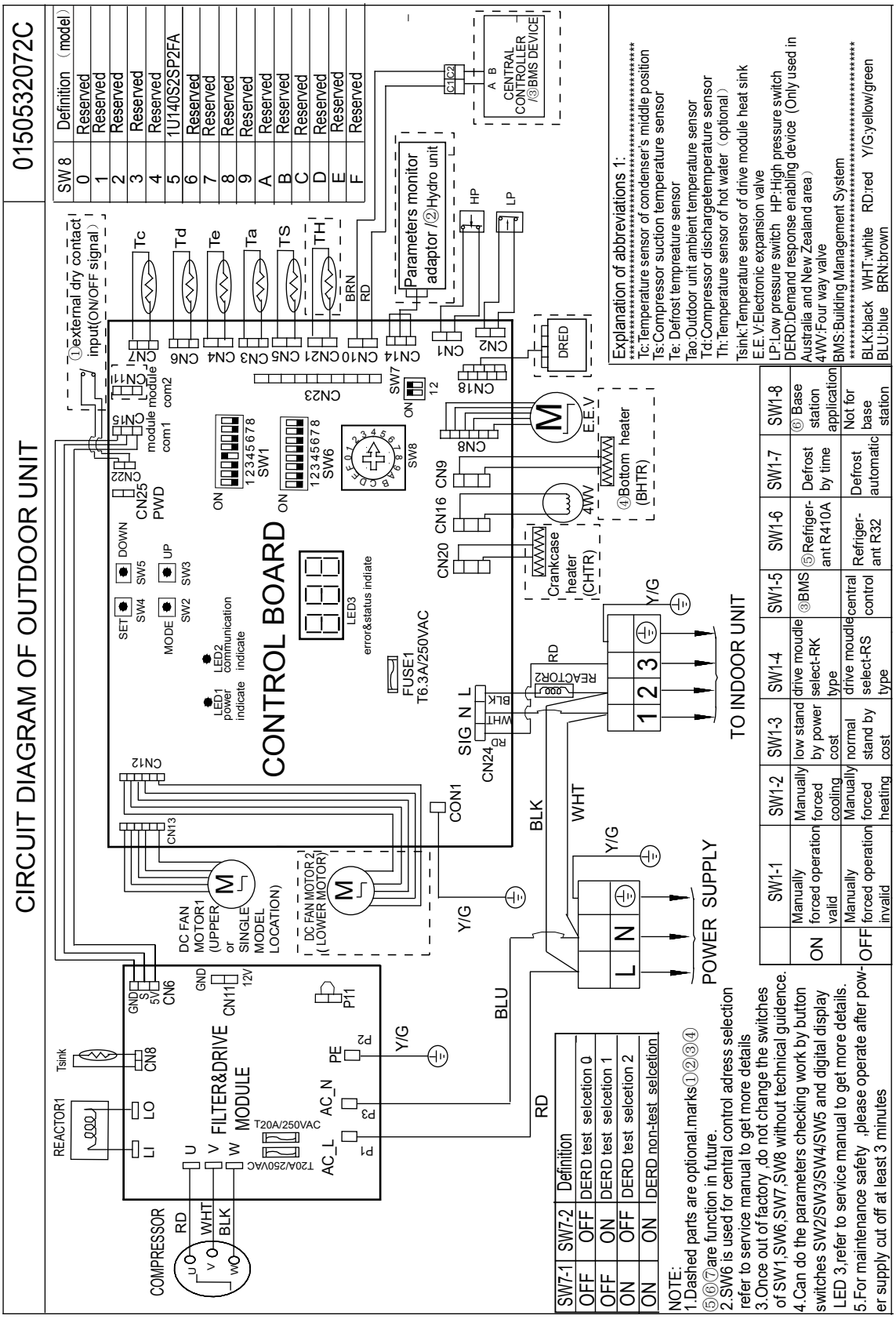
1.SW3is used for central control adress selection refer to service manual to get more details
2.Once out of factory ,do not change the switches of SW4,SW5,SW6,SW7without technical guidence.
3.Can do the parameters checking work by button switches SW4/SW5/SW6/SW7 and digital display LED 3,refer to service manual to get more details.
4.For maintenance safety ,please operate after power supply cut off at least 3 minutes

| | SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 |
|---|---|---|---|---|---|---|---|---|
| ON | Manually forced operation valid | Manually forced cooling | low stand by power cost | - | BMS | - | Defrost by time | - |
| OFF | Manually forced operation invalid | Manually forced heating | normal stand by cost | - | central control | - | Defrost automatic | - |

Explanation of abbreviations 1:

Tcm:Temperature sensor of condenser's middle position
Ts:Compressor suction temperature sensor
Te: Defrost tempreature sensor
Tao:Outdoor unit ambient temperature sensor
Td:Compressor dischargetemperature sensor
Th:Temperature sensor of hot water (optional)
E.E.V:Electronic expansion valve
LP:Low pressure switch
HP:High pressure switch
DERD:Demand response enabling device (Only used in Australia and New Zealand area)
4WV:Four way valve
BMS:Building Management System

BLK:black WHT:white RD:red Y/G:yellow/green
BLU:blue BRN:brown



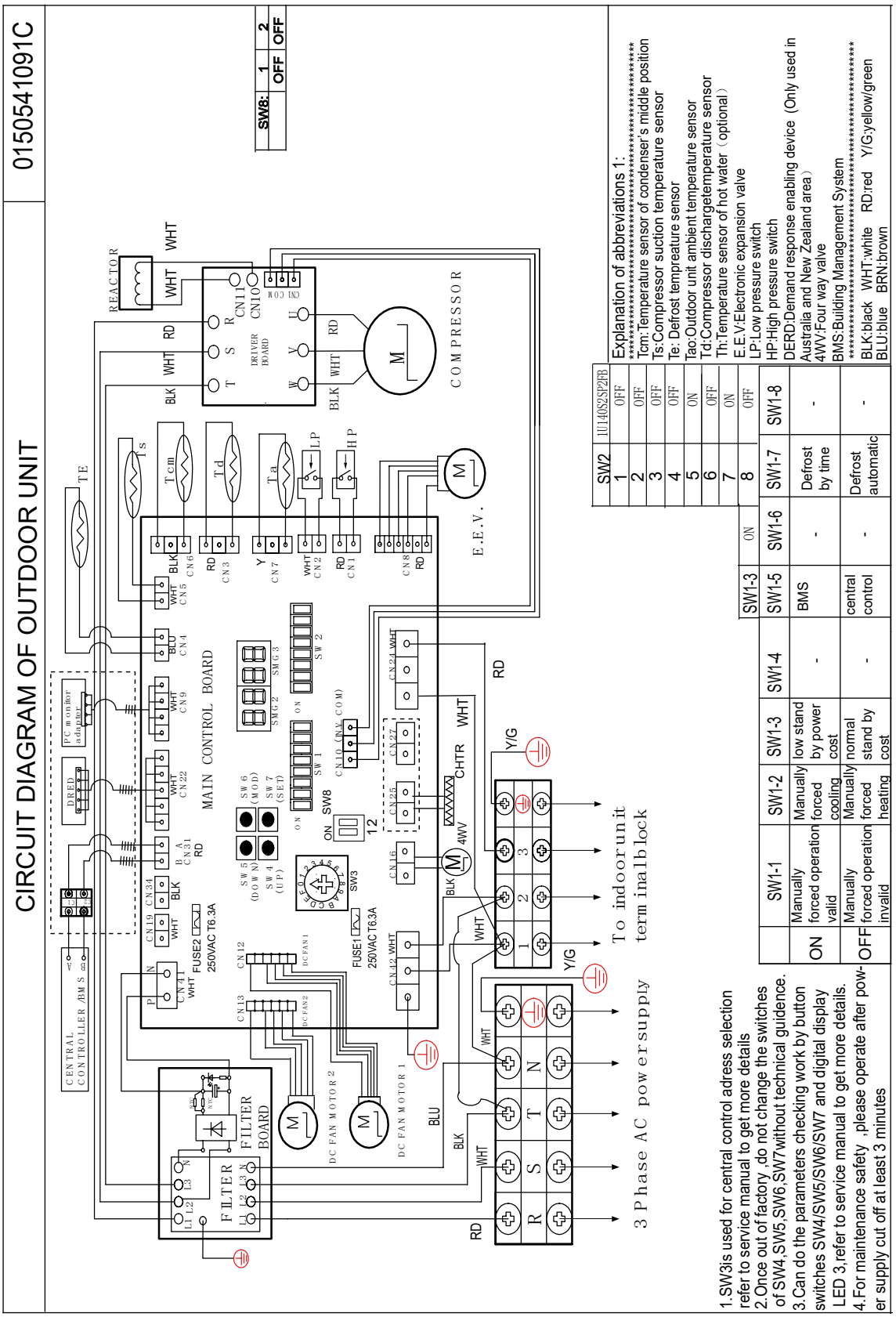

| SW 8 | Definition（model） |
|---|---|
| 0 | Reserved |
| 1 | Reserved |
| 2 | Reserved |
| 3 | Reserved |
| 4 | Reserved |
| 5 | 1U140S2SP2FA |
| 6 | Reserved |
| 7 | Reserved |
| 8 | Reserved |
| 9 | Reserved |
| A | Reserved |
| B | Reserved |
| C | Reserved |
| D | Reserved |
| E | Reserved |
| F | Reserved |

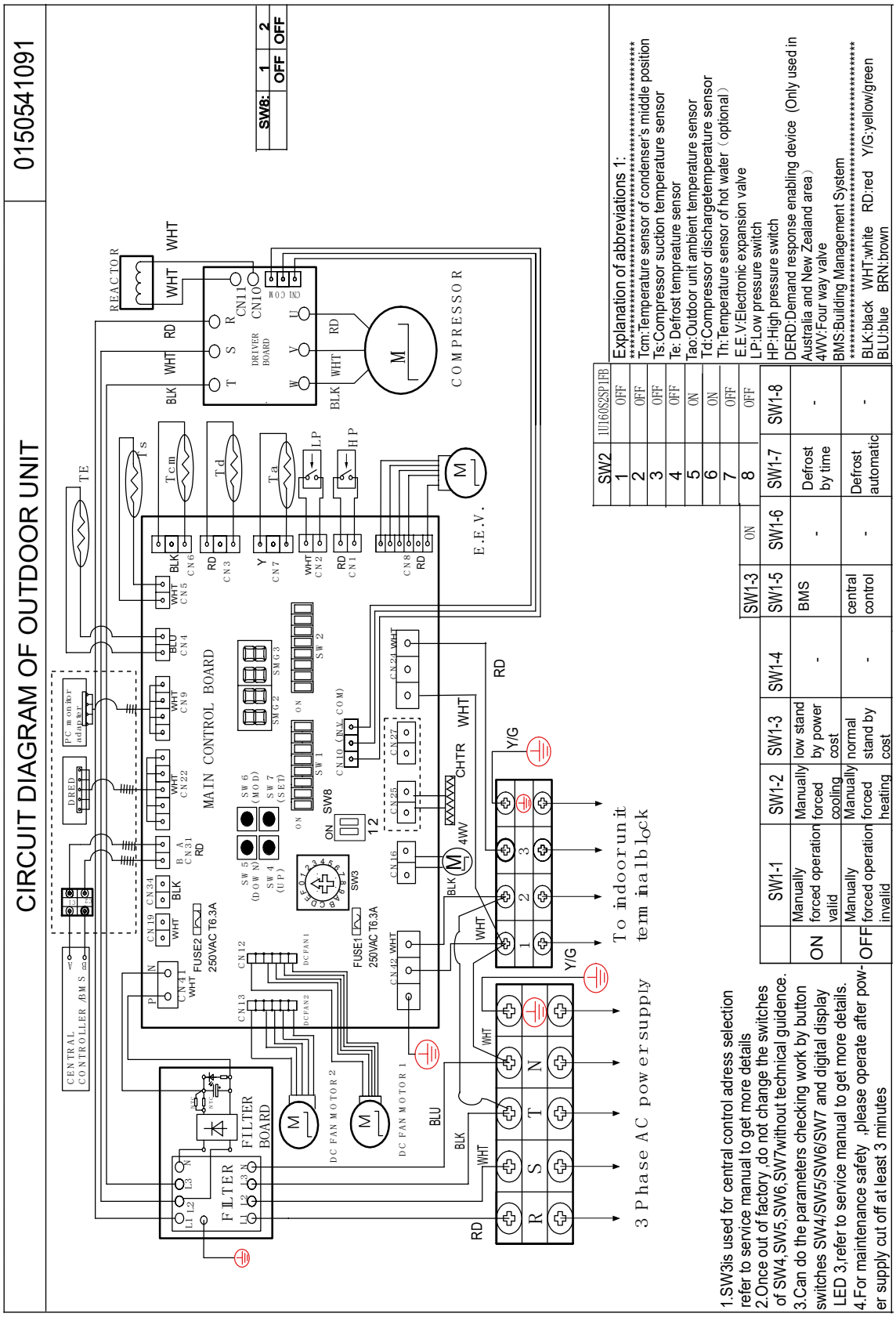
| | SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 |
|---|---|---|---|---|---|---|---|---|
| ON | Manually forced operation valid | Manually forced cooling | low stand by power cost | drive moudle select-RK type | ③BMS | ⑤Refriger-ant R410A | Defrost by time | ⑥ Base station application |
| OFF | Manually forced operation invalid | Manually forced heating | normal stand by cost | drive moudle select-RS type | central control | Refriger-ant R32 | Defrost automatic | Not for base station |

| SW7-1 | SW7-2 | Definition |
|---|---|---|
| OFF | OFF | DERD test selcetion 0 |
| OFF | ON | DERD test selcetion 1 |
| ON | OFF | DERD test selcetion 2 |
| ON | ON | DERD non-test selcetion |

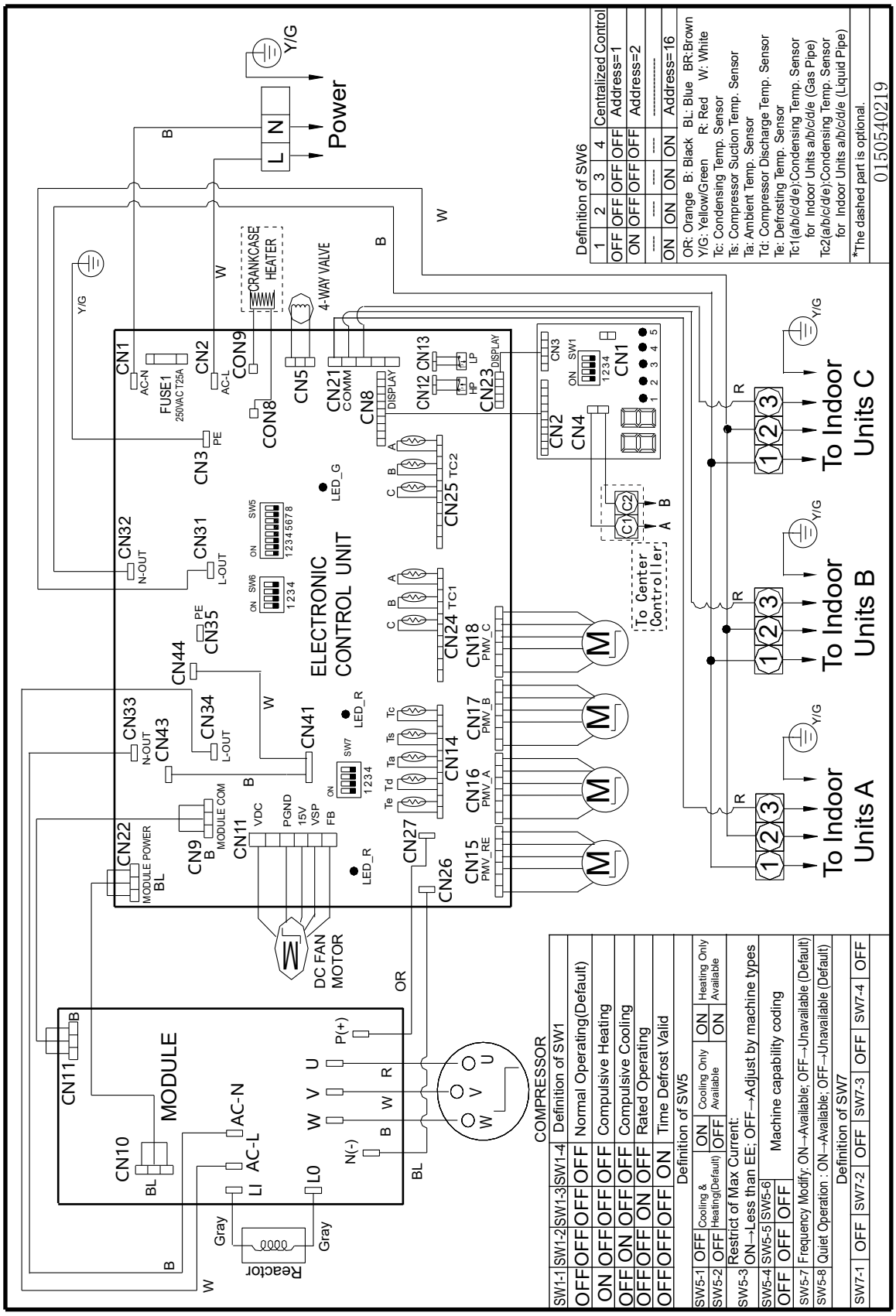
NOTE:
1.Dashed parts are optional.marks①②③④⑤⑥⑦are function in future.
2.SW6 is used for central control adress selection refer to service manual to get more details
3.Once out of factory ,do not change the switches of SW1,SW6,SW7,SW8 without technical guidence.
4.Can do the parameters checking work by button switches SW2/SW3/SW4/SW5 and digital display LED 3,refer to service manual to get more details.
5.For maintenance safety ,please operate after power supply cut off at least 3 minutes

1U140S2SP2FB

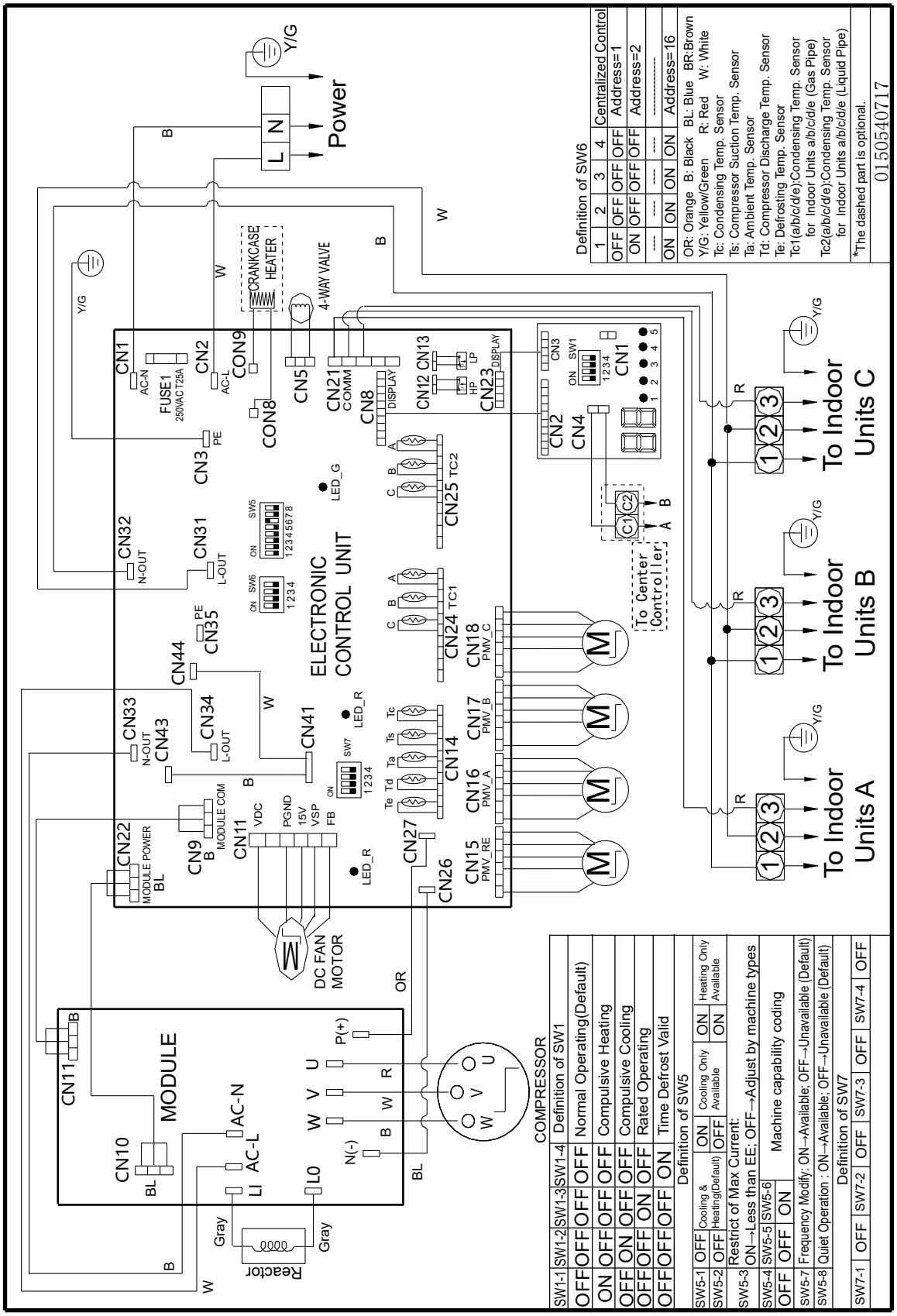



CIRCUIT DIAGRAM OF OUTDOOR UNIT
0150541091
SW8: 1 2
OFF OFF
REACTOR
COMPRESSOR
DRIVER BOARD
MAIN CONTROL BOARD
FILTER BOARD
CENTRAL CONTROLLER
E.E.V.
DC FAN MOTOR 1
DC FAN MOTOR 2
FUSE1 250VAC T6.3A
FUSE2 250VAC T6.3A
3 Phase AC power supply
To indoor unit terminal block
SW2 1U160S2SP1FB
1 OFF
2 OFF
3 OFF
4 OFF
5 ON
6 ON
7 OFF
8 OFF
Explanation of abbreviations 1:
Tcm:Temperature sensor of condenser's middle position
Ts:Compressor suction temperature sensor
Te: Defrost tempreature sensor
Tao:Outdoor unit ambient temperature sensor
Td:Compressor dischargetemperature sensor
Th:Temperature sensor of hot water（optional）
E.E.V:Electronic expansion valve
LP:Low pressure switch
HP:High pressure switch
DERD:Demand response enabling device (Only used in Australia and New Zealand area)
4WV:Four way valve
BMS:Building Management System
BLK:black WHT:white RD:red Y/G:yellow/green
BLU:blue BRN:brown
SW1-3 ON
SW1-5 BMS
SW1-6 -
SW1-7 Defrost by time
SW1-8 -
SW1-4 -
SW1-5 central control
SW1-6 -
SW1-7 Defrost automatic
SW1-8 -
SW1-1 SW1-2 SW1-3 SW1-4
ON Manually forced operation valid Manually forced cooling low stand by power cost -
OFF Manually forced operation invalid Manually forced heating normal stand by cost -
1.SW3is used for central control adress selection refer to service manual to get more details
2.Once out of factory ,do not change the switches of SW4,SW5,SW6,SW7without technical guidence.
3.Can do the parameters checking work by button switches SW4/SW5/SW6/SW7 and digital display LED 3,refer to service manual to get more details.
4.For maintenance safety ,please operate after power supply cut off at least 3 minutes

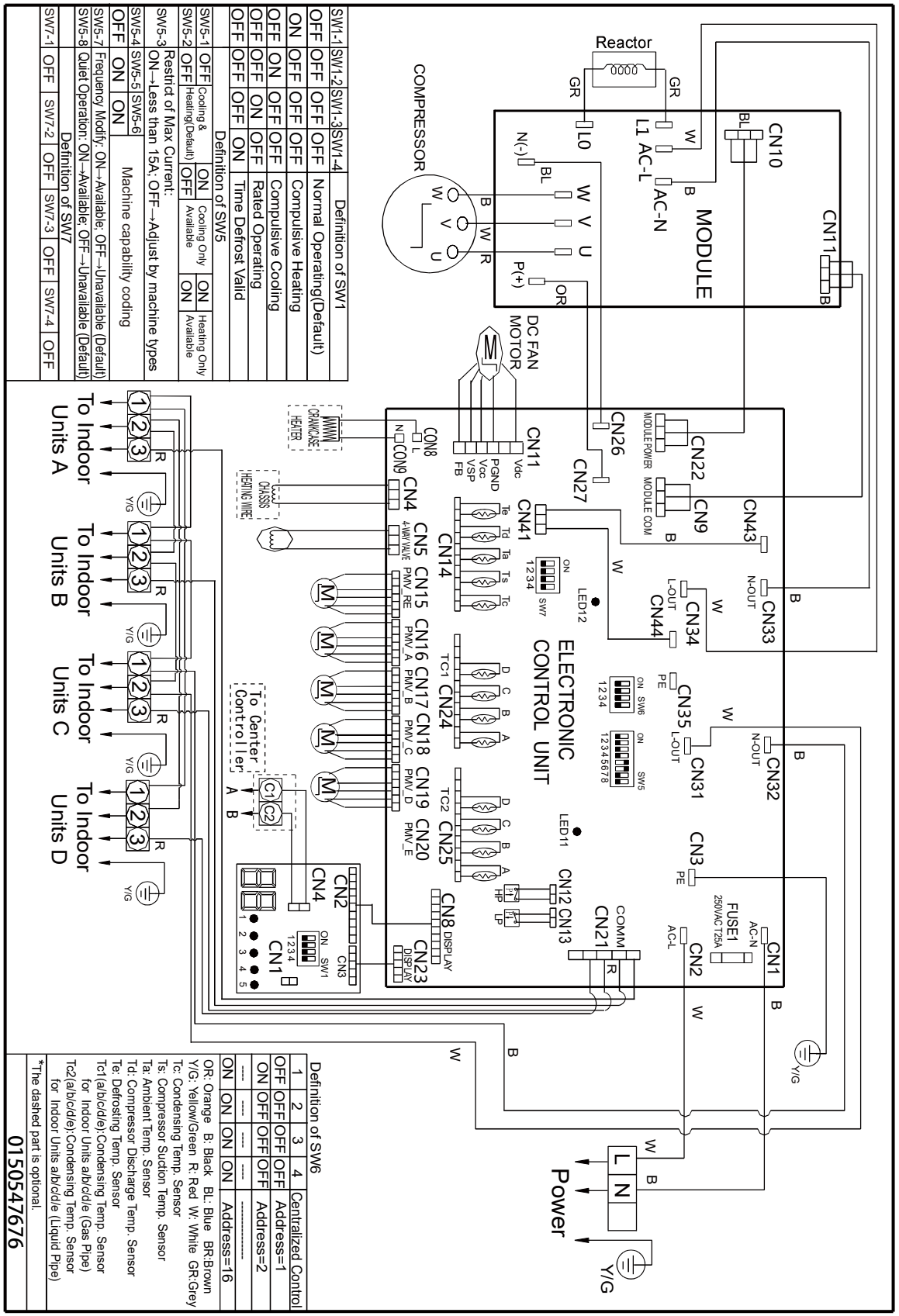
3U55S2SR5FA



3U70S2SR5FA



4U75S2SR5FA




| SW1-1 | SW1-2 | SW1-3 | SW1-4 | Definition of SW1 |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Normal Operating(Default) |
| ON | OFF | OFF | OFF | Compulsive Heating |
| OFF | ON | OFF | OFF | Compulsive Cooling |
| OFF | OFF | ON | OFF | Rated Operating |
| OFF | OFF | OFF | ON | Time Defrost Valid |

| Definition of SW5 | | | | | |
|---|---|---|---|---|---|
| SW5-1 | OFF | Cooling & Heating(Default) | ON | Cooling Only Available | Heating Only Available |
| SW5-2 | OFF | | OFF | | |
| SW5-3 | Restrict of Max Current: ON→Less than 15A; OFF→Adjust by machine types | | | | |
| SW5-4 | SW5-5 | SW5-6 | Machine capability coding | | |
| OFF | ON | ON | | | |
| SW5-7 | Frequency Modify: ON→Available; OFF→Unavailable (Default) | | | | |
| SW5-8 | Quiet Operation: ON→Available; OFF→Unavailable (Default) | | | | |

| Definition of SW7 | | | | | |
|---|---|---|---|---|---|
| SW7-1 | OFF | SW7-2 | OFF | SW7-3 | OFF | SW7-4 | OFF |
|---|---|---|---|---|---|---|---|

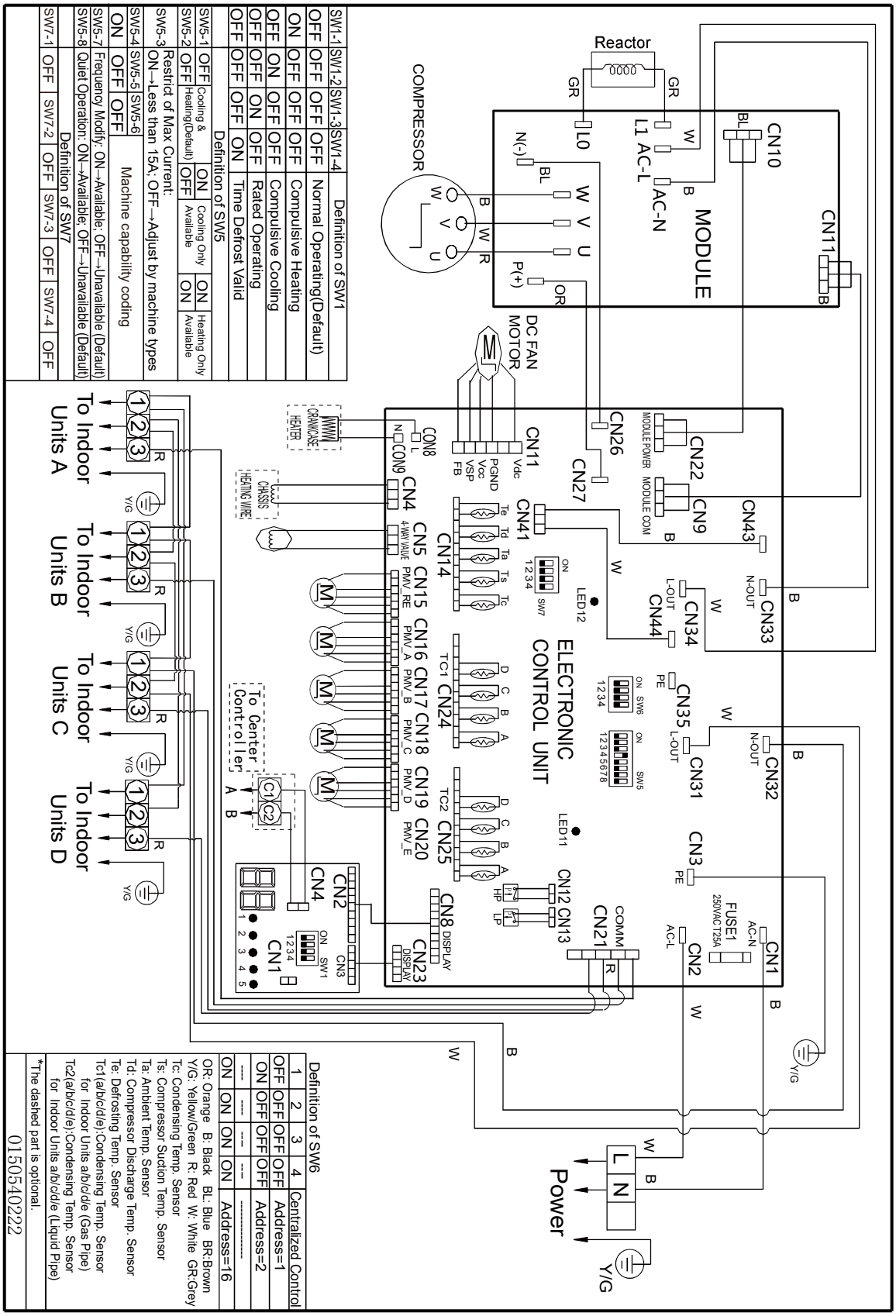
| Definition of SW6 | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | Centralized Control |
| OFF | OFF | OFF | OFF | Address=1 |
| ON | OFF | OFF | OFF | Address=2 |
| ---- | ---- | ---- | ---- | ---------- |
| ON | ON | ON | ON | Address=16 |

OR: Orange B: Black BL: Blue BR:Brown
Y/G: Yellow/Green R: Red W: White GR:Grey
Tc: Condensing Temp. Sensor
Ts: Compressor Suction Temp. Sensor
Ta: Ambient Temp. Sensor
Td: Compressor Discharge Temp. Sensor
Te: Defrosting Temp. Sensor
Tc1(*a/b/c/d/e*):Condensing Temp. Sensor for Indoor Units *a/b/c/d/e* (Gas Pipe)
Tc2(*a/b/c/d/e*):Condensing Temp. Sensor for Indoor Units *a/b/c/d/e* (Liquid Pipe)

*The dashed part is optional.

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4U85S2SR5FA




| SW1-1 | SW1-2 | SW1-3 | SW1-4 | Definition of SW1 |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Normal Operating(Default) |
| ON | OFF | OFF | OFF | Compulsive Heating |
| OFF | ON | OFF | OFF | Compulsive Cooling |
| OFF | OFF | ON | OFF | Rated Operating |
| OFF | OFF | OFF | ON | Time Defrost Valid |

| Definition of SW5 | | | | |
|---|---|---|---|---|
| SW5-1 | OFF | Cooling & Heating(Default) | ON | Cooling Only Available |
| | | | OFF | |
| SW5-2 | OFF | | ON | Heating Only Available |
| | | | OFF | |
| SW5-3 | Restrict of Max Current: ON→Less than 15A; OFF→Adjust by machine types | | | |
| SW5-4 | SW5-5 | SW5-6 | Machine capability coding | |
| ON | OFF | OFF | | |
| SW5-7 | Frequency Modify: ON→Available; OFF→Unavailable (Default) | | | |
| SW5-8 | Quiet Operation: ON→Available; OFF→Unavailable (Default) | | | |

| Definition of SW7 | | | | |
|---|---|---|---|---|
| SW7-1 | OFF | SW7-2 | OFF | SW7-3 | OFF | SW7-4 | OFF |
|---|---|---|---|---|---|---|---|

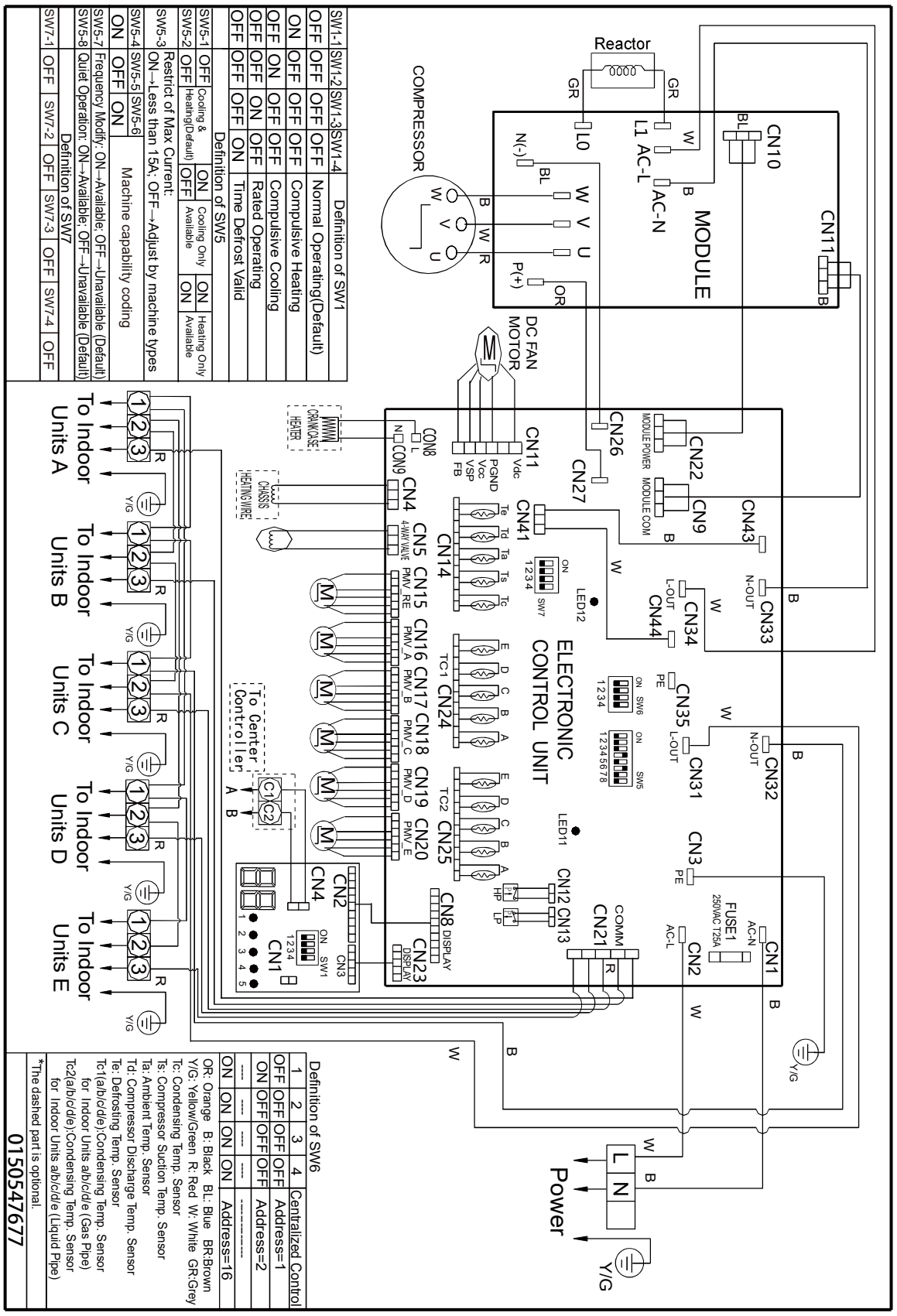
| Definition of SW6 | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | Centralized Control Address=1 |
| OFF | OFF | OFF | OFF | |
| ON | OFF | OFF | OFF | Address=2 |
| --- | --- | --- | --- | ---------- |
| ON | ON | ON | ON | Address=16 |

OR: Orange B: Black BL: Blue BR:Brown
Y/G: Yellow/Green R: Red W: White GR:Grey
Tc: Condensing Temp. Sensor
Ts: Compressor Suction Temp. Sensor
Ta: Ambient Temp. Sensor
Td: Compressor Discharge Temp. Sensor
Te: Defrosting Temp. Sensor
Tc1(*a/b/c/d/e*):Condensing Temp. Sensor for Indoor Units *a/b/c/d/e* (Gas Pipe)
Tc2(*a/b/c/d/e*):Condensing Temp. Sensor for Indoor Units *a/b/c/d/e* (Liquid Pipe)

*The dashed part is optional.

01505402222

5U90S2SS5FA




| SW1-1 | SW1-2 | SW1-3 | SW1-4 | Definition of SW1 |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Normal Operating(Default) |
| ON | OFF | OFF | OFF | Compulsive Heating |
| OFF | ON | OFF | OFF | Compulsive Cooling |
| OFF | OFF | ON | OFF | Rated Operating |
| OFF | OFF | OFF | ON | Time Defrost Valid |

| Definition of SW5 | | | |
|---|---|---|---|
| SW5-1 | OFF | Cooling & Heating(Default) | ON: Heating Only Available; OFF: Cooling Only Available |
| SW5-2 | OFF | | |
| SW5-3 | Restrict of Max Current: ON→Less than 15A; OFF→Adjust by machine types | | |
| SW5-4 | SW5-5 | SW5-6 | Machine capability coding |
| ON | OFF | ON | |
| SW5-7 | Frequency Modify: ON→Available; OFF→Unavailable (Default) | | |
| SW5-8 | Quiet Operation: ON→Available; OFF→Unavailable (Default) | | |

| Definition of SW7 | | | | | |
|---|---|---|---|---|---|
| SW7-1 | OFF | SW7-2 | OFF | SW7-3 | OFF | SW7-4 | OFF |

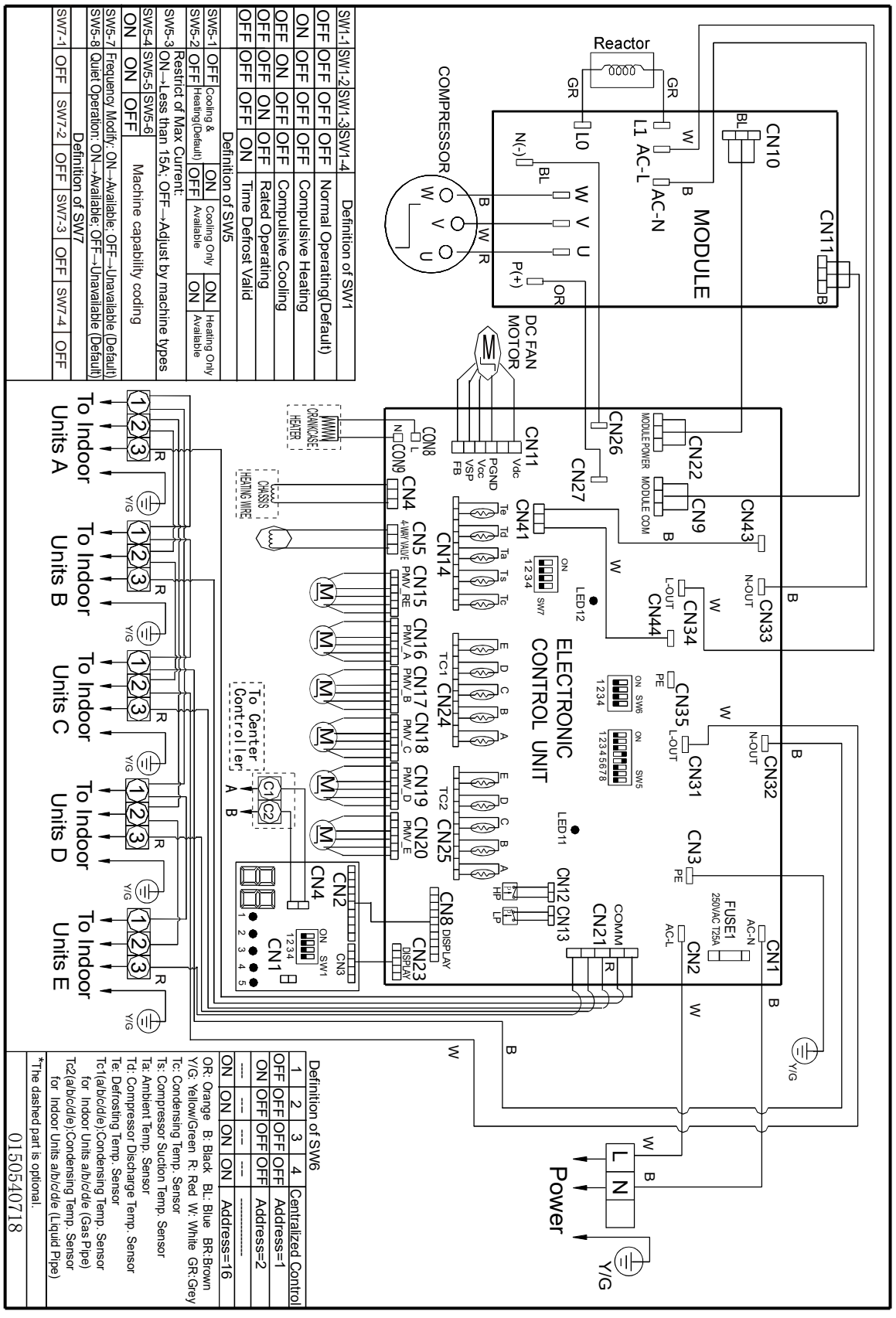
| Definition of SW6 | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | Centralized Control Address=1 |
| OFF | OFF | OFF | OFF | |
| ON | OFF | OFF | OFF | Address=2 |
| ---- | ---- | ---- | ---- | ---------- |
| ON | ON | ON | ON | Address=16 |

OR: Orange B: Black BL: Blue BR:Brown
Y/G: Yellow/Green R: Red W: White GR:Grey
Tc: Condensing Temp. Sensor
Ts: Compressor Suction Temp. Sensor
Ta: Ambient Temp. Sensor
Td: Compressor Discharge Temp. Sensor
Te: Defrosting Temp. Sensor
Tc1(a/b/c/d/e):Condensing Temp. Sensor for Indoor Units a/b/c/d/e (Gas Pipe)
Tc2(a/b/c/d/e):Condensing Temp. Sensor for Indoor Units a/b/c/d/e (Liquid Pipe)

*The dashed part is optional.

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5U105S2SS5FA



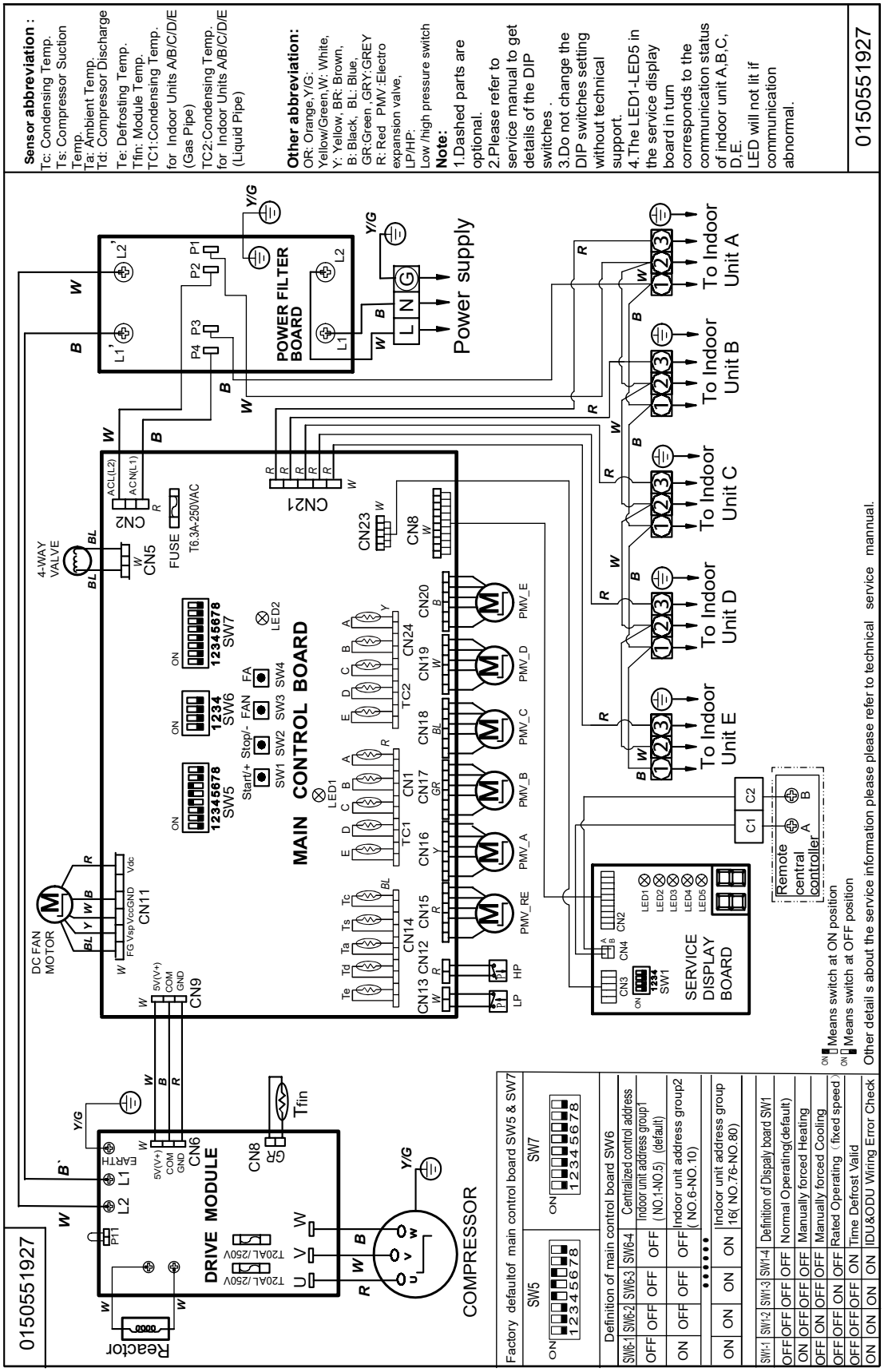

| SW1-1 | SW1-2 | SW1-3 | SW1-4 | Definition of SW1 |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Normal Operating(Default) |
| ON | OFF | OFF | OFF | Compulsive Heating |
| OFF | ON | OFF | OFF | Compulsive Cooling |
| OFF | OFF | ON | OFF | Rated Operating |
| OFF | OFF | OFF | ON | Time Defrost Valid |

| Definition of SW5 | | | | |
|---|---|---|---|---|
| SW5-1 | OFF | Cooling & Heating(Default) | ON | Cooling Only Available |
| SW5-2 | OFF | | OFF | |
| | | | ON | Heating Only Available |
| SW5-3 | ON→Less than 15A; OFF→Adjust by machine types | | | |
| SW5-4 | SW5-5 | SW5-6 | Machine capability coding | |
| ON | ON | OFF | | |
| SW5-7 | Frequency Modify: ON→Available; OFF→Unavailable (Default) | | | |
| SW5-8 | Quiet Operation: ON→Available; OFF→Unavailable (Default) | | | |

| Definition of SW7 | | | | |
|---|---|---|---|---|
| SW7-1 | OFF | SW7-2 | OFF | SW7-3 | OFF | SW7-4 | OFF |
|---|---|---|---|---|---|---|---|

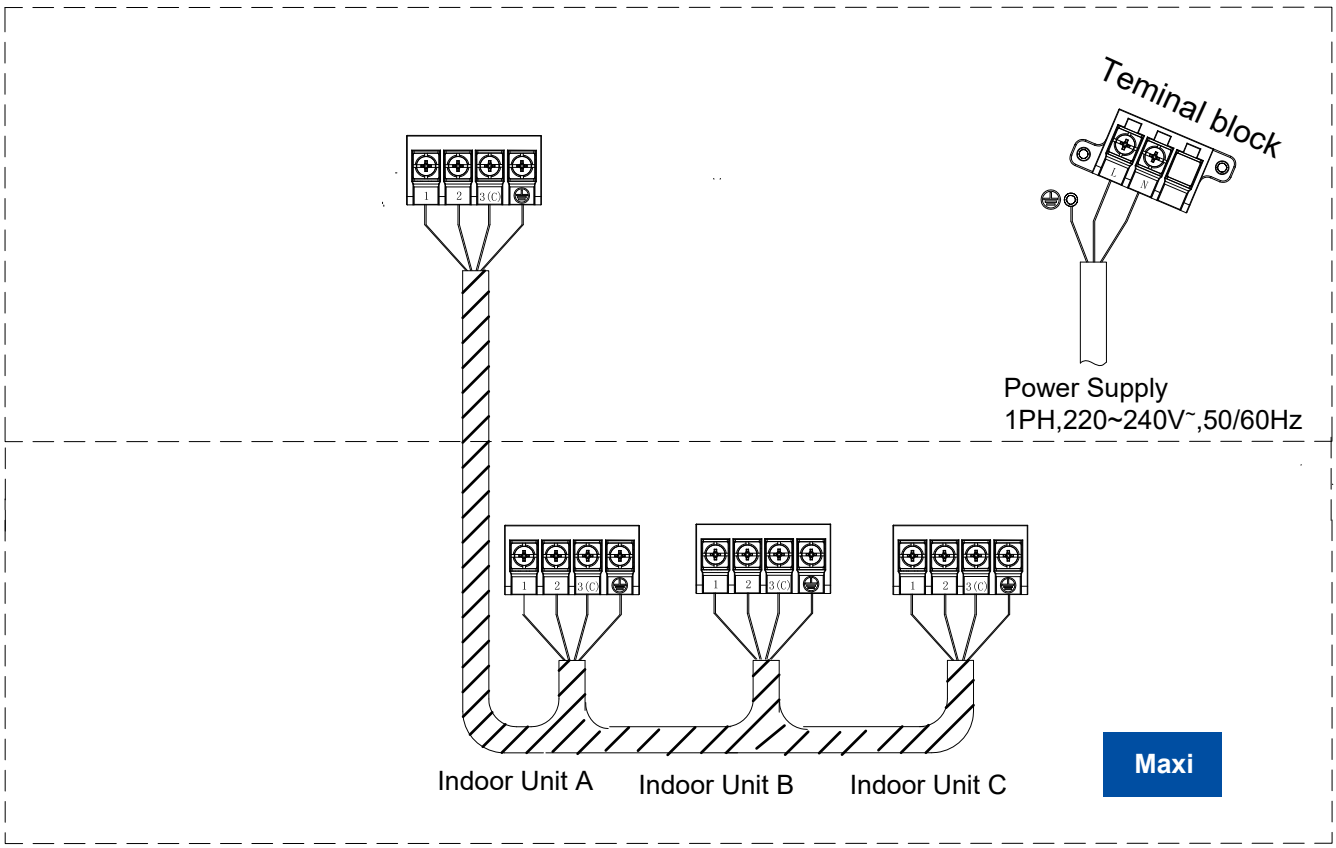
| Definition of SW6 | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | Centralized Control |
| OFF | OFF | OFF | OFF | Address=1 |
| ON | OFF | OFF | OFF | Address=2 |
| --- | --- | --- | --- | ---------- |
| --- | --- | --- | --- | ---------- |
| ON | ON | ON | ON | Address=16 |

5U125S2SN1FA



## 8.4 Wiring Connection

1U90S2SS2FA 1U105S2SS1FA 1U105S2SS2FA 1U125S2SN1FA 1U125S2SN1FA 1U140S2SP1FA 1U140S2SN1FA 1U125S2SN2FA 1U140S2SP2FA



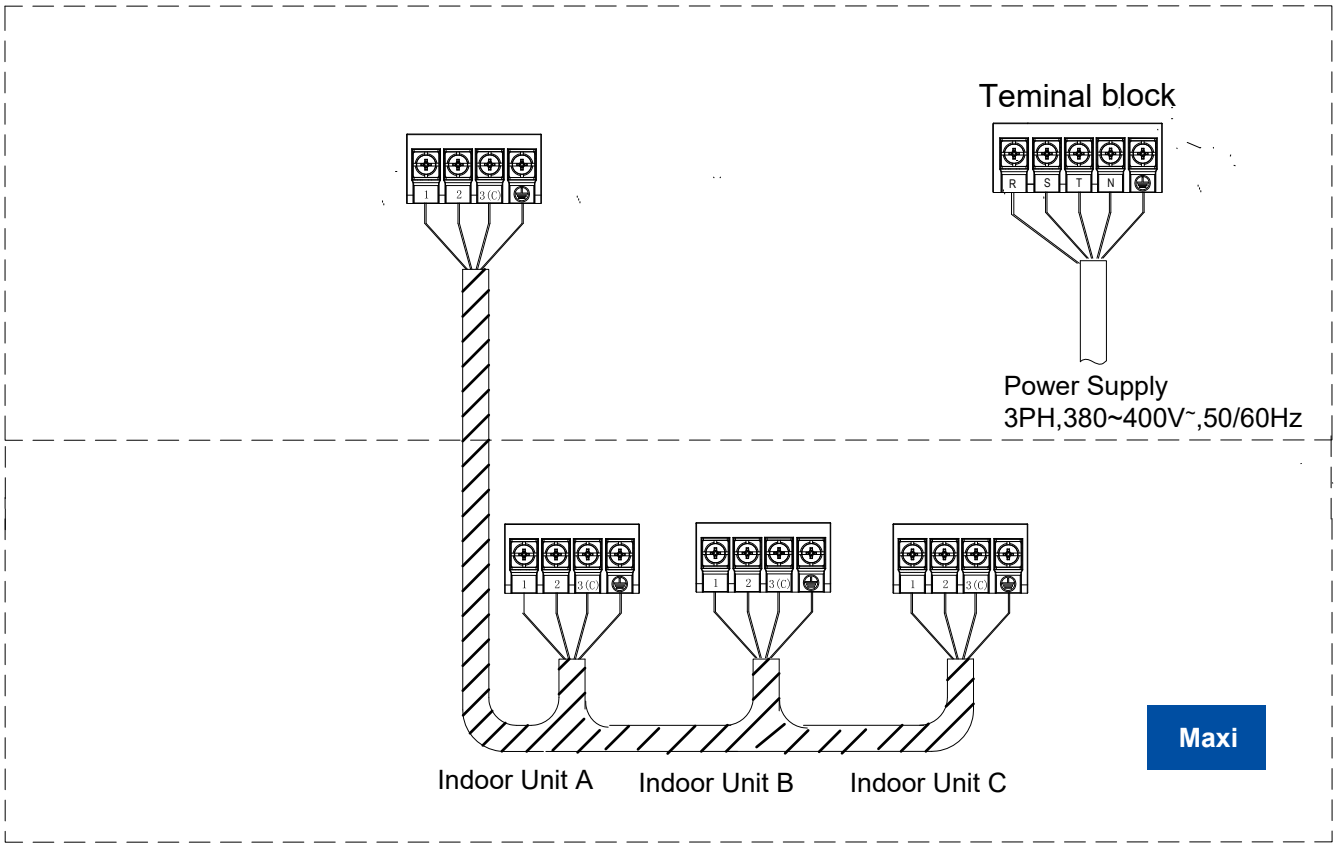

Power Supply Cable: H05RN-F3G 4.0mm$^2$

Connecting Cable: H05RN-F4G 2.5mm$^2$

Connecting Cable: H05RN-F2G 2.0mm$^2$

Connect the connecting wires between indoor and outdoor units and ensure the sequence numbers on terminals match with each other.

1U105S2SS1FB 1U125S2SN1FB 1U125S2SN1FB 1U140S2SP1FB 1U140S2SN1FB 1U160S2SN1FB 1U125S2SN2FB 1U140S2SP2FB



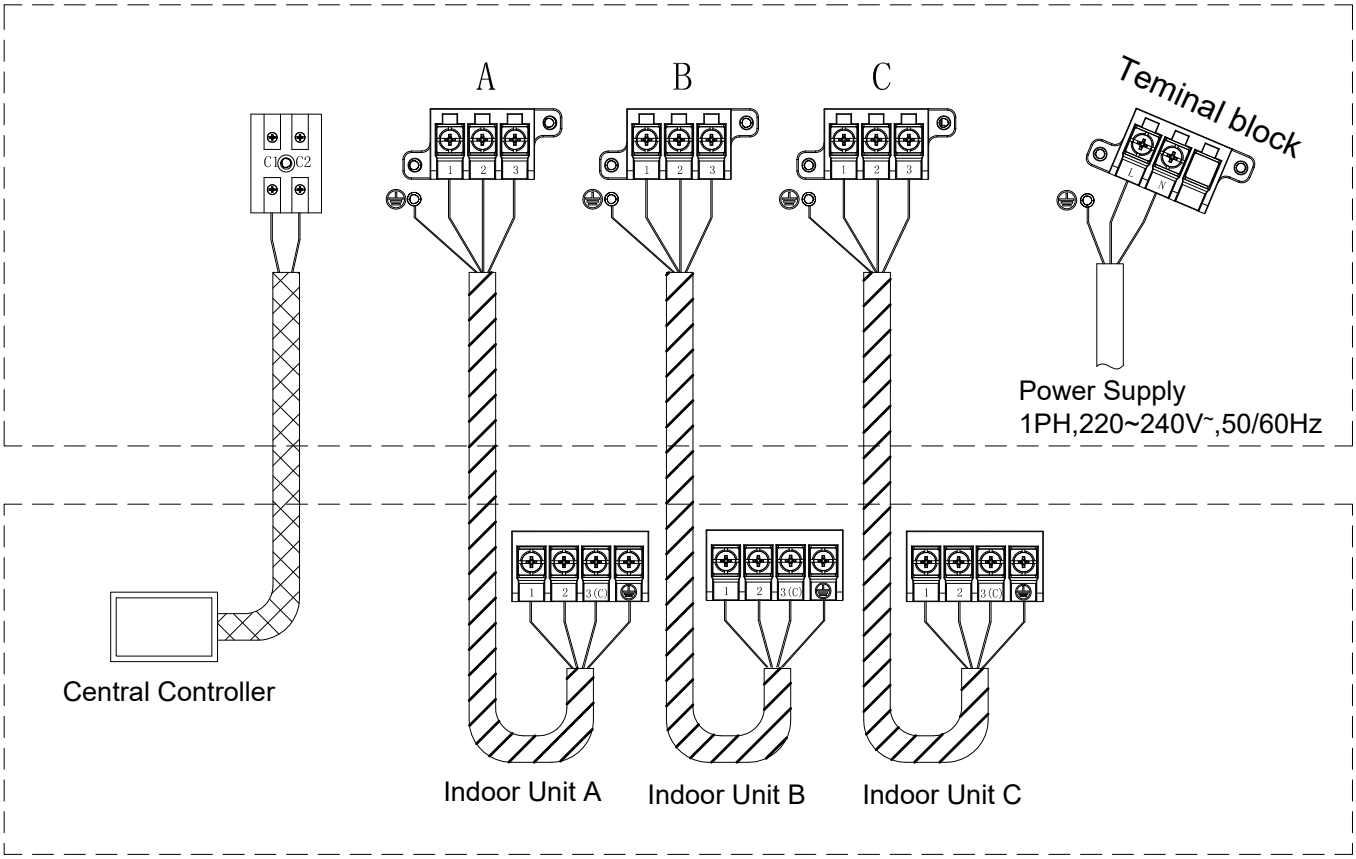

Power Supply Cable: H05RN-F3G 4.0mm$^2$

Connecting Cable: H05RN-F4G 2.5mm$^2$

Connecting Cable: H05RN-F2G 2.0mm$^2$

Connect the connecting wires between indoor and outdoor units and ensure the sequence numbers on terminals match with each other.

3U55S2SR5FA 3U70S2SR5FA



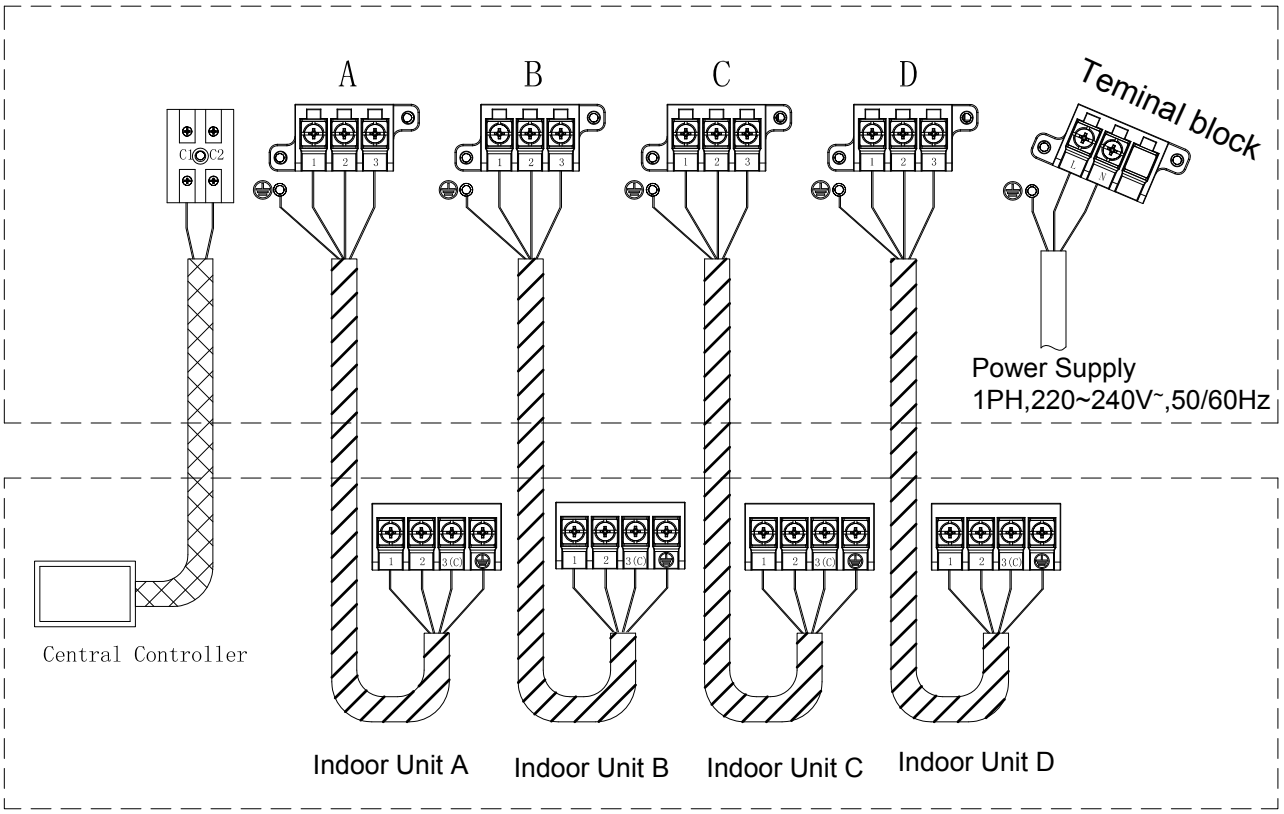

Power Supply Cable: H05RN-F3G 4.0mm$^2$

Connecting Cable: H05RN-F4G 2.5mm$^2$

Connecting Cable: H05RN-F2G 2.0mm$^2$

Connect the connecting wires between indoor and outdoor units and ensure the sequence numbers on terminals match with each other.

4U75S2SR5FA 4U85S2SR5FA



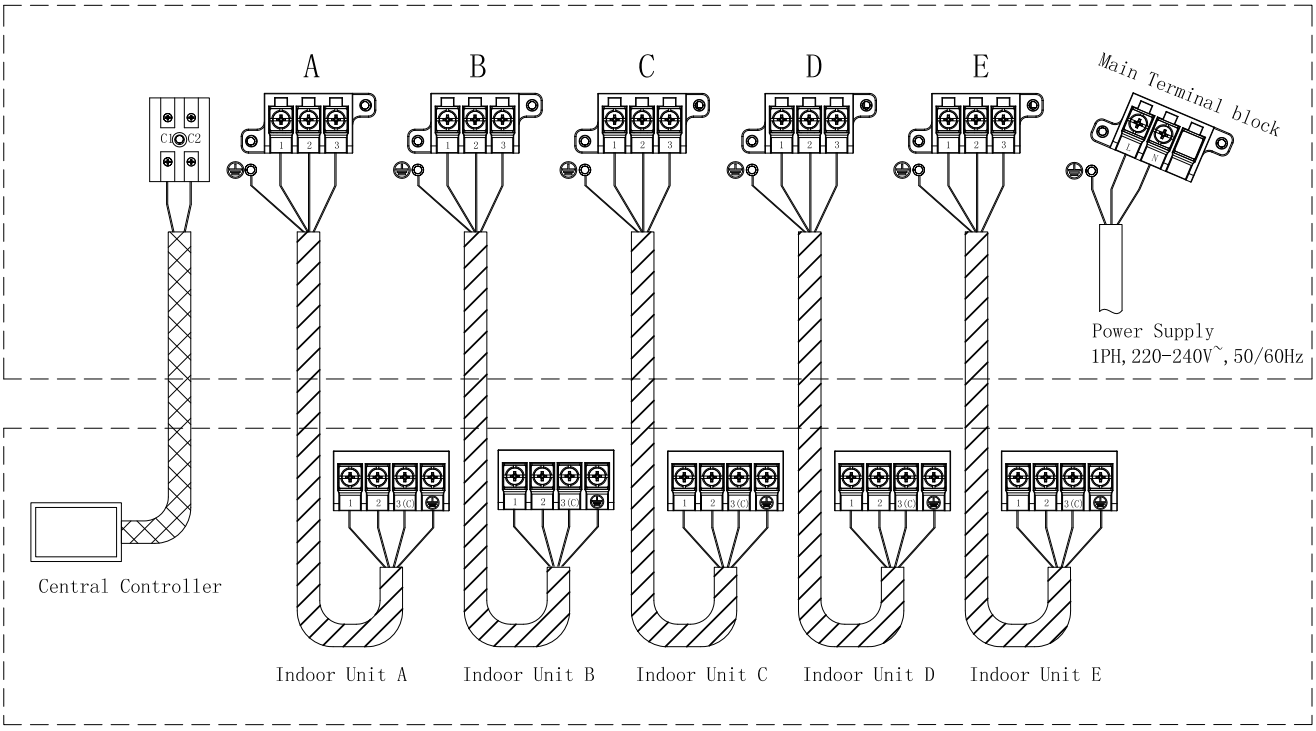

Power Supply Cable: H05RN-F3G 4.0mm$^2$

Connecting Cable: H05RN-F4G 2.5mm$^2$

Connecting Cable: H05RN-F2G 2.0mm$^2$

Connect the connecting wires between indoor and outdoor units and ensure the sequence numbers on terminals match with each other.

5U90S2SS5FA 5U105S2SS5FA 5U125S2SN1FA

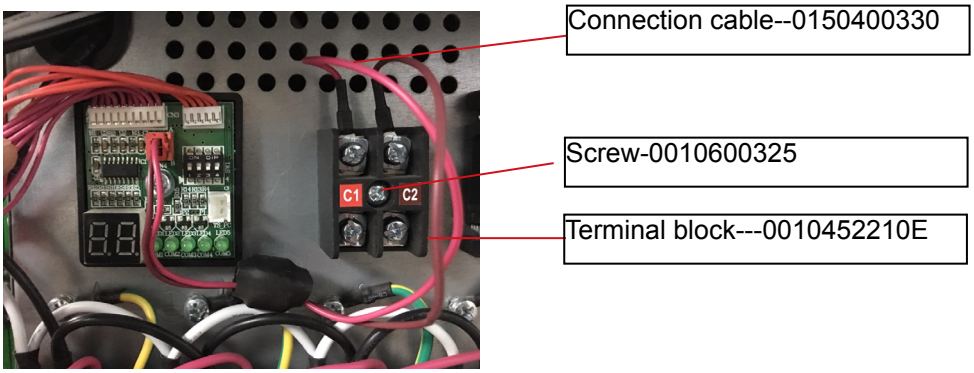


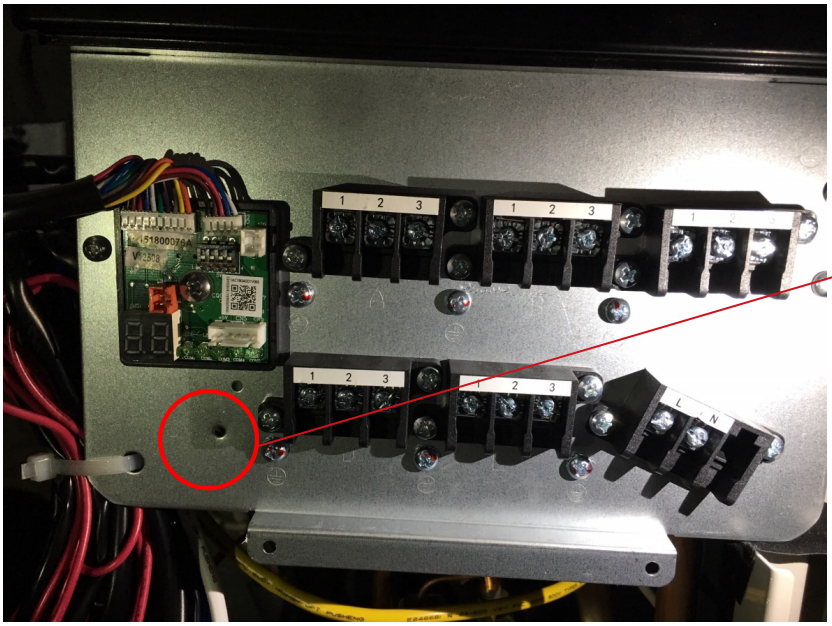

Power Supply Cable: H05RN-F3G 4.0mm$^2$

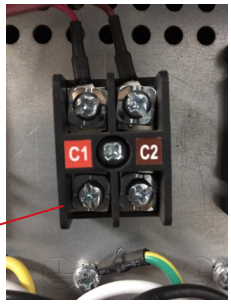
Connecting Cable: H05RN-F4G 2.5mm$^2$

Connecting Cable: H05RN-F2G 2.0mm$^2$

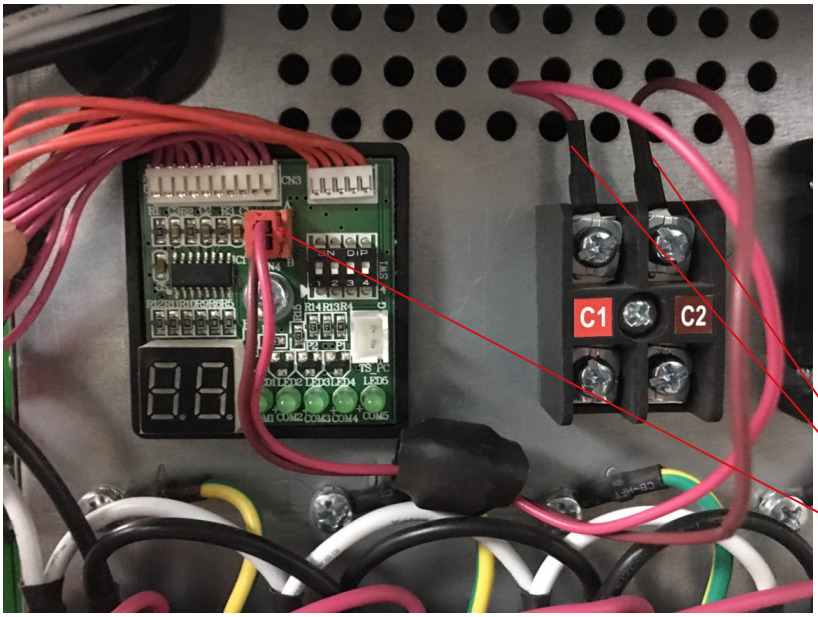
Connect the connecting wires between indoor and outdoor units and ensure the sequence numbers on terminals match with each other.





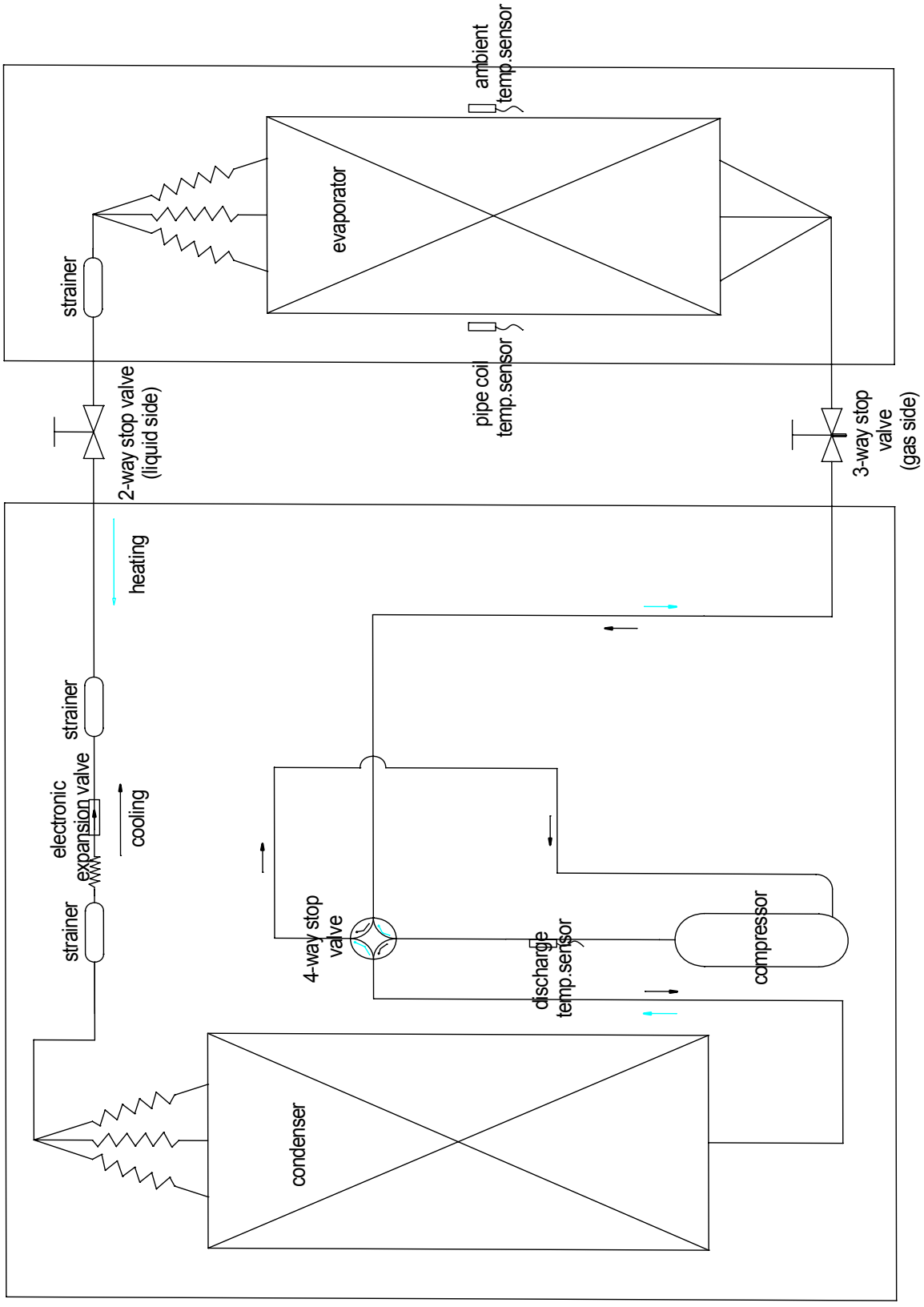

**Fix the terminal block on this position**



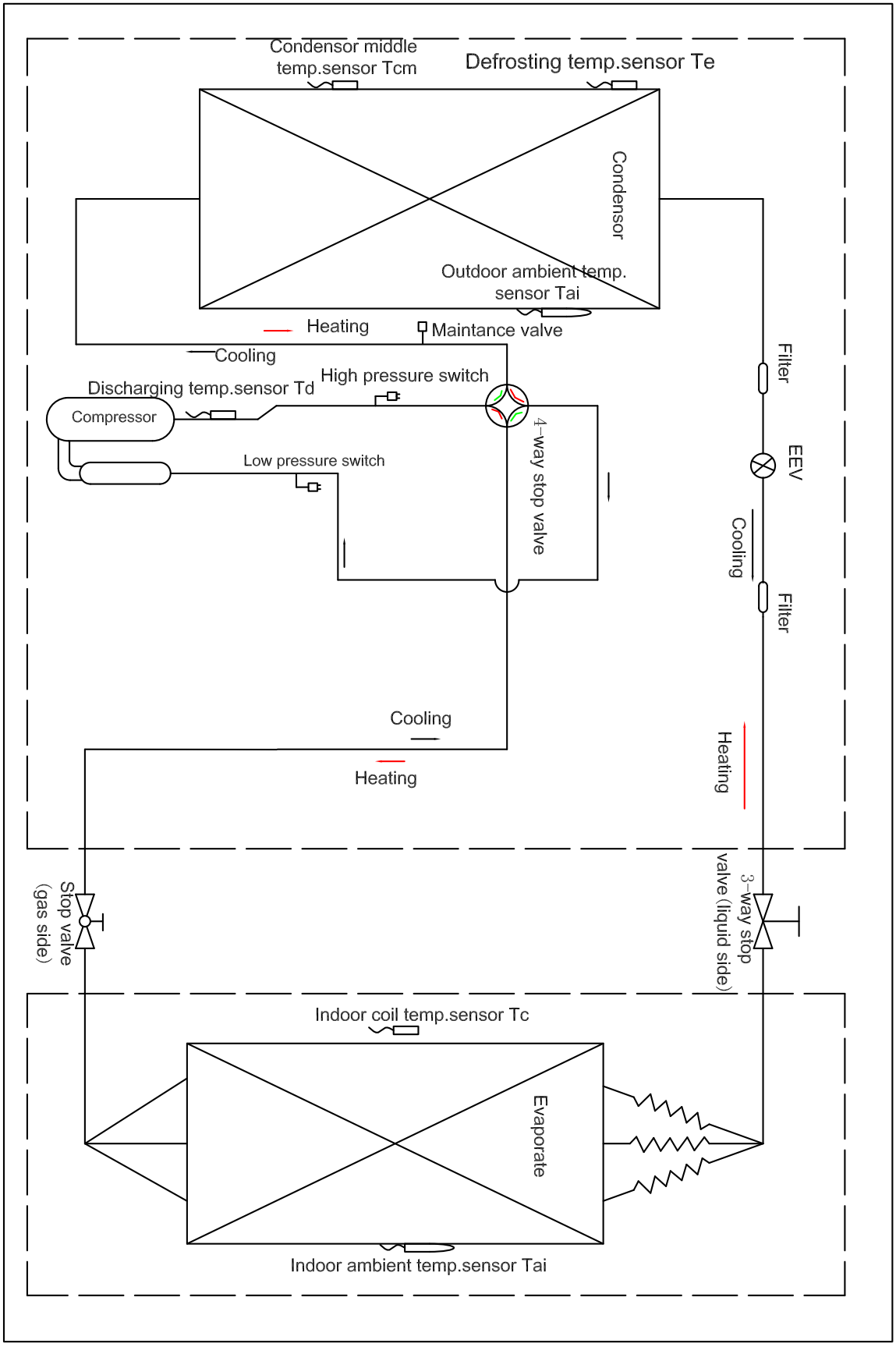

**Install the connection cable like this way**

## 8.5 Piping Diagram

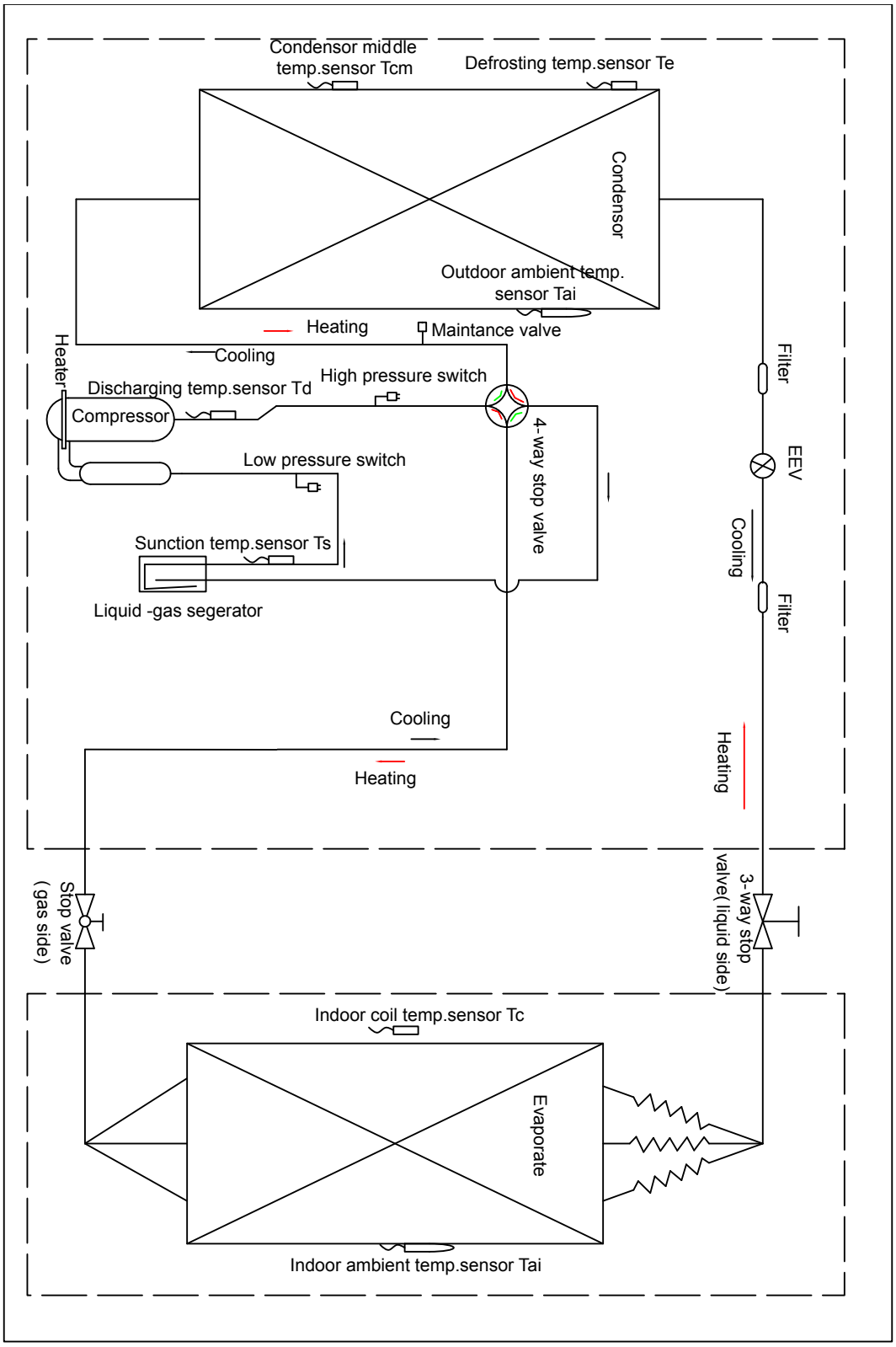
1U71S2SG1FA/1U71S2SR2FA



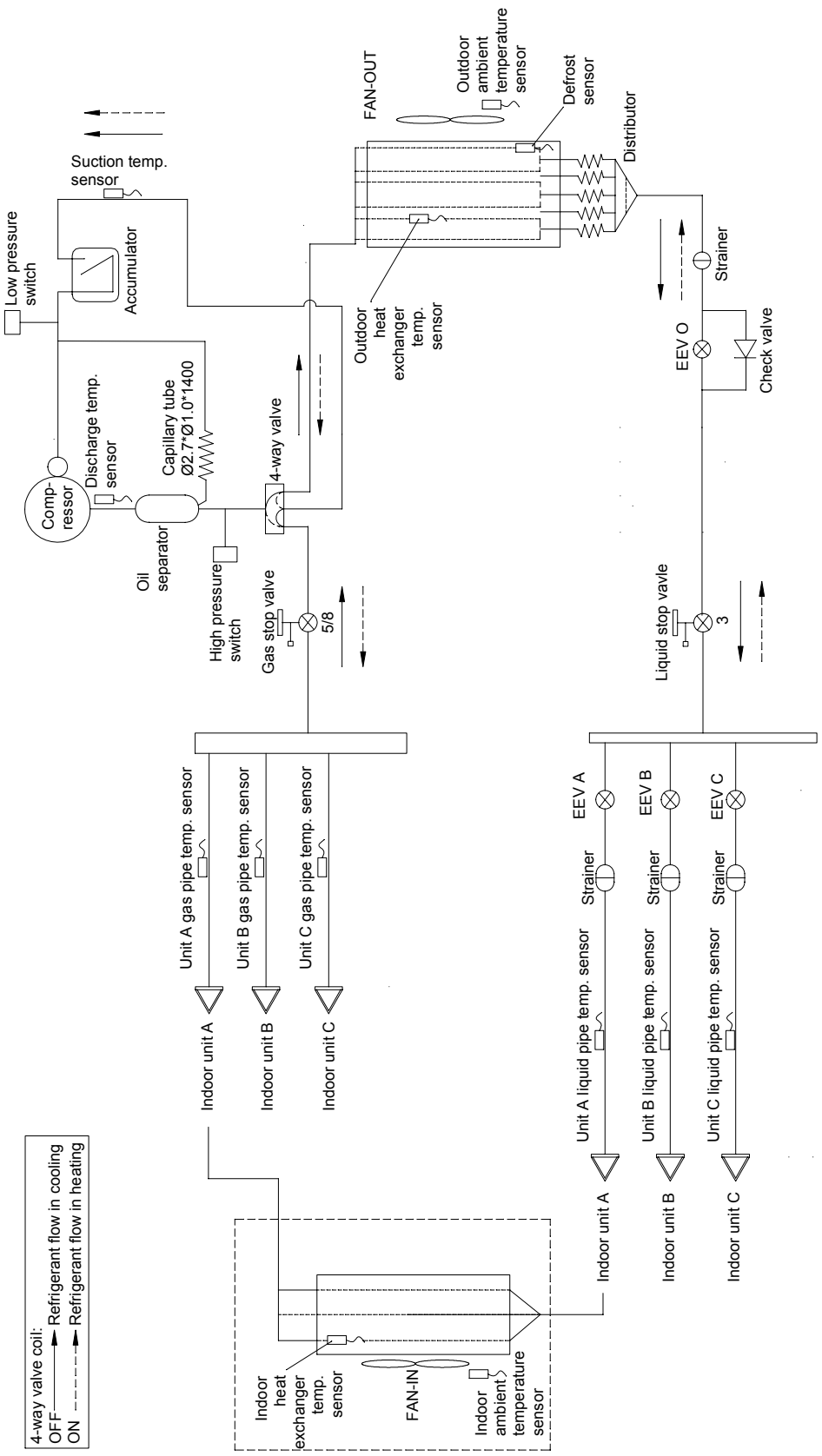
1U90S2SS2FA 1U105S2SS1FA 1U105S2SS2FA 1U105S2SS1FB



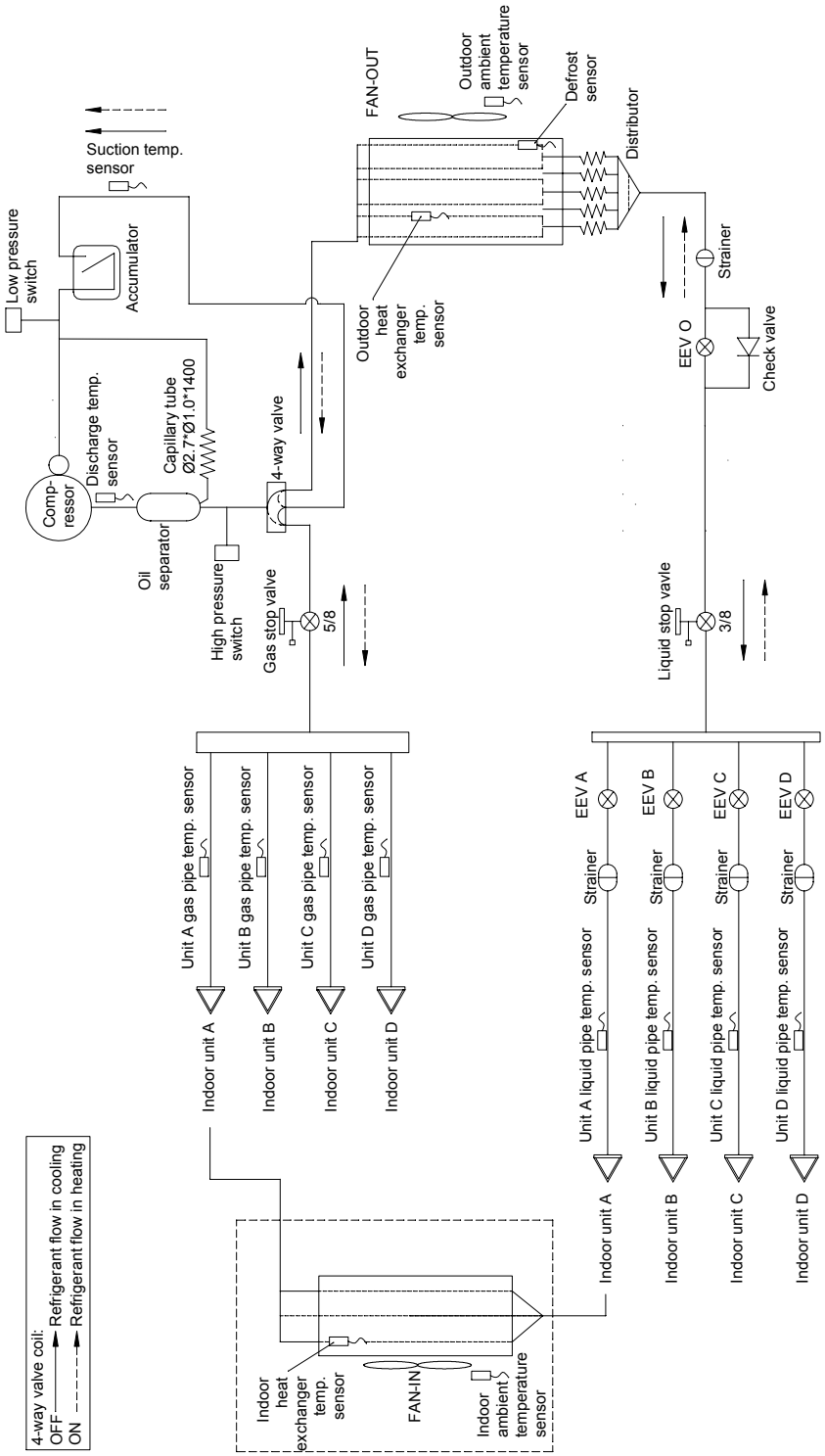
1U125S2SN1FA 1U125S2SN1FB 1U140S2SP1FA 1U140S2SP1FB 1U140S2SN1FA 1U140S2SN1FB
1U160S2SP1FB 1U125S2SN2FA 1U125S2SN2FB 1U140S2SP2FA 1U140S2SP2FB



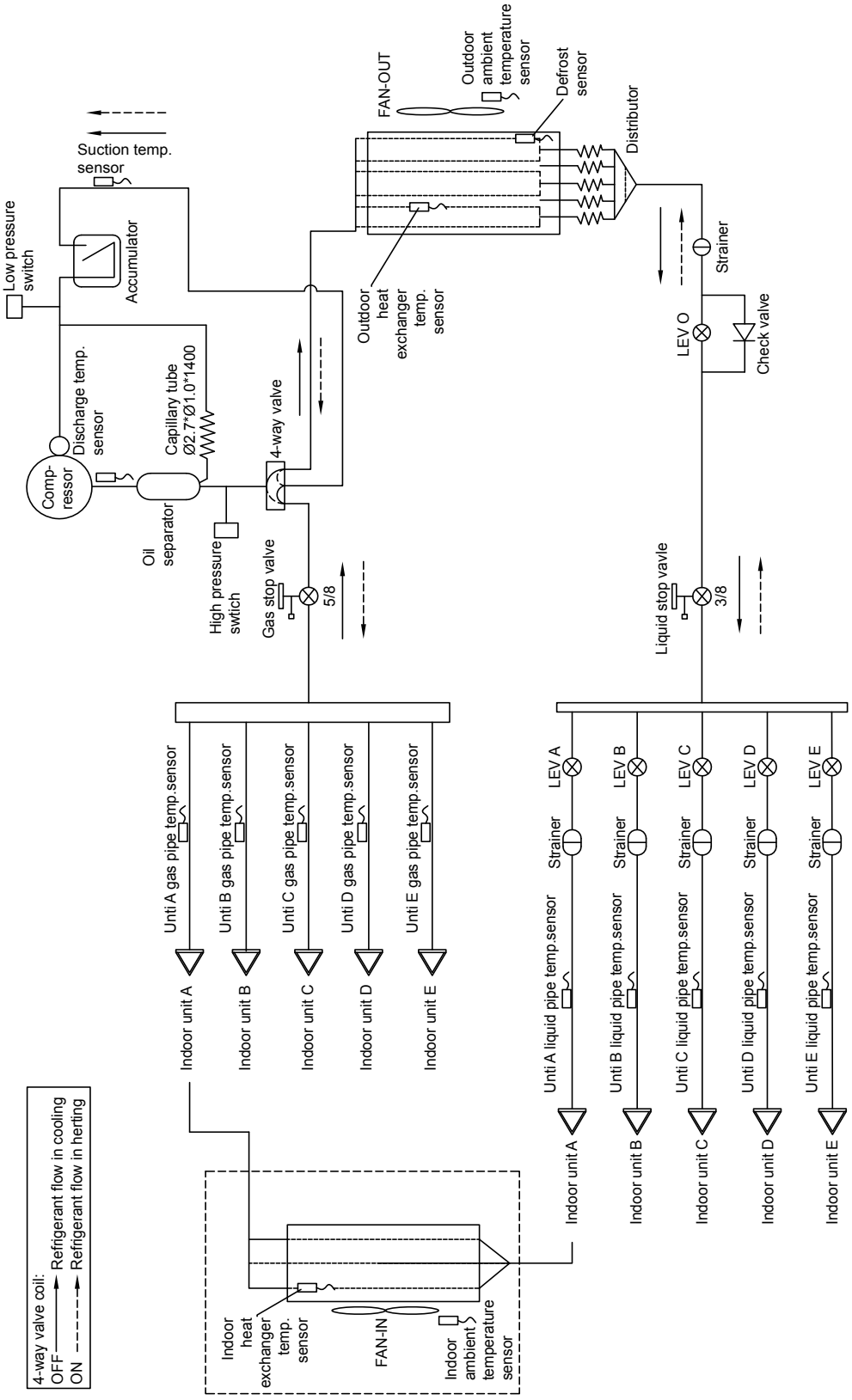
3U55S2SR5FA 3U70S2SR5FA



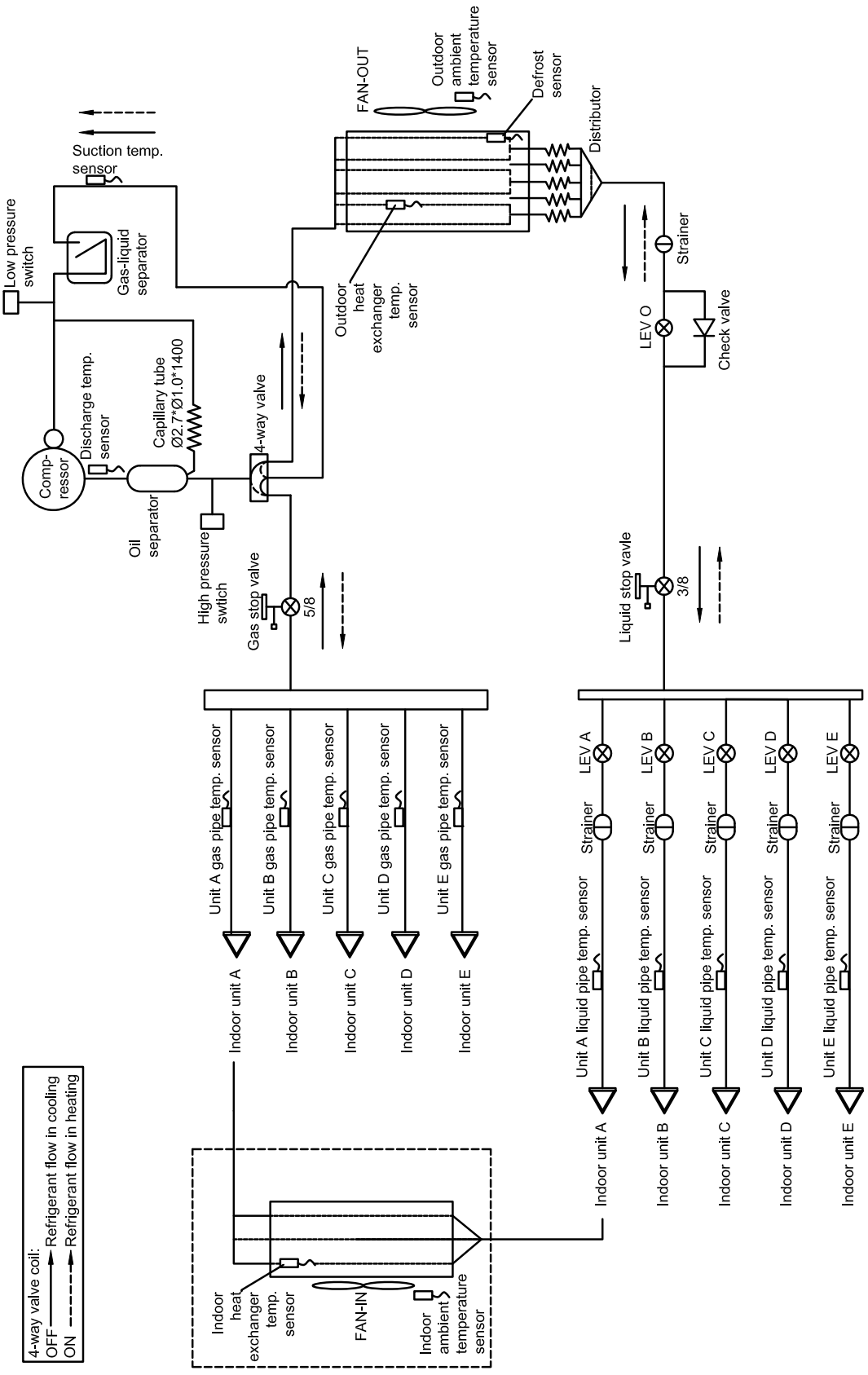
4U75S2SR5FA 4U85S2SR5FA



5U90S2SS5FA 5U105S2SS5FA



5U125S2SS5FA



## 8.6 Limitation Values on Pipe Installation

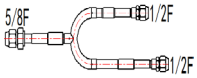
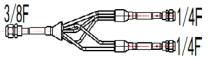
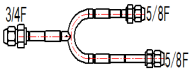
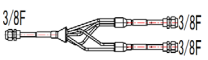
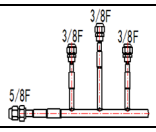
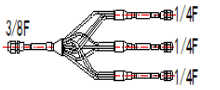
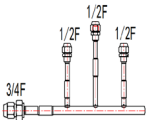
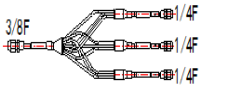
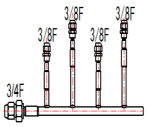
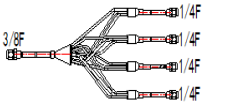
1U90S2SS2FA 1U105S2SS1FA/B 1U125S2SN1FA/B 1U140S2SN1FA/B 1U140S2SP1FA/B

R32 light commercial Maxi split match table ( twin ,triple ,quadruple split)

| Model | | | capacity (kw) | Indoor unit type | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cassette | | | Floor Ceiling | | | Duct | | | |
| | | | | Twin | Triple | doubletwin | Twin | Triple | doubletwin | Twin | Triple | doubletwin |
| 1U105S2SS1FA<br>1U105S2SS2FA<br>1U105S2SS1FB | Pipe length<br>L+L1+L2≤50m<br>Wire length ≤55m | Pipe length<br>L+L1+L2+L3≤50m<br>Wire length ≤55m | 10 | 2*AB50S2SC1FA | 3*AB35S2SM3FA | / | 2*AC50S2SG1FA | 3*AC35S2SG1FA | / | 2*AD50S2SM3FA<br>2*AD50S2SS1FA | 3*AD35S2SM3FA<br>3*AD35S2SS1FA | / |
| 1U125S2SN1FA<br>1U140S2SN1FA<br>1U125S2SN2FA | Pipe length<br>L+L1+L2≤50m<br>Wire length ≤55m | Pipe length<br>L+L1+L2+L3≤50m<br>Wire length ≤55m | 12.5 | 2*AB71S2SG1FA | 3*AB50S2SC1FA | 4*AB35S2SC1FA | 2*AC71S2SG1FA | 3*AC50S2SG1FA | 4*AC35S2SG1FA | 2*AD71S2SM3FA<br>2*AD71S2SS1FA | 3*AD50S2SM3FA<br>3*AD50S2SS1FA | 4*AD35S2SM3FA<br>4*AD35S2SS1FA |
| 1U125S2SN1FB<br>1U140S2SN1FB<br>1U125S2SN2FB | Pipe length<br>L+L1+L2≤50m<br>Wire length ≤55m | Pipe length<br>L+L1+L2+L3+L4≤50m<br>Wire length ≤55m | 12.5 | 2*AB71S2SG1FA | 3*AB50S2SC1FA | 4*AB35S2SC1FA | 2*AC71S2SG1FA | 3*AC50S2SG1FA | 4*AC35S2SG1FA | 2*AD71S2SM3FA<br>2*AD71S2SS1FA | 3*AD50S2SM3FA<br>3*AD50S2SS1FA | 4*AD35S2SM3FA<br>4*AD35S2SS1FA |
| 1U140S2SP1FA<br>1U140S2SP2FA<br>Adapter pipe<br>Branch pipe | Pipe length<br>L+L1+L2≤70m<br>Wire length ≤75m | Pipe length<br>L+L1+L2+L3≤70m<br>Wire length ≤75m | 14 | 2*AB71S2SG1FA | 3*AB50S2SC1FA | 4*AB35S2SC1FA | 2*AC71S2SG1FA | 3*AC50S2SG1FA | 4*AC35S2SG1FA | 2*AD71S2SM3FA<br>2*AD71S2SS1FA | 3*AD50S2SM3FA<br>3*AD50S2SS1FA | 4*AD35S2SM3FA<br>4*AD35S2SS1FA |
| 1U140S2SP1FB<br>Adapter pipe<br>Branch pipe | Pipe length<br>L+L1+L2≤70m<br>Wire length ≤75m | Pipe length<br>L+L1+L2+L3+L4≤70m<br>Wire length ≤75m | 14 | 2*AB71S2SG1FA | 3*AB50S2SC1FA | 4*AB35S2SC1FA | 2*AC71S2SG1FA | 3*AC50S2SG1FA | 4*AC35S2SG1FA | 2*AD71S2SM3FA<br>2*AD71S2SS1FA | 3*AD50S2SM3FA<br>3*AD50S2SS1FA | 4*AD35S2SM3FA<br>4*AD35S2SS1FA |
| | | | | FQG-2Y100A(105) | FQG-3Y100A(105) | FQG-4Y200A<br>+Adapter:0150713967 | FQG-2Y100A(105) | FQG-3Y100A(105) | FQG-4Y200A<br>+Adapter:0150713967 | FQG-2Y100A(105) | FQG-3Y100A(105) | FQG-4Y200A<br>+Adapter:0150713967 |
| Branch pipe | | | | FQG-2Y200A(125/140)<br>+Adapter:0150713967 | FQG-3Y200A(125/140)<br>+Adapter:0150713967 | | FQG-2Y200A(125/140)<br>+Adapter:0150713967 | FQG-3Y200A(125/140)<br>+Adapter:0150713967 | | FQG-2Y200A(125/140)<br>+Adapter:0150713967 | FQG-3Y200A(125/140)<br>+Adapter:0150713967 | |

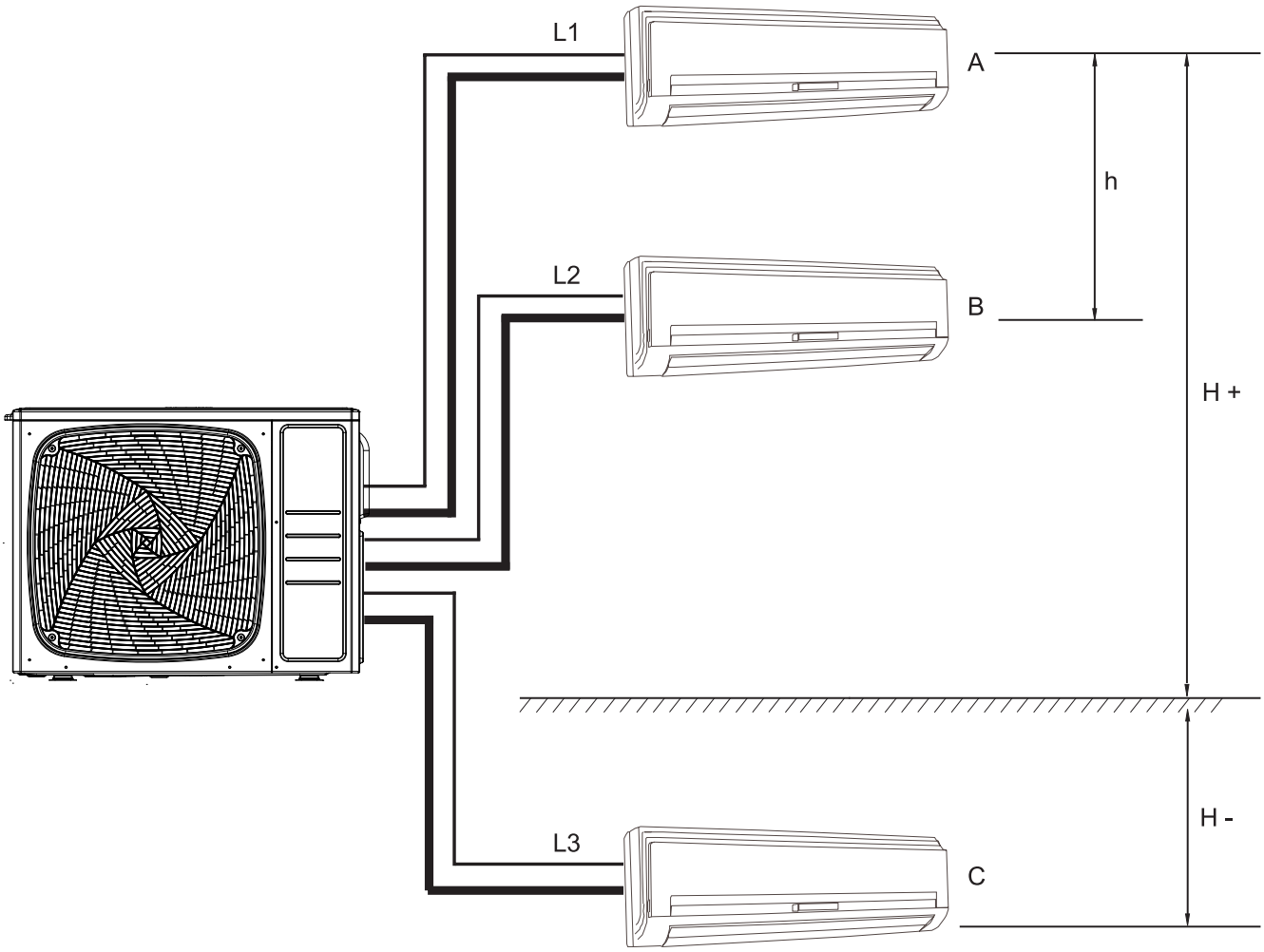
**The MAXI SPLIT system is a solution for open spaces in medium sized premises such as shops or offices, where two,three or four indoor units are required. For example, one outdoor unit can be connected to Cassettes (AB Series)/Floor Ceiling(AC Series) or Duct(AD Series) by branch pipes . Please refer to the outdoor unit models to choose suitable branch pipes and matching indoor unit model and quantities in following table.**

**The matching table of MAXI SPLIT series**

| Outdoor unit Model | Indoor Unit Model | Number of indoor Units | Gas side manifold | Liquid side manifold | Manifold Model | Reducer No. |
|---|---|---|---|---|---|---|
| 1U105S2SS1FA<br>1U105S2SS2FA<br>1U105S2SS1FB | AB50S2SC1FA<br>AC50S2SG1FA | 2 |  |  | FQG-2Y100A | / |
| | AD50S2SM3FA<br>AD50S2SS1FA | 2 | | | | |
| 1U125S2SN1FA<br>1U125S2SN1FB<br>1U140S2SP1FA<br>1U140S2SP1FB<br>1U140S2SN1FA<br>1U140S2SN1FB<br>1U160S2SP1FB<br>1U125S2SN2FA<br>1U125S2SN2FB<br>1U140S2SP2FA<br>1U140S2SP2FB | AB71S2SG1FA<br>AC71S2SG1FA | 2 |  |  | FQG-2Y200A<br>(Except 1U160S2SP1FB) | 0150713967<br>(Except 1U160S2SP1FB) |
| | AD71S2SM3FA<br>AD71S2SS1FA | 2 | | | | |
| 1U105S2SS1FA<br>1U105S2SS1FB | AB35S2SC1FA<br>AC35S2SG1FA | 3 |  |  | FQG-3Y100A | / |
| | AD35S2SM3FA<br>AD35S2SS1FA | 3 | | | | |
| 1U125S2SN1FA<br>1U125S2SN1FB<br>1U140S2SP1FA<br>1U140S2SP1FB<br>1U140S2SN1FA<br>1U140S2SN1FB<br>1U160S2SP1FB<br>1U125S2SN2FA<br>1U125S2SN2FB<br>1U140S2SP2FA<br>1U140S2SP2FB | AB50S2SC1FA<br>AC50S2SG1FA | 3 |  |  | FQG-3Y200A<br>(Except 1U160S2SP1FB) | 0150713967<br>(Except 1U160S2SP1FB) |
| | AD50S2SM3FA<br>AD50S2SS1FA | 3 | | | | |
| 1U125S2SN1FA<br>1U125S2SN1FB<br>1U140S2SP1FA<br>1U140S2SP1FB<br>1U140S2SN1FA<br>1U140S2SN1FB<br>1U160S2SP1FB<br>1U125S2SN2FA<br>1U125S2SN2FB<br>1U140S2SP2FA<br>1U140S2SP2FB | AB35S2SC1FA<br>AC35S2SG1FA | 4 |  |  | FQG-4Y200A<br>(Except 1U160S2SP1FB) | 0150713967<br>(Except 1U160S2SP1FB) |
| | AD35S2SM3FA<br>AD35S2SS1FA | 4 | | | | |

**Note: For MAXI SPLIT models please choose suitable manifold and branch pipes according to combinations of indoor and outdoor unit. Detailed installation methods please refer to the installations manual; The manifold and brand pipes are optional components, please purchase separately according to the actual installation needs.**

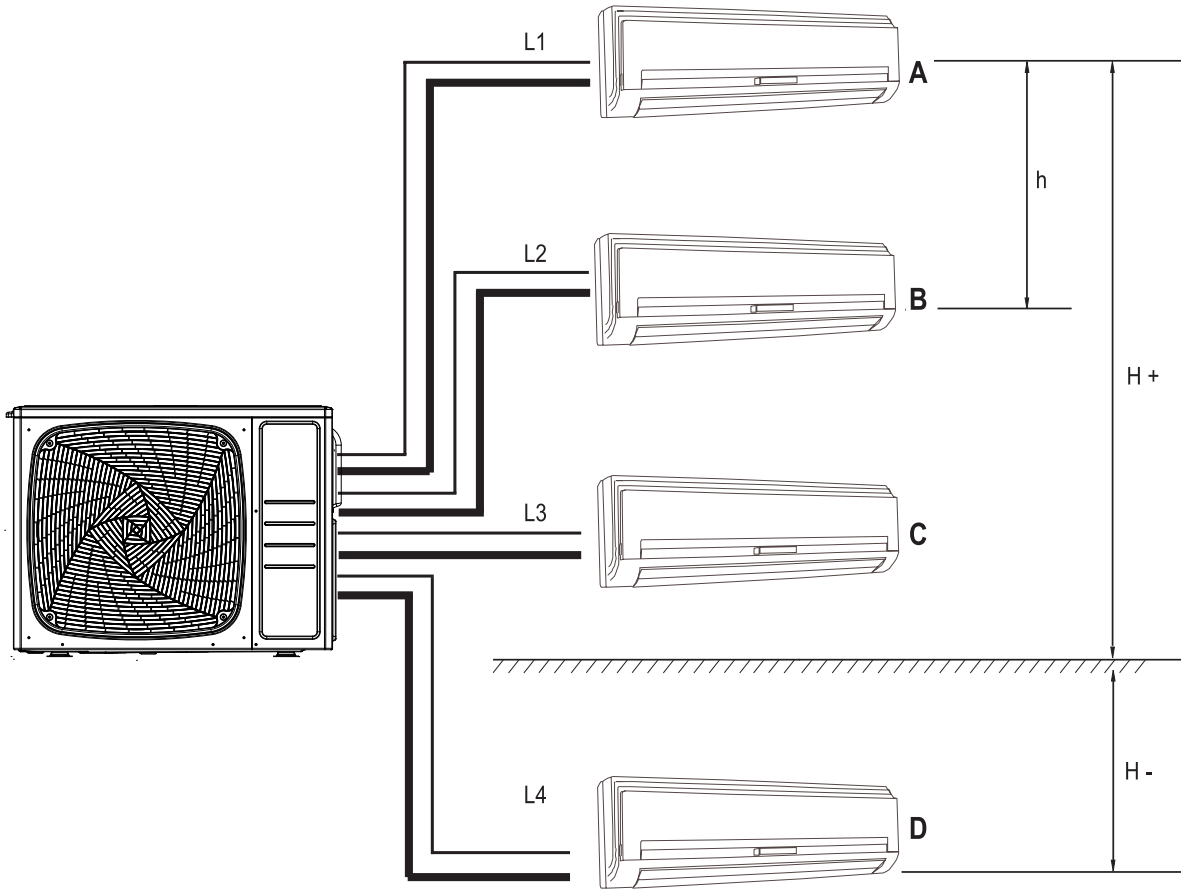
3U55S2SR5FA 3U70S2SR5FA




The piping length information, please refer the following table.

| Item | Unit | Description | Standard | Maximum |
|---|---|---|---|---|
| A,B,C Liquid Pipe | mm | Size of the liquid side connection pipe | φ6.35 | / |
| A,B,C Gas Pipe | mm | Size of the gas side connection pipe | φ9.52 | / |
| L1 (One Way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L2 (One Way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L3 (One Way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L1+L2+L3 | m | Total liquid piping length | ≤ 30 | 3U55<50<br>3U70<60 |
| h | m | Drop between every two indoor units when the location of the outdoor unit is among indoor units | ≤ 1 | ≤ 15 |
| | m | Drop between every two indoor units when the location of the outdoor unit is at one side of indoor units | ≤ 1 | ≤ 7.5 |
| H+ | m | Drop between the outdoor unit and the indoor unit | ≤ 5 | ≤ 15 |
| H- | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is among the indoor units | ≤ 5 | ≤ 7.5 |
| | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is at one side of indoor units | ≤ 5 | ≤ 15 |

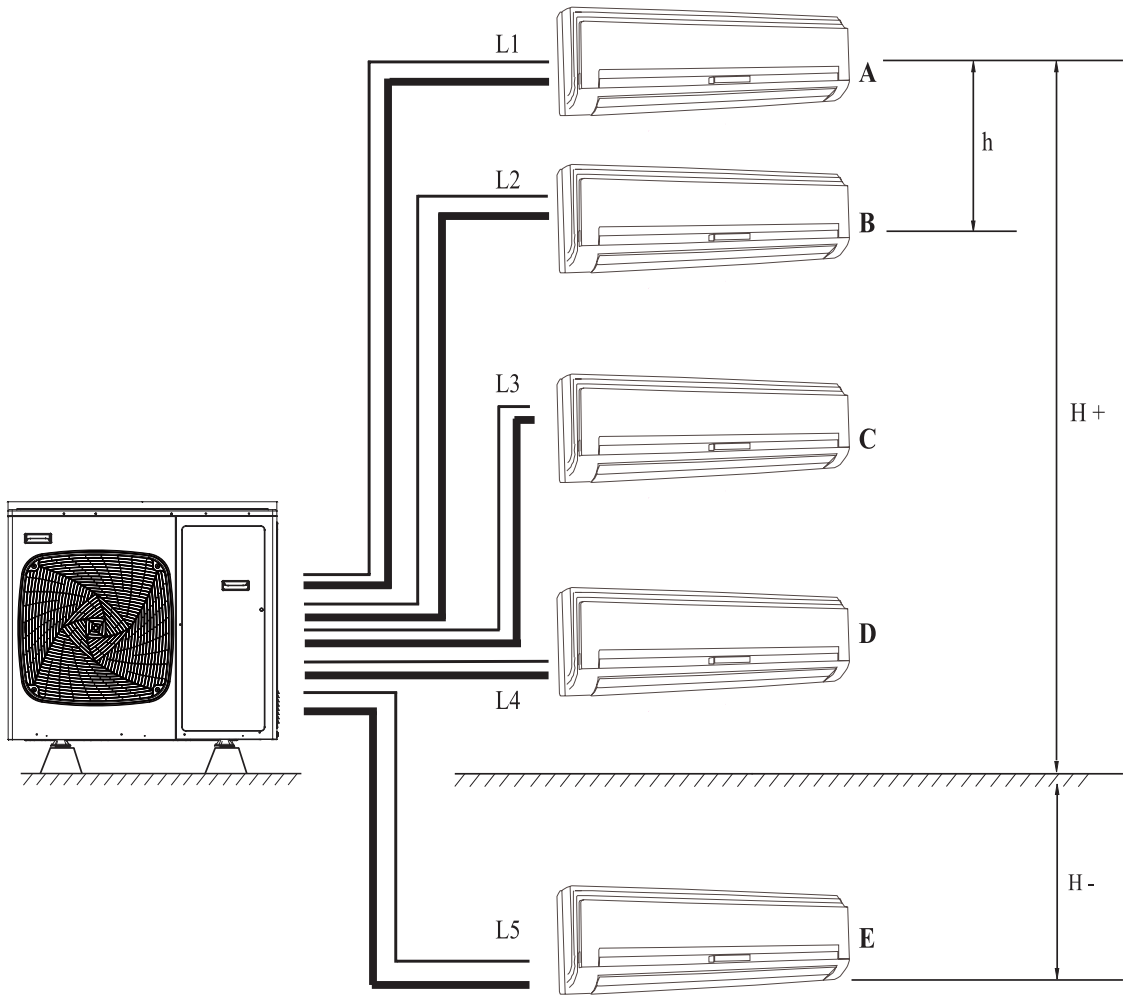
4U75S2SR5FA 4U85S2SR5FA




The piping length information, please refer the following table.

| Item | Unit | Description | Standard | Maximum |
|---|---|---|---|---|
| A,B,C, Dliquid Pipe | mm | Size of the liquid side connection pipe | φ6.35 | / |
| A,B,C Gas Pipe | mm | Size of the gas side connection pipe | φ9.52 | / |
| D Gas Pipe | mm | Size of the gas side connection pipe | φ12.7 | / |
| L1 (One Way) | mm | Max. Piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L2 (One Way) | m | Max. Piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L3 (One Way) | m | Max. Piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L4 (One Way) | m | Max. Piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L1+L2+L3+L4 | m | Total liquid piping length | ≤ 40 | ≤ 70 |
| h | m | Drop between every two indoor units when the location of the outdoor unit is among indoor units | ≤ 1 | ≤ 15 |
| | m | Drop between every two indoor units when the location of the outdoor unit is at one side of indoor units | ≤ 1 | ≤ 7.5 |
| H+ | m | Drop between the outdoor unit and the indoor unit | ≤ 5 | ≤ 15 |
| H- | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is among the indoor units | ≤ 5 | ≤ 15 |
| | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is at one side of indoor units | ≤ 5 | ≤ 15 |

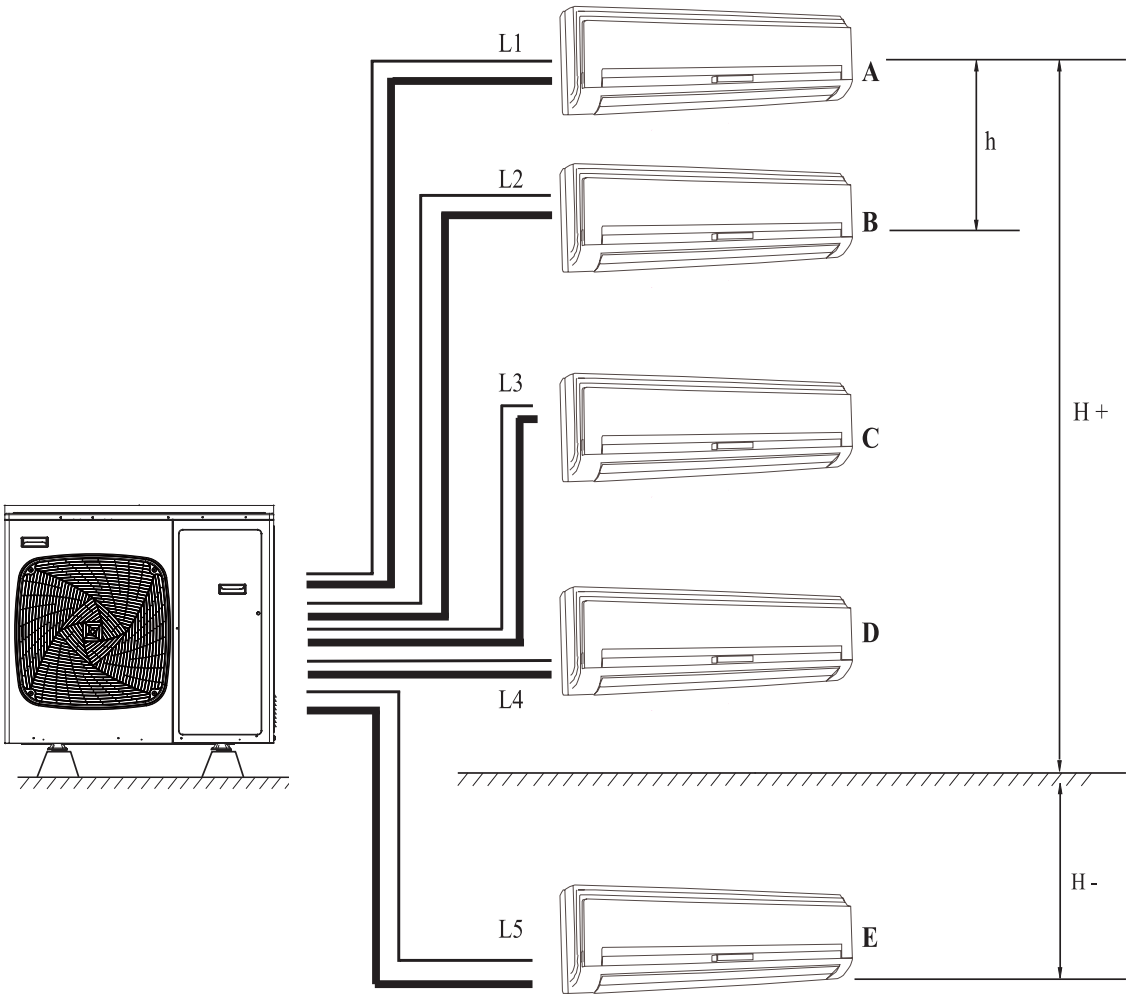
5U90S2SS5FA 5U105S2SS5FA




The piping length information, please refer the following table.

| Item | Unit | Description | Standard | Maximum |
|---|---|---|---|---|
| A,B,C,D,E liquid pipe | mm | Size of the liquid side connection pipe | φ6.35 | / |
| A,B,C Gas pipe | mm | Size of the gas side connection pipe | φ9.52 | / |
| D, E Gas pipe | mm | Size of the gas side connection pipe | φ12.7 | / |
| L1 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L2 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L3 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L4 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L5 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L1+L2+L3+L4+L5 | m | Total liquid piping length | ≤ 40 | ≤ 80 |
| h | m | Drop between every two indoor units when the location of the outdoor unit is among indoor units | ≤ 1 | ≤ 15 |
| | m | Drop between every two indoor units when the location of the outdoor unit is at one side of indoor units | ≤ 1 | ≤ 7.5 |
| H+ | m | Drop between the outdoor unit and the indoor unit | ≤ 5 | ≤ 15 |
| H- | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is among the indoor units | ≤ 5 | ≤ 7.5 |
| | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is at one side of indoor units | ≤ 5 | ≤ 15 |

5U125S2SN1FA




The piping length information, please refer the following table.

| Item | Unit | Description | Standard | Maximum |
|---|---|---|---|---|
| A,B,C,D,E liquid pipe | mm | Size of the liquid side connection pipe | φ6.35 | / |
| A,B,C Gas pipe | mm | Size of the gas side connection pipe | φ9.52 | / |
| D, E Gas pipe | mm | Size of the gas side connection pipe | φ12.7 | / |
| L1 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L2 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L3 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L4 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L5 (one way) | m | Max.piping length between IU and OU of the way | ≤ 10 | ≤ 25 |
| L1+L2+L3+L4+L5 | m | Total liquid piping length | ≤ 50 | ≤ 100 |
| h | m | Drop between every two indoor units when the location of the outdoor unit is among indoor units | ≤ 1 | ≤ 15 |
| | m | Drop between every two indoor units when the location of the outdoor unit is at one side of indoor units | ≤ 1 | ≤ 7.5 |
| H+ | m | Drop between the outdoor unit and the indoor unit | ≤ 5 | ≤ 15 |
| H- | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is among the indoor units | ≤ 5 | ≤ 7.5 |
| | m | Drop between the outdoor unit and the indoor unit when the location of outdoor unit is at one side of indoor units | ≤ 5 | ≤ 15 |

## 8.7 Combination and the Data

**3U55S2SR5FA combination and the data**

COOLING 5

| Comb. | Combinations | | | Rated capacity(Kw) (Nom. cooling) | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit A | Unit B | Unit C | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | 2.00 | — | — | 0.80 | 2.00 | 2.80 | 0.55 | 0.62 | 1.50 | 2.44 | 2.83 | 6.48 | — | — | — | — |
| | 2.5 | — | — | 2.60 | — | — | 0.80 | 2.60 | 3.90 | 0.55 | 0.78 | 1.65 | 2.44 | 3.56 | 7.13 | — | — | — | — |
| | 3.5 | — | — | 3.60 | — | — | 1.00 | 3.60 | 5.30 | 0.55 | 1.07 | 1.76 | 2.44 | 4.88 | 7.61 | — | — | — | — |
| | 4.2 | — | — | 4.40 | — | — | 1.30 | 4.40 | 5.00 | 0.55 | 1.28 | 2.15 | 2.44 | 5.84 | 9.29 | — | — | — | — |
| | 5.0 | — | — | 5.20 | — | — | 1.40 | 5.00 | 6.60 | 0.55 | 1.38 | 2.24 | 2.44 | 6.30 | 9.68 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | 2.00 | 2.00 | — | 1.60 | 4.00 | 5.60 | 0.55 | 1.18 | 2.50 | 2.44 | 5.38 | 10.80 | 3.39 | A | 6.80 | A++ |
| | 2.0 | 2.5 | — | 2.00 | 2.60 | — | 1.80 | 4.60 | 6.60 | 0.55 | 1.28 | 2.50 | 2.44 | 5.84 | 10.80 | 3.59 | A | 6.80 | A++ |
| | 2.0 | 3.5 | — | 1.79 | 3.21 | — | 2.10 | 5.00 | 6.60 | 0.55 | 1.36 | 2.50 | 2.44 | 6.20 | 10.80 | 3.68 | A | 7.00 | A++ |
| | 2.0 | 4.2 | — | 1.56 | 3.44 | — | 2.10 | 5.00 | 6.60 | 0.55 | 1.36 | 2.50 | 2.44 | 6.20 | 10.80 | 3.68 | A | 7.00 | A++ |
| | 2.0 | 5.0 | — | 1.39 | 3.61 | — | 2.10 | 5.00 | 6.60 | 0.55 | 1.36 | 2.50 | 2.44 | 6.20 | 10.80 | 3.68 | A | 7.00 | A++ |
| | 2.5 | 2.5 | — | 2.50 | 2.50 | — | 2.00 | 5.00 | 6.60 | 0.55 | 1.36 | 2.50 | 2.44 | 6.20 | 10.80 | 3.68 | A | 7.00 | A++ |
| | 2.5 | 3.5 | — | 2.10 | 2.90 | — | 2.10 | 5.00 | 6.60 | 0.55 | 1.34 | 2.50 | 2.44 | 6.11 | 10.80 | 3.73 | A | 7.00 | A++ |
| | 2.5 | 4.2 | — | 1.86 | 3.14 | — | 2.10 | 5.00 | 6.60 | 0.55 | 1.34 | 2.50 | 2.44 | 6.11 | 10.80 | 3.73 | A | 7.40 | A++ |
| | 2.5 | 5.0 | — | 1.67 | 3.33 | — | 2.10 | 5.00 | 6.60 | 0.55 | 1.34 | 2.50 | 2.44 | 6.11 | 10.80 | 3.73 | A | 7.80 | A++ |
| | 3.5 | 3.5 | — | 2.50 | 2.50 | — | 2.10 | 5.00 | 6.60 | 0.55 | 1.34 | 2.50 | 2.44 | 6.11 | 10.80 | 3.73 | A | 7.80 | A++ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | 1.67 | 1.67 | 1.67 | 2.10 | 5.00 | 6.60 | 0.55 | 1.29 | 2.50 | 2.44 | 5.89 | 10.80 | 3.88 | A | 7.60 | A++ |
| | 2.0 | 2.0 | 2.5 | 1.52 | 1.52 | 1.97 | 2.10 | 5.00 | 6.60 | 0.55 | 1.29 | 2.50 | 2.44 | 5.89 | 10.80 | 3.88 | A | 8.00 | A++ |
| | 2.0 | 2.0 | 3.5 | 1.32 | 1.32 | 2.37 | 2.10 | 5.00 | 6.60 | 0.55 | 1.27 | 2.50 | 2.44 | 5.79 | 10.80 | 3.94 | A | 8.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 1.39 | 1.81 | 1.81 | 2.10 | 5.00 | 6.60 | 0.55 | 1.27 | 2.50 | 2.44 | 5.79 | 10.80 | 3.94 | A | 8.30 | A++ |
| | 2.0 | 2.5 | 3.5 | 1.22 | 1.59 | 2.20 | 2.10 | 5.00 | 6.60 | 0.55 | 1.27 | 2.50 | 2.44 | 5.79 | 10.80 | 3.94 | A | 8.30 | A++ |
| | 2.5 | 2.5 | 2.5 | 1.67 | 1.67 | 1.67 | 2.10 | 5.00 | 6.60 | 0.55 | 1.25 | 2.50 | 2.44 | 5.70 | 10.80 | 4.00 | A | 8.50 | A+++ |
| | 2.5 | 2.5 | 3.5 | 1.48 | 1.48 | 2.05 | 2.10 | 5.00 | 6.60 | 0.55 | 1.25 | 2.50 | 2.44 | 5.70 | 10.80 | 4.00 | A | 8.50 | A+++ |

HEATING 6.4

| Comb. | Combinations | | | Rated capacity(kW) (Nom. heating) | | | total heating capacity(KW) | | | total power input (W) | | | total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit A | Unit B | Unit C | min. data | rated data | max. data | min. data | rated data | max. data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | 2.30 | — | — | 0.80 | 2.30 | 4.00 | 0.55 | 0.63 | 1.80 | 2.44 | 2.76 | 7.77 | — | — | — | — |
| | 2.5 | — | — | 3.60 | — | — | 0.80 | 3.60 | 6.00 | 0.55 | 0.98 | 1.90 | 2.44 | 4.29 | 8.20 | — | — | — | — |
| | 3.5 | — | — | 4.50 | — | — | 1.00 | 4.50 | 6.00 | 0.55 | 1.20 | 2.00 | 2.44 | 5.25 | 8.64 | — | — | — | — |
| | 4.2 | — | — | 5.40 | — | — | 1.50 | 5.40 | 6.00 | 0.55 | 1.40 | 2.00 | 2.44 | 6.12 | 8.64 | — | — | — | — |
| | 5.0 | — | — | 6.00 | — | — | 1.50 | 6.00 | 7.20 | 0.55 | 1.55 | 2.20 | 2.44 | 6.78 | 9.50 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | 2.30 | 2.30 | — | 1.20 | 4.60 | 7.20 | 0.55 | 1.25 | 2.10 | 2.44 | 5.47 | 9.07 | 3.68 | A | 3.90 | A |
| | 2.0 | 2.5 | — | 2.30 | 3.60 | — | 1.20 | 5.90 | 7.20 | 0.55 | 1.54 | 2.10 | 2.44 | 6.74 | 9.07 | 3.83 | A | 3.95 | A |
| | 2.0 | 3.5 | — | 2.16 | 4.24 | — | 1.20 | 6.40 | 7.20 | 0.55 | 1.72 | 2.10 | 2.44 | 7.52 | 9.07 | 3.72 | A | 3.95 | A |
| | 2.0 | 4.2 | — | 1.91 | 4.49 | — | 1.70 | 6.40 | 7.20 | 0.55 | 1.70 | 2.10 | 2.44 | 7.44 | 9.07 | 3.76 | A | 3.95 | A |
| | 2.0 | 5.0 | — | 1.77 | 4.63 | — | 1.70 | 6.40 | 7.20 | 0.55 | 1.70 | 2.10 | 2.44 | 7.44 | 9.07 | 3.76 | A | 3.95 | A |
| | 2.5 | 2.5 | — | 3.20 | 3.20 | — | 1.70 | 6.40 | 7.20 | 0.55 | 1.68 | 2.20 | 2.44 | 7.35 | 9.50 | 3.81 | A | 4.00 | A+ |
| | 2.5 | 3.5 | — | 2.84 | 3.56 | — | 1.70 | 6.40 | 7.20 | 0.55 | 1.68 | 2.20 | 2.44 | 7.35 | 9.50 | 3.81 | A | 4.00 | A+ |
| | 2.5 | 4.2 | — | 2.56 | 3.84 | — | 1.70 | 6.40 | 7.20 | 0.55 | 1.66 | 2.20 | 2.44 | 7.26 | 9.50 | 3.86 | A | 4.10 | A+ |
| | 2.5 | 5.0 | — | 2.40 | 4.00 | — | 1.70 | 6.40 | 7.20 | 0.55 | 1.66 | 2.20 | 2.44 | 7.26 | 9.50 | 3.86 | A | 4.20 | A+ |
| | 3.5 | 3.5 | — | 3.20 | 3.20 | — | 1.70 | 6.40 | 7.20 | 0.55 | 1.66 | 2.20 | 2.44 | 7.26 | 9.50 | 3.86 | A | 4.20 | A+ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | 2.13 | 2.13 | 2.13 | 1.70 | 6.40 | 7.20 | 0.55 | 1.64 | 2.20 | 2.44 | 7.17 | 9.50 | 3.90 | A | 4.30 | A+ |
| | 2.0 | 2.0 | 2.5 | 1.80 | 1.80 | 2.81 | 1.70 | 6.40 | 7.20 | 0.55 | 1.63 | 2.20 | 2.44 | 7.13 | 9.50 | 3.93 | A | 4.40 | A+ |
| | 2.0 | 2.0 | 3.5 | 1.62 | 1.62 | 3.16 | 1.70 | 6.40 | 7.20 | 0.55 | 1.63 | 2.20 | 2.44 | 7.13 | 9.50 | 3.93 | A | 4.40 | A+ |
| | 2.0 | 2.5 | 2.5 | 1.55 | 2.43 | 2.43 | 1.70 | 6.40 | 7.20 | 0.55 | 1.62 | 2.20 | 2.44 | 7.09 | 9.50 | 3.95 | A | 4.50 | A+ |
| | 2.0 | 2.5 | 3.5 | 1.42 | 2.22 | 2.77 | 1.70 | 6.40 | 7.20 | 0.55 | 1.62 | 2.20 | 2.44 | 7.09 | 9.50 | 3.95 | A | 4.50 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.13 | 2.13 | 2.13 | 1.70 | 6.40 | 7.20 | 0.55 | 1.60 | 2.20 | 2.44 | 7.00 | 9.50 | 4.00 | A | 4.60 | A++ |
| | 2.5 | 2.5 | 3.5 | 1.97 | 1.97 | 2.46 | 1.70 | 6.40 | 7.20 | 0.55 | 1.60 | 2.20 | 2.44 | 7.00 | 9.50 | 4.00 | A | 4.60 | A++ |

**3U70S2SR5FA combination and the data**
COOLING 7

| Comb. | Combinations | | | Rated capacity(Kw) (Nom. cooling) | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit A | Unit B | Unit C | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | 2.00 | — | — | 0.80 | 2.00 | 2.80 | 0.55 | 0.62 | 1.30 | 2.44 | 2.75 | 5.75 | — | — | — | — |
| | 2.5 | — | — | 2.60 | — | — | 0.80 | 2.60 | 3.90 | 0.55 | 0.79 | 1.34 | 2.44 | 3.50 | 5.91 | — | — | — | — |
| | 3.5 | — | — | 3.60 | — | — | 1.00 | 3.60 | 5.30 | 0.55 | 1.09 | 1.65 | 2.44 | 4.84 | 7.30 | — | — | — | — |
| | 4.2 | — | — | 4.40 | — | — | 1.30 | 4.40 | 5.00 | 0.55 | 1.32 | 1.90 | 2.44 | 5.86 | 8.40 | — | — | — | — |
| | 5.0 | — | — | 5.20 | — | — | 1.40 | 5.20 | 7.00 | 0.55 | 1.55 | 2.00 | 2.44 | 6.88 | 8.85 | — | — | — | — |
| | 7.1 | — | — | 6.50 | — | — | 1.50 | 6.50 | 7.40 | 0.55 | 1.92 | 2.60 | 2.44 | 8.52 | 11.50 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | 2.00 | 2.00 | — | 1.80 | 4.00 | 5.60 | 0.55 | 1.21 | 2.60 | 2.44 | 5.37 | 11.50 | 3.31 | A | 6.80 | A++ |
| | 2.0 | 2.5 | — | 2.00 | 2.60 | — | 1.80 | 4.60 | 6.70 | 0.55 | 1.35 | 2.60 | 2.44 | 5.99 | 11.50 | 3.41 | A | 6.80 | A++ |
| | 2.0 | 3.5 | — | 2.00 | 3.60 | — | 1.80 | 5.60 | 7.50 | 0.55 | 1.65 | 2.60 | 2.44 | 7.32 | 11.50 | 3.39 | A | 6.90 | A++ |
| | 2.0 | 4.2 | — | 2.00 | 4.40 | — | 1.80 | 6.40 | 7.60 | 0.55 | 1.89 | 2.60 | 2.44 | 8.39 | 11.50 | 3.39 | A | 6.90 | A++ |
| | 2.0 | 5.0 | — | 1.94 | 5.06 | — | 2.40 | 7.00 | 7.60 | 0.55 | 2.02 | 2.60 | 2.44 | 8.96 | 11.50 | 3.47 | A | 6.90 | A++ |
| | 2.5 | 2.5 | — | 2.60 | 2.60 | — | 2.00 | 5.20 | 7.40 | 0.55 | 1.52 | 2.60 | 2.44 | 6.74 | 11.50 | 3.42 | A | 6.90 | A++ |
| | 2.5 | 3.5 | — | 2.60 | 3.60 | — | 2.00 | 6.20 | 7.60 | 0.55 | 1.79 | 2.60 | 2.44 | 7.94 | 11.50 | 3.46 | A | 6.90 | A++ |
| | 2.5 | 4.2 | — | 2.60 | 4.40 | — | 2.40 | 7.00 | 7.60 | 0.55 | 2.02 | 2.60 | 2.44 | 8.96 | 11.50 | 3.47 | A | 7.00 | A++ |
| | 2.5 | 5.0 | — | 2.33 | 4.67 | — | 2.40 | 7.00 | 7.60 | 0.55 | 2.00 | 2.60 | 2.44 | 8.87 | 11.50 | 3.50 | A | 7.00 | A++ |
| | 3.5 | 3.5 | — | 3.40 | 3.40 | — | 2.40 | 6.80 | 7.60 | 0.55 | 2.00 | 2.60 | 2.44 | 8.87 | 11.50 | 3.40 | A | 7.00 | A++ |
| | 3.5 | 4.2 | — | 3.15 | 3.85 | — | 2.40 | 7.00 | 7.60 | 0.55 | 1.82 | 2.60 | 2.44 | 8.07 | 11.50 | 3.85 | A | 7.20 | A++ |
| | 3.5 | 5.0 | — | 2.86 | 4.14 | — | 2.40 | 7.00 | 7.60 | 0.55 | 1.82 | 2.60 | 2.44 | 8.07 | 11.50 | 3.85 | A | 7.40 | A++ |
| | 4.2 | 4.2 | — | 3.50 | 3.50 | — | 2.40 | 7.00 | 7.60 | 0.55 | 1.82 | 2.60 | 2.44 | 8.07 | 11.50 | 3.85 | A | 7.40 | A++ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | 2.00 | 2.00 | 2.00 | 2.40 | 6.00 | 7.60 | 0.55 | 1.75 | 2.60 | 2.44 | 7.76 | 11.50 | 3.43 | A | 7.60 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.00 | 2.00 | 2.60 | 2.40 | 6.60 | 7.60 | 0.55 | 1.75 | 2.60 | 2.44 | 7.76 | 11.50 | 3.77 | A | 7.80 | A++ |
| | 2.0 | 2.0 | 3.5 | 1.84 | 1.84 | 3.32 | 2.40 | 7.00 | 7.60 | 0.55 | 1.80 | 2.60 | 2.44 | 7.99 | 11.50 | 3.89 | A | 7.80 | A++ |
| | 2.0 | 2.0 | 4.2 | 1.67 | 1.67 | 3.67 | 2.40 | 7.00 | 7.60 | 0.55 | 1.80 | 2.60 | 2.44 | 7.99 | 11.50 | 3.89 | A | 8.00 | A++ |
| | 2.0 | 2.0 | 5.0 | 1.52 | 1.52 | 3.96 | 2.40 | 7.00 | 7.60 | 0.55 | 1.80 | 2.60 | 2.44 | 7.99 | 11.50 | 3.89 | A | 8.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 1.94 | 2.53 | 2.53 | 2.40 | 7.00 | 7.60 | 0.55 | 1.80 | 2.60 | 2.44 | 7.99 | 11.50 | 3.89 | A | 8.20 | A++ |
| | 2.0 | 2.5 | 3.5 | 1.71 | 2.22 | 3.07 | 2.40 | 7.00 | 7.60 | 0.55 | 1.80 | 2.60 | 2.44 | 7.99 | 11.50 | 3.89 | A | 8.20 | A++ |
| | 2.0 | 2.5 | 4.2 | 1.56 | 2.02 | 3.42 | 2.40 | 7.00 | 7.60 | 0.55 | 1.80 | 2.60 | 2.44 | 7.99 | 11.50 | 3.89 | A | 8.30 | A++ |
| | 2.0 | 2.5 | 5.0 | 1.43 | 1.86 | 3.71 | 2.40 | 7.00 | 7.60 | 0.55 | 1.82 | 2.60 | 2.44 | 8.07 | 11.50 | 3.85 | A | 8.30 | A++ |
| | 2.0 | 3.5 | 3.5 | 1.52 | 2.74 | 2.74 | 2.40 | 7.00 | 7.60 | 0.55 | 1.82 | 2.60 | 2.44 | 8.07 | 11.50 | 3.85 | A | 8.40 | A++ |
| | 2.0 | 3.5 | 4.2 | 1.40 | 2.52 | 3.08 | 2.40 | 7.00 | 7.60 | 0.55 | 1.80 | 2.60 | 2.44 | 7.99 | 11.50 | 3.89 | A | 8.40 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.33 | 2.33 | 2.33 | 2.40 | 7.00 | 7.60 | 0.55 | 1.75 | 2.60 | 2.44 | 7.80 | 11.50 | 4.00 | A | 8.50 | A+++ |
| | 2.5 | 2.5 | 3.5 | 2.07 | 2.07 | 2.86 | 2.40 | 7.00 | 7.60 | 0.55 | 1.75 | 2.60 | 2.44 | 7.80 | 11.50 | 4.00 | A | 8.50 | A+++ |
| | 2.5 | 2.5 | 4.2 | 1.90 | 1.90 | 3.21 | 2.40 | 7.00 | 7.60 | 0.55 | 1.75 | 2.60 | 2.44 | 7.80 | 11.50 | 4.00 | A | 8.50 | A+++ |
| | 2.5 | 3.5 | 3.5 | 1.86 | 2.57 | 2.57 | 2.40 | 7.00 | 7.60 | 0.55 | 1.75 | 2.60 | 2.44 | 7.80 | 11.50 | 4.00 | A | 8.50 | A+++ |

HEATING 7.6

| Comb. | Combinations | | | Rated capacity(kW) (Nom. heating) | | | total heating capacity(KW) | | | total power input (W) | | | total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit A | Unit B | Unit C | min. data | rated data | max. data | min. data | rated data | max. data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | 2.30 | — | — | 0.80 | 2.30 | 4.00 | 0.55 | 0.64 | 1.40 | 2.44 | 2.82 | 5.90 | — | — | — | — |
| | 2.5 | — | — | 3.60 | — | — | 0.80 | 3.60 | 6.00 | 0.55 | 0.98 | 1.50 | 2.44 | 4.33 | 6.33 | — | — | — | — |
| | 3.5 | — | — | 4.50 | — | — | 1.00 | 4.50 | 6.00 | 0.55 | 1.22 | 1.65 | 2.44 | 5.40 | 6.96 | — | — | — | — |
| | 4.2 | — | — | 5.40 | — | — | 1.50 | 5.40 | 6.00 | 0.55 | 1.45 | 1.90 | 2.44 | 6.41 | 8.01 | — | — | — | — |
| | 5.0 | — | — | 6.00 | — | — | 1.50 | 6.00 | 8.00 | 0.55 | 1.60 | 2.00 | 2.44 | 7.08 | 8.43 | — | — | — | — |
| | 7.1 | — | — | 7.00 | — | — | 1.50 | 7.00 | 8.50 | 0.55 | 1.84 | 2.20 | 2.44 | 8.14 | 9.28 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | 2.30 | 2.30 | — | 2.60 | 4.60 | 8.00 | 0.55 | 1.25 | 2.00 | 2.44 | 5.53 | 8.43 | 3.68 | A | 3.80 | A |
| | 2.0 | 2.5 | — | 2.30 | 3.60 | — | 2.70 | 5.90 | 8.50 | 0.55 | 1.60 | 2.00 | 2.44 | 7.08 | 8.43 | 3.69 | A | 3.80 | A |
| | 2.0 | 3.5 | — | 2.30 | 4.50 | — | 2.70 | 6.80 | 8.50 | 0.55 | 1.82 | 2.10 | 2.44 | 8.05 | 8.86 | 3.74 | A | 3.80 | A |
| | 2.0 | 4.2 | — | 2.27 | 5.33 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.00 | 2.10 | 2.44 | 8.85 | 8.86 | 3.80 | A | 3.90 | A |
| | 2.0 | 5.0 | — | 2.11 | 5.49 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.00 | 2.10 | 2.44 | 8.85 | 8.86 | 3.80 | A | 3.90 | A |
| | 2.5 | 2.5 | — | 3.60 | 3.60 | — | 2.90 | 7.20 | 8.50 | 0.55 | 2.00 | 2.10 | 2.44 | 8.85 | 8.86 | 3.60 | B | 3.90 | A |
| | 2.5 | 3.5 | — | 3.38 | 4.22 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.00 | 2.10 | 2.44 | 8.85 | 8.86 | 3.80 | A | 3.90 | A |
| | 2.5 | 4.2 | — | 3.04 | 4.56 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.00 | 2.10 | 2.44 | 8.85 | 8.86 | 3.80 | A | 3.95 | A |
| | 2.5 | 5.0 | — | 2.85 | 4.75 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.00 | 2.10 | 2.44 | 8.85 | 8.86 | 3.80 | A | 3.95 | A |
| | 3.5 | 3.5 | — | 3.75 | 3.75 | — | 2.90 | 7.50 | 8.50 | 0.55 | 2.00 | 2.20 | 2.44 | 8.85 | 9.28 | 3.75 | A | 4.00 | A+ |
| | 3.5 | 4.2 | — | 3.45 | 4.15 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.02 | 2.20 | 2.44 | 8.93 | 9.28 | 3.76 | A | 4.00 | A+ |
| | 3.5 | 5.0 | — | 3.26 | 4.34 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.00 | 2.20 | 2.44 | 8.85 | 9.28 | 3.80 | A | 4.10 | A+ |
| | 4.2 | 4.2 | — | 3.80 | 3.80 | — | 2.90 | 7.60 | 8.50 | 0.55 | 2.00 | 2.20 | 2.44 | 8.85 | 9.28 | 3.80 | A | 4.10 | A+ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | 2.30 | 2.30 | 2.30 | 2.90 | 6.90 | 8.50 | 0.55 | 1.85 | 2.30 | 2.44 | 8.18 | 9.70 | 3.73 | A | 4.20 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.13 | 2.13 | 3.34 | 2.90 | 7.60 | 8.50 | 0.55 | 1.98 | 2.30 | 2.44 | 8.76 | 9.70 | 3.84 | A | 4.20 | A+ |
| | 2.0 | 2.0 | 3.5 | 1.92 | 1.92 | 3.76 | 2.90 | 7.60 | 8.50 | 0.55 | 1.96 | 2.30 | 2.44 | 8.67 | 9.70 | 3.88 | A | 4.20 | A+ |
| | 2.0 | 2.0 | 4.2 | 1.75 | 1.75 | 4.10 | 2.90 | 7.60 | 8.50 | 0.55 | 1.95 | 2.30 | 2.44 | 8.62 | 9.70 | 3.90 | A | 4.30 | A+ |
| | 2.0 | 2.0 | 5.0 | 1.65 | 1.65 | 4.30 | 2.90 | 7.60 | 8.50 | 0.55 | 1.95 | 2.30 | 2.44 | 8.62 | 9.70 | 3.90 | A | 4.30 | A+ |
| | 2.0 | 2.5 | 2.5 | 1.84 | 2.88 | 2.88 | 2.90 | 7.60 | 8.50 | 0.55 | 1.93 | 2.30 | 2.44 | 8.54 | 9.70 | 3.94 | A | 4.30 | A+ |
| | 2.0 | 2.5 | 3.5 | 1.68 | 2.63 | 3.29 | 2.90 | 7.60 | 8.50 | 0.55 | 1.95 | 2.30 | 2.44 | 8.62 | 9.70 | 3.90 | A | 4.40 | A+ |
| | 2.0 | 2.5 | 4.2 | 1.55 | 2.42 | 3.63 | 2.90 | 7.60 | 8.50 | 0.55 | 1.93 | 2.30 | 2.44 | 8.54 | 9.70 | 3.94 | A | 4.40 | A+ |
| | 2.0 | 2.5 | 5.0 | 1.47 | 2.30 | 3.83 | 2.90 | 7.60 | 8.50 | 0.55 | 1.94 | 2.30 | 2.44 | 8.58 | 9.70 | 3.92 | A | 4.40 | A+ |
| | 2.0 | 3.5 | 3.5 | 1.55 | 3.03 | 3.03 | 2.90 | 7.60 | 8.50 | 0.55 | 1.93 | 2.30 | 2.44 | 8.54 | 9.70 | 3.94 | A | 4.50 | A+ |
| | 2.0 | 3.5 | 4.2 | 1.43 | 2.80 | 3.36 | 2.90 | 7.60 | 8.50 | 0.55 | 1.92 | 2.30 | 2.44 | 8.49 | 9.70 | 3.96 | A | 4.50 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.53 | 2.53 | 2.53 | 2.90 | 7.60 | 8.50 | 0.55 | 1.90 | 2.30 | 2.44 | 8.40 | 9.70 | 4.00 | A | 4.60 | A++ |
| | 2.5 | 2.5 | 3.5 | 2.34 | 2.34 | 2.92 | 2.90 | 7.60 | 8.50 | 0.55 | 1.90 | 2.30 | 2.44 | 8.40 | 9.70 | 4.00 | A | 4.60 | A++ |
| | 2.5 | 2.5 | 4.2 | 2.17 | 2.17 | 3.26 | 2.90 | 7.60 | 8.50 | 0.55 | 1.90 | 2.30 | 2.44 | 8.40 | 9.70 | 4.00 | A | 4.60 | A++ |
| | 2.5 | 3.5 | 3.5 | 2.17 | 2.71 | 2.71 | 2.90 | 7.60 | 8.50 | 0.55 | 1.90 | 2.30 | 2.44 | 8.40 | 9.70 | 4.00 | A | 4.60 | A++ |

Haier

**4U75S2SR5FA combination and the data**

COOLING 7.5

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| 1x1 | 2.0 | — | — | — | 2.00 | — | — | — | 0.80 | 2.00 | 2.80 | 0.55 | 0.66 | 1.30 | 2.44 | 2.93 | 5.77 | — | — | — | — |
| | 2.5 | — | — | — | 2.60 | — | — | — | 0.80 | 2.60 | 3.90 | 0.55 | 0.86 | 1.34 | 2.44 | 3.82 | 5.93 | — | — | — | — |
| | 3.5 | — | — | — | 3.60 | — | — | — | 1.00 | 3.60 | 5.30 | 0.55 | 1.20 | 1.50 | 2.44 | 5.32 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | 4.40 | — | — | — | 1.30 | 4.40 | 5.00 | 0.55 | 1.40 | 1.90 | 2.44 | 6.21 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | 5.20 | — | — | — | 1.40 | 5.20 | 7.00 | 0.55 | 1.65 | 1.90 | 2.44 | 7.32 | 8.43 | — | — | — | — |
| | 7.1 | — | — | — | 6.50 | — | — | — | 1.50 | 6.50 | 7.40 | 0.55 | 2.05 | 2.80 | 2.44 | 9.09 | 12.42 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | 2.00 | 2.00 | — | — | 2.00 | 4.00 | 5.60 | 0.55 | 1.30 | 3.00 | 2.44 | 5.77 | 13.31 | 3.08 | B | 6.20 | A++ |
| | 2.0 | 2.5 | — | — | 2.00 | 2.60 | — | — | 2.00 | 4.60 | 6.70 | 0.55 | 1.50 | 3.00 | 2.44 | 6.65 | 13.31 | 3.07 | B | 6.20 | A++ |
| | 2.0 | 3.5 | — | — | 2.00 | 3.60 | — | — | 2.00 | 5.60 | 8.10 | 0.55 | 1.80 | 3.00 | 2.44 | 7.99 | 13.31 | 3.11 | B | 6.20 | A++ |
| | 2.0 | 4.2 | — | — | 2.00 | 4.40 | — | — | 2.00 | 6.40 | 7.80 | 0.55 | 1.95 | 3.00 | 2.44 | 8.65 | 13.31 | 3.28 | A | 6.20 | A++ |
| | 2.0 | 5.0 | — | — | 2.00 | 5.20 | — | — | 2.00 | 7.20 | 8.70 | 0.55 | 2.20 | 3.00 | 2.44 | 9.76 | 13.31 | 3.27 | A | 6.20 | A++ |
| | 2.0 | 7.1 | — | — | 1.76 | 5.74 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.24 | 3.10 | 2.44 | 9.94 | 13.75 | 3.35 | A | 6.20 | A++ |
| | 2.5 | 2.5 | — | — | 2.60 | 2.60 | — | — | 2.00 | 5.20 | 7.80 | 0.55 | 1.70 | 3.10 | 2.44 | 7.54 | 13.75 | 3.06 | B | 6.20 | A++ |
| | 2.5 | 3.5 | — | — | 2.60 | 3.60 | — | — | 2.00 | 6.20 | 8.70 | 0.55 | 2.00 | 3.10 | 2.44 | 8.87 | 13.75 | 3.10 | B | 6.20 | A++ |
| | 2.5 | 4.2 | — | — | 2.60 | 4.40 | — | — | 2.00 | 7.00 | 8.70 | 0.55 | 2.10 | 3.10 | 2.44 | 9.32 | 13.75 | 3.33 | A | 6.20 | A++ |
| | 2.5 | 5.0 | — | — | 2.50 | 5.00 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.24 | 3.10 | 2.44 | 9.94 | 13.75 | 3.35 | A | 6.20 | A++ |
| | 2.5 | 7.1 | — | — | 2.14 | 5.36 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.24 | 3.10 | 2.44 | 9.94 | 13.75 | 3.35 | A | 6.20 | A++ |
| | 3.5 | 3.5 | — | — | 3.60 | 3.60 | — | — | 2.00 | 7.20 | 8.70 | 0.55 | 2.20 | 3.10 | 2.44 | 9.76 | 13.75 | 3.27 | A | 6.20 | A++ |
| | 3.5 | 4.2 | — | — | 3.38 | 4.13 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.26 | 3.20 | 2.44 | 10.03 | 14.20 | 3.32 | A | 6.20 | A++ |
| | 3.5 | 5.0 | — | — | 2.95 | 4.25 | — | — | 2.00 | 7.20 | 8.70 | 0.55 | 2.24 | 3.20 | 2.44 | 9.94 | 14.20 | 3.21 | A | 6.20 | A++ |
| | 3.5 | 7.1 | — | — | 2.67 | 4.83 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.25 | 3.20 | 2.44 | 9.98 | 14.20 | 3.33 | A | 6.20 | A++ |
| | 4.2 | 4.2 | — | — | 3.75 | 3.75 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.25 | 3.20 | 2.44 | 9.98 | 14.20 | 3.33 | A | 6.20 | A++ |
| | 4.2 | 5.0 | — | — | 3.44 | 4.06 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.25 | 3.20 | 2.44 | 9.98 | 14.20 | 3.33 | A | 6.20 | A++ |
| | 4.2 | 7.1 | — | — | 3.03 | 4.47 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.25 | 3.30 | 2.44 | 9.98 | 14.64 | 3.33 | A | 6.20 | A++ |
| | 5.0 | 5.0 | — | — | 3.75 | 3.75 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.18 | 3.30 | 2.44 | 9.67 | 14.64 | 3.44 | A | 6.20 | A++ |
| | 5.0 | 7.1 | — | — | 3.33 | 4.17 | — | — | 2.00 | 7.50 | 8.70 | 0.55 | 2.18 | 3.30 | 2.44 | 9.67 | 14.64 | 3.44 | A | 6.20 | A++ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | 2.00 | 2.00 | 2.00 | — | 2.40 | 6.00 | 8.70 | 0.55 | 1.80 | 3.40 | 2.44 | 7.99 | 15.08 | 3.33 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | — | 2.00 | 2.00 | 2.60 | — | 2.40 | 6.60 | 8.70 | 0.55 | 1.95 | 3.40 | 2.44 | 8.65 | 15.08 | 3.38 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | — | 1.97 | 1.97 | 3.55 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.20 | 3.40 | 2.44 | 9.76 | 15.08 | 3.41 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | — | 1.79 | 1.79 | 3.93 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.20 | 3.40 | 2.44 | 9.76 | 15.08 | 3.41 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 5.0 | — | 1.63 | 1.63 | 4.24 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.20 | 3.40 | 2.44 | 9.76 | 15.08 | 3.41 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 7.1 | — | 1.43 | 1.43 | 4.64 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 2.5 | — | 2.00 | 2.60 | 2.60 | — | 2.40 | 7.20 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.35 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 3.5 | — | 1.83 | 2.38 | 3.29 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| TRI (1x3) | 2.0 | 2.5 | 4.2 | — | 1.67 | 2.17 | 3.67 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 5.0 | — | 1.53 | 1.99 | 3.98 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 7.1 | — | 1.35 | 1.76 | 4.39 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 3.5 | — | 1.63 | 2.93 | 2.93 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 4.2 | — | 1.50 | 2.70 | 3.30 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 5.0 | — | 1.39 | 2.50 | 3.61 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 7.1 | — | 1.24 | 2.23 | 4.03 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 4.2 | 4.2 | — | 1.39 | 3.06 | 3.06 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 4.2 | 5.0 | — | 1.29 | 2.84 | 3.36 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.0 | 4.2 | 7.1 | — | 1.16 | 2.56 | 3.78 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.5 | 2.5 | 2.5 | — | 2.50 | 2.50 | 2.50 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.72 | A++ |
| | 2.5 | 2.5 | 3.5 | — | 2.22 | 2.22 | 3.07 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.72 | A++ |
| | 2.5 | 2.5 | 4.2 | — | 2.03 | 2.03 | 3.44 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.74 | A++ |
| | 2.5 | 2.5 | 5.0 | — | 1.88 | 1.88 | 3.75 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.74 | A++ |
| | 2.5 | 2.5 | 7.1 | — | 1.67 | 1.67 | 4.17 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.15 | 3.40 | 2.44 | 9.54 | 15.08 | 3.49 | A | 6.70 | A++ |
| | 2.5 | 3.5 | 3.5 | — | 1.99 | 2.76 | 2.76 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.73 | A++ |
| | 2.5 | 3.5 | 4.2 | — | 1.84 | 2.55 | 3.11 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.70 | A++ |
| | 2.5 | 3.5 | 5.0 | — | 1.71 | 2.37 | 3.42 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.70 | A++ |
| | 2.5 | 3.5 | 7.1 | — | 1.54 | 2.13 | 3.84 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.70 | A++ |
| | 2.5 | 4.2 | 4.2 | — | 1.71 | 2.89 | 2.89 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.70 | A++ |
| | 2.5 | 4.2 | 5.0 | — | 1.60 | 2.70 | 3.20 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.70 | A++ |
| | 3.5 | 3.5 | 3.5 | — | 2.50 | 2.50 | 2.50 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.75 | A++ |
| | 3.5 | 3.5 | 4.2 | — | 2.33 | 2.33 | 2.84 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.70 | A++ |
| | 3.5 | 3.5 | 5.0 | — | 2.18 | 2.18 | 3.15 | — | 2.40 | 7.50 | 8.70 | 0.55 | 2.08 | 3.40 | 2.44 | 9.23 | 15.08 | 3.61 | A | 6.70 | A++ |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 2.0 | 1.88 | 1.88 | 1.88 | 1.88 | 2.40 | 7.50 | 8.70 | 0.55 | 2.12 | 3.40 | 2.44 | 9.41 | 15.08 | 3.54 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 1.74 | 1.74 | 1.74 | 2.27 | 2.40 | 7.50 | 8.70 | 0.55 | 2.12 | 3.40 | 2.44 | 9.41 | 15.08 | 3.54 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 1.56 | 1.56 | 1.56 | 2.81 | 2.40 | 7.50 | 8.70 | 0.55 | 2.12 | 3.40 | 2.44 | 9.41 | 15.08 | 3.54 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 1.44 | 1.44 | 1.44 | 3.17 | 2.40 | 7.50 | 8.70 | 0.55 | 2.12 | 3.40 | 2.44 | 9.41 | 15.08 | 3.54 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 5.0 | 1.34 | 1.34 | 1.34 | 3.48 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 7.1 | 1.20 | 1.20 | 1.20 | 3.90 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 1.63 | 1.63 | 2.12 | 2.12 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 1.47 | 1.47 | 1.91 | 2.65 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 1.36 | 1.36 | 1.77 | 3.00 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 5.0 | 1.27 | 1.27 | 1.65 | 3.31 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.80 | A++ |

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.5 | 7.1 | 1.15 | 1.15 | 1.49 | 3.72 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 1.34 | 1.34 | 2.41 | 2.41 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 3.5 | 4.2 | 1.25 | 1.25 | 2.25 | 2.75 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 5.0 | 1.17 | 1.17 | 2.11 | 3.05 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | 4.2 | 1.17 | 1.17 | 2.58 | 2.58 | 2.40 | 7.50 | 8.70 | 0.55 | 2.02 | 3.40 | 2.44 | 8.96 | 15.08 | 3.71 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 4.2 | 5.0 | 1.10 | 1.10 | 2.43 | 2.87 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 1.53 | 1.99 | 1.99 | 1.99 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 1.39 | 1.81 | 1.81 | 2.50 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 4.2 | 1.29 | 1.68 | 1.68 | 2.84 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 5.0 | 1.21 | 1.57 | 1.57 | 3.15 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 1.27 | 1.65 | 2.29 | 2.29 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 3.5 | 4.2 | 1.19 | 1.55 | 2.14 | 2.62 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 3.5 | 5.0 | 1.12 | 1.46 | 2.01 | 2.91 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 4.2 | 4.2 | 1.12 | 1.46 | 2.46 | 2.46 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 4.2 | 5.0 | 1.06 | 1.37 | 2.32 | 2.75 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 3.5 | 3.5 | 3.5 | 1.17 | 2.11 | 2.11 | 2.11 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.0 | 3.5 | 3.5 | 4.2 | 1.10 | 1.99 | 1.99 | 2.43 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 1.88 | 1.88 | 1.88 | 1.88 | 2.40 | 7.50 | 8.70 | 0.55 | 2.00 | 3.40 | 2.44 | 8.87 | 15.08 | 3.75 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 1.71 | 1.71 | 1.71 | 2.37 | 2.40 | 7.50 | 8.70 | 0.55 | 1.97 | 3.40 | 2.44 | 8.74 | 15.08 | 3.81 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 4.2 | 1.60 | 1.60 | 1.60 | 2.70 | 2.40 | 7.50 | 8.70 | 0.55 | 1.97 | 3.40 | 2.44 | 8.74 | 15.08 | 3.81 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 1.57 | 1.57 | 2.18 | 2.18 | 2.40 | 7.50 | 8.70 | 0.55 | 1.97 | 3.40 | 2.44 | 8.74 | 15.08 | 3.81 | A | 7.00 | A++ |

HEATING 8.6

| Comb. | Combinations | | | | Rated capacity Output/ kW (Nom. heating) | | | | Total heating capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| 1x1 | 2.0 | — | — | — | 2.30 | — | — | — | 0.80 | 2.30 | 4.00 | 0.55 | 0.63 | 1.50 | 2.44 | 2.80 | 6.65 | — | — | — | — |
| | 2.5 | — | — | — | 3.60 | — | — | — | 0.80 | 3.60 | 6.00 | 0.55 | 0.98 | 1.40 | 2.44 | 4.35 | 6.21 | — | — | — | — |
| | 3.5 | — | — | — | 4.50 | — | — | — | 1.00 | 4.50 | 6.00 | 0.55 | 1.21 | 1.50 | 2.44 | 5.37 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | 5.40 | — | — | — | 1.50 | 5.40 | 6.00 | 0.55 | 1.44 | 1.90 | 2.44 | 6.39 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | 6.00 | — | — | — | 1.50 | 6.00 | 8.00 | 0.55 | 1.59 | 2.60 | 2.44 | 7.05 | 11.54 | — | — | — | — |
| | 7.1 | — | — | — | 7.00 | — | — | — | 1.50 | 7.00 | 8.60 | 0.55 | 1.83 | 2.60 | 2.44 | 8.12 | 11.54 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | 2.30 | 2.30 | — | — | 2.80 | 4.60 | 8.00 | 0.55 | 1.25 | 2.90 | 2.44 | 5.55 | 12.87 | 3.68 | A | 3.75 | A |
| | 2.0 | 2.5 | — | — | 2.30 | 3.60 | — | — | 2.80 | 5.90 | 9.00 | 0.55 | 1.59 | 2.90 | 2.44 | 7.05 | 12.87 | 3.71 | A | 3.75 | A |
| | 2.0 | 3.5 | — | — | 2.30 | 4.50 | — | — | 2.80 | 6.80 | 10.00 | 0.55 | 1.83 | 2.90 | 2.44 | 8.12 | 12.87 | 3.72 | A | 3.75 | A |
| | 2.0 | 4.2 | — | — | 2.30 | 5.40 | — | — | 3.10 | 7.70 | 10.00 | 0.55 | 2.05 | 2.90 | 2.44 | 9.09 | 12.87 | 3.76 | A | 3.80 | A |
| | 2.0 | 5.0 | — | — | 2.30 | 6.00 | — | — | 3.10 | 8.30 | 10.00 | 0.55 | 2.22 | 2.90 | 2.44 | 9.85 | 12.87 | 3.74 | A | 3.80 | A |
| | 2.0 | 7.1 | — | — | 2.13 | 6.47 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.30 | 2.90 | 2.44 | 10.20 | 12.87 | 3.74 | A | 3.85 | A |
| | 2.5 | 2.5 | — | — | 3.60 | 3.60 | — | — | 3.10 | 7.20 | 10.00 | 0.55 | 1.94 | 2.90 | 2.44 | 8.61 | 12.87 | 3.71 | A | 3.85 | A |
| | 2.5 | 3.5 | — | — | 3.60 | 4.50 | — | — | 3.10 | 8.10 | 10.00 | 0.55 | 2.12 | 2.90 | 2.44 | 9.41 | 12.87 | 3.82 | A | 3.83 | A |
| | 2.5 | 4.2 | — | — | 3.44 | 5.16 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 2.90 | 2.44 | 9.98 | 12.87 | 3.82 | A | 3.87 | A |
| | 2.5 | 5.0 | — | — | 3.23 | 5.38 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.22 | 2.90 | 2.44 | 9.85 | 12.87 | 3.87 | A | 3.85 | A |
| | 2.5 | 7.1 | — | — | 2.92 | 5.68 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.22 | 2.90 | 2.44 | 9.85 | 12.87 | 3.87 | A | 3.84 | A |
| | 3.5 | 3.5 | — | — | 4.30 | 4.30 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.22 | 2.90 | 2.44 | 9.85 | 12.87 | 3.87 | A | 3.86 | A |
| | 3.5 | 4.2 | — | — | 3.91 | 4.69 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.22 | 3.00 | 2.44 | 9.85 | 13.31 | 3.87 | A | 3.82 | A |
| | 3.5 | 5.0 | — | — | 3.51 | 4.69 | — | — | 3.10 | 8.20 | 10.00 | 0.55 | 2.10 | 3.00 | 2.44 | 9.32 | 13.31 | 3.90 | A | 3.80 | A |
| | 3.5 | 7.1 | — | — | 3.37 | 5.23 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.20 | 3.00 | 2.44 | 9.76 | 13.31 | 3.91 | A | 3.84 | A |
| | 4.2 | 4.2 | — | — | 4.30 | 4.30 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.20 | 3.10 | 2.44 | 9.76 | 13.75 | 3.91 | A | 3.86 | A |
| | 4.2 | 5.0 | — | — | 4.07 | 4.53 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.83 | A |
| | 4.2 | 7.1 | — | — | 3.75 | 4.85 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.86 | A |
| | 5.0 | 5.0 | — | — | 4.30 | 4.30 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.86 | A |
| | 5.0 | 7.1 | — | — | 3.97 | 4.63 | — | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.87 | A |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | 2.30 | 2.30 | 2.30 | — | 3.10 | 6.90 | 9.50 | 0.55 | 1.85 | 3.10 | 2.44 | 8.21 | 13.75 | 3.73 | A | 3.80 | A |
| | 2.0 | 2.0 | 2.5 | — | 2.30 | 2.30 | 3.60 | — | 3.10 | 8.20 | 10.00 | 0.55 | 2.16 | 3.10 | 2.44 | 9.58 | 13.75 | 3.80 | A | 3.80 | A |
| | 2.0 | 2.0 | 3.5 | — | 2.17 | 2.17 | 4.25 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.26 | 3.10 | 2.44 | 10.03 | 13.75 | 3.81 | A | 3.80 | A |
| | 2.0 | 2.0 | 4.2 | — | 1.98 | 1.98 | 4.64 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.80 | A |
| | 2.0 | 2.0 | 5.0 | — | 1.87 | 1.87 | 4.87 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.80 | A |
| | 2.0 | 2.0 | 7.1 | — | 1.71 | 1.71 | 5.19 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.80 | A |
| | 2.0 | 2.5 | 2.5 | — | 2.08 | 3.26 | 3.26 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.80 | A |
| | 2.0 | 2.5 | 3.5 | — | 1.90 | 2.98 | 3.72 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.80 | A |

Haier

| Comb. | Combinations | | | | Rated capacity Output/kW (Nom. heating) | | | | Total heating capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| TRI (1x3) | 2.0 | 2.5 | 4.2 | — | 1.75 | 2.74 | 4.11 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.80 | A |
| | 2.0 | 2.5 | 5.0 | — | 1.66 | 2.60 | 4.34 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.82 | A |
| | 2.0 | 2.5 | 7.1 | — | 1.53 | 2.40 | 4.67 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.82 | A |
| | 2.0 | 3.5 | 3.5 | — | 1.75 | 3.42 | 3.42 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.82 | A |
| | 2.0 | 3.5 | 4.2 | — | 1.62 | 3.17 | 3.81 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.82 | A |
| | 2.0 | 3.5 | 5.0 | — | 1.55 | 3.02 | 4.03 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.82 | A |
| | 2.0 | 3.5 | 7.1 | — | 1.43 | 2.80 | 4.36 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.82 | A |
| | 2.0 | 4.2 | 4.2 | — | 1.51 | 3.55 | 3.55 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.82 | A |
| | 2.0 | 4.2 | 5.0 | — | 1.44 | 3.39 | 3.77 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.82 | A |
| | 2.0 | 4.2 | 7.1 | — | 1.35 | 3.16 | 4.10 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.87 | A |
| | 2.5 | 2.5 | 2.5 | — | 2.87 | 2.87 | 2.87 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.87 | A |
| | 2.5 | 2.5 | 3.5 | — | 2.65 | 2.65 | 3.31 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.87 | A |
| | 2.5 | 2.5 | 4.2 | — | 2.46 | 2.46 | 3.69 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.87 | A |
| | 2.5 | 2.5 | 5.0 | — | 2.35 | 2.35 | 3.91 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.87 | A |
| | 2.5 | 2.5 | 7.1 | — | 2.18 | 2.18 | 4.24 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.23 | 3.10 | 2.44 | 9.89 | 13.75 | 3.86 | A | 3.90 | A |
| | 2.5 | 3.5 | 3.5 | — | 2.46 | 3.07 | 3.07 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.5 | 3.5 | 4.2 | — | 2.29 | 2.87 | 3.44 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.5 | 3.5 | 5.0 | — | 2.20 | 2.74 | 3.66 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.5 | 3.5 | 7.1 | — | 2.05 | 2.56 | 3.99 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.18 | 3.10 | 2.44 | 9.67 | 13.75 | 3.94 | A | 3.85 | A |
| | 2.5 | 4.2 | 4.2 | — | 2.15 | 3.23 | 3.23 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.18 | 3.10 | 2.44 | 9.67 | 13.75 | 3.94 | A | 3.85 | A |
| | 2.5 | 4.2 | 5.0 | — | 2.06 | 3.10 | 3.44 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.18 | 3.10 | 2.44 | 9.67 | 13.75 | 3.94 | A | 3.85 | A |
| | 3.5 | 3.5 | 3.5 | — | 2.87 | 2.87 | 2.87 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.18 | 3.10 | 2.44 | 9.67 | 13.75 | 3.94 | A | 3.90 | A |
| | 3.5 | 3.5 | 4.2 | — | 2.69 | 2.69 | 3.23 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.18 | 3.10 | 2.44 | 9.67 | 13.75 | 3.94 | A | 3.90 | A |
| | 3.5 | 3.5 | 5.0 | — | 2.58 | 2.58 | 3.44 | — | 3.10 | 8.60 | 10.00 | 0.55 | 2.18 | 3.10 | 2.44 | 9.67 | 13.75 | 3.94 | A | 3.90 | A |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 2.0 | 2.15 | 2.15 | 2.15 | 2.15 | 3.10 | 8.60 | 10.00 | 0.55 | 2.25 | 3.10 | 2.44 | 9.98 | 13.75 | 3.82 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 2.5 | 1.88 | 1.88 | 1.88 | 2.95 | 3.10 | 8.60 | 10.00 | 0.55 | 2.22 | 3.10 | 2.44 | 9.85 | 13.75 | 3.87 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 3.5 | 1.74 | 1.74 | 1.74 | 3.39 | 3.10 | 8.60 | 10.00 | 0.55 | 2.22 | 3.10 | 2.44 | 9.85 | 13.75 | 3.87 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 4.2 | 1.61 | 1.61 | 1.61 | 3.78 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 5.0 | 1.53 | 1.53 | 1.53 | 4.00 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 7.1 | 1.42 | 1.42 | 1.42 | 4.33 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 2.5 | 1.68 | 1.68 | 2.62 | 2.62 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 3.5 | 1.56 | 1.56 | 2.44 | 3.05 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 4.2 | 1.45 | 1.45 | 2.28 | 3.41 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 5.0 | 1.39 | 1.39 | 2.18 | 3.63 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.90 | A |

| Comb. | Combinations | | | | Rated capacity Output/ kW (Nom. heating) | | | | Total heating capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.5 | 7.1 | 1.30 | 1.30 | 2.04 | 3.96 | 3.10 | 8.60 | 10.00 | 0.55 | 2.19 | 3.10 | 2.44 | 9.72 | 13.75 | 3.93 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 3.5 | 1.45 | 1.45 | 2.85 | 2.85 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 4.2 | 1.36 | 1.36 | 2.67 | 3.20 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 5.0 | 1.31 | 1.31 | 2.56 | 3.42 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 4.2 | 1.28 | 1.28 | 3.02 | 3.02 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 5.0 | 1.24 | 1.24 | 2.90 | 3.23 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 2.5 | 1.51 | 2.36 | 2.36 | 2.36 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 3.5 | 1.41 | 2.21 | 2.21 | 2.76 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 4.2 | 1.33 | 2.08 | 2.08 | 3.12 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 5.0 | 1.28 | 2.00 | 2.00 | 3.33 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 3.5 | 1.33 | 2.08 | 2.60 | 2.60 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 4.2 | 1.25 | 1.96 | 2.45 | 2.94 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 5.0 | 1.21 | 1.89 | 2.36 | 3.15 | 3.10 | 8.60 | 10.00 | 0.55 | 2.17 | 3.10 | 2.44 | 9.63 | 13.75 | 3.96 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 4.2 | 1.18 | 1.85 | 2.78 | 2.78 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 5.0 | 1.14 | 1.79 | 2.68 | 2.98 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 3.5 | 1.25 | 2.45 | 2.45 | 2.45 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 4.2 | 1.18 | 2.32 | 2.32 | 2.78 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.15 | 2.15 | 2.15 | 2.15 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 2.02 | 2.02 | 2.02 | 2.53 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 4.2 | 1.91 | 1.91 | 1.91 | 2.87 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 1.91 | 1.91 | 2.39 | 2.39 | 3.10 | 8.60 | 10.00 | 0.55 | 2.15 | 3.10 | 2.44 | 9.54 | 13.75 | 4.00 | A | 4.00 | A+ |

**4U85S2SR5FA combination and the data**
COOLING 8.5

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| 1x1 | 2.0 | — | — | — | 2.00 | — | — | — | 0.80 | 2.00 | 2.80 | 0.55 | 0.66 | 1.30 | 2.44 | 2.93 | 5.77 | — | — | — | — |
| | 2.5 | — | — | — | 2.60 | — | — | — | 0.80 | 2.60 | 3.90 | 0.55 | 0.86 | 1.34 | 2.44 | 3.82 | 5.93 | — | — | — | — |
| | 3.5 | — | — | — | 3.60 | — | — | — | 1.00 | 3.60 | 5.30 | 0.55 | 1.20 | 1.50 | 2.44 | 5.32 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | 4.40 | — | — | — | 1.30 | 4.40 | 5.00 | 0.55 | 1.40 | 1.90 | 2.44 | 6.21 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | 5.20 | — | — | — | 1.40 | 5.20 | 7.00 | 0.55 | 1.65 | 1.90 | 2.44 | 7.32 | 8.43 | — | — | — | — |
| | 7.1 | — | — | — | 6.50 | — | — | — | 1.50 | 6.50 | 7.40 | 0.55 | 2.00 | 3.00 | 2.44 | 8.87 | 13.31 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | 2.00 | 2.00 | — | — | 2.50 | 4.00 | 5.60 | 0.55 | 1.30 | 3.20 | 2.44 | 5.77 | 14.20 | 3.08 | B | 6.20 | A++ |
| | 2.0 | 2.5 | — | — | 2.00 | 2.60 | — | — | 2.50 | 4.60 | 6.70 | 0.55 | 1.50 | 3.20 | 2.44 | 6.65 | 14.20 | 3.07 | B | 6.20 | A++ |
| | 2.0 | 3.5 | — | — | 2.00 | 3.60 | — | — | 2.50 | 5.60 | 8.10 | 0.55 | 1.80 | 3.20 | 2.44 | 7.99 | 14.20 | 3.11 | B | 6.20 | A++ |
| | 2.0 | 4.2 | — | — | 2.00 | 4.40 | — | — | 2.50 | 6.40 | 7.80 | 0.55 | 2.05 | 3.20 | 2.44 | 9.09 | 14.20 | 3.12 | B | 6.20 | A++ |
| | 2.0 | 5.0 | — | — | 2.00 | 5.20 | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.28 | 3.20 | 2.44 | 10.12 | 14.20 | 3.16 | B | 6.20 | A++ |
| | 2.0 | 7.1 | — | — | 2.00 | 6.50 | — | — | 2.50 | 8.50 | 9.30 | 0.55 | 2.65 | 3.30 | 2.44 | 11.76 | 14.64 | 3.21 | A | 6.20 | A++ |
| | 2.5 | 2.5 | — | — | 2.60 | 2.60 | — | — | 2.50 | 5.20 | 7.80 | 0.55 | 1.60 | 3.30 | 2.44 | 7.10 | 14.64 | 3.25 | A | 6.20 | A++ |
| | 2.5 | 3.5 | — | — | 2.60 | 3.60 | — | — | 2.50 | 6.20 | 9.10 | 0.55 | 1.98 | 3.30 | 2.44 | 8.78 | 14.64 | 3.13 | B | 6.20 | A++ |
| | 2.5 | 4.2 | — | — | 2.60 | 4.40 | — | — | 2.50 | 7.00 | 9.30 | 0.55 | 2.20 | 3.30 | 2.44 | 9.76 | 14.64 | 3.18 | B | 6.20 | A++ |
| | 2.5 | 5.0 | — | — | 2.60 | 5.20 | — | — | 2.50 | 7.80 | 9.30 | 0.55 | 2.35 | 3.30 | 2.44 | 10.43 | 14.64 | 3.32 | A | 6.20 | A++ |
| | 2.5 | 7.1 | — | — | 2.43 | 6.07 | — | — | 2.50 | 8.50 | 9.30 | 0.55 | 2.60 | 3.30 | 2.44 | 11.54 | 14.64 | 3.27 | A | 6.20 | A++ |
| | 3.5 | 3.5 | — | — | 3.60 | 3.60 | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.20 | 3.30 | 2.44 | 9.76 | 14.64 | 3.27 | A | 6.20 | A++ |
| | 3.5 | 4.2 | — | — | 3.60 | 4.40 | — | — | 2.50 | 8.00 | 9.30 | 0.55 | 2.42 | 3.30 | 2.44 | 10.74 | 14.64 | 3.31 | A | 6.20 | A++ |
| | 3.5 | 5.0 | — | — | 3.31 | 4.79 | — | — | 2.50 | 8.10 | 9.50 | 0.55 | 2.52 | 3.30 | 2.44 | 11.18 | 14.64 | 3.21 | A | 6.20 | A++ |
| | 3.5 | 7.1 | — | — | 3.03 | 5.47 | — | — | 2.50 | 8.50 | 9.50 | 0.55 | 2.59 | 3.30 | 2.44 | 11.49 | 14.64 | 3.28 | A | 6.20 | A++ |
| | 4.2 | 4.2 | — | — | 4.25 | 4.25 | — | — | 2.50 | 8.50 | 9.50 | 0.55 | 2.59 | 3.30 | 2.44 | 11.49 | 14.64 | 3.28 | A | 6.20 | A++ |
| | 4.2 | 5.0 | — | — | 3.90 | 4.60 | — | — | 2.50 | 8.50 | 9.50 | 0.55 | 2.59 | 3.30 | 2.44 | 11.49 | 14.64 | 3.28 | A | 6.20 | A++ |
| | 4.2 | 7.1 | — | — | 3.43 | 5.07 | — | — | 2.50 | 8.50 | 9.50 | 0.55 | 2.58 | 3.30 | 2.44 | 11.45 | 14.64 | 3.29 | A | 6.20 | A++ |
| | 5.0 | 5.0 | — | — | 4.25 | 4.25 | — | — | 2.50 | 8.50 | 9.50 | 0.55 | 2.56 | 3.30 | 2.44 | 11.36 | 14.64 | 3.32 | A | 6.20 | A++ |
| | 5.0 | 7.1 | — | — | 3.78 | 4.72 | — | — | 2.50 | 8.50 | 9.50 | 0.55 | 2.55 | 3.30 | 2.44 | 11.31 | 14.64 | 3.33 | A | 6.20 | A++ |
| | 7.1 | 7.1 | — | — | 4.25 | 4.25 | — | — | 2.50 | 8.50 | 9.50 | 0.55 | 2.55 | 3.30 | 2.44 | 11.31 | 14.64 | 3.33 | A | 6.20 | A++ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | 2.00 | 2.00 | 2.00 | — | 3.00 | 6.00 | 9.50 | 0.55 | 1.85 | 3.50 | 2.44 | 8.21 | 15.53 | 3.24 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | — | 2.00 | 2.00 | 2.60 | — | 3.00 | 6.60 | 9.50 | 0.55 | 2.00 | 3.50 | 2.44 | 8.87 | 15.53 | 3.30 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | — | 2.00 | 2.00 | 3.60 | — | 3.00 | 7.60 | 9.50 | 0.55 | 2.30 | 3.50 | 2.44 | 10.20 | 15.53 | 3.30 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | — | 2.00 | 2.00 | 4.40 | — | 3.20 | 8.40 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.28 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 5.0 | — | 1.85 | 1.85 | 4.80 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.57 | 3.50 | 2.44 | 11.40 | 15.53 | 3.31 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 7.1 | — | 1.62 | 1.62 | 5.26 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.57 | 3.50 | 2.44 | 11.40 | 15.53 | 3.31 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 2.5 | — | 2.00 | 2.60 | 2.60 | — | 3.20 | 7.20 | 9.50 | 0.55 | 2.20 | 3.50 | 2.44 | 9.76 | 15.53 | 3.27 | A | 6.70 | A++ |

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| TRI (1x3) | 2.0 | 2.5 | 3.5 | — | 2.00 | 2.60 | 3.60 | — | 3.20 | 8.20 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.28 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 4.2 | — | 1.89 | 2.46 | 4.16 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 5.0 | — | 1.73 | 2.26 | 4.51 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 2.5 | 7.1 | — | 1.53 | 1.99 | 4.98 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 3.5 | — | 1.85 | 3.33 | 3.33 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 4.2 | — | 1.70 | 3.06 | 3.74 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 5.0 | — | 1.57 | 2.83 | 4.09 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 3.5 | 7.1 | — | 1.40 | 2.53 | 4.57 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 4.2 | 4.2 | — | 1.57 | 3.46 | 3.46 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 4.2 | 5.0 | — | 1.47 | 3.22 | 3.81 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.0 | 4.2 | 7.1 | — | 1.32 | 2.90 | 4.28 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.56 | 3.50 | 2.44 | 11.36 | 15.53 | 3.32 | A | 6.70 | A++ |
| | 2.5 | 2.5 | 2.5 | — | 2.60 | 2.60 | 2.60 | — | 3.20 | 7.80 | 9.50 | 0.55 | 2.35 | 3.50 | 2.44 | 10.43 | 15.53 | 3.32 | A | 6.72 | A++ |
| | 2.5 | 2.5 | 3.5 | — | 2.51 | 2.51 | 3.48 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.72 | A++ |
| | 2.5 | 2.5 | 4.2 | — | 2.30 | 2.30 | 3.90 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.74 | A++ |
| | 2.5 | 2.5 | 5.0 | — | 2.13 | 2.13 | 4.25 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.74 | A++ |
| | 2.5 | 2.5 | 7.1 | — | 1.89 | 1.89 | 4.72 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.70 | A++ |
| | 2.5 | 3.5 | 3.5 | — | 2.26 | 3.12 | 3.12 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.73 | A++ |
| | 2.5 | 3.5 | 4.2 | — | 2.08 | 2.89 | 3.53 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.70 | A++ |
| | 2.5 | 3.5 | 5.0 | — | 1.94 | 2.68 | 3.88 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.70 | A++ |
| | 2.5 | 3.5 | 7.1 | — | 1.74 | 2.41 | 4.35 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.70 | A++ |
| | 2.5 | 4.2 | 4.2 | — | 1.94 | 3.28 | 3.28 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.70 | A++ |
| | 2.5 | 4.2 | 5.0 | — | 1.81 | 3.07 | 3.62 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.70 | A++ |
| | 3.5 | 3.5 | 3.5 | — | 2.83 | 2.83 | 2.83 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.75 | A++ |
| | 3.5 | 3.5 | 4.2 | — | 2.64 | 2.64 | 3.22 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.70 | A++ |
| | 3.5 | 3.5 | 5.0 | — | 2.47 | 2.47 | 3.56 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.70 | A++ |
| | 3.5 | 3.5 | 7.1 | — | 2.23 | 2.23 | 4.03 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.70 | A++ |
| | 3.5 | 4.2 | 4.2 | — | 2.47 | 3.02 | 3.02 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.75 | A++ |
| | 3.5 | 4.2 | 5.0 | — | 2.32 | 2.83 | 3.35 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.75 | A++ |
| | 3.5 | 5.0 | 5.0 | — | 2.19 | 3.16 | 3.16 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.75 | A++ |
| | 4.2 | 4.2 | 4.2 | — | 2.83 | 2.83 | 2.83 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.75 | A++ |
| | 4.2 | 4.2 | 5.0 | — | 2.67 | 2.67 | 3.16 | — | 3.20 | 8.50 | 9.50 | 0.55 | 2.53 | 3.50 | 2.44 | 11.22 | 15.53 | 3.36 | A | 6.75 | A++ |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 2.0 | 2.00 | 2.00 | 2.00 | 2.00 | 3.20 | 8.00 | 9.50 | 0.55 | 2.43 | 3.50 | 2.44 | 10.78 | 15.53 | 3.29 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 1.98 | 1.98 | 1.98 | 2.57 | 3.20 | 8.50 | 9.50 | 0.55 | 2.55 | 3.50 | 2.44 | 11.31 | 15.53 | 3.33 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 1.77 | 1.77 | 1.77 | 3.19 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |

Haier

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 4.2 | 1.63 | 1.63 | 1.63 | 3.60 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 5.0 | 1.52 | 1.52 | 1.52 | 3.95 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 7.1 | 1.36 | 1.36 | 1.36 | 4.42 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 1.85 | 1.85 | 2.40 | 2.40 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 1.67 | 1.67 | 2.17 | 3.00 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 1.55 | 1.55 | 2.01 | 3.40 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 5.0 | 1.44 | 1.44 | 1.87 | 3.75 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 7.1 | 1.30 | 1.30 | 1.69 | 4.22 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 1.52 | 1.52 | 2.73 | 2.73 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.80 | A++ |
| | 2.0 | 2.0 | 3.5 | 4.2 | 1.42 | 1.42 | 2.55 | 3.12 | 3.20 | 8.50 | 9.50 | 0.55 | 2.54 | 3.50 | 2.44 | 11.27 | 15.53 | 3.35 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 5.0 | 1.33 | 1.33 | 2.39 | 3.45 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | 4.2 | 1.33 | 1.33 | 2.92 | 2.92 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 4.2 | 5.0 | 1.25 | 1.25 | 2.75 | 3.25 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 1.73 | 2.26 | 2.26 | 2.26 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 1.57 | 2.05 | 2.05 | 2.83 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 4.2 | 1.47 | 1.91 | 1.91 | 3.22 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 5.0 | 1.37 | 1.78 | 1.78 | 3.56 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 1.44 | 1.87 | 2.59 | 2.59 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 3.5 | 4.2 | 1.35 | 1.75 | 2.43 | 2.97 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 3.5 | 5.0 | 1.27 | 1.65 | 2.28 | 3.30 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 4.2 | 4.2 | 1.27 | 1.65 | 2.79 | 2.79 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 4.2 | 5.0 | 1.20 | 1.56 | 2.63 | 3.11 | 3.20 | 8.50 | 9.50 | 0.55 | 2.52 | 3.50 | 2.44 | 11.18 | 15.53 | 3.37 | A | 7.00 | A++ |
| | 2.0 | 3.5 | 3.5 | 3.5 | 1.33 | 2.39 | 2.39 | 2.39 | 3.20 | 8.50 | 9.50 | 0.55 | 2.51 | 3.50 | 2.44 | 11.14 | 15.53 | 3.39 | A | 7.00 | A++ |
| | 2.0 | 3.5 | 3.5 | 4.2 | 1.25 | 2.25 | 2.25 | 2.75 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.13 | 2.13 | 2.13 | 2.13 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 1.94 | 1.94 | 1.94 | 2.68 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 4.2 | 1.81 | 1.81 | 1.81 | 3.07 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 5.0 | 1.70 | 1.70 | 1.70 | 3.40 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 1.78 | 1.78 | 2.47 | 2.47 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 3.5 | 4.2 | 1.67 | 1.67 | 2.32 | 2.83 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 3.5 | 5.0 | 1.58 | 1.58 | 2.19 | 3.16 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 4.2 | 4.2 | 1.58 | 1.58 | 2.67 | 2.67 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 1.65 | 2.28 | 2.28 | 2.28 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 2.5 | 3.5 | 3.5 | 4.2 | 1.56 | 2.15 | 2.15 | 2.63 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |
| | 3.5 | 3.5 | 3.5 | 3.5 | 2.13 | 2.13 | 2.13 | 2.13 | 3.20 | 8.50 | 9.50 | 0.55 | 2.50 | 3.50 | 2.44 | 11.09 | 15.53 | 3.40 | A | 7.00 | A++ |

HEATING 9.6

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| 1x1 | 2.0 | — | — | — | 2.30 | — | — | — | 0.80 | 2.30 | 4.00 | 0.55 | 0.63 | 1.50 | 2.44 | 2.80 | 6.65 | — | — | — | — |
| | 2.5 | — | — | — | 3.60 | — | — | — | 0.80 | 3.60 | 6.00 | 0.55 | 0.98 | 1.40 | 2.44 | 4.35 | 6.21 | — | — | — | — |
| | 3.5 | — | — | — | 4.50 | — | — | — | 1.00 | 4.50 | 6.00 | 0.55 | 1.21 | 1.50 | 2.44 | 5.37 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | 5.40 | — | — | — | 1.50 | 5.40 | 6.00 | 0.55 | 1.44 | 1.90 | 2.44 | 6.39 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | 6.00 | — | — | — | 1.50 | 6.00 | 8.00 | 0.55 | 1.59 | 2.60 | 2.44 | 7.05 | 11.54 | — | — | — | — |
| | 7.1 | — | — | — | 7.00 | — | — | — | 1.50 | 7.00 | 8.60 | 0.55 | 1.83 | 2.60 | 2.44 | 8.12 | 11.54 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | 2.30 | 2.30 | — | — | 2.80 | 4.60 | 8.00 | 0.55 | 1.25 | 3.30 | 2.44 | 5.55 | 14.64 | 3.68 | A | 3.75 | A |
| | 2.0 | 2.5 | — | — | 2.30 | 3.60 | — | — | 3.00 | 5.90 | 10.00 | 0.55 | 1.59 | 3.30 | 2.44 | 7.05 | 14.64 | 3.71 | A | 3.75 | A |
| | 2.0 | 3.5 | — | — | 2.30 | 4.50 | — | — | 3.20 | 6.80 | 10.00 | 0.55 | 1.83 | 3.30 | 2.44 | 8.12 | 14.64 | 3.72 | A | 3.75 | A |
| | 2.0 | 4.2 | — | — | 2.30 | 5.40 | — | — | 3.40 | 7.70 | 10.00 | 0.55 | 2.05 | 3.30 | 2.44 | 9.09 | 14.64 | 3.76 | A | 3.80 | A |
| | 2.0 | 5.0 | — | — | 2.30 | 6.00 | — | — | 3.80 | 8.30 | 10.50 | 0.55 | 2.22 | 3.30 | 2.44 | 9.85 | 14.64 | 3.74 | A | 3.80 | A |
| | 2.0 | 7.1 | — | — | 2.30 | 7.00 | — | — | 4.00 | 9.30 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.72 | A | 3.85 | A |
| | 2.5 | 2.5 | — | — | 3.60 | 3.60 | — | — | 3.40 | 7.20 | 10.50 | 0.55 | 1.94 | 3.30 | 2.44 | 8.61 | 14.64 | 3.71 | A | 3.85 | A |
| | 2.5 | 3.5 | — | — | 3.60 | 4.50 | — | — | 3.80 | 8.10 | 10.50 | 0.55 | 2.10 | 3.30 | 2.44 | 9.32 | 14.64 | 3.86 | A | 3.83 | A |
| | 2.5 | 4.2 | — | — | 3.60 | 5.40 | — | — | 4.00 | 9.00 | 10.50 | 0.55 | 2.30 | 3.30 | 2.44 | 10.20 | 14.64 | 3.91 | A | 3.87 | A |
| | 2.5 | 5.0 | — | — | 3.60 | 6.00 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.84 | A | 3.85 | A |
| | 2.5 | 7.1 | — | — | 3.26 | 6.34 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.55 | 3.30 | 2.44 | 11.31 | 14.64 | 3.76 | A | 3.84 | A |
| | 3.5 | 3.5 | — | — | 4.50 | 4.50 | — | — | 4.00 | 9.00 | 10.50 | 0.55 | 2.35 | 3.30 | 2.44 | 10.43 | 14.64 | 3.83 | A | 3.86 | A |
| | 3.5 | 4.2 | — | — | 4.36 | 5.24 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.84 | A | 3.82 | A |
| | 3.5 | 5.0 | — | — | 3.86 | 5.14 | — | — | 4.40 | 9.00 | 10.50 | 0.55 | 2.37 | 3.30 | 2.44 | 10.51 | 14.64 | 3.80 | A | 3.80 | A |
| | 3.5 | 7.1 | — | — | 3.76 | 5.84 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.84 | A | 3.84 | A |
| | 4.2 | 4.2 | — | — | 4.80 | 4.80 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.49 | 3.30 | 2.44 | 11.05 | 14.64 | 3.86 | A | 3.86 | A |
| | 4.2 | 5.0 | — | — | 4.55 | 5.05 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.49 | 3.30 | 2.44 | 11.05 | 14.64 | 3.86 | A | 3.83 | A |
| | 4.2 | 7.1 | — | — | 4.18 | 5.42 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.48 | 3.30 | 2.44 | 11.00 | 14.64 | 3.87 | A | 3.86 | A |
| | 5.0 | 5.0 | — | — | 4.80 | 4.80 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.46 | 3.30 | 2.44 | 10.91 | 14.64 | 3.90 | A | 3.86 | A |
| | 5.0 | 7.1 | — | — | 4.43 | 5.17 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.48 | 3.30 | 2.44 | 11.00 | 14.64 | 3.87 | A | 3.87 | A |
| | 7.1 | 7.1 | — | — | 4.80 | 4.80 | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.84 | A | 3.85 | A |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | 2.30 | 2.30 | 2.30 | — | 3.80 | 6.90 | 10.50 | 0.55 | 1.85 | 3.40 | 2.44 | 8.21 | 15.08 | 3.73 | A | 3.80 | A |
| | 2.0 | 2.0 | 2.5 | — | 2.30 | 2.30 | 3.60 | — | 4.00 | 8.20 | 10.50 | 0.55 | 2.16 | 3.40 | 2.44 | 9.58 | 15.08 | 3.80 | A | 3.80 | A |
| | 2.0 | 2.0 | 3.5 | — | 2.30 | 2.30 | 4.50 | — | 4.20 | 9.10 | 10.50 | 0.55 | 2.39 | 3.40 | 2.44 | 10.60 | 15.08 | 3.81 | A | 3.80 | A |
| | 2.0 | 2.0 | 4.2 | — | 2.21 | 2.21 | 5.18 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.48 | 3.40 | 2.44 | 11.00 | 15.08 | 3.87 | A | 3.80 | A |
| | 2.0 | 2.0 | 5.0 | — | 2.08 | 2.08 | 5.43 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.48 | 3.40 | 2.44 | 11.00 | 15.08 | 3.87 | A | 3.80 | A |
| | 2.0 | 2.0 | 7.1 | — | 1.90 | 1.90 | 5.79 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.50 | 3.40 | 2.44 | 11.09 | 15.08 | 3.84 | A | 3.80 | A |
| | 2.0 | 2.5 | 2.5 | — | 2.32 | 3.64 | 3.64 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.54 | 3.40 | 2.44 | 11.27 | 15.08 | 3.78 | A | 3.80 | A |

Haier

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| TRI (1x3) | 2.0 | 2.5 | 3.5 | — | 2.12 | 3.32 | 4.15 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.48 | 3.40 | 2.44 | 11.00 | 15.08 | 3.87 | A | 3.80 | A |
| | 2.0 | 2.5 | 4.2 | — | 1.95 | 3.06 | 4.59 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.48 | 3.40 | 2.44 | 11.00 | 15.08 | 3.87 | A | 3.80 | A |
| | 2.0 | 2.5 | 5.0 | — | 1.86 | 2.90 | 4.84 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.47 | 3.40 | 2.44 | 10.96 | 15.08 | 3.89 | A | 3.82 | A |
| | 2.0 | 2.5 | 7.1 | — | 1.71 | 2.68 | 5.21 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.50 | 3.40 | 2.44 | 11.09 | 15.08 | 3.84 | A | 3.82 | A |
| | 2.0 | 3.5 | 3.5 | — | 1.95 | 3.82 | 3.82 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.52 | 3.40 | 2.44 | 11.18 | 15.08 | 3.81 | A | 3.82 | A |
| | 2.0 | 3.5 | 4.2 | — | 1.81 | 3.54 | 4.25 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.46 | 3.40 | 2.44 | 10.91 | 15.08 | 3.90 | A | 3.82 | A |
| | 2.0 | 3.5 | 5.0 | — | 1.73 | 3.38 | 4.50 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.46 | 3.40 | 2.44 | 10.91 | 15.08 | 3.90 | A | 3.82 | A |
| | 2.0 | 3.5 | 7.1 | — | 1.60 | 3.13 | 4.87 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.46 | 3.40 | 2.44 | 10.91 | 15.08 | 3.90 | A | 3.82 | A |
| | 2.0 | 4.2 | 4.2 | — | 1.69 | 3.96 | 3.96 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.46 | 3.40 | 2.44 | 10.91 | 15.08 | 3.90 | A | 3.82 | A |
| | 2.0 | 4.2 | 5.0 | — | 1.61 | 3.78 | 4.20 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.46 | 3.40 | 2.44 | 10.91 | 15.08 | 3.90 | A | 3.82 | A |
| | 2.0 | 4.2 | 7.1 | — | 1.50 | 3.53 | 4.57 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.46 | 3.40 | 2.44 | 10.91 | 15.08 | 3.90 | A | 3.87 | A |
| | 2.5 | 2.5 | 2.5 | — | 3.20 | 3.20 | 3.20 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.87 | A |
| | 2.5 | 2.5 | 3.5 | — | 2.95 | 2.95 | 3.69 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.87 | A |
| | 2.5 | 2.5 | 4.2 | — | 2.74 | 2.74 | 4.11 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.87 | A |
| | 2.5 | 2.5 | 5.0 | — | 2.62 | 2.62 | 4.36 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.87 | A |
| | 2.5 | 2.5 | 7.1 | — | 2.43 | 2.43 | 4.73 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.90 | A |
| | 2.5 | 3.5 | 3.5 | — | 2.74 | 3.43 | 3.43 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.85 | A |
| | 2.5 | 3.5 | 4.2 | — | 2.56 | 3.20 | 3.84 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.85 | A |
| | 2.5 | 3.5 | 5.0 | — | 2.45 | 3.06 | 4.09 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.85 | A |
| | 2.5 | 3.5 | 7.1 | — | 2.29 | 2.86 | 4.45 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.85 | A |
| | 2.5 | 4.2 | 4.2 | — | 2.40 | 3.60 | 3.60 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.85 | A |
| | 2.5 | 4.2 | 5.0 | — | 2.30 | 3.46 | 3.84 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.85 | A |
| | 3.5 | 3.5 | 3.5 | — | 3.20 | 3.20 | 3.20 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.90 | A |
| | 3.5 | 3.5 | 4.2 | — | 3.00 | 3.00 | 3.60 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.45 | 3.40 | 2.44 | 10.87 | 15.08 | 3.92 | A | 3.90 | A |
| | 3.5 | 3.5 | 5.0 | — | 2.88 | 2.88 | 3.84 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 3.5 | 3.5 | 7.1 | — | 2.70 | 2.70 | 4.20 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.85 | A |
| | 3.5 | 4.2 | 4.2 | — | 2.82 | 3.39 | 3.39 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 3.5 | 4.2 | 5.0 | — | 2.72 | 3.26 | 3.62 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 3.5 | 5.0 | 5.0 | — | 2.62 | 3.49 | 3.49 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 4.2 | 4.2 | 4.2 | — | 3.20 | 3.20 | 3.20 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 4.2 | 4.2 | 5.0 | — | 3.09 | 3.09 | 3.43 | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 2.0 | 2.30 | 2.30 | 2.30 | 2.30 | 4.20 | 9.20 | 10.50 | 0.55 | 2.42 | 3.40 | 2.44 | 10.74 | 15.08 | 3.80 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 2.5 | 2.10 | 2.10 | 2.10 | 3.29 | 4.20 | 9.60 | 10.50 | 0.55 | 2.44 | 3.40 | 2.44 | 10.83 | 15.08 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 3.5 | 1.94 | 1.94 | 1.94 | 3.79 | 4.40 | 9.60 | 10.50 | 0.55 | 2.44 | 3.40 | 2.44 | 10.83 | 15.08 | 3.93 | A | 3.85 | A |

| Comb. | Combinations | | | | Rated capacity (kW) (Nom. cooling) | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit A | Unit B | Unit C | Unit D | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 4.2 | 1.80 | 1.80 | 1.80 | 4.21 | 4.40 | 9.60 | 10.50 | 0.55 | 2.44 | 3.40 | 2.44 | 10.83 | 15.08 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 5.0 | 1.71 | 1.71 | 1.71 | 4.47 | 4.40 | 9.60 | 10.50 | 0.55 | 2.44 | 3.40 | 2.44 | 10.83 | 15.08 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 7.1 | 1.59 | 1.59 | 1.59 | 4.83 | 4.40 | 9.60 | 10.50 | 0.55 | 2.44 | 3.40 | 2.44 | 10.83 | 15.08 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 2.5 | 1.87 | 1.87 | 2.93 | 2.93 | 4.40 | 9.60 | 10.50 | 0.55 | 2.44 | 3.40 | 2.44 | 10.83 | 15.08 | 3.93 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 3.5 | 1.74 | 1.74 | 2.72 | 3.40 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 4.2 | 1.62 | 1.62 | 2.54 | 3.81 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 5.0 | 1.55 | 1.55 | 2.43 | 4.06 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 7.1 | 1.45 | 1.45 | 2.27 | 4.42 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 3.5 | 1.62 | 1.62 | 3.18 | 3.18 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 4.2 | 1.52 | 1.52 | 2.98 | 3.58 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 5.0 | 1.46 | 1.46 | 2.86 | 3.81 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 4.2 | 1.43 | 1.43 | 3.37 | 3.37 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 5.0 | 1.38 | 1.38 | 3.24 | 3.60 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 2.5 | 1.69 | 2.64 | 2.64 | 2.64 | 4.40 | 9.60 | 10.50 | 0.55 | 2.43 | 3.40 | 2.44 | 10.78 | 15.08 | 3.95 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 3.5 | 1.58 | 2.47 | 2.47 | 3.09 | 4.40 | 9.60 | 10.50 | 0.55 | 2.42 | 3.40 | 2.44 | 10.74 | 15.08 | 3.97 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 4.2 | 1.48 | 2.32 | 2.32 | 3.48 | 4.40 | 9.60 | 10.50 | 0.55 | 2.42 | 3.40 | 2.44 | 10.74 | 15.08 | 3.97 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 5.0 | 1.42 | 2.23 | 2.23 | 3.72 | 4.40 | 9.60 | 10.50 | 0.55 | 2.42 | 3.40 | 2.44 | 10.74 | 15.08 | 3.97 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 3.5 | 1.48 | 2.32 | 2.90 | 2.90 | 4.40 | 9.60 | 10.50 | 0.55 | 2.42 | 3.40 | 2.44 | 10.74 | 15.08 | 3.97 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 4.2 | 1.40 | 2.19 | 2.73 | 3.28 | 4.40 | 9.60 | 10.50 | 0.55 | 2.42 | 3.40 | 2.44 | 10.74 | 15.08 | 3.97 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 5.0 | 1.35 | 2.11 | 2.63 | 3.51 | 4.40 | 9.60 | 10.50 | 0.55 | 2.42 | 3.40 | 2.44 | 10.74 | 15.08 | 3.97 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 4.2 | 1.32 | 2.07 | 3.10 | 3.10 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 5.0 | 1.28 | 2.00 | 3.00 | 3.33 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 3.5 | 1.40 | 2.73 | 2.73 | 2.73 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 4.2 | 1.32 | 2.59 | 2.59 | 3.10 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.40 | 2.40 | 2.40 | 2.40 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 2.26 | 2.26 | 2.26 | 2.82 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 4.2 | 2.13 | 2.13 | 2.13 | 3.20 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 5.0 | 2.06 | 2.06 | 2.06 | 3.43 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 2.13 | 2.13 | 2.67 | 2.67 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 4.2 | 2.02 | 2.02 | 2.53 | 3.03 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 5.0 | 1.95 | 1.95 | 2.44 | 3.25 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 4.2 | 4.2 | 1.68 | 1.68 | 3.12 | 3.12 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 2.02 | 2.53 | 2.53 | 2.53 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 2.5 | 3.5 | 3.5 | 4.2 | 1.92 | 2.40 | 2.40 | 2.88 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |
| | 3.5 | 3.5 | 3.5 | 3.5 | 2.40 | 2.40 | 2.40 | 2.40 | 4.40 | 9.60 | 10.50 | 0.55 | 2.40 | 3.40 | 2.44 | 10.65 | 15.08 | 4.00 | A | 4.00 | A+ |

Haier

**5U90S2SS5FA combination and the data**

COOLING 9.0

| Comb. | Combinations | | | | | Rated capacity (kW) (Nom. cooling) | | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENE-RGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| 1x1 | 2.0 | — | — | — | — | 2.00 | — | — | — | — | 0.80 | 2.00 | 2.80 | 0.55 | 0.76 | 1.30 | 2.44 | 3.37 | 5.77 | — | — | — | — |
| | 2.5 | — | — | — | — | 2.60 | — | — | — | — | 0.80 | 2.60 | 3.90 | 0.55 | 0.98 | 1.34 | 2.44 | 4.35 | 5.93 | — | — | — | — |
| | 3.5 | — | — | — | — | 3.60 | — | — | — | — | 1.00 | 3.60 | 5.30 | 0.55 | 1.35 | 1.50 | 2.44 | 5.99 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | — | 4.40 | — | — | — | — | 1.30 | 4.40 | 5.00 | 0.55 | 1.59 | 1.90 | 2.44 | 7.05 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | — | 5.20 | — | — | — | — | 1.40 | 5.20 | 7.00 | 0.55 | 1.86 | 1.90 | 2.44 | 8.25 | 8.43 | — | — | — | — |
| | 7.1 | — | — | — | — | 6.50 | — | — | — | — | 1.50 | 6.50 | 7.40 | 0.55 | 2.25 | 3.00 | 2.44 | 9.98 | 13.31 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | — | 2.00 | 2.00 | — | — | — | 2.50 | 4.00 | 5.60 | 0.55 | 1.50 | 3.60 | 2.44 | 6.65 | 15.97 | — | — | — | — |
| | 2.0 | 2.5 | — | — | — | 2.00 | 2.60 | — | — | — | 2.50 | 4.60 | 6.70 | 0.55 | 1.67 | 3.60 | 2.44 | 7.41 | 15.97 | 2.75 | D | 6.20 | A++ |
| | 2.0 | 3.5 | — | — | — | 2.00 | 3.60 | — | — | — | 2.50 | 5.60 | 8.10 | 0.55 | 2.03 | 3.60 | 2.44 | 9.01 | 15.97 | 2.76 | D | 6.20 | A++ |
| | 2.0 | 4.2 | — | — | — | 2.00 | 4.40 | — | — | — | 2.50 | 6.40 | 7.80 | 0.55 | 2.30 | 3.60 | 2.44 | 10.20 | 15.97 | 2.78 | D | 6.20 | A++ |
| | 2.0 | 5.0 | — | — | — | 2.00 | 5.20 | — | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.58 | 3.60 | 2.44 | 11.45 | 15.97 | 2.79 | D | 6.20 | A++ |
| | 2.0 | 7.1 | — | — | — | 2.00 | 6.50 | — | — | — | 2.50 | 8.50 | 9.30 | 0.55 | 2.95 | 3.60 | 2.44 | 13.09 | 15.97 | 2.88 | C | 6.20 | A++ |
| | 2.5 | 2.5 | — | — | — | 2.60 | 2.60 | — | — | — | 2.50 | 5.20 | 7.80 | 0.55 | 1.89 | 3.60 | 2.44 | 8.39 | 15.97 | 2.75 | D | 6.20 | A++ |
| | 2.5 | 3.5 | — | — | — | 2.60 | 3.60 | — | — | — | 2.50 | 6.20 | 9.10 | 0.55 | 2.23 | 3.60 | 2.44 | 9.89 | 15.97 | 2.78 | D | 6.20 | A++ |
| | 2.5 | 4.2 | — | — | — | 2.60 | 4.40 | — | — | — | 2.50 | 7.00 | 9.30 | 0.55 | 2.51 | 3.60 | 2.44 | 11.14 | 15.97 | 2.79 | D | 6.20 | A++ |
| | 2.5 | 5.0 | — | — | — | 2.60 | 5.20 | — | — | — | 2.50 | 7.80 | 9.30 | 0.55 | 2.79 | 3.60 | 2.44 | 12.38 | 15.97 | 2.80 | D | 6.20 | A++ |
| | 2.5 | 7.1 | — | — | — | 2.57 | 6.43 | — | — | — | 2.50 | 9.00 | 9.30 | 0.55 | 2.99 | 3.60 | 2.44 | 13.27 | 15.97 | 3.01 | B | 6.20 | A++ |
| | 3.5 | 3.5 | — | — | — | 3.60 | 3.60 | — | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.41 | 3.60 | 2.44 | 10.69 | 15.97 | 2.99 | C | 6.20 | A++ |
| | 3.5 | 4.2 | — | — | — | 3.60 | 4.40 | — | — | — | 2.50 | 8.00 | 9.30 | 0.55 | 2.68 | 3.60 | 2.44 | 11.89 | 15.97 | 2.99 | C | 6.20 | A++ |
| | 3.5 | 5.0 | — | — | — | 3.60 | 5.20 | — | — | — | 2.50 | 8.80 | 10.00 | 0.55 | 2.91 | 3.60 | 2.44 | 12.91 | 15.97 | 3.02 | B | 6.20 | A++ |
| | 3.5 | 7.1 | — | — | — | 3.21 | 5.79 | — | — | — | 2.50 | 9.00 | 11.00 | 0.55 | 3.02 | 3.60 | 2.44 | 13.40 | 15.97 | 2.98 | C | 6.20 | A++ |
| | 4.2 | 4.2 | — | — | — | 4.40 | 4.40 | — | — | — | 2.50 | 8.80 | 10.00 | 0.55 | 2.83 | 3.60 | 2.44 | 12.56 | 15.97 | 3.11 | B | 6.20 | A++ |
| | 4.2 | 5.0 | — | — | — | 4.13 | 4.88 | — | — | — | 2.50 | 9.00 | 10.50 | 0.55 | 2.89 | 3.60 | 2.44 | 12.82 | 15.97 | 3.11 | B | 6.20 | A++ |
| | 4.2 | 7.1 | — | — | — | 3.63 | 5.37 | — | — | — | 2.50 | 9.00 | 11.00 | 0.55 | 2.96 | 3.60 | 2.44 | 13.13 | 15.97 | 3.04 | B | 6.20 | A++ |
| | 5.0 | 5.0 | — | — | — | 4.50 | 4.50 | — | — | — | 2.50 | 9.00 | 11.00 | 0.55 | 3.01 | 3.60 | 2.44 | 13.35 | 15.97 | 2.99 | C | 6.20 | A++ |
| | 5.0 | 7.1 | — | — | — | 4.00 | 5.00 | — | — | — | 2.50 | 9.00 | 11.00 | 0.55 | 3.15 | 3.60 | 2.44 | 13.98 | 15.97 | 2.86 | C | 6.20 | A++ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | — | 2.00 | 2.00 | 2.00 | — | — | 3.00 | 6.00 | 9.50 | 0.55 | 2.05 | 3.80 | 2.44 | 9.09 | 16.86 | 2.93 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | — | — | 2.00 | 2.00 | 2.60 | — | — | 3.00 | 6.60 | 9.50 | 0.55 | 2.21 | 3.80 | 2.44 | 9.80 | 16.86 | 2.99 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | — | — | 2.00 | 2.00 | 3.60 | — | — | 3.00 | 7.60 | 9.50 | 0.55 | 2.38 | 3.80 | 2.44 | 10.56 | 16.86 | 3.19 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | — | — | 2.00 | 2.00 | 4.40 | — | — | 3.20 | 8.40 | 9.50 | 0.55 | 2.67 | 3.80 | 2.44 | 11.85 | 16.86 | 3.15 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 5.0 | — | — | 1.96 | 1.96 | 5.09 | — | — | 3.20 | 9.00 | 10.00 | 0.55 | 2.84 | 3.80 | 2.44 | 12.60 | 16.86 | 3.17 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 7.1 | — | — | 1.71 | 1.71 | 5.57 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.98 | 4.10 | 2.44 | 13.22 | 18.19 | 3.02 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 2.5 | — | — | 2.00 | 2.60 | 2.60 | — | — | 3.20 | 7.20 | 9.50 | 0.55 | 2.33 | 3.80 | 2.44 | 10.34 | 16.86 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 3.5 | — | — | 2.00 | 2.60 | 3.60 | — | — | 3.20 | 8.20 | 9.50 | 0.55 | 2.57 | 3.80 | 2.44 | 11.40 | 16.86 | 3.19 | B | 6.70 | A++ |

| Comb. | Combinations | | | | | Rated capacity (kW) (Nom. cooling) | | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENE-RGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| TRI (1x3) | 2.0 | 2.5 | 4.2 | — | — | 2.00 | 2.60 | 4.40 | — | — | 3.20 | 9.00 | 10.00 | 0.55 | 2.82 | 3.80 | 2.44 | 12.51 | 16.86 | 3.19 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 5.0 | — | — | 1.84 | 2.39 | 4.78 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.88 | 3.80 | 2.44 | 12.78 | 16.86 | 3.13 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 7.1 | — | — | 1.62 | 2.11 | 5.27 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.03 | 4.10 | 2.44 | 13.44 | 18.19 | 2.97 | C | 6.70 | A++ |
| | 2.0 | 3.5 | 3.5 | — | — | 1.96 | 3.52 | 3.52 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.86 | 3.80 | 2.44 | 12.69 | 16.86 | 3.15 | B | 6.70 | A++ |
| | 2.0 | 3.5 | 4.2 | — | — | 1.80 | 3.24 | 3.96 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.93 | 4.10 | 2.44 | 13.00 | 18.19 | 3.07 | B | 6.70 | A++ |
| | 2.0 | 3.5 | 5.0 | — | — | 1.67 | 3.00 | 4.33 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.99 | 4.10 | 2.44 | 13.27 | 18.19 | 3.01 | B | 6.70 | A++ |
| | 2.0 | 3.5 | 7.1 | — | — | 1.49 | 2.68 | 4.83 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.00 | 4.10 | 2.44 | 13.31 | 18.19 | 3.00 | B | 6.70 | A++ |
| | 2.0 | 4.2 | 4.2 | — | — | 1.67 | 3.67 | 3.67 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.0 | 4.2 | 5.0 | — | — | 1.55 | 3.41 | 4.03 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.0 | 4.2 | 7.1 | — | — | 1.40 | 3.07 | 4.53 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.00 | 4.10 | 2.44 | 13.31 | 18.19 | 3.00 | B | 6.70 | A++ |
| | 2.0 | 5.0 | 5.0 | — | — | 1.45 | 3.77 | 3.77 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.98 | 4.10 | 2.44 | 13.22 | 18.19 | 3.02 | B | 6.70 | A++ |
| | 2.5 | 2.5 | 2.5 | — | — | 2.60 | 2.60 | 2.60 | — | — | 3.20 | 7.80 | 9.50 | 0.55 | 2.56 | 3.80 | 2.44 | 11.36 | 16.86 | 3.05 | B | 6.72 | A++ |
| | 2.5 | 2.5 | 3.5 | — | — | 2.60 | 2.60 | 3.60 | — | — | 3.20 | 8.80 | 10.00 | 0.55 | 2.75 | 3.80 | 2.44 | 12.20 | 16.86 | 3.20 | B | 6.72 | A++ |
| | 2.5 | 2.5 | 4.2 | — | — | 2.44 | 2.44 | 4.13 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.87 | 3.80 | 2.44 | 12.73 | 16.86 | 3.14 | B | 6.74 | A++ |
| | 2.5 | 2.5 | 5.0 | — | — | 2.25 | 2.25 | 4.50 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.74 | A++ |
| | 2.5 | 2.5 | 7.1 | — | — | 2.00 | 2.00 | 5.00 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.5 | 3.5 | 3.5 | — | — | 2.39 | 3.31 | 3.31 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 3.80 | 2.44 | 12.95 | 16.86 | 3.08 | B | 6.73 | A++ |
| | 2.5 | 3.5 | 4.2 | — | — | 2.21 | 3.06 | 3.74 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.5 | 3.5 | 5.0 | — | — | 2.05 | 2.84 | 4.11 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.5 | 3.5 | 7.1 | — | — | 1.84 | 2.55 | 4.61 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.5 | 4.2 | 4.2 | — | — | 2.05 | 3.47 | 3.47 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.5 | 4.2 | 5.0 | — | — | 1.92 | 3.25 | 3.84 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.97 | 4.10 | 2.44 | 13.18 | 18.19 | 3.03 | B | 6.70 | A++ |
| | 2.5 | 4.2 | 7.1 | — | — | 1.73 | 2.93 | 4.33 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.00 | 4.10 | 2.44 | 13.31 | 18.19 | 3.00 | B | 6.70 | A++ |
| | 2.5 | 5.0 | 5.0 | — | — | 1.80 | 3.60 | 3.60 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.00 | 4.10 | 2.44 | 13.31 | 18.19 | 3.00 | B | 6.70 | A++ |
| | 3.5 | 3.5 | 3.5 | — | — | 3.00 | 3.00 | 3.00 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.96 | 4.10 | 2.44 | 13.13 | 18.19 | 3.04 | B | 6.75 | A++ |
| | 3.5 | 3.5 | 4.2 | — | — | 2.79 | 2.79 | 3.41 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.95 | 4.10 | 2.44 | 13.09 | 18.19 | 3.05 | B | 6.70 | A++ |
| | 3.5 | 3.5 | 5.0 | — | — | 2.61 | 2.61 | 3.77 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.96 | 4.10 | 2.44 | 13.13 | 18.19 | 3.04 | B | 6.70 | A++ |
| | 3.5 | 4.2 | 4.2 | — | — | 2.61 | 3.19 | 3.19 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.96 | 4.10 | 2.44 | 13.13 | 18.19 | 3.04 | B | 6.75 | A++ |
| | 3.5 | 4.2 | 5.0 | — | — | 2.45 | 3.00 | 3.55 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.94 | 4.10 | 2.44 | 13.04 | 18.19 | 3.06 | B | 6.75 | A++ |
| | 3.5 | 5.0 | 5.0 | — | — | 2.31 | 3.34 | 3.34 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.00 | 4.10 | 2.44 | 13.31 | 18.19 | 3.00 | B | 6.75 | A++ |
| | 4.2 | 4.2 | 4.2 | — | — | 3.00 | 3.00 | 3.00 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.00 | 4.10 | 2.44 | 13.31 | 18.19 | 3.00 | B | 6.75 | A++ |
| | 4.2 | 4.2 | 5.0 | — | — | 2.83 | 2.83 | 3.34 | — | — | 3.20 | 9.00 | 11.00 | 0.55 | 3.00 | 4.10 | 2.44 | 13.31 | 18.19 | 3.00 | B | 6.75 | A++ |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 2.0 | — | 2.00 | 2.00 | 2.00 | 2.00 | — | 3.20 | 8.00 | 11.00 | 0.55 | 2.66 | 4.00 | 2.44 | 11.80 | 17.75 | 3.01 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | — | 2.00 | 2.00 | 2.00 | 2.60 | — | 3.20 | 8.60 | 11.00 | 0.55 | 2.78 | 4.00 | 2.44 | 12.33 | 17.75 | 3.09 | B | 6.80 | A++ |

Haier

| Comb. | Combinations | | | | | Rated capacity (kW) (Nom. cooling) | | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENE-RGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 3.5 | — | 1.88 | 1.88 | 1.88 | 3.38 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.86 | 4.00 | 2.44 | 12.69 | 17.75 | 3.15 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | — | 1.73 | 1.73 | 1.73 | 3.81 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 4.10 | 2.44 | 12.95 | 18.19 | 3.08 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 5.0 | — | 1.61 | 1.61 | 1.61 | 4.18 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 7.1 | — | 1.44 | 1.44 | 1.44 | 4.68 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | — | 1.96 | 1.96 | 2.54 | 2.54 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.83 | 4.00 | 2.44 | 12.56 | 17.75 | 3.18 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | — | 1.76 | 1.76 | 2.29 | 3.18 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | — | 1.64 | 1.64 | 2.13 | 3.60 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 5.0 | — | 1.53 | 1.53 | 1.98 | 3.97 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 7.1 | — | 1.37 | 1.37 | 1.79 | 4.47 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 4.10 | 2.44 | 12.95 | 18.19 | 3.08 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | — | 1.61 | 1.61 | 2.89 | 2.89 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 3.5 | 4.2 | — | 1.50 | 1.50 | 2.70 | 3.30 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 4.10 | 2.44 | 12.95 | 18.19 | 3.08 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 5.0 | — | 1.41 | 1.41 | 2.53 | 3.66 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | 4.2 | — | 1.41 | 1.41 | 3.09 | 3.09 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 4.10 | 2.44 | 12.95 | 18.19 | 3.08 | B | 6.90 | A++ |
| | 2.0 | 2.0 | 4.2 | 5.0 | — | 1.32 | 1.32 | 2.91 | 3.44 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 4.10 | 2.44 | 12.95 | 18.19 | 3.08 | B | 6.90 | A++ |
| | 2.0 | 2.0 | 5.0 | 5.0 | — | 1.25 | 1.25 | 3.25 | 3.25 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 4.10 | 2.44 | 12.95 | 18.19 | 3.08 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | — | 1.84 | 2.39 | 2.39 | 2.39 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.85 | 4.00 | 2.44 | 12.64 | 17.75 | 3.16 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | — | 1.67 | 2.17 | 2.17 | 3.00 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.90 | 4.10 | 2.44 | 12.87 | 18.19 | 3.10 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 4.2 | — | 1.55 | 2.02 | 2.02 | 3.41 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 5.0 | — | 1.45 | 1.89 | 1.89 | 3.77 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.90 | 4.10 | 2.44 | 12.87 | 18.19 | 3.10 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | — | 1.53 | 1.98 | 2.75 | 2.75 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.84 | 4.10 | 2.44 | 12.60 | 18.19 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 4.2 | — | 1.43 | 1.86 | 2.57 | 3.14 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.87 | 4.10 | 2.44 | 12.73 | 18.19 | 3.14 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 5.0 | — | 1.34 | 1.75 | 2.42 | 3.49 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.86 | 4.10 | 2.44 | 12.69 | 18.19 | 3.15 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 4.2 | 4.2 | — | 1.34 | 1.75 | 2.96 | 2.96 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.85 | 4.10 | 2.44 | 12.64 | 18.19 | 3.16 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 4.2 | 5.0 | — | 1.27 | 1.65 | 2.79 | 3.30 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.90 | 4.10 | 2.44 | 12.87 | 18.19 | 3.10 | B | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 3.5 | — | 1.41 | 2.53 | 2.53 | 2.53 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.87 | 4.10 | 2.44 | 12.73 | 18.19 | 3.14 | B | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 4.2 | — | 1.32 | 2.38 | 2.38 | 2.91 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.89 | 4.10 | 2.44 | 12.82 | 18.19 | 3.11 | B | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 5.0 | — | 1.25 | 2.25 | 2.25 | 3.25 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.93 | 4.10 | 2.44 | 13.00 | 18.19 | 3.07 | B | 6.90 | A++ |
| | 2.0 | 3.5 | 4.2 | 4.2 | — | 1.25 | 2.25 | 2.75 | 2.75 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.91 | 4.10 | 2.44 | 12.91 | 18.19 | 3.09 | B | 6.90 | A++ |
| | 2.0 | 4.2 | 4.2 | 4.2 | — | 1.18 | 2.61 | 2.61 | 2.61 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.92 | 4.10 | 2.44 | 12.95 | 18.19 | 3.08 | B | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | — | 2.25 | 2.25 | 2.25 | 2.25 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.87 | 4.10 | 2.44 | 12.73 | 18.19 | 3.14 | B | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | — | 2.05 | 2.05 | 2.05 | 2.84 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.81 | 4.10 | 2.44 | 12.47 | 18.19 | 3.20 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 4.2 | — | 1.92 | 1.92 | 1.92 | 3.25 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.76 | 4.10 | 2.44 | 12.24 | 18.19 | 3.26 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 5.0 | — | 1.80 | 1.80 | 1.80 | 3.60 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.78 | 4.10 | 2.44 | 12.33 | 18.19 | 3.24 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | — | 1.89 | 1.89 | 2.61 | 2.61 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.81 | 4.10 | 2.44 | 12.47 | 18.19 | 3.20 | A | 6.90 | A++ |

| Comb. | Combinations | | | | | Rated capacity (kW) (Nom. cooling) | | | | | Total cooling capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | EER (W/W) | ENE-RGY LABEL | SEER (W/W) | ENE-RGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.5 | 2.5 | 3.5 | 4.2 | — | 1.77 | 1.77 | 2.45 | 3.00 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.80 | 4.10 | 2.44 | 12.42 | 18.19 | 3.21 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 3.5 | 5.0 | — | 1.67 | 1.67 | 2.31 | 3.34 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 4.2 | 4.2 | — | 1.67 | 1.67 | 2.83 | 2.83 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.5 | 3.5 | 3.5 | 3.5 | — | 1.75 | 2.42 | 2.42 | 2.42 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.5 | 3.5 | 3.5 | 4.2 | — | 1.65 | 2.28 | 2.28 | 2.79 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 3.5 | 3.5 | 3.5 | 3.5 | — | 2.25 | 2.25 | 2.25 | 2.25 | — | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| PENTA (1x5) | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 1.70 | 1.70 | 1.70 | 1.70 | 2.21 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 1.55 | 1.55 | 1.55 | 1.55 | 2.79 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 4.2 | 1.45 | 1.45 | 1.45 | 1.45 | 3.19 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 5.0 | 1.36 | 1.36 | 1.36 | 1.36 | 3.55 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 2.5 | 1.61 | 1.61 | 1.61 | 2.09 | 2.09 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 3.5 | 1.48 | 1.48 | 1.48 | 1.92 | 2.66 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 4.2 | 1.38 | 1.38 | 1.38 | 1.80 | 3.05 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 5.0 | 1.30 | 1.30 | 1.30 | 1.70 | 3.39 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 3.5 | 1.36 | 1.36 | 1.36 | 2.45 | 2.45 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 4.2 | 1.29 | 1.29 | 1.29 | 2.31 | 2.83 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 1.53 | 1.53 | 1.98 | 1.98 | 1.98 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 3.5 | 1.41 | 1.41 | 1.83 | 1.83 | 2.53 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 4.2 | 1.32 | 1.32 | 1.72 | 1.72 | 2.91 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 5.0 | 1.25 | 1.25 | 1.63 | 1.63 | 3.25 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 3.5 | 1.30 | 1.30 | 1.70 | 2.35 | 2.35 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 1.45 | 1.89 | 1.89 | 1.89 | 1.89 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 3.5 | 1.34 | 1.75 | 1.75 | 1.75 | 2.42 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 4.2 | 1.27 | 1.65 | 1.65 | 1.65 | 2.79 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 3.5 | 1.67 | 1.67 | 1.67 | 1.67 | 2.31 | 3.20 | 9.00 | 11.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.38 | 18.19 | 3.23 | A | 7.00 | A++ |

HEATING 10.4

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. heating) | | | | | Total heating capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | COP (W/W) | ENE-RGY LABEL | SCOP (W/W) | ENE-RGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| 1x1 | 2.0 | — | — | — | — | 2.30 | — | — | — | — | 0.80 | 2.30 | 4.00 | 0.55 | 0.66 | 1.50 | 2.44 | 2.93 | 6.65 | — | — | — | — |
| | 2.5 | — | — | — | — | 3.60 | — | — | — | — | 0.80 | 3.60 | 6.00 | 0.55 | 1.03 | 1.40 | 2.44 | 4.57 | 6.21 | — | — | — | — |
| | 3.5 | — | — | — | — | 4.50 | — | — | — | — | 1.00 | 4.50 | 6.00 | 0.55 | 1.27 | 1.50 | 2.44 | 5.63 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | — | 5.40 | — | — | — | — | 1.50 | 5.40 | 6.00 | 0.55 | 1.50 | 1.90 | 2.44 | 6.65 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | — | 6.00 | — | — | — | — | 1.50 | 6.00 | 8.00 | 0.55 | 1.65 | 2.60 | 2.44 | 7.32 | 11.54 | — | — | — | — |
| | 7.1 | — | — | — | — | 7.00 | — | — | — | — | 1.50 | 7.00 | 8.60 | 0.55 | 1.90 | 2.60 | 2.44 | 8.43 | 11.54 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | — | 2.30 | 2.30 | — | — | — | 2.80 | 4.60 | 8.00 | 0.55 | 1.30 | 3.30 | 2.44 | 5.77 | 14.64 | 3.54 | B | 3.75 | A |
| | 2.0 | 2.5 | — | — | — | 2.30 | 3.60 | — | — | — | 3.00 | 5.90 | 10.00 | 0.55 | 1.66 | 3.30 | 2.44 | 7.36 | 14.64 | 3.55 | B | 3.75 | A |
| | 2.0 | 3.5 | — | — | — | 2.30 | 4.50 | — | — | — | 3.20 | 6.80 | 10.00 | 0.55 | 1.90 | 3.30 | 2.44 | 8.43 | 14.64 | 3.58 | B | 3.75 | A |
| | 2.0 | 4.2 | — | — | — | 2.30 | 5.40 | — | — | — | 3.40 | 7.70 | 10.00 | 0.55 | 2.15 | 3.30 | 2.44 | 9.54 | 14.64 | 3.58 | B | 3.80 | A |
| | 2.0 | 5.0 | — | — | — | 2.30 | 6.00 | — | — | — | 3.80 | 8.30 | 11.50 | 0.55 | 2.29 | 3.30 | 2.44 | 10.16 | 14.64 | 3.62 | A | 3.80 | A |
| | 2.0 | 7.1 | — | — | — | 2.30 | 7.00 | — | — | — | 4.00 | 9.30 | 11.50 | 0.55 | 2.55 | 3.30 | 2.44 | 11.31 | 14.64 | 3.65 | A | 3.85 | A |
| | 2.5 | 2.5 | — | — | — | 3.60 | 3.60 | — | — | — | 3.40 | 7.20 | 10.50 | 0.55 | 2.02 | 3.30 | 2.44 | 8.96 | 14.64 | 3.56 | B | 3.85 | A |
| | 2.5 | 3.5 | — | — | — | 3.60 | 4.50 | — | — | — | 3.80 | 8.10 | 10.50 | 0.55 | 2.26 | 3.30 | 2.44 | 10.03 | 14.64 | 3.58 | B | 3.83 | A |
| | 2.5 | 4.2 | — | — | — | 3.60 | 5.40 | — | — | — | 4.00 | 9.00 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.60 | B | 3.87 | A |
| | 2.5 | 5.0 | — | — | — | 3.60 | 6.00 | — | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.64 | 3.30 | 2.44 | 11.71 | 14.64 | 3.64 | A | 3.85 | A |
| | 2.5 | 7.1 | — | — | — | 3.53 | 6.87 | — | — | — | 4.40 | 10.40 | 11.00 | 0.55 | 2.85 | 3.30 | 2.44 | 12.64 | 14.64 | 3.65 | A | 3.84 | A |
| | 3.5 | 3.5 | — | — | — | 4.50 | 4.50 | — | — | — | 4.00 | 9.00 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.60 | B | 3.86 | A |
| | 3.5 | 4.2 | — | — | — | 4.50 | 5.40 | — | — | — | 4.40 | 9.90 | 10.50 | 0.55 | 2.74 | 3.30 | 2.44 | 12.16 | 14.64 | 3.61 | A | 3.82 | A |
| | 3.5 | 5.0 | — | — | — | 4.46 | 5.94 | — | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.61 | A | 3.80 | A |
| | 3.5 | 7.1 | — | — | — | 4.07 | 6.33 | — | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.61 | A | 3.84 | A |
| | 4.2 | 4.2 | — | — | — | 5.20 | 5.20 | — | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.61 | A | 3.86 | A |
| | 4.2 | 5.0 | — | — | — | 4.93 | 5.47 | — | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.61 | A | 3.83 | A |
| | 4.2 | 7.1 | — | — | — | 4.53 | 5.87 | — | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.61 | A | 3.86 | A |
| | 5.0 | 5.0 | — | — | — | 5.20 | 5.20 | — | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.91 | 3.30 | 2.44 | 12.91 | 14.64 | 3.57 | B | 3.80 | A |
| | 5.0 | 7.1 | — | — | — | 4.80 | 5.60 | — | — | — | 4.40 | 9.50 | 11.50 | 0.55 | 3.03 | 3.30 | 2.44 | 13.44 | 14.64 | 3.14 | C | 3.87 | A |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | — | 2.30 | 2.30 | 2.30 | — | — | 3.80 | 6.90 | 11.50 | 0.55 | 1.93 | 3.40 | 2.44 | 8.56 | 15.08 | 3.58 | B | 3.80 | A |
| | 2.0 | 2.0 | 2.5 | — | — | 2.30 | 2.30 | 3.60 | — | — | 4.00 | 8.20 | 11.50 | 0.55 | 2.28 | 3.40 | 2.44 | 10.12 | 15.08 | 3.60 | B | 3.80 | A |
| | 2.0 | 2.0 | 3.5 | — | — | 2.30 | 2.30 | 4.50 | — | — | 4.20 | 9.10 | 11.50 | 0.55 | 2.50 | 3.40 | 2.44 | 11.09 | 15.08 | 3.64 | A | 3.80 | A |
| | 2.0 | 2.0 | 4.2 | — | — | 2.30 | 2.30 | 5.40 | — | — | 4.40 | 10.00 | 11.50 | 0.55 | 2.73 | 3.40 | 2.44 | 12.11 | 15.08 | 3.66 | A | 3.80 | A |
| | 2.0 | 2.0 | 5.0 | — | — | 2.26 | 2.26 | 5.89 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.80 | A |
| | 2.0 | 2.0 | 7.1 | — | — | 2.06 | 2.06 | 6.28 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.80 | A |
| | 2.0 | 2.5 | 2.5 | — | — | 2.30 | 3.60 | 3.60 | — | — | 4.40 | 9.50 | 11.50 | 0.55 | 2.63 | 3.40 | 2.44 | 11.67 | 15.08 | 3.61 | A | 3.80 | A |
| | 2.0 | 2.5 | 3.5 | — | — | 2.30 | 3.60 | 4.50 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.80 | A |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. heating) | | | | | Total heating capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | COP (W/W) | ENE-RGY LABEL | SCOP (W/W) | ENE-RGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| TRI (1x3) | 2.0 | 2.5 | 4.2 | — | — | 2.12 | 3.31 | 4.97 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.80 | A |
| | 2.0 | 2.5 | 5.0 | — | — | 2.01 | 3.15 | 5.24 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.82 | A |
| | 2.0 | 2.5 | 7.1 | — | — | 1.85 | 2.90 | 5.64 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.82 | A |
| | 2.0 | 3.5 | 3.5 | — | — | 2.12 | 4.14 | 4.14 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.82 | A |
| | 2.0 | 3.5 | 4.2 | — | — | 1.96 | 3.84 | 4.60 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.82 | A |
| | 2.0 | 3.5 | 5.0 | — | — | 1.87 | 3.66 | 4.88 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.82 | A |
| | 2.0 | 3.5 | 7.1 | — | — | 1.73 | 3.39 | 5.28 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.64 | A | 3.82 | A |
| | 2.0 | 4.2 | 4.2 | — | — | 1.83 | 4.29 | 4.29 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.64 | A | 3.82 | A |
| | 2.0 | 4.2 | 5.0 | — | — | 1.75 | 4.10 | 4.55 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.64 | A | 3.82 | A |
| | 2.0 | 4.2 | 7.1 | — | — | 1.63 | 3.82 | 4.95 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.64 | A | 3.87 | A |
| | 2.0 | 5.0 | 5.0 | — | — | 1.67 | 4.36 | 4.36 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.64 | A | 3.87 | A |
| | 2.5 | 2.5 | 2.5 | — | — | 3.47 | 3.47 | 3.47 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.87 | A |
| | 2.5 | 2.5 | 3.5 | — | — | 3.20 | 3.20 | 4.00 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.87 | A |
| | 2.5 | 2.5 | 4.2 | — | — | 2.97 | 2.97 | 4.46 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.87 | A |
| | 2.5 | 2.5 | 5.0 | — | — | 2.84 | 2.84 | 4.73 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.87 | A |
| | 2.5 | 2.5 | 7.1 | — | — | 2.64 | 2.64 | 5.13 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.90 | A |
| | 2.5 | 3.5 | 3.5 | — | — | 2.97 | 3.71 | 3.71 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 2.5 | 3.5 | 4.2 | — | — | 2.77 | 3.47 | 4.16 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 2.5 | 3.5 | 5.0 | — | — | 2.66 | 3.32 | 4.43 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 2.5 | 3.5 | 7.1 | — | — | 2.48 | 3.10 | 4.82 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 2.5 | 4.2 | 4.2 | — | — | 2.60 | 3.90 | 3.90 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 2.5 | 4.2 | 5.0 | — | — | 2.50 | 3.74 | 4.16 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 2.5 | 4.2 | 7.1 | — | — | 2.34 | 3.51 | 4.55 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 2.5 | 5.0 | 5.0 | — | — | 2.40 | 4.00 | 4.00 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.85 | A |
| | 3.5 | 3.5 | 3.5 | — | — | 3.47 | 3.47 | 3.47 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.90 | A |
| | 3.5 | 3.5 | 4.2 | — | — | 3.25 | 3.25 | 3.90 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.65 | A | 3.90 | A |
| | 3.5 | 3.5 | 5.0 | — | — | 3.12 | 3.12 | 4.16 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 3.5 | 4.2 | 4.2 | — | — | 3.06 | 3.67 | 3.67 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 3.5 | 4.2 | 5.0 | — | — | 2.94 | 3.53 | 3.92 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 3.5 | 5.0 | 5.0 | — | — | 2.84 | 3.78 | 3.78 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 4.2 | 4.2 | 4.2 | — | — | 3.47 | 3.47 | 3.47 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 4.2 | 4.2 | 5.0 | — | — | 3.34 | 3.34 | 3.71 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 2.0 | — | 2.30 | 2.30 | 2.30 | 2.30 | — | 4.20 | 9.20 | 11.50 | 0.55 | 2.55 | 3.40 | 2.44 | 11.31 | 15.08 | 3.61 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 2.5 | — | 2.28 | 2.28 | 2.28 | 3.57 | — | 4.20 | 10.40 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.66 | A | 3.85 | A |

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| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. heating) | | | | | Total heating capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | COP (W/W) | ENE-RGY LABEL | SCOP (W/W) | ENE-RGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.0 | 2.0 | 2.0 | 3.5 | — | 2.10 | 2.10 | 2.10 | 4.11 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.66 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 4.2 | — | 1.94 | 1.94 | 1.94 | 4.57 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.66 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 5.0 | — | 1.85 | 1.85 | 1.85 | 4.84 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.66 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 7.1 | — | 1.72 | 1.72 | 1.72 | 5.24 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.66 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 2.5 | — | 2.03 | 2.03 | 3.17 | 3.17 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.66 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 3.5 | — | 1.88 | 1.88 | 2.95 | 3.69 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 4.2 | — | 1.76 | 1.76 | 2.75 | 4.13 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 5.0 | — | 1.68 | 1.68 | 2.64 | 4.39 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 7.1 | — | 1.57 | 1.57 | 2.46 | 4.79 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 3.5 | — | 1.76 | 1.76 | 3.44 | 3.44 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 4.2 | — | 1.65 | 1.65 | 3.23 | 3.87 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 5.0 | — | 1.58 | 1.58 | 3.10 | 4.13 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 4.2 | — | 1.55 | 1.55 | 3.65 | 3.65 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 5.0 | — | 1.50 | 1.50 | 3.51 | 3.90 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.90 | A |
| | 2.0 | 2.0 | 5.0 | 5.0 | — | 1.44 | 1.44 | 3.76 | 3.76 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 2.5 | — | 1.83 | 2.86 | 2.86 | 2.86 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 3.5 | — | 1.71 | 2.67 | 2.67 | 3.34 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 4.2 | — | 1.61 | 2.51 | 2.51 | 3.77 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 5.0 | — | 1.54 | 2.42 | 2.42 | 4.03 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 3.5 | — | 1.61 | 2.51 | 3.14 | 3.14 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.71 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 4.2 | — | 1.51 | 2.37 | 2.96 | 3.55 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 5.0 | — | 1.46 | 2.28 | 2.85 | 3.80 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 4.2 | — | 1.43 | 2.24 | 3.36 | 3.36 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 5.0 | — | 1.38 | 2.16 | 3.25 | 3.61 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.82 | 3.40 | 2.44 | 12.51 | 15.08 | 3.69 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 3.5 | — | 1.51 | 2.96 | 2.96 | 2.96 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.71 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 4.2 | — | 1.43 | 2.80 | 2.80 | 3.36 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.71 | A | 4.00 | A+ |
| | 2.0 | 3.5 | 3.5 | 5.0 | — | 1.38 | 2.71 | 2.71 | 3.61 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.67 | A | 4.00 | A+ |
| | 2.0 | 3.5 | 4.2 | 4.2 | — | 1.36 | 2.66 | 3.19 | 3.19 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.82 | 3.40 | 2.44 | 12.51 | 15.08 | 3.69 | A | 4.00 | A+ |
| | 2.0 | 4.2 | 4.2 | 4.2 | — | 1.29 | 3.04 | 3.04 | 3.04 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | — | 2.60 | 2.60 | 2.60 | 2.60 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.77 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | — | 2.45 | 2.45 | 2.45 | 3.06 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.71 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 4.2 | — | 2.31 | 2.31 | 2.31 | 3.47 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.71 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 5.0 | — | 2.23 | 2.23 | 2.23 | 3.71 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.70 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | — | 2.31 | 2.31 | 2.89 | 2.89 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. heating) | | | | | Total heating capacity (kW) | | | Total power input (kW) | | | Total current (A)@230V | | | COP (W/W) | ENE-RGY LABEL | SCOP (W/W) | ENE-RGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | Min. data | Rated data | Max. data | Min. Data | Rated data | Max. data | Min. data | Rated data | Max. Data | Rated capacity | | | |
| QUA-RDI (1X4) | 2.5 | 2.5 | 3.5 | 4.2 | — | 2.19 | 2.19 | 2.74 | 3.28 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 5.0 | — | 2.12 | 2.12 | 2.64 | 3.53 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 4.2 | 4.2 | — | 2.08 | 2.08 | 3.12 | 3.12 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.5 | 3.5 | 3.5 | 3.5 | — | 2.19 | 2.74 | 2.74 | 2.74 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.5 | 3.5 | 3.5 | 4.2 | — | 2.08 | 2.60 | 2.60 | 3.12 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 3.5 | 3.5 | 3.5 | 3.5 | — | 2.60 | 2.60 | 2.60 | 2.60 | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| PENTA (1x5) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 1.87 | 1.87 | 1.87 | 1.87 | 2.93 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 1.75 | 1.75 | 1.75 | 1.75 | 3.42 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 4.2 | 1.64 | 1.64 | 1.64 | 1.64 | 3.85 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 5.0 | 1.57 | 1.57 | 1.57 | 1.57 | 4.11 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 2.5 | 1.70 | 1.70 | 1.70 | 2.66 | 2.66 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 3.5 | 1.59 | 1.59 | 1.59 | 2.50 | 3.12 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 4.2 | 1.50 | 1.50 | 1.50 | 2.35 | 3.53 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 5.0 | 1.45 | 1.45 | 1.45 | 2.27 | 3.78 | 4.20 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 3.5 | 1.50 | 1.50 | 1.50 | 2.94 | 2.94 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 4.2 | 1.42 | 1.42 | 1.42 | 2.79 | 3.34 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 1.55 | 1.55 | 2.43 | 2.43 | 2.43 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 3.5 | 1.47 | 1.47 | 2.30 | 2.30 | 2.87 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 4.2 | 1.39 | 1.39 | 2.18 | 2.18 | 3.27 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 5.0 | 1.34 | 1.34 | 2.10 | 2.10 | 3.51 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 3.5 | 1.39 | 1.39 | 2.18 | 2.72 | 2.72 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 1.43 | 2.24 | 2.24 | 2.24 | 2.24 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 3.5 | 1.36 | 2.13 | 2.13 | 2.13 | 2.66 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 4.2 | 1.29 | 2.02 | 2.02 | 2.02 | 3.04 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 15.08 | 3.73 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 3.5 | 1.98 | 1.98 | 1.98 | 1.98 | 2.48 | 4.40 | 10.40 | 11.50 | 0.55 | 2.79 | 3.40 | 2.44 | 12.38 | 18.19 | 3.73 | A | 4.00 | A+ |

Haier

**5U105S2SS5FA combination and the data**

COOLING 10.0

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | — | — | 2.00 | — | — | — | — | 0.80 | 2.00 | 2.80 | 0.55 | 0.76 | 1.30 | 2.44 | 3.37 | 5.77 | — | — | — | — |
| | 2.5 | — | — | — | — | 2.60 | — | — | — | — | 0.80 | 2.60 | 3.90 | 0.55 | 0.98 | 1.34 | 2.44 | 4.35 | 5.93 | — | — | — | — |
| | 3.5 | — | — | — | — | 3.60 | — | — | — | — | 1.00 | 3.60 | 5.30 | 0.55 | 1.35 | 1.50 | 2.44 | 5.99 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | — | 4.40 | — | — | — | — | 1.30 | 4.40 | 5.00 | 0.55 | 1.59 | 1.90 | 2.44 | 7.05 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | — | 5.20 | — | — | — | — | 1.40 | 5.20 | 7.00 | 0.55 | 1.86 | 1.90 | 2.44 | 8.25 | 8.43 | — | — | — | — |
| | 7.1 | — | — | — | — | 6.50 | — | — | — | — | 1.50 | 6.50 | 7.40 | 0.55 | 2.25 | 3.00 | 2.44 | 9.98 | 13.31 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | — | 2.00 | 2.00 | — | — | — | 2.50 | 4.00 | 5.60 | 0.55 | 1.50 | 3.60 | 2.44 | 6.65 | 15.97 | — | — | — | — |
| | 2.0 | 2.5 | — | — | — | 2.00 | 2.60 | — | — | — | 2.50 | 4.60 | 6.70 | 0.55 | 1.67 | 3.60 | 2.44 | 7.41 | 15.97 | 2.75 | D | 6.20 | A++ |
| | 2.0 | 3.5 | — | — | — | 2.00 | 3.60 | — | — | — | 2.50 | 5.60 | 8.10 | 0.55 | 2.03 | 3.60 | 2.44 | 9.01 | 15.97 | 2.76 | D | 6.20 | A++ |
| | 2.0 | 4.2 | — | — | — | 2.00 | 4.40 | — | — | — | 2.50 | 6.40 | 7.80 | 0.55 | 2.30 | 3.60 | 2.44 | 10.20 | 15.97 | 2.78 | D | 6.20 | A++ |
| | 2.0 | 5.0 | — | — | — | 2.00 | 5.20 | — | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.58 | 3.60 | 2.44 | 11.45 | 15.97 | 2.79 | D | 6.20 | A++ |
| | 2.0 | 7.1 | — | — | — | 2.00 | 6.50 | — | — | — | 2.50 | 8.50 | 9.30 | 0.55 | 3.02 | 3.60 | 2.44 | 13.40 | 15.97 | 2.81 | C | 6.20 | A++ |
| | 2.5 | 2.5 | — | — | — | 2.60 | 2.60 | — | — | — | 2.50 | 5.20 | 7.80 | 0.55 | 1.90 | 3.60 | 2.44 | 8.43 | 15.97 | 2.74 | D | 6.20 | A++ |
| | 2.5 | 3.5 | — | — | — | 2.60 | 3.60 | — | — | — | 2.50 | 6.20 | 9.10 | 0.55 | 2.24 | 3.60 | 2.44 | 9.94 | 15.97 | 2.77 | D | 6.20 | A++ |
| | 2.5 | 4.2 | — | — | — | 2.60 | 4.40 | — | — | — | 2.50 | 7.00 | 9.30 | 0.55 | 2.52 | 3.60 | 2.44 | 11.18 | 15.97 | 2.78 | D | 6.20 | A++ |
| | 2.5 | 5.0 | — | — | — | 2.60 | 5.20 | — | — | — | 2.50 | 7.80 | 9.30 | 0.55 | 2.79 | 3.60 | 2.44 | 12.38 | 15.97 | 2.80 | D | 6.20 | A++ |
| | 2.5 | 7.1 | — | — | — | 2.60 | 6.50 | — | — | — | 2.50 | 9.10 | 9.30 | 0.55 | 3.17 | 3.60 | 2.44 | 14.06 | 15.97 | 2.87 | C | 6.20 | A++ |
| | 3.5 | 3.5 | — | — | — | 3.60 | 3.60 | — | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.58 | 3.60 | 2.44 | 11.45 | 15.97 | 2.79 | D | 6.20 | A++ |
| | 3.5 | 4.2 | — | — | — | 3.60 | 4.40 | — | — | — | 2.50 | 8.00 | 9.30 | 0.55 | 2.85 | 3.60 | 2.44 | 12.64 | 15.97 | 2.81 | C | 6.20 | A++ |
| | 3.5 | 5.0 | — | — | — | 3.60 | 5.20 | — | — | — | 2.50 | 8.80 | 10.00 | 0.55 | 3.10 | 3.60 | 2.44 | 13.75 | 15.97 | 2.84 | C | 6.20 | A++ |
| | 3.5 | 7.1 | — | — | — | 3.56 | 6.44 | — | — | — | 2.50 | 10.00 | 11.00 | 0.55 | 3.48 | 3.60 | 2.44 | 15.44 | 15.97 | 2.87 | C | 6.20 | A++ |
| | 4.2 | 4.2 | — | — | — | 4.40 | 4.40 | — | — | — | 2.50 | 8.80 | 10.00 | 0.55 | 3.09 | 3.60 | 2.44 | 13.71 | 15.97 | 2.85 | C | 6.20 | A++ |
| | 4.2 | 5.0 | — | — | — | 4.40 | 5.20 | — | — | — | 2.50 | 9.60 | 10.50 | 0.55 | 3.38 | 3.60 | 2.44 | 15.00 | 15.97 | 2.84 | C | 6.20 | A++ |
| | 4.2 | 7.1 | — | — | — | 4.04 | 5.96 | — | — | — | 2.50 | 10.00 | 11.00 | 0.55 | 3.47 | 3.60 | 2.44 | 15.39 | 15.97 | 2.88 | C | 6.20 | A++ |
| | 5.0 | 5.0 | — | — | — | 5.00 | 5.00 | — | — | — | 2.50 | 10.00 | 11.00 | 0.55 | 3.50 | 3.60 | 2.44 | 15.53 | 15.97 | 2.86 | C | 6.20 | A++ |
| | 5.0 | 7.1 | — | — | — | 4.44 | 5.56 | — | — | — | 2.50 | 9.00 | 11.00 | 0.55 | 3.50 | 3.60 | 2.44 | 15.53 | 15.97 | 2.57 | E | 6.20 | A++ |
| | 7.1 | 7.1 | — | — | — | 5.00 | 5.00 | — | — | — | 2.50 | 10.00 | 11.00 | 0.55 | 3.45 | 3.60 | 2.44 | 15.31 | 15.97 | 2.90 | C | 6.20 | A++ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | — | 2.00 | 2.00 | 2.00 | — | — | 3.00 | 6.00 | 9.50 | 0.55 | 2.20 | 3.80 | 2.44 | 9.76 | 16.86 | 2.73 | D | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | — | — | 2.00 | 2.00 | 2.60 | — | — | 3.00 | 6.60 | 9.50 | 0.55 | 2.40 | 3.80 | 2.44 | 10.65 | 16.86 | 2.75 | D | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | — | — | 2.00 | 2.00 | 3.60 | — | — | 3.00 | 7.60 | 9.50 | 0.55 | 2.75 | 3.80 | 2.44 | 12.20 | 16.86 | 2.76 | D | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | — | — | 2.00 | 2.00 | 4.40 | — | — | 3.20 | 8.40 | 9.50 | 0.55 | 3.00 | 3.80 | 2.44 | 13.31 | 16.86 | 2.80 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 5.0 | — | — | 2.00 | 2.00 | 5.20 | — | — | 3.20 | 9.20 | 10.00 | 0.55 | 3.20 | 3.80 | 2.44 | 14.20 | 16.86 | 2.88 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 7.1 | — | — | 1.90 | 1.90 | 6.19 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.70 | A++ |
| | 2.0 | 2.5 | 2.5 | — | — | 2.00 | 2.60 | 2.60 | — | — | 3.20 | 7.20 | 9.50 | 0.55 | 2.60 | 3.80 | 2.44 | 11.54 | 16.86 | 2.77 | D | 6.70 | A++ |
| | 2.0 | 2.5 | 3.5 | — | — | 2.00 | 2.60 | 3.60 | — | — | 3.20 | 8.20 | 9.50 | 0.55 | 2.93 | 3.80 | 2.44 | 13.00 | 16.86 | 2.80 | D | 6.70 | A++ |
| | 2.0 | 2.5 | 4.2 | — | — | 2.00 | 2.60 | 4.40 | — | — | 3.20 | 9.00 | 10.00 | 0.55 | 3.20 | 3.80 | 2.44 | 14.20 | 16.86 | 2.81 | C | 6.70 | A++ |
| | 2.0 | 2.5 | 5.0 | — | — | 2.00 | 2.60 | 5.20 | — | — | 3.20 | 9.80 | 11.00 | 0.55 | 3.44 | 3.80 | 2.44 | 15.26 | 16.86 | 2.85 | C | 6.70 | A++ |
| | 2.0 | 2.5 | 7.1 | — | — | 1.80 | 2.34 | 5.86 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 3.5 | 3.5 | — | — | 2.00 | 3.60 | 3.60 | — | — | 3.20 | 9.20 | 11.00 | 0.55 | 3.38 | 3.80 | 2.44 | 15.00 | 16.86 | 2.72 | D | 6.70 | A++ |
| | 2.0 | 3.5 | 4.2 | — | — | 2.00 | 3.60 | 4.40 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 3.5 | 5.0 | — | — | 1.85 | 3.33 | 4.81 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 3.5 | 7.1 | — | — | 1.65 | 2.98 | 5.37 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 4.2 | 4.2 | — | — | 1.85 | 4.07 | 4.07 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 4.2 | 5.0 | — | — | 1.72 | 3.79 | 4.48 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 4.2 | 7.1 | — | — | 1.55 | 3.41 | 5.04 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 5.0 | 5.0 | — | — | 1.61 | 4.19 | 4.19 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.0 | 5.0 | 7.1 | — | — | 1.46 | 3.80 | 4.74 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 2.5 | 2.5 | — | — | 2.60 | 2.60 | 2.60 | — | — | 3.20 | 7.80 | 9.50 | 0.55 | 2.78 | 3.80 | 2.44 | 12.33 | 16.86 | 2.81 | C | 6.72 | A++ |
| | 2.5 | 2.5 | 3.5 | — | — | 2.60 | 2.60 | 3.60 | — | — | 3.20 | 8.80 | 10.00 | 0.55 | 3.14 | 3.80 | 2.44 | 13.93 | 16.86 | 2.80 | C | 6.72 | A++ |
| | 2.5 | 2.5 | 4.2 | — | — | 2.60 | 2.60 | 4.40 | — | — | 3.20 | 9.60 | 11.00 | 0.55 | 3.40 | 3.80 | 2.44 | 15.08 | 16.86 | 2.82 | C | 6.74 | A++ |
| | 2.5 | 2.5 | 5.0 | — | — | 2.50 | 2.50 | 5.00 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.74 | A++ |
| | 2.5 | 2.5 | 7.1 | — | — | 2.22 | 2.22 | 5.56 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 3.5 | 3.5 | — | — | 2.60 | 3.60 | 3.60 | — | — | 3.20 | 9.80 | 11.00 | 0.55 | 3.45 | 3.80 | 2.44 | 15.31 | 16.86 | 2.84 | C | 6.73 | A++ |
| | 2.5 | 3.5 | 4.2 | — | — | 2.45 | 3.40 | 4.15 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 3.5 | 5.0 | — | — | 2.28 | 3.16 | 4.56 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 3.5 | 7.1 | — | — | 2.05 | 2.83 | 5.12 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 4.2 | 4.2 | — | — | 2.28 | 3.86 | 3.86 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| TRI (1x3) | 2.5 | 4.2 | 5.0 | — | — | 2.13 | 3.61 | 4.26 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 4.2 | 7.1 | — | — | 1.93 | 3.26 | 4.81 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 5.0 | 5.0 | — | — | 2.00 | 4.00 | 4.00 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 2.5 | 5.0 | 7.1 | — | — | 1.82 | 3.64 | 4.55 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 3.5 | 3.5 | 3.5 | — | — | 3.33 | 3.33 | 3.33 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.75 | A++ |
| | 3.5 | 3.5 | 4.2 | — | — | 3.10 | 3.10 | 3.79 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.50 | 4.10 | 2.44 | 15.53 | 18.19 | 2.86 | C | 6.70 | A++ |
| | 3.5 | 3.5 | 5.0 | — | — | 2.90 | 2.90 | 4.19 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.70 | A++ |
| | 3.5 | 3.5 | 7.1 | — | — | 2.63 | 2.63 | 4.74 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.70 | A++ |
| | 3.5 | 4.2 | 4.2 | — | — | 2.90 | 3.55 | 3.55 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.75 | A++ |
| | 3.5 | 4.2 | 5.0 | — | — | 2.73 | 3.33 | 3.94 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.75 | A++ |
| | 3.5 | 5.0 | 5.0 | — | — | 2.57 | 3.71 | 3.71 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.75 | A++ |
| | 4.2 | 4.2 | 4.2 | — | — | 3.33 | 3.33 | 3.33 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.75 | A++ |
| | 4.2 | 4.2 | 5.0 | — | — | 3.14 | 3.14 | 3.71 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.75 | A++ |
| | 4.2 | 5.0 | 5.0 | — | — | 2.97 | 3.51 | 3.51 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.75 | A++ |
| | 5.0 | 5.0 | 5.0 | — | — | 3.33 | 3.33 | 3.33 | — | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.45 | 4.10 | 2.44 | 15.31 | 18.19 | 2.90 | C | 6.75 | A++ |
| QUADR(1x4) | 2.0 | 2.0 | 2.0 | 2.0 | — | 2.00 | 2.00 | 2.00 | 2.00 | — | 3.20 | 8.00 | 11.00 | 0.55 | 2.80 | 4.00 | 2.44 | 12.42 | 17.75 | 2.86 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | — | 2.00 | 2.00 | 2.00 | 2.60 | — | 3.20 | 8.60 | 11.00 | 0.55 | 3.00 | 4.00 | 2.44 | 13.31 | 17.75 | 2.87 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | — | 2.00 | 2.00 | 2.00 | 3.60 | — | 3.20 | 9.60 | 11.00 | 0.55 | 3.30 | 4.00 | 2.44 | 14.64 | 17.75 | 2.91 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | — | 1.92 | 1.92 | 1.92 | 4.23 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 5.0 | — | 1.79 | 1.79 | 1.79 | 4.64 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 7.1 | — | 1.60 | 1.60 | 1.60 | 5.20 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | — | 2.00 | 2.00 | 2.60 | 2.60 | — | 3.20 | 9.20 | 11.00 | 0.55 | 3.20 | 4.00 | 2.44 | 14.20 | 17.75 | 2.88 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | — | 1.96 | 1.96 | 2.55 | 3.53 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | — | 1.82 | 1.82 | 2.36 | 4.00 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 5.0 | — | 1.69 | 1.69 | 2.20 | 4.41 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 7.1 | — | 1.53 | 1.53 | 1.98 | 4.96 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | — | 1.79 | 1.79 | 3.21 | 3.21 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.80 | A++ |
| | 2.0 | 2.0 | 3.5 | 4.2 | — | 1.67 | 1.67 | 3.00 | 3.67 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 5.0 | — | 1.56 | 1.56 | 2.81 | 4.06 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 7.1 | — | 1.42 | 1.42 | 2.55 | 4.61 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | 4.2 | — | 1.56 | 1.56 | 3.44 | 3.44 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.90 | A++ |
| | 2.0 | 2.0 | 4.2 | 5.0 | — | 1.47 | 1.47 | 3.24 | 3.82 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.90 | A++ |
| | 2.0 | 2.0 | 5.0 | 5.0 | — | 1.39 | 1.39 | 3.61 | 3.61 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | — | 2.00 | 2.60 | 2.60 | 2.60 | — | 3.20 | 9.80 | 11.00 | 0.55 | 3.37 | 4.00 | 2.44 | 14.95 | 17.75 | 2.91 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | — | 1.85 | 2.41 | 2.41 | 3.33 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 4.2 | — | 1.72 | 2.24 | 2.24 | 3.79 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 5.0 | — | 1.61 | 2.10 | 2.10 | 4.19 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 7.1 | — | 1.46 | 1.90 | 1.90 | 4.74 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.40 | 4.10 | 2.44 | 15.08 | 18.19 | 2.94 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | — | 1.69 | 2.20 | 3.05 | 3.05 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 4.2 | — | 1.59 | 2.06 | 2.86 | 3.49 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 5.0 | — | 1.49 | 1.94 | 2.69 | 3.88 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 4.2 | 4.2 | — | 1.49 | 1.94 | 3.28 | 3.28 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 4.2 | 5.0 | — | 1.41 | 1.83 | 3.10 | 3.66 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 2.5 | 5.0 | 5.0 | — | 1.33 | 1.73 | 3.47 | 3.47 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 3.5 | — | 1.56 | 2.81 | 2.81 | 2.81 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 4.2 | — | 1.47 | 2.65 | 2.65 | 3.24 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.38 | 4.10 | 2.44 | 15.00 | 18.19 | 2.96 | C | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 5.0 | — | 1.39 | 2.50 | 2.50 | 3.61 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.0 | 3.5 | 4.2 | 4.2 | — | 1.39 | 2.50 | 3.06 | 3.06 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.0 | 3.5 | 4.2 | 5.0 | — | 1.32 | 2.37 | 2.89 | 3.42 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.0 | 4.2 | 4.2 | 4.2 | — | 1.32 | 2.89 | 2.89 | 2.89 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | — | 2.50 | 2.50 | 2.50 | 2.50 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | — | 2.28 | 2.28 | 2.28 | 3.16 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 4.2 | — | 2.13 | 2.13 | 2.13 | 3.61 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 5.0 | — | 2.00 | 2.00 | 2.00 | 4.00 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 7.1 | — | 1.82 | 1.82 | 1.82 | 4.55 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | — | 2.10 | 2.10 | 2.90 | 2.90 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 6.90 | A++ |
| | 2.5 | 2.5 | 3.5 | 4.2 | — | 1.97 | 1.97 | 2.73 | 3.33 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.36 | 4.10 | 2.44 | 14.91 | 18.19 | 2.98 | C | 7.00 | A++ |
| | 2.5 | 2.5 | 3.5 | 5.0 | — | 1.86 | 1.86 | 2.57 | 3.71 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 2.5 | 4.2 | 4.2 | — | 1.86 | 1.86 | 3.14 | 3.14 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 2.5 | 4.2 | 5.0 | — | 1.76 | 1.76 | 2.97 | 3.51 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |

Haier

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| QUADRI(1x4) | 2.5 | 2.5 | 5.0 | 5.0 | — | 1.67 | 1.67 | 3.33 | 3.33 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 3.5 | 3.5 | 3.5 | — | 1.94 | 2.69 | 2.69 | 2.69 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 3.5 | 3.5 | 4.2 | — | 1.83 | 2.54 | 2.54 | 3.10 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 3.5 | 3.5 | 5.0 | — | 1.73 | 2.40 | 2.40 | 3.47 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 3.5 | 4.2 | 4.2 | — | 1.73 | 2.40 | 2.93 | 2.93 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 3.5 | 3.5 | 3.5 | 3.5 | — | 2.50 | 2.50 | 2.50 | 2.50 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 3.5 | 3.5 | 3.5 | 4.2 | — | 2.37 | 2.37 | 2.37 | 2.89 | — | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| PENTA (1x5) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 1.89 | 1.89 | 1.89 | 1.89 | 2.45 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 1.72 | 1.72 | 1.72 | 1.72 | 3.10 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 4.2 | 1.61 | 1.61 | 1.61 | 1.61 | 3.55 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 5.0 | 1.52 | 1.52 | 1.52 | 1.52 | 3.94 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 2.5 | 1.79 | 1.79 | 1.79 | 2.32 | 2.32 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 3.5 | 1.64 | 1.64 | 1.64 | 2.13 | 2.95 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 4.2 | 1.54 | 1.54 | 1.54 | 2.00 | 3.38 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 5.0 | 1.45 | 1.45 | 1.45 | 1.88 | 3.77 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 3.5 | 1.52 | 1.52 | 1.52 | 2.73 | 2.73 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 4.2 | 1.43 | 1.43 | 1.43 | 2.57 | 3.14 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 5.0 | 1.35 | 1.35 | 1.35 | 2.43 | 3.51 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 4.2 | 1.35 | 1.35 | 1.35 | 2.97 | 2.97 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 1.69 | 1.69 | 2.20 | 2.20 | 2.20 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 3.5 | 1.56 | 1.56 | 2.03 | 2.03 | 2.81 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 4.2 | 1.47 | 1.47 | 1.91 | 1.91 | 3.24 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 5.0 | 1.39 | 1.39 | 1.81 | 1.81 | 3.61 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 3.5 | 1.45 | 1.45 | 1.88 | 2.61 | 2.61 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 4.2 | 1.37 | 1.37 | 1.78 | 2.47 | 3.01 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 5.0 | 1.30 | 1.30 | 1.69 | 2.34 | 3.38 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 4.2 | 1.30 | 1.30 | 1.69 | 2.86 | 2.86 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 3.5 | 1.35 | 1.35 | 2.43 | 2.43 | 2.43 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 1.61 | 2.10 | 2.10 | 2.10 | 2.10 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 3.5 | 1.49 | 1.94 | 1.94 | 1.94 | 2.69 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 4.2 | 1.41 | 1.83 | 1.83 | 1.83 | 3.10 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 5.0 | 1.33 | 1.73 | 1.73 | 1.73 | 3.47 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 3.5 | 1.39 | 1.81 | 1.81 | 2.50 | 2.50 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 4.2 | 1.32 | 1.71 | 1.71 | 2.37 | 2.89 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 3.5 | 1.30 | 1.69 | 2.34 | 2.34 | 2.34 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 3.5 | 1.86 | 1.86 | 1.86 | 1.86 | 2.57 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 4.2 | 1.76 | 1.76 | 1.76 | 1.76 | 2.97 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 5.0 | 1.67 | 1.67 | 1.67 | 1.67 | 3.33 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 3.5 | 1.73 | 1.73 | 1.73 | 2.40 | 2.40 | 3.20 | 10.00 | 11.00 | 0.55 | 3.33 | 4.10 | 2.44 | 14.77 | 18.19 | 3.00 | B | 7.00 | A++ |

## HEATING 10.5

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. heating) | | | | | total heating capacity(KW) | | | total power input (W) | | | total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | — | — | 2.30 | — | — | — | — | 0.80 | 2.30 | 4.00 | 0.55 | 0.66 | 1.50 | 2.44 | 2.93 | 6.65 | — | — | — | — |
| | 2.5 | — | — | — | — | 3.60 | — | — | — | — | 0.80 | 3.60 | 6.00 | 0.55 | 1.03 | 1.40 | 2.44 | 4.57 | 6.21 | — | — | — | — |
| | 3.5 | — | — | — | — | 4.50 | — | — | — | — | 1.00 | 4.50 | 6.00 | 0.55 | 1.27 | 1.50 | 2.44 | 5.63 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | — | 5.40 | — | — | — | — | 1.50 | 5.40 | 6.00 | 0.55 | 1.50 | 1.90 | 2.44 | 6.65 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | — | 6.00 | — | — | — | — | 1.50 | 6.00 | 8.00 | 0.55 | 1.65 | 2.60 | 2.44 | 7.32 | 11.54 | — | — | — | — |
| | 7.1 | — | — | — | — | 7.00 | — | — | — | — | 1.50 | 7.00 | 8.60 | 0.55 | 1.90 | 2.60 | 2.44 | 8.43 | 11.54 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | — | 2.30 | 2.30 | — | — | — | 2.80 | 4.60 | 8.00 | 0.55 | 1.30 | 3.30 | 2.44 | 5.77 | 14.64 | 3.54 | B | 3.75 | A |
| | 2.0 | 2.5 | — | — | — | 2.30 | 3.60 | — | — | — | 3.00 | 5.90 | 10.00 | 0.55 | 1.66 | 3.30 | 2.44 | 7.36 | 14.64 | 3.55 | B | 3.75 | A |
| | 2.0 | 3.5 | — | — | — | 2.30 | 4.50 | — | — | — | 3.20 | 6.80 | 10.00 | 0.55 | 1.90 | 3.30 | 2.44 | 8.43 | 14.64 | 3.58 | B | 3.75 | A |
| | 2.0 | 4.2 | — | — | — | 2.30 | 5.40 | — | — | — | 3.40 | 7.70 | 10.00 | 0.55 | 2.15 | 3.30 | 2.44 | 9.54 | 14.64 | 3.58 | B | 3.80 | A |
| | 2.0 | 5.0 | — | — | — | 2.30 | 6.00 | — | — | — | 3.80 | 8.30 | 11.50 | 0.55 | 2.29 | 3.30 | 2.44 | 10.16 | 14.64 | 3.62 | A | 3.80 | A |
| | 2.0 | 7.1 | — | — | — | 2.30 | 7.00 | — | — | — | 4.00 | 9.30 | 11.50 | 0.55 | 2.55 | 3.30 | 2.44 | 11.31 | 14.64 | 3.65 | A | 3.85 | A |
| | 2.5 | 2.5 | — | — | — | 3.60 | 3.60 | — | — | — | 3.40 | 7.20 | 10.50 | 0.55 | 2.02 | 3.30 | 2.44 | 8.96 | 14.64 | 3.56 | B | 3.85 | A |
| | 2.5 | 3.5 | — | — | — | 3.60 | 4.50 | — | — | — | 3.80 | 8.10 | 10.50 | 0.55 | 2.26 | 3.30 | 2.44 | 10.03 | 14.64 | 3.58 | B | 3.83 | A |
| | 2.5 | 4.2 | — | — | — | 3.60 | 5.40 | — | — | — | 4.00 | 9.00 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.60 | B | 3.87 | A |
| | 2.5 | 5.0 | — | — | — | 3.60 | 6.00 | — | — | — | 4.40 | 9.60 | 10.50 | 0.55 | 2.64 | 3.30 | 2.44 | 11.71 | 14.64 | 3.64 | A | 3.85 | A |
| | 2.5 | 7.1 | — | — | — | 3.57 | 6.93 | — | — | — | 4.40 | 10.50 | 11.00 | 0.55 | 2.85 | 3.30 | 2.44 | 12.64 | 14.64 | 3.68 | A | 3.84 | A |
| | 3.5 | 3.5 | — | — | — | 4.50 | 4.50 | — | — | — | 4.00 | 9.00 | 10.50 | 0.55 | 2.50 | 3.30 | 2.44 | 11.09 | 14.64 | 3.60 | B | 3.86 | A |
| | 3.5 | 4.2 | — | — | — | 4.50 | 5.40 | — | — | — | 4.40 | 9.90 | 10.50 | 0.55 | 2.74 | 3.30 | 2.44 | 12.16 | 14.64 | 3.61 | A | 3.82 | A |
| | 3.5 | 5.0 | — | — | — | 4.50 | 6.00 | — | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.65 | A | 3.80 | A |
| | 3.5 | 7.1 | — | — | — | 4.11 | 6.39 | — | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.65 | A | 3.84 | A |
| | 4.2 | 4.2 | — | — | — | 5.25 | 5.25 | — | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.65 | A | 3.86 | A |
| | 4.2 | 5.0 | — | — | — | 4.97 | 5.53 | — | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.65 | A | 3.83 | A |
| | 4.2 | 7.1 | — | — | — | 4.57 | 5.93 | — | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.65 | A | 3.86 | A |
| | 5.0 | 5.0 | — | — | — | 5.25 | 5.25 | — | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.91 | 3.30 | 2.44 | 12.91 | 14.64 | 3.61 | A | 3.80 | A |
| | 5.0 | 7.1 | — | — | — | 4.85 | 5.65 | — | — | — | 4.40 | 9.50 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.30 | C | 3.87 | A |
| | 7.1 | 7.1 | — | — | — | 5.25 | 5.25 | — | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.30 | 2.44 | 12.78 | 14.64 | 3.65 | A | 3.85 | A |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | — | 2.30 | 2.30 | 2.30 | — | — | 3.80 | 6.90 | 11.50 | 0.55 | 1.93 | 3.40 | 2.44 | 8.56 | 15.08 | 3.58 | B | 3.80 | A |
| | 2.0 | 2.0 | 2.5 | — | — | 2.30 | 2.30 | 3.60 | — | — | 4.00 | 8.20 | 11.50 | 0.55 | 2.28 | 3.40 | 2.44 | 10.12 | 15.08 | 3.60 | B | 3.80 | A |
| | 2.0 | 2.0 | 3.5 | — | — | 2.30 | 2.30 | 4.50 | — | — | 4.20 | 9.10 | 11.50 | 0.55 | 2.50 | 3.40 | 2.44 | 11.09 | 15.08 | 3.64 | A | 3.80 | A |
| | 2.0 | 2.0 | 4.2 | — | — | 2.30 | 2.30 | 5.40 | — | — | 4.40 | 10.00 | 11.50 | 0.55 | 2.73 | 3.40 | 2.44 | 12.11 | 15.08 | 3.66 | A | 3.80 | A |
| | 2.0 | 2.0 | 5.0 | — | — | 2.28 | 2.28 | 5.94 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.80 | A |
| | 2.0 | 2.0 | 7.1 | — | — | 2.08 | 2.08 | 6.34 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.80 | A |
| | 2.0 | 2.5 | 2.5 | — | — | 2.30 | 3.60 | 3.60 | — | — | 4.40 | 9.50 | 11.50 | 0.55 | 2.63 | 3.40 | 2.44 | 11.67 | 15.08 | 3.61 | A | 3.80 | A |
| | 2.0 | 2.5 | 3.5 | — | — | 2.30 | 3.60 | 4.50 | — | — | 4.40 | 10.40 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.61 | A | 3.80 | A |
| | 2.0 | 2.5 | 4.2 | — | — | 2.14 | 3.35 | 5.02 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.80 | A |
| | 2.0 | 2.5 | 5.0 | — | — | 2.03 | 3.18 | 5.29 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.82 | A |
| | 2.0 | 2.5 | 7.1 | — | — | 1.87 | 2.93 | 5.70 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.82 | A |
| | 2.0 | 3.5 | 3.5 | — | — | 2.14 | 4.18 | 4.18 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.82 | A |
| | 2.0 | 3.5 | 4.2 | — | — | 1.98 | 3.87 | 4.65 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.82 | A |
| | 2.0 | 3.5 | 5.0 | — | — | 1.89 | 3.69 | 4.92 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.88 | 3.40 | 2.44 | 12.78 | 15.08 | 3.65 | A | 3.82 | A |
| | 2.0 | 3.5 | 7.1 | — | — | 1.75 | 3.42 | 5.33 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.67 | A | 3.82 | A |
| | 2.0 | 4.2 | 4.2 | — | — | 1.84 | 4.33 | 4.33 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.67 | A | 3.82 | A |
| | 2.0 | 4.2 | 5.0 | — | — | 1.76 | 4.14 | 4.60 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.67 | A | 3.82 | A |
| | 2.0 | 4.2 | 7.1 | — | — | 1.64 | 3.86 | 5.00 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.67 | A | 3.87 | A |
| | 2.0 | 5.0 | 5.0 | — | — | 1.69 | 4.41 | 4.41 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.67 | A | 3.87 | A |
| | 2.0 | 5.0 | 7.1 | — | — | 1.58 | 4.12 | 4.80 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.86 | 3.40 | 2.44 | 12.69 | 15.08 | 3.67 | A | 3.87 | A |
| | 2.5 | 2.5 | 2.5 | — | — | 3.50 | 3.50 | 3.50 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.87 | A |
| | 2.5 | 2.5 | 3.5 | — | — | 3.23 | 3.23 | 4.04 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.87 | A |
| | 2.5 | 2.5 | 4.2 | — | — | 3.00 | 3.00 | 4.50 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.87 | A |
| | 2.5 | 2.5 | 5.0 | — | — | 2.86 | 2.86 | 4.77 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.87 | A |
| | 2.5 | 2.5 | 7.1 | — | — | 2.66 | 2.66 | 5.18 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.90 | A |
| | 2.5 | 3.5 | 3.5 | — | — | 3.00 | 3.75 | 3.75 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 2.5 | 3.5 | 4.2 | — | — | 2.80 | 3.50 | 4.20 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 2.5 | 3.5 | 5.0 | — | — | 2.68 | 3.35 | 4.47 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 2.5 | 3.5 | 7.1 | — | — | 2.50 | 3.13 | 4.87 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 2.5 | 4.2 | 4.2 | — | — | 2.63 | 3.94 | 3.94 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 2.5 | 4.2 | 5.0 | — | — | 2.52 | 3.78 | 4.20 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |

Haier

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. heating) | | | | | total heating capacity(KW) | | | total power input (W) | | | total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| TRI (1x3) | 2.5 | 4.2 | 7.1 | — | — | 2.36 | 3.54 | 4.59 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 2.5 | 5.0 | 5.0 | — | — | 2.42 | 4.04 | 4.04 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 2.5 | 5.0 | 7.1 | — | — | 2.28 | 3.80 | 4.43 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.85 | A |
| | 3.5 | 3.5 | 3.5 | — | — | 3.50 | 3.50 | 3.50 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.90 | A |
| | 3.5 | 3.5 | 4.2 | — | — | 3.28 | 3.28 | 3.94 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.85 | 3.40 | 2.44 | 12.64 | 15.08 | 3.68 | A | 3.90 | A |
| | 3.5 | 3.5 | 5.0 | — | — | 3.15 | 3.15 | 4.20 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 3.5 | 3.5 | 7.1 | — | — | 2.95 | 2.95 | 4.59 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.85 | A |
| | 3.5 | 4.2 | 4.2 | — | — | 3.09 | 3.71 | 3.71 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 3.5 | 4.2 | 5.0 | — | — | 2.97 | 3.57 | 3.96 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 3.5 | 5.0 | 5.0 | — | — | 2.86 | 3.82 | 3.82 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 4.2 | 4.2 | 4.2 | — | — | 3.50 | 3.50 | 3.50 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 4.2 | 4.2 | 5.0 | — | — | 3.38 | 3.38 | 3.75 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 4.2 | 5.0 | 5.0 | — | — | 3.26 | 3.62 | 3.62 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 5.0 | 5.0 | 5.0 | — | — | 3.50 | 3.50 | 3.50 | — | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| QUADRI(1x4) | 2.0 | 2.0 | 2.0 | 2.0 | — | 2.30 | 2.30 | 2.30 | 2.30 | — | 4.20 | 9.20 | 11.50 | 0.55 | 2.55 | 3.40 | 2.44 | 11.31 | 15.08 | 3.61 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 2.5 | — | 2.30 | 2.30 | 2.30 | 3.60 | — | 4.20 | 10.50 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.70 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 3.5 | — | 2.12 | 2.12 | 2.12 | 4.14 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.70 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 4.2 | — | 1.96 | 1.96 | 1.96 | 4.61 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.70 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 5.0 | — | 1.87 | 1.87 | 1.87 | 4.88 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.70 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.0 | 7.1 | — | 1.74 | 1.74 | 1.74 | 5.29 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.70 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 2.5 | — | 2.05 | 2.05 | 3.20 | 3.20 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.84 | 3.40 | 2.44 | 12.60 | 15.08 | 3.70 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 3.5 | — | 1.90 | 1.90 | 2.98 | 3.72 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.85 | A |
| | 2.0 | 2.0 | 2.5 | 4.2 | — | 1.78 | 1.78 | 2.78 | 4.17 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 5.0 | — | 1.70 | 1.70 | 2.66 | 4.44 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 7.1 | — | 1.59 | 1.59 | 2.49 | 4.84 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 3.5 | — | 1.78 | 1.78 | 3.47 | 3.47 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 4.2 | — | 1.67 | 1.67 | 3.26 | 3.91 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.83 | 3.40 | 2.44 | 12.56 | 15.08 | 3.71 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 5.0 | — | 1.60 | 1.60 | 3.13 | 4.17 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.74 | A | 3.90 | A |
| | 2.0 | 2.0 | 3.5 | 7.1 | — | 1.50 | 1.50 | 2.93 | 4.57 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.74 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 4.2 | — | 1.57 | 1.57 | 3.68 | 3.68 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.74 | A | 3.90 | A |
| | 2.0 | 2.0 | 4.2 | 5.0 | — | 1.51 | 1.51 | 3.54 | 3.94 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.74 | A | 3.90 | A |
| | 2.0 | 2.0 | 5.0 | 5.0 | — | 1.45 | 1.45 | 3.80 | 3.80 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.74 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 2.5 | — | 1.84 | 2.89 | 2.89 | 2.89 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.81 | 3.40 | 2.44 | 12.47 | 15.08 | 3.74 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 3.5 | — | 1.73 | 2.70 | 2.70 | 3.38 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.90 | A |
| | 2.0 | 2.5 | 2.5 | 4.2 | — | 1.62 | 2.54 | 2.54 | 3.81 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 5.0 | — | 1.56 | 2.44 | 2.44 | 4.06 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 7.1 | — | 1.46 | 2.29 | 2.29 | 4.45 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 3.5 | — | 1.62 | 2.54 | 3.17 | 3.17 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 4.2 | — | 1.53 | 2.39 | 2.99 | 3.59 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 3.5 | 5.0 | — | 1.47 | 2.30 | 2.88 | 3.84 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 4.2 | — | 1.45 | 2.26 | 3.40 | 3.40 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 4.2 | 5.0 | — | 1.40 | 2.18 | 3.28 | 3.64 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.80 | 3.40 | 2.44 | 12.42 | 15.08 | 3.75 | A | 3.95 | A |
| | 2.0 | 2.5 | 5.0 | 5.0 | — | 1.35 | 2.11 | 3.52 | 3.52 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.78 | 3.40 | 2.44 | 12.33 | 15.08 | 3.78 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 3.5 | — | 1.53 | 2.99 | 2.99 | 2.99 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.78 | 3.40 | 2.44 | 12.33 | 15.08 | 3.78 | A | 3.95 | A |
| | 2.0 | 3.5 | 3.5 | 4.2 | — | 1.45 | 2.83 | 2.83 | 3.40 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.78 | 3.40 | 2.44 | 12.33 | 15.08 | 3.78 | A | 4.00 | A+ |
| | 2.0 | 3.5 | 3.5 | 5.0 | — | 1.40 | 2.73 | 2.73 | 3.64 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.78 | 3.40 | 2.44 | 12.33 | 15.08 | 3.78 | A | 4.00 | A+ |
| | 2.0 | 3.5 | 4.2 | 4.2 | — | 1.37 | 2.68 | 3.22 | 3.22 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.78 | 3.40 | 2.44 | 12.33 | 15.08 | 3.78 | A | 4.00 | A+ |
| | 2.0 | 3.5 | 4.2 | 5.0 | — | 1.33 | 2.60 | 3.12 | 3.46 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.78 | 3.40 | 2.44 | 12.33 | 15.08 | 3.78 | A | 4.00 | A+ |
| | 2.0 | 4.2 | 4.2 | 4.2 | — | 1.31 | 3.06 | 3.06 | 3.06 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.78 | 3.40 | 2.44 | 12.33 | 15.08 | 3.78 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | — | 2.63 | 2.63 | 2.63 | 2.63 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | — | 2.47 | 2.47 | 2.47 | 3.09 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 4.2 | — | 2.33 | 2.33 | 2.33 | 3.50 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 5.0 | — | 2.25 | 2.25 | 2.25 | 3.75 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 7.1 | — | 2.12 | 2.12 | 2.12 | 4.13 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | — | 2.33 | 2.33 | 2.92 | 2.92 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 4.2 | — | 2.21 | 2.21 | 2.76 | 3.32 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 3.5 | 5.0 | — | 2.14 | 2.14 | 2.67 | 3.56 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 4.2 | 4.2 | — | 2.10 | 2.10 | 3.15 | 3.15 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 4.2 | 5.0 | — | 2.03 | 2.03 | 3.05 | 3.39 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 5.0 | 5.0 | — | 1.97 | 1.97 | 3.28 | 3.28 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. heating) | | | | | total heating capacity(KW) | | | total power input (W) | | | total current (A)@230V | | | COP (W/W) | ENERGY LABEL | SCOP (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| QUADRI(1x4) | 2.5 | 3.5 | 3.5 | 3.5 | — | 2.21 | 2.76 | 2.76 | 2.76 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 3.5 | 3.5 | 4.2 | — | 2.10 | 2.63 | 2.63 | 3.15 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 3.5 | 3.5 | 5.0 | — | 2.03 | 2.54 | 2.54 | 3.39 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 3.5 | 4.2 | 4.2 | — | 2.00 | 2.50 | 3.00 | 3.00 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 3.5 | 3.5 | 3.5 | 3.5 | — | 2.63 | 2.63 | 2.63 | 2.63 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 3.5 | 3.5 | 3.5 | 4.2 | — | 2.50 | 2.50 | 2.50 | 3.00 | — | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| QUADRI(1x5) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 1.89 | 1.89 | 1.89 | 1.89 | 2.95 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 1.76 | 1.76 | 1.76 | 1.76 | 3.45 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 4.2 | 1.65 | 1.65 | 1.65 | 1.65 | 3.88 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 5.0 | 1.59 | 1.59 | 1.59 | 1.59 | 4.14 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 2.5 | 1.71 | 1.71 | 1.71 | 2.68 | 2.68 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 3.5 | 1.61 | 1.61 | 1.61 | 2.52 | 3.15 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 4.2 | 1.52 | 1.52 | 1.52 | 2.38 | 3.57 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 5.0 | 1.46 | 1.46 | 1.46 | 2.29 | 3.82 | 4.20 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 3.5 | 1.52 | 1.52 | 1.52 | 2.97 | 2.97 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 4.2 | 1.44 | 1.44 | 1.44 | 2.81 | 3.38 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 5.0 | 1.39 | 1.39 | 1.39 | 2.72 | 3.62 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 4.2 | 1.36 | 1.36 | 1.36 | 3.20 | 3.20 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 1.57 | 1.57 | 2.45 | 2.45 | 2.45 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 3.5 | 1.48 | 1.48 | 2.32 | 2.32 | 2.90 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 4.2 | 1.40 | 1.40 | 2.20 | 2.20 | 3.30 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 5.0 | 1.36 | 1.36 | 2.12 | 2.12 | 3.54 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 3.5 | 1.40 | 1.40 | 2.20 | 2.75 | 2.75 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 4.2 | 1.33 | 1.33 | 2.09 | 2.61 | 3.13 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 5.0 | 1.29 | 1.29 | 2.02 | 2.53 | 3.37 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 4.2 | 1.27 | 1.27 | 1.99 | 2.98 | 2.98 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 3.5 | 1.33 | 1.33 | 2.61 | 2.61 | 2.61 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 1.45 | 2.26 | 2.26 | 2.26 | 2.26 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 3.5 | 1.37 | 2.15 | 2.15 | 2.15 | 2.68 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 4.2 | 1.31 | 2.04 | 2.04 | 2.04 | 3.06 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 5.0 | 1.26 | 1.98 | 1.98 | 1.98 | 3.30 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 3.5 | 1.31 | 2.04 | 2.04 | 2.55 | 2.55 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 4.2 | 1.24 | 1.95 | 1.95 | 2.44 | 2.92 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 3.5 | 1.24 | 1.95 | 2.44 | 2.44 | 2.44 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 3.5 | 2.00 | 2.00 | 2.00 | 2.00 | 2.50 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 4.2 | 1.91 | 1.91 | 1.91 | 1.91 | 2.86 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 5.0 | 1.85 | 1.85 | 1.85 | 1.85 | 3.09 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 3.5 | 1.91 | 1.91 | 1.91 | 2.39 | 2.39 | 4.40 | 10.50 | 11.50 | 0.55 | 2.76 | 3.40 | 2.44 | 12.24 | 15.08 | 3.80 | A | 4.00 | A+ |

Haier

**5U125S2SN1FA combination and the data**

COOLING 12.5

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | — | — | 2.00 | — | — | — | — | 0.80 | 2.00 | 2.80 | 0.55 | 0.76 | 1.30 | 2.44 | 3.37 | 5.77 | — | — | — | — |
| | 2.5 | — | — | — | — | 2.60 | — | — | — | — | 0.80 | 2.60 | 3.90 | 0.55 | 0.98 | 1.34 | 2.44 | 4.35 | 5.93 | — | — | — | — |
| | 3.5 | — | — | — | — | 3.60 | — | — | — | — | 1.00 | 3.60 | 5.30 | 0.55 | 1.35 | 1.50 | 2.44 | 5.99 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | — | 4.40 | — | — | — | — | 1.30 | 4.40 | 5.00 | 0.55 | 1.59 | 1.90 | 2.44 | 7.05 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | — | 5.20 | — | — | — | — | 1.40 | 5.20 | 7.00 | 0.55 | 1.86 | 1.90 | 2.44 | 8.25 | 8.43 | — | — | — | — |
| | 7.1 | — | — | — | — | 6.50 | — | — | — | — | 1.50 | 6.50 | 7.40 | 0.55 | 2.25 | 3.00 | 2.44 | 9.98 | 13.31 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | — | 2.00 | 2.00 | — | — | — | 2.50 | 4.00 | 5.60 | 0.55 | 1.50 | 3.60 | 2.44 | 6.65 | 15.97 | — | — | — | — |
| | 2.0 | 2.5 | — | — | — | 2.00 | 2.60 | — | — | — | 2.50 | 4.60 | 6.70 | 0.55 | 1.54 | 3.60 | 2.44 | 6.83 | 15.97 | 2.99 | C | 6.20 | A++ |
| | 2.0 | 3.5 | — | — | — | 2.00 | 3.60 | — | — | — | 2.50 | 5.60 | 8.10 | 0.55 | 1.86 | 3.60 | 2.44 | 8.25 | 15.97 | 3.01 | B | 6.20 | A++ |
| | 2.0 | 4.2 | — | — | — | 2.00 | 4.40 | — | — | — | 2.50 | 6.40 | 7.80 | 0.55 | 2.12 | 3.60 | 2.44 | 9.41 | 15.97 | 3.02 | B | 6.20 | A++ |
| | 2.0 | 5.0 | — | — | — | 2.00 | 5.20 | — | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.38 | 3.60 | 2.44 | 10.56 | 15.97 | 3.03 | B | 6.20 | A++ |
| | 2.0 | 7.1 | — | — | — | 2.00 | 6.50 | — | — | — | 2.50 | 8.50 | 9.30 | 0.55 | 2.80 | 3.60 | 2.44 | 12.42 | 15.97 | 3.04 | B | 6.20 | A++ |
| | 2.5 | 2.5 | — | — | — | 2.60 | 2.60 | — | — | — | 2.50 | 5.20 | 7.80 | 0.55 | 1.73 | 3.60 | 2.44 | 7.68 | 15.97 | 3.01 | B | 6.20 | A++ |
| | 2.5 | 3.5 | — | — | — | 2.60 | 3.60 | — | — | — | 2.50 | 6.20 | 9.10 | 0.55 | 2.05 | 3.60 | 2.44 | 9.09 | 15.97 | 3.02 | B | 6.20 | A++ |
| | 2.5 | 4.2 | — | — | — | 2.60 | 4.40 | — | — | — | 2.50 | 7.00 | 9.30 | 0.55 | 2.31 | 3.60 | 2.44 | 10.25 | 15.97 | 3.03 | B | 6.20 | A++ |
| | 2.5 | 5.0 | — | — | — | 2.60 | 5.20 | — | — | — | 2.50 | 7.80 | 9.30 | 0.55 | 2.57 | 3.60 | 2.44 | 11.40 | 15.97 | 3.04 | B | 6.20 | A++ |
| | 2.5 | 7.1 | — | — | — | 2.60 | 6.50 | — | — | — | 2.50 | 9.10 | 9.30 | 0.55 | 2.98 | 3.60 | 2.44 | 13.22 | 15.97 | 3.05 | B | 6.20 | A++ |
| | 3.5 | 3.5 | — | — | — | 3.60 | 3.60 | — | — | — | 2.50 | 7.20 | 9.30 | 0.55 | 2.38 | 3.60 | 2.44 | 10.56 | 15.97 | 3.03 | B | 6.20 | A++ |
| | 3.5 | 4.2 | — | — | — | 3.60 | 4.40 | — | — | — | 2.50 | 8.00 | 9.30 | 0.55 | 2.63 | 3.60 | 2.44 | 11.67 | 15.97 | 3.04 | B | 6.20 | A++ |
| | 3.5 | 5.0 | — | — | — | 3.60 | 5.20 | — | — | — | 2.50 | 8.80 | 10.00 | 0.55 | 2.89 | 3.60 | 2.44 | 12.82 | 15.97 | 3.04 | B | 6.20 | A++ |
| | 3.5 | 7.1 | — | — | — | 4.46 | 8.04 | — | — | — | 2.50 | 12.50 | 13.80 | 0.55 | 4.10 | 3.60 | 2.44 | 18.18 | 15.97 | 3.05 | B | 6.20 | A++ |
| | 4.2 | 4.2 | — | — | — | 4.40 | 4.40 | — | — | — | 2.50 | 8.80 | 10.00 | 0.55 | 2.89 | 3.60 | 2.44 | 12.82 | 15.97 | 3.04 | B | 6.20 | A++ |
| | 4.2 | 5.0 | — | — | — | 4.40 | 5.20 | — | — | — | 2.50 | 9.60 | 10.50 | 0.55 | 3.14 | 3.60 | 2.44 | 13.93 | 15.97 | 3.06 | B | 6.20 | A++ |
| | 4.2 | 7.1 | — | — | — | 5.05 | 7.45 | — | — | — | 2.50 | 12.50 | 13.80 | 0.55 | 4.07 | 3.60 | 2.44 | 18.06 | 15.97 | 3.07 | B | 6.20 | A++ |
| | 5.0 | 5.0 | — | — | — | 6.25 | 6.25 | — | — | — | 2.50 | 12.50 | 13.80 | 0.55 | 4.07 | 3.60 | 2.44 | 18.06 | 15.97 | 3.07 | B | 6.20 | A++ |
| | 5.0 | 7.1 | — | — | — | 5.56 | 6.94 | — | — | — | 2.50 | 12.50 | 13.80 | 0.55 | 4.06 | 3.60 | 2.44 | 18.00 | 15.97 | 3.08 | B | 6.20 | A++ |
| | 7.1 | 7.1 | — | — | — | 6.25 | 6.25 | — | — | — | 2.50 | 12.50 | 13.80 | 0.55 | 4.05 | 3.60 | 2.44 | 17.95 | 15.97 | 3.09 | B | 6.20 | A++ |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | — | 2.00 | 2.00 | 2.00 | — | — | 3.00 | 6.00 | 9.50 | 0.55 | 1.98 | 3.80 | 2.44 | 8.78 | 16.86 | 3.03 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | — | — | 2.00 | 2.00 | 2.60 | — | — | 3.00 | 6.60 | 9.50 | 0.55 | 2.17 | 3.80 | 2.44 | 9.63 | 16.86 | 3.04 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | — | — | 2.00 | 2.00 | 3.60 | — | — | 3.00 | 7.60 | 9.50 | 0.55 | 2.50 | 3.80 | 2.44 | 11.09 | 16.86 | 3.04 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | — | — | 2.00 | 2.00 | 4.40 | — | — | 3.20 | 8.40 | 9.50 | 0.55 | 2.76 | 3.80 | 2.44 | 12.26 | 16.86 | 3.04 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 5.0 | — | — | 2.00 | 2.00 | 5.20 | — | — | 3.20 | 9.20 | 10.00 | 0.55 | 3.02 | 3.80 | 2.44 | 13.38 | 16.86 | 3.05 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 7.1 | — | — | 2.38 | 2.38 | 7.74 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.08 | 5.20 | 2.44 | 18.12 | 23.07 | 3.06 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 2.5 | — | — | 2.00 | 2.60 | 2.60 | — | — | 3.20 | 7.20 | 9.50 | 0.55 | 2.38 | 3.80 | 2.44 | 10.56 | 16.86 | 3.03 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 3.5 | — | — | 2.00 | 2.60 | 3.60 | — | — | 3.20 | 8.20 | 9.50 | 0.55 | 2.69 | 3.80 | 2.44 | 11.93 | 16.86 | 3.05 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 4.2 | — | — | 2.00 | 2.60 | 4.40 | — | — | 3.20 | 9.00 | 10.00 | 0.55 | 2.95 | 3.80 | 2.44 | 13.09 | 16.86 | 3.05 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 5.0 | — | — | 2.00 | 2.60 | 5.20 | — | — | 3.20 | 9.80 | 13.80 | 0.55 | 3.20 | 3.80 | 2.44 | 14.21 | 16.86 | 3.06 | B | 6.70 | A++ |
| | 2.0 | 2.5 | 7.1 | — | — | 2.25 | 2.93 | 7.32 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.07 | 5.20 | 2.44 | 18.06 | 23.07 | 3.07 | B | 6.70 | A++ |
| | 2.0 | 3.5 | 3.5 | — | — | 2.00 | 3.60 | 3.60 | — | — | 3.20 | 9.20 | 13.80 | 0.55 | 3.02 | 3.80 | 2.44 | 13.38 | 16.86 | 3.05 | B | 6.70 | A++ |
| | 2.0 | 3.5 | 4.2 | — | — | 2.00 | 3.60 | 4.40 | — | — | 3.20 | 10.00 | 13.80 | 0.55 | 3.26 | 5.20 | 2.44 | 14.45 | 23.07 | 3.07 | B | 6.70 | A++ |
| | 2.0 | 3.5 | 5.0 | — | — | 2.31 | 4.17 | 6.02 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 3.5 | 7.1 | — | — | 2.07 | 3.72 | 6.71 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 4.2 | 4.2 | — | — | 2.31 | 5.09 | 5.09 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 4.2 | 5.0 | — | — | 2.16 | 4.74 | 5.60 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 4.2 | 7.1 | — | — | 1.94 | 4.26 | 6.30 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 5.0 | 5.0 | — | — | 2.02 | 5.24 | 5.24 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.0 | 5.0 | 7.1 | — | — | 1.82 | 4.74 | 5.93 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 4.10 | 2.44 | 17.92 | 18.19 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 2.5 | 2.5 | — | — | 2.60 | 2.60 | 2.60 | — | — | 3.20 | 7.80 | 9.50 | 0.55 | 2.57 | 3.80 | 2.44 | 11.38 | 16.86 | 3.04 | B | 6.72 | A++ |
| | 2.5 | 2.5 | 3.5 | — | — | 2.60 | 2.60 | 3.60 | — | — | 3.20 | 8.80 | 10.00 | 0.55 | 2.89 | 3.80 | 2.44 | 12.80 | 16.86 | 3.05 | B | 6.72 | A++ |
| | 2.5 | 2.5 | 4.2 | — | — | 2.60 | 2.60 | 4.40 | — | — | 3.20 | 9.60 | 13.80 | 0.55 | 3.14 | 3.80 | 2.44 | 13.92 | 16.86 | 3.06 | B | 6.74 | A++ |
| | 2.5 | 2.5 | 5.0 | — | — | 3.13 | 3.13 | 6.25 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.74 | A++ |
| | 2.5 | 2.5 | 7.1 | — | — | 2.78 | 2.78 | 6.94 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 3.5 | 3.5 | — | — | 2.60 | 3.60 | 3.60 | — | — | 3.20 | 9.80 | 13.80 | 0.55 | 3.19 | 3.80 | 2.44 | 14.16 | 16.86 | 3.07 | B | 6.73 | A++ |
| | 2.5 | 3.5 | 4.2 | — | — | 3.07 | 4.25 | 5.19 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 3.5 | 5.0 | — | — | 2.85 | 3.95 | 5.70 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 3.5 | 7.1 | — | — | 2.56 | 3.54 | 6.40 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 4.2 | 4.2 | — | — | 2.85 | 4.82 | 4.82 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| TRI (1x3) | 2.5 | 4.2 | 5.0 | — | — | 2.66 | 4.51 | 5.33 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 4.2 | 7.1 | — | — | 2.41 | 4.07 | 6.02 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 5.0 | 5.0 | — | — | 2.50 | 5.00 | 5.00 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 5.0 | 7.1 | — | — | 2.27 | 4.55 | 5.68 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 2.5 | 7.1 | 7.1 | — | — | 2.08 | 5.21 | 5.21 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 3.5 | 3.5 | 3.5 | — | — | 4.17 | 4.17 | 4.17 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.75 | A++ |
| | 3.5 | 3.5 | 4.2 | — | — | 3.88 | 3.88 | 4.74 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 4.04 | 5.20 | 2.44 | 17.92 | 23.07 | 3.09 | B | 6.70 | A++ |
| | 3.5 | 3.5 | 5.0 | — | — | 3.63 | 3.63 | 5.24 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.70 | A++ |
| | 3.5 | 3.5 | 7.1 | — | — | 3.28 | 3.28 | 5.93 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.70 | A++ |
| | 3.5 | 4.2 | 4.2 | — | — | 3.63 | 4.44 | 4.44 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 3.5 | 4.2 | 5.0 | — | — | 3.41 | 4.17 | 4.92 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 3.5 | 4.2 | 7.1 | — | — | 3.10 | 3.79 | 5.60 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 3.5 | 5.0 | 5.0 | — | — | 3.21 | 4.64 | 4.64 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 3.5 | 5.0 | 7.1 | — | — | 2.94 | 4.25 | 5.31 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 4.2 | 4.2 | 4.2 | — | — | 4.17 | 4.17 | 4.17 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 4.2 | 4.2 | 5.0 | — | — | 3.93 | 3.93 | 4.64 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 4.2 | 4.2 | 7.1 | — | — | 3.59 | 3.59 | 5.31 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 4.2 | 5.0 | 5.0 | — | — | 3.72 | 4.39 | 4.39 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 4.2 | 5.0 | 7.1 | — | — | 3.42 | 4.04 | 5.05 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| | 5.0 | 5.0 | 5.0 | — | — | 4.17 | 4.17 | 4.17 | — | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.75 | A++ |
| QUADRI(1x4) | 2.0 | 2.0 | 2.0 | 2.0 | — | 2.00 | 2.00 | 2.00 | 2.00 | — | 3.20 | 8.00 | 13.80 | 0.55 | 2.62 | 4.00 | 2.44 | 11.63 | 17.75 | 3.05 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | — | 2.00 | 2.00 | 2.00 | 2.60 | — | 3.20 | 8.60 | 13.80 | 0.55 | 2.81 | 4.00 | 2.44 | 12.47 | 17.75 | 3.06 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | — | 2.00 | 2.00 | 2.00 | 3.60 | — | 3.20 | 9.60 | 13.80 | 0.55 | 3.13 | 4.00 | 2.44 | 13.87 | 17.75 | 3.07 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | — | 2.40 | 2.40 | 2.40 | 5.29 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 5.0 | — | 2.23 | 2.23 | 2.23 | 5.80 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 5.20 | 2.44 | 17.70 | 23.07 | 3.13 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.0 | 7.1 | — | 2.00 | 2.00 | 2.00 | 6.50 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.99 | 4.10 | 2.44 | 17.70 | 18.19 | 3.13 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | — | 2.00 | 2.00 | 2.60 | 2.60 | — | 3.20 | 9.20 | 13.80 | 0.55 | 3.00 | 4.00 | 2.44 | 13.29 | 17.75 | 3.07 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | — | 2.45 | 2.45 | 3.19 | 4.41 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.98 | 5.20 | 2.44 | 17.66 | 23.07 | 3.14 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | — | 2.27 | 2.27 | 2.95 | 5.00 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 5.0 | — | 2.12 | 2.12 | 2.75 | 5.51 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 2.5 | 7.1 | — | 1.91 | 1.91 | 2.48 | 6.20 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | — | 2.23 | 2.23 | 4.02 | 4.02 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.80 | A++ |
| | 2.0 | 2.0 | 3.5 | 4.2 | — | 2.08 | 2.08 | 3.75 | 4.58 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 5.0 | — | 1.95 | 1.95 | 3.52 | 5.08 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 3.5 | 7.1 | — | 1.77 | 1.77 | 3.19 | 5.76 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.70 | A++ |
| | 2.0 | 2.0 | 4.2 | 4.2 | — | 1.95 | 1.95 | 4.30 | 4.30 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.0 | 4.2 | 5.0 | — | 1.84 | 1.84 | 4.04 | 4.78 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.0 | 4.2 | 7.1 | — | 1.68 | 1.68 | 3.69 | 5.45 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.0 | 5.0 | 5.0 | — | 1.74 | 1.74 | 4.51 | 4.51 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.0 | 5.0 | 7.1 | — | 1.59 | 1.59 | 4.14 | 5.18 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.0 | 7.1 | 7.1 | — | 1.47 | 1.47 | 4.78 | 4.78 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | — | 2.00 | 2.60 | 2.60 | 2.60 | — | 3.20 | 9.80 | 13.80 | 0.55 | 3.17 | 4.00 | 2.44 | 14.07 | 17.75 | 3.09 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | — | 2.31 | 3.01 | 3.01 | 4.17 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 4.2 | — | 2.16 | 2.80 | 2.80 | 4.74 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 5.0 | — | 2.02 | 2.62 | 2.62 | 5.24 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 2.5 | 7.1 | — | 1.82 | 2.37 | 2.37 | 5.93 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.94 | 5.20 | 2.44 | 17.48 | 23.07 | 3.17 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | — | 2.12 | 2.75 | 3.81 | 3.81 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 4.2 | — | 1.98 | 2.58 | 3.57 | 4.37 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 5.0 | — | 1.87 | 2.43 | 3.36 | 4.85 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 3.5 | 7.1 | | 1.70 | 2.21 | 3.06 | 5.53 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 4.2 | 4.2 | — | 1.87 | 2.43 | 4.10 | 4.10 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 4.2 | 5.0 | — | 1.76 | 2.29 | 3.87 | 4.58 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 4.2 | 7.1 | | 1.61 | 2.10 | 3.55 | 5.24 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 5.0 | 5.0 | — | 1.67 | 2.17 | 4.33 | 4.33 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 5.0 | 7.1 | | 1.53 | 1.99 | 3.99 | 4.98 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 2.5 | 7.1 | 7.1 | | 1.42 | 1.85 | 4.62 | 4.62 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 3.5 | — | 1.95 | 3.52 | 3.52 | 3.52 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 4.2 | — | 1.84 | 3.31 | 3.31 | 4.04 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.92 | 5.20 | 2.44 | 17.39 | 23.07 | 3.19 | B | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 5.0 | — | 1.74 | 3.13 | 3.13 | 4.51 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.0 | 3.5 | 3.5 | 7.1 | | 1.59 | 2.87 | 2.87 | 5.18 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |

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| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| QUADRI(1x4) | 2.0 | 3.5 | 4.2 | 4.2 | — | 1.74 | 3.13 | 3.82 | 3.82 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.0 | 3.5 | 4.2 | 5.0 | — | 1.64 | 2.96 | 3.62 | 4.28 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.0 | 3.5 | 4.2 | 7.1 | | 1.52 | 2.73 | 3.33 | 4.92 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.0 | 4.2 | 4.2 | 4.2 | — | 1.64 | 3.62 | 3.62 | 3.62 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.0 | 4.2 | 4.2 | 5.0 | | 1.56 | 3.44 | 3.44 | 4.06 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.0 | 4.2 | 4.2 | 7.1 | | 1.45 | 3.18 | 3.18 | 4.70 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.0 | 5.0 | 5.0 | 5.0 | | 1.42 | 3.69 | 3.69 | 3.69 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | — | 3.13 | 3.13 | 3.13 | 3.13 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | — | 2.85 | 2.85 | 2.85 | 3.95 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 4.2 | — | 2.66 | 2.66 | 2.66 | 4.51 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 5.0 | — | 2.50 | 2.50 | 2.50 | 5.00 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 2.5 | 7.1 | — | 2.27 | 2.27 | 2.27 | 5.68 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | — | 2.62 | 2.62 | 3.63 | 3.63 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 6.90 | A++ |
| | 2.5 | 2.5 | 3.5 | 4.2 | — | 2.46 | 2.46 | 3.41 | 4.17 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 3.5 | 5.0 | — | 2.32 | 2.32 | 3.21 | 4.64 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 3.5 | 7.1 | | 2.12 | 2.12 | 2.94 | 5.31 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 4.2 | 4.2 | — | 2.32 | 2.32 | 3.93 | 3.93 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.90 | 5.20 | 2.44 | 17.30 | 23.07 | 3.21 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 4.2 | 5.0 | — | 2.20 | 2.20 | 3.72 | 4.39 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.89 | 5.20 | 2.44 | 17.26 | 23.07 | 3.21 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 4.2 | 7.1 | | 2.02 | 2.02 | 3.42 | 5.05 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 5.0 | 5.0 | — | 2.08 | 2.08 | 4.17 | 4.17 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 5.0 | 7.1 | | 1.92 | 1.92 | 3.85 | 4.81 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 3.5 | 3.5 | — | 2.43 | 3.36 | 3.36 | 3.36 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 3.5 | 4.2 | — | 2.29 | 3.17 | 3.17 | 3.87 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 3.5 | 5.0 | — | 2.17 | 3.00 | 3.00 | 4.33 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 3.5 | 7.1 | | 1.99 | 2.76 | 2.76 | 4.98 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 4.2 | 4.2 | — | 2.17 | 3.00 | 3.67 | 3.67 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 4.2 | 5.0 | | 2.06 | 2.85 | 3.48 | 4.11 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 4.2 | 7.1 | | 1.90 | 2.63 | 3.22 | 4.75 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 3.5 | 3.5 | — | 3.13 | 3.13 | 3.13 | 3.13 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 3.5 | 4.2 | — | 2.96 | 2.96 | 2.96 | 3.62 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 3.5 | 5.0 | | 2.81 | 2.81 | 2.81 | 4.06 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 3.5 | 7.1 | | 2.60 | 2.60 | 2.60 | 4.70 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 4.2 | 4.2 | | 2.81 | 2.81 | 3.44 | 3.44 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 4.2 | 5.0 | | 2.68 | 2.68 | 3.27 | 3.87 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 4.2 | 7.1 | | 2.49 | 2.49 | 3.04 | 4.49 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 5.0 | 5.0 | | 2.56 | 2.56 | 3.69 | 3.69 | — | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| PENTA (1x5) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 3.20 | 10.00 | 13.80 | 0.55 | 3.10 | 5.20 | 2.44 | 13.75 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 2.36 | 2.36 | 2.36 | 2.36 | 3.07 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 2.16 | 2.16 | 2.16 | 2.16 | 3.88 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 4.2 | 2.02 | 2.02 | 2.02 | 2.02 | 4.44 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 5.0 | 1.89 | 1.89 | 1.89 | 1.89 | 4.92 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 7.1 | 1.72 | 1.72 | 1.72 | 1.72 | 5.60 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 2.5 | 2.23 | 2.23 | 2.23 | 2.90 | 2.90 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 3.5 | 2.05 | 2.05 | 2.05 | 2.66 | 3.69 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 4.2 | 1.92 | 1.92 | 1.92 | 2.50 | 4.23 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 5.0 | 1.81 | 1.81 | 1.81 | 2.36 | 4.71 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 7.1 | 1.66 | 1.66 | 1.66 | 2.15 | 5.38 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 3.5 | 1.89 | 1.89 | 1.89 | 3.41 | 3.41 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 4.2 | 1.79 | 1.79 | 1.79 | 3.21 | 3.93 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 5.0 | 1.69 | 1.69 | 1.69 | 3.04 | 4.39 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 7.1 | 1.55 | 1.55 | 1.55 | 2.80 | 5.05 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 4.2 | 1.69 | 1.69 | 1.69 | 3.72 | 3.72 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 5.0 | 1.60 | 1.60 | 1.60 | 3.53 | 4.17 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 7.1 | 1.48 | 1.48 | 1.48 | 3.25 | 4.81 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 2.12 | 2.12 | 2.75 | 2.75 | 2.75 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 3.5 | 1.95 | 1.95 | 2.54 | 2.54 | 3.52 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 4.2 | 1.84 | 1.84 | 2.39 | 2.39 | 4.04 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| PENTA (1x5) | 2.0 | 2.0 | 2.5 | 2.5 | 5.0 | 1.74 | 1.74 | 2.26 | 2.26 | 4.51 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 7.1 | 1.59 | 1.59 | 2.07 | 2.07 | 5.18 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 3.5 | 1.81 | 1.81 | 2.36 | 3.26 | 3.26 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 4.2 | 1.71 | 1.71 | 2.23 | 3.08 | 3.77 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 5.0 | 1.62 | 1.62 | 2.11 | 2.92 | 4.22 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 7.1 | 1.50 | 1.50 | 1.95 | 2.69 | 4.87 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 4.2 | 1.62 | 1.62 | 2.11 | 3.57 | 3.57 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 5.0 | 1.54 | 1.54 | 2.01 | 3.40 | 4.01 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 7.1 | 1.43 | 1.43 | 1.86 | 3.14 | 4.64 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 3.5 | 1.69 | 1.69 | 3.04 | 3.04 | 3.04 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 4.2 | 1.60 | 1.60 | 2.88 | 2.88 | 3.53 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 5.0 | 1.52 | 1.52 | 2.74 | 2.74 | 3.96 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 7.1 | 1.41 | 1.41 | 2.54 | 2.54 | 4.59 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 2.02 | 2.62 | 2.62 | 2.62 | 2.62 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 3.5 | 1.87 | 2.43 | 2.43 | 2.43 | 3.36 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 4.2 | 1.76 | 2.29 | 2.29 | 2.29 | 3.87 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 5.0 | 1.67 | 2.17 | 2.17 | 2.17 | 4.33 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 7.1 | 1.53 | 1.99 | 1.99 | 1.99 | 4.98 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 3.5 | 1.74 | 2.26 | 2.26 | 3.13 | 3.13 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 4.2 | 1.64 | 2.14 | 2.14 | 2.96 | 3.62 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 5.0 | 1.56 | 2.03 | 2.03 | 2.81 | 4.06 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 7.1 | 1.45 | 1.88 | 1.88 | 2.60 | 4.70 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 3.5 | 1.62 | 2.11 | 2.92 | 2.92 | 2.92 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 4.2 | 1.54 | 2.01 | 2.78 | 2.78 | 3.40 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 5.0 | 1.47 | 1.91 | 2.65 | 2.65 | 3.82 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 7.1 | 1.37 | 1.78 | 2.46 | 2.46 | 4.44 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 3.5 | 2.32 | 2.32 | 2.32 | 2.32 | 3.21 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 4.2 | 2.20 | 2.20 | 2.20 | 2.20 | 3.72 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 5.0 | 2.08 | 2.08 | 2.08 | 2.08 | 4.17 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 7.1 | 1.92 | 1.92 | 1.92 | 1.92 | 4.81 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 3.5 | 2.17 | 2.17 | 2.17 | 3.00 | 3.00 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 4.2 | 2.06 | 2.06 | 2.06 | 2.85 | 3.48 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 5.0 | 1.96 | 1.96 | 1.96 | 2.71 | 3.92 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 7.1 | 1.82 | 1.82 | 1.82 | 2.51 | 4.54 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 4.2 | 4.2 | 1.96 | 1.96 | 1.96 | 3.31 | 3.31 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 4.2 | 5.0 | 1.87 | 1.87 | 1.87 | 3.16 | 3.74 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 2.5 | 5.0 | 5.0 | 1.79 | 1.79 | 1.79 | 3.57 | 3.57 | 3.20 | 12.5 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 3.5 | 2.03 | 2.03 | 2.81 | 2.81 | 2.81 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 4.2 | 1.93 | 1.93 | 2.68 | 2.68 | 3.27 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 5.0 | 1.85 | 1.85 | 2.56 | 2.56 | 3.69 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 4.2 | 4.2 | 4.2 | 1.77 | 1.77 | 2.99 | 2.99 | 2.99 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 2.5 | 4.2 | 4.2 | 5.0 | 1.69 | 1.69 | 2.86 | 2.86 | 3.39 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 1.91 | 2.65 | 2.65 | 2.65 | 2.65 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 4.2 | 1.83 | 2.53 | 2.53 | 2.53 | 3.09 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 5.0 | 1.75 | 2.42 | 2.42 | 2.42 | 3.49 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |
| | 3.5 | 3.5 | 3.5 | 3.5 | 4.2 | 2.39 | 2.39 | 2.39 | 2.39 | 2.93 | 3.20 | 12.50 | 13.80 | 0.55 | 3.87 | 5.20 | 2.44 | 17.17 | 23.07 | 3.23 | A | 7.10 | A++ |

Haier

**5U125S2SN1FA combination and the data**

Heating 12.7

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| 1x1 | 2.0 | — | — | — | — | 2.30 | — | — | — | — | 0.80 | 2.30 | 4.00 | 0.55 | 0.66 | 1.50 | 2.44 | 2.93 | 6.65 | — | — | — | — |
| | 2.5 | — | — | — | — | 3.60 | — | — | — | — | 0.80 | 3.60 | 6.00 | 0.55 | 1.03 | 1.40 | 2.44 | 4.57 | 6.21 | — | — | — | — |
| | 3.5 | — | — | — | — | 4.50 | — | — | — | — | 1.00 | 4.50 | 6.00 | 0.55 | 1.27 | 1.50 | 2.44 | 5.63 | 6.65 | — | — | — | — |
| | 4.2 | — | — | — | — | 5.40 | — | — | — | — | 1.50 | 5.40 | 6.00 | 0.55 | 1.50 | 1.90 | 2.44 | 6.65 | 8.43 | — | — | — | — |
| | 5.0 | — | — | — | — | 6.00 | — | — | — | — | 1.50 | 6.00 | 8.00 | 0.55 | 1.65 | 2.60 | 2.44 | 7.32 | 11.54 | — | — | — | — |
| | 7.1 | — | — | — | — | 7.00 | — | — | — | — | 1.50 | 7.00 | 8.60 | 0.55 | 1.90 | 2.60 | 2.44 | 8.43 | 11.54 | — | — | — | — |
| BI (1x2) | 2.0 | 2.0 | — | — | — | 2.30 | 2.30 | — | — | — | 2.80 | 4.60 | 10.00 | 0.55 | 1.33 | 4.10 | 2.44 | 5.88 | 18.19 | 3.47 | B | 3.80 | A |
| | 2.0 | 2.5 | — | — | — | 2.30 | 3.60 | — | — | — | 3.00 | 5.90 | 12.40 | 0.55 | 1.70 | 4.10 | 2.44 | 7.52 | 18.19 | 3.48 | B | 3.80 | A |
| | 2.0 | 3.5 | — | — | — | 2.30 | 4.50 | — | — | — | 3.20 | 6.80 | 12.40 | 0.55 | 1.94 | 4.10 | 2.44 | 8.59 | 18.19 | 3.51 | B | 3.80 | A |
| | 2.0 | 4.2 | — | — | — | 2.30 | 5.40 | — | — | — | 3.40 | 7.70 | 12.40 | 0.55 | 2.19 | 4.10 | 2.44 | 9.73 | 18.19 | 3.51 | B | 3.85 | A |
| | 2.0 | 5.0 | — | — | — | 2.30 | 6.00 | — | — | — | 3.80 | 8.30 | 14.30 | 0.55 | 2.34 | 4.10 | 2.44 | 10.37 | 18.19 | 3.55 | B | 3.85 | A |
| | 2.0 | 7.1 | — | — | — | 2.30 | 7.00 | — | — | — | 4.00 | 9.30 | 14.30 | 0.55 | 2.60 | 4.10 | 2.44 | 11.52 | 18.19 | 3.58 | B | 3.90 | A |
| | 2.5 | 2.5 | — | — | — | 3.60 | 3.60 | — | — | — | 3.40 | 7.20 | 13.00 | 0.55 | 2.06 | 4.10 | 2.44 | 9.15 | 18.19 | 3.49 | B | 3.90 | A |
| | 2.5 | 3.5 | — | — | — | 3.60 | 4.50 | — | — | — | 3.80 | 8.10 | 13.00 | 0.55 | 2.31 | 4.10 | 2.44 | 10.24 | 18.19 | 3.51 | B | 3.88 | A |
| | 2.5 | 4.2 | — | — | — | 3.60 | 5.40 | — | — | — | 4.00 | 9.00 | 13.00 | 0.55 | 2.55 | 4.10 | 2.44 | 11.31 | 18.19 | 3.53 | B | 3.92 | A |
| | 2.5 | 5.0 | — | — | — | 3.60 | 6.00 | — | — | — | 4.40 | 9.60 | 13.00 | 0.55 | 2.69 | 4.10 | 2.44 | 11.93 | 18.19 | 3.57 | B | 3.90 | A |
| | 2.5 | 7.1 | — | — | — | 4.31 | 8.39 | — | — | — | 4.40 | 12.70 | 13.50 | 0.55 | 3.52 | 4.10 | 2.44 | 15.61 | 18.19 | 3.61 | A | 3.89 | A |
| | 3.5 | 3.5 | — | — | — | 4.50 | 4.50 | — | — | — | 4.00 | 9.00 | 13.00 | 0.55 | 2.55 | 4.10 | 2.44 | 11.31 | 18.19 | 3.53 | B | 3.91 | A |
| | 3.5 | 4.2 | — | — | — | 4.50 | 5.40 | — | — | — | 4.40 | 9.90 | 13.00 | 0.55 | 2.79 | 4.10 | 2.44 | 12.37 | 18.19 | 3.55 | B | 3.87 | A |
| | 3.5 | 5.0 | — | — | — | 4.50 | 6.00 | — | — | — | 4.40 | 10.50 | 14.30 | 0.55 | 2.92 | 4.10 | 2.44 | 12.97 | 18.19 | 3.59 | B | 3.85 | A |
| | 3.5 | 7.1 | — | — | — | 4.97 | 7.73 | — | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.52 | 4.10 | 2.44 | 15.61 | 18.19 | 3.61 | A | 3.89 | A |
| | 4.2 | 4.2 | — | — | — | 6.35 | 6.35 | — | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.56 | 4.10 | 2.44 | 15.78 | 18.19 | 3.57 | B | 3.91 | A |
| | 4.2 | 5.0 | — | — | — | 6.02 | 6.68 | — | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.52 | 4.10 | 2.44 | 15.61 | 18.19 | 3.61 | A | 3.88 | A |
| | 4.2 | 7.1 | — | — | — | 5.53 | 7.17 | — | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.10 | 2.44 | 15.56 | 18.19 | 3.62 | A | 3.91 | A |
| | 5.0 | 5.0 | — | — | — | 6.35 | 6.35 | — | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.50 | 4.10 | 2.44 | 15.52 | 18.19 | 3.63 | A | 3.85 | A |
| | 5.0 | 7.1 | — | — | — | 5.86 | 6.84 | — | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.49 | 4.10 | 2.44 | 15.48 | 18.19 | 3.64 | A | 3.92 | A |
| | 7.1 | 7.1 | — | — | — | 6.35 | 6.35 | — | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.10 | 2.44 | 15.43 | 18.19 | 3.65 | A | 3.90 | A |
| TRI (1x3) | 2.0 | 2.0 | 2.0 | — | — | 2.30 | 2.30 | 2.30 | — | — | 3.80 | 6.90 | 14.30 | 0.55 | 1.98 | 4.30 | 2.44 | 8.79 | 19.08 | 3.48 | B | 3.80 | A |
| | 2.0 | 2.0 | 2.5 | — | — | 2.30 | 2.30 | 3.60 | — | — | 4.00 | 8.20 | 14.30 | 0.55 | 2.34 | 4.30 | 2.44 | 10.39 | 19.08 | 3.50 | B | 3.85 | A |
| | 2.0 | 2.0 | 3.5 | — | — | 2.30 | 2.30 | 4.50 | — | — | 4.20 | 9.10 | 14.30 | 0.55 | 2.59 | 4.30 | 2.44 | 11.47 | 19.08 | 3.52 | B | 3.85 | A |
| | 2.0 | 2.0 | 4.2 | — | — | 2.30 | 2.30 | 5.40 | — | — | 4.40 | 10.00 | 14.30 | 0.55 | 2.81 | 4.30 | 2.44 | 12.46 | 19.08 | 3.56 | B | 3.85 | A |
| | 2.0 | 2.0 | 5.0 | — | — | 2.76 | 2.76 | 7.19 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.85 | A |
| | 2.0 | 2.0 | 7.1 | — | — | 2.52 | 2.52 | 7.66 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.85 | A |
| | 2.0 | 2.5 | 2.5 | — | — | 2.30 | 3.60 | 3.60 | — | — | 4.40 | 9.50 | 14.30 | 0.55 | 2.70 | 4.30 | 2.44 | 11.97 | 19.08 | 3.52 | B | 3.85 | A |
| | 2.0 | 2.5 | 3.5 | — | — | 2.30 | 3.60 | 4.50 | — | — | 4.40 | 10.40 | 14.30 | 0.55 | 2.95 | 4.30 | 2.44 | 13.11 | 19.08 | 3.52 | B | 3.85 | A |
| | 2.0 | 2.5 | 4.2 | — | — | 2.58 | 4.05 | 6.07 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.85 | A |
| | 2.0 | 2.5 | 5.0 | — | — | 2.45 | 3.84 | 6.40 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.87 | A |
| | 2.0 | 2.5 | 7.1 | — | — | 2.26 | 3.54 | 6.89 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.87 | A |
| | 2.0 | 3.5 | 3.5 | — | — | 2.58 | 5.06 | 5.06 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.87 | A |
| | 2.0 | 3.5 | 4.2 | — | — | 2.39 | 4.68 | 5.62 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.87 | A |
| | 2.0 | 3.5 | 5.0 | — | — | 2.28 | 4.46 | 5.95 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.57 | 4.30 | 2.44 | 15.83 | 19.08 | 3.56 | B | 3.87 | A |
| | 2.0 | 3.5 | 7.1 | — | — | 2.12 | 4.14 | 6.44 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.55 | 4.30 | 2.44 | 15.74 | 19.08 | 3.58 | B | 3.87 | A |
| | 2.0 | 4.2 | 4.2 | — | — | 2.23 | 5.24 | 5.24 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.55 | 4.30 | 2.44 | 15.74 | 19.08 | 3.58 | B | 3.87 | A |
| | 2.0 | 4.2 | 5.0 | — | — | 2.13 | 5.01 | 5.56 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.55 | 4.30 | 2.44 | 15.74 | 19.08 | 3.58 | B | 3.87 | A |
| | 2.0 | 4.2 | 7.1 | — | — | 1.99 | 4.67 | 6.05 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.55 | 4.30 | 2.44 | 15.74 | 19.08 | 3.58 | B | 3.92 | A |
| | 2.0 | 5.0 | 5.0 | — | — | 2.04 | 5.33 | 5.33 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.55 | 4.30 | 2.44 | 15.74 | 19.08 | 3.58 | B | 3.92 | A |
| | 2.0 | 5.0 | 7.1 | — | — | 1.91 | 4.98 | 5.81 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.55 | 4.30 | 2.44 | 15.74 | 19.08 | 3.58 | B | 3.92 | A |
| | 2.5 | 2.5 | 2.5 | — | — | 4.23 | 4.23 | 4.23 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.92 | A |
| | 2.5 | 2.5 | 3.5 | — | — | 3.91 | 3.91 | 4.88 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.92 | A |
| | 2.5 | 2.5 | 4.2 | — | — | 3.63 | 3.63 | 5.44 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.92 | A |
| | 2.5 | 2.5 | 5.0 | — | — | 3.46 | 3.46 | 5.77 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.92 | A |
| | 2.5 | 2.5 | 7.1 | — | — | 3.22 | 3.22 | 6.26 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.95 | A |
| | 2.5 | 3.5 | 3.5 | — | — | 3.63 | 4.54 | 4.54 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 3.5 | 4.2 | — | — | 3.39 | 4.23 | 5.08 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 3.5 | 5.0 | — | — | 3.24 | 4.05 | 5.40 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 3.5 | 7.1 | — | — | 3.03 | 3.78 | 5.89 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 4.2 | 4.2 | — | — | 3.18 | 4.76 | 4.76 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| TRI (1x3) | 2.5 | 4.2 | 5.0 | — | — | 3.05 | 4.57 | 5.08 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 4.2 | 7.1 | — | — | 2.86 | 4.29 | 5.56 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 5.0 | 5.0 | — | — | 2.93 | 4.88 | 4.88 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 5.0 | 7.1 | — | — | 2.75 | 4.59 | 5.36 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.5 | 7.1 | 7.1 | — | — | 2.60 | 5.05 | 5.05 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.90 | A |
| | 3.5 | 3.5 | 3.5 | — | — | 4.23 | 4.23 | 4.23 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.95 | A |
| | 3.5 | 3.5 | 4.2 | — | — | 3.97 | 3.97 | 4.76 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.54 | 4.30 | 2.44 | 15.69 | 19.08 | 3.59 | B | 3.95 | A |
| | 3.5 | 3.5 | 5.0 | — | — | 3.81 | 3.81 | 5.08 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 3.5 | 3.5 | 7.1 | — | — | 3.57 | 3.57 | 5.56 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.90 | A |
| | 3.5 | 4.2 | 4.2 | — | — | 3.74 | 4.48 | 4.48 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 3.5 | 4.2 | 5.0 | — | — | 3.59 | 4.31 | 4.79 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 3.5 | 4.2 | 7.1 | — | | 3.38 | 4.06 | 5.26 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.49 | 4.30 | 2.44 | 15.48 | 19.08 | 3.64 | A | 3.95 | A |
| | 3.5 | 5.0 | 5.0 | — | — | 3.46 | 4.62 | 4.62 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 3.5 | 5.0 | 7.1 | — | | 3.27 | 4.35 | 5.08 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 4.2 | 4.2 | 4.2 | — | — | 4.23 | 4.23 | 4.23 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 4.2 | 4.2 | 5.0 | — | — | 4.08 | 4.08 | 4.54 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 4.2 | 4.2 | 7.1 | — | | 3.85 | 3.85 | 4.99 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 4.2 | 5.0 | 5.0 | — | — | 3.94 | 4.38 | 4.38 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 4.2 | 5.0 | 7.1 | — | | 3.73 | 4.14 | 4.83 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 5.0 | 5.0 | 5.0 | — | — | 4.23 | 4.23 | 4.23 | — | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| QUADRI(1x4) | 2.0 | 2.0 | 2.0 | 2.0 | — | 2.30 | 2.30 | 2.30 | 2.30 | — | 4.20 | 9.20 | 14.30 | 0.55 | 2.56 | 4.30 | 2.44 | 11.37 | 19.08 | 3.59 | B | 3.90 | A |
| | 2.0 | 2.0 | 2.0 | 2.5 | — | 2.30 | 2.30 | 2.30 | 3.60 | — | 4.20 | 10.50 | 14.30 | 0.55 | 2.92 | 4.30 | 2.44 | 12.94 | 19.08 | 3.60 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.0 | 3.5 | — | 2.56 | 2.56 | 2.56 | 5.01 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.53 | 4.30 | 2.44 | 15.65 | 19.08 | 3.60 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.0 | 4.2 | — | 2.37 | 2.37 | 2.37 | 5.58 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.53 | 4.30 | 2.44 | 15.65 | 19.08 | 3.60 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.0 | 5.0 | — | 2.26 | 2.26 | 2.26 | 5.91 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.53 | 4.30 | 2.44 | 15.65 | 19.08 | 3.60 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.0 | 7.1 | — | 2.10 | 2.10 | 2.10 | 6.40 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.53 | 4.30 | 2.44 | 15.65 | 19.08 | 3.60 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 2.5 | — | 2.48 | 2.48 | 3.87 | 3.87 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.53 | 4.30 | 2.44 | 15.65 | 19.08 | 3.60 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 3.5 | — | 2.30 | 2.30 | 3.60 | 4.50 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.90 | A |
| | 2.0 | 2.0 | 2.5 | 4.2 | — | 2.15 | 2.15 | 3.36 | 5.04 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 2.0 | 2.0 | 2.5 | 5.0 | — | 2.06 | 2.06 | 3.22 | 5.37 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 2.0 | 2.0 | 2.5 | 7.1 | — | 1.92 | 1.92 | 3.01 | 5.85 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 2.0 | 2.0 | 3.5 | 3.5 | — | 2.15 | 2.15 | 4.20 | 4.20 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 2.0 | 2.0 | 3.5 | 4.2 | — | 2.01 | 2.01 | 3.94 | 4.73 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.51 | 4.30 | 2.44 | 15.56 | 19.08 | 3.62 | A | 3.95 | A |
| | 2.0 | 2.0 | 3.5 | 5.0 | — | 1.93 | 1.93 | 3.78 | 5.05 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.0 | 3.5 | 7.1 | — | 1.81 | 1.81 | 3.55 | 5.52 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.0 | 4.2 | 4.2 | — | 1.90 | 1.90 | 4.45 | 4.45 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.0 | 4.2 | 5.0 | — | 1.83 | 1.83 | 4.29 | 4.76 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.0 | 4.2 | 7.1 | | 1.72 | 1.72 | 4.03 | 5.23 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.0 | 5.0 | 5.0 | — | 1.76 | 1.76 | 4.59 | 4.59 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.0 | 5.0 | 7.1 | | 1.66 | 1.66 | 4.33 | 5.05 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.0 | 7.1 | 7.1 | | 1.57 | 1.57 | 4.78 | 4.78 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 2.5 | — | 2.23 | 3.49 | 3.49 | 3.49 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.48 | 4.30 | 2.44 | 15.43 | 19.08 | 3.65 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 3.5 | — | 2.09 | 3.27 | 3.27 | 4.08 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 3.95 | A |
| | 2.0 | 2.5 | 2.5 | 4.2 | — | 1.96 | 3.07 | 3.07 | 4.60 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 2.5 | 5.0 | — | 1.88 | 2.95 | 2.95 | 4.92 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 2.5 | 7.1 | — | 1.77 | 2.77 | 2.77 | 5.39 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 3.5 | 3.5 | — | 1.96 | 3.07 | 3.84 | 3.84 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 3.5 | 4.2 | — | 1.85 | 2.89 | 3.62 | 4.34 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 3.5 | 5.0 | — | 1.78 | 2.79 | 3.48 | 4.65 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 3.5 | 7.1 | | 1.68 | 2.63 | 3.28 | 5.11 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 4.2 | 4.2 | — | 1.75 | 2.74 | 4.11 | 4.11 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 4.2 | 5.0 | — | 1.69 | 2.64 | 3.96 | 4.40 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.43 | 4.30 | 2.44 | 15.23 | 19.08 | 3.70 | A | 4.00 | A |
| | 2.0 | 2.5 | 4.2 | 7.1 | | 1.60 | 2.50 | 3.75 | 4.86 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.00 | A |
| | 2.0 | 2.5 | 5.0 | 5.0 | — | 1.63 | 2.55 | 4.26 | 4.26 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.00 | A |
| | 2.0 | 2.5 | 5.0 | 7.1 | | 1.55 | 2.42 | 4.03 | 4.70 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.00 | A |
| | 2.0 | 2.5 | 7.1 | 7.1 | | 1.47 | 2.30 | 4.47 | 4.47 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.00 | A |

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| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| QUADRI(1x4) | 2.0 | 3.5 | 3.5 | 3.5 | — | 1.85 | 3.62 | 3.62 | 3.62 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.00 | A |
| | 2.0 | 3.5 | 3.5 | 4.2 | — | 1.75 | 3.42 | 3.42 | 4.11 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 3.5 | 3.5 | 5.0 | — | 1.69 | 3.30 | 3.30 | 4.40 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 3.5 | 3.5 | 7.1 | — | 1.60 | 3.12 | 3.12 | 4.86 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 3.5 | 4.2 | 4.2 | — | 1.66 | 3.25 | 3.90 | 3.90 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 3.5 | 4.2 | 5.0 | — | 1.60 | 3.14 | 3.77 | 4.19 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 3.5 | 4.2 | 7.1 | — | 1.52 | 2.98 | 3.57 | 4.63 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 4.2 | 4.2 | 4.2 | — | 1.58 | 3.71 | 3.71 | 3.71 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 4.2 | 4.2 | 5.0 | — | 1.53 | 3.59 | 3.59 | 3.99 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 4.2 | 4.2 | 7.1 | — | 1.45 | 3.41 | 3.41 | 4.42 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.0 | 5.0 | 5.0 | 5.0 | — | 1.44 | 3.75 | 3.75 | 3.75 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | — | 3.18 | 3.18 | 3.18 | 3.18 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | — | 2.99 | 2.99 | 2.99 | 3.74 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 4.2 | — | 2.82 | 2.82 | 2.82 | 4.23 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 5.0 | — | 2.72 | 2.72 | 2.72 | 4.54 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 7.1 | — | 2.57 | 2.57 | 2.57 | 4.99 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | — | 2.82 | 2.82 | 3.53 | 3.53 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 3.5 | 4.2 | — | 2.67 | 2.67 | 3.34 | 4.01 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 3.5 | 5.0 | — | 2.58 | 2.58 | 3.23 | 4.31 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 3.5 | 7.1 | — | 2.44 | 2.44 | 3.06 | 4.75 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 4.2 | 4.2 | — | 2.54 | 2.54 | 3.81 | 3.81 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 4.2 | 5.0 | — | 2.46 | 2.46 | 3.69 | 4.10 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 4.2 | 7.1 | — | 2.33 | 2.33 | 3.50 | 4.54 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 5.0 | 5.0 | — | 2.38 | 2.38 | 3.97 | 3.97 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.42 | 4.30 | 2.44 | 15.19 | 19.08 | 3.71 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 5.0 | 7.1 | — | 2.26 | 2.26 | 3.77 | 4.40 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 3.5 | 3.5 | — | 2.67 | 3.34 | 3.34 | 3.34 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 3.5 | 4.2 | — | 2.54 | 3.18 | 3.18 | 3.81 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 3.5 | 5.0 | — | 2.46 | 3.07 | 3.07 | 4.10 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 3.5 | 7.1 | — | 2.33 | 2.92 | 2.92 | 4.54 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 4.2 | 4.2 | — | 2.42 | 3.02 | 3.63 | 3.63 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 4.2 | 5.0 | — | 2.34 | 2.93 | 3.52 | 3.91 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 4.2 | 7.1 | — | 2.23 | 2.79 | 3.35 | 4.34 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 3.5 | 3.5 | — | 3.18 | 3.18 | 3.18 | 3.18 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 3.5 | 4.2 | — | 3.02 | 3.02 | 3.02 | 3.63 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 3.5 | 5.0 | — | 2.93 | 2.93 | 2.93 | 3.91 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 3.5 | 7.1 | — | 2.79 | 2.79 | 2.79 | 4.34 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 4.2 | 4.2 | — | 2.89 | 2.89 | 3.46 | 3.46 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 4.2 | 5.0 | — | 2.80 | 2.80 | 3.36 | 3.74 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 4.2 | 7.1 | — | 2.67 | 2.67 | 3.20 | 4.15 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 5.0 | 5.0 | — | 2.72 | 2.72 | 3.63 | 3.63 | — | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| PENTA (1x5) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 2.28 | 2.28 | 2.28 | 2.28 | 3.57 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 2.13 | 2.13 | 2.13 | 2.13 | 4.17 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 4.2 | 2.00 | 2.00 | 2.00 | 2.00 | 4.70 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 5.0 | 1.92 | 1.92 | 1.92 | 1.92 | 5.01 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.0 | 7.1 | 1.80 | 1.80 | 1.80 | 1.80 | 5.49 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 2.5 | 2.07 | 2.07 | 2.07 | 3.24 | 3.24 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 3.5 | 1.95 | 1.95 | 1.95 | 3.05 | 3.81 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 4.2 | 1.84 | 1.84 | 1.84 | 2.88 | 4.31 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 5.0 | 1.77 | 1.77 | 1.77 | 2.77 | 4.62 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 2.5 | 7.1 | 1.67 | 1.67 | 1.67 | 2.61 | 5.08 | 4.20 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 3.5 | 1.84 | 1.84 | 1.84 | 3.59 | 3.59 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 4.2 | 1.74 | 1.74 | 1.74 | 3.40 | 4.08 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 5.0 | 1.68 | 1.68 | 1.68 | 3.28 | 4.38 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 3.5 | 7.1 | 1.59 | 1.59 | 1.59 | 3.11 | 4.83 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 4.2 | 1.65 | 1.65 | 1.65 | 3.87 | 3.87 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |

| Comb. | Combinations | | | | | Rated capacity Output/kW (Nom. cooling) | | | | | total cooling capacity(kW) | | | total power input (kW) | | | total current (A)@230V | | | EER (W/W) | ENERGY LABEL | SEER (W/W) | ENERGY LABEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit A | Unit B | Unit C | Unit D | Unit E | Unit A | Unit B | Unit C | Unit D | Unit E | min. data | rated data | max. data | min. data | rated data | max. Data | min. data | rated data | max. Data | rated capacity | | | |
| QUADRI(1x4) | 2.0 | 2.0 | 2.0 | 4.2 | 5.0 | 1.60 | 1.60 | 1.60 | 3.75 | 4.16 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.0 | 4.2 | 7.1 | 1.51 | 1.51 | 1.51 | 3.55 | 4.61 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 1.90 | 1.90 | 2.97 | 2.97 | 2.97 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 3.5 | 1.79 | 1.79 | 2.80 | 2.80 | 3.51 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 4.2 | 1.70 | 1.70 | 2.66 | 2.66 | 3.99 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 5.0 | 1.64 | 1.64 | 2.57 | 2.57 | 4.28 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 2.5 | 7.1 | 1.55 | 1.55 | 2.43 | 2.43 | 4.73 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 3.5 | 1.70 | 1.70 | 2.66 | 3.32 | 3.32 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 4.2 | 1.61 | 1.61 | 2.53 | 3.16 | 3.79 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 5.0 | 1.56 | 1.56 | 2.44 | 3.06 | 4.07 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 3.5 | 7.1 | 1.48 | 1.48 | 2.32 | 2.90 | 4.51 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 4.2 | 1.54 | 1.54 | 2.41 | 3.61 | 3.61 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 5.0 | 1.49 | 1.49 | 2.33 | 3.50 | 3.89 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 2.5 | 4.2 | 7.1 | 1.42 | 1.42 | 2.22 | 3.33 | 4.32 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 3.5 | 1.61 | 1.61 | 3.16 | 3.16 | 3.16 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 4.2 | 1.54 | 1.54 | 3.01 | 3.01 | 3.61 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 5.0 | 1.49 | 1.49 | 2.92 | 2.92 | 3.89 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.0 | 3.5 | 3.5 | 7.1 | 1.42 | 1.42 | 2.77 | 2.77 | 4.32 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 1.75 | 2.74 | 2.74 | 2.74 | 2.74 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 3.5 | 1.66 | 2.60 | 2.60 | 2.60 | 3.25 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 4.2 | 1.58 | 2.47 | 2.47 | 2.47 | 3.71 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 5.0 | 1.53 | 2.39 | 2.39 | 2.39 | 3.99 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 2.5 | 7.1 | 1.45 | 2.27 | 2.27 | 2.27 | 4.42 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 3.5 | 1.58 | 2.47 | 2.47 | 3.09 | 3.09 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 4.2 | 1.51 | 2.36 | 2.36 | 2.95 | 3.54 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 5.0 | 1.46 | 2.29 | 2.29 | 2.86 | 3.81 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 2.5 | 3.5 | 7.1 | 1.39 | 2.18 | 2.18 | 2.72 | 4.23 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 3.5 | 1.51 | 2.36 | 2.95 | 2.95 | 2.95 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 4.2 | 1.44 | 2.25 | 2.82 | 2.82 | 3.38 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 5.0 | 1.40 | 2.19 | 2.73 | 2.73 | 3.65 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.0 | 2.5 | 3.5 | 3.5 | 7.1 | 1.33 | 2.09 | 2.61 | 2.61 | 4.06 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 3.5 | 2.42 | 2.42 | 2.42 | 2.42 | 3.02 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 4.2 | 2.31 | 2.31 | 2.31 | 2.31 | 3.46 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 5.0 | 2.24 | 2.24 | 2.24 | 2.24 | 3.74 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 2.5 | 7.1 | 2.14 | 2.14 | 2.14 | 2.14 | 4.15 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 3.5 | 2.31 | 2.31 | 2.31 | 2.89 | 2.89 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 4.2 | 2.21 | 2.21 | 2.21 | 2.76 | 3.31 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 5.0 | 2.15 | 2.15 | 2.15 | 2.68 | 3.58 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 3.5 | 7.1 | 2.05 | 2.05 | 2.05 | 2.56 | 3.99 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| PENTA (1x5) | 2.5 | 2.5 | 2.5 | 4.2 | 4.2 | 2.12 | 2.12 | 2.12 | 3.18 | 3.18 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 4.2 | 5.0 | 2.06 | 2.06 | 2.06 | 3.09 | 3.43 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 2.5 | 5.0 | 5.0 | 2.01 | 2.01 | 2.01 | 3.34 | 3.34 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 3.5 | 2.21 | 2.21 | 2.76 | 2.76 | 2.76 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 4.2 | 2.12 | 2.12 | 2.65 | 2.65 | 3.18 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 3.5 | 3.5 | 5.0 | 2.06 | 2.06 | 2.57 | 2.57 | 3.43 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 4.2 | 4.2 | 4.2 | 1.95 | 1.95 | 2.93 | 2.93 | 2.93 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 2.5 | 4.2 | 4.2 | 5.0 | 1.91 | 1.91 | 2.86 | 2.86 | 3.18 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 2.12 | 2.65 | 2.65 | 2.65 | 2.65 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 4.2 | 2.03 | 2.54 | 2.54 | 2.54 | 3.05 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 2.5 | 3.5 | 3.5 | 3.5 | 5.0 | 1.98 | 2.47 | 2.47 | 2.47 | 3.30 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |
| | 3.5 | 3.5 | 3.5 | 3.5 | 4.2 | 2.44 | 2.44 | 2.44 | 2.44 | 2.93 | 4.40 | 12.70 | 14.30 | 0.55 | 3.40 | 4.30 | 2.44 | 15.10 | 19.08 | 3.73 | A | 4.05 | A+ |

## 8.8 Performance data

1U71S2SR2FA
heating

| Indoor Temperature (℃) | Outdoor Temperature(℃) | | | | | |
|---|---|---|---|---|---|---|
| | -15/- | | | --10/-11 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 5421 | 2241 | 2.42 | 6124 | 2469 | 2.48 |
| 18/12 | 5346 | 2286 | 2.34 | 6084 | 2475 | 2.46 |
| 20/14.5 | 5123 | 2315 | 2.21 | 6024 | 2487 | 2.42 |
| 21/15 | 5074 | 2326 | 2.18 | 5975 | 2498 | 2.39 |
| 22/16 | 5020 | 2346 | 2.14 | 5924 | 2521 | 2.35 |
| 24/17 | 4985 | 2369 | 2.10 | 5899 | 2541 | 2.32 |
| 26/18 | 4965 | 2389 | 2.08 | 5873 | 2594 | 2.26 |

| Indoor Temperature (℃) | Outdoor Temperature(℃) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 7103 | 2658 | 2.67 | 7440 | 2791 | 2.67 | 7608 | 2766 | 2.75 | 7821 | 2502 | 3.13 |
| 18/12 | 6993 | 2685 | 2.61 | 7355 | 2831 | 2.60 | 7496 | 2841 | 2.64 | 7721 | 2512 | 3.07 |
| 20/14.5 | 6857 | 2684 | 2.55 | 7177 | 2827 | 2.54 | 7345 | 2834 | 2.59 | 7635 | 2526 | 3.02 |
| 21/15 | 6800 | 2704 | 2.51 | 7073 | 2793 | 2.53 | 7276 | 2829 | 2.57 | 7561 | 2530 | 2.99 |
| 22/16 | 6642 | 2714 | 2.45 | 6987 | 2797 | 2.50 | 7217 | 2833 | 2.55 | 7490 | 2558 | 2.93 |
| 24/17 | 6554 | 2741 | 2.39 | 6880 | 2809 | 2.45 | 7177 | 2883 | 2.49 | 7353 | 2554 | 2.88 |
| 26/18 | 6500 | 2751 | 2.36 | 6784 | 2834 | 2.39 | 7076 | 2883 | 2.45 | 7270 | 2550 | 2.85 |

| Indoor Temp. (℃) | Outdoor Temperature(℃) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6/5 | | | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 7903 | 2516 | 3.14 | 7915 | 2524 | 3.14 | 8079 | 2569 | 3.15 | 7106 | 1927 | 3.69 | 7275 | 1971 | 3.69 |
| 18/12 | 7798 | 2520 | 3.09 | 7894 | 2583 | 3.06 | 7934 | 2548 | 3.11 | 6987 | 1942 | 3.60 | 7212 | 2067 | 3.49 |
| 20/14.5 | 7698 | 2506 | 3.07 | 7814 | 2587 | 3.02 | 7895 | 2574 | 3.07 | 6891 | 1937 | 3.56 | 7177 | 2182 | 3.29 |
| 21/15 | 7657 | 2501 | 3.06 | 7749 | 2602 | 2.98 | 7802 | 2582 | 3.02 | 6825 | 1960 | 3.48 | 7097 | 2277 | 3.12 |
| 22/16 | 7499 | 2484 | 3.02 | 7664 | 2627 | 2.92 | 7777 | 2639 | 2.95 | 6802 | 1962 | 3.47 | 6940 | 2365 | 2.93 |
| 24/17 | 7363 | 2475 | 2.98 | 7608 | 2628 | 2.89 | 7746 | 2675 | 2.90 | 6703 | 1970 | 3.40 | 6778 | 2423 | 2.80 |
| 26/18 | 7203 | 2500 | 2.88 | 7529 | 2626 | 2.87 | 7704 | 2691 | 2.86 | 6655 | 1979 | 3.36 | 6699 | 2458 | 2.72 |

1U71S2SR2FA
cooling

| Indoor Temp. (℃) | Outdoor Temperature(℃) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 6808 | 1756 | 3.88 | 7240 | 2604 | 2.78 | 7206 | 2427 | 2.97 | 6203 | 2159 | 2.87 | 6127 | 2421 | 2.53 |
| 20/14 | 7231 | 1851 | 3.91 | 7349 | 2570 | 2.86 | 7288 | 2690 | 2.71 | 7033 | 2634 | 2.67 | 6923 | 2714 | 2.55 |
| 22/16 | 7355 | 1864 | 3.95 | 7432 | 2590 | 2.87 | 7364 | 2678 | 2.75 | 7189 | 2567 | 2.80 | 7015 | 2532 | 2.77 |
| 25/18 | 7413 | 1855 | 4.00 | 7507 | 2528 | 2.97 | 7431 | 2461 | 3.02 | 7339 | 2602 | 2.82 | 7163 | 2522 | 2.84 |
| 27/19 | 7467 | 1819 | 4.11 | 7634 | 2456 | 3.11 | 7510 | 2463 | 3.05 | 7405 | 2607 | 2.84 | 7288 | 2496 | 2.92 |
| 30/22 | 7534 | 1809 | 4.17 | 7765 | 2451 | 3.17 | 7683 | 2532 | 3.03 | 7505 | 2588 | 2.90 | 7354 | 2545 | 2.89 |
| 32/23 | 7601 | 1819 | 4.18 | 7867 | 2459 | 3.20 | 7765 | 2547 | 3.05 | 7522 | 2568 | 2.93 | 7431 | 2528 | 2.94 |

1U90S2SS2FA
Heating

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -15 | | | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 5237 | 1796 | 2.92 | 8877 | 1814 | 4.89 | 8820 | 2596 | 3.40 | 9371 | 2748 | 3.41 | 10143 | 2901 | 3.50 |
| 18/12 | 5137 | 1852 | 2.77 | 8608 | 1871 | 4.60 | 8652 | 2677 | 3.23 | 9193 | 2834 | 3.24 | 9950 | 2992 | 3.33 |
| 20/14.5 | 4988 | 1870 | 2.67 | 8500 | 1890 | 4.50 | 8400 | 2704 | 3.11 | 8925 | 2863 | 3.12 | 9660 | 3022 | 3.20 |
| 21/15 | 4938 | 1889 | 2.61 | 8325 | 1908 | 4.36 | 8316 | 2731 | 3.05 | 8836 | 2892 | 3.06 | 9563 | 3052 | 3.13 |
| 22/16 | 4838 | 1908 | 2.54 | 8254 | 1927 | 4.28 | 8148 | 2758 | 2.95 | 8657 | 2920 | 2.96 | 9370 | 3082 | 3.04 |
| 24/17 | 4589 | 1945 | 2.36 | 8144 | 1965 | 4.14 | 7728 | 2812 | 2.75 | 8211 | 2977 | 2.76 | 8887 | 3143 | 2.83 |
| 26/18 | 4339 | 1983 | 2.19 | 8024 | 2003 | 4.01 | 7308 | 2866 | 2.55 | 7765 | 3035 | 2.56 | 8404 | 3203 | 2.62 |

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6/5 | | | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 10915 | 3023 | 3.61 | 11025 | 3054 | 3.61 | 11356 | 3115 | 3.65 | 11687 | 3176 | 3.68 | 12458 | 3298 | 3.78 |
| 18/12 | 10707 | 3118 | 3.43 | 10815 | 3149 | 3.43 | 11139 | 3212 | 3.47 | 11464 | 3275 | 3.50 | 12221 | 3401 | 3.59 |
| 20/14.5 | 10395 | 3149 | 3.30 | 10500 | 3181 | 3.30 | 10815 | 3245 | 3.33 | 11130 | 3308 | 3.36 | 11865 | 3435 | 3.45 |
| 21/15 | 10291 | 3181 | 3.24 | 10395 | 3213 | 3.24 | 10707 | 3277 | 3.27 | 11019 | 3341 | 3.30 | 11746 | 3470 | 3.39 |
| 22/16 | 10083 | 3212 | 3.14 | 10185 | 3245 | 3.14 | 10491 | 3310 | 3.17 | 10796 | 3374 | 3.20 | 11509 | 3504 | 3.28 |
| 24/17 | 9563 | 3275 | 2.92 | 9660 | 3308 | 2.92 | 9950 | 3374 | 2.95 | 10240 | 3441 | 2.98 | 10916 | 3573 | 3.06 |
| 26/18 | 9044 | 3338 | 2.71 | 9135 | 3372 | 2.71 | 9409 | 3439 | 2.74 | 9683 | 3507 | 2.76 | 10323 | 3642 | 2.83 |

1U90S2SS2FA
Cooling

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 9196 | 2509 | 3.67 | 8862 | 2591 | 3.42 | 8611 | 2672 | 3.22 | 8360 | 2727 | 3.07 | 8026 | 2781 | 2.89 |
| 20/14 | 9614 | 2565 | 3.75 | 9264 | 2649 | 3.50 | 9002 | 2732 | 3.29 | 8740 | 2788 | 3.13 | 8390 | 2844 | 2.95 |
| 22/16 | 9928 | 2678 | 3.71 | 9567 | 2765 | 3.46 | 9296 | 2853 | 3.26 | 9025 | 2911 | 3.10 | 8664 | 2969 | 2.92 |
| 25/18 | 10241 | 2734 | 3.75 | 9869 | 2823 | 3.50 | 9589 | 2913 | 3.29 | 9310 | 2972 | 3.13 | 8938 | 3032 | 2.95 |
| 27/19 | 10450 | 2819 | 3.71 | 10070 | 2911 | 3.46 | 9785 | 3003 | 3.26 | 9500 | 3064 | 3.10 | 9120 | 3125 | 2.92 |
| 30/22 | 10659 | 2932 | 3.64 | 10271 | 3027 | 3.39 | 9981 | 3123 | 3.20 | 9690 | 3187 | 3.04 | 9302 | 3250 | 2.86 |
| 32/23 | 10973 | 2988 | 3.67 | 10574 | 3085 | 3.43 | 10274 | 3183 | 3.23 | 9975 | 3248 | 3.07 | 9576 | 3313 | 2.89 |

Haier

## 1U105S2SS1FA/ 1U105S2SS2FA
## Heating

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -15 | | | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 7987 | 3077 | 2.60 | 9884 | 3711 | 2.66 | 10354 | 3897 | 2.66 | 10587 | 3862 | 2.74 | 10884 | 3493 | 3.12 |
| 18/12 | 7920 | 3101 | 2.55 | 9732 | 3748 | 2.60 | 10235 | 3953 | 2.59 | 10432 | 3966 | 2.63 | 10745 | 3507 | 3.06 |
| 20/14.5 | 7877 | 3248 | 2.43 | 9542 | 3748 | 2.55 | 9987 | 3947 | 2.53 | 10221 | 3957 | 2.58 | 10625 | 3526 | 3.01 |
| 21/15 | 7768 | 3288 | 2.36 | 9463 | 3776 | 2.51 | 9843 | 3900 | 2.52 | 10125 | 3950 | 2.56 | 10522 | 3532 | 2.98 |
| 22/16 | 7654 | 3257 | 2.35 | 9243 | 3789 | 2.44 | 9723 | 3906 | 2.49 | 10043 | 3956 | 2.54 | 10423 | 3572 | 2.92 |
| 24/17 | 7544 | 3302 | 2.28 | 9121 | 3828 | 2.38 | 9574 | 3922 | 2.44 | 9987 | 4025 | 2.48 | 10233 | 3566 | 2.87 |
| 26/18 | 7265 | 3357 | 2.16 | 9045 | 3841 | 2.35 | 9440 | 3958 | 2.39 | 9847 | 4025 | 2.45 | 10117 | 3560 | 2.84 |

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6/5 | | | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 10998 | 3513 | 3.13 | 11014 | 3524 | 3.13 | 11243 | 3587 | 3.13 | 9889 | 2690 | 3.68 | 10124 | 2752 | 3.68 |
| 18/12 | 10852 | 3519 | 3.08 | 10985 | 3607 | 3.05 | 11041 | 3558 | 3.10 | 9723 | 2711 | 3.59 | 10036 | 2886 | 3.48 |
| 20/14.5 | 10712 | 3500 | 3.06 | 10874 | 3613 | 3.01 | 10987 | 3594 | 3.06 | 9590 | 2704 | 3.55 | 9987 | 3047 | 3.28 |
| 21/15 | 10656 | 3491 | 3.05 | 10784 | 3633 | 2.97 | 10857 | 3604 | 3.01 | 9497 | 2736 | 3.47 | 9876 | 3179 | 3.11 |
| 22/16 | 10435 | 3468 | 3.01 | 10665 | 3668 | 2.91 | 10822 | 3685 | 2.94 | 9466 | 2739 | 3.46 | 9658 | 3302 | 2.92 |
| 24/17 | 10247 | 3455 | 2.97 | 10587 | 3670 | 2.88 | 10779 | 3734 | 2.89 | 9329 | 2750 | 3.39 | 9432 | 3383 | 2.79 |
| 26/18 | 10024 | 3491 | 2.87 | 10477 | 3667 | 2.86 | 10721 | 3757 | 2.85 | 9262 | 2763 | 3.35 | 9322 | 3432 | 2.72 |

1U105S2SS1FA/ 1U105S2SS2FA
Cooling

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 9049 | 2326 | 3.89 | 9623 | 3449 | 2.79 | 9577 | 3214 | 2.98 | 8245 | 2860 | 2.88 | 8144 | 3206 | 2.54 |
| 20/14 | 9610 | 2452 | 3.92 | 9768 | 3403 | 2.87 | 9687 | 3562 | 2.72 | 9348 | 3488 | 2.68 | 9201 | 3594 | 2.56 |
| 22/16 | 9776 | 2469 | 3.96 | 9878 | 3430 | 2.88 | 9788 | 3546 | 2.76 | 9555 | 3400 | 2.81 | 9324 | 3354 | 2.78 |
| 25/18 | 9852 | 2457 | 4.01 | 9978 | 3348 | 2.98 | 9877 | 3260 | 3.03 | 9754 | 3447 | 2.83 | 9521 | 3341 | 2.85 |
| 27/19 | 9924 | 2409 | 4.12 | 10147 | 3252 | 3.12 | 9982 | 3262 | 3.06 | 9842 | 3453 | 2.85 | 9687 | 3306 | 2.93 |
| 30/22 | 10014 | 2396 | 4.18 | 10321 | 3246 | 3.18 | 10212 | 3354 | 3.05 | 9975 | 3428 | 2.91 | 9774 | 3370 | 2.90 |
| 32/23 | 10102 | 2409 | 4.19 | 10456 | 3257 | 3.21 | 10321 | 3373 | 3.06 | 9998 | 3401 | 2.94 | 9877 | 3348 | 2.95 |

1U105S2SS1FB
Heating

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | -15 | | | -12.5 | | | -10 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 5658 | 2471 | 2.29 | 6088 | 2602 | 2.34 | 6737 | 2772 | 2.43 |
| 18/12 | 5489 | 2397 | 2.29 | 5926 | 2543 | 2.33 | 6578 | 2718 | 2.42 |
| 20/14.5 | 5321 | 2334 | 2.28 | 5768 | 2486 | 2.32 | 6419 | 2663 | 2.41 |
| 21/15 | 5219 | 2330 | 2.24 | 5636 | 2440 | 2.31 | 6265 | 2610 | 2.40 |
| 22/16 | 5133 | 2302 | 2.23 | 5508 | 2374 | 2.32 | 6119 | 2560 | 2.39 |
| 24/17 | 5055 | 2287 | 2.21 | 5402 | 2359 | 2.29 | 6007 | 2513 | 2.39 |
| 26/18 | 4979 | 2263 | 2.20 | 5304 | 2326 | 2.28 | 5909 | 2483 | 2.38 |

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | | 6/5 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 9871 | 3720 | 2.65 | 10350 | 3906 | 2.65 | 10584 | 3891 | 2.72 | 10880 | 3498 | 3.11 | 11002 | 3526 | 3.12 |
| 18/12 | 9719 | 3758 | 2.59 | 10220 | 3946 | 2.59 | 10435 | 3953 | 2.64 | 10742 | 3522 | 3.05 | 10862 | 3538 | 3.07 |
| 20/14.5 | 9529 | 3758 | 2.54 | 10000 | 3521 | 2.84 | 10220 | 3961 | 2.58 | 10628 | 3531 | 3.01 | 10786 | 3525 | 3.06 |
| 21/15 | 9450 | 3786 | 2.50 | 9852 | 3910 | 2.52 | 10125 | 3955 | 2.56 | 10520 | 3542 | 2.97 | 10650 | 3515 | 3.03 |
| 22/16 | 9230 | 3799 | 2.43 | 9702 | 3896 | 2.49 | 10042 | 3938 | 2.55 | 10425 | 3558 | 2.93 | 10430 | 3465 | 3.01 |
| 24/17 | 9108 | 3838 | 2.37 | 9578 | 3909 | 2.45 | 9992 | 4013 | 2.49 | 10256 | 3549 | 2.89 | 10248 | 3439 | 2.98 |
| 26/18 | 9032 | 3852 | 2.34 | 9446 | 3969 | 2.38 | 9832 | 3997 | 2.46 | 10118 | 3666 | 2.76 | 10018 | 3478 | 2.88 |

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 11010 | 3518 | 3.13 | 11240 | 3591 | 3.13 | 9890 | 2867 | 3.45 | 10125 | 2797 | 3.62 |
| 18/12 | 10980 | 3588 | 3.06 | 11050 | 3553 | 3.11 | 725 | 214 | 3.38 | 10035 | 2875 | 3.49 |
| 20/14.5 | 10870 | 3599 | 3.02 | 10980 | 3588 | 3.06 | 9595 | 2890 | 3.32 | 9986 | 3045 | 3.28 |
| 21/15 | 10785 | 3619 | 2.98 | 10860 | 3596 | 3.02 | 9470 | 2887 | 3.28 | 9870 | 3133 | 3.15 |
| 22/16 | 10668 | 3653 | 2.92 | 10821 | 3668 | 2.95 | 9465 | 2903 | 3.26 | 9655 | 3240 | 2.98 |
| 24/17 | 10580 | 3686 | 2.87 | 10796 | 3749 | 2.88 | 9325 | 2905 | 3.21 | 9435 | 3299 | 2.86 |
| 26/18 | 10470 | 3661 | 2.86 | 10625 | 3728 | 2.85 | 9260 | 2987 | 3.10 | 9328 | 3320 | 2.81 |

1U105S2SS1FB
Cooling

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 8943 | 2882 | 3.10 | 8660 | 2933 | 2.95 | 8430 | 2904 | 2.90 | 8245 | 2860 | 2.88 | 8122 | 2867 | 2.83 |
| 20/14 | 10046 | 3464 | 2.90 | 9763 | 3550 | 2.75 | 9533 | 3531 | 2.70 | 9348 | 3488 | 2.68 | 9225 | 3508 | 2.63 |
| 22/16 | 10253 | 3384 | 3.03 | 9970 | 3462 | 2.88 | 9740 | 3442 | 2.83 | 9555 | 3400 | 2.81 | 9432 | 3417 | 2.76 |
| 25/18 | 10452 | 3427 | 3.05 | 10169 | 3507 | 2.90 | 9939 | 3487 | 2.85 | 9754 | 3447 | 2.83 | 9631 | 3464 | 2.78 |
| 27/19 | 10540 | 3433 | 3.07 | 10257 | 3513 | 2.92 | 10027 | 3494 | 2.87 | 9842 | 3453 | 2.85 | 9719 | 3471 | 2.80 |
| 30/22 | 10673 | 3410 | 3.13 | 10390 | 3487 | 2.98 | 10160 | 3468 | 2.93 | 9975 | 3428 | 2.91 | 9852 | 3445 | 2.86 |
| 32/23 | 10696 | 3385 | 3.16 | 10413 | 3459 | 3.01 | 10183 | 3440 | 2.96 | 9998 | 3401 | 2.94 | 9875 | 3417 | 2.89 |

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Heating

| | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -15 | | | -12.5 | | | -10 | | | -6/-7 | | | -4/-5 | | | -1/-2 | | |
| Indoor temp. | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 7455 | 3765 | 1.98 | 8568 | 4042 | 2.12 | 9451 | 4145 | 2.28 | 10222 | 3704 | 2.76 | 10978 | 3799 | 2.89 | 11660 | 3900 | 2.99 |
| 18/12 | 7283 | 3660 | 1.99 | 8392 | 3977 | 2.11 | 9282 | 4107 | 2.26 | 10166 | 3765 | 2.70 | 10922 | 3859 | 2.83 | 11604 | 3947 | 2.94 |
| 20/14.5 | 7115 | 3593 | 1.98 | 8218 | 3951 | 2.08 | 9120 | 4053 | 2.25 | 10066 | 3857 | 2.61 | 10822 | 3950 | 2.74 | 11504 | 3994 | 2.88 |
| 21/15 | 6930 | 3518 | 1.97 | 8050 | 3870 | 2.08 | 8962 | 4055 | 2.21 | 10030 | 3873 | 2.59 | 10786 | 3951 | 2.73 | 11468 | 4038 | 2.84 |
| 22/16 | 6776 | 3457 | 1.96 | 7888 | 3829 | 2.06 | 8806 | 4021 | 2.19 | 9947 | 3855 | 2.58 | 10703 | 3949 | 2.71 | 11385 | 4052 | 2.81 |
| 24/17 | 6652 | 3411 | 1.95 | 7735 | 3773 | 2.05 | 8658 | 3972 | 2.18 | 9878 | 3920 | 2.52 | 10634 | 4013 | 2.65 | 11316 | 4085 | 2.77 |
| 26/18 | 6536 | 3387 | 1.93 | 7577 | 3770 | 2.01 | 8511 | 3940 | 2.16 | 9797 | 3919 | 2.50 | 10553 | 4013 | 2.63 | 11235 | 4115 | 2.73 |

| . | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1/0 | | | 6/5 | | | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| Indoor temp | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 12018 | 3877 | 3.10 | 12844 | 4077 | 3.15 | 12956 | 4074 | 3.18 | 13079 | 4000 | 3.27 | 13224 | 4172 | 3.17 | 13442 | 4436 | 3.03 |
| 18/12 | 11962 | 3922 | 3.05 | 12788 | 4099 | 3.12 | 12900 | 4095 | 3.15 | 13023 | 4007 | 3.25 | 13168 | 4180 | 3.15 | 13386 | 4447 | 3.01 |
| 20/14.5 | 11862 | 3967 | 2.99 | 12688 | 4093 | 3.10 | 12800 | 4089 | 3.13 | 12923 | 4001 | 3.23 | 13068 | 4175 | 3.13 | 13286 | 4443 | 2.99 |
| 21/15 | 11826 | 4009 | 2.95 | 12652 | 4135 | 3.06 | 12764 | 4131 | 3.09 | 12887 | 4040 | 3.19 | 13032 | 4217 | 3.09 | 13250 | 4492 | 2.95 |
| 22/16 | 11743 | 4022 | 2.92 | 12569 | 4176 | 3.01 | 12681 | 4171 | 3.04 | 12804 | 4078 | 3.14 | 12949 | 4260 | 3.04 | 13167 | 4540 | 2.90 |
| 24/17 | 11674 | 4053 | 2.88 | 12500 | 4195 | 2.98 | 12612 | 4190 | 3.01 | 12735 | 4095 | 3.11 | 12880 | 4279 | 3.01 | 13098 | 4564 | 2.87 |
| 26/18 | 11593 | 4096 | 2.83 | 12419 | 4239 | 2.93 | 12531 | 4233 | 2.96 | 12654 | 4135 | 3.06 | 12799 | 4324 | 2.96 | 13017 | 4616 | 2.82 |

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Cooling

| Outdoor temperature | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| Indoor temp. | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 11578 | 3759 | 3.08 | 11516 | 3813 | 3.02 | 11251 | 4033 | 2.79 | 10960 | 3942 | 2.78 | 10698 | 4212 | 2.54 |
| 20/14 | 11865 | 3755 | 3.16 | 11765 | 3820 | 3.08 | 11598 | 4127 | 2.81 | 11324 | 4225 | 2.68 | 10892 | 4255 | 2.56 |
| 22/16 | 12016 | 3779 | 3.18 | 11932 | 3837 | 3.11 | 11825 | 4092 | 2.89 | 11589 | 4124 | 2.81 | 11241 | 4357 | 2.58 |
| 25/18 | 12274 | 3800 | 3.23 | 12105 | 3855 | 3.14 | 11989 | 4106 | 2.92 | 11816 | 4175 | 2.83 | 11436 | 4365 | 2.62 |
| 27/19 | 12435 | 3745 | 3.32 | 12330 | 3902 | 3.16 | 12112 | 4064 | 2.98 | 12000 | 4152 | 2.89 | 11765 | 4440 | 2.65 |
| 30/22 | 12653 | 3743 | 3.38 | 12498 | 3930 | 3.18 | 12323 | 4054 | 3.04 | 12218 | 4142 | 2.95 | 11811 | 4358 | 2.71 |
| 32/23 | 12841 | 3755 | 3.42 | 12687 | 3952 | 3.21 | 12512 | 4089 | 3.06 | 12345 | 4171 | 2.96 | 12012 | 4321 | 2.78 |

1U125S2SN1FB / 1U125S2SN2FB
Heating

| Indoor temp. | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -15 | | | -12.5 | | | -10 | | | -6/-7 | | | -4/-5 | | | -1/-2 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 7492 | 3765 | 1.99 | 8594 | 4035 | 2.13 | 9490 | 4181 | 2.27 | 10280 | 3738 | 2.75 | 11015 | 3865 | 2.85 | 11694 | 3924 | 2.98 |
| 18/12 | 7316 | 3695 | 1.98 | 8418 | 3971 | 2.12 | 9322 | 4125 | 2.26 | 10225 | 3773 | 2.71 | 10958 | 3928 | 2.79 | 11630 | 3997 | 2.91 |
| 20/14.5 | 7154 | 3631 | 1.97 | 8236 | 3960 | 2.08 | 9160 | 4089 | 2.24 | 10120 | 3863 | 2.62 | 10860 | 3964 | 2.74 | 11538 | 4020 | 2.87 |
| 21/15 | 6965 | 3536 | 1.97 | 8067 | 3878 | 2.08 | 9000 | 4072 | 2.21 | 10088 | 3910 | 2.58 | 10821 | 3978 | 2.72 | 11500 | 4035 | 2.85 |
| 22/16 | 6812 | 3476 | 1.96 | 7908 | 3820 | 2.07 | 8847 | 4021 | 2.20 | 9996 | 3874 | 2.58 | 10735 | 3991 | 2.69 | 11422 | 4050 | 2.82 |
| 24/17 | 6685 | 3411 | 1.96 | 7762 | 3768 | 2.06 | 8695 | 4007 | 2.17 | 9934 | 3926 | 2.53 | 10672 | 4042 | 2.64 | 11351 | 4098 | 2.77 |
| 26/18 | 6571 | 3405 | 1.93 | 7603 | 3764 | 2.02 | 8550 | 3958 | 2.16 | 9855 | 3958 | 2.49 | 10581 | 4070 | 2.60 | 11273 | 4144 | 2.72 |

| Indoor temp. | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1/0 | | | 6/5 | | | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 12049 | 3912 | 3.08 | 12866 | 4072 | 3.16 | 13012 | 4105 | 3.17 | 13165 | 4038 | 3.26 | 13260 | 4157 | 3.19 | 13475 | 4447 | 3.03 |
| 18/12 | 11993 | 3945 | 3.04 | 12812 | 4093 | 3.13 | 12956 | 4113 | 3.15 | 13110 | 4046 | 3.24 | 13204 | 4178 | 3.16 | 13420 | 4458 | 3.01 |
| 20/14.5 | 11893 | 3978 | 2.99 | 12710 | 4113 | 3.09 | 12856 | 4147 | 3.10 | 13005 | 4051 | 3.21 | 13102 | 4186 | 3.13 | 13322 | 4470 | 2.98 |
| 21/15 | 11857 | 4006 | 2.96 | 12675 | 4156 | 3.05 | 12820 | 4162 | 3.08 | 12970 | 4066 | 3.19 | 13068 | 4229 | 3.09 | 13286 | 4504 | 2.95 |
| 22/16 | 11774 | 4032 | 2.92 | 12590 | 4183 | 3.01 | 12737 | 4190 | 3.04 | 12890 | 4105 | 3.14 | 12985 | 4257 | 3.05 | 13200 | 4536 | 2.91 |
| 24/17 | 11705 | 4064 | 2.88 | 12525 | 4217 | 2.97 | 12668 | 4209 | 3.01 | 12825 | 4111 | 3.12 | 12910 | 4289 | 3.01 | 13130 | 4559 | 2.88 |
| 26/18 | 11624 | 4107 | 2.83 | 12443 | 4261 | 2.92 | 12587 | 4252 | 2.96 | 12732 | 4174 | 3.05 | 12829 | 4334 | 2.96 | 13052 | 4612 | 2.83 |

1U125S2SN1FB / 1U125S2SN2FB
Cooling

| Indoor temp. | Outdoor temperature | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 11674 | 3790 | 3.08 | 11603 | 3829 | 3.03 | 11340 | 4050 | 2.80 | 11071 | 3997 | 2.77 | 10773 | 4208 | 2.56 |
| 20/14 | 11961 | 3773 | 3.17 | 11851 | 3835 | 3.09 | 11687 | 4159 | 2.81 | 11433 | 4083 | 2.80 | 10968 | 4268 | 2.57 |
| 22/16 | 12112 | 3797 | 3.19 | 12018 | 3852 | 3.12 | 11914 | 4137 | 2.88 | 11698 | 4178 | 2.80 | 11316 | 4352 | 2.60 |
| 25/18 | 12371 | 3806 | 3.25 | 12192 | 3870 | 3.15 | 12078 | 4136 | 2.92 | 11926 | 4214 | 2.83 | 11513 | 4378 | 2.63 |
| 27/19 | 12530 | 3763 | 3.33 | 12416 | 3917 | 3.17 | 12201 | 4094 | 2.98 | 12110 | 4190 | 2.89 | 11842 | 4435 | 2.67 |
| 30/22 | 12748 | 3760 | 3.39 | 12585 | 3945 | 3.19 | 12412 | 4083 | 3.04 | 12385 | 4198 | 2.95 | 11886 | 4370 | 2.72 |
| 32/23 | 12936 | 3782 | 3.42 | 12774 | 3979 | 3.21 | 12601 | 4118 | 3.06 | 12455 | 4208 | 2.96 | 12084 | 4331 | 2.79 |

1U140S2SP1FA / 1U140S2SP2FA
Heating

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | | 6/5 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 15054 | 5245 | 2.87 | 15310 | 5103 | 3.00 | 15532 | 5010 | 3.10 | 15746 | 4952 | 3.18 | 15902 | 4833 | 3.29 |
| 18/12 | 14974 | 5348 | 2.80 | 15230 | 5198 | 2.93 | 15453 | 5083 | 3.04 | 15664 | 5021 | 3.12 | 15820 | 4883 | 3.24 |
| 20/14.5 | 14859 | 5364 | 2.77 | 15115 | 5212 | 2.90 | 15338 | 5096 | 3.01 | 15550 | 5049 | 3.08 | 15712 | 4941 | 3.18 |
| 21/15 | 14761 | 5467 | 2.70 | 15017 | 5306 | 2.83 | 15230 | 5180 | 2.94 | 15442 | 5130 | 3.01 | 15601 | 5000 | 3.12 |
| 22/16 | 14509 | 5496 | 2.64 | 14764 | 5330 | 2.77 | 14987 | 5204 | 2.88 | 15189 | 5131 | 2.96 | 15345 | 4982 | 3.08 |
| 24/17 | 14332 | 5512 | 2.60 | 14592 | 5345 | 2.73 | 14814 | 5216 | 2.84 | 15028 | 5164 | 2.91 | 15184 | 4946 | 3.07 |
| 26/18 | 14075 | 5498 | 2.56 | 14328 | 5326 | 2.69 | 14552 | 5197 | 2.80 | 14766 | 5109 | 2.89 | 14922 | 4941 | 3.02 |

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 16020 | 4840 | 3.31 | 16110 | 4795 | 3.36 | 15896 | 4581 | 3.47 | 15583 | 4597 | 3.39 |
| 18/12 | 15912 | 4896 | 3.25 | 16023 | 4855 | 3.30 | 15812 | 4637 | 3.41 | 15454 | 4627 | 3.34 |
| 20/14.5 | 15800 | 4938 | 3.20 | 15889 | 4889 | 3.25 | 15676 | 4722 | 3.32 | 15318 | 4728 | 3.24 |
| 21/15 | 15681 | 5010 | 3.13 | 15771 | 4959 | 3.18 | 15560 | 4729 | 3.29 | 15202 | 4736 | 3.21 |
| 22/16 | 15432 | 4978 | 3.10 | 15521 | 4912 | 3.16 | 15313 | 4669 | 3.28 | 14956 | 4645 | 3.22 |
| 24/17 | 15284 | 4962 | 3.08 | 15372 | 4911 | 3.13 | 15162 | 4680 | 3.24 | 14805 | 4685 | 3.16 |
| 26/18 | 15010 | 4970 | 3.02 | 15098 | 4902 | 3.08 | 14888 | 4682 | 3.18 | 14532 | 4688 | 3.10 |

1U140S2SP1FA / 1U140S2SP2FA
Cooling

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 12887 | 4267 | 3.02 | 12785 | 4409 | 2.90 | 12662 | 4397 | 2.88 | 12451 | 4578 | 2.72 | 12216 | 4735 | 2.58 |
| 20/14 | 13122 | 4316 | 3.04 | 13020 | 4474 | 2.91 | 12898 | 4463 | 2.89 | 12645 | 4582 | 2.76 | 12410 | 4737 | 2.62 |
| 22/16 | 13246 | 4301 | 3.08 | 13144 | 4456 | 2.95 | 13022 | 4444 | 2.93 | 12889 | 4587 | 2.81 | 12654 | 4739 | 2.67 |
| 25/18 | 13442 | 4295 | 3.13 | 13340 | 4432 | 3.01 | 13216 | 4435 | 2.98 | 13012 | 4598 | 2.83 | 12778 | 4750 | 2.69 |
| 27/19 | 13637 | 4275 | 3.19 | 13535 | 4409 | 3.07 | 13412 | 4397 | 3.05 | 13200 | 4490 | 2.94 | 12965 | 4630 | 2.80 |
| 30/22 | 13811 | 4316 | 3.20 | 13709 | 4451 | 3.08 | 13586 | 4440 | 3.06 | 13321 | 4470 | 2.98 | 13086 | 4608 | 2.84 |
| 32/23 | 13924 | 4338 | 3.21 | 13822 | 4473 | 3.09 | 13699 | 4462 | 3.07 | 13588 | 4514 | 3.01 | 13352 | 4652 | 2.87 |

1U140S2SP1FB / 1U140S2SP2FB
Heating

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | | 6/5 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 14840 | 5244 | 2.83 | 15089 | 5063 | 2.98 | 15334 | 4979 | 3.08 | 15549 | 4921 | 3.16 | 15690 | 4798 | 3.27 |
| 18/12 | 14765 | 5350 | 2.76 | 14989 | 5151 | 2.91 | 15256 | 5035 | 3.03 | 15436 | 4979 | 3.10 | 15609 | 4848 | 3.22 |
| 20/14.5 | 14648 | 5385 | 2.72 | 14903 | 5157 | 2.89 | 15142 | 5014 | 3.02 | 15364 | 5021 | 3.06 | 15503 | 4906 | 3.16 |
| 21/15 | 14549 | 5490 | 2.65 | 14810 | 5215 | 2.84 | 15030 | 5095 | 2.95 | 15256 | 5085 | 3.00 | 15390 | 4965 | 3.10 |
| 22/16 | 14298 | 5520 | 2.59 | 14621 | 5317 | 2.75 | 14788 | 5047 | 2.93 | 15005 | 5104 | 2.94 | 15135 | 4946 | 3.06 |
| 24/17 | 14120 | 5516 | 2.56 | 14356 | 5278 | 2.72 | 14617 | 5023 | 2.91 | 14841 | 5153 | 2.88 | 14993 | 4916 | 3.05 |
| 26/18 | 13863 | 5479 | 2.53 | 14039 | 5238 | 2.68 | 14356 | 5146 | 2.79 | 14547 | 5069 | 2.87 | 14814 | 4955 | 2.99 |

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 15815 | 4822 | 3.28 | 15915 | 4794 | 3.32 | 15698 | 4577 | 3.43 | 15358 | 4571 | 3.36 |
| 18/12 | 15706 | 4878 | 3.22 | 15825 | 4854 | 3.26 | 15614 | 4620 | 3.38 | 15230 | 4587 | 3.32 |
| 20/14.5 | 15595 | 4920 | 3.17 | 15692 | 4873 | 3.22 | 15478 | 4719 | 3.28 | 15094 | 4688 | 3.22 |
| 21/15 | 15476 | 4976 | 3.11 | 15574 | 4944 | 3.15 | 15362 | 4712 | 3.26 | 14976 | 4709 | 3.18 |
| 22/16 | 15228 | 4960 | 3.07 | 15356 | 4890 | 3.14 | 15115 | 4665 | 3.24 | 14732 | 4618 | 3.19 |
| 24/17 | 15079 | 4928 | 3.06 | 15178 | 4896 | 3.10 | 14964 | 4647 | 3.22 | 14581 | 4658 | 3.13 |
| 26/18 | 14812 | 4954 | 2.99 | 14921 | 4876 | 3.06 | 14691 | 4664 | 3.15 | 14308 | 4661 | 3.07 |

1U140S2SP1FB / 1U140S2SP2FB
Cooling

| Indoor temper -ature(°C) | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 12656 | 4233 | 2.99 | 12600 | 4375 | 2.88 | 12562 | 4377 | 2.87 | 12330 | 4567 | 2.70 | 12128 | 4719 | 2.57 |
| 20/14 | 12890 | 4282 | 3.01 | 12835 | 4426 | 2.90 | 12783 | 4439 | 2.88 | 12535 | 4558 | 2.75 | 12321 | 4685 | 2.63 |
| 22/16 | 13015 | 4267 | 3.05 | 12958 | 4438 | 2.92 | 12921 | 4425 | 2.92 | 12768 | 4560 | 2.80 | 12564 | 4693 | 2.68 |
| 25/18 | 13210 | 4261 | 3.10 | 13155 | 4414 | 2.98 | 13102 | 4426 | 2.96 | 12892 | 4572 | 2.82 | 12689 | 4770 | 2.66 |
| 27/19 | 13405 | 4256 | 3.15 | 13350 | 4377 | 3.05 | 13305 | 4391 | 3.03 | 13079 | 4479 | 2.92 | 12876 | 4665 | 2.76 |
| 30/22 | 13580 | 4284 | 3.17 | 13526 | 4449 | 3.04 | 13464 | 4458 | 3.02 | 13200 | 4490 | 2.94 | 12998 | 4626 | 2.81 |
| 32/23 | 13689 | 4291 | 3.19 | 13673 | 4468 | 3.06 | 13587 | 4455 | 3.05 | 13466 | 4504 | 2.99 | 13262 | 4653 | 2.85 |

1U140S2SN1FA/B
Heating

| Indoor temp. | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -15 | | | -10 | | | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 7481 | 3079 | 2.43 | 8877 | 3111 | 2.85 | 12600 | 4451 | 2.83 | 13388 | 4713 | 2.84 | 14490 | 4975 | 2.91 | 14963 | 5132 | 2.92 |
| 18/12 | 7339 | 3175 | 2.31 | 8608 | 3208 | 2.68 | 12360 | 4590 | 2.69 | 13133 | 4860 | 2.70 | 14214 | 5130 | 2.77 | 14678 | 5292 | 2.77 |
| 20/14.5 | 7125 | 3208 | 2.22 | 8500 | 3240 | 2.62 | 12000 | 4637 | 2.59 | 12750 | 4910 | 2.60 | 13800 | 5182 | 2.66 | 14250 | 5346 | 2.67 |
| 21/15 | 7054 | 3240 | 2.18 | 8325 | 3273 | 2.54 | 11880 | 4683 | 2.54 | 12623 | 4959 | 2.55 | 13662 | 5234 | 2.61 | 14108 | 5399 | 2.61 |
| 22/16 | 6911 | 3272 | 2.11 | 8254 | 3305 | 2.50 | 11640 | 4729 | 2.46 | 12368 | 5008 | 2.47 | 13386 | 5286 | 2.53 | 13823 | 5453 | 2.53 |
| 24/17 | 6555 | 3336 | 1.97 | 8144 | 3370 | 2.42 | 11040 | 4822 | 2.29 | 11730 | 5106 | 2.30 | 12696 | 5390 | 2.36 | 13110 | 5560 | 2.36 |
| 26/18 | 6199 | 3400 | 1.82 | 8024 | 3435 | 2.34 | 10440 | 4915 | 2.12 | 11093 | 5204 | 2.13 | 12006 | 5493 | 2.19 | 12398 | 5667 | 2.19 |

| Indoor temp. | Outdoor temperature | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6/5 | | | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 15593 | 5184 | 3.01 | 15750 | 5237 | 3.01 | 16223 | 5342 | 3.04 | 16695 | 5446 | 3.07 | 17798 | 5656 | 3.15 |
| 18/12 | 15296 | 5346 | 2.86 | 15450 | 5400 | 2.86 | 15914 | 5508 | 2.89 | 16377 | 5616 | 2.92 | 17459 | 5832 | 2.99 |
| 20/14.5 | 14850 | 5400 | 2.75 | 15000 | 5455 | 2.75 | 15450 | 5564 | 2.78 | 15900 | 5673 | 2.80 | 16950 | 5891 | 2.88 |
| 21/15 | 14702 | 5454 | 2.70 | 14850 | 5510 | 2.70 | 15296 | 5620 | 2.72 | 15741 | 5730 | 2.75 | 16781 | 5950 | 2.82 |
| 22/16 | 14405 | 5508 | 2.61 | 14550 | 5564 | 2.61 | 14987 | 5675 | 2.64 | 15423 | 5787 | 2.67 | 16442 | 6009 | 2.74 |
| 24/17 | 13662 | 5616 | 2.43 | 13800 | 5673 | 2.43 | 14214 | 5787 | 2.46 | 14628 | 5900 | 2.48 | 15594 | 6127 | 2.55 |
| 26/18 | 12920 | 5724 | 2.26 | 13050 | 5782 | 2.26 | 13442 | 5898 | 2.28 | 13833 | 6014 | 2.30 | 14747 | 6245 | 2.36 |

1U140S2SN1FA/B
Cooling

| Indoor temp. | Outdoor temperature | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | | 40/26 | | | 40/26 | | | 40/26 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 12971 | 4770 | 2.72 | 12500 | 4926 | 2.54 | 12146 | 5081 | 2.39 | 11792 | 5185 | 2.27 | 11320 | 5289 | 2.14 | 10377 | 5600 | 1.85 | 9434 | 5704 | 1.65 |
| 20/14 | 13561 | 4878 | 2.78 | 13068 | 5037 | 2.59 | 12698 | 5196 | 2.44 | 12328 | 5302 | 2.33 | 11835 | 5408 | 2.19 | 10849 | 5726 | 1.89 | 9862 | 5832 | 1.69 |
| 22/16 | 14003 | 5092 | 2.75 | 13494 | 5258 | 2.57 | 13112 | 5424 | 2.42 | 12730 | 5535 | 2.30 | 12221 | 5645 | 2.16 | 11202 | 5977 | 1.87 | 10184 | 6088 | 1.67 |
| 25/18 | 14445 | 5199 | 2.78 | 13920 | 5369 | 2.59 | 13526 | 5538 | 2.44 | 13132 | 5651 | 2.32 | 12607 | 5764 | 2.19 | 11556 | 6103 | 1.89 | 10506 | 6216 | 1.69 |
| 27/19 | 14740 | 5360 | 2.75 | 14204 | 5535 | 2.57 | 13802 | 5709 | 2.42 | 13400 | 5826 | 2.30 | 12864 | 5943 | 2.16 | 11792 | 6292 | 1.87 | 10720 | 6409 | 1.67 |
| 30/22 | 15035 | 5574 | 2.70 | 14488 | 5756 | 2.52 | 14078 | 5938 | 2.37 | 13668 | 6059 | 2.26 | 13121 | 6180 | 2.12 | 12028 | 6544 | 1.84 | 10934 | 6665 | 1.64 |
| 32/23 | 15477 | 5682 | 2.72 | 14914 | 5867 | 2.54 | 14492 | 6052 | 2.39 | 14070 | 6176 | 2.28 | 13507 | 6299 | 2.14 | 12382 | 6670 | 1.86 | 11256 | 6793 | 1.66 |

## 1U160S2SP1FB Heating

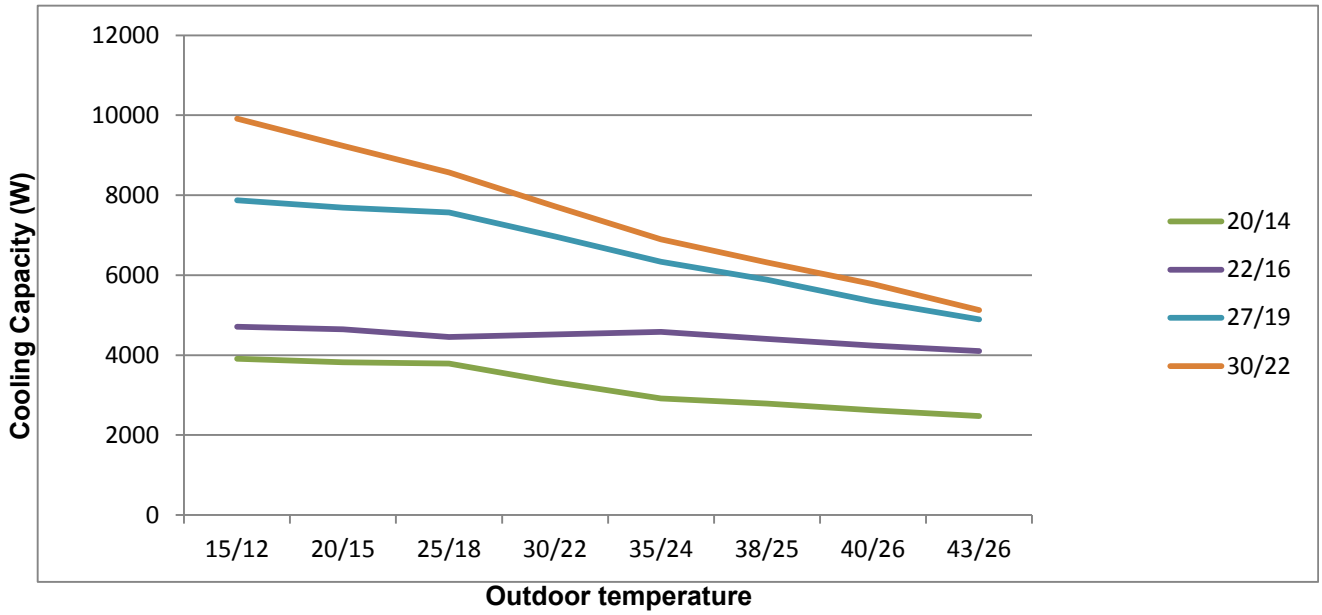
| Indoor temperature | Outdoor temperature(OC) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -15/ | | | -10/ | | | -6/-7 | | | -4/-5 | | | -1/-2 | | | 1/0 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 10710 | 4391 | 2.44 | 12495 | 4160 | 3.00 | 14280 | 3929 | 3.63 | 15173 | 4160 | 3.65 | 16422 | 4391 | 3.74 | 16958 | 4530 | 3.74 |
| 18/12 | 10506 | 4529 | 2.32 | 12257 | 4290 | 2.86 | 14008 | 4052 | 3.46 | 14884 | 4290 | 3.47 | 16109 | 4529 | 3.56 | 16635 | 4672 | 3.56 |
| 20/14.5 | 10200 | 4574 | 2.23 | 11900 | 4334 | 2.75 | 13600 | 4093 | 3.32 | 14450 | 4334 | 3.33 | 15640 | 4574 | 3.42 | 16150 | 4719 | 3.42 |
| 21/15 | 10098 | 4620 | 2.19 | 11781 | 4377 | 2.69 | 13464 | 4134 | 3.26 | 14306 | 4377 | 3.27 | 15484 | 4620 | 3.35 | 15989 | 4766 | 3.35 |
| 22/16 | 9894 | 4666 | 2.12 | 11543 | 4420 | 2.61 | 13192 | 4175 | 3.16 | 14017 | 4420 | 3.17 | 15171 | 4666 | 3.25 | 15666 | 4813 | 3.25 |
| 24/17 | 9384 | 4757 | 1.97 | 10948 | 4507 | 2.43 | 12512 | 4256 | 2.94 | 13294 | 4507 | 2.95 | 14389 | 4757 | 3.02 | 14858 | 4907 | 3.03 |
| 26/18 | 8874 | 4849 | 1.83 | 10353 | 4594 | 2.25 | 11832 | 4338 | 2.73 | 12572 | 4594 | 2.74 | 13607 | 4849 | 2.81 | 14051 | 5002 | 2.81 |

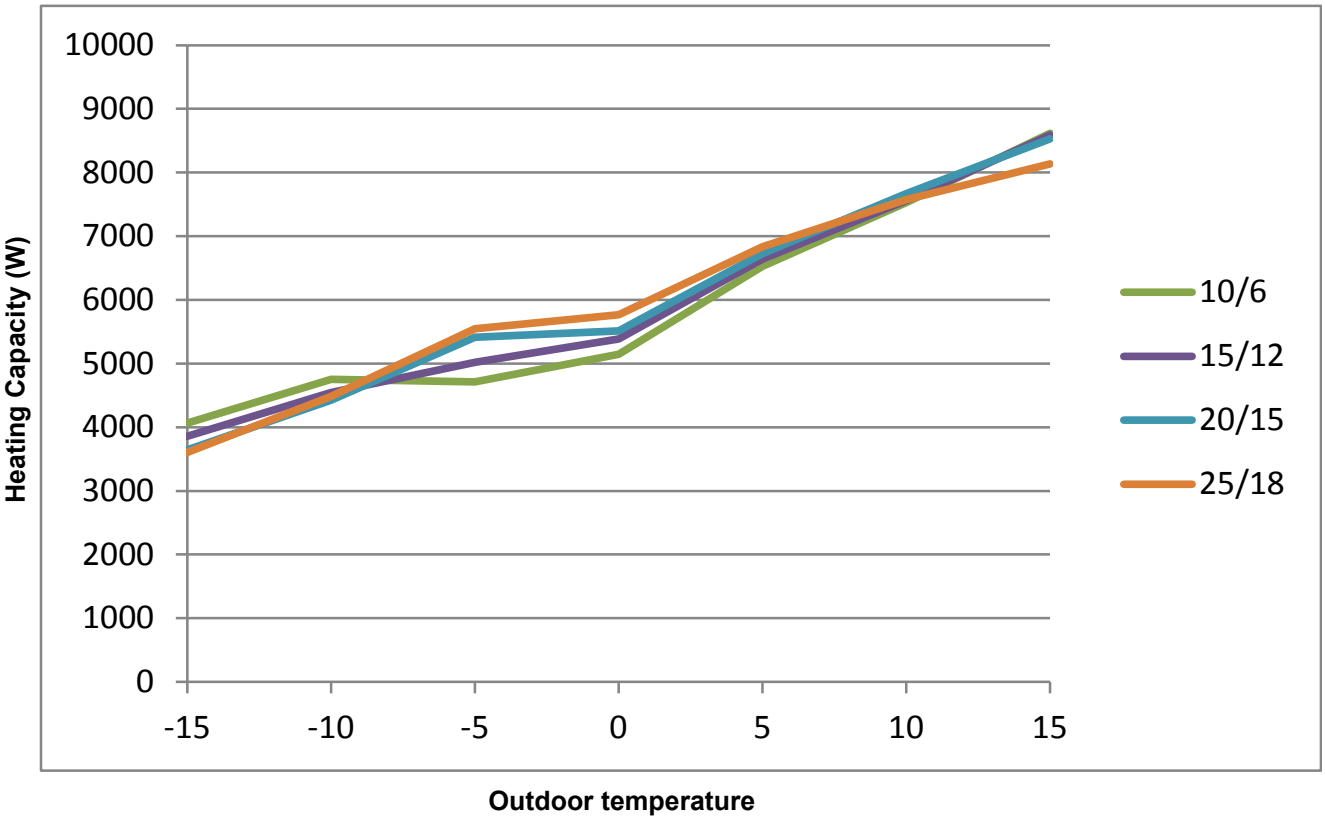
| Indoor temp. | Outdoor temperature(OC) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6/5 | | | 7/6 | | | 12/10 | | | 16/15 | | | 27/18 | | |
| | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP | heating capacity | power input | COP |
| 16/10 | 17672 | 4576 | 3.86 | 17850 | 4622 | 3.86 | 18386 | 4715 | 3.90 | 18921 | 4807 | 3.94 | 20171 | 4992 | 4.04 |
| 18/12 | 17335 | 4719 | 3.67 | 17510 | 4767 | 3.67 | 18035 | 4862 | 3.71 | 18561 | 4958 | 3.74 | 19786 | 5148 | 3.84 |
| 20/14.5 | 16830 | 4767 | 3.53 | 17000 | 4815 | 3.53 | 17510 | 4911 | 3.57 | 18020 | 5008 | 3.60 | 19210 | 5200 | 3.69 |
| 21/15 | 16662 | 4815 | 3.46 | 16830 | 4863 | 3.46 | 17335 | 4960 | 3.49 | 17840 | 5058 | 3.53 | 19018 | 5252 | 3.62 |
| 22/16 | 16325 | 4862 | 3.36 | 16490 | 4911 | 3.36 | 16985 | 5010 | 3.39 | 17479 | 5108 | 3.42 | 18634 | 5304 | 3.51 |
| 24/17 | 15484 | 4958 | 3.12 | 15640 | 5008 | 3.12 | 16109 | 5108 | 3.15 | 16578 | 5208 | 3.18 | 17673 | 5408 | 3.27 |
| 26/18 | 14642 | 5053 | 2.90 | 14790 | 5104 | 2.90 | 15234 | 5206 | 2.93 | 15677 | 5308 | 2.95 | 16713 | 5512 | 3.03 |

| 1U160S2SP1FB Cooling | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Indoor temp. | Outdoor temperature | | | | | | | | | | | | | | |
| | -10/ | | | 20/15 | | | 25/18 | | | 32/23 | | | 35/24 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 21120 | 3999 | 5.28 | 15488 | 4487 | 3.45 | 14925 | 4633 | 3.22 | 14502 | 4780 | 3.03 | 14080 | 4877 | 2.89 |
| 20/14 | 22080 | 4089 | 5.40 | 16192 | 4588 | 3.53 | 15603 | 4737 | 3.29 | 15162 | 4887 | 3.10 | 14720 | 4987 | 2.95 |
| 22/16 | 22800 | 4269 | 5.34 | 16720 | 4790 | 3.49 | 16112 | 4946 | 3.26 | 15656 | 5102 | 3.07 | 15200 | 5206 | 2.92 |
| 25/18 | 23520 | 4359 | 5.40 | 17248 | 4890 | 3.53 | 16621 | 5050 | 3.29 | 16150 | 5209 | 3.10 | 15680 | 5316 | 2.95 |
| 27/19 | 24000 | 4494 | 5.34 | 17600 | 5042 | 3.49 | 16960 | 5206 | 3.26 | 16480 | 5370 | 3.07 | 16000 | 5480 | 2.92 |
| 30/22 | 24480 | 4673 | 5.24 | 17952 | 5243 | 3.42 | 17299 | 5414 | 3.20 | 16810 | 5585 | 3.01 | 16320 | 5699 | 2.86 |
| 32/23 | 25200 | 4763 | 5.29 | 18480 | 5344 | 3.46 | 17808 | 5518 | 3.23 | 17304 | 5693 | 3.04 | 16800 | 5809 | 2.89 |

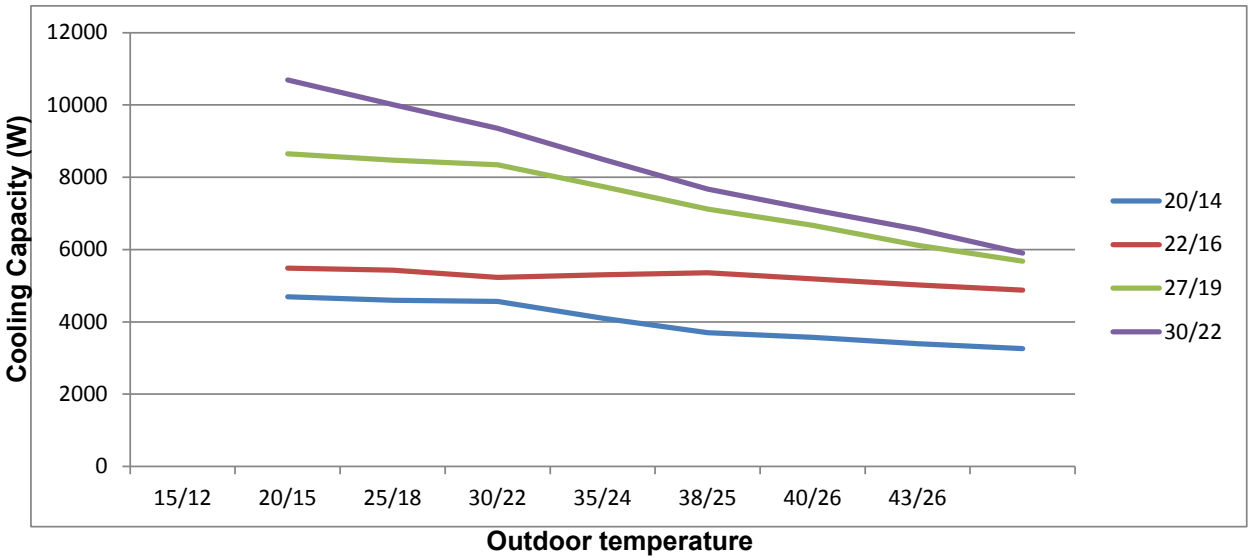
| 1U160S2SP1FB Cooling | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Indoor temp. | Outdoor temperature | | | | | | | | |
| | 38/26 | | | 40/28 | | | 43/29 | | |
| | cooling capacity | power input | EER | cooling capacity | power input | EER | cooling capacity | power input | EER |
| 18/12 | 13517 | 4975 | 2.72 | 12390 | 5267 | 2.35 | 11264 | 5365 | 2.10 |
| 20/14 | 14131 | 5087 | 2.78 | 12954 | 5386 | 2.41 | 11776 | 5485 | 2.15 |
| 22/16 | 14592 | 5310 | 2.75 | 13376 | 5622 | 2.38 | 12160 | 5727 | 2.12 |
| 25/18 | 15053 | 5422 | 2.78 | 13798 | 5741 | 2.40 | 12544 | 5847 | 2.15 |
| 27/19 | 15360 | 5590 | 2.75 | 14080 | 5918 | 2.38 | 12800 | 6028 | 2.12 |
| 30/22 | 15667 | 5813 | 2.70 | 14362 | 6155 | 2.33 | 13056 | 6269 | 2.08 |
| 32/23 | 16128 | 5925 | 2.72 | 14784 | 6274 | 2.36 | 13440 | 6390 | 2.10 |

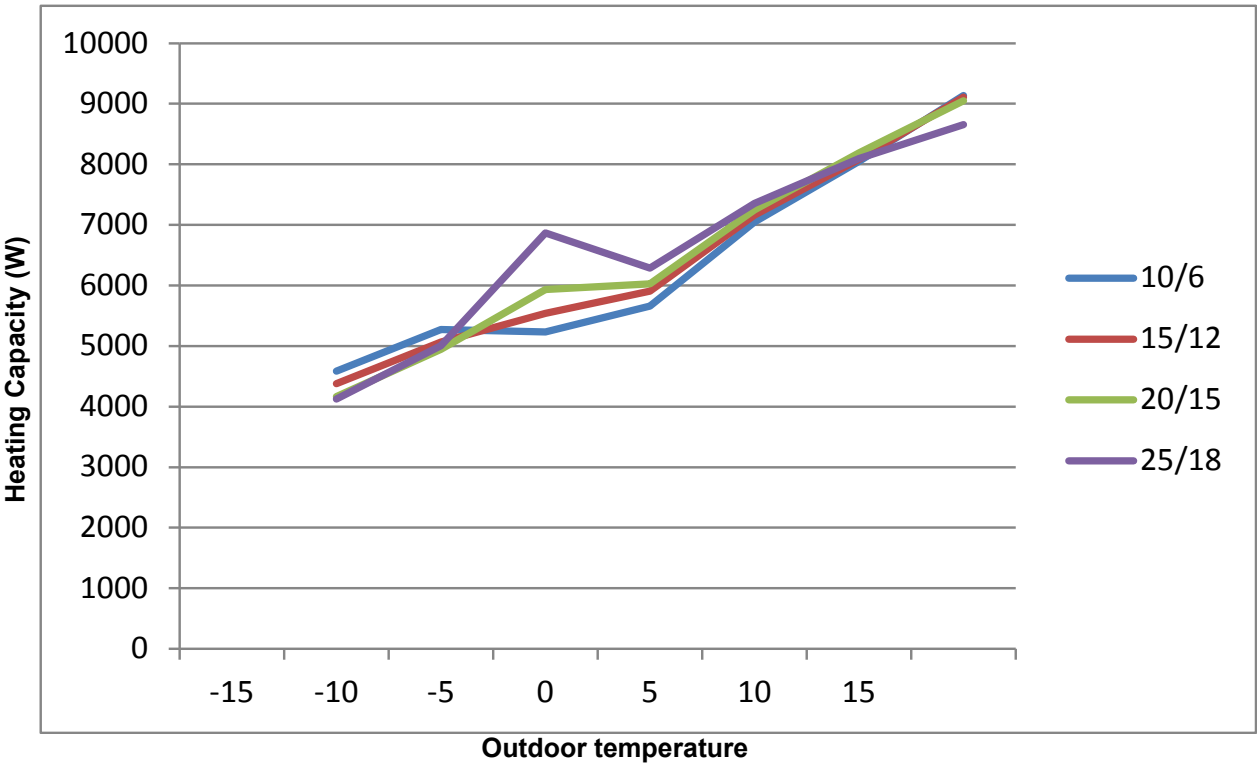
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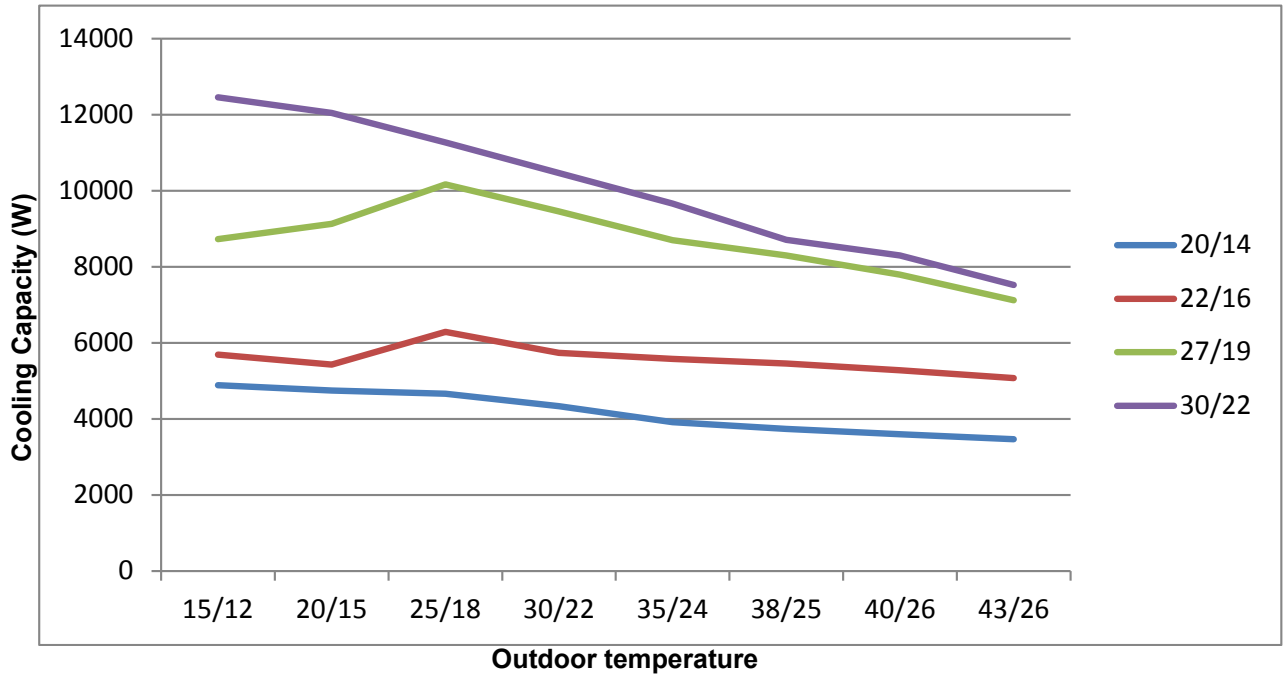



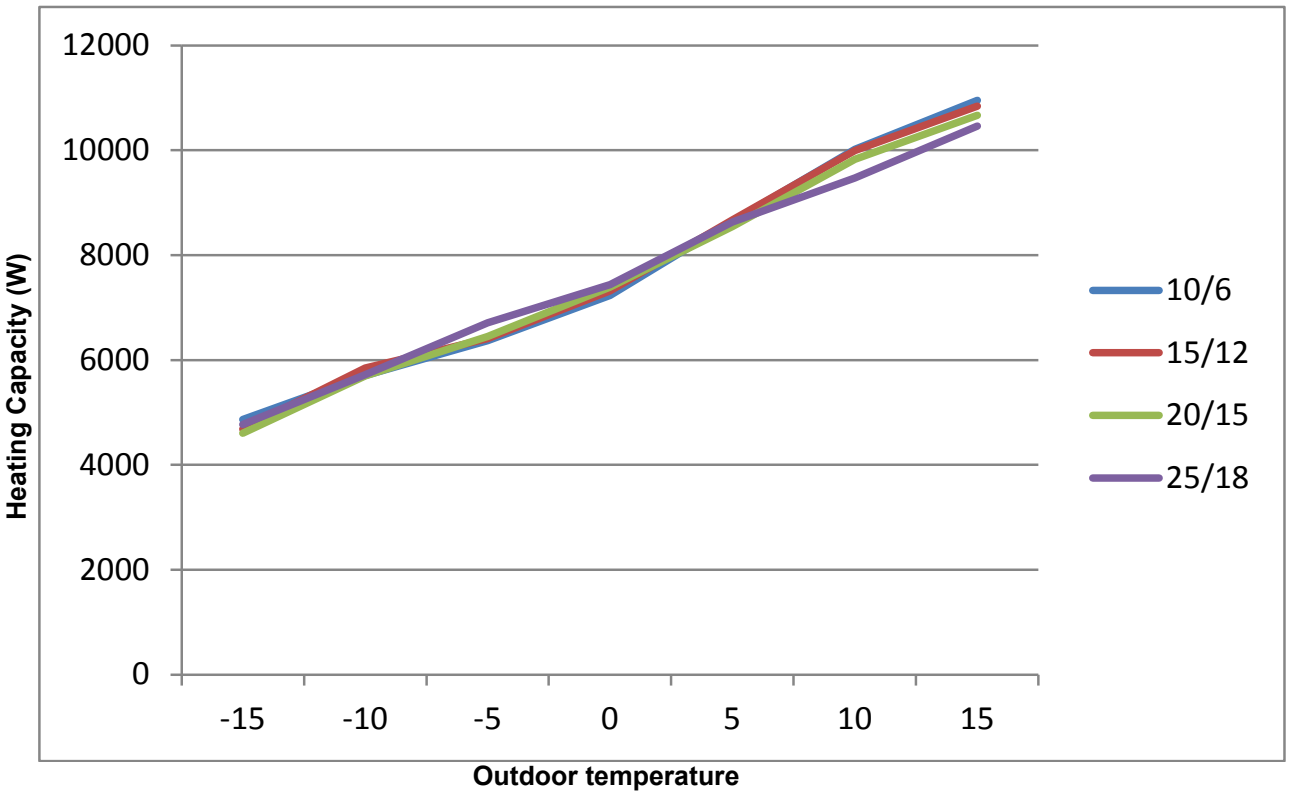
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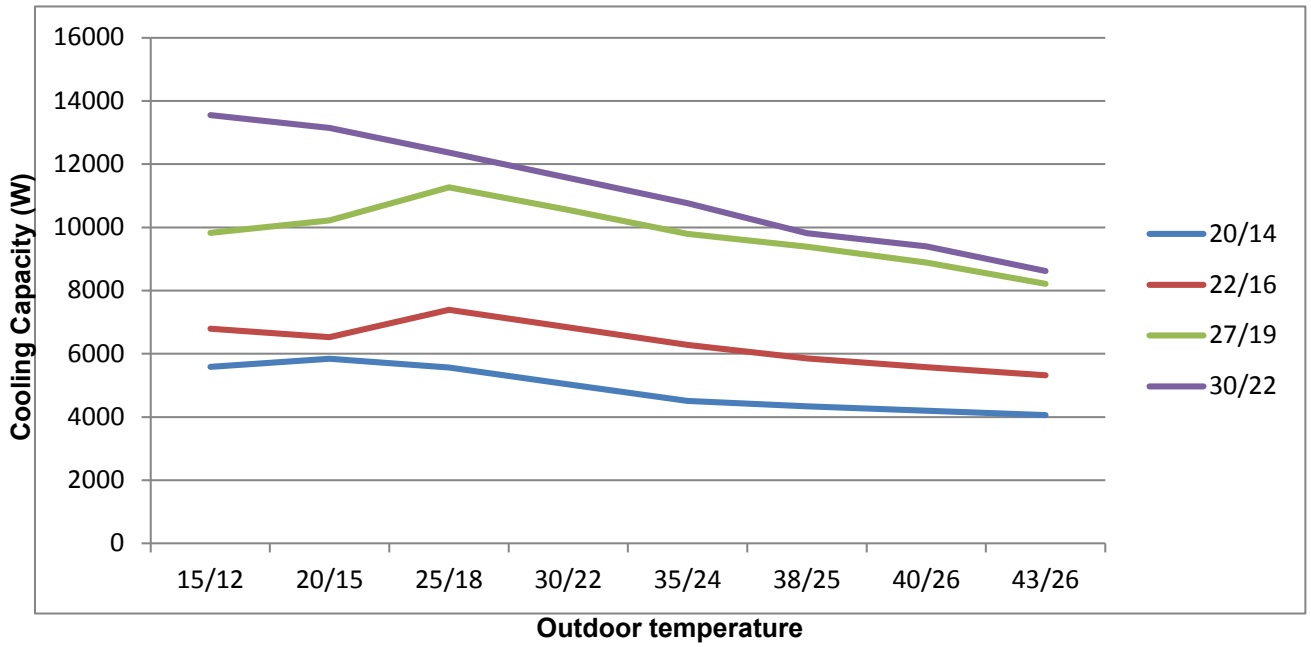



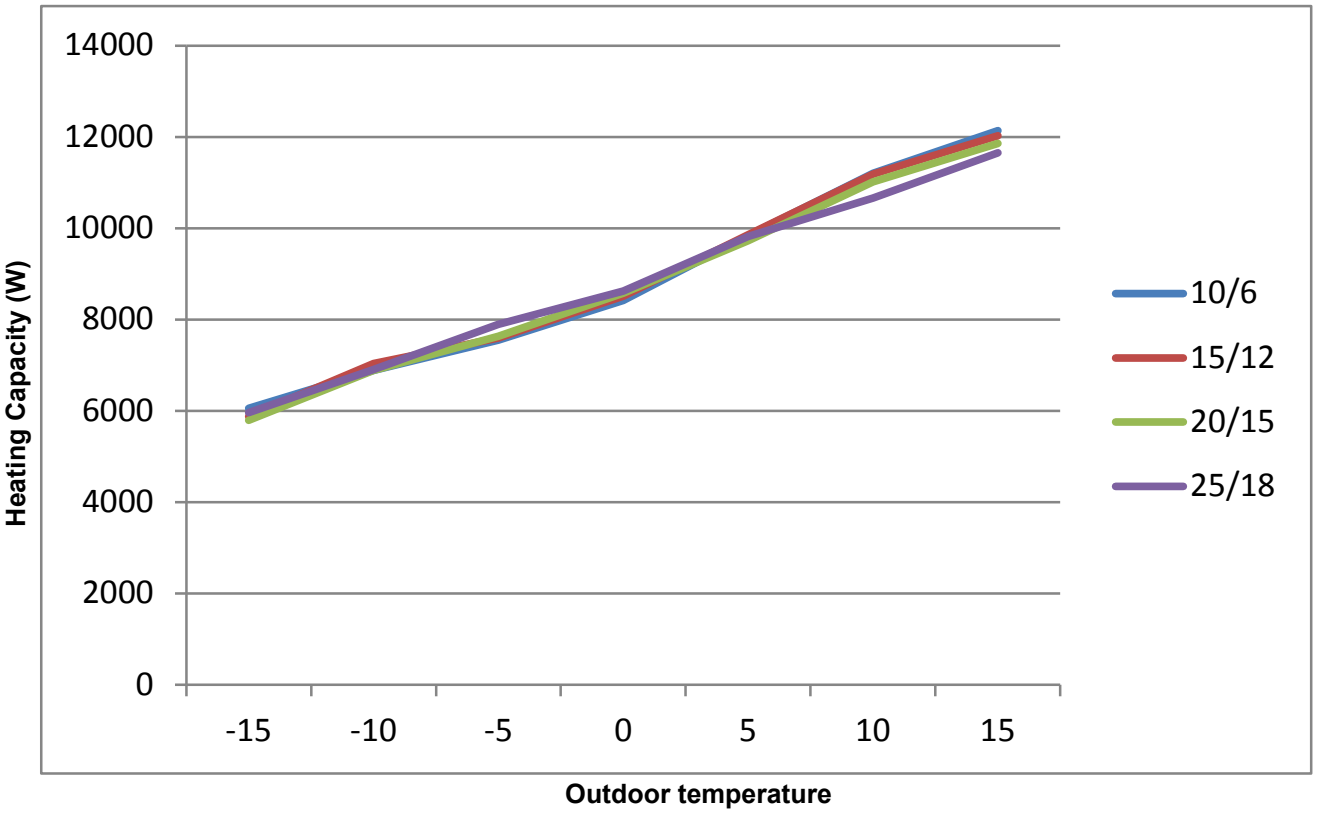
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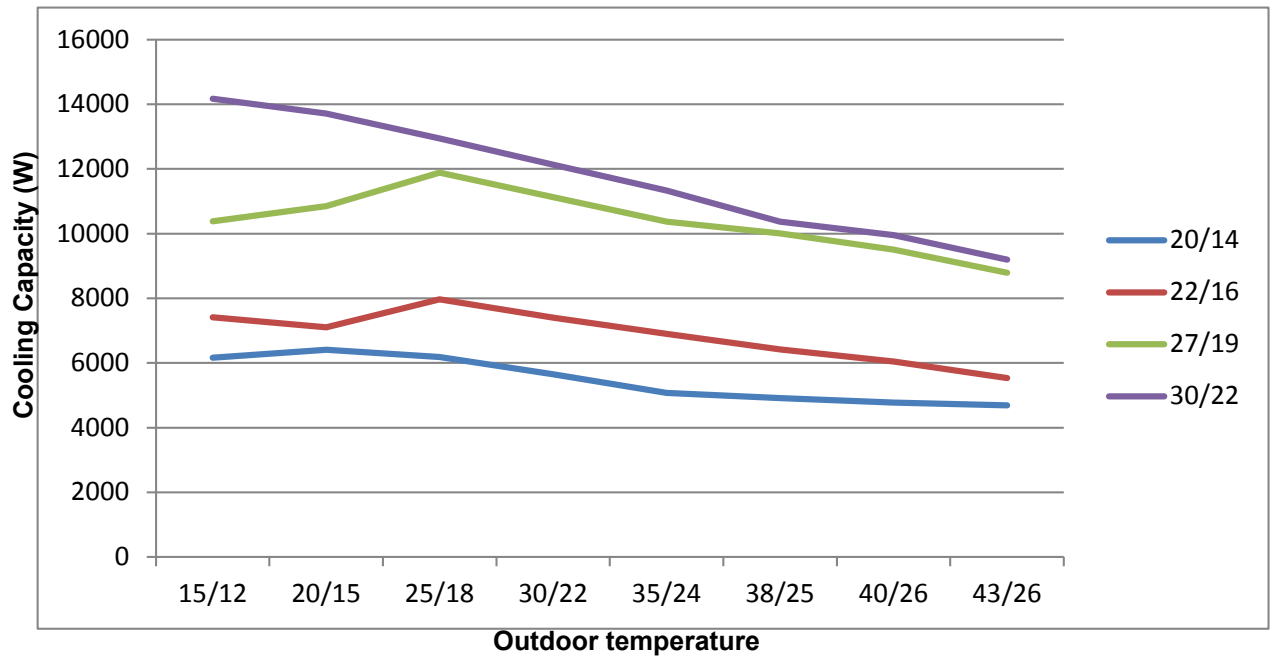



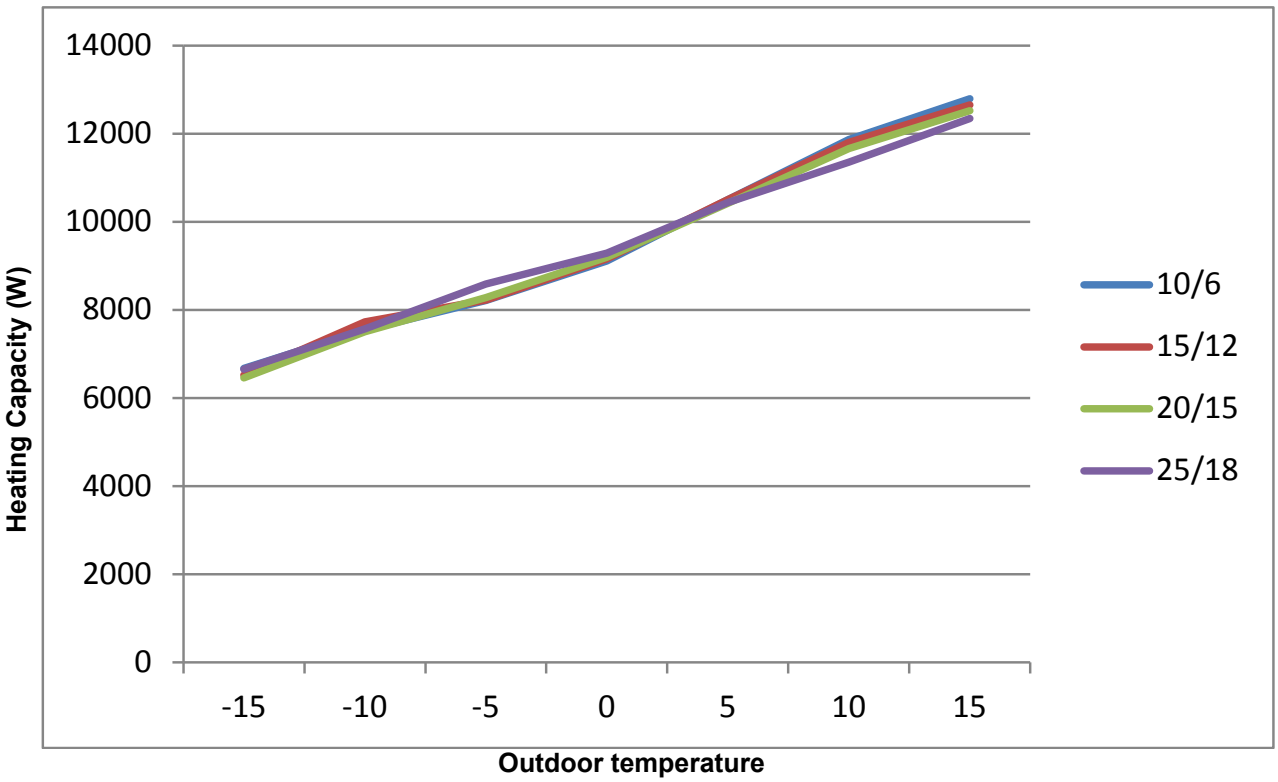
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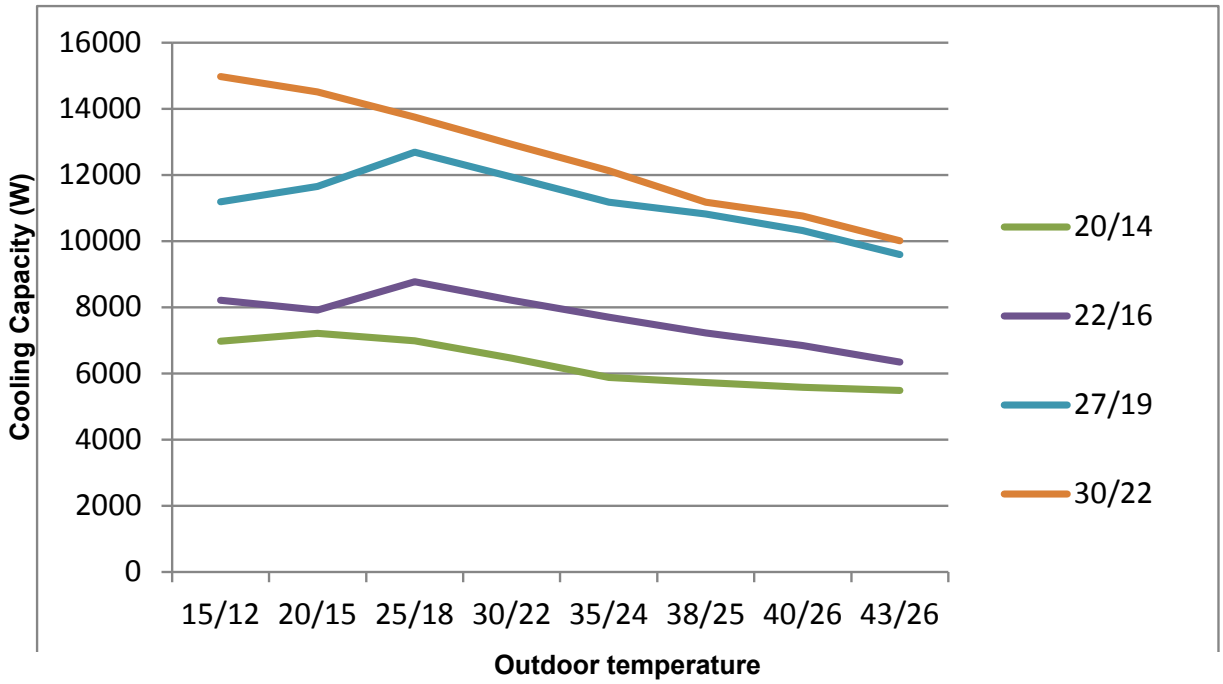



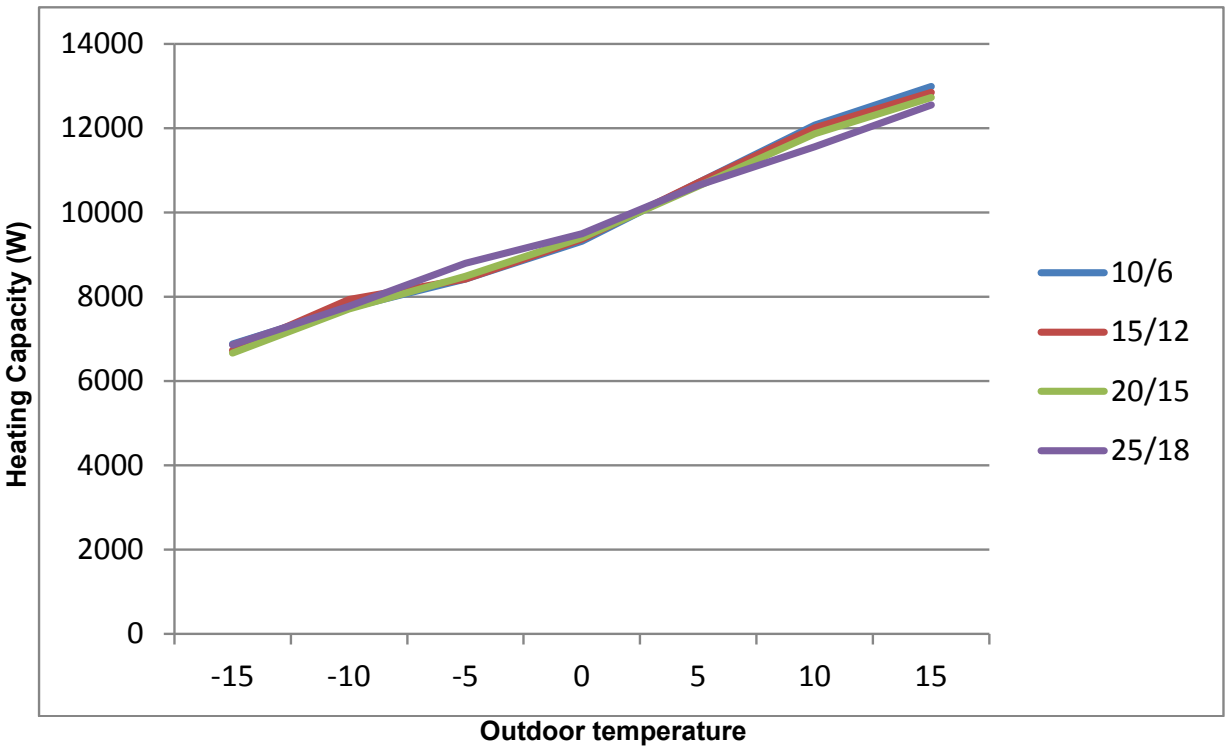
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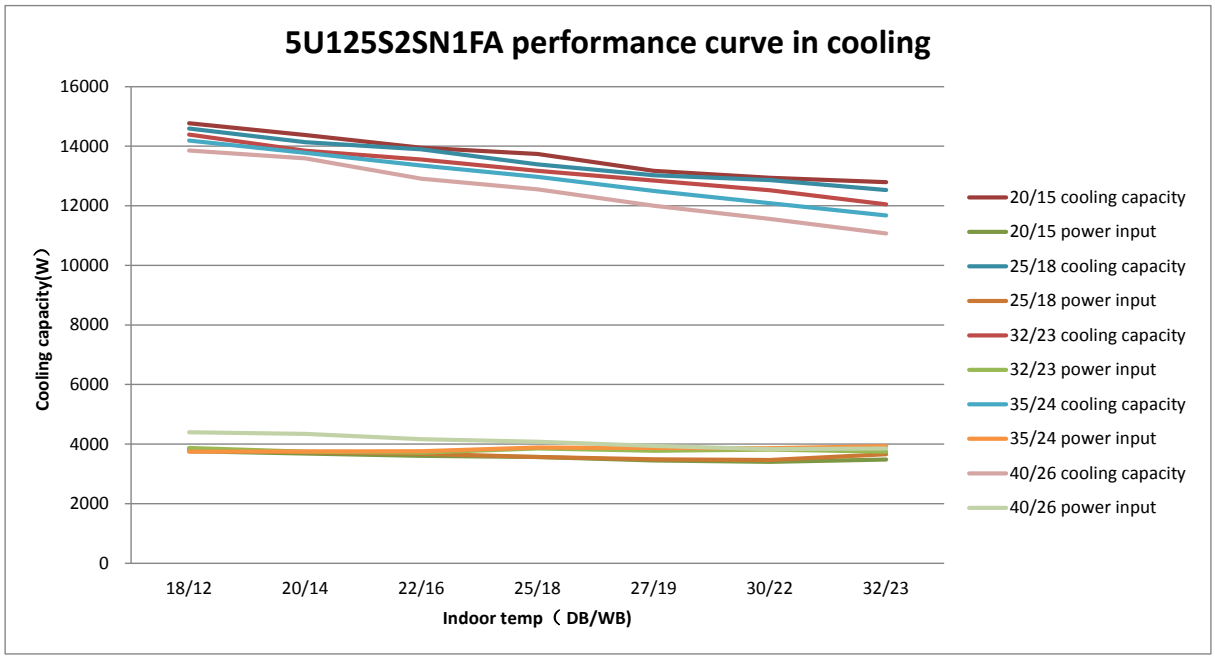



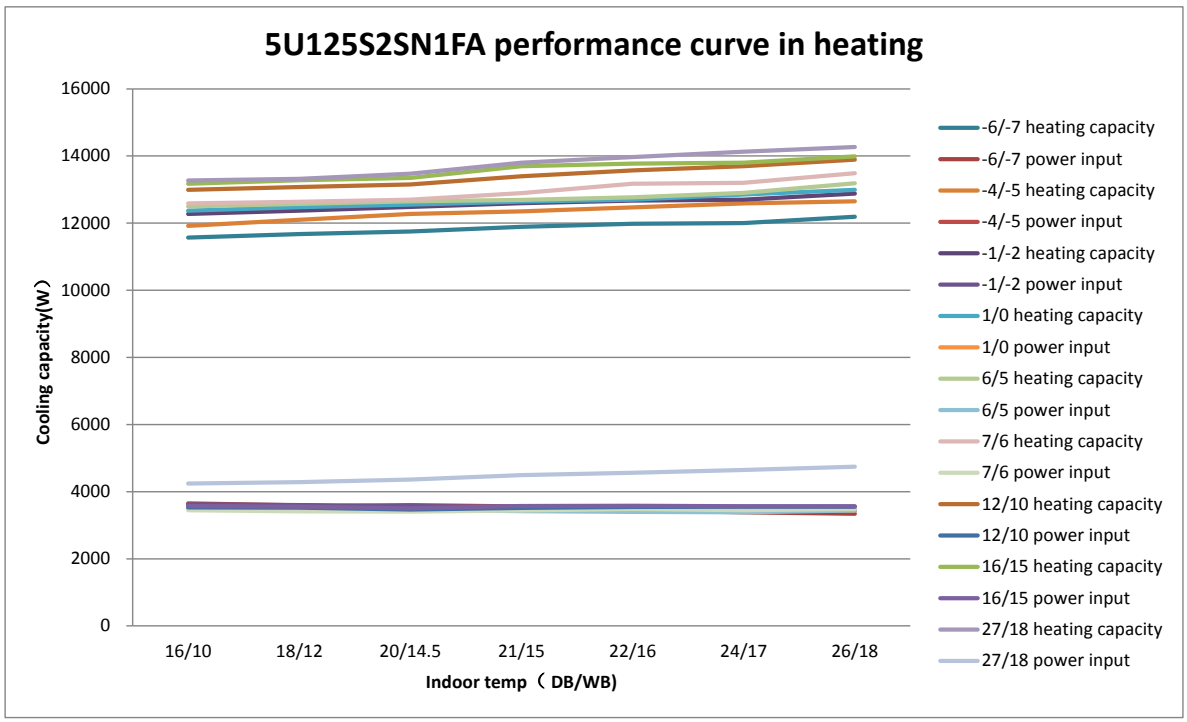
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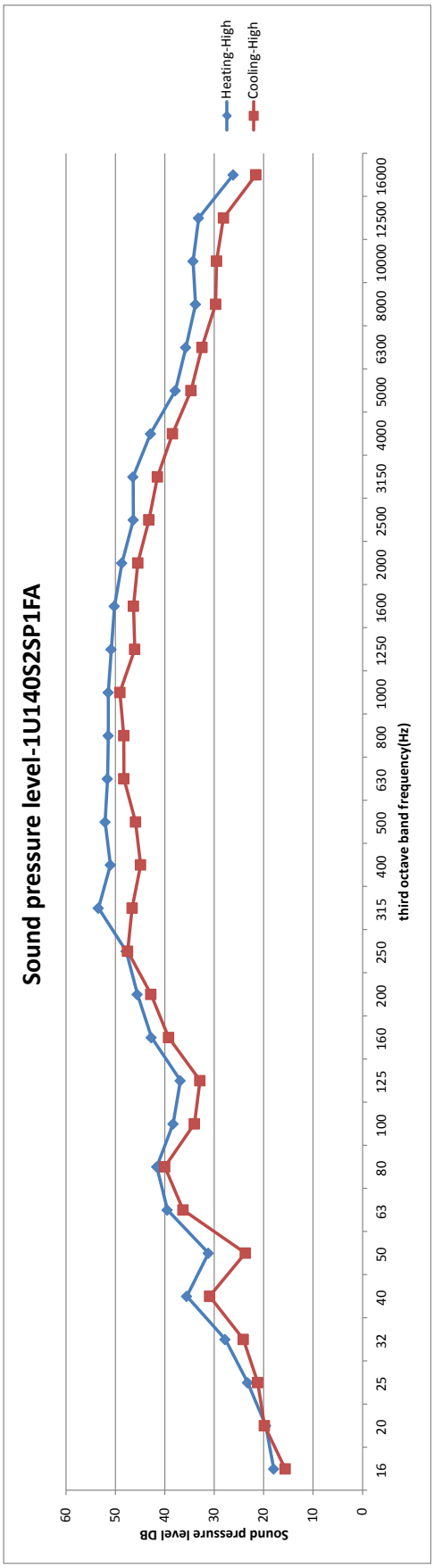



5U125S2SN1FA

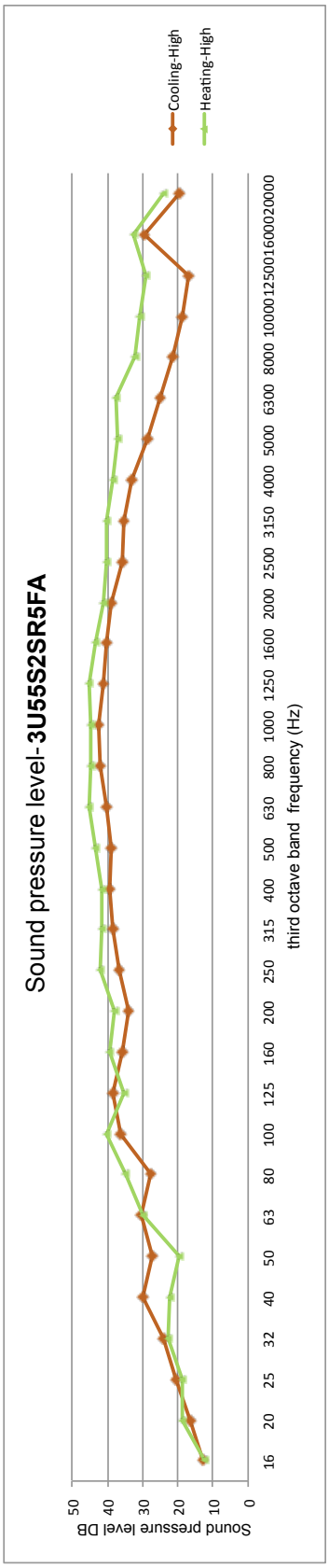


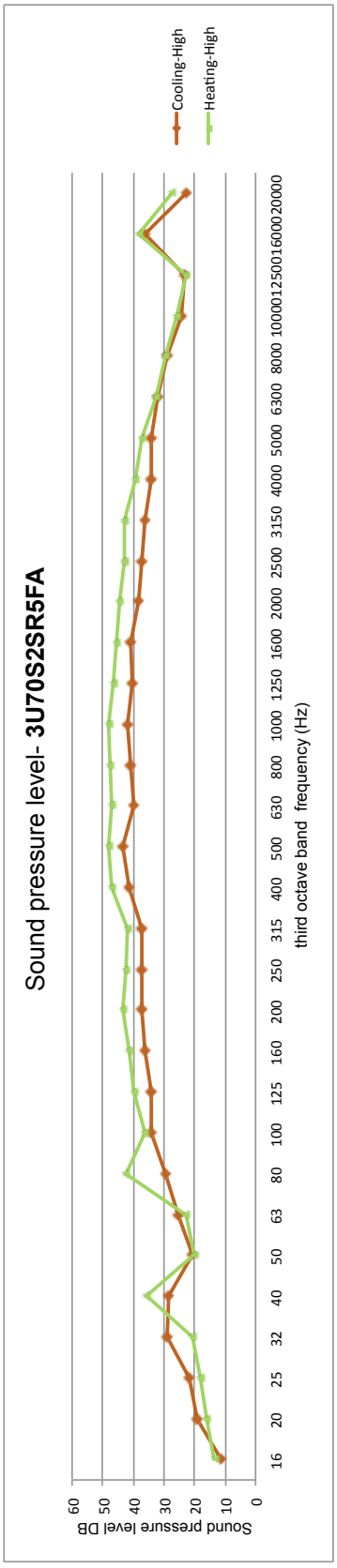
## 8.9 Sound Pressure level



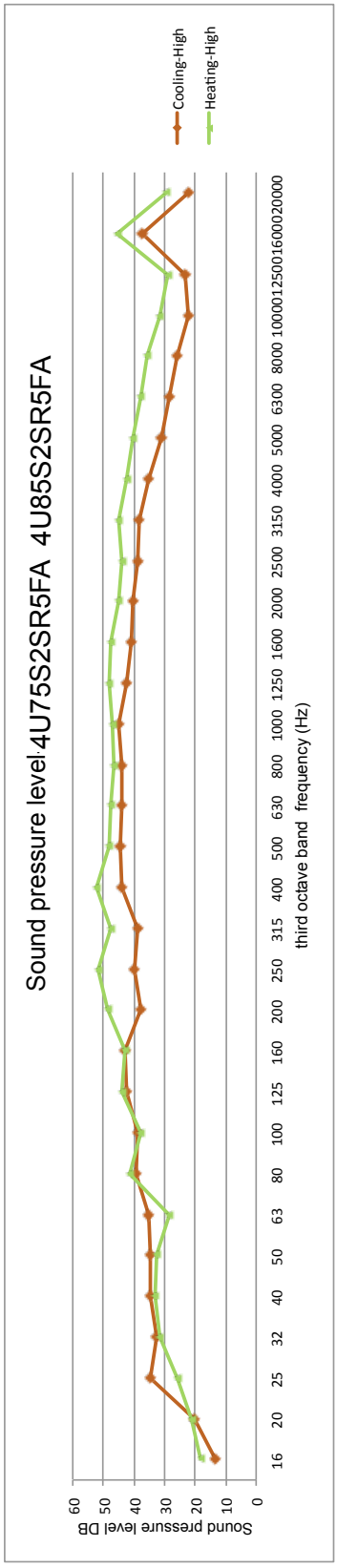
**3U55S2SR5FA**



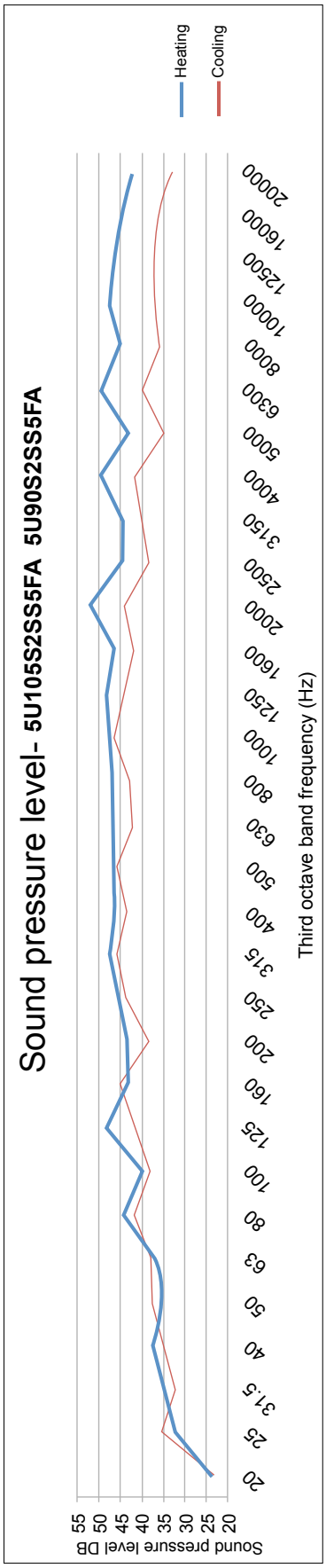
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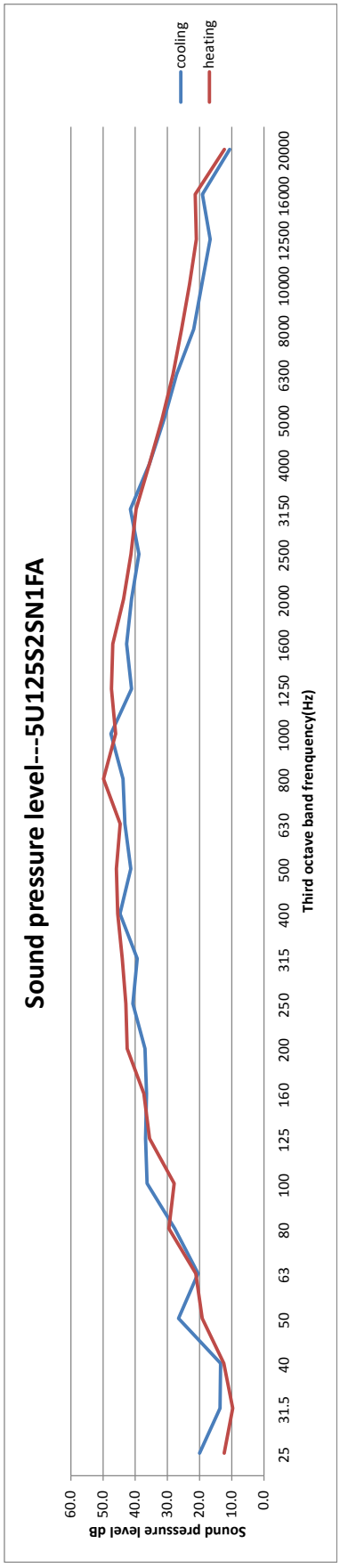
**4U75S2SR5FA 4U85S2SR5FA**



**5U105S2SS5FA 5U90S2SS5FA**



## 5U125S2SN1FA



## 8.10 Installation Instruction

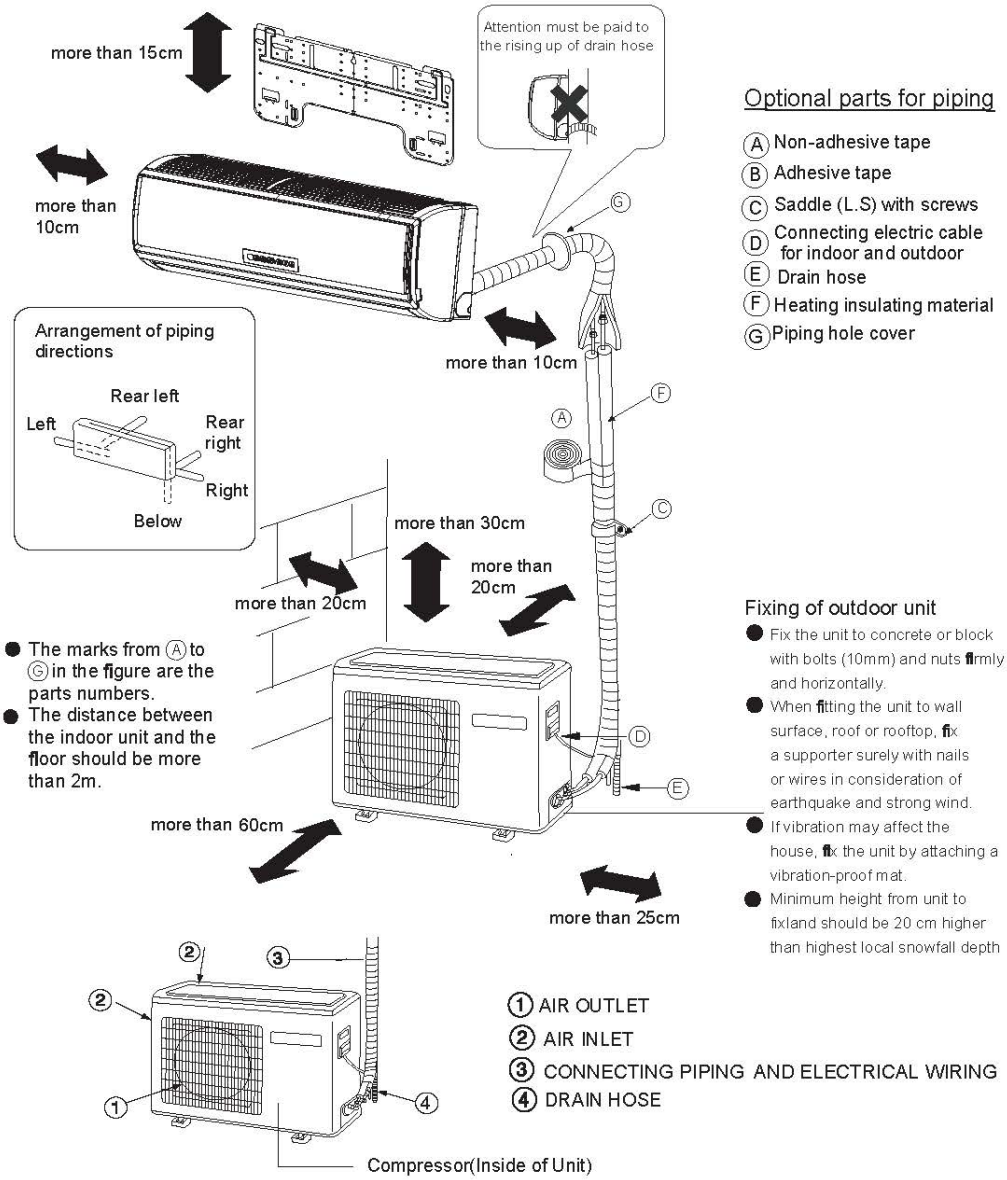
## For 1U71S2SR2FA

### Indoor/Outdoor Unit Installation Drawings

The models adopt HFC free refrigerant R32.

For installation of the indoor units,refer to the installation manual which was provided with the units.

(The diagram shows a wall-mounted indoor unit.)




If using the left side drain pipe, make sure the hole is got through.

The above indoor and outdoor units' picture is just for your reference.

Please be subject to the actual product purchased.

### Items to Be Checked

(1). Verify the type of refrigerant used by the unit to be serviced. Refrigerant Type: R32
(2). Check the symptom exhibited by the unit to be serviced. Look in this service handbook for symptoms relating to the refrigerant cycle.
(3). Be sure to carefully read the safety precautions at the beginning of this document.
(4). If there is a gas leak or if the remaining refrigerant is exposed to an open flame, a noxious gas hydrofluoric acid may form. Keep workplace well ventilated.

**CAUTION**

- Install new pipes immediately after removing old ones to keep moisture out of the refrigerant circuit.
- Chloride in some types of refrigerants such as R22 will cause the refrigerating machine oil to deteriorate.

### Necessary Tools and Materials

Prepare the following tools and materials necessary for installing and servicing the unit.
Necessary tools for use with R32 (Adaptability of tools that are for use with R22 and R407C).

1. To be used exclusively with R32 ( Not to be used if used with R22 or R407C )

| Tools/Materials | Use | Notes |
|---|---|---|
| Gauge Manifold | Evacuating,refrigerant charging | 5.09MPa on the High-pressure side. |
| Charging Hose | Evacuating, refrigerant charging | Hose diameter larger than the concentional ones. |
| Refrigerant Recovery Equipment | Refrigerant recovery | |
| Refrigerant Cylinder | Refrigerant charging | Write down the refrigerant type. Pink in color at the top of the cylinder. |
| Refrigerant Cylinder Charging Port | Refrigerant charging | Hose diameter larger than the conventional ones. |
| Flare Nut | Connecting the unit to piping | Use Type-2 Flare nuts. |

2. Tools and materials that may be used with R32 with some restrictions

| Tools/Materials | Use | Notes |
|---|---|---|
| Gas leak detector | Detection of gas leaks | The ones for HFC type refrigerant may be used. |
| Vacuum Pump | Vacuum drying | May be used if a reverse flow check adaptor is attached. |
| Flare Tool | Flare machining of piping | Chages have been made in the flare machining dimension.Refer to the next page. |
| Refrigerant Recovery Equipment | Recovery of refrigerant | May be used if designed for use with R32 . |

3. Tools and materials that are used with R22 or R407C that can also be used with R32

| Tools/Materials | Use | Notes |
|---|---|---|
| Vacuum Pump with a Check Valve | Vacuum drying | |
| Bender | Bending pipes | |
| Torque Wrench | Tightening flare nuts | Only Φ12.70 (1/2") and Φ 15.88(5/8") have a larger flare machining dimension. |
| Pipe Cutter | Cutting pipes | |
| Welder and Nitrogen Cylinder | Welding pipes | |
| Refrigerant Charging Meter | Refrigerant charging | |
| Vacuum Gauze | Checking vacuum degree | |

4. Tool and materials that must not used with R32

| Tools/Materials | Use | Notes |
|---|---|---|
| Charging Cylinder | Refrigerant Charging | Must not be used with R32 -type units. |

Tools for R32 must be handled with special care, and keep moisture and dust from entering the cycle.

## Piping Materials

### Types of Copper Pipes (Reference)

| Maximum Operation Pressure | Applicable Refrigerants |
|---|---|
| 3.4MPa | R22, R407C |
| 4.3 MPa | R32 |

- Use pipes that meet the local standards.

### Piping Materials/Radial Thickness

Use pipes made of phosphorus deoxidized copper.
Since the operation pressure of the units that use R32 is higher than that of the units for use with R22, use pipes with at least the radial thickness specified in the chart below. (Pipes with a radial thickness of 0.7mm or less may not be used.)

| Size(mm) | Size(inch) | Radial Thickness(mm) | Type |
|---|---|---|---|
| Φ6.35 | 1/4" | 0.8t | Type-O pipes |
| Φ9.52 | 3/8" | 0.8t | |
| Φ12.7 | 1/2" | 0.8t | |
| Φ15.88 | 5/8" | 1.0t | |
| Φ19.05 | 3/4" | 1.0t | Type-1/2H or Hpipes |

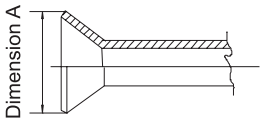
- Although it was possible to use type-O for pipes with a size of up to Φ 19.05(3/4") with conventional refrigerants, use type-1/2H pipes for units that use R32 .(Type-O pipes may be used if the pipe size is Φ19.05 and the radial thickness is 1.2t.)
- The table shows the standards in Japan. Using this table as a reference, choose pipes that meet the local standards.

### Flare Machining (type-O and OL only)

The flare machining dimensions for units that use R32 is larger than those for units that use R22 in order to increase air tightness.

Flare Machining Dimension(mm)

| External dimension of pipes | Size | Dimension A | |
|---|---|---|---|
| | | R32 | R22 |
| Φ6.35 | 1/4" | 9.1 | 9.0 |
| Φ9.52 | 3/8" | 13.2 | 13.0 |
| Φ12.7 | 1/2" | 16.6 | 16.2 |
| Φ15.88 | 5/8" | 19.7 | 19.4 |
| Φ19.05 | 3/4" | 24.0 | 23.3 |



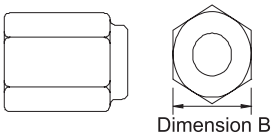

If a clutch type flare tool is used to machine flares on units that use R32, make the protruding part of the pipe between 1.0 and 1.5mm. Copper pipe gauge for adjusting the length of pipe protrusion is useful.

### Flare Nut

Type-2 flare nuts instead of type-1 nuts are used to increase the strength. The size of some of the flare nuts have also been changed.

Flare nut dimension(mm)

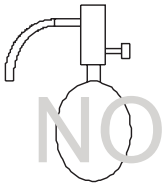
| External dimension of pipes | Size | Dimension B | |
|---|---|---|---|
| | | R32 (Type2) | R22(Type1) |
| Φ6.35 | 1/4" | 17.0 | 17.0 |
| Φ9.52 | 3/8" | 22.0 | 22.0 |
| Φ12.7 | 1/2" | 26.0 | 24.0 |
| Φ15.88 | 5/8" | 29.0 | 27.0 |
| Φ19.05 | 3/4" | 36.0 | 36.0 |



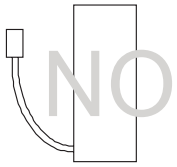

- The table shows the standards in Japan. Using this table as a reference, choose pipes that meet the local standards.

## Air Tightness Test

No changes from the conventional method. Note that a refrigerant leakage detector for R22 or R410A cannot detect R32 leakage.




Halide torch




R22 or R407C leakage detector

**Items to be strictly observed :**

1. Pressurize the equipment with nitrogen up to the design pressure and then judge the equipment's air tightness, taking temperature variations into account.
2. When investigating leakage locations using a refrigerant, be sure to use R32 .
3. Ensure that R32 is in a liquid state when charging.

**Reasons:**

1. Use of oxygen as the pressurized gas may cause an explosion.
2. Charging with R32 gas will lead the composition of the remaining refrigerant in the cylinder to change and then this refrigerant can not be used.

## Vacuuming

**1. Vacuum pump with check valve**

A vacuum pump with a check valve is required to prevent the vacuum pump oil from flowing back into the refrigerant circuit when the vacuum pump power is turned off (power failure). It is also possible to attach a check valve to the actual vacuum pump afterwards.

**2. Standard degree of vacuum for the vacuum pump**

Use a pump which reaches 65Pa or below after 5 minutes of operation.
In addition, be sure to use a vacuum pump that has been properly maintained and oiled using the specified oil. If the vacuum pump is not properly maintained, the degree of vacuum may be too low.

**3. Required accuracy of the vacuum gauge**

Use a vacuum gauge that can measure up to 650Pa. Do not use a general gauge manifold since it cannot measure a vacuum of 650Pa.

**4. Evacuating time**

Evacuate the equipment for 1 hour after 650Pa has been reached.
After envacuating, leave the equipment for 1 hour and make sure the that vacuum is not lost.

**5. Operating procedure when the vacuum pump is stopped**

In order to prevent a backflow of the vacuum pump oil, open the relief valve on the vacuum pump side or loosen the charge hose to drawn in air before stopping operation.The same operating procedure should be used when using a vacuum pump with a check valve.

## Charging Refrigerant

R32 must be in a liquid state when charging.

**Reasons:**

R32 is a HFC refrigerant (boiling point = -52℃ ) and can roughly be handled in the same way as R410A; however, be sure to fill the refrigerant from the liquid side, for doing so from the gas side will somewhat change the composition of the refrigerant in the cylinder.

**Note**

- In the case of a cylinder with a syphon, liquid R32 is charged without turning the cylinder up side down. Check the type of cylinder before charging.

**Remedies to be taken in case of a refrigerant leak**

When refrigerant leaks, additional refrigerant may be charged. (Add the refrigerant from the liquid side)

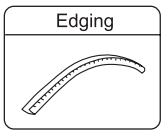
## Characteristics of the Conventional and the New Refrigerants

- Because R32 is a simulated azeotropic refrigerant, it can be handled in almost the same mammer as a single refrigerant such as R22. Howerver, if the refrigerant is removed in the vapor phase, the composition of the refrigerant in the cylinder will somewhat change.
- Remove the refrigerant in the liquid phase. Additional refrigerant may be added in case of a refrigerant leak.

# Installation Procedures

### 1. Accessories

"Edging" for protection of electrical wires from an opening edge.

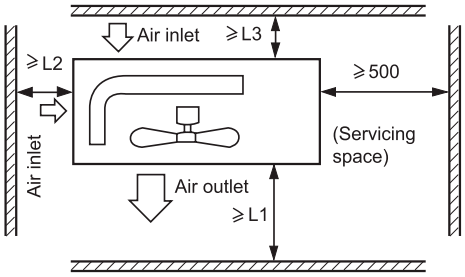



### 2. Selection of the place of installation

Select the place of installation satisfying the following conditions and, at the same time, obtain a consent from the client or user.

- Place where air circulates.
- Place free from heat radiation from other heat sources.
- Place where drain water may be discharged.
- Place where noise and hot air may not disturb the neighborhood.
- Place where there is not heavy snowfall in the winter time.
- Place where obstacles do not exist near the air inlet and air outlet .
- Place where the air outlet may not be exposed to a strong wind.
- Place surrounded at four sides are not suitable for installation. A 1m or more of overhead space is needed for the unit.
- Avoid mounting guide-louvers to the place where short-circuit is a possibility.
- When installing several units, secure sufficient suction space to avoid short circuiting.

**Open space requirement around the unit**



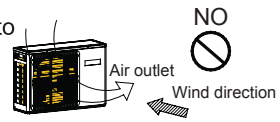

| Distance | | | |
|---|---|---|---|
| L1 | open | open | 500 mm |
| L2 | 300 mm | 300 mm | open |
| L3 | 150 mm | 300 mm | 150 mm |

**Note :**

(1) Fix the parts with screws.

(2) Don't intake the strong wind directly to the outlet air-flow hole.

(3) A one meter distance should be kept from the unit top.



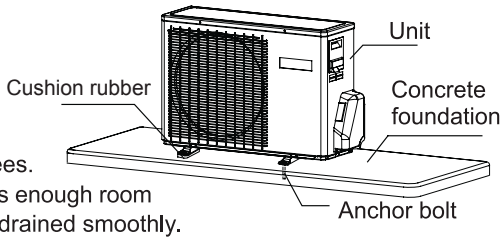

(4) Don't block the surroundings of the unit with sundries.

(5) If the outdoor unit is installed in a place that is exposed to the wind, install the unit so that the outlet grid is NOT pointing in the direction of the wind.

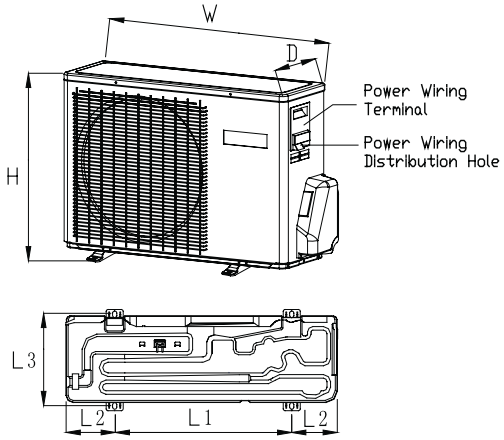
### 3. Installation of outdoor unit

Fix the unit on the foundation in a proper way according to the condition of the installation place, referring to the following information.

- Give enough room for the concrete foundation to fix by anchor bolts.
- Place the concrete foundation deep enough.
- Install the unit so that the angle of inclination must be less than 3 degrees.
- Forbidden to place the unit on the ground directly.Please confirm there is enough room near the drainage hole on bottom plate, which will ensure the water be drained smoothly.




### 4.Installation dimension(Unit:mm)

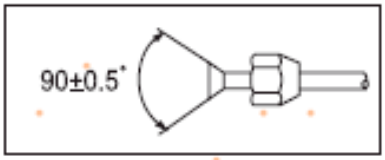



| Model | W | D | H | L1 | L2 | L3 |
|---|---|---|---|---|---|---|
| 1U71S2SR2FA | 890 | 340 | 697 | 628 | 131 | 359.7 |

## 5.Piping Connection

Piping size

| | | |
|---|---|---|
| 1U71S2SR2FA | Liquid pipe | Φ9.52x0.8mm |
| | Gas pipe | Φ15.88x1.0mm |

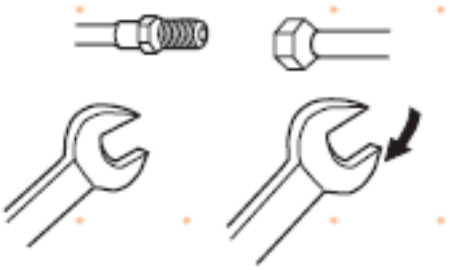



- Install the removed flare nuts to the pipes to be connected, then flare the pipes.

Connection of pipes

- To bend a pipe, give the roundness as large as possible not to crush the pipe, and the bending radius should be 30 to 40 mm or longer.
- Connecting the pipe of gas side rst makes working easier.
- The connection pipe is specialized for R32.

Half union Flare nut



Spanner Torque wrench

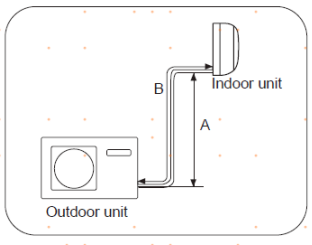
Forced fastening without careful centering may damage the threads and cause a leakage of gas.

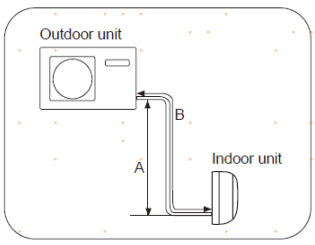
| Pipe Diameter( Φ) | **Fastening torque** |
|---|---|
| **Liquid side6.35mm(1/4")** | **18N.m** |
| **Liquid/Gas side9.52mm(3/8")** | **42 N.m** |
| **Gas side 12.7mm(1/2")** | **55N.m** |
| **Gas side 15.88mm(5/8")** | **60 N.m** |

**Be careful thatmatters, such as wastes of sands,water, etc. shall not enter the pipe.**

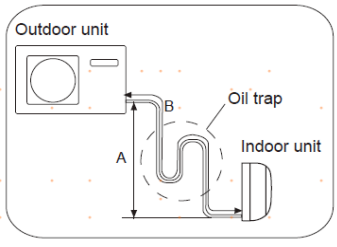
CAUTION

The standard pipe length is Cm. If it is over Dm, the function of the unit will be affected. If the pipe has to be lengthened, the refrigerant should be charged, according to E g/m. But the charge of refrigerant must be conducted by professional air conditioner engineer. Before adding additional refrigerant,perform air purging from the refrigerant pipes and indoor unit using a vacuum pump,then charge additional refrigerant.




| Outdoor unit | Amax | Bmax | C | D | E |
|---|---|---|---|---|---|
| 1U71S2SR2FA | 30 | 50 | 5 | 10 | 45 |




- Max.Elevation: Amax
- In case the elevation A is more than 10m, oil trap shoud be installed every 5~7m
- Max. Length: Bmax
- In case the pipe length B is more thanDm, the refrigerant should be charged, according to E g/m.

## 6. Leakage Test

**Leak test**

1 Vacuum leak test

1.1 Evacuate the system from the liquid and gas piping to -100.7 kPa(5 Torr).

1.2 Once reached, turn off the vacuum pump and check that the pressure does not rise for at least 1 minute.

1.3 Should the pressure rise, the system may either contain moisture (refer to the part " Vacuum drying ") or have leaks.

2 Pressure leak test

2.1 Break the vacuum by pressurizing with nitrogen gas to a minimum gauge pressure of 0.2 MPa (2 bar). Never set the gauge pressure higher than the maximum operation pressure of the unit, i.e. 4.0MPa (40bar). Pressurize for 1 hour.

2.2 Test for leaks by applying a bubble test solution to all piping connections.

NOTICE

Make sure to use a recommended bubble test solution from your wholesaler.

Do not use soap water, which may cause cracking of falre nuts (Soap water may contain salt, which absorbs moisture that will freeze when the piping gets cold). and/or lead to corrosion of flared joints (Soap water may contain ammonia which causes a corrosive effect between the brass flare nut and the copper flare).

**Vacuum drying**

To remove all mositure from the system, proceed as follows:

1 Evacuate the system for at least 2 hours to a target vacuum of -100.7 kPa(=-1.007 bar).

2 Check that, with the vacuum pump turned off, the target vacuum is maintained for at least 1 hour.

3 Should you fail to reach the target vacuum within 2 hours or maintain the vacuum for 1 hour, the system may contain too much moisture.

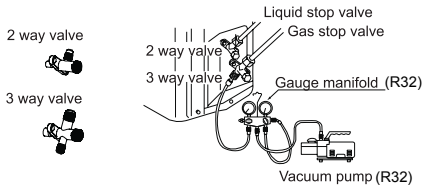
4 In that case, break the vacuum by pressurizing with nigrogen gas to a gauge pressure of 0.05 MPa (0.5bar) and repeat steps 1 to 3 unit all moisture has been removed.

5 The stop valves can now be opened, and/or additional refrigerant can be charged .

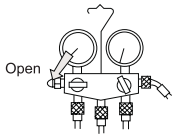
## 7. Vacuuming

**Piping vavuum method: to use vacuum pump**

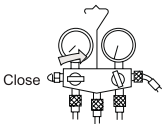
1. Detach the service port's cap of 3-way valve, the valve rod's cap for 2-way valve and 3-way valves, and connect the service port into the projection of charge hose (low) for gaugemanifold. Then connect the projection of charge hose (center) for gaugemanifold into vacuum pump.



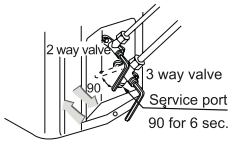

2. Open the handle at low in gaugemanifold, and operate vacuum pump. If the scale-moves of gause (low) reach vacuum condition in a moment, check the step 1 again.




3. Vacuumize for over 15min. And check the level gauge which should read -0.1MPa (-76 cm Hg) at low pressure side. After the completion of vacuumizing, close the handle 'Lo' in the vacuum pump. Check the condition of the scale and hold it for 1-2min. If the scale-moves back in spite of tightening, make flaring work again, then return to the beginning of the step 3.

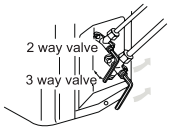



4. Open the valve rod for the 2-way valve to an angle of anticlockwise 90 degree. After 6 seconds, close the 2-way valve and make the inspection of gas leakge.

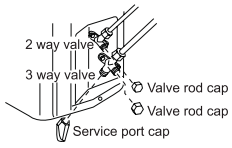



5. No gas leakage? In case of gas leakage, tighten parts of pipe connection. If leakage stops, then proceed the step 6. If it does not stop gas leakage, discharge whole refrigerants from the service port. After flaring work again and vacuumize, fill up prescribed refrigerant from the gas cylinder.

6. Detach the charge hose from the service port, open 2-way valve and 3-way. Turn the valve rod anticlockwise until hitting lightly.




7. To prevent the gas leakage, turn the service ports cap, the valve rodis cap for 2-way valve and 3-way's a little more than the point where the torque increases suddenly.




**CAUTION:**

If the refrigerant of the air conditioner leaks, it is necessary to make all the refrigerant out. Vacuumize first, then charge the liquid refrigerant into air conditioner according to the amount marked on the nameplate.

## 8. Electrical Wiring

| WARNING! |
|---|
| **DANGER OF BODILY INJURY OR DEATH** |
| • TURN OFF ELECTRIC POWER AT CIRCUIT BREAKER OR POWER SOURCE BEFORE MAKING ANY ELECTRIC CONNECTIONS.<br>• GROUND CONNECTIONS MUST BE COMPLETED BEFORE MAKING LINE VOLTAGE CONNECTIONS. |

**Precautions for Electrical wiring**

- Electrical wiring work should be conducted only by authorized personnel.
- Do not connect more than three wires to the terminal block. Always use round type crimped terminal lugs with insulated grip on the ends of the wires.
- Use copper conductor only.

**Selection of size of power supply and interconnecting wires**

Select wire sizes and circuit protection from table below. (This table shows 20 m length wires with less than 2% voltage drop.)

| Item / Model | Phase | Circuit breaker | | Power source wire size (minimum) ($mm^2$) | Earth leakage breaker | |
|---|---|---|---|---|---|---|
| | | Switch breaker (A) | Overcurrent protector rated capacity (A) | | Switch breaker(A) | Leak current(mA) |
| 1U71S2SR2FA | 1 | 25 | 20 | 4.0 | 25 | 30 |

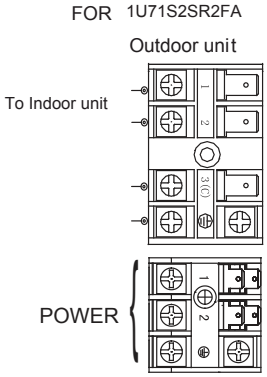
- If the supply cord is damaged, it must be replaced by the manufacturer or itsservice agent or a similar qualified person.
- If the fuse of control box is broken, please change it with the ceramic type of T 25A/250V.
- The wiring method should be in line with the local wiring standard.
- All the cables shall have got the European authentication certificate. During installation, when the connecting cables break off, it must be assured that the grouding wire is the last one to be broken off.
- The explosion-proof breaker of the air conditioner should be all-pole switch. The distance between its two contacts should not be no less than 3mm. Such means for disconnection must be incorporation in the fixed wiring.
- The distance between its two terminal blocks of indoor unit and outdoor unit should not be over 5m. If exceeded, the diameter of the wire should be enlarged according to the local wiring standard.
- A explosion-proof breaker must be installed.

**Wiring procedure**

1) Remove set screws on the side before taking off the front panel toward the direction.
2) Connect wires to the terminal block correctly and fix the wires with a wire clamp equipped nearby the terminal block.
3) Route the wires in a proper way and penetrate the wires through the opening for electrical wiring on the side panel.

**WARNING:**

*INTERCONNECTING WIRES MUST BE WIRED ACCORDING TO FIGURE BELOW. INCORRECT WIRING MAY CAUSE EQUIPMENT DAMAGE.*




| Model | 1U71S2SR2FA |
|---|---|
| Connecting wiring | ⩾ 4G 2.5$mm^2$ |
| Power cable | ⩾ 3G 4.0$mm^2$ |

## For 1U90S2SS2FA1U105S2SS1FA/B 1U105S2SS2FA 1U125S2SN1FA/B 1U140S2SN1FA/B 1U140S2SP1FA/B 1U125S2SN2FA/B 1U140S2SP2FA/B 1U160S2SP1FB

### Select installation site

### General

⚠ WARNING

• Be sure to provide for adequate measures in order to prevent that the outdoor unit be used as a shelter bye small animals.

Small animals making contact with electrical parts can cause malfunctions, smoke or fire. Please instruct the customer to keep the area around the unit clean.

• Select an installation site where the following conditions are satisfied and that meets with your customer's approval.

- Places which are well-ventilated.
- Pllaces where the unit does not bother next-door neighbours.
- Safe places which can withstand the unit's weight and vibration and where the unit can be installed level.
- Places where there is no possibility of flammable gas or product leak.
- The equipment is not intended for use in a potentially explosive atmosphere.
- Places where servicing space can be well ensured.
- Places where the indoor and outdoor units's piping and wiring lengths come within the allowable ranges.
- Places where water leaking from the unit cannot cause damage to the location (e.g. in case of a blocked drain pipe)
- Places where the rain can be avoided as much as possible.
- Do not install the unit in places often used as work place. In case of construction works (d.g.grinding works ) where a lot of dust is created, the unit must be covered.
- Do not place any objects or equipment on top of the unit( top plate).
- Do not climb, sit or stand on top of the unit.
- Be sure that sufficient precautions are taken, in accordance with applicable legislation, in case of refrigerant leakage.

NOTICE

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

• When installing the unit in a place exposed to strong wind, pay special attention to the following.

Strong winds of 5 m/sec or more blowing against the outdoor unit's air outlet causes short circuit (suction of discharge air), and this may have the following consequences:

- Deterioration of the operational capacity.
- Frequent frost acceleration in heating operation.
- Disruption of operation due to rise of high pressure.
- When a strong wind blows continuously on the face of the unit, the fan can start rotating very fast until it breaks.

Refer to the figures for installation of this unit in a place where the wind direction can be foreseen.

• Repare a water drainage channel around the foundation, to drain waste water from around the unit.

• If the water drainage of the unit is not easy, please build up the unit on a foundation of concrete blocks, etc.(the height of the foundation should be maximum 150mm).

• If you install the unit on a frame, please install a waterproof plate(field supplu) within 150mm of the underside of the unit in order to prevent the invasion of water from the lower direction.

When installing the unitin a place frequently exposed to snow, pay special attention to elevate the foundation as high as possible.

• Make sure that the unit is installed level.

**General**

NOTICE

When operating the outdoor unit in a low outdoor amnient temperature, be sure to follow the instructions described below.

• To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.

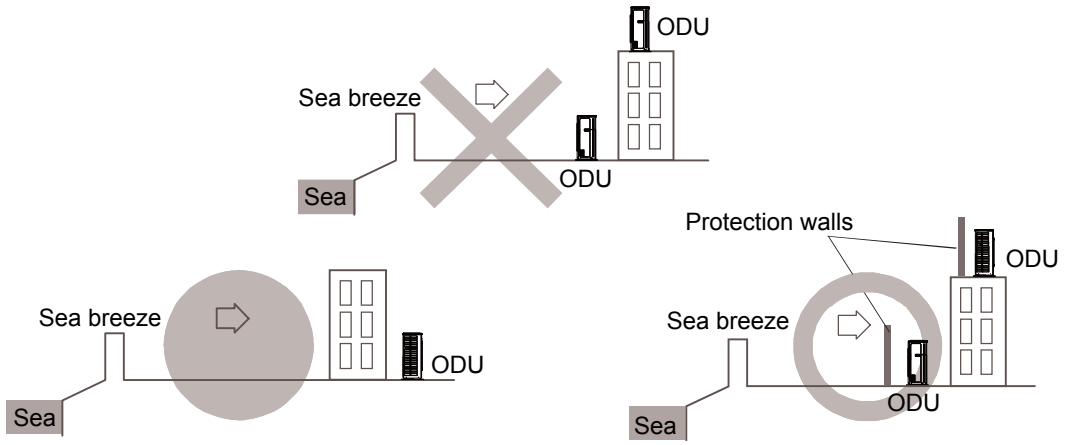
• Never install the outdoor unit at a site where the suction side may be exposed directly to wind.

• To prevent exposure to wind, install a baffle plate on the air discharge side of the outdoor unit.

In heavy snowfall areas it is very important to select an installation site where the snow will not affect the unit and set the outlet side at a right angle to the direction of the wind.

**General**

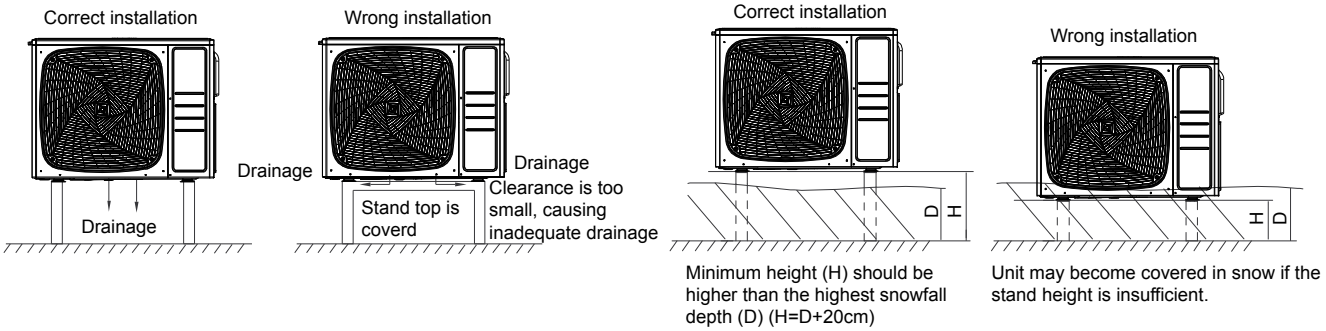
• For seacoast applications, block the unit from direct exposure to sea breeze by installing the unit behind a structure (such as a building) or a protective wall that is 1 .5 times higher than the unit, leaving 700 mm of space between the wall and unit for air circulation.Consult an installation expert about taking anti-corrosion measures, such as removing salinity on the heat exchanger and applying a rust inhibitor more frequently than once a year.




• Set the unit on mounting brackets or pad. To avoid the adverse effects of snow, ice and defrosting issues, install the unit on heat pump risers to ensure a sufficient height from the ground. In all cases, refer to local code for correct riser height.

• Make sure the outdoor unit is installed level and is stable.

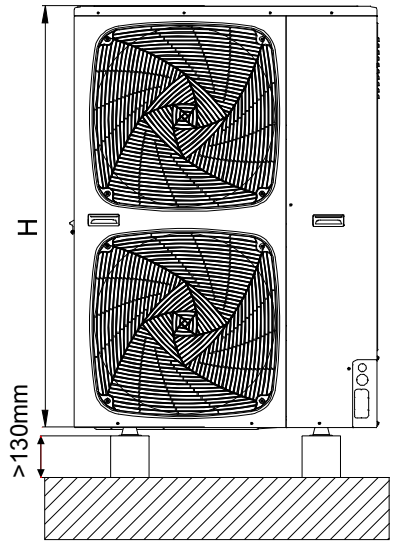
• Install snow protection hood as necessary.



**10.1** Precautions on Installation

⚠ NOTICE

If drain holes of the outdoor unit are covered by a mounting base or by floor surface, raise the unit in order to provide a free space of more than 130mm under the outdoor unit.

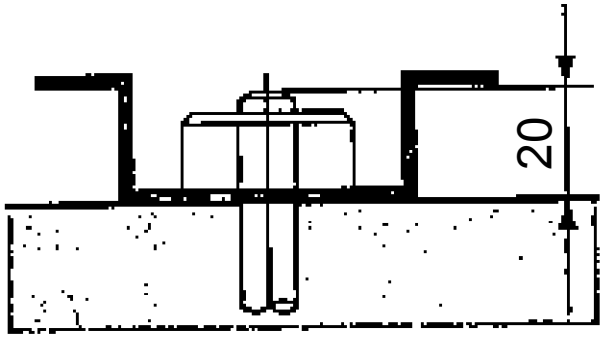



**Foundation work**

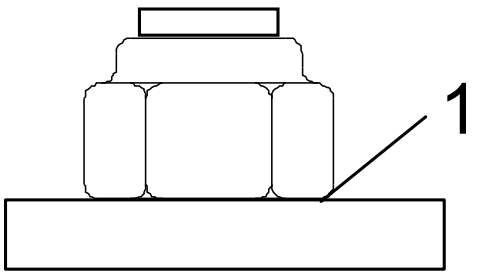
• Check the strength and level of the installation ground so that the unit will not cause any operating vibration or noise after installation.

• In accordance with the foundation drawing in the figure, fix the unit securely by means of the foundation bolts. (Prepare four sets of M12 foundation bolts, nuts and washers each which are available on the market.)

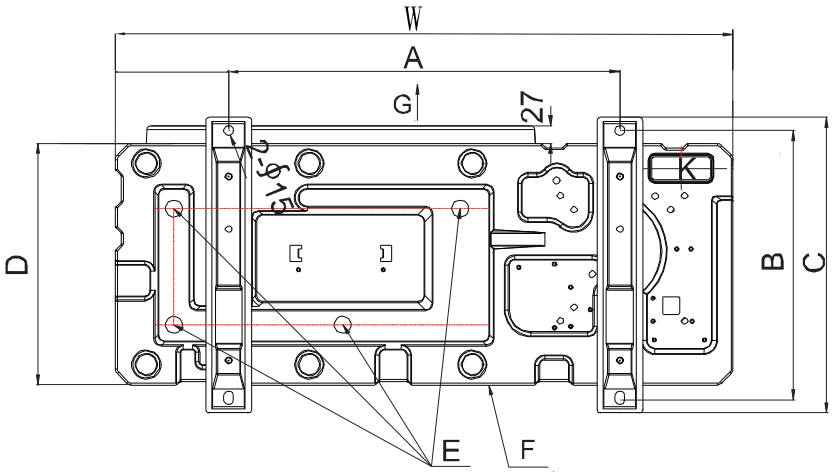
• It is best to screw in the foundation bolts until their length are 20mm from the foundation surface.




• Fix the outdoor unit to the foundation bolts using nuts with resin washers(1) as shown in the figure.



• If the coating on the fastening area is stripped off, the nuts rust easily.
• Dimensions (bottom view)(unit of measurement:mm)




A Leg pitch1
B Leg pitch2
C Front grill (Air outlet side)
D Drain hole
E Bottom frame
K Knock-out hole (For piping line)

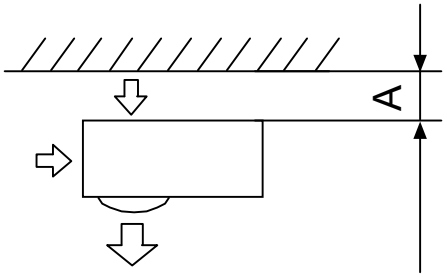
| | 1U90<br>1U105 | 1U125<br>1U140N | 1U140P<br>1U160P |
|---|---|---|---|
| A | 660 | 600 | 600 |
| B | 400-405 | 405-410 | 405-410 |
| C | 434 | 450 | 450 |
| D | 368 | 368 | 368 |
| W | 917 | 950 | 950 |
| H | 758 | 965 | 1350 |

**Selection of installation location of outdoor**

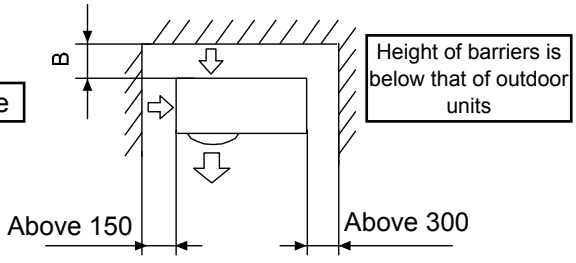
(1)Single-unit installation (Unit: mm)

| | 1U90<br>1U105<br>1U125<br>1U140<br>1U160 |
|---|---|
| A | >150 |
| B | >200 |
| C | >150 |
| D | >150 |
| E | >200 |
| F | >200 |
| G | >300 |
| H | >1500 |

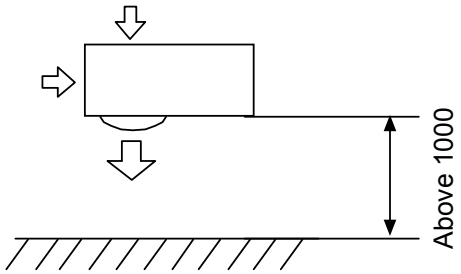
Back



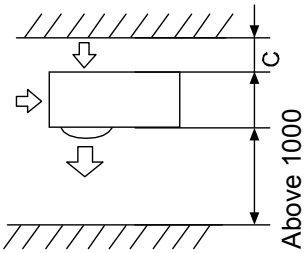

Back and side



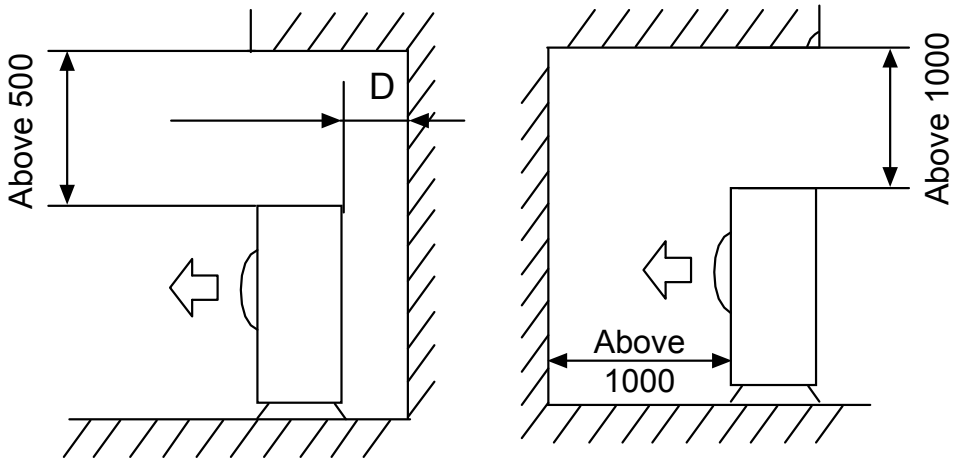

Front




Front and back



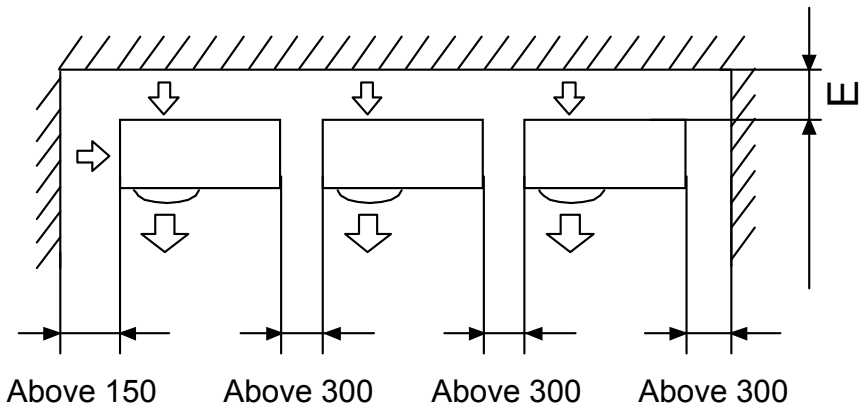
When barriers exist above the unit



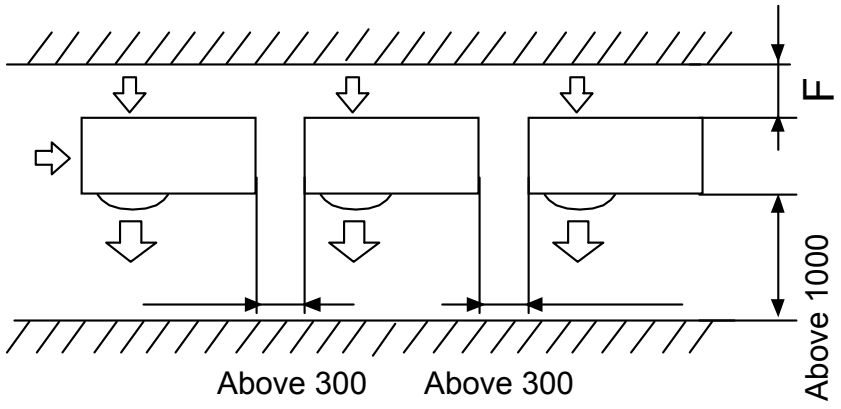

The top and two side surfaces must be exposed to open space, and barriers on at least one side of the front and back shall be lower than the outdoor unit.

(2) Multi-unit installation (Unit: mm)

Back and side

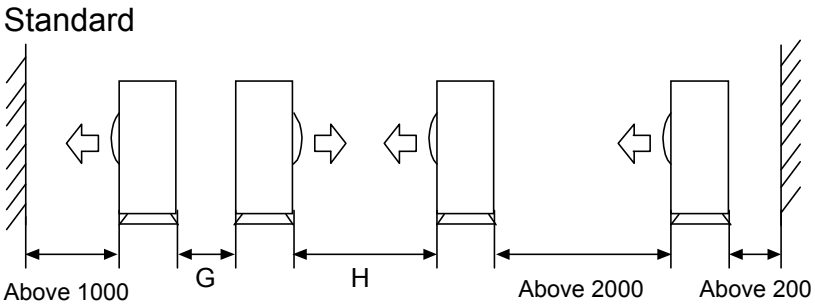



Front and back




Height of barriers is below that of outdoor unit

(3) Multi-unit installation in front and back (Unit: mm)




The top and two side surfaces must be exposed to open space, and barriers on at least one side of the front and back shall be lower than the outdoor unit.

• The installation service spaces shown in the illustrations are based on an air intake temperature of 35°C(DB) for COOL operation. In regions where the air intake temperature regularly exceeds 35°C (DB), or if the heat load of outdoor units is expected to regularly exceed the maximum operating capacity, reserve a larger space than that indicated at the air intake side of units.
• Regarding the required air outlet space, position the units with consideration to the space required for the onsite refrigerant piping work as well. Consult your dealer if the work conditions do not match those in the drawings.

**Drain pipe disposal**

• Make sure the drain works properly.
• In regions where buildups of snow can be expected, the accumulation and freezing of snow in the space between the heat exchanger and external plate may lower operating efficiency.
• After punching the knock-out hole, the application of repair-type paint on the surface around the edge sections is recommended to prevent rust.

**10.2 Refrigerant pipe size and allowable pipe length**

⚠ DANGER

• Piping an other pressure containing parts shall comply with the applicable legislation and shall be suitable for refrigerant. Use phosphoric acide deoxidised seamless copper for refrigerant.
• Installation shall be done by an installer, the choice of materials and installation shall comply with applicable legislation. In Europe the EN378 is the application standard that shall be used.

INFORMATION

It is forbidden to discharge refrigerant into the atmosphere.
Collect the refrigerant in accordance with the freon collection and destruction law.

NOTICE

To persons in charge of piping work:
Be sure to open the stop valve after piping installing and vacuuming is complete. (Running the system with the valve closed may break the compressor.)

NOTICE

Do not use flux when brazing the refrigerant piping.
For brazing, use phosphor copper brazing filler metal (BCuP) which does not require a flux.
(If a chlorine flux is used, the piping will corrode, and if the flux contains fluoride, if will cause the coolant oil to deteriorate, adversely affecting the coolant piping system.)

**Necessary Tools and Materials**

Prepare the following tools and materials necessary for installing and servicing the unit.
Necessary tools for use with R32 (Adaptability of tools that are for use with R22 and R407C).

1. To be used exclusively with R410A/R32 ( Not to be used with R22 or R470C system )

| Tools/Materials | Use | Notes |
|---|---|---|
| Gauge Manifold | Evacuating,refrigerant charging | 5.09MPa on the High-pressure side. |
| Charging Hose | Evacuating, refrigerant charging | Hose diameter larger than the concentional ones. |
| Refrigerant Recovery Equipment | Refrigerant recovery | |
| Refrigerant Cylinder | Refrigerant charging | Write down the refrigerant type. Pink in color at the top of the cylinder. |
| Refrigerant Cylinder Charging Port | Refrigerant charging | Hose diameter larger than the conventional ones. |
| Flare Nut | Connecting the unit to piping | Use Type-2 Flare nuts. |

2. Tools and materials that may be used with R410/R32 with some restrictions

| Tools/Materials | Use | Notes |
|---|---|---|
| Gas leak detector | Detection of gas leaks | The ones for HFC type refrigerant may be used. |
| Vacuum Pump | Vacuum drying | May be used if a reverse flow check adaptor is attached. |
| Flare Tool | Flare machining of piping | Chages have been made in the flare machining dimension.Refer to the next page. |
| Refrigerant Recovery Equipment | Recovery of refrigerant | May be used if designed for use with R410A. |

3. Tools and materials that are used with R22 or R407C can also be used with R410A/R32

| Tools/Materials | Use | Notes |
|---|---|---|
| Vacuum Pump with a Check Valve | Vacuum drying | |
| Bender | Bending pipes | |
| Torque Wrench | Tightening flare nuts | Only 12.70 (1/2") and 15.88 (5/8") have a larger flare machining dimension. |
| Pipe Cutter | Cutting pipes | |
| Welder and Nitrogen Cylinder | Welding pipes | |
| Refrigerant Charging Meter | Refrigerant charging | |
| Vacuum Gauze | Checking vacuum degree | |

4. Tool and materials that must not used with R410A/R32

| Tools/Materials | Use | Notes |
|---|---|---|
| Charging Cylinder | Refrigerant Charging | Must not be used with R410-type units. |

Tools for R410A must be handled with special care, and keep moisture and dust from entering the cycle.

**Piping Materials**

Types of Copper Pipes (Reference)

| Maximum Operation Pressure | Applicable Refrigerants |
|---|---|
| 3.4MPa | R22, R407C |
| 4.15MPa | R410A |
| 4.3MPa | R32 |

• Use pipes that meet the local standards.

Piping Materials/Radial Thickness

Use pipes made of phosphorus deoxidized copper.

Since the operation pressure of the units that use R410A is higher than that of the units for use with R22, use pipes with at least the radial thickness specified in the chart below. (Pipes with a radial thickness of 0.7mm or less may not be used.)

| Size (mm) | Size (inch) | Radial Thickness (mm) | Type |
|---|---|---|---|
| Φ6.35 | 1/4" | 0.8t | Type-O pipes |
| Φ9.52 | 3/8" | 0.8t | |
| Φ12.7 | 1/2" | 0.8t | |
| Φ15.88 | 5/8" | 1.0t | |
| Φ19.05 | 3/4" | 1.0t | Type-1/2H or Hpipes |

• Although it was possible to use type-O for pipes with a size of up to 19.05(3/4") with conventional refrigerants, use type-1/2H pipes for units that use R410A.(Type-O pipes may be used if the pipe size is 19.05 and the radial thickness is 1.2t.)

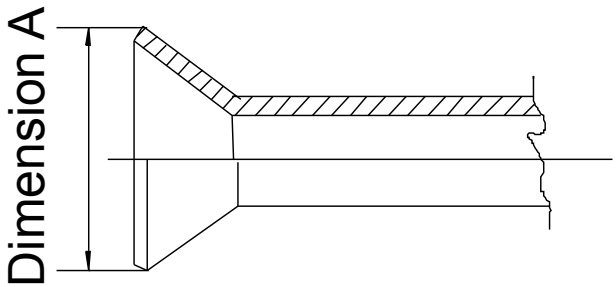
• The table shows the standards in Japan. Using this table as a reference, choose pipes that meet the local standards.

Flare Machining (type-O and OL only)

The flare machining dimensions for units that use R410A is larger than those for units that use R22 in order to increase air tightness.

Flare Machining Dimension(mm)

| External dimension of pipes | Size | Dimension A | |
|---|---|---|---|
| | | R410A/R32 | R22 |
| Φ6.35 | 1/4" | 9.1 | 9.0 |
| Φ9.52 | 3/8" | 13.2 | 13.0 |
| Φ12.7 | 1/2" | 16.6 | 16.2 |
| Φ15.88 | 5/8" | 19.7 | 19.4 |
| Φ19.05 | 3/4" | 24.0 | 23.3 |



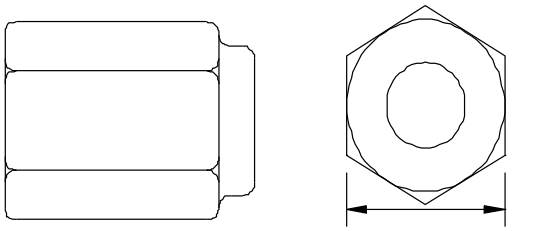

If a clutch type flare tool is used to machine flares on units that use R410A, make the protruding part of the pipe between 1.0 and 1.5mm. Copper pipe gauge for adjusting the length of pipe protrusion is useful.

Flare Nut

Type-2 flare nuts instead of type-1 nuts are used to increase the strength. The size of some of the flare nuts have also been changed.

Flare nut dimension (mm)

| External dimension of pipes | Size | Dimension B | |
|---|---|---|---|
| | | R410A/R32(Type2) | R22(Type1) |
| Φ6.35 | 1/4" | 17.0 | 17.0 |
| Φ9.52 | 3/8" | 22.0 | 22.0 |
| Φ12.7 | 1/2" | 26.0 | 24.0 |
| Φ15.88 | 5/8" | 29.0 | 27.0 |
| Φ19.05 | 3/4" | 36.0 | 36.0 |



Dimension B

• Using this table as a reference, choose pipes that meet the local standards.

NOTICE.

• For new installations, use the standard pipe sizes. When using existiong pipes, size-up is allowed as mentioned in the table above.

Additional restrictions towards allowable pipe lengths, as mentioned in the table "Limitations for one way piping length and vertical height difference for single split" on page 379, must be taken into account.

Not using the standard lpipe size may result in capacity decrease. The installer must acknowledge this and judge this very carefully in function of the complete installation

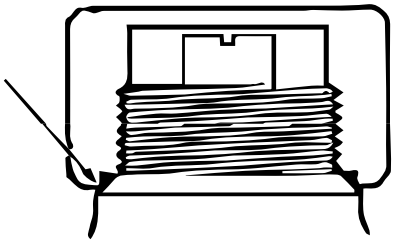
• Existing or pre-installed piping can be used

1. Piping must comply with the criteria below.
   • Piping diameter must comply with the limitations as indicated in paragraph "Piping size for single split" on page 378" .
   • Piping length must be withinlimits of the allowable piping length as in the table "Limitations for one way piping length and vertical height difference for single split" on page 379 and height difference" .
   • Piping must be designed for R410A. See the content "Piping Materials" on page 376.
2. Piping can be reused without cleaning when:
   • Total 1-way piping length: <50m.
   • No compressor breakdown has occurred in the history of the unit to be replaced.
   • A correct pump down operation can be executed:
   - Operate the unit continuously for 30minutes in cooling mode.
   - Execute a pump down operation.
   - Remove the air conditioning units to be replaced.
   • Check the contamination inside the existing piping.

   If you cannot meet all these requirements, the existing pipes must be cleaned or replaced after removing the air conditioning units to be replaced.
3. Prepare the flare connections for higher pressure.

Cautions on handling the stem cap

• The stem cap is sealed where indicated by the arrow. Take care not to damage it.
  After handling the stop valve, make sure tighten the stem cap securely. For the tightening torque, refer to the table below.
  Check for refrigerant leaks after tightening the stem cap.

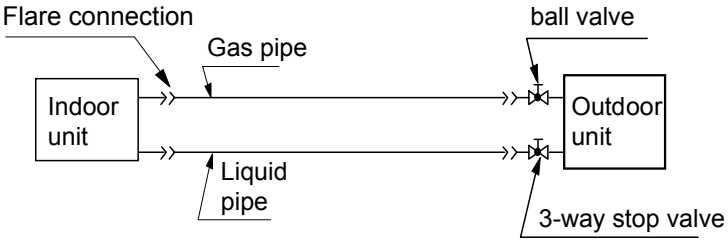


Cautions on handling the service port

• Always use a charge hose equipped with a valve depressor pin, since the service port is a Schrader type valve.
• After handling the service port, make sure to tighten the service port cap securely. For the tightening torque, refer to the table below.
• Check for refrigerant leaks after tightening the service port cap.

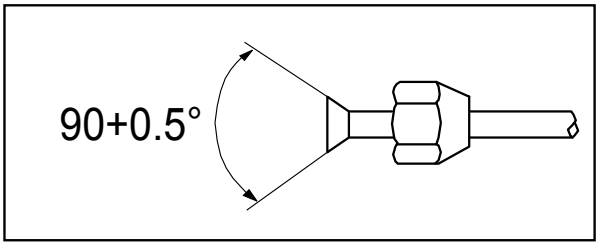
### 10.3 Refrigerant piping

**Piping diagram for single split**




**Piping size for single split**

| Model | Pipe | Diameter of pipe | Connecting method |
|---|---|---|---|
| 1U90S2SS2FA 1U105S2SS1FA<br>1U105S2SS2FA 1U105S2SS1FB | Liquid pipe | Φ9.52mm | Flaring connection |
| 1U125S2SN1FA/B 1U140S2SN1FA/B<br>1U140S2SP1FA/B 1U125S2SN2FA/B<br>1U140S2SP2FA 1U140S2SP2FB | Gas pipe | Φ15.88mm | |
| 1U160S2SP1FB | Liquid pipe | Φ9.52mm | |
| | Gas pipe | Φ19.05mm | |




Install the removed flare nuts to the pipes to be connected, then flare the pipes.

**Limitations for one way piping length and vertical height difference for single split**

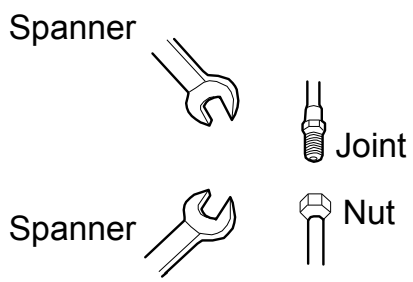
| Model | 1U90S2SS2FA<br>1U105S2SS1FA/B<br>1U105S2SS2FA<br>1U125S2SN1FA/B | 1U125S2SN2FA/B<br>1U140S2SN1FA/B<br>1U140S2SP2FB<br>1U160S2SP1FB | 1U140S2SP1FA/B<br>1U140S2SP2FA |
|---|---|---|---|
| One way piping length | less than 50 m | less than 70 m | less than 75 m |
| Vertical height difference (Between indoor and outdoor) | less than 30 m | less than 30 m | less than 30 m |

Precautions for refrigerant piping

- Do not twist or crush piping.
- Be sure that no dust is mixed in piping.
- Bend piping with as wide angle as possible.
- Keep insulating both gas and liquid piping.
- Check flare-connected area for gas leakage.

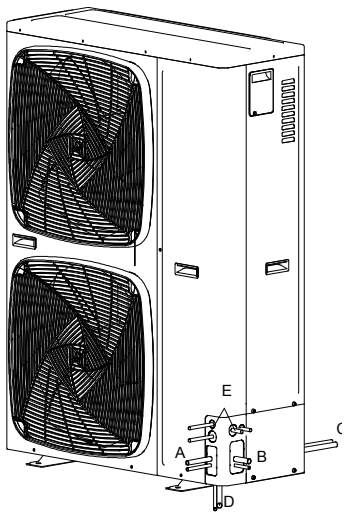
**Piping connection method**

- Apply refrigerant oil to the joint and the flange.
- To bend a pipe, give the roundness as possible not to crush the pipe.
- When connecting pipe, hold the pipe centre to centre and then screw nut on by hand, refer to Fig.
- Be careful not to let foreign matters, such as sands enter the pipe.




| Pipe diameter | Fastening torque (N.m) |
|---|---|
| Liquid pipe 6.35mm | 14.2-17.2 |
| Liquid pipe 9.52mm | 32.7-39.9 |
| Gas pipe 12.7mm | 49.5-60.3 |
| Gas pipe 15.88mm | 61.8-75.4 |
| Gas pipe 19.05mm | 97.2-118.6 |

- Field pipes can be installed in four directions (A, B, C, D, E).



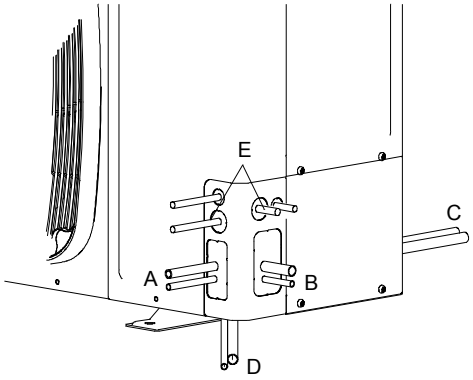

A: Forward
B: Sideways
C: Backward
D: Downward
E: Power supply cable,outdoor and indoor connection cable

- Cutting out the two slits makes it possible to install as shown in the figure "Field pipes in 4 directions". (Use a metal saw to cut out the slits.)
- To install the connecting pipe to the unit in a downward direction, make a knock-out hole by penetrating the centre area around the knock-out hole using a 6mm drill (4x).

• After knocking out the knock-out hole, it is recommended to apply repair paint to the edge and the surrounding end surfaces to prevent rusting.
• When passing electrical wiring through the knock-out holes, remove any burrs from the know-out holes and wrap the wiring with protective tape to prevent damage.

**Preventing foreign objects from entering**

Plug the pipe through-holes with putty or insulating material (procured locally) to stop up all gaps, as shown in the figure.




1 Putty or insulating material (produced locally)

If there is any possibility that small animals enter the system through the knock-out holes, plug the holes with packing materials (field supplied).
Insects or samall animals entering the outdoor unit may cause a short circuit in teh electrical box.
Seal knock-out holes to avoid snow and humidity entering.

**Preventing foreign objects from entering**

• Be careful not to let the indoor and outdoor piping come into contact with the compressor terminal cover.
  If the liquid-side piping insulation might come into contact with it, adjust the height as shown in the figure below.
  Also, make sure the field piping does not touch the bolts or outer panels of the compressor.
• When the outdoor unit is installed above the indoor unit the following can occur:
  The condensed water on the stop valve can move to the indoor unit. To avoid this, please cover the stop valve with sealing material.
• If the temperature is higher than 30°C and the humidity is higher than RH 80%, then thickness of the sealing materials should be at least 20mm in ouder to avoid condensation on the surface of the sealing.
• Be sure to insulate the liquid and gas-side field piping.

NOTICE

Any exposed piping may cause condensation.
(The highest temperature that the gas-side piping can reach is around 120°C, so be sure to use insulating material which is very resistant.)

DANGER

No not touch piping and internal parts.

**Cautions for necessity of a trap**

To avoid the the risk of oil held inside the riser piping flowing back into the compressor when stopped and causing liquid compression phenomenon, or cases of deterioration of oil return, it will be necessary to provide a trap when the outdoor unit is higher than the indoor unit and the height is over 10m, and the oil trap should be added every 5-7m.

### 10.4 Leak test and vacuum drying

When all piping work is complete and the outdoor unit is connected to the indoor unit, it is necessary to :
• check for any leakages in the refrigerant piping
• to perform vacuum drying to remove all moisture in the refrigerant piping.
If there is a possibility of moisture being present in the refrigerant piping (for example, rainwater may have entered the piping), first carry out the vacuum drying procedure below until all moisture has been removed.

**General guidelines**

• All piping inside the unit has been factory tested for leaks.
• Use a 2-stage vacuum pump with a non-return valve which can evacuate to a gauge pressure of-100.7kPa(5 Torr absolute,-755mm Hg).
• Connect the vacuum pump to both the service port of the gas stop valve and the liquid stop valve to increase efficiency.

NOTICE

• Do not purge the air with refrigerants. Use a vacuum pump to evacuate the installation. No additional refrigerant is provided for air purging.

Make sure that the gas stop valve and liquid stop valve are firmly closed before performing the leak test or vacuum drying.

**Leak test**

1 Vacuum leak test
1.1 Evacuate the system from the liquid and gas piping to -100.7 kPa(5 Torr).
1.2 Once reached, turn off the vacuum pump and check that the pressure does not rise for at least 1 minute.
1.3 Should the pressure rise, the system may either contain moisture (refer to the part " Vacuum drying ") or have leaks.
2 Pressure leak test
2.1 Break the vacuum by pressurizing with nitrogen gas to a minimum gauge pressure of 0.2 MPa (2 bar). Never set the gauge pressure higher than the maximum operation pressure of the unit, i.e. 4.0MPa (40bar).Pressurize for 1 hour.
2.2 Test for leaks by applying a bubble test solution to all piping connections.

NOTICE

Make sure to use a recommended bubble test solution from your wholesaler.
Do not use soap water, which may cause cracking of falre nuts (Soap water may contain salt, which absorbs moisture that will freeze when the piping gets cold). and/or lead to corrosion of flared joints (Soap water may contain ammonia which causes a corrosive effect between the brass flare nut and the copper flare).

**Vacuum drying**

To remove all mositure from the system, proceed as follows:
1 Evacuate the system for at least 2 hours to a target vacuum of -100.7 kPa(=-1.007 bar).
2 Check that, with the vacuum pump turned off, the target vacuum is maintained for at least 1 hour.
3 Should you fail to reach the target vacuum within 2 hours or maintain the vacuum for 1 hour, the system may contain too much moisture.
4 In that case, break the vacuum by pressurizing with nigrogen gas to a gauge pressure of 0.05 MPa (0.5bar) and repeat steps 1 to 3 unit all moisture has been removed.
5 The stop valves can now be opened, and/or additional refrigerant can be charged .

INFORMATION

After opening the stop valve, it is possible that the pressure in the refrigerant piping does not rise. This migeh be caused by e.g. the closed state of the expansion valve in the outdoor unit circuit, but does not present any problem for correct operation of the unit.

**10.5 Charging refrigerant**

**Important information regarding the refrigerant used**

• This product contains fluorinated greenhouse gases covered by the Kyoto Protocol. Do not vent gases into the atmopsphere.
• Evacuate Indoor Unit and interconnecting pipework to a vacuum pressure of 500 microns and hold for 15 minutes.
• The outdoor unit is supplied with refrigerant HFC-410A(R410A) sufficient for 30m line length. Refer to the specification sheet to calculate additional refrigerant to suit your line length.
• Open the service valve at the Outdoor unit to allow refrigerant to flow throughout the system.
• For long line lengths, oil (of the correct type) should be added to the refrigerant system at the rate shown in the Specification Date table.See the part "Oil add instruction"
• Leak check all brazed and fitted joints.

**Precautions and general guidelines**

• When servicing the unit requires the refrigerant system to be opened, treatment and evacuation of refrigerant must be done in accordance with applicable legislation.
• Refrigerant can not be charged until field wiring has been completed.
Refrigerant may only be charged after performing the leak test and vacuum drying.

CAUTION

When charging a system, care shall be taken that its maximum permissible charge is never exceeded, in view of the danger of liquid hammer.

WARNING

• Refrigerant cylinders shall be opened shlowly.
• Always use protective gloves and protect your eyes when charging refrigerant.

DANGER

• When the power is on, please close the front panel when leaving the unit unattended.
Charging with an unsuitable substance may cause explosions and accidents, so always ensuren that the appropriate refrigerant is charged.
• This unit requires additional charging of refrigerant according to the length of refrigerant piping connected at the site.
• Make sure to charge the refrigerant in liquid state to the liquid pipe. Since R410A is a mixed refrigerant, its composition changes if charged in its gaseous state and normal system operation would then no longer be assured.
• Before charging, check whether the refrigerant cylinder has a suphon attached or not and position the cylinder accordingly.

Fill using a cylinder with a siphon attached Charge the liquid refrigerant with the cylinder in upright position.



Fill using a cylinder with a siphon attached Charge the liquid refrigerant with the cylinder in up-sidedown position.

On this model it is not necessary to charge additionally if the piping length ≤30m.

**Complete recharging**

NOTICE

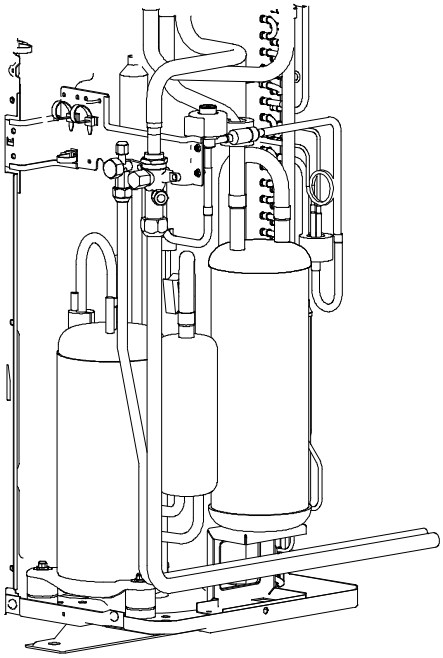
Berore recharging, make sure to execute vacuum drying of the intermal piping of the unit as well. To do so, use the internal service port of the unit. Do not use the service ports located on the stop valve, since vacuum drying can not be performed properly from these ports.

Outdoor units have 1 port on the piping. It is between the heat exchanger and the 4-way valve.

In case complete recharging is required (after a leak, etc.), refer to teh information below to determine the necessary amount of refrigerant.

WARNING

Some sections of the refrigerant circuit may be isolated from other sections caused by components with specific functions (e.g. valves). The refrigerant circuit therefore features additional service ports for vacuuming, pressure relief or pressurizing the circuit. In case it is required to perform brazing on the unit, ensure that there is no pressure remaining inside the unit. Internal pressures need to be released with ALL the service ports indicated on the figures below opened. The location is depending on mode type.



**Total charging weight of the refrigerant (After a leak, etc.)**

The total charging amounts relate to the refrigerant piping length.

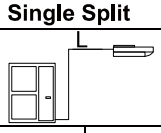
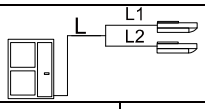
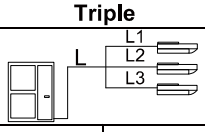
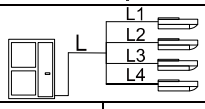
| Model | Refrigerant piping length (liquid side) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 5-10m[(A)] | 10-20m | 20-30m | 30-40m | 40-50m | 50-60m | 60-70m | 70-75m |
| 1U90S2SS2FA<br>1U105S2SS1FA/B | 1.70 | 1.70 | 1.70 | 2.15 | 2.60 | - | - | - |
| 1U105S2SS2FA | 1.70 | 1.70 | 1.70 | 2.15 | 2.60 | - | - | - |
| 1U125S2SN1FA/B | 2.00 | 2.00 | 2.00 | 2.45 | 2.90 | - | - | - |
| 1U125S2SN2FA/B<br>1U140S2SN1FA/B | 2.30 | 2.30 | 2.30 | 2.75 | 3.20 | 3.65 | 4.10 | - |
| 1U140S2SP2FB<br>1U160S2SP1FB | 3.50 | 3.50 | 3.50 | 3.95 | 4.40 | 4.85 | 5.30 | - |
| 1U140S2SP2FA<br>1U140S2SP1FA/B | 2.90 | 2.90 | 2.90 | 3.35 | 3.80 | 4.25 | 4.70 | 5.15 |

## Maxi system refrigerant charging

# Installation Procedure

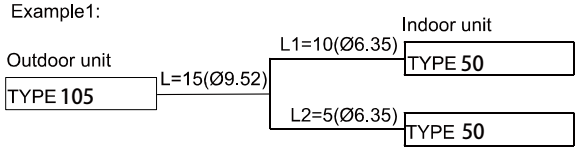
**Additional Refrigerant Charge**

Specification of refrigerant charge for single split and maxi split.
1.It is not neccesary to charge additionally when the piping length L+P≤20m.
2.Please charge refrigerant additionally according to the following table when the piping length L+P>20m or need to complete recharge .

| Single Split | | Twin | | Triple | | Quadruple | |
|---|---|---|---|---|---|---|---|
|  | |  | |  | |  | |
| Charge(g) | L>20 | L≤20,L+P>20 | L>20 | L≤20,L+P> 20 | L>20 | L≤20,L+P>20 | L>20 |
| 105FA/FB | (L-20)*45 | (L+P-20)*30 | (L-20)*45+P*30 | (L+P-20)*30 | (L-20)*45+P*30 | — | — |
| 125FA/FB | (L-20)*45 | (L+P-20)*45 | (L+P-20)*45 | (L+P-20)*30 | (L-20)*45+P*30 | (L+P-20)*30 | (L-20)*45+P*30 |
| 140FA/FB | (L-20)*45 | (L+P-20)*45 | (L+P-20)*45 | (L+P-20)*30 | (L-20)*45+P*30 | (L+P-20)*30 | (L-20)*45+P*30 |
| P(m) | P=0 | P=L1+L2 | | P=L1+L2+L3 | | P=L1+L2+L3+L4 | |

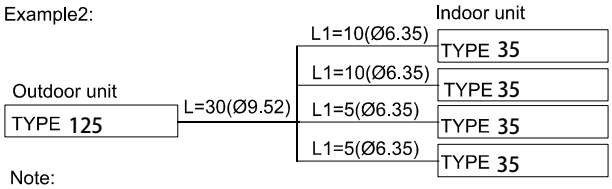
Remark:
a.L is the main pipe length of liquid pipe;P is the sum length of branch liquid pipes.
b.The piping length L+P means the sum of the main pipe and branch pipes.
For MAXI system (Twin,Triple,Quadruple),piping length=L+P≠L.
For single split system,L+P=L,because P=0.

Example1:




Note:
(1)L=15<20;L+P=L+L1+L2=15+10+5=30>20
(2)Refrigerant charging amount=(L+P-20)*30=300g
(3)TYPE 50 means capacity 5000W type

Example2:




Note:
(1)L=30>20;P=L1+L2+L3+L4=10+10+5+5=30
(2)Refrigerant charging amount=(L-20)*45+P*30=1350g
(3)TYPE 35 means capacity 3500W type

- Only in COOLING operation can charge the additonal refrigerant.
- When charging, the refrigerant shall be charged from the charging nozzle of low pressure valve.
- Be careful when charging refrigerant, do not let the air mix into thesystem, and must charge the additional refrigerant in liquid state.

**Oil add instruction**

The cumout of oil added can be calculated by the following formula :Q=(A+(L-30)*B)/4-C

| mode | factory refrigerant charge | recharge quantity | factory oil charging |
|---|---|---|---|
| | A(g) | B(g/m) | C(cc) |
| 1U90S2SS2FA<br>1U105S2SS1FA/B | 1700 | 45 | 870 |
| 1U125S2SN1FA/B | 2000 | 45 | 870 |
| 1U125S2SN2FA/B<br>1U140S2SN1FA/B | 2300 | 45 | 870 |
| 1U140S2SP1FA/B<br>1U140S2SP2FA | 2900 | 45 | 1250 |
| 1U140S2SP2FB<br>1U160S2SP1FB | 3500 | 45 | 1250 |

Note:

a.when Q<0, oil added=0;

b.when Q>0, oil added=Q(cc);

c.L is the liquid pipe length, unit(m)

**10.6 Electrical wiring work**

⚠ WARNING

• All wiring must be performed by an authorized electrician.
All components procured on the side and all elecrtic construction shall comply with the applicable legislation.

⚠ DANGER: HIGH VOLTAGE

To avoid electrical shock, make sure to disconnect the power supply 1 minute or more before servicing the electrical parts. Even after 1 minute, always measure the voltage at the terminals of main circuit capacitors or electrical parts and, before touching , make sure that those voltages are 50VDC or less.

NOTICE

To persons in charge of electrical wiring work:

Do not oerate the unit until the refrigerant piping is complete. (Running it before the piping is ready will break the compressor.)

**Precautions on electrical wiring work**

When servicing the unit requires the refrigerant system to be opened, treatment and evacuation of refrigerant must be done in accordance with applicable legislation. Refrigerant can not be charged until field wiring has been completed.

Refrigerant may only be charged after performing the leak test and vacuum drying.

⚠ DANGER

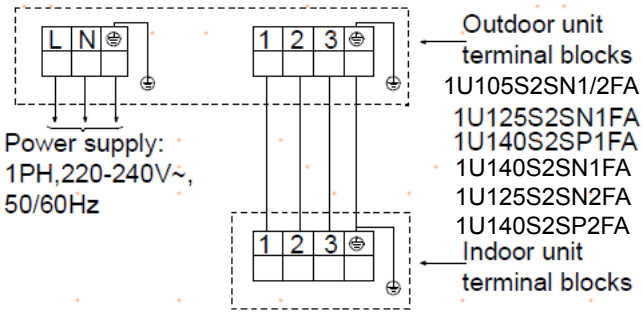
• Before obtaining access to terminal devices, all supply circuits must be interrupted.
• Be sure to install an earth leakage circuit breaker in accordance with aplicable legislation. Failure to do so may cause electrical shock.
• Use only copper wires.
• A main switch or other means for disconnection, having a contact separation in all poles, must be incorporated in the fixed wiring in accordance with applicable legislation. Do not turn on the main switch until all the wiring is completed.
• Make sure to connect power supply cables in normal phase.
• Never squeeze bundled cables into a unit.
• Fix cables so that cables do not make contact with the pipes (especially on high pressure side).
• Secure the electrical wiring with cable ties as shown in the figure
• Make sure no external pressure is applied to the terminal connectors.
• When installing the earth leakage circuit breaker make sure that it is compatible with the inverter (resistant to high frequency electrical noise ) to avoid unnecessary opening of the earth leakage circuit breaker.
• As this unit is equipped with an inverter, installing a phase advancing capacitor not only will deteriorate power factor improvement effect, but also may cause capacitor abnormal heating accident due to high-frequency waves. Therefore, never install a phase advancing capacitor.

⚠ CAUTION

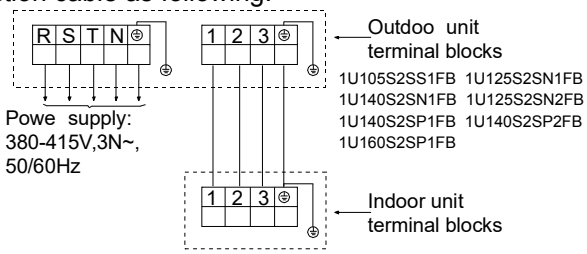
Be sure to install the required fuses or circuit breakers.

**Connecting power supply and inter-unit wiring**

• Connect and fix the power supply cable, indoor-outdoor connection cable as following:



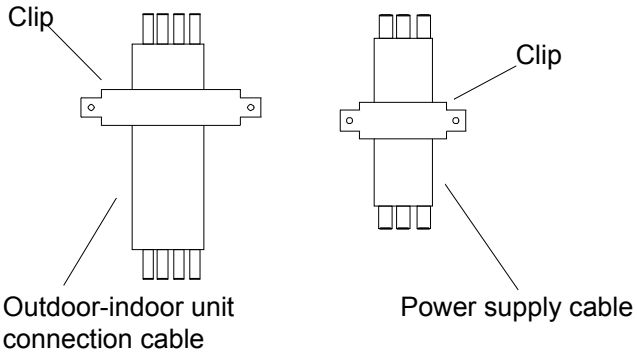

For single phase power supply models: 1U90S2SS2FA 1U105S2SS1/2FA,
Power supply cable: H05RN-F 3G 4.0mm$^2$
1U125S2SN1FA, 1U125S2SN2FA, 1U140S2SN1FA, 1U140S2SP1FA, 1U140S2SP2FA
Power supply cable: H05RN-F 3G 6.0mm$^2$
Indoor and outdoor connection cable: H05RN-F 4G 2.5mm$^2$
(*1Note:If the indoor and outdoor unit connection cable length L satisfied condition 40m< L<55m, please change the connection cables specification to H07RN-F 4G 4.0mm2. If the indoor and outdoor unit connection cable length L satisfied condition 55m≤L≤75m, please change the connection cables specification to H07RN-F 4G 6.0mm$^2$)




For three phase power supply models: 1U105S2SS1FB, 1U125S2SN1FB, 1U125S2SN2FB,1U140/160S2SP1FB, 1U140S2SN1FB, 1U140S2SP2FB
Power supply cable:
H05RN-F 5G 4.0mm2 ,
Indoor and outdoor connection cable:
H05RN-F 4G 2.5mm$^2$

(*1Note: If the indoor and outdoor unit connection cable length L satisfied condition 40m< L<55m, please change the connection cables specification to H07RN-F 4G 4.0mm$^2$. If the indoor and outdoor unit connection cable length L satisfied condition 55m<L<75m, please change the connection cables specification to H07RN-F 4G 6.0mm$^2$ )

• Fix the cable with the clip to prevent slide.




• Secure the cable to the stop valve attachment plate so that it does not slide.
• When cables are routed from the unit, a protection sleeve for the conduits (PG-insertions) can be inserted at the knock-out hole.
• When you do not use a wire conduit, be sure to protect the wires with vinyl tubes to revent the edge of the knockout hole from cutting the wires.
• Follow the electric wiring diagram for electrical wiring works.
• Form the wires and fix the cover fimmly so that the cover may be fit in properly.
• When you do not use a wire conduit, be sure to protect the wires with vinyl tubes to revent the edge of the knockout hole from cutting the wires.
• Follow the electric wiring diagram for electrical wiring works.
• Form the wires and fix the cover fimmly so that the cover may be fit in properly.
  - Do not connect wires of different gauge to the same power supply terminal. (Looseness in the connection may cause overheating.)
• Use the correct screwdriver to tighten the terminal screws. Small screwdrivers can damage the screw head and prevent appropriate tightening.
• Over-tightening the terminal screws can damage the screws.

**Specifications of standard wiring components**

⚠ CAUTION

• Select all cables and wire sizes in accordance with applicable legislation.
• After finishing the electrical work, confirm that each electric part and terminal inside the electric part box is connected securely.
• The earth leakage breaker must be a high-speed type breaker of 30 mA (<0.1s).

### 10.7 Test operation

⚠ DANGER

Never leave the unit unattended during installation or servicing. When the service panel is removed live parts can be easily touched by accident.

INFORMATION

Note that during the first running period of the unit, required power input may be higher than stated on the nameplate of the unit. This phenomenon originates from the compressor that needs elapse of a 50 hours run in period before reaching smooth operation and stable power consumption.

**Pre-run checks**

| Items to check | |
|---|---|
| Electrical wiring<br>Inter-unit wiring<br>Ground wire | • Is the wiring as mentioned on the wiring diagram?<br>Make sure no wiring has been forgotten and that there are no missing phases or reverse phases.<br>• Is the unit properly grounded?<br>• Is the wiring between units connected in series correct? Are any of the wiring attachment screws loose?<br>Is the insulation resistance at leaset 1 MΩ ?<br>- Use a 500V mege-tester when measuring insulation.<br>- Do not use a mega-tester for lowvoltage circuits. |
| Refrigerant piping | • Is the size of the piping appropriate?<br>• Is the insulation material for the piping attached securely?<br>Are both the liquid and gas pipes insulated?<br>• Are the stop valves for both the liquid side and the gas side open? |
| Extra refrigerant | • Did you write down the extra refrigerant and the refrigerant piping length? |

• Be sure to perform a test run.
• Be sure to fully open the liquid-side and gas-side stop valves. If you operate the unit with stop valves closed, the compressor will break down.
• Be sure to execute the first test run of the installation in cooling mode operation.
• Never leave the unit unattended with an open front panel during test run.

**Precautions regarding test-runs**

1 In order to detect stop valves failing to open, operation of the unit is compulsorily performed in cooling for 2-3 minutes during the first test run, even if the remote controller was set to heating operation. In this case, the remote controller will have kept displaying the heating symbol all the time and the unit will switch to heating operation automatically after elapse of that time.
2 In case you cannot operate the unit in test run mode for any unusual reason, refer to “Error codes" .
3 In case of a wireless remote controller, execute the run only after having installed the indoor unit decoration panel with infrared receiver first.
4 In case the panels of indoor units are not yet installed to the indoor units, make sure to shut off the power supply after finishing the complete test run.
5 A complete test run surely includes shutting off power after having performed a normal operation stop on the remote controller. Do not stop operation by turning circuit breakers off.

**Before installing (Relocating) the unit or performing electric work**

| ⚠ CAUTION | |
|---|---|
| Ground the unit.<br>Do not connect the grounding on the unit to gas pipes,water pipes, lightning rods, or the grounding terminals of telephones. Improper grounding presents a risk of electric shock, smoke, fire, or the noise caused by improper grounding may cause the unit to malfunction. | Do not spray water on the air conditioners or immerse the air conditioners in water.<br>• Water on the unit presents a risk of electric shock.<br>Periodically check the platform on which is placed for damage to prevent the unit from falling.<br>• If the unit is left on a damaged plarform, it may topple over, causing injury. |

| | |
|---|---|
| Make sure the wires are not subject to tension.<br>• If the wires are too taut, they may break or generate heat and/or smoke and cause fire.<br>• Install a breaker for current leakage at the power source to avoid the risk of electric shock.<br>• Without a breaker for current leakage, there is a risk of electric shock, smoke or fire.<br>• Use breakers and fuses (electrical current breaker, remote switch<switch+Type-B fuse>,molded case circuit breaker) with a proper current capacity.<br>• The use of large-capacity fuses, steel wire, or copper wire may damage the unit or cause smoke or fire. | When installing draining pipes, follow the instructions in the manual, and make sure that they properly drain water so as to avoid dew condensation.<br>• If not installed properly, they may cause water leaks and damage the furnishings.<br><br>Properly dispose of the packing materials.<br>• Things such as nails may be included in the package. Dispose of them properly to prevent injury.<br>• Plastic bags present a choking hazard to children. Tear up the plastic bags before disposing of them to prevent accidents. |

Before the test run

| ⚠ CAUTION | |
|---|---|
| Do not operate switches with wet hands to avoid electric.<br>Do not touch the refrigerant pipes with bare hands during and immediately after operation.<br>• Depending on the state of the refrigerant in the system, certain parts of the unit such as the pipes and compressor may become very cold or hot and may subject the person to frost bites or burning.<br><br>Do not operated the unit without panels and safety guards in their proper places.<br>• They are there to keep the users from injury from accidentally touching rotating, high-tempreture or high-voltage parts. | Do not turn off the power immediately after stopping the unit.<br>• Allow for at least five minutes before turning off the unit, otherwise the unit may leak water or experience other problems.<br><br>Do not operate the unit without air filters.<br>• Dust particles in the air may clog the system and cause malfunction. |

**10.8 Move and scrap the air conditioning**

• When moving, to disassemble and re-install the air conditioning, please contact your dealer for technical support.
• In the composition material of air conditioning, the content of lead, mercury, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers are not more than 0.1% (mass fraction) and cadmium is not more than 0.01% (mass fraction).
• Please recycle the refrigerant before scrapping, moving, setting and repairing the air conditioning; for the air conditioning scrapping, should be dealt with by the qualified enterprises.

**3U55S2SR5FA 3U70S2SR5FA 4U75S2SR5FA 4U85S2SR5FA 5U90S2SS5FA 5U105S2SS5FA 5U125S2SN1FA**

- **Installation Precautions**

## ⚠WARNING

* The area of the room in which R32 refrigerant air conditioner is installed cannot be less than the minimum area specified in the table below, to avoid potential safety problems due to out-of-limit of refrigerant concentration inside the room caused used by leakage of refrigerant from reigeration system of the indoor unit.

* Once the horn mouth of connecting lines is fastenedit may not be used again (the air tightness may be affected).
* whole connector wire shall be used for indoor/outdoor unit as required in the operation specification of installation process and operation instructions.

- **Electrical Safety Requirements**

1.The surrounding conditions (ambient temperature, direct sunlight and rainwater) shall be noticed during electrical wiring, with effective protective measures being taken.
2.Copper wire cable in line with local standards shall be used as the power line and connector wire.
3..8oth the indoor unit and outdoor unit shall be reliably earthed.
4.Wiring for the outdoor unit shall be made first and then the indoor unit. The air conditioner can only be powered on afterwiring and pipe connection.
5.The dedicated branch circuit must be used, and leakage protector with sufficient capacity must be installed.

- **Qualification Requirements of Installer**

Relevant qualification certificate must be obtained as per national laws and regulations.

- **Indoor Unit Installation**

**1.Fixing of wall panel and piping layout**
In case of left/right water pipe connection for the indoor unit, or in case the evaporator interface of the indoor unit and the horn mouth of the connecting piping cannot be extended to the outdoor side for installation, the connector pipes shall be connected to the evaporator piping interface of the indoor unit in the process of horn mouth.
**2. Piping layout**
During layout of connecting pipes, drain hose and connector wires, the drain hose and connecting wire shall be placed at the bottom and top respectively. The power line cannot be twined with the connector wire. The drain pipes (especially inside the room and machine) must be winded with thermal insulation materials.
**3. Nitrogen charging for pressure maintaining and leak detection**
After the evaporator of the indoor unit is connected to the connector pipe (after welding), nitrogen maximum to 4.0MPa shall be charged inside the evaporator and the piping connected to evaporator with a nitrogen cylinder(adjusted by a reducing valve). Afterwards, the valve of the nitrogen cylinder shall be closed, for leak detection with soapy water or leak detecting solution. The pressure shall be maintained for more than 5 minutes, and then whether the system
pressure is reduced or not shall be observed. In case the pressure is reduced, leakage can be identified. After the leak point is handled, the steps above shall be repeated.
After the evaporator of the indoor unit is connected to connecting piping, nitrogen shall be charged for pressure maintaining and leak detection. Afterwards, the evaporator shall be connected to the two-way stop valve and three-way stop valve of the outdoor unit. After the copper cap of the connecting piping is fastened, nitrogen no more than 4.0MPa shall be charged for 1 hour at the access hole of the three-way stop valve with a charging hose. The valve of the nitrogen cylinder shall be closed, for leak detection with soapy water or leak detecting solution. The pressure shall be maintained for 1 hour, and then whether the system pressure is reduced or not shall be observed. In case the pressure is reduced, leakage can be identified. After the leak point is handled, the steps above shall be repeated. The next step (vacuumizing with a vacuum pump) can only be continued after the installation steps (nitrogen charging for pressure maintaining and leak detection normal) are completed.

- **Outdoor Unit Installation**

1.Fixing and connection



***Note:***

a) Fire source shall be avoided within 3m around the place of installation.

b) The leak detection equipment of refrigerant shall be placed at a low position in the outdoor, and shall be opened.

1) Fixing

The support of the outdoor unit shall be fixed onto the wall surface, and then the outdoor unit shall be fixed onto the support horizontally. In case the outdoor unit is wall-mounted or roof-mounted, the support shall be firmly fixed, to avoid the damage of strong wind.

2) Installation of connecting pipes

The cone of the connecting pipes shall be aligned with the conical surface of corresponding valve connector. The nut of connecting pipes shall be installed at a proper position and then be tightened with a spanner. Excessive tightening torque shall be avoided, or otherwise the nut may be damaged.

**Leak test**

1 Vacuum leak test

1.1 Evacuate the system from the liquid and gas piping to -100.7 kPa(5 Torr).

1.2 Once reached, turn off the vacuum pump and check that the pressure does not rise for at least 1 minute.

1.3 Should the pressure rise, the system may either contain moisture (refer to the part " Vacuum drying ") or have leaks.

2 Pressure leak test

2.1 Break the vacuum by pressurizing with nitrogen gas to a minimum gauge pressure of 0.2 MPa (2 bar). Never set the gauge pressure higher than the maximum operation pressure of the unit, i.e. 4.0MPa (40bar).Pressurize for 1 hour.

2.2 Test for leaks by applying a bubble test solution to all piping connections.

NOTICE

Make sure to use a recommended bubble test solution from your wholesaler.

Do not use soap water, which may cause cracking of falre nuts (Soap water may contain salt, which absorbs moisture that will freeze when the piping gets cold). and/or lead to corrosion of flared joints (Soap water may contain ammonia which causes a corrosive effect between the brass flare nut and the copper flare).

**Vacuum drying**

To remove all mositure from the system, proceed as follows:

1 Evacuate the system for at least 2 hours to a target vacuum of -100.7 kPa(=-1.007 bar).

2 Check that, with the vacuum pump turned off, the target vacuum is maintained for at least 1 hour.

3 Should you fail to reach the target vacuum within 2 hours or maintain the vacuum for 1 hour, the system may contain too much moisture.

4 In that case, break the vacuum by pressurizing with nigrogen gas to a gauge pressure of 0.05 MPa (0.5bar) and repeat steps 1 to 3 unit all moisture has been removed.

5 The stop valves can now be opened, and/or additional refrigerant can be charged .

- **Post-installation Inspection Items and Test Run**

**Post-installation Inspection Items**

| Items to Be Checked | Consequence of Improper Installation |
|---|---|
| Whether the installation is firm or not | The unit may fall, vibrate or make a noise |
| Whether the inspection on air leakage is completed | The refrigerating capacity (heating capacity) may be insufficient |
| Whether the unit is fully insulated | Condensation or drip may occur |
| Whether the drainage is smooth or not | Condensation or drip may occur |
| Whether the power voltage is identical to that marked on the nameplate | Failure may occur or the parts may be burned |
| Whether the circuit and pipeline are installed correctly | Failure may occur or the parts may be burned |
| Whether the unit is safely earthed | Electric eakage may occur |
| Whether the type of wire is in line with relevant regulations | Failure may occur or the parts may be burned |

| | |
|---|---|
| Whether barriers are identified at the air inletloutlet of the indoorloutdoor unit | The refrigerating capacity (heating capacity) may be insufficient |
| Whether the length of refrigerant pipes and the refrigerant amount charged are recorded | The refrigerant amount charged cannot be confirmed |

**Test Run**

1. Preparations

(1) Check the power supply.

(2) Check the equipment around, whether there is any combustible source, fire source, or heat source.

(3) Power on is not allowed before all the installation operations are completed and before the leak detection is proven qualified.

(4) The control circuit shall be connected correctly and all the wires shall be firmly connected.

(5) The two-way stop valve and three-way stop valve shall be opened.

(6) All the scattered articles (especially the metal filing and thread residue) shall be removed from the unit body.

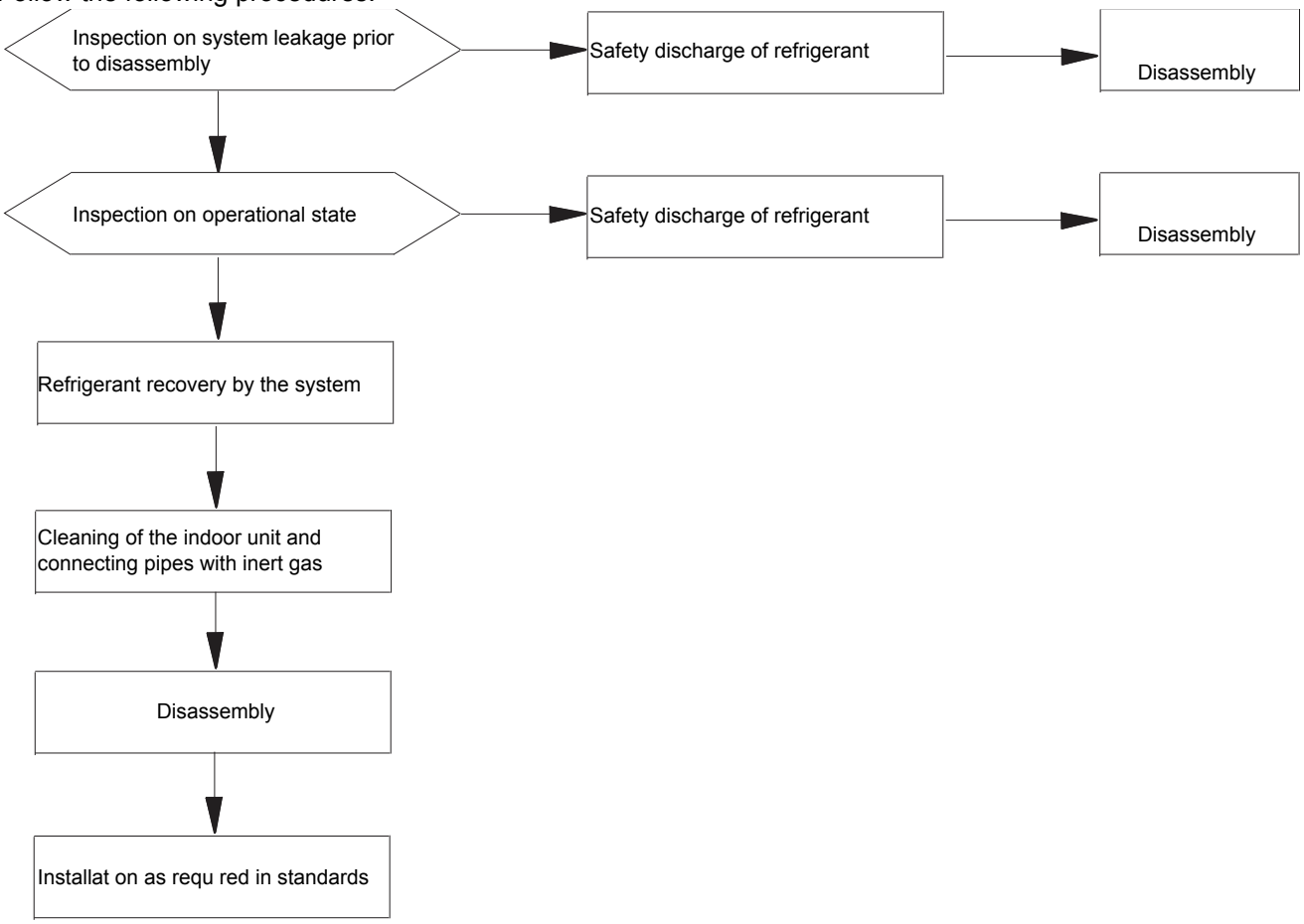
2. Methods

(1) Switch on the power supply and press the "ON/OFF" on the remote controller, after which the air conditioner will start operating.

(2) Press "Mode"to select refrigeration, heating and sweeping wind, and observe whether the air conditioner is under normal operation.

**Relocation Procedures**

- Please call the dealer or the appointed agency.
- Follow the following procedures:




***Note:*** in case relocation is required, the joint of evaporator gaslliquid pipes of the indoor unit shall be cut off with a cutting knife.Connection is only allowed after re-flaring (the same to the outdoor unit).

## Maintenance Instructions

### Maintenance Precautions

#### Precautions

• For all the faults requiring welding the refrigeration pipelines or components inside the refrigeration system of R32 refrigerant air conditioners, maintenance at the user's site is never allowed.
• For the faults requiring radical disassembly and bending operation of the heat exchanger, such as the replacement of the outdoor unit chassis and integral disassembly of the condenser, inspection and maintenance at the user's site are never allowed.
• For the faults requiring replacement of the compressor or parts & components of refrigeration system, maintenance at the user's site is not allowed.
• For other faults not involved in the refrigerant container, internal refrigeration pipelines and refrigeration elements, the maintenance at the user's site is allowed, including the cleaning and dredging of the refrigeration system requiring no disassembly of refrigeration elements and no welding.
• In case replacement of gas/liquid pipes is required during maintenance, the joint of evaporator gas/liquid pipes of the indoor unit shall be cut off with a cutting knife. Connection is only allowed after re-flaring (the same to the outdoor unit).

#### Qualification Requirements of Maintenance Personnel

1. All the operators or the maintenance personnel involved in refrigerating circuits shall be provided with the effective certificate issued by an industry-accepted assessment institute, to ensure that they are qualified for safety disposal of refrigerant as required in the assessment regulations.
2. The equipment can only be maintained and repaired as per the method recommended by the manufacturer. In case the assistance from personnel of other disciplines is required, the assistance shall be supervised by the personnel with qualification certificate involved in flammable refrigerant.

#### Inspection on Maintenance Environment

• Before operation, the refrigerant leaked in the room is not allowed.
• The area of the room in which maintenance is made shall be in line with this manual.
• Continuous ventilation shall be maintained during maintenance.
• Qpen fire or high-temperature heat source higher than 548 degree which can easily give birth to open fire is not allowed inside the room within the maintenance area.
• During maintenance, the phones and the radioactive electronics of all the operators inside the room must be powered off.
• Qne dry powder or carbon dioxide extinguisher shall be equipped inside the maintenance area, and the extinguisher must be under available state.

## Maintenance Site Requirements

• The maintenance site shall be provided with favorable ventilation and must be flat. Arrangement of the maintenance site inside the basement is not allowed.
• Welding zone and non-welding zone shall be divided at the maintenance site, and shall be clearly marked. A certain safety distance must be guaranteed between the two zones.
• Ventilators shall be installed at the maintenance site, and exhaust fans, fans, ceiling fans, floor fans and dedicated exhaust duct can be arranged, to meet the requirements of ventilation volume and uniform exhaust, and to avoid accumulation of refrigerant gas.
• Leak detection equipment for flammable refrigerant shall be equipped, with relevant management system being established. Whether the leak detection equipment is under available state shall be confirmed before maintenance.
• Sufficient dedicated vacuum pumps of flammable refrigerant and refrigerant charging equipment shall be equipped, with relevant management system for maintenance equipment being established. It shall be guaranteed that the maintenance equipment can only be used for vacuumizing and charging of one type of flammable refrigerant, and mixed usage is not allowed.
• The master power switch shall be arranged outside the maintenance site, with protective (anti-explosive) device being equipped.
• Nitrogen cylinders, acetylene cylinders and oxygen cylinders shall be placed separately. The distance between the gas cylinders above and the working area involved in open fire shall be at least 6m. The anti-backfire valve shall be installed for the acetylene cylinders. The color of the acetylene cylinders and oxygen cylinders installed shall meet the international requirements.
• The warning sign of " No Fire" , "No Smoking", or"Anti static"shall be arranged inside the maintenance area.
• Fire control device suitable for electric appliance such as the dry powder extinguisher or carbon dioxide extinguisher shall be equipped, and shall always be under the available state.
• The ventilator and other electrical equipment at the maintenance site shall be relatively fixed, with standardized pipe routing. Temporary wires and sockets at the maintenance site are not allowed.

## Leak Detection Methods

• The environment in which the refrigerant leakage is checked shall be free from potential ignition source. Leak detection with halogen probes (or any other detector with open fire) shall be avoided.
• For the system containing flammable refrigerant, leak detection may be realized with electronic
• leak detection equipment. During leak detection, the environment in which the leak detection equipment is calibrated shall be free from refrigerant. It shall be guaranteed that the leak detection equipment will not become potential ignition source, and is applicable to the refrigerant to be detected. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.
• The fluid used for leak detection shall be applicable to most of the refrigerant. The use of chlorine-containing solvent shall be avoided, to avoid chemical reaction between chlorine and refrigerant and corrosion to copper pipelines.
• In case leakage is suspected, the open fire at the site shall be evacuated or be put out.
• In case welding is required at the leakage position, all the refrigerants shall be recovered, or be isolated at a position far from the leak point with a stop valve. Before and during welding, the whole system shall be purified with OFN.

## Safety Principles

• The power supply should be cut off before the maintenance.
• During product maintenance, favorable ventilation shall be guaranteed at the maintenance site, and the close of all the doors/windows is not allowed.
• Operation with open fire is not allowed, including welding and smoking. The use of phones is also not allowed. The user shall be informed that cooking with open fire is not allowed.
• During maintenance in a dry season, when the relative humidity is less than 40%, anti-static measures shall be taken,including the wearing of cotton clothes and cotton gloves.
• In case the leakage of flammable refrigerant is identified during maintenance, forced ventilation measures shall be taken immediately, and the source of leak shall be plugged.
• In case the product damaged must be maintained by disassembling the refrigeration system, the product must be delivered to the maintenance point. Welding of refrigerant pipelines at the user's site is not allowed.
• During maintenance, in case re-treatment is required due to lack of fittings, the air conditioner shall be reset.
• The refrigeration system must be safely earthed in the whole course of maintenance.
• For the door-to-door service with refrigerant cylinders, the refrigerant charged inside the cylinder cannot exceed the specified value. The cylinder placed in vehicles or at the installation/maintenance site shall be fixed perpendicularly and be kept away from heat sources, ignition source, source of radiation and electric appliance.

## Maintenance Items

### Maintenance Requirements

• Before the refrigeration system is operated, the circulating system shall be cleaned with nitrogen. Afterwards, the outdoor unit shall be vacuumized, the duration of which cannot be less than 30 minutes. Finally, 1.5-2.0MPa OFN shall be used for nitrogen flushing (30 seconds-1 minute), to confirm the position requiring treatment. Maintenance of the refrigeration system is only allowed after the residual gas of flammable refrigerant is removed.
• During the use of refrigerant charging tools, cross contamination of different refrigerants shall be avoided. The total length(including the refrigerant pipelines) shall be shortened as much as possible, to reduce the residual of refrigerant inside.
• The cylinders of refrigerant shall be kept upright, and be fixed.
• Before refrigerant charging, the refrigeration system shall be earthed.
• The refrigerant charged shall be of the type and volume specified on the nameplate. Excessive charging is not allowed.
• After maintenance of the refrigeration system, the system shall be sealed with a safe manner.
• The maintenance in progress shall not damage or lower the original class of safety protection of the system.

### Maintenance of Electrical Components

• Partial of the electrical component under maintenance shall be subject to inspection on refrigerant leakage with dedicated leak detection equipment.
• After the maintenance, the components with safety protection functions cannot be disassembled or removed.
• During the maintenance of sealing elements, before opening the seal cover, the air conditioner shall be powered off first. When power supply is required, continuous leak detection shall be carried out at the most dangerous position to avoid potential risks.
• During maintenance of electrical components, the replacement of enclosures shall not affect the level of protection.
• After maintenance, it shall be guaranteed that the sealing functions will not be damaged or the sealing materials will not lose the function of preventing the entry of flammable gas due to aging. The substitute components shall meet the recommended requirements of the air conditioner manufacturer.

## Maintenance of Intrinsically Safe Elements

• The intrinsically safe element refers to the components working continuously inside flammable gas without any risks.
• Before any maintenance, leak detection and inspection on earthing reliability of the air conditioner must be carried out, to ensure no leakage and reliable earthing.
• In case the allowable voltage and current limit may be surpassed during the service of the air conditioner, any inductance or capacitance cannot be added in the circuit.
• Only the elements appointed by the air conditioner manufacturer can be used as the parts and components replaced, or otherwise a fire or explosion may be triggered in case of refrigerant leakage.
• For the maintenance not involved in system pipelines, the system pipelines shall be well protected, to ensure that no leakage will be caused due to maintenance.
• After maintenance and before test run, the air conditioner must be subject to leak detection and inspection on earthing reliability with leak detection equipment or leak detecting solution. It shall be guaranteed that the startup inspection is carried out without leakage and under reliable earthing.

## Removal and Vacuumizing

• The maintenance or other operations of the refrigeration circuit shall be made as per conventional procedures. Moreover,the flammability of refrigerant shall also be mainly considered. The following procedures shall be followed:
• Refrigerant cleaning;
• Pipeline purification with inert gas;
• Vacuumizing;
• Pipeline purification again with inert gas;
• Pipeline cutting or welding. The refrigerant shall be recovered to a proper cylinder. The system shall be purged with OFN, to ensure safety. The step above may need to be repeated for several times. Compressed air or oxygen cannot be used for purging.

In the course of purging, OFN shall be charged inside the refrigeration system under vacuum state, to reach the operating pressure. Afterwards, the OFN shall be discharged to the atmosphere. Finally, the system shall be vacuumized. The step above shall be repeated until all the refrigerants in the system are cleared. The OFN charged for the last time shall be discharged to the atmosphere. Afterwards the system can be welded. The operation above is necessary in case of pipeline welding.

It shall be guaranteed that no alight fire source is around the outlet of the vacuum pump and the ventilation is favorable.

## Welding

• Favorable ventilation must be guaranteed in the maintenance area. After the maintenance machine is subject to the vacuumizing above, the system refrigerant can be discharged on the outdoor unit side.
• Before the outdoor unit is welded, it must be guaranteed that no refrigerant is inside the outdoor unit and the system refrigerant has been discharged and cleared.
• The refrigeration pipelines cannot be cut with a welding gun under any circumstance. The refrigeration pipelines must be disassembled with a pipe cutter, and the disassembly must be carried out around a ventilation opening.

## Refrigerant Charging Procedures

**The following requirements are added as the supplementation of conventional procedures:**

• During the use of refrigerant charging tools, cross contamination of different refrigerants shall be avoided. The total length (including the refrigerant pipelines) shall be shortened as much as possible, to reduce the residual of refrigerant inside;

• The cylinders of refrigerant shall be kept upright;

• Before refrigerant charging, the refrigeration system shall be earthed;

• A label must be pasted on the refrigeration system after refrigerant charging;

• Excessive charging is not allowed; the refrigerant shall be charged slowly;

• In case system leakage is identified, refrigerant charging is not allowed unless the leak point is repaired;

• During refrigerant charging, the charging amount shall be measured with an electronic scale or a spring scale. The connecting hose between the refrigerant cylinder and the charging equipment shall be relaxed appropriately, to avoid impact on the measuring accuracy due to stress.

**Requirements on storage site of refrigerant**

• The cylinder of refrigerant shall be placed in a -10-50℃ environment with favorable ventilation, and warning labels shall be pasted;

• The maintenance tool in contact with the refrigerant shall be stored and used separately, and the maintenance tool of different refrigerants cannot be mixed.

## Scrapping and Recovery

**Scrapping**

Before scrapping, the technician shall be completely familiar with the equipment and all its features. The safe recovery of refrigerant is recommended. In case the refrigerant recovered needs to be reused, before which the sample of refrigerant and oil shall be analyzed.

(1) The equipment and operation shall be well known;

(2) Power supply shall be switched off;

(3) The followings shall be guaranteed before scrapping:

• The mechanical equipment shall be convenient for operation on the cylinder of refrigerant (if necessary);

• All personal protective equipment is available and being used correctly;

• The whole course of recovery shall be guided by qualified personnel;

• The recovery equipment and cylinders shall be in line with corresponding standards.

(4) The refrigeration system shall be vacuumized if possible;

(5) In case the vacuum state cannot be reached, vacuumizing shall be carried out from numerous positions, to pump the refrigerant in each part of the system out;

(6) It shall be guaranteed that the capacity of cylinders is sufficient before recovery;

(7) The recovery equipment shall be started and operated as per the operation instructions of the manufacturer;

(8) The cylinder cannot be charged too full. (The refrigerant charged cannot exceed Uu% of the capacity of cylinders)

(9) The maximum operating pressure of cylinders cannot be surpassed even only lasting for a short term;

(10) After refrigerant recovery is completed, the cylinder and equipment must be evacuated rapidly, and all the stop valves on the equipment must be closed;

(11) Before purification and tests, the refrigerant recovered cannot be charged into another refrigeration system.

***Note:***

**The air conditioner shall be marked (with dates and signature) after being scrapped and the refrigerant is discharged. It shall be guaranteed that the sign on the air conditioner can reflect the flammable refrigerant charged inside.**

**Recovey**

During maintenance or scrapping, the refrigerant inside the refrigeration system needs to be cleared. It is recommended that the refrigerant be cleared thoroughly.

The refrigerant can only be charged into a dedicated cylinder, the capacity of which shall match with the refrigerant amount charged in the whole refrigeration system. All cylinders to be used are designated for the recovered refrigerant and labeled for that refrigerant (Dedicated Cylinder for Refrigerant Recovery). The cylinders shall be equipped with pressure relief valves and stop valves under favorable state. The empty cylinder shall be vacuumized before usage and be kept under normal temperature.

The recovery equipment shall always be under favorable working state, and be equipped with operation instructions, to facilitate information search. The recovery equipment shall be applicable to the recovery of flammable refrigerant. Moreover, weighing apparatus under available state with measurement certificates shall be equipped. In addition, removable attachment joints free from leakage shall be used as the hose, and shall always be under favorable state. Whether the recovery equipment is under favorable state and is properly maintained and whether all the electrical components are sealed shall be checked before usage, to avoid fire or explosion in case of refrigerant leakage. If you have any question, please consult the manufacturer.

The refrigerant recovered shall be delivered back to the manufacturer in appropriate cylinders, with transporting instructions being attached. Mixing of refrigerant in recovery equipment (especially the cylinders) is not allowed.

During transporting, the space in which the flammable refrigerant air conditioners are loaded cannot be sealed. Anti-static measures shall be taken for the transporting vehicles. Meanwhile, during the transporting loading and unloading of air conditioners, necessary protective measures shall be taken, to protect the air conditioner from being damaged.

During removal of the compressor or clearing of the compressor oil, it shall be guaranteed that the compressor is vacuumized to a proper level, to ensure no residual flammable refrigerant is left inside the lubricating oil. The vacuumizing shall be completed before the compressor is delivered back to the manufacturer. The vacuumizing can only be accelerated by heating the compressor housing through electrical heating. Safety shall be guaranteed when the oil is discharged from the system.disassembled with a pipe cutter, and the disassembly must be carried out around a ventilation opening.

Carefu y read the fo owing information in order to operate the air conditioner correctly.

Below are listed three kinds of Safety Precautions and Suggestions.

⚠ WARNINGIncorrect operations may result in severe consequences of death or serious injuries.

⚠ CAUTION Incorrect operations may result in injuries or machine damages; in some cases may cause serious consequences.

INSTRUCTIONS: These nformat on can ensure the correct operat on of the machine.

The following safety symbols are used throughout this manual:

⃠ :Ind cates an action that must be avoided.

:Ind cates that mportant nstruct ons must be followed.

:Ind cates a part which must be grounded.

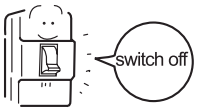
:Beware of electric shock (This symbo is disp ayed on the main unit labe.)

After completing installation, test the unit to check for installation errors. Give the user adequate instructions concerning the use and cleaning of the unit according to the Qperation Manual.

Be sure to conform with the following important Safety Precautions.

## ⚠WARNING

• If any abnormal phenomena is found(e.g.smell of firing), please open the window and well ventilated the room immediately, then cut off the power supply immediately, and contact the dealer to find out the handling method. In such case, to continue using the conditioner will damage the conditioner, and may cause electrical shock, fire, or explosion hazard.



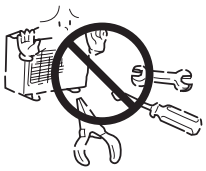

After a long time use of air-conditioner the base should be checked for any damages. If the damaged base is not repaired the unit may fall down and cause accidents.



• Don't dismantle the outlet of the outdoor unit. The exposure of fan is very dangerous which may harm human beings.



• When need maintenance and repairment, call dealer to handle it.
Incorrect maintenance and repairment may cause water leak, electrical shock, fire, and explosion hazard.



## ⚠WARNING

• No goods or nobody is permitted to placed on or stand on outdoor unit.The falling of goods and people may cause accidents.



• Don't operate the air-conditioner with damp hands.Otherwise it will be shocked.



• Only use correctly-typed fuse.
May not use wire or any other materials replacing fuse, otherwise it may cause faults or fire accidents.



• Use drain pipe correctly to ensure efficient drainage. Incorrect pipe use may cause water leaking.

• Installed explosion-proof electrical-leaking circuit breaker. It easily cause electrical shock without circuit breaker.

• Air-conditioner can't be installed in the environment with inflammable gases because the inflammable gases near air-conditioner may cause fire and explosion hazard. Please let the dealer be responsible for installing the conditioner. Incorrect installation may cause water leak, electrical shock, fire, and explosion hazard.
• Call the dealer to take measures to prevent the refrigerant from leaking.
If conditioner is installed in a small room, be sure to take every measure in order to prevent suffocation and explosion accident even in case of refrigerant leakage.

• When conditioner is installed or reinstalled, the dealer should be responsible for them.
Incorrect installation may cause water leaking, electrical shock, fire, and explosion hazard.

• Connect earthing wire.
Earthing wire should not be connected to the gas pipe, water pipe, lightning rod or phone line, incorrect earthing may cause shock.


Earthing

## ⚠ WARNING

• Have the unit professionally installed.
Improper installation by an unqualified person may result in water leak, electric shock, fire, or explosion.

• Place the unit on a stable, level surface that withstands the weight of the unit to prevent the unit from tipping over or falling causing injury as a result.

• Only use specified cables for wiring. Securely connect each cable, and make sure that the cables are not straining the terminals.
Cables not connected securely and properly may generate heat and cause fire and explosion.

• Take necessary safety measures against typhoons and earthquakes to prevent the unit from falling over.

• Do not make any changes or modifications to the unit. In case of problems, consult the dealer.
If repairs are not made properly, the unit may leak water and present a risk of electric shock, or it may produce smoke or cause fire and explosion

• Be sure to carefully follow each step in this handbook when installing the unit.
Improper installat on may result in water leak electr ic shock smoke or fire.

• Have all electrical work performed by a licensed electrician according to the local regulations and the instructions given in this manual. Secure a circuit designated exclusively to the unit.
Improper installation or a lack of circuit capacity may cause the unit to malfunction or present a risk of electric shock, smoke, and fire.

• Securely attach the terminal cover(panel) on the unit.
If installed improperly, dust and/or water may enter the unit and present a risk of electric shock, smoke, fire, or explosion.

• Only use refrigerant R32 as indicated on the unit when installing or relocating the unit.
The use of any other refrigerant or an introduction of air into the unit circuit may cause the unit to run an abnormal cycle and abnormal cycle and cause the unit to burst.

## ⚠ WARNING

• Do not touch the fins on the heat exchanger with bare hands, for they are sharp and dangerous.

• In the event of a refrigerant gas leak, provide adequate ventilation to the room. If leaked refrigerant gas is exposed to a heat source, noxious gases, fire or explosion will be caused.

• Do not try to defeat the safety features of the devices, and do not change the settings.
Defeating the safety features on the unit such as the pressure switch and temperature switch or using parts other than the dealer or specialist may result in fire or explosion.

• When installing the unit in a small room, safeguard against hypoxia that results from leaked refrigerant reaching the threshold level.
Consult the dealer for necessary measures to take.

• When relocating the air conditioner, consult the dealer or a specialist.
Improper installation may result in water leak, electric shock, or fire.

• After completing the service work, check for a refrigerant gas leak.
If leaked gas refrigerant is exposed to a heat source such as fan heater, stove, and electric grill, noxious gases may form.

• Only use specified parts.
Have the unit professionally installed. Improper installation may cause water leak, electric shock,smoke, fire, explosion

**Precautions for Handling Units for Use with R32**

## ⚠ CAUTION

Do not use the existing refrigerant piping

• The old refrigerant and refrigerator oil in the existing piping contain a large amount of chlorine, which will cause the refrigerator oil in the new unit to deteriorate.
• R32 is a high-pressure refrigerant, and the use of the existing piping may result in bursting.

Keep the inner and outer surfaces of the pipes clean and free of contaminants such as sulfurm, oxides, dust/dirt shaving particles, oils, and moisture.
• Contaminants inside the refrigerant piping will cause the refrigerant oil to deteriorate.

Use a vacuum pump with a reverse-flow check valve.
• If other types of valves are used, the vacuum pump oil will flow back into the refrigerant cycle and cause the refrigerator oil to deteriorate.
Do not use the following tools that have been used with the conventional refrigerants. Prepare tools that are for exclusive use with R32.
(Gauge manifold, charging hose, gas leak detector, reverse-flow check valve, refrigerant charge base,vacuum gauge, and refrigerant recovery equipment.)
• If refrigerant and/or refrigerant oil left on these tools are mixed in with R32, or if water is mixed with R32, it will cause the refrigerant to deteriorate.
• Since R32 does not contain chlorine, gas-leak detectors for conventional refrigerators will not work.

## ⚠ CAUTION

• Store the piping to be used during installation indoors, and keep both ends of the piping sealed until immediately before brazing.(keep elbows and other joints wrapped in plastic.)
• If dust, dirt, or water enters the refrigerant cycle, it may cause the oil in the unit to deteriorate or may cause the compressor to malfunction.
Use a small amount of ester oil, ether oil, or alkylbenzene to coat flares and flange connections.
• A large amount of mineral oil will cause the refrigerating machine oil to deteriorate.
Use liquid refrigerant to charge the system.
• Charge the unit with gas refrigerant will cause the refrigerant in the cylinder to change its composition and will lead to a drop in performance

Do not use a charging cylinder.
• The use of charging cylinder will change the composition of the refrigerant and lead to power loss.

Exercise special care when handling the tools.
• An introduction of foreign objects such as dust, dirt or water into the refrigerant cycle will cause the refrigerating machine oil to deteriorate.

Only use R32 refrigerant.
• The use of refrigerants containing chlorine(i.e. R22) will cause the refrigerant to deteriorate.

**Before Installing the Unit**

**⚠ CAUTION**

Do not install the unit in a place where there is a possibility of flammable gas leak.
• Leaked gas accumulated around the unit may start a fire or explosion.
Do not use the unit to preserve food, animals, plants, artifacts, or for other special purposes.
• The unit is not designed to provide adepuate conditions to preserve the quality of these items.
Do not use the unit in an unusual environment
• The use of the unit in the presence of a large amount of oil, steam, acid, alkaline solvents or special types of sprays may lead to a remarkable drop in performance and/or malfunction and presents a risk of electric shock, smoke, fire, or explosion.
• The presence of organic solvents, corroded gas (such as ammonia, sulfur compounds,and acid may cause gas or water leak.)

When installing the unit in a hospital, take necessary measures against noise.

• High-frequency medical equipment may interfere with the normal operation of the air conditioning unit or the air conditioning unit may interfere with the normal operation of the medical equipment

Do not place the unit on or over things that may not get wet.
• When humidity level exceeds 80% or when the drainage system is clogged, indoor units may drip water.
• Installation of a centralized drainage system for the outdoor unit may also need to be considered to prevent water drips from the outdoor units.

## Read Before Installation

**Items to be Checked**

(1) Verify the type of refrigerant used by the unit to be serviced. Refrigerant Type: R32
(2) Check the symptom exhibited by the unit to be serviced. Look in this service handbook for symptoms relating to the refrigerant cycle.
(3) Be sure to carefully read the safety precautions at the beginning of this document.
(4) If there is a gas leak or if the remaining refrigerant is exposed to an open flame, a noxious gas hydrofluoric acid may form. Keep workplace well ventilated.

**CAUTION**

• Install new pipes immediately after removing old ones to keep moisture out of the refrigerant circuit.
• Chloride in some types of refrigerants such as R22 will cause the refrigerating machine oil to deteriorate.

**Necessary Tools and Materials**

Prepare the following tools and materials necessary for installing and servicing the unit. Necessary tools for use with R32 (Adaptability of tools that are for use with R407C).
1.To be used exclusively with R32 ( Not to be used if used with R22 or R407C )

| Tools/Materials | Use | Notes |
|---|---|---|
| Gauge Manifold | Evacuating, Refrigerant Charging | 5.09MPa on the High-Pressure Side. |
| Charging Hose | Evacuating, Refrigerant Charging | Hose Diameter Larger than the Concentional Ones. |
| Refrigerant Recovery Equipment | Refrigerant Recovery | |
| Refrigerant Cylinder | Refrigerant Charging | Write Down the Refrigerant type. Pink in Color at the Top of the Cylinder. |
| Refrigerant Cylinder Charging Port | Refrigerant Charging | Hose Diameter Larger than the Conventional Ones. |
| Flare Nut | Connecting the Unit to Piping | Use Type-2 Flare Nuts. |

2. Tools and materials that may be used with R32 with some restrictions

| Tools/Materials | Use | Notes |
|---|---|---|
| Gas leak detector | Detection of Gas Leaks | The Ones for HFC Type Refrigerant May be Used. |
| Vacuum Pump | Vacuum Drying | May be Used if A Reverse Flow Check Adaptor is Attached. |
| Flare Tool | Flare Machining of Piping | Chages Have Been Made in the Flare Machining Dimension. Refer to the Next Page. |
| Refrigerant Recovery Equipment | Recovery of Refrigerant | May be Used if Designed for Use With R32 |

3. Tools and materials that are used with R410A that can also be used with R32

| Tools/Materials | Use | Notes |
|---|---|---|
| Vacuum Pump With a Check Valve | Vacuum Drying | |
| Bender | Bending Pipes | |
| Torque Wrench | Tightening Flare Nuts | Only Φ12.70 (1/2") and Φ15.88 (5/8")have a larger flare machining dimension. |
| Pipe Cutter | Cutting Pipes | |
| Welder and Nitrogen Cylinder | Welding Pipes | |
| Refrigerant Charging Meter | Refrigerant Charging | |
| Vacuum Gauze | Checking Vacuum Degree | |

4.Tool and materials that must not used with R32

| Tools/Materials | Use | Notes |
|---|---|---|
| Charging Cylinder | Refrigerant Charging | Must Not be Used With R32-Type Units. |

Tools for R32 must be handled with special care, and keep moisture and dust from entering the cycle.

**R32 leakage Test**

No changes from the conventional method. Note that a refrigerant leakage detector for R22 or R410A cannot detect R32 leakage.




Halide torch




R22 or R407C leakage detector

**Items to be Strictly Observed:**

1.Pressurize the equipment with nitrogen up to the design pressure and then judge the equipment's air tightness, taking temperature variations into account.

2.When investigating leakage locations using a refrigerant, be sure to use R32.

3.Insure that R32 is in a liquid state when charging.

**Reasons:**

1.Use of oxygen as the pressurized gas may cause an explosion.

2.Charging with R32 gas will lead the composition of the remaining refrigerant in the cylinder to change and then this refrigerant can not be used.

**Vacuuming**

**1.Vacuum pump with check valve**

A vacuum pump with a check valve is required to prevent the vacuum pump oil from flowing back into the refrigerant circuit when the vacuum pump power is turned off (power failure). It is also possible to attach a check valve to the actual vacuum pump afterwards.

**2.Standard degree of vacuum for the vacuum pump**

Use a pump which reaches 65Pa or below after 5 minutes of operation.

In addition, be sure to use a vacuum pump that has been properly maintained and oiled using the specified oil. If the vacuum pump is not properly maintained, the degree of vacuum may be too low.

**3.Required accuracy of the vacuum gauge**

Use a vacuum gauge that can measure up to 650Pa. Do not use a general gauge manifold since it cannot measure a vacuum of 650Pa.

**4.Evacuating time**

Evacuate the equipment for 1 hour after 650Pa has been reached.

After envacuating, leave the equipment for 1 hour and make sure the that vacuum is not lost.

**5.Operating procedure when the vacuum pump is stopped**

In order to prevent a backflow of the vacuum pump oil, open the relief valve on the vacuum pump side or loosen the charge hose to drawn in air before stopping operation.The same operating procedure should be used when using a vacuum pump with a check valve.

**Charging Refrigerant**

R must be in a liquid state when charging.

**Reasons:**

R32 is a pseudo-azeotropic refrigerant (boiling point R32= -52°C R125= -49°C ) and can roughly be handled in the same way as R410A however, be sure to fill the refrigerant from the liquid side, for doing so from the gas side will somewhat change the composition of the refrigerant in the cylinder.

***Note***

• In the case of a cylinder with a syphon, liquid R32 is charged without turning the cylinder up side down. Check the type of cylinder before charging.

**Remedies to be taken in case of a refrigerant leak**

When refrigerant leaks, additional refrigerant may be charged. (Add the refrigerant from the liquid side)

**Characteristics of the Conventional and the New Refrigerants**

• Because R32 is a simulated azeotropic refrigerant, it can be handled in almost the same manner as a refrigerant such as R410A. Howerver, if the refrigerant is removed in the vapor phase, the composition of the refrigerant in the cylinder will somewhat change.

• Remove the refrigerant in the liquid phase. Additional refrigerant may be added in case of a refrigerant leak.

## Accessories

Accessories Supplied with the Outdoor Unit

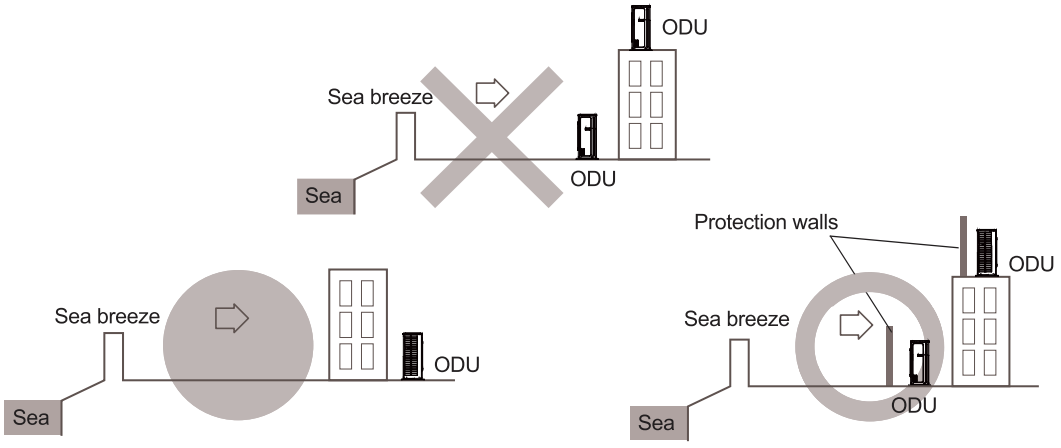
| No. | Drawing | Name of Parts | 5U125S2SN1FA | Other model Quantity |
|---|---|---|---|---|
| 1 |  | Drainage Elbow | 4 | 2 |
| 2 |  | Rubber Cushion | 4 | 4 |
| 3 |  | Clap | 3 | 3 |

## Procedure for Selecting the Location

1) Choose a place solid enough to bear the weight and vibration of the unit, where the operation noise will not be amplified.
2) Choose a location where the hot air discharged from the unit or the operation noise, will not cause a nuisance to the neighbors of the user.
3) Avoid places near a bedroom and the like, so that the operation noise will cause no trouble.
4) There must be sufficient space for carrying the unit into and out of the site.
5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
6) The site must be free from the possibility of flammable gas leakage in a nearby place.
Locate the unit so that the noise and the discharged hot air will not annoy the neighbors.
7) Install units, power cords and inter-unit cables at least 3048mm away from television and radio sets. This is to prevent interference to images and sounds. (Noises may be heard even if they are more than 3048mm away depending on radio wave conditions.)
8) In coastal areas or other places with salty atmosphere of sulfate gas, corrosion may shorten the life of the air conditioner.
9) Since drain flows out of the outdoor unit, do not place under the unit anything which must be kept away from moisture.
10) On a flat surface that does not collect rain water.
11) Away from strong wind.
12) Away from direct exposure to rain or snow.
13) Away from sea breeze.
14) Away from inflammable materials.
15) Away from high temperature or open flames.

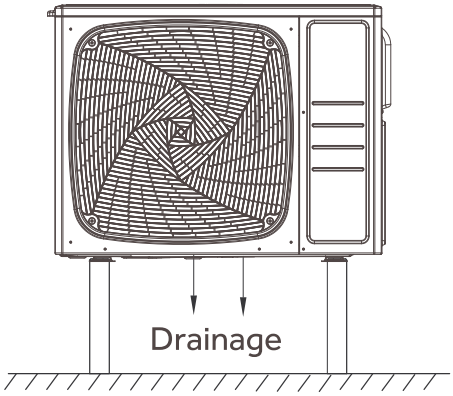
***Note:***

1) Cannot be installed hanging from ceiling or stacked.
2) If installing on a high place such as a roof, with a fence or guard rail around it.
3) If there is a potential for accumulated snow to block the air inlet or heat exchanger, install the unit on a higher base.
4) R32 refrigerant is an unsafe, nontoxic and flammable refrigerant. However, if there is a concern about a dangerous level of refrigerant concentration in the case of refrigerant leakage, add extra ventilation.
5) Avoid installing the outdoor unit where corrosive gases, such as sulfur oxides, ammonia,  and sulfurous gas, are produced. If unavoidable, consult with an installation specialist about using a corrosion-proof or anti-rust additive to protect the unit coils.
6) For seacoast applications, block the unit from direct exposure to sea breeze by installing the unit behind a structure (such as a building) or a protective wall that is 1.5 times higher than the unit, leaving 700 mm of space between the wall and unit for air circulation. Consult an installation expert about taking anti-corrosion measures, such as removing salinity on the heat exchanger and applying a rust inhibitor more frequently than once a year.

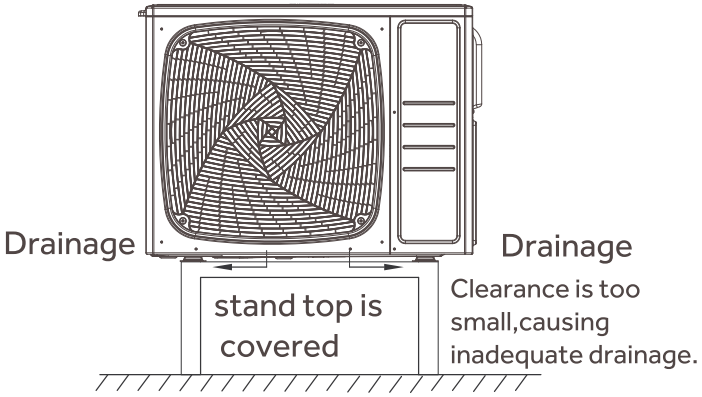


7) Set the unit on mounting brackets or pad. To avoid the adverse effects of snow, ice and defrosting issues, install the unit on heat pump risers to ensure a sufficient height from the ground. In all cases, refer to local code for correct riser height.
Make sure the outdoor unit is installed level and is stable.
Install snow protection hood as necessary.

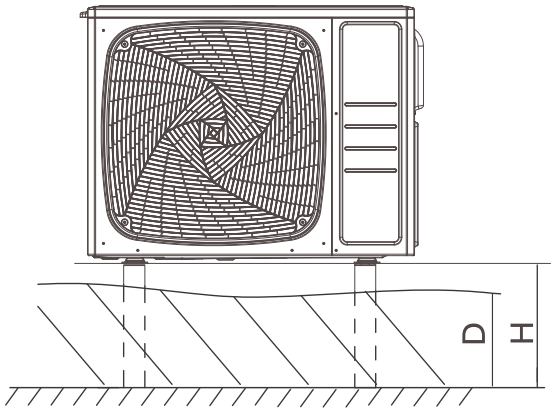
Correct installation




Wrong installation

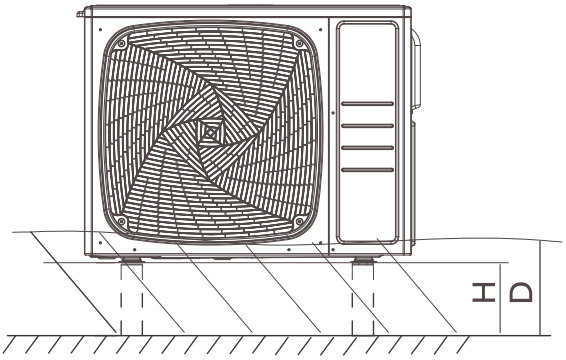



Correct installation




Minimum height (H) should be higher than the highest snowfall depth (D) (H=D+**20cm**)

Wrong installation

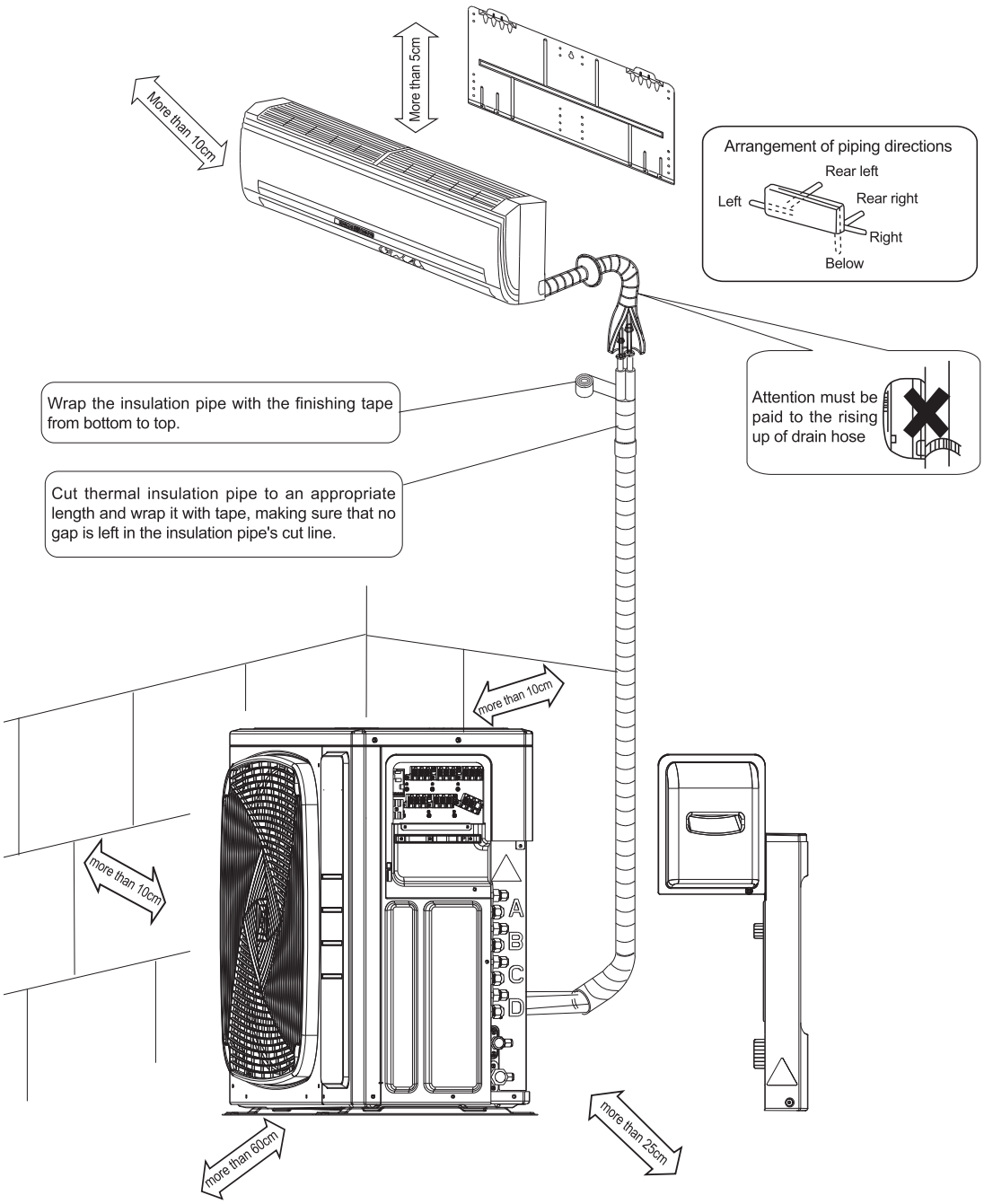



unit may become covered in snow if the stand height is insufficient.

## Installation Drawings of Indoor and Outdoor Units

Do not connected the embedded branch piping and the outdoor unit when only carrying out piping work without connecting the indoor unit in order to add another indoor unit later. Make sure no dirt or moisture gets into either side of the embedded branch piping.

Installation figure please refers to the following.




If there is the danger of the unit falling or overturning, fix the unit with foundation bolts, or with wire or other means.

If the location does not have good drainage, place the unit on a level mounting base(or a plastic pedestal).

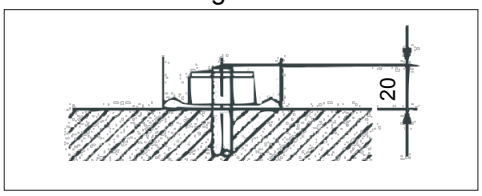
Install the outdoor unit in a level position. Failure to do so may result in water leakage or accumulation.

## Precautions on Installation

• Check the strength and level of the installation ground so that the unit will not cause any operating vibration or noise after installed.

• In accordance with the foundation drawing in fix the unit securely by means of the foundation bolts. (Prepare four sets of M8 or M10 foundation bolts, nuts and washers each which are available on the market.)

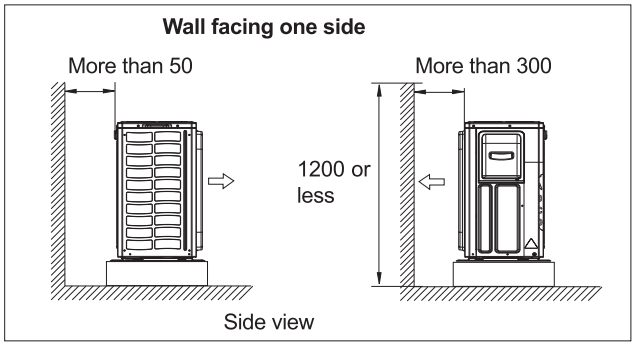
• It is best to screw in the foundation bolts until their length are 20mm from the foundation surface.

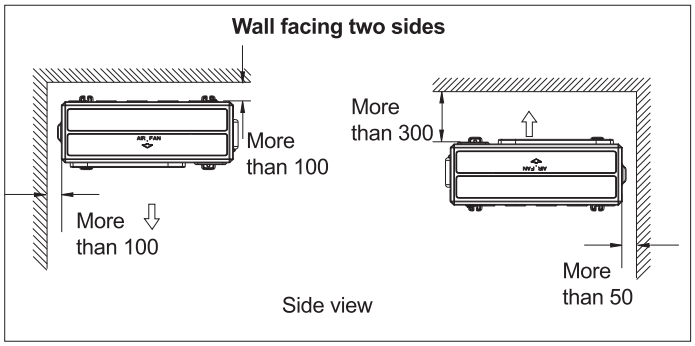


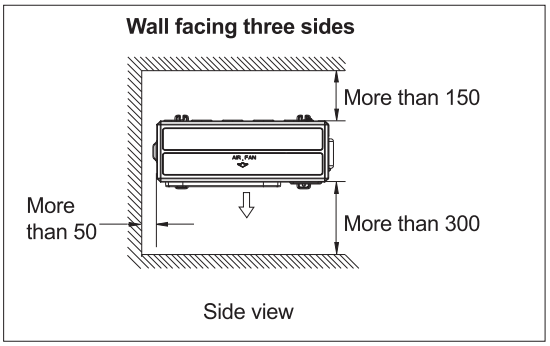

## Outdoor Unit Installation Guideline

• Where a wall or other obstacle is in the path of outdoor unit's intake or exhaust airflow, follow the installation guidelines below.

• For any of the below installation pattems, the wall height on the exhaust side should be 1200mm or less.




## Limitations on the Installation

**1.Precautions on Installation**

• Check the strength and level of the installation ground so that unit will not cause any operating vibration or noise after installation.

• In accordance with the foundation drawing in fix the unit securely by means of the foundation bolts.

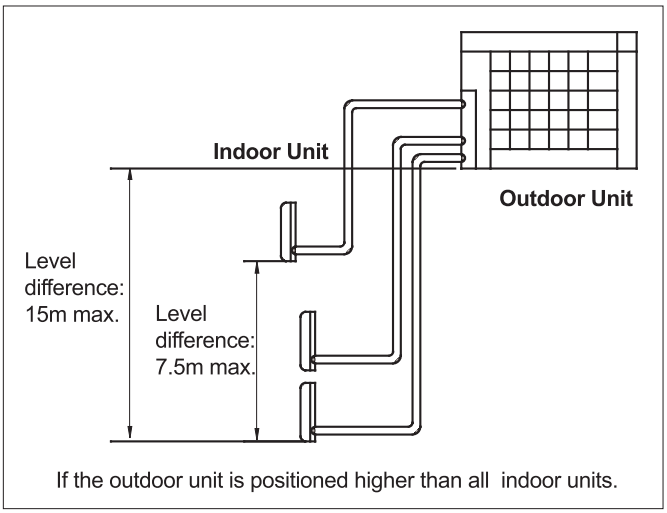
• It is best to screw in the foundation bolts until their length are 20 mm from the foundation surface.

**2.Selecting a location for Installation of the Indoor Units**

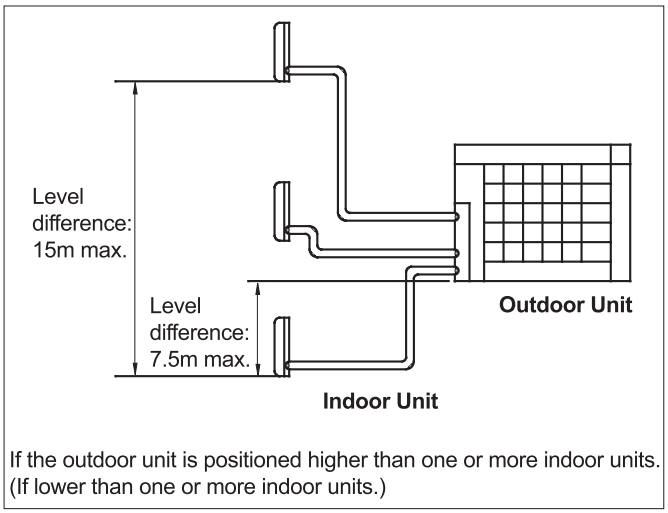
• The maxinum allowable length of refrigerant piping, and the maximum allowable height difference between the outdoor and indoor units, are listed below. (The shorter the refrigerant piping, the better the performance. Connect so that the piping is as short as possible. Shortest allowable length per room is 3m)

| Outdoor Unit Capacity Class | 3U55S2SR5FA | 3U70S2SR5FA | 4U75S2SR5FA |
|---|---|---|---|
| Piping to Each Indoor Unit | 25m max. | 25m max. | 25m max. |
| Total Length of Piping between all Units | 50m max. | 60m max. | 70m max. |

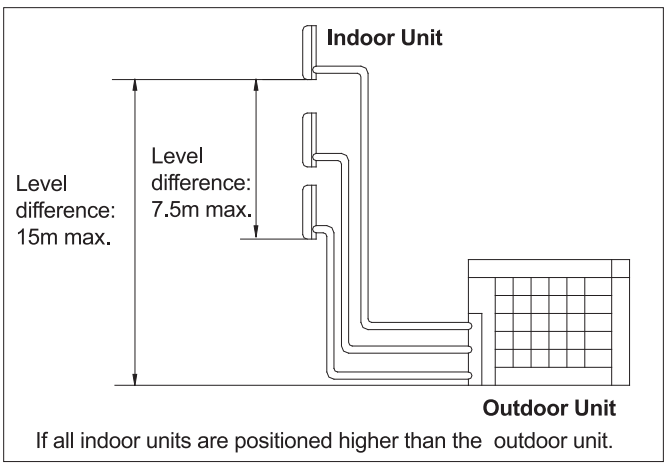
| Outdoor Unit Capacity Class | 4U85S2SR5FA | 5U90S2SS5FA<br>5U105S2SS5FA | 5U125S2SN1FA |
|---|---|---|---|
| Piping to Each Indoor Unit | 25m max. | 25m max. | 25m max. |
| Total Length of Piping between all Units | 70m max. | 80m max. | 100m max. |



If the outdoor unit is positioned higher than all indoor units.

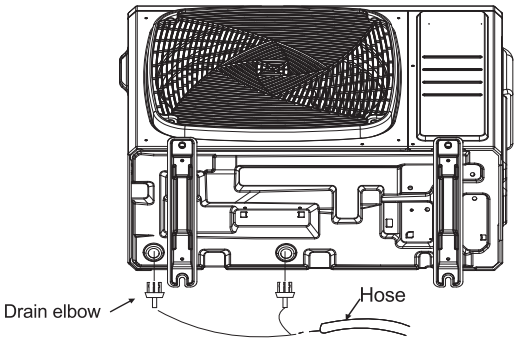


If the outdoor unit is positioned higher than one or more indoor units. (If lower than one or more indoor units.)



If all indoor units are positioned higher than the outdoor unit.

## Refrigerant Piping Work




**1. Installing Outdoor Unit**

1) When installing the outdoor unit, refer to "Precautions for Selecting the Location" and the "Indoor/Outdoor Unit Installation Drawings".

2)If drain work is necessary, follow the procedures below.

**2. Drain Work**

1) Use drain plug for drainage.

2) If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 30mm in height under the outdoor unit's feet.

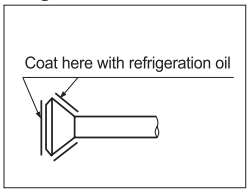
3) In cold areas, do not use a drain hose with the outdoor unit. (Otherwise, drain water may freeze, impairing heating performance.)

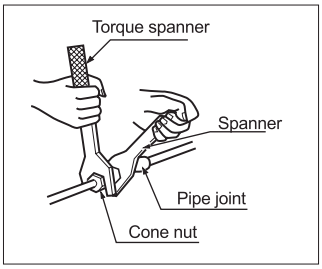
### 3.Refrigerant Piping Work

1). Align the centres of both flares and tighten the flare nuts 3 or 4 turns by hand. Then tighten them fully with the torque wrenches.

Use torque wrenches when tightening the flare nuts to prevent damage to the flare nuts and escaping gas.

| Flare Nut Tightening Torque | |
|---|---|
| Flare nut for ø 6.35 | 14.2-17.2N.m(144-175kgf.cm) |
| Flare nut for ø 9.52 | 32.7-39.9N.m(333-407kgf.cm) |
| Flare nut for ø 12.7 | 49.5-60.3N.m(505-615kgf.cm.) |
| Flare nut for ø 15.88 | 61.8-75.4N.m(630-769kgf.cm.) |




| Valve Cap Tightening Torque |
|---|
| Liquid pipe 26.5-32.3N.m(270-330kgf.cm) |
| Gas pipe 48.1-59.7N.m(490-610kgf.cm) |

| Service Port Cap Tightening Torque |
|---|
| 10.8-14.7N.m(110-150kgf.cm) |

2)To prevent gas leakage, apply refrigeration oil on both inner and outer surfaces of the flare. (Use refrigeration oil for R32)

### 4. Purging Air And Checking Gas Leakage

When piping work is completed, it is necessary to purge the air and check for gas leakage.

**⚠ WARNING**

1) Do not mix any substance other than the specified refrigerant (R32) into the refrigeration cycle.

2) When refrigerant gas leaks occur, ventilate the room as soon and as much as possible.

3) R32, as well as other refrigerants, should always be recovered and never be released directly into the environment.

4) Use a vacuum pump for R32 exclusively. Using the same vacuum pump for different refrigerents may damage the vacuun pump or the unit.

• If using additional refrigerant, perform air purging from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.

• Use a hexagonal wrench (4mm) to operate the stop valve rod.

• All refrigerant pipe joints should be tightened with a torque wrench at the specified tightening torque.

Connect projection side of charging hose (Which comes from gauge manifold) to gas stop valve's service port.

⇩

Fully open gauge manifold's low-pressure valve(Lo) and completely close its high-pressure valve(Hi). (High-pressure valve subsequently requires no operation.)

⇩

Apply vacuum pumping. Check that the compound pressure gauge reads-0.1MPa(-76cmHg). Evacuation for at lease 1 hour is recommended.

⇩

Close gauge manifold's low-pressure valve(Lo) and stop vacuum pump.
(Leave as is for 4-5 minutes and make sure the coupling meter needie does not go back.
If it does go back, this may indicate the presence of moisture or leaking from connecting parts. After inspecting all the connection and loosening then retightening thenuts, reqeat steps 2-4. )

⇩

Remove covers from liquid stop valve and gas stop valve.

⇩

Turn the liquid stop valve's rod 90 degrees counterclockwise with a hexagonal wrench to open valve. Close it after 5 seconds, and check for gas leakage.
Using soapy water, check for gas leakage from indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.

Disconnect charging hose from gas stop valve's service port, then fully open liquid and gas stop valves. (Do not attempt to turn valve rod beyond its stop.)

⇩

Tighten valve caps and service port caps for the liquid and gas stop valves with a torque wrench at the specified torques. See "3 Refrigerant piping" on page 23 for details.

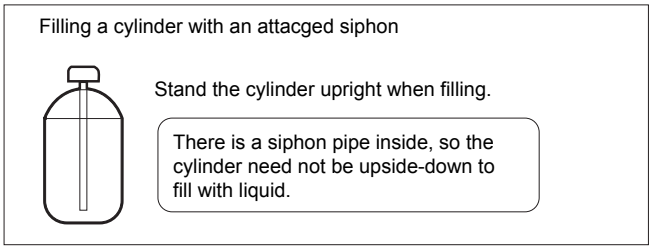
**5. Refilling the Refrigerant**

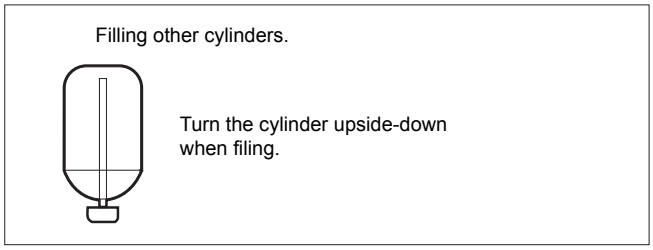
Check the type of refrigerant to be used on the machine nameplate.

**Precautions when adding R32.**

**Fill from the liquid pipe in liquid form.(recommend)**

1) Before filling, check whether the cylinder has a siphon attached or not. (It should have something like "liquid filling siphon attached" displayed on it.) (recommend)




2) Be sure to use the R32 tools to ensure pressure and to prevent foreign objects entering.

| Outdoor Unit | Standard Total liquid Piping lengrh | Max. Total liquid Piping length |
|---|---|---|
| 3U55S2SR5FA | 30m | 50m |
| 3U70S2SR5FA | 30m | 60m |
| 4U75S2SR5FA | 40m | 70m |
| 4U85S2SR5FA | 40m | 70m |
| 5U90S2SS5FA 5U105S2SS5FA | 40m | 80m |
| 5U125S2SN1FA | 50m | 100m |

**6. Charging with Refrigerant**

1) This system must use refrigerant R32.

2) Add refrigerant 20g per meter when the total piping length exceeds the standard value, but make sure that the total liquid piping length should be less than the max.value.

**7.Precautions for Laying Refrigerant Piping**

**• Cautions on Pipe Handling**

1) Protect the open end of the pipe against dust and moisture.

2) All pipe bends should be as gentle as possible. Use a pipe bender for bending. (Bending radius should be 30 to 40mm or larger.)

**• Selection of Copper and Heat Insulation Materials**

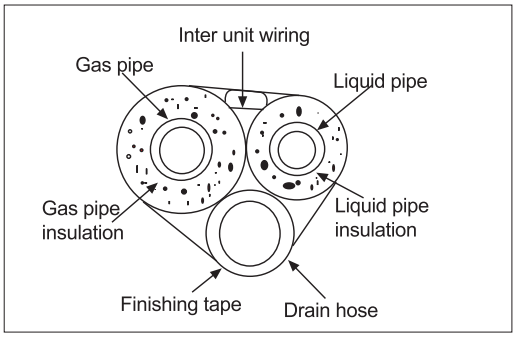
When using commercial copper pipes and fittings, observe the following:

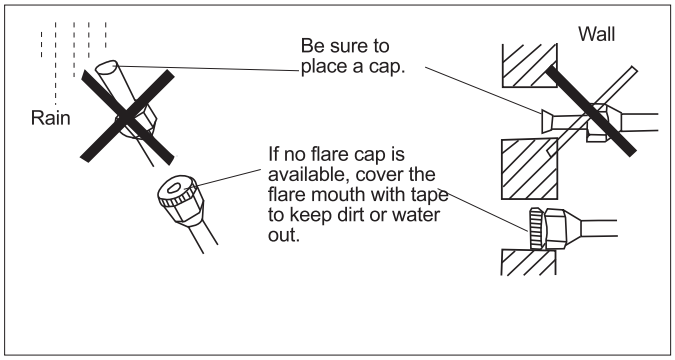
1) Insulation material: Polyethylene foam

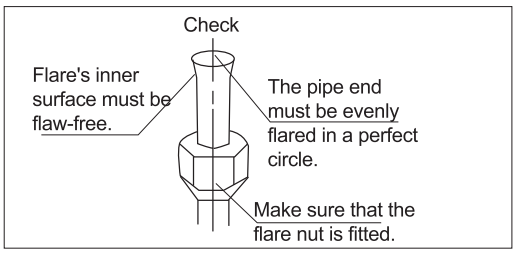
Heat transfer rate: 0.041 to 0.052W/mK (0.035 to 0.045kcal/mh$^{o}$C) Refrigerant gas pipe's surface temperature reaches 110$^{o}$C max. Choose heat insulation materials that will withstand this temperature.

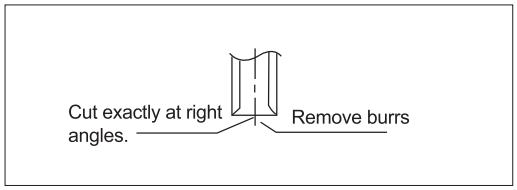
| Gas Pipe | Gas Pipe Insulation |
|---|---|
| O.D.: 9.52mm,12.7mm<br>Thickness: 0.8mm | I.D.: 12-15mm,<br>Thickness: 13mm min. |
| Liquid Pipe | Liquid Pipe Insulation |
| O.D.: 6.35mm<br>Thickness: 0.8mm | I.D.: 18-10mm<br>Thickness: 10mm min. |

3) Use Separate Thermal Insulation Pipes For Gas And Liquid Refrigerant Pipe.

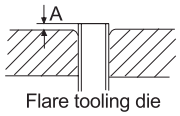



Set exactly at the position shown below.

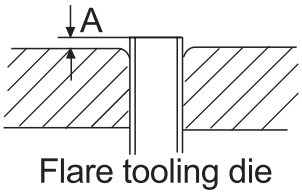



| | Flare Tool for R32 | Conventional Flare Tool | |
|---|---|---|---|
| | Clutch-Type | Clutch-Type (Rigid-Type) | Wing-Nuttype (Imperial-Type) |
| | 0-0.5mm | 1.0-1.5mm | 1.5-2.0mm |

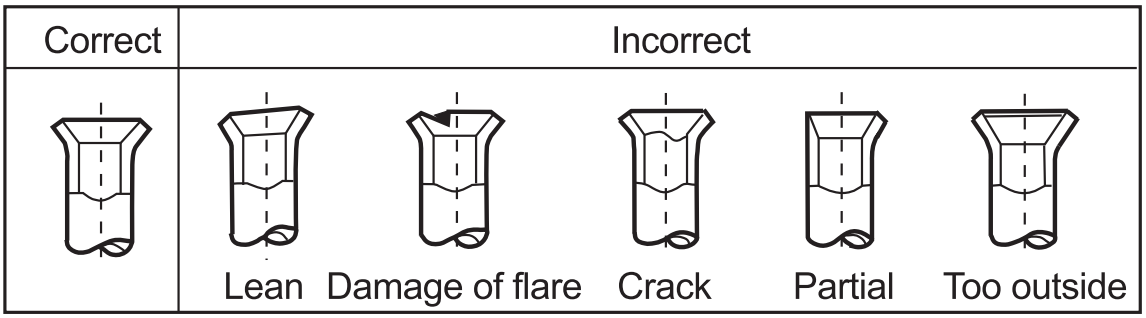
**8.Cutting and Flaring Work of Piping**

• Pipe cutting is carried out with a pipe cutter and burs must be removed.

• After inserting the flare nut, flaring work is carried out.

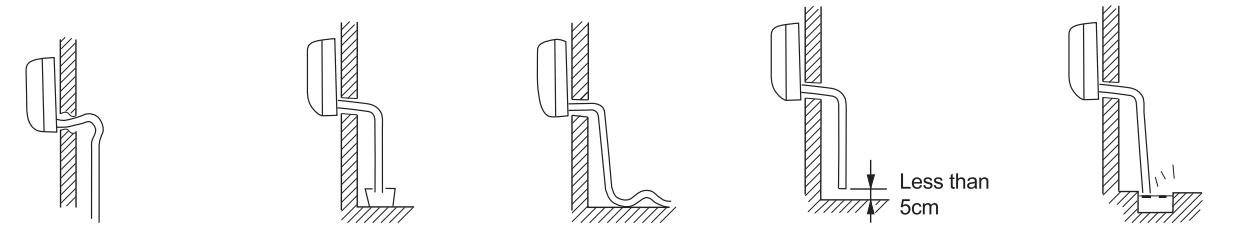



| Pipe | Pipe Diameter | Size A(mm) |
|---|---|---|
| Liquid Pipe | 6.35mm(1/4") | 0.8-1.5 |
| Gas Pipe | 9.52mm(3/8") | 1.0-1.5 |
| | 12.7mm(1/2") | 1.0-1.5 |



**9.On Drainage**

• Please install the drain hose so as to be downward slope without fail. Please don't do the drainage as shown below.




It becomes high midway. | The end is immersed in water | It waves. | It gap with the ground its too small. | There is the bad smell from a ditch.

• Please pour water in the drain pan of the indoor unit, and confirm that drainage is carried out thoroughly to outdoor.

• In case that the attached drain hose is in a room, please apply heat insulation to it without fail.

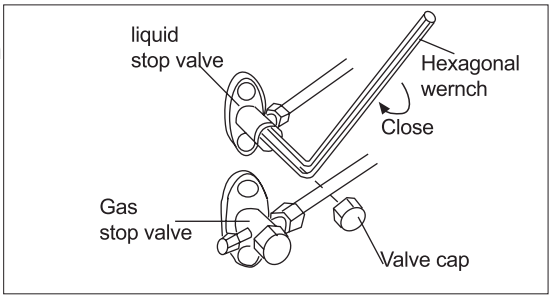
**⚠ WARNING**

1) Do not use mineral oil on flared part.
2) Prevent mineral oil from getting into the system as this would educe the lifetime of the units.
3) Never use piping which has been used for previous installations. Only use parts which are delivered with the unit.
4) Do never install a drier to this R32 unit in order to guarantee its lifetime. The drying material may dissolve and damage the system.
5) Incompete flaring may cause refrigerant gas leakage.

## Pump down operation

**In order to protect the environment, be sure to pump down when relocating or disposing of the unit.**

1) Remove the valve caps from liquid stop valve and gas stop valve.
2) Carry out forced cooling operation.
3) After five to ten minutes close the liquid stop valve with a hexagonal wrench.
4) After two to three minutes close the gas stop vaile and stop forced cooling operation.




## Wiring Work

**1. Electric Wiring**

• The air conditioner must use special circuit, and wiring by the qualified electrician according to the wiring rules specified in national standard.

• The grounding wire and the neutral wire shall be strictly separated. Connect the neutral wire with grounding wire is incorrect.

• The explosion-proof electric leakage breaker must be installed.

• All the electric wire must be copper wire.Power supply: 1PH, 220-240V-, 50/60Hz.

• The wiring method of power line is Y connection. If the power line is damaged, in order to avoid risk of electric shock, it must be replaced by the manufacturer or its repair center or other similar qualified person.The connecting cable must be shielded. Fuse:T25A 250VAC(Power circuit board).

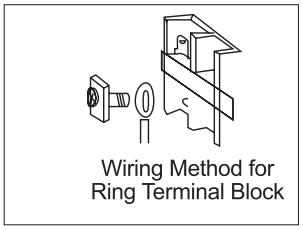
• Please check the circuit diagram about the fuse replaced, explosion-proof fuse. The specification of power cable is H05RN-F3G 4.0mm$^2$.

• The specification of cable between indoor unit to outdoor unit is H05RN-F4G 2.5mm$^2$. (If more than 30m, choose H07RN-F4G 4.0mm$^2$)

## 2.Wiring Method

• Wiring method of orbicular terminals

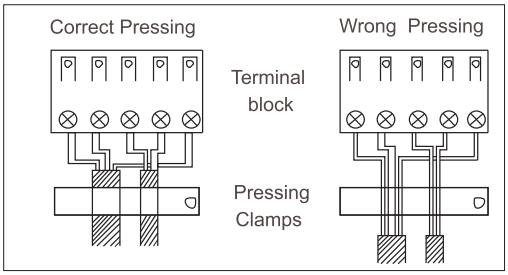
For the connection wire with orbicular terminals, its wiring method is as shown in the right figure: remove the connecting screw, put the screw through the ring on the end of the wire, then
connect to the terminal block and fasten screw.


Wiring Method for
Ring Terminal Block

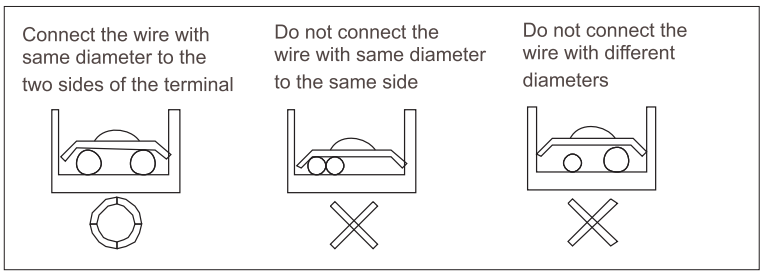
• Wiring Method of Straight Terminals.

For the connection wire without orbicular terminals, its wiring method is: loosen the connection screw, and insert the end of the connection wire completely into the Terminal block, then fasten the screw.

Slightly pull the wire outwards to confirm it is firmly held.




• Crimp connection method for wires without terminals.




• Crimp Connection Method For Connection Wire

After connection, the wire must be fastened by wire cover. The wire cover shall press on the protection coat of the connection wire, as shown in right top figure.

***Note:***When connecting the wiring, confirm the terminal number of indoor and outdoor units carefully. Incorrect wiring will damage the controller of air conditioner or the unit can not operate.

## 3. Wiring Method Of Outdoor Unit:

Remove the cover of terminal box and clamp.

**• Power Line**

Connect respectively the live wire, neutral wire, ground wire to the L/N on terminal block and grounding screw on metal sheet.

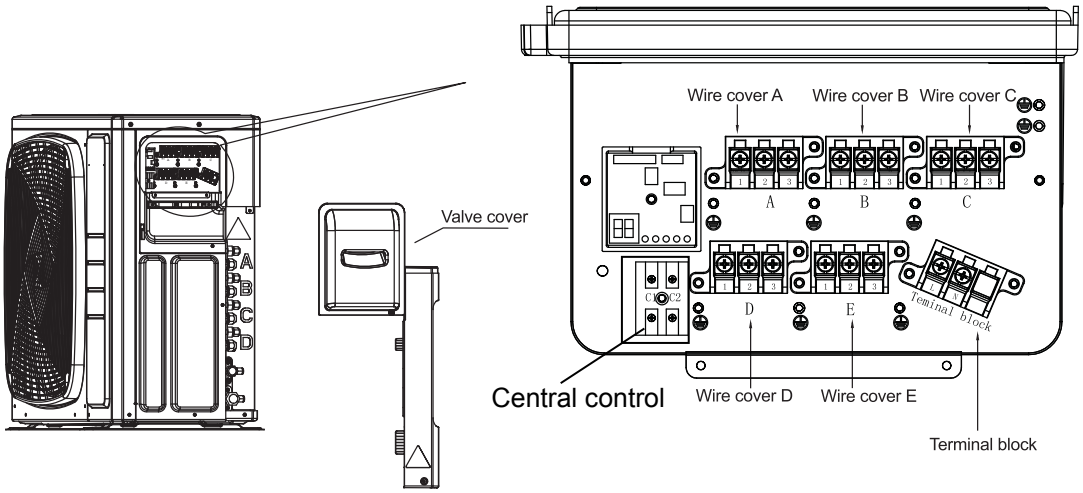
**• Communication Line between Indoor & Outdoor**

E.g. Connect respectively the terminal 1/2/3/GND of Indoor B to the 1/2/3 on Terminal B and grounding screw on metal sheet of Outdoor.

Max. 5 indoor units for 5U outdoor and the rest outdoors follow the same logic.

Reinstall the clamp and cover of terminal box according to the Installation Manual, after the connection above-mentioned done

***Note*: Power cord and communication wire are provided by consumers themselves.**




**4. Wiring Method of Indoor Unit**

Loosen wire cover and connect the power cord and communication wire of indoor unit to the terminal correspondingly.

***Note:*When connecting power cord to power supply terminal, please pay attention to the following items:**

• Do not connect the power cord with different dimensions to the same connection wire end. Improper contact will cause heat generation.

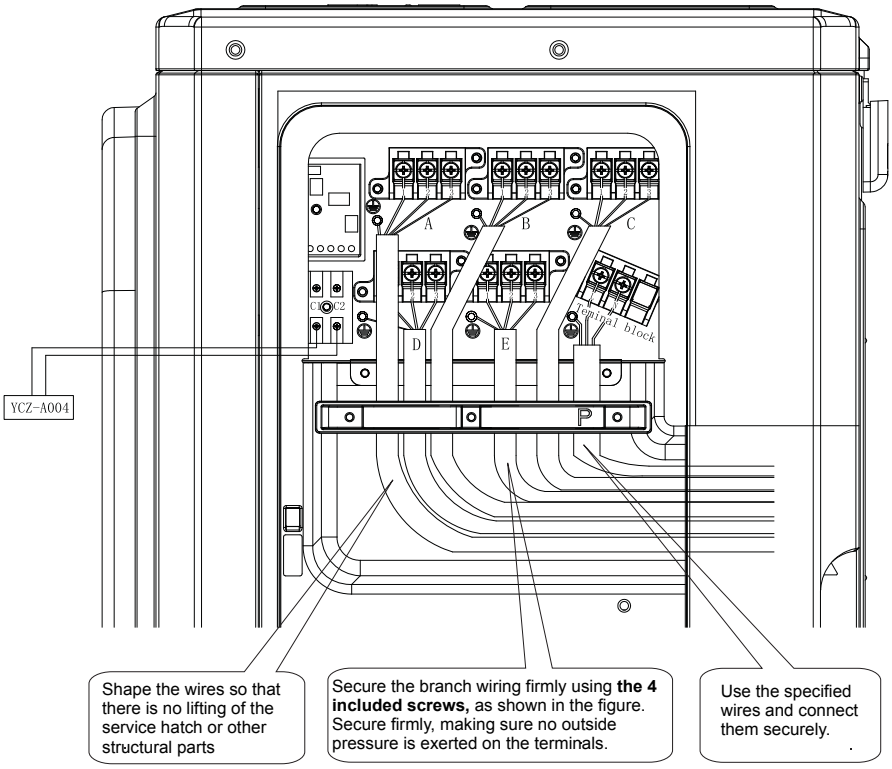
• Do not connect the power line with different dimensions to the same grounding wire end. Improper contact will affect protection.

• Do not connect the power line to the connecting end of communication wire. Incorrect connection will cause damage to the connected unit.

• The wiring should ensure that the ground line is the last one to be broken off by force.

**5. Example wiring diagram.**

Wiring diagram please refers to the following.



## Test Running

• Before Starting the Test Running, Please Confirm the Following Works Have been Done Successfully.

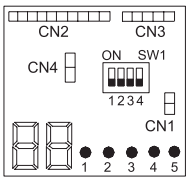
1) Correct piping work 2) Correct wiring work

3) Correct match of indoor and outdoor unit 4) Proper recharge of refrigerant if needed.

• Make sure that all the stop valves are fully open.

• Check the voltage supplied to the outdoor and indoor units, please confirm that is 220-240v.

• Wiring error check




This product is capable of automatic checking of wiring error.

Switch on all the 4 dip-switches on the outdoor unit small service PC-board as shown on the right. Then power off the unit and power on again the system will enter the operation of "Wiring Error Check". After 3 Minutes stand-by the unit starts for automatic wiring checking.

Approximately 30~50minutes (depends on how many units installed in the system) after the unit starts the Errors of the wiring will be shown by the LEDs (1 to 3).

During this operation, the digital-number will alternately show the compressor working frequency (e.g. 50 stands for the current running frequency) and letter "CH"(means checking).

After this operation, if all the wiring is correct, the digital-number will show "0", if there has wrong wiring, the digital-number will show "EC"(error connection) and also it will flashing.

The service monitor LEDs indicate the error of wiring, as shown in the table below. For details about how to read the LED display, refer to the service manual.

If self-checking is not possible, check the indoor unit wiring and piping in the usual manner.

| LED | 1 | 2 | 3 | 4 | 5 | Message |
|---|---|---|---|---|---|---|
| Status | OFF | | | | | Unit Not Connected |
| | ALL Flashing | | | | | Automatic Checking Impossible, all Units Connect Wrong |
| | ALL ON | | | | | All Units Connect Correctly |
| | ON | FLASHING | FLASHING | ON | FLASHING | **On:** Unit Connect Correctly<br>**Flashing:** Unit Connect Wrong, Need To Change The Wiring Manually Between 2,3, And 5 |
| | ON | FLASHING | FLASHING | ON | ON | **On:** Unit Connect Correctly<br>**Flashing:** Unit Connect Wrong, Need To Change The Wiring Manually Between 2,3 |
| | Only One LED Flashing | | | | | Abnormal |

• Test running.

1) To test cooling, set the lowest temperature at 16°C. To test heating, set the highest temperature, at 30°C. If the temperature is lower than 16°C, it is impossible to test cooling with remote controller, and also when the temperature is higher than 30°C, it is impossible to test heating.

2) Please check both cooling and heating operation of each unit individually and then also check the simultaneous operation of all indoor units.

3) After running the unit for about 20 minutes, check the indoor unit outlet temperature.

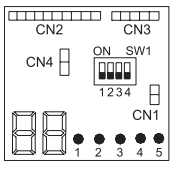
4) After the unit is stopped, or working mode changed, the system will not start again for about 3 minutes.

5) During cooling operation, frost may occur on the indoor unit or pipes, this is normal.

6) Operate the unit according to the operation manual. Please kindly explain to our customers how to operate through the instruction manual.

• Seven-segment Numeric Display

1) When unit is running, this seven-segment numeric will display the frequency of compressor. For example, " 40 " means compressor running frequency is 40 Hz, " 108" means compressor running frequency is 108Hz.




2) When faulty happens, seven-segment numeric will flash and display some numbers, this number is failure code. For example, a flashing " 15 " means No.15 failure, that is indoor and outdoor communication error.

• Communication LED

3U55S2SR5FA and 3U70S2SR5FA are with 3 green LED that means 3 indoor units, and 4U85S2SR5FA with 4 green LED means 4 indoor units. 5U90S2SS5FA, 5U105S2SS5FA with 5 green LED means 5 indoor units.If one LED keep lighting that means the corresponding indoor unit has good communication with outdoor unit. If one LED is not lighting, that means there is no communication between indoor and outdoor.

***Notes:***

1) When using this product, you need not to set the address. But the L/N wires between indoor & outdoor units must be corresponded, or there will be communication failure.

2) Quiet Operation Setting. Set the DIP "8" to ON position of SW5, the system will run with lower noise, but the max. capacity will also reduce slightly.

3) Do not change the settings of other switchs, wrong settings can make the system damage or other malfunctions.

## Set Fixed Speed Mode

For inverter air-conditioning, the operating pressure and operating current can be varied depending on the compressor speed and load condition.

With changes in suction pressure and operating current, it is more difficult for technicians to identfy whether the amount of refrigerant inside the sysem is sufficient.

To ease the investigation, temporary change the operating from inverter mode to fixed speed mode during inspection.

| | |
|---|---|
| Rated cooling working condition | Set 20℃ cooling by wireless controller, high fan speed. Press healthy botton 8 times continuously in 7 senconds, then entered when lamp buzzer sounds twice. |
| | Press any key on wireless controller to exit. |

## R32 Adaptor installation

### 1. Adaptors as accessories

For models 3U52S2SG1FA, 3U68S2SG1FA, 4U70S2SH1FA, 4U85S2SH1FA, adaptors are included in the accessories

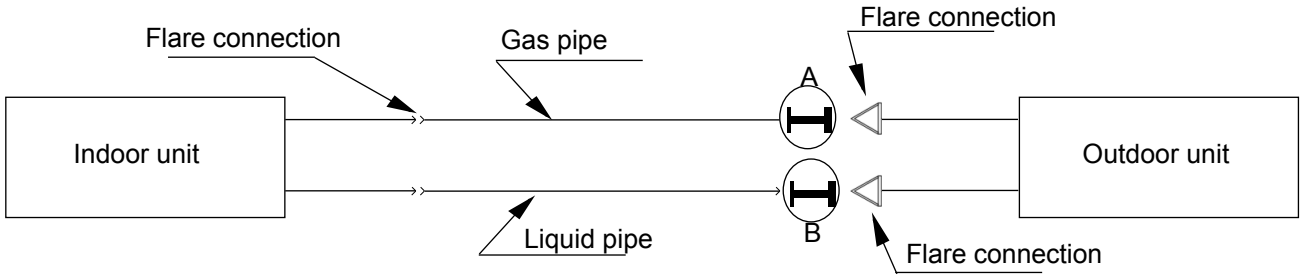
| Adapter Specfication (mm) (in.) | Qty. | Model |
|---|---|---|
| 9.52 to12.7 (3/8 to 1/2) | 1 piece | 3U52S2SG1FA, 3U68S2SG1FA |
| 9.52 to 12.7 (3/8 to 1/2 )<br>12.7 to 9.52 (1/2 to 3/8) | 2 pieces | 4U70S2SH1FA, 4U85S2SH1FA |

For models below, there's no adaptor included in the accessories
3U55S2SR2FA, 3U55S2SR3FA, 3U55S2SR5FA
3U70S2SR2FA, 3U70S2SR3FA, 3U70S2SR5FA,
4U75S2SR2FA, 4U75S2SR3FA, 4U75S2SR5FA,
4U85S2SR2FA, 4U85S2SR3FA, 4U85S2SR5FA,
5U90S2SS2FA, 5U90S2SS3FA, 5U90S2SS5FA,
5U105S2SS2FA, 5U105S2SS3FA, 5U105S2SS5FA
For these models if there's adaptor requirements, please order spare parts as following

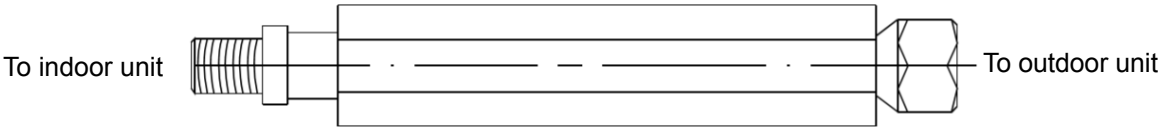
### 2. Adaptors as spare parts

| Adapter Specfication (mm) (in.) | Spare parts code |
|---|---|
| 6.35 to 9.52 (1/4 to 3/8) | 0150704781 |
| 9.52 to 12.7 (3/8 to 1/2) | 0150707574A |
| 9.52 to 15.88 (3/8 to 5/8) | 0150707575 |
| 12.7 to 15.88 (1/2 to 5/8) | 0150709683 |
| 12.7 to 9.52 (1/2to 3/8) | 0150706109 |

### 3. Installation instructions



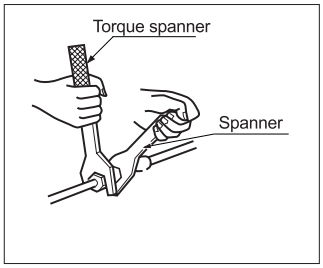

A/B: Adaptor




Note:
Adaptors should be installed at outdoor unit side.

- The connection of indoor unit pipes must use double spanners.
- The installing torque shall be as given in the following table

| Flare Nut Tightening Torque | |
|---|---|
| Flare nut for ø6.35mm (1/4 in.) | 14.2-17.2N.m(144-175kgf.cm) |
| Flare nut for ø9.52mm (3/8 in.) | 32.7-39.9N.m(333-407kgf.cm) |
| Flare nut for ø12.7mm (1/2 in.) | 49.5-60.3N.m(505-615kgf.cm.) |
| Flare nut for ø15.88mm (5/8 in.) | 61.8-75.4N.m(630-769kgf.cm.) |

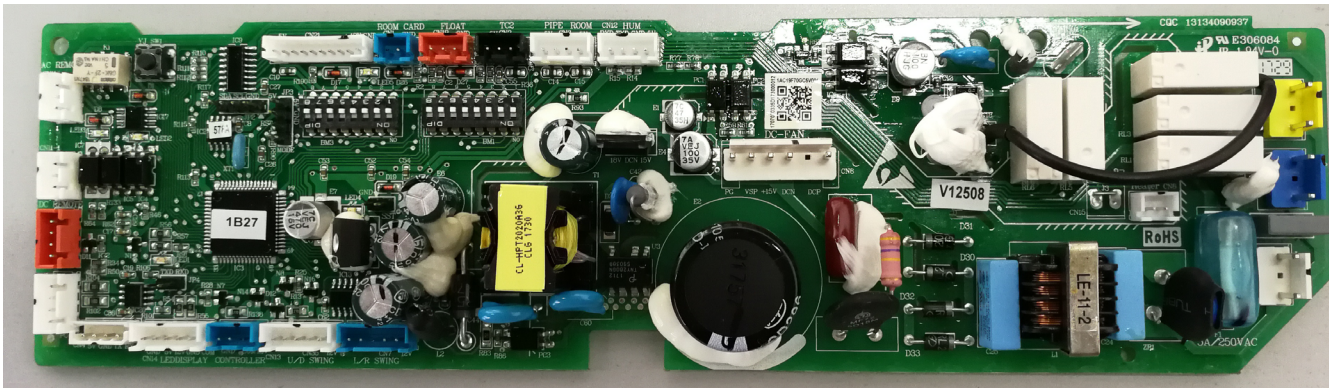


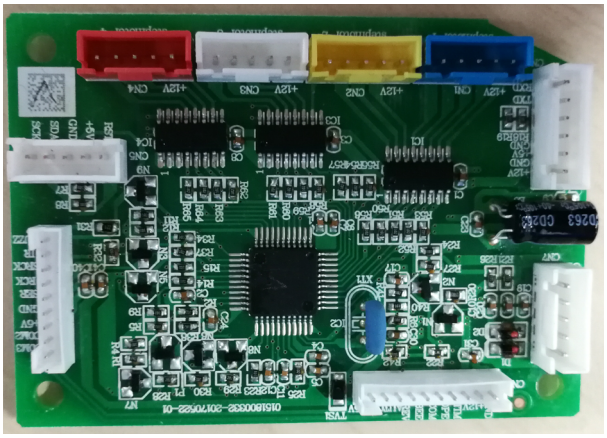
# Part 9 . Electric Control and Troubleshooting

PCB(0151800244A) AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA

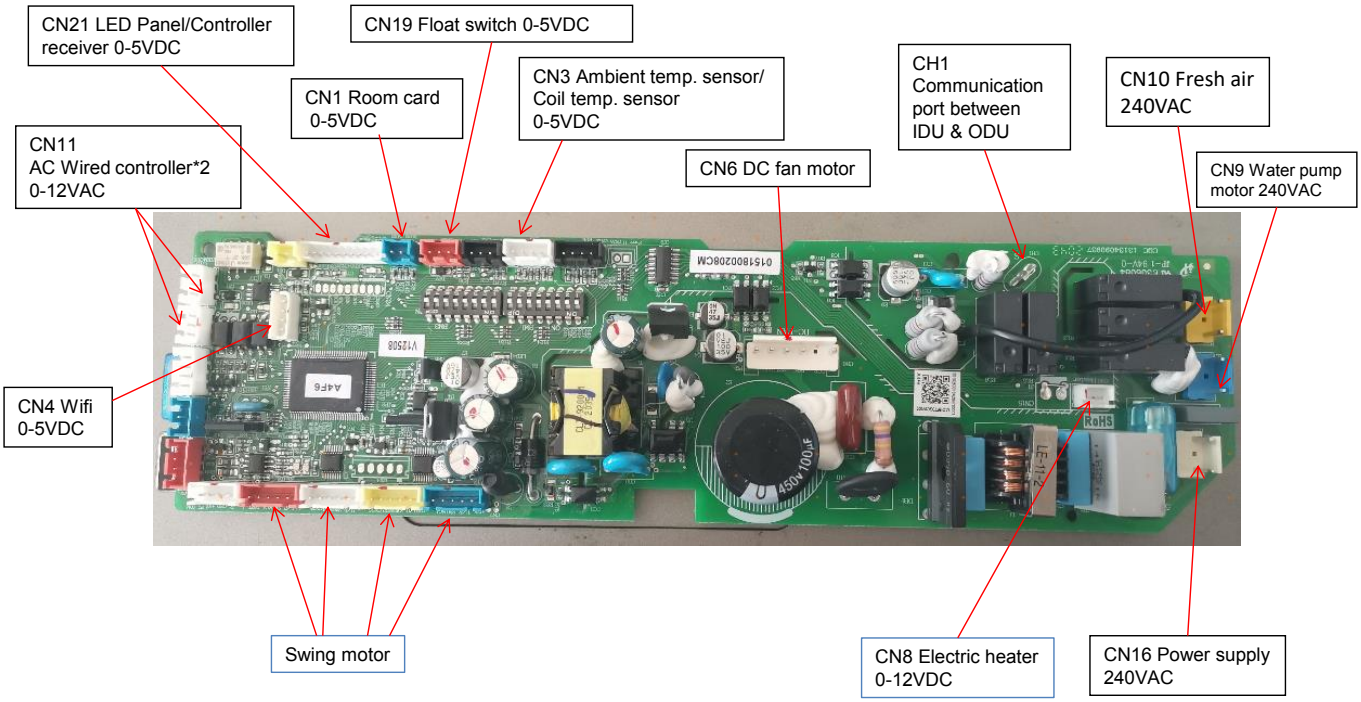



PCB (0151800244AE+0151800332)
AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA (Manufactured before 6th May, 2021)

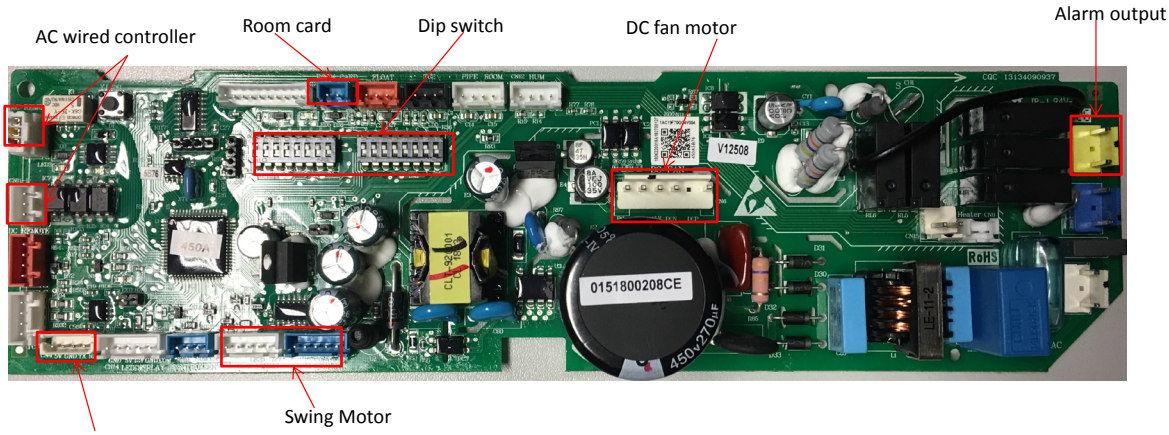


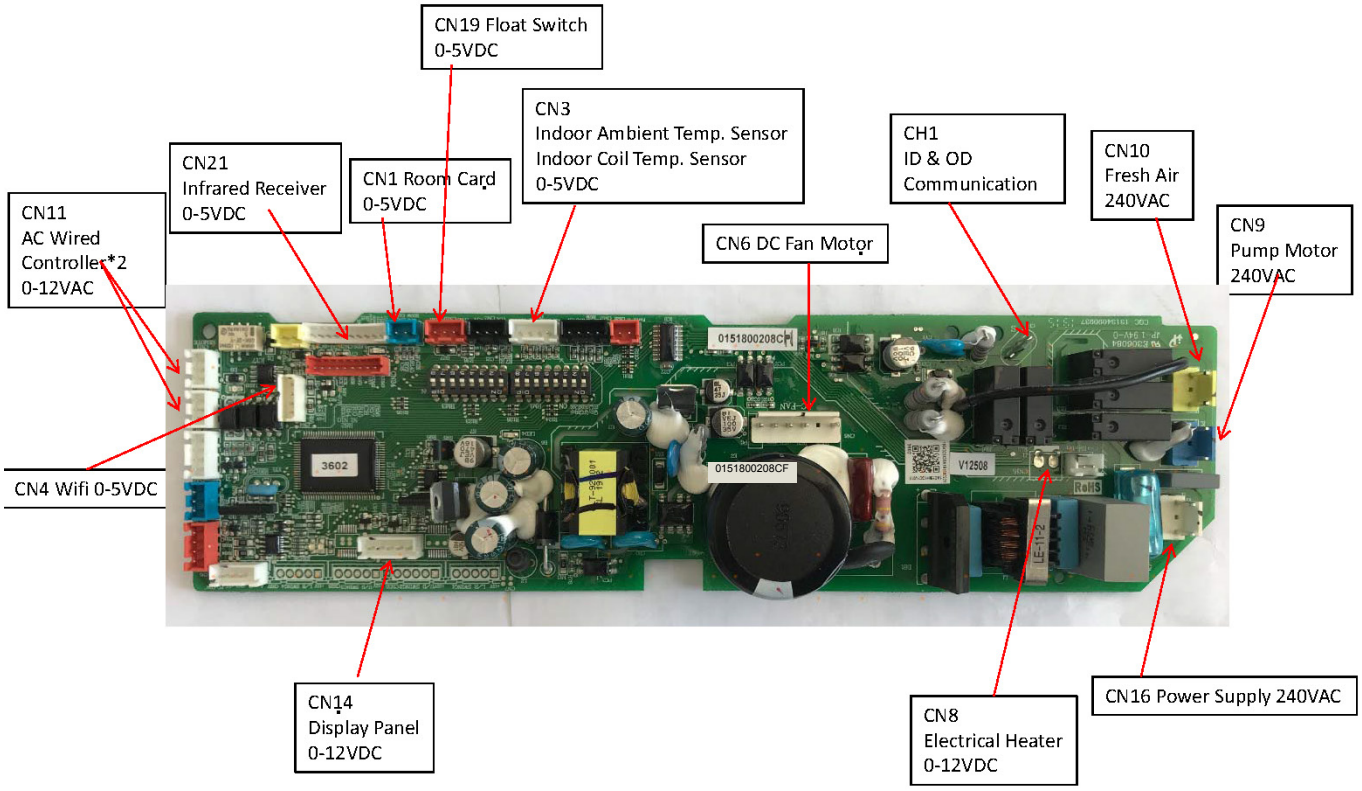
PCB(0151800208CM)　AB25S2SC2FA　AB35S2SC2FA　AB50S2SC2FA　(Manufactured after 6th May, 2021)



PCB (0151800208CE) AB71S2SG1FA (Manufactured before 6th May, 2021)



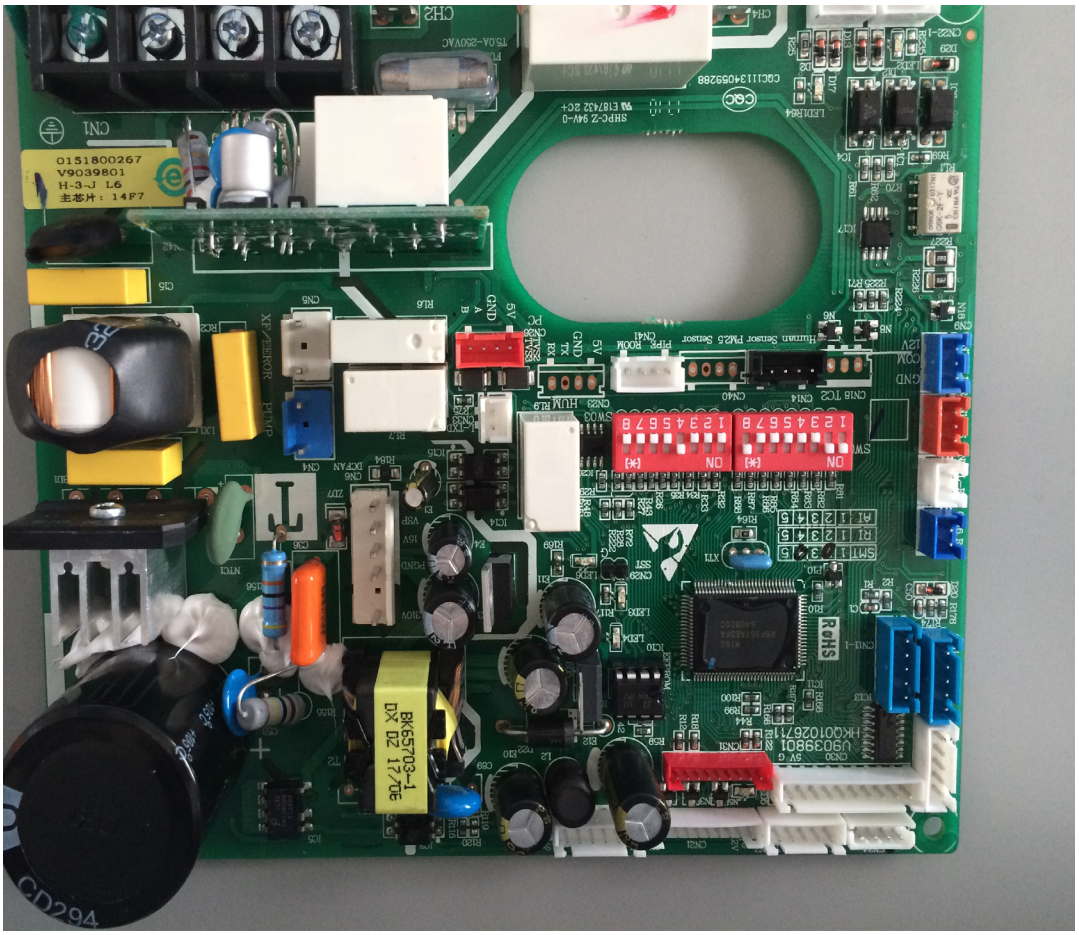

AB71S2SG1FA (Manufactured after 6th May, 2021)
ABH105H1ERG ABH125K1ERG ABH140K1ERG ABH160K1ERG
PCB CODE 0151800208CF



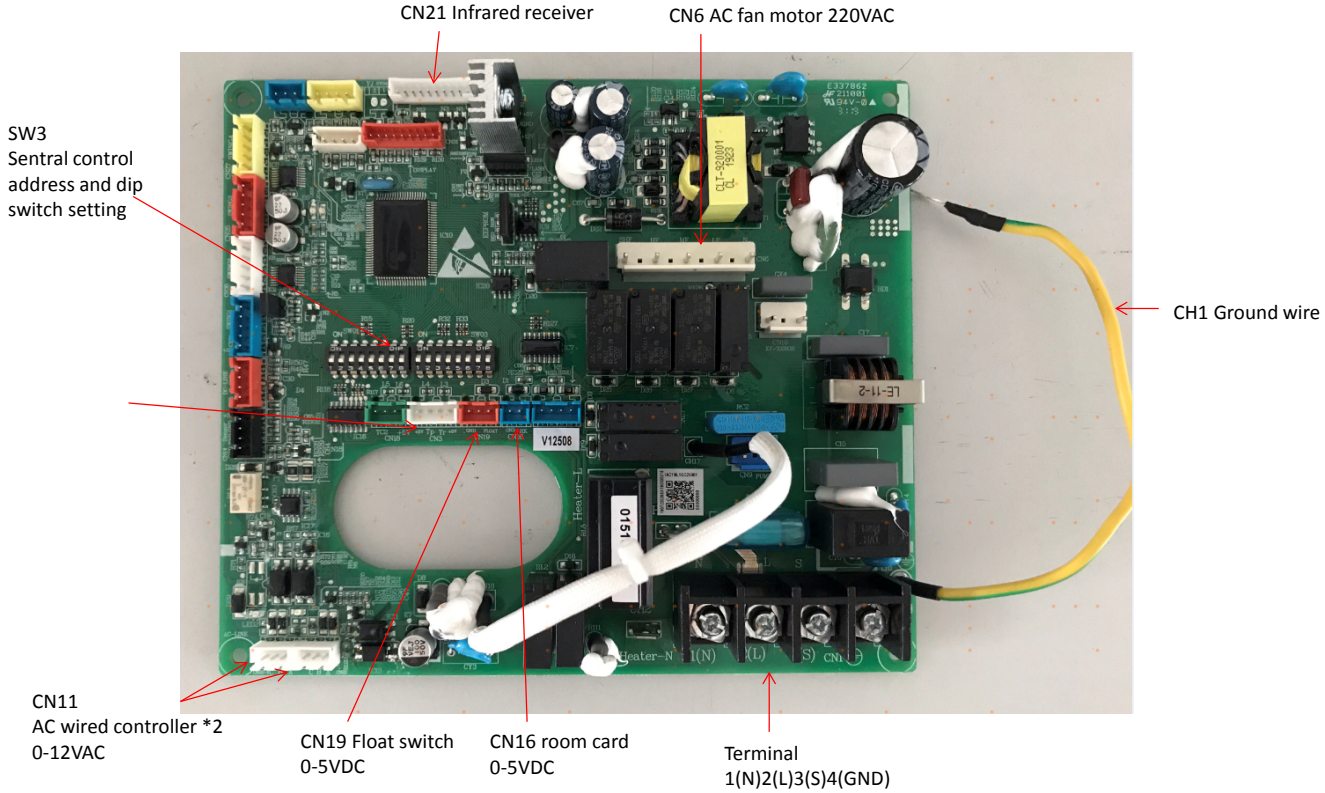
PCB(0151800267)

AD25/35/S2SS1FA AD35S2SS1FA AD25S2SS2FA AD35S2SS1FA AD50S2SS1FA AD50S2SS2FA AD71S2SS1FA AD71S2SS2FA AD50S2SM1FA AD71S2SM3ERA AD90S2SM3FA AD105S2SM3FA (For above models that manufactured before Nov. 2020)

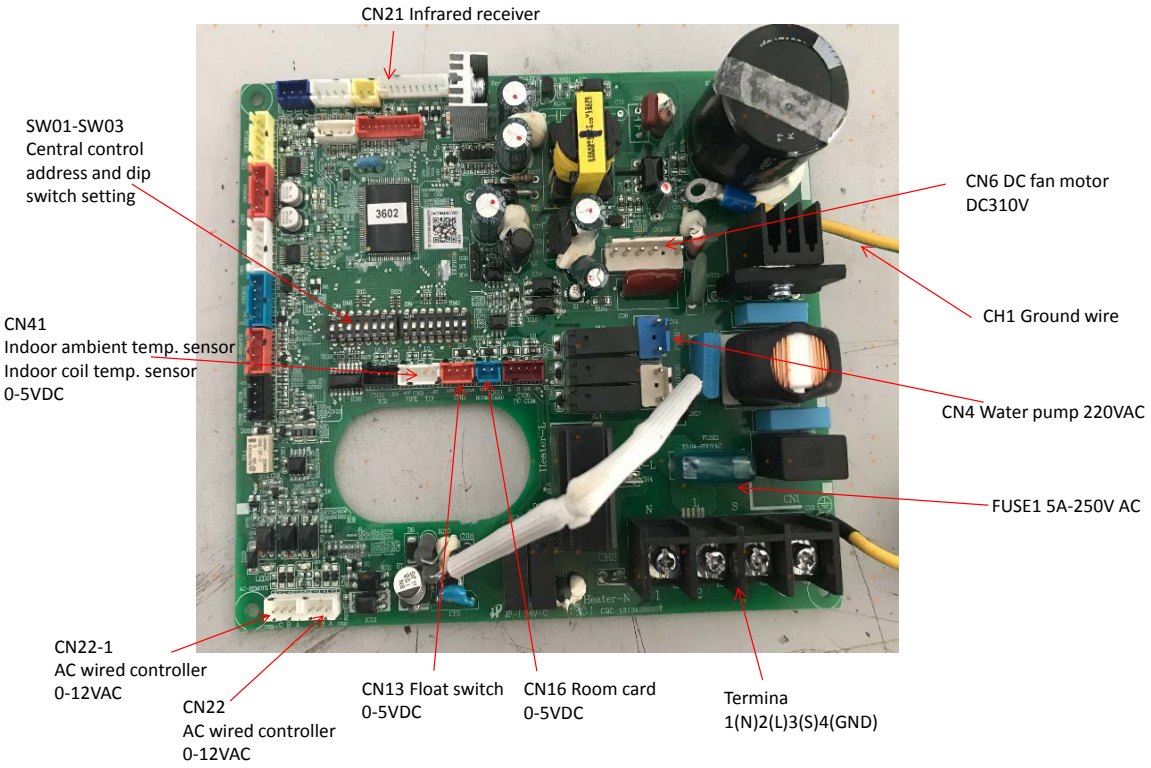
AD71S2SM1FA



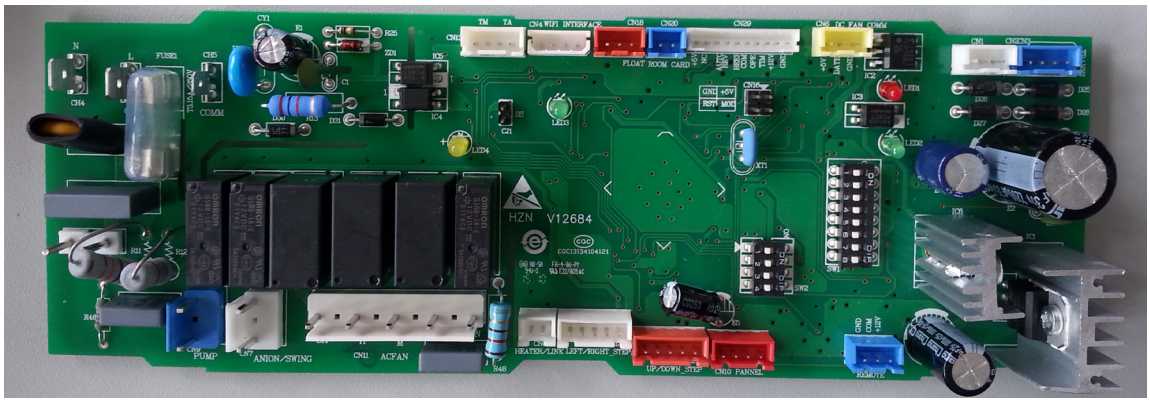
AD71S2SM6FA PCB code 0151800637



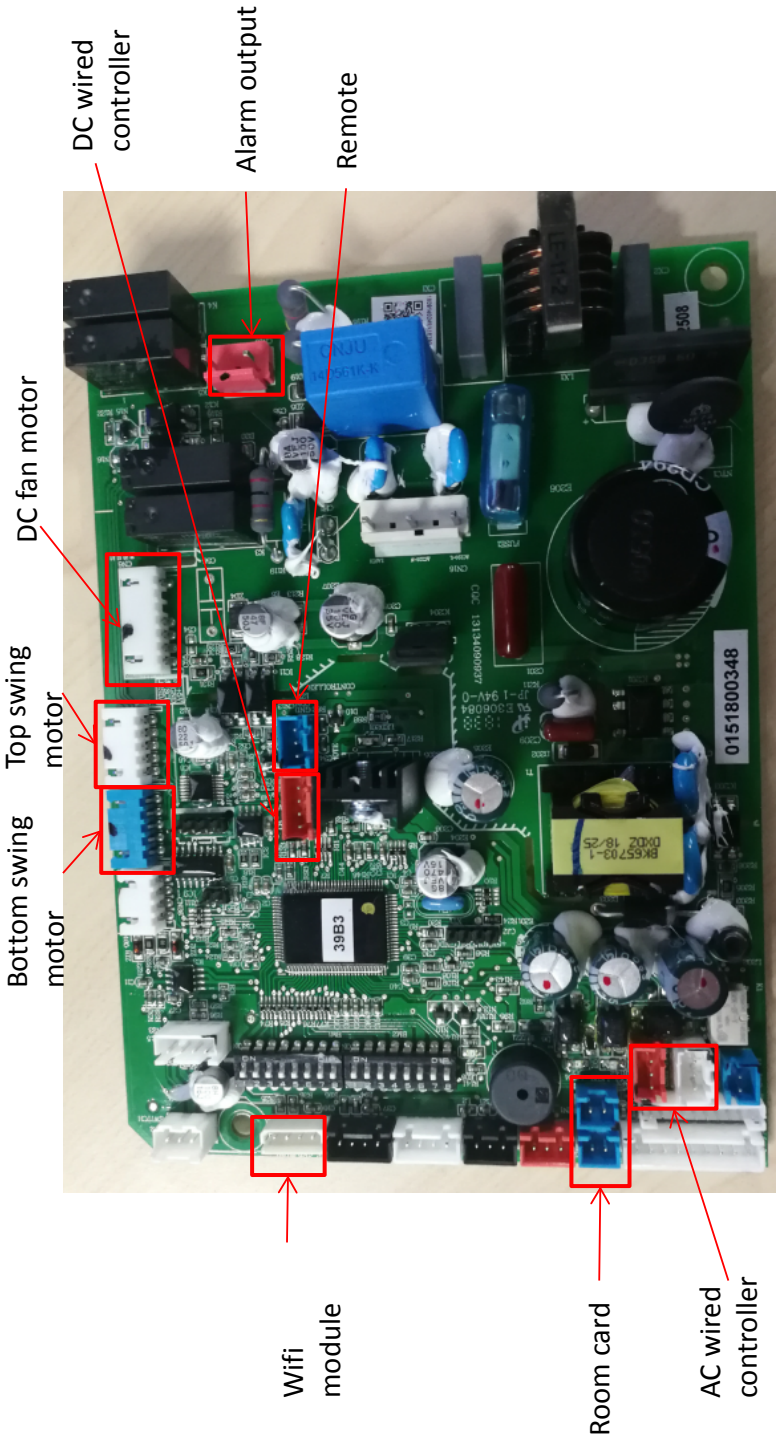

AD25/35/S2SS1FA AD35S2SS1FA AD25S2SS2FA AD35S2SS1FA AD50S2SS1FA AD50S2SS2FA AD71S2SS1FA AD71S2SS2FA AD50S2SM1FA AD71S2SM3ERA AD90S2SM3FA AD105S2SM3FA (For above models that manufactured after Nov. 2020)
AD100S2SM6FA AD125S2SM8FA AD140S2SM8FA AD160S2SM3FA
PCB code 0151800644



PCB CODE 0151800106E AD125S2SM3FA AD140S2SM3FA

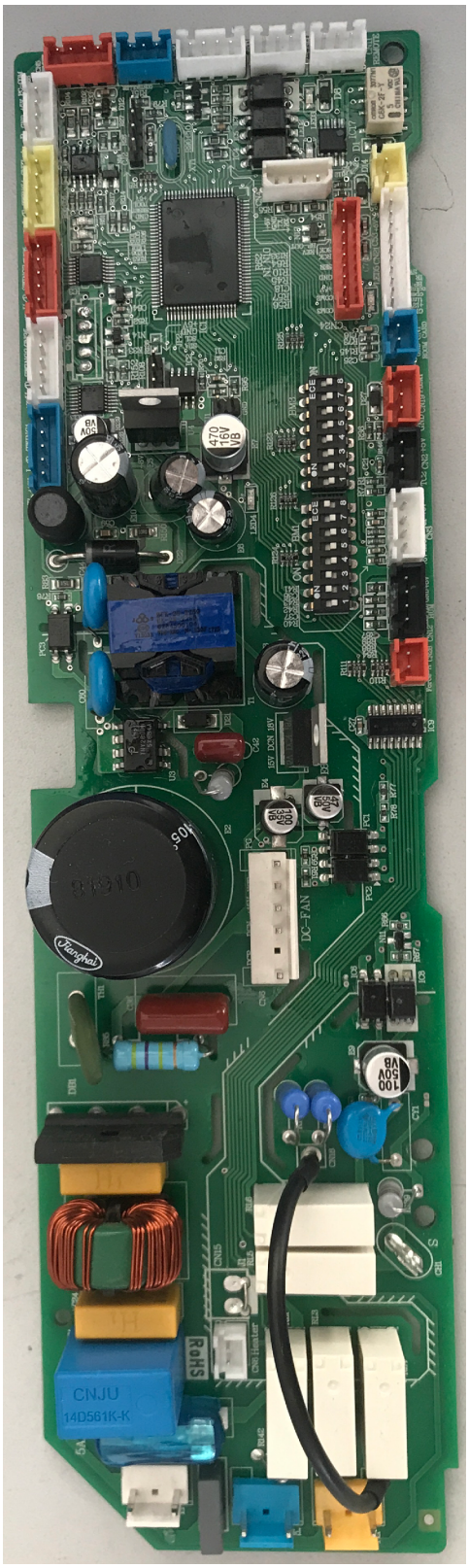


PCB 0151800348 AF25S2SD1FA AF35S2SD1FA AF50S2SD1FA

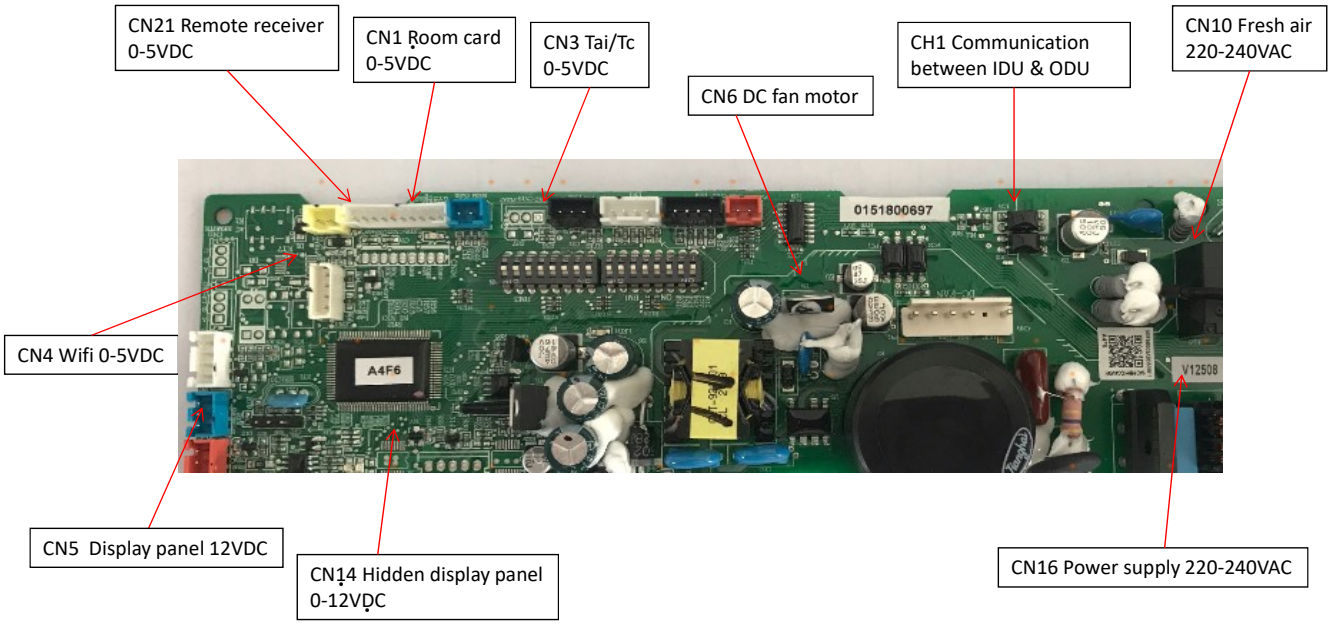


PCB 0151800459

AC35S2SG1FA AC50S2SG1FA AC105S2SH1FA AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA



PCB 0151800697
AP140S2SK1FA



## 9.1 Indoor unit Dip Switch Setting

AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA

PCB 0151800244A dip switch setting BM1

| BM1-1 | BM1-2 | BM1-3 | BM1-4 | BM1-5 | BM1-6 | BM1-7 | BM1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | --- | --- | --- | --- | --- | AB25S2SC1FA |
| ON | OFF | OFF | --- | --- | --- | --- | --- | AB35S2SC1FA |
| OFF | ON | OFF | --- | --- | --- | --- | --- | AB50S2SC1FA |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room Card Unavailable(Default) |
| --- | --- | --- | ON | --- | --- | --- | --- | Room Card Available |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat Pump(Default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cooling Only |
| --- | --- | --- | --- | --- | OFF | --- | --- | Fresh Air (Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | External Alarm Output |
| --- | --- | --- | --- | --- | --- | OFF | --- | Without Filter Clean Remind (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | With Filter Clean Remind |
| --- | --- | --- | --- | --- | --- | --- | OFF | Reserved |

PCB 0151800244A dip switch setting BM3

| BM3-1 | BM3-2 | BM3-3 | BM3-4 | Description |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Reserved |
| BM3-5 | BM3-6 | BM3-7 | BM3-8 | Address of Wire Controlled Indoor Unit |
| OFF | OFF | OFF | OFF | Master Unit(Default) |
| OFF | OFF | OFF | ON | 1# Slave Unit |
| OFF | OFF | ON | OFF | 2# Slave Unit |
| OFF | OFF | ON | ON | 3# Slave Unit |
| OFF | ON | OFF | OFF | 4# Slave Unit |
| OFF | ON | OFF | ON | 5# Slave Unit |
| OFF | ON | ON | OFF | 6# Slave Unit |
| OFF | ON | ON | ON | 7# Slave Unit |
| ON | OFF | OFF | OFF | 8# Slave Unit |
| ON | OFF | OFF | ON | 9# Slave Unit |
| ON | OFF | ON | OFF | 10# Slave Unit |
| ON | OFF | ON | ON | 11# Slave Unit |
| ON | ON | OFF | OFF | 12# Slave Unit |
| ON | ON | OFF | ON | 13# Slave Unit |
| ON | ON | ON | OFF | 14# Slave Unit |
| ON | ON | ON | ON | 15# Slave Unit |

AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA
PCB 0151800208CM dip switch setting BM1

| BM1-1 | BM1-2 | BM1-3 | BM1-4 | BM1-5 | BM1-6 | BM1-7 | BM1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | --- | --- | --- | --- | --- | 1Hp Indoor Unit |
| ON | OFF | OFF | --- | --- | --- | --- | --- | 1.2Hp Indoor Unit |
| OFF | ON | OFF | --- | --- | --- | --- | --- | 2Hp Indoor Unit |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room Card Unavailable(Default) |
| --- | --- | --- | ON | --- | --- | --- | --- | Room Card Available |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat Pump(Default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cooling Only |
| --- | --- | --- | --- | --- | OFF | --- | --- | Fresh Air (Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | External Alarm Output |
| --- | --- | --- | --- | --- | --- | OFF | --- | Without Filter Clean Remind (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | With Filter Clean Remind |
| --- | --- | --- | --- | --- | --- | --- | OFF | Reserved |

PCB 0151800208CM dip switch setting BM3

| BM3-1 | BM3-2 | BM3-3 | BM3-4 | Description |
|---|---|---|---|---|
| OFF | ON | OFF | OFF | Cassette |
| BM3-5 | BM3-6 | BM3-7 | BM3-8 | Address of Wire Controlled Indoor Unit |
| OFF | OFF | OFF | OFF | Master Unit(Default) |
| OFF | OFF | OFF | ON | 1# Slave Unit |
| OFF | OFF | ON | OFF | 2# Slave Unit |
| OFF | OFF | ON | ON | 3# Slave Unit |
| OFF | ON | OFF | OFF | 4# Slave Unit |
| OFF | ON | OFF | ON | 5# Slave Unit |
| OFF | ON | ON | OFF | 6# Slave Unit |
| OFF | ON | ON | ON | 7# Slave Unit |
| ON | OFF | OFF | OFF | 8# Slave Unit |
| ON | OFF | OFF | ON | 9# Slave Unit |
| ON | OFF | ON | OFF | 10# Slave Unit |
| ON | OFF | ON | ON | 11# Slave Unit |
| ON | ON | OFF | OFF | 12# Slave Unit |
| ON | ON | OFF | ON | 13# Slave Unit |
| ON | ON | ON | OFF | 14# Slave Unit |
| ON | ON | ON | ON | 15# Slave Unit |

Note:
For old PCB 0151800244AE, olny the dip switch SW3-2 and SW3-3 are different from the new PCB 0151800208CM SW3-2 and SW3-3 on 0151800244AE are switced as OFF/OFF, whcih means the function reserved.

AB71S2SG1FA ABH105H1ERG ABH125K1ERG ABH140K1ERG ABH160K1ERG

PCB code 0151800208CF

| SW1 (1-ON, 0-OFF) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Capacity (SW1-1→SW1-3) | | | Room card | Running mode | Fresh air /Trouble alarm | Filter remindng | Location | Description |
| SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 | |
| 1 | 1 | 0 | --- | --- | --- | --- | --- | |
| 1 | 0 | 1 | --- | --- | --- | --- | --- | Capacity: 10.5kW |
| 0 | 1 | 1 | --- | --- | --- | --- | --- | Capacity: 12.5kW |
| 1 | 1 | 1 | --- | --- | --- | --- | --- | Capacity: 14.0kW |
| 1 | 1 | 1 | --- | --- | --- | 1 | --- | Capacity: 16.0kW |
| --- | --- | --- | 0 | --- | --- | --- | --- | Room card invalid (default) |
| --- | --- | --- | 1 | --- | --- | --- | --- | Room card valid |
| --- | --- | --- | --- | 0 | --- | --- | --- | Heat pump (default) |
| --- | --- | --- | --- | 1 | --- | --- | --- | Cooling only |
| --- | --- | --- | --- | --- | 0 | --- | --- | Fresh air function |
| --- | --- | --- | --- | --- | 1 | --- | --- | Trouble alarm |
| --- | --- | --- | --- | --- | --- | 0 | --- | Without filter reminding |
| --- | --- | --- | --- | --- | --- | 1 | --- | With filter reminding |
| --- | --- | --- | --- | --- | --- | --- | 0 | Used in American |
| --- | --- | --- | --- | --- | --- | --- | 1 | Not used in American(default) |

| SW3-2 | SW3-3 | Unit Type |
|---|---|---|
| ON | ON | Cassette |

| SW3-5 | SW3-6 | SW3-7 | SW3-8 | Address of Wire Controlled Indoor Unit |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | 0 (master) |
| OFF | OFF | OFF | ON | 1(slave) |
| OFF | OFF | ON | OFF | 2(slave) |
| OFF | OFF | ON | ON | 3(slave) |
| OFF | ON | OFF | OFF | 4(slave) |
| OFF | ON | OFF | ON | 5(slave) |
| OFF | ON | ON | OFF | 6(slave) |
| OFF | ON | ON | ON | 7(slave) |
| ON | OFF | OFF | OFF | 8(slave) |
| ON | OFF | OFF | ON | 9(slave) |
| ON | OFF | ON | OFF | 10(slave) |
| ON | OFF | ON | ON | 11(slave) |
| ON | ON | OFF | OFF | 12(slave) |
| ON | ON | OFF | ON | 13(slave) |
| ON | ON | ON | OFF | 14(slave) |
| ON | ON | ON | ON | 15(slave) |

Note:

For old PCB 0151800208CE, olny the dip switch SW3-2 and SW3-3 are different from the new PCB 0151800208CF SW3-2 and SW3-3 on 0151800244AE are switced as OFF/OFF, whcih means the function reserved.

AC35S2SG1FA AC50S2SG1FA AC105S2SH1FA AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA
PCB 0151800459 dip switch setting BM1

| BM1-1 | BM1-2 | BM1-3 | BM1-4 | BM1-5 | BM1-6 | BM1-7 | BM1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| ON | OFF | OFF | --- | --- | --- | --- | --- | AC35S2SG1FA |
| OFF | ON | OFF | --- | --- | --- | --- | --- | AC50S2SG1FA |
| ON | ON | OFF | --- | --- | --- | --- | --- | AC71S2SG1FA |
| ON | OFF | ON | --- | --- | --- | --- | --- | AC105S2SH1FA |
| OFF | ON | ON | --- | --- | --- | --- | --- | AC125S2SK1FA |
| ON | ON | ON | --- | --- | --- | --- | --- | AC140S2SK1FA |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room Card Unavailable(Default) |
| --- | --- | --- | ON | --- | --- | --- | --- | Room Card Available |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat Pump(Default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cooling Only |
| --- | --- | --- | --- | --- | OFF | --- | --- | Fresh Air (Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | External Alarm Output |
| --- | --- | --- | --- | --- | --- | OFF | --- | Without Filter Clean Remind (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | With Filter Clean Remind |
| --- | --- | --- | --- | --- | --- | --- | OFF | Reserved |

PCB 0151800459 dip switch setting BM3

| BM3-1 | BM3-2 | BM3-3 | BM3-4 | Description |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Reserved |
| BM3-5 | BM3-6 | BM3-7 | BM3-8 | Address of Wire Controlled Indoor Unit |
| OFF | OFF | OFF | OFF | Master Unit(Default) |
| OFF | OFF | OFF | ON | 1# Slave Unit |
| OFF | OFF | ON | OFF | 2# Slave Unit |
| OFF | OFF | ON | ON | 3# Slave Unit |
| OFF | ON | OFF | OFF | 4# Slave Unit |
| OFF | ON | OFF | ON | 5# Slave Unit |
| OFF | ON | ON | OFF | 6# Slave Unit |
| OFF | ON | ON | ON | 7# Slave Unit |
| ON | OFF | OFF | OFF | 8# Slave Unit |
| ON | OFF | OFF | ON | 9# Slave Unit |
| ON | OFF | ON | OFF | 10# Slave Unit |
| ON | OFF | ON | ON | 11# Slave Unit |
| ON | ON | OFF | OFF | 12# Slave Unit |
| ON | ON | OFF | ON | 13# Slave Unit |
| ON | ON | ON | OFF | 14# Slave Unit |
| ON | ON | ON | ON | 15# Slave Unit |

AD25/35/S2SS1FA AD35S2SS1FA AD25S2SS2FA AD35S2SS1FA AD50S2SS1FA AD50S2SS2FA AD71S2SS1FA AD71S2SS2FA AD50S2SM1FA AD71S2SM3ERA AD90S2SM3FA AD105S2SM3FA
(For above models that manufactured before Nov. 2020)
AD71S2SM1FA

PCB 0151800267 dip switch setting BM1

| BM1-1 | BM1-2 | BM1-3 | BM1-4 | BM1-5 | BM1-6 | BM1-7 | BM1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | --- | --- | --- | --- | --- | 25K Indoor Unit |
| ON | OFF | OFF | --- | --- | --- | --- | --- | 35K Indoor Unit |
| OFF | ON | OFF | --- | --- | --- | --- | --- | 50K Indoor Unit |
| ON | ON | OFF | --- | --- | --- | --- | --- | 71K Indoor Unit |
| OFF | OFF | ON | --- | --- | --- | --- | --- | 90K Hp Indoor Unit |
| ON | OFF | ON | --- | --- | --- | --- | --- | 4Hp Indoor Unit |
| OFF | ON | ON | --- | --- | --- | --- | --- | 5Hp Indoor Unit |
| ON | ON | ON | --- | --- | --- | --- | --- | 6Hp Indoor Unit |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room Card Unavailable(Default) |
| --- | --- | --- | ON | --- | --- | --- | --- | Room Card Available |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat Pump(Default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cooling Only |
| --- | --- | --- | --- | --- | OFF | --- | --- | Fresh Air (Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | External Alarm Output |
| --- | --- | --- | --- | --- | --- | OFF | --- | Without Filter Clean Remind (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | With Filter Clean Remind |
| --- | --- | --- | --- | --- | --- | --- | OFF | Esp Duct (USA) |
| --- | --- | --- | --- | --- | --- | --- | ON | Eu. &Australia |

| BM3-1 | BM3-2 | BM3-3 | Description |
|---|---|---|---|
| OFF | OFF | OFF | Reserved |

| BM3-4 | Description |
|---|---|
| OFF | Slim duct |
| ON | Medium ESP duct |

| BM3-5 | BM3-6 | BM3-7 | BM3-8 | Address of Wire Controlled Indoor Unit |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Master Unit(Default) |
| OFF | OFF | OFF | ON | 1# Slave Unit |
| OFF | OFF | ON | OFF | 2# Slave Unit |
| OFF | OFF | ON | ON | 3# Slave Unit |
| OFF | ON | OFF | OFF | 4# Slave Unit |
| OFF | ON | OFF | ON | 5# Slave Unit |
| OFF | ON | ON | OFF | 6# Slave Unit |
| OFF | ON | ON | ON | 7# Slave Unit |
| ON | OFF | OFF | OFF | 8# Slave Unit |
| ON | OFF | OFF | ON | 9# Slave Unit |
| ON | OFF | ON | OFF | 10# Slave Unit |
| ON | OFF | ON | ON | 11# Slave Unit |
| ON | ON | OFF | OFF | 12# Slave Unit |
| ON | ON | OFF | ON | 13# Slave Unit |
| ON | ON | ON | OFF | 14# Slave Unit |
| ON | ON | ON | ON | 15# Slave Unit |

AD71S2SM6FA

PCB 0151800637 dip switch setting BM1

| SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| ON | ON | OFF | --- | --- | --- | --- | --- | AD71S2SM6FA |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room Card Unavailable(Default) |
| --- | --- | --- | ON | --- | --- | --- | --- | Room Card Available |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat Pump(Default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cooling Only |
| --- | --- | --- | --- | --- | OFF | --- | | Fresh Air (Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | External Alarm Output |
| --- | --- | --- | --- | --- | --- | OFF | --- | Without Filter Clean Remind (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | With Filter Clean Remind |
| --- | --- | --- | --- | --- | --- | | ON | Non-American Model |

PCB 0151800637 dip switch setting SW03(BM3)

| SW2-1 | SW2-2 | SW2-3 | SW2-4 | Description |
|---|---|---|---|---|
| **OFF** | **---** | **---** | **---** | **1 swing motor(Default)** |
| **ON** | **---** | **---** | **---** | **2 swing motor** |
| **---** | **OFF** | **---** | **---** | **Reserved** |
| **---** | **---** | **OFF** | **---** | **Reserved** |
| **---** | **---** | **---** | **OFF** | **4 grade static pressure** |
| **---** | **---** | **---** | **ON** | **10 grade static pressure(Default)** |

| SW3-5 | SW3-6 | SW3-7 | SW3-8 | Address of Wire Controlled Indoor Unit |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Master Unit(Default) |
| OFF | OFF | OFF | ON | 1# Slave Unit |
| OFF | OFF | ON | OFF | 2# Slave Unit |
| OFF | OFF | ON | ON | 3# Slave Unit |
| OFF | ON | OFF | OFF | 4# Slave Unit |
| OFF | ON | OFF | ON | 5# Slave Unit |
| OFF | ON | ON | OFF | 6# Slave Unit |
| OFF | ON | ON | ON | 7# Slave Unit |
| ON | OFF | OFF | OFF | 8# Slave Unit |
| ON | OFF | OFF | ON | 9# Slave Unit |
| ON | OFF | ON | OFF | 10# Slave Unit |
| ON | OFF | ON | ON | 11# Slave Unit |
| ON | ON | OFF | OFF | 12# Slave Unit |
| ON | ON | OFF | ON | 13# Slave Unit |
| ON | ON | ON | OFF | 14# Slave Unit |
| ON | ON | ON | ON | 15# Slave Unit |

AD25/35/S2SS1FA AD35S2SS1FA AD25S2SS2FA AD35S2SS1FA AD50S2SS1FA AD50S2SS2FA AD71S2SS1FA AD71S2SS2FA AD50S2SM1FA AD71S2SM3ERA AD90S2SM3FA AD105S2SM3FA
(For above models that manufactured after Nov. 2020)
AD100S2SM6FA AD125S2SM8FA AD140S2SM8FA AD160S2SM3FA
PCB 0151800644 dip switch setting SW01(BM1)

| SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | ON | --- | --- | --- | --- | --- | AD100S2SM6FA |
| ON | ON | ON | --- | --- | --- | --- | --- | AD160S2SM3FA |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room Card Unavailable(Default) |
| --- | --- | --- | ON | --- | --- | --- | --- | Room Card Available |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat Pump(Default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cooling Only |
| --- | --- | --- | --- | --- | OFF | --- | --- | Fresh Air (Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | External Alarm Output |
| --- | --- | --- | --- | --- | --- | OFF | --- | Without Filter Clean Remind (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | With Filter Clean Remind |
| --- | --- | --- | --- | --- | --- | --- | ON | Non-American Model |

PCB 0151800644 dip switch setting SW03(BM3)

| SW2-1 | SW2-2 | SW2-3 | SW2-4 | Description |
|---|---|---|---|---|
| OFF | --- | --- | --- | 1 swing motor(Default) |
| ON | --- | --- | --- | 2 swing motor |
| --- | OFF | --- | --- | Reserved |
| --- | --- | OFF | --- | Reserved |
| --- | --- | --- | OFF | 4 grade static pressure |
| --- | --- | --- | ON | 10 grade static pressure(Default) |

| SW3-5 | SW3-6 | SW3-7 | SW3-8 | Address of Wire Controlled Indoor Unit |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Master Unit(Default) |
| OFF | OFF | OFF | ON | 1# Slave Unit |
| OFF | OFF | ON | OFF | 2# Slave Unit |
| OFF | OFF | ON | ON | 3# Slave Unit |
| OFF | ON | OFF | OFF | 4# Slave Unit |
| OFF | ON | OFF | ON | 5# Slave Unit |
| OFF | ON | ON | OFF | 6# Slave Unit |
| OFF | ON | ON | ON | 7# Slave Unit |
| ON | OFF | OFF | OFF | 8# Slave Unit |
| ON | OFF | OFF | ON | 9# Slave Unit |
| ON | OFF | ON | OFF | 10# Slave Unit |
| ON | OFF | ON | ON | 11# Slave Unit |
| ON | ON | OFF | OFF | 12# Slave Unit |
| ON | ON | OFF | ON | 13# Slave Unit |
| ON | ON | ON | OFF | 14# Slave Unit |
| ON | ON | ON | ON | 15# Slave Unit |

AD125S2SM3FA AD140S2SM3FA
PCB code 0151800106E

| BM1 (1-ON, 0-OFF) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Capacity (SW1-1→SW1-3) | | | Room card SW1-4 | Running mode SW1-5 | Unit Type | | | Description |
| SW1-1 | SW1-2 | SW1-3 | | | SW1-6 | SW1-7 | SW1-8 | |
| ON | OFF | ON | --- | --- | --- | --- | --- | ADH105M1ERG |
| OFF | ON | ON | --- | --- | --- | --- | --- | ADH125M1ERG AD125S2SM3FA |
| ON | ON | ON | --- | --- | --- | --- | --- | ADH140M1ERG AD140S2SM3FA |
| --- | --- | --- | ON | --- | --- | --- | --- | Room card valid |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room card invalid (default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cool only |
| --- | --- | --- | --- | OFF | --- | --- | --- | Cool and heat (default) |
| --- | --- | --- | --- | | OFF | ON | OFF | Medium ESP DUCT |
| --- | --- | --- | --- | | ON | ON | OFF | High ESP DUCT |

Wired controller communication address

| SW3-1 | SW3-2 | SW3-3 | SW3-4 | Indoor unit Address (Indoor unit address for one wired controller control more than one unit) |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | 0 (master) |
| OFF | OFF | OFF | ON | 1(slave) |
| OFF | OFF | ON | OFF | 2(slave) |
| OFF | OFF | ON | ON | 3(slave) |
| OFF | ON | OFF | OFF | 4(slave) |
| OFF | ON | OFF | ON | 5(slave) |
| OFF | ON | ON | OFF | 6(slave) |
| OFF | ON | ON | ON | 7(slave) |
| ON | OFF | OFF | OFF | 8(slave) |
| ON | OFF | OFF | ON | 9(slave) |
| ON | OFF | ON | OFF | 10(slave) |
| ON | OFF | ON | ON | 11(slave) |
| ON | ON | OFF | OFF | 12(slave) |
| ON | ON | OFF | ON | 13(slave) |
| ON | ON | ON | OFF | 14(slave) |
| ON | ON | ON | ON | 15(slave) |

AF25S2SD1FA AF35S2SD1FA AF42S2SD1FA

PCB 0151800348dip switch setting BM1

| BM1-1 | BM1-2 | BM1-3 | BM1-4 | BM1-5 | BM1-6 | BM1-7 | BM1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | --- | --- | --- | --- | --- | AF25S2SD1FA |
| ON | OFF | OFF | --- | --- | --- | --- | --- | AF25S2SD1FA |
| OFF | ON | OFF | --- | --- | --- | --- | --- | AF42S2SD1FA |
| ON | ON | OFF | --- | --- | --- | --- | --- | 24000 |
| OFF | OFF | ON | --- | --- | --- | --- | --- | 28000 |
| ON | OFF | ON | --- | --- | --- | --- | --- | 36000 |
| OFF | ON | ON | --- | --- | --- | --- | --- | 48000 |
| ON | ON | ON | --- | --- | --- | --- | --- | 60000 |
| --- | --- | --- | OF | --- | --- | --- | --- | Room card unavailable(default) |
| --- | --- | --- | ON | --- | --- | --- | --- | Room card available |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat pump(default) |
| --- | --- | --- | --- | ON | --- | --- | --- | cooling only |
| --- | --- | --- | --- | --- | OFF | --- | --- | Fresh Air (Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | External Alarm Output |
| --- | --- | --- | --- | --- | --- | OFF | --- | Without Filter Clean Remind (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | With Filter Clean Remind |
| --- | --- | --- | --- | --- | --- | --- | OFF | American unit |
| --- | --- | --- | --- | --- | --- | --- | ON | Not american unit |

PCB 0151800348 dip switch setting BM2

| BM2-1 | BM2-2 | BM2-3 | BM2-4 | Description |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | Reserved |
| BM2-5 | BM2-6 | BM2-7 | BM2-8 | Address of Wire Controlled Indoor Unit |
| OFF | OFF | OFF | OFF | 0#(master)(default) |
| OFF | OFF | OFF | ON | 1# (slave) |
| OFF | OFF | ON | OFF | 2# (slave) |
| OFF | ON | ON | ON | 3# (slave) |
| OFF | ON | OFF | OFF | 4# (slave) |
| OFF | ON | OFF | ON | 5# (slave) |
| OFF | ON | ON | OFF | 6# (slave) |
| OFF | ON | ON | ON | 7# (slave) |
| ON | OFF | OFF | OFF | 8# (slave) |
| ON | OFF | OFF | ON | 9# (slave) |
| ON | OFF | ON | OFF | 10# (slave) |
| ON | OFF | ON | ON | 11# (slave) |
| ON | ON | OFF | OFF | 12# (slave) |
| ON | ON | OFF | ON | 13# (slave) |
| ON | ON | ON | OFF | 14# (slave) |
| ON | ON | ON | ON | 15# (slave) |

PCB CODE:0151800697

| SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| ON | ON | ON | --- | --- | --- | --- | --- | Indoor capacity selection |
| --- | --- | --- | ON | --- | --- | --- | --- | Room card function valid |
| --- | --- | --- | OFF | --- | --- | --- | --- | Room card function invalid (default) |
| --- | --- | --- | --- | ON | --- | --- | --- | Cooling only |
| --- | --- | --- | --- | OFF | --- | --- | --- | Heat pump (default) |
| --- | --- | --- | --- | --- | ON | --- | --- | Malfunction alarm & filter reminding |
| --- | --- | --- | --- | --- | OFF | --- | --- | fresh air (default) |
| --- | --- | --- | --- | --- | --- | ON | --- | Reserved |
| --- | --- | --- | --- | --- | --- | OFF | --- | Outdoor capacity selection 1U140S2SN1FA/B(default) |
| --- | --- | --- | --- | --- | --- | --- | ON | Non-American area (default) |
| --- | --- | --- | --- | --- | --- | --- | OFF | American area |

| SW2-1 | SW2-2 | SW2-3 | SW2-4 | SW2-5 | SW2-6 | SW2-7 | SW2-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | --- | --- | --- | --- | --- | --- | --- | Reserved |
| --- | OFF | --- | --- | --- | --- | --- | --- | Reserved |
| --- | --- | OFF | --- | --- | --- | --- | --- | Reserved |
| --- | --- | --- | OFF | --- | --- | --- | --- | Reserved |
| --- | --- | --- | --- | OFF | OFF | OFF | OFF | Address of Wire Controlled Indoor Unit |

## 9.2 Control with YCJ-A002

**Model list**

| Model | PCB | Port |
|---|---|---|
| AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA | 0151800244A | CN13 |
| AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA | 0151800244AE (Before 6th May,2021) | No Function |
| | 0151800208CM (After 6th May,2021) | CN13 |
| AD25S2SS1FA AD35S2SS1FA AD50S2SS1FA AD71S2SS1FA AD25S2SS2FA AD35S2SS2FA AD50S2SS2FA AD71S2SS2FA AD35S2SM3FA AD50S2SM3FA AD71S2SM3FA AD90S2SM3FA AD105S2SM3FA AD50S2SM1FA | 0151800267(Before 30th Nov. 2020) 0151800644 (After 30th Nov. 2020) | CN9 |
| AB71S2SG1FA | 0151800208CE (Before 6th May,2021) | No Function |
| | 0151800208CF (After 6th May,2021) | CN13 |
| ABH105H1ERG ABH125K1ERG ABH140K1ERG ABH160K1ERG | 0151800208CF | CN13 |
| AF25S2SD1FA AF35S2SD1FA AF50S2SD1FA | 0151800348 | CN13 |
| AC35S2SG1FA AC50S2SG1FA AC71S2SG1FA AC105S2SH1FA AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA | 0151800459 | CN13 |
| AD125S2SM3FA AD140S2SM3FA | 0151800106E | CN19 |
| AD71S2SM6FA | 0151800637 | CN9 |
| AD160S2SM3FA AD100S2SM6FA | 0151800644 | CN9 |

### YCJ-A002 part code--0151800130



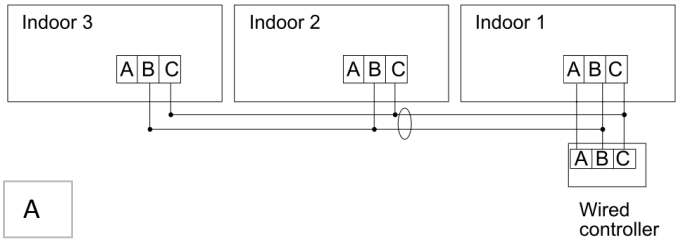

| BM1 | | Description |
|---|---|---|
| 0:OFF | 1:ON | |
| 0 | 0 | Single Split model |
| 1 | 0 | VRF model |
| 0 | 1 | Modbus RTU standard protocol |
| 1 | 1 | BMS system |

| SW1(1 mean ON, 0 mean OFF) | | | | | | | | Definition: unitary air conditioner |
|---|---|---|---|---|---|---|---|---|
| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | |
| - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Single mode address =1 |
| - | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Single mode address =2 |
| - | --- | | | | | | | ---- |
| - | 0 | 1 | 0 | 0 | 1 | 1 | 0 | Single mode address =39 |
| - | 0 | 1 | 0 | 0 | 1 | 1 | 1 | Single mode address =40 |
| - | --- | | | | | | | ---- |
| - | 0 | 1 | 1 | 1 | 1 | 1 | 1 | Single mode address =63 |
| - | 1 | 0 | 0 | 0 | 0 | 0 | 0 | Single mode address =64 |
| - | --- | | | | | | | ---- |
| - | 1 | 1 | 1 | 1 | 1 | 1 | 0 | Single mode address =127 |
| - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Single mode address =128 |

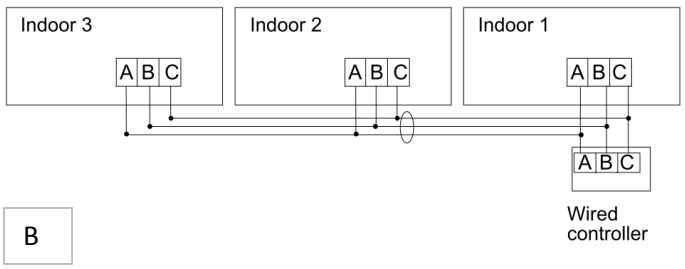
## 9.3 Wired Controller Group Control

| Model | PCB | Group control method |
|---|---|---|
| AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA | 0151800244A | B |
| AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA | 0151800244AE (Before 6th May,2021) | B |
| | 0151800208CM (After 6th May,2021) | |
| AD25S2SS1FA AD35S2SS1FA AD50S2SS1FA AD71S2SS1FA AD25S2SS2FA AD35S2SS2FA AD50S2SS2FA AD71S2SS2FA AD35S2SM3FA AD50S2SM3FA AD71S2SM3FA AD90S2SM3FA AD105S2SM3FA AD50S2SM1FA | 0151800267(Before 30th Nov. 2020) 0151800644 (After 30th Nov. 2020) | B |
| AB71S2SG1FA | 0151800208CE (Before 6th May,2021) | B |
| | 0151800208CF (After 6th May,2021) | |
| ABH105H1ERG ABH125K1ERG ABH140K1ERG ABH160K1ERG | 0151800208CF | B |
| AF25S2SD1FA AF35S2SD1FA AF50S2SD1FA | 0151800348 | B |
| AC35S2SG1FA AC50S2SG1FA AC71S2SG1FA AC105S2SH1FA | 0151800459 | B |
| AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA | | |
| AD125S2SM3FA AD140S2SM3FA | 0151800106E | A |
| AD71S2SM6FA | 0151800637 | B |
| AD100S2SM6FA AD160S2SM3FA | 0151800644 | B |

**Group control method**




A




B

| Model | PCB | Wired controller connection port |
|---|---|---|
| AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA | 0151800244A | CN11 CN11-1 |
| AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA | 0151800208CM | CN11 CN11-1 |
| AD25S2SS1FA AD35S2SS1FA AD50S2SS1FA AD71S2SS1FA AD25S2SS2FA AD35S2SS2FA AD50S2SS2FA AD71S2SS2FA AD35S2SM3FA AD50S2SM3FA AD71S2SM3FA AD90S2SM3FA AD105S2SM3FA AD50S2SM1FA | 0151800644 | CN22 CN22-1 |
| AB71S2SG1FA | 0151800208CF | CN11 CN11-1 |
| AF25S2SD1FA AF35S2SD1FA AF50S2SD1FA | 0151800348 | CN11 CN11-1 |
| AC35S2SG1FA AC50S2SG1FA AC71S2SG1FA AC105S2SH1FA AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA | 0151800459 | CN11 CN11-1 |
| AD125S2SM3FA AD140S2SM3FA | 0151800106E | CN1 |

## 9.4 Indoor unit Function

### 1.3.1 Sign Definition

| Indoor | | | | | Outdoor | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tai | Tc1 | Tc2 | Tm | Tao | Toci | Tc | Te | Ts | Td |
| Ambient Temp | Outlet Pipe Temp. | Inlet Pipe Temp | Mid Coil Temp | Ambient Temp | Thick Pipe of Heat Exchanger | Mid Condenser Temp. | Defrost Temp | Compressor Suction Temp. | Compressor Discharging Temp. |
| Tcomp1,2 | | | Tset | | | | | | |
| Temp. Compensation | | | Set Temp. | | | | | | |

### 1.3.2 Dry Operation

Tai ＜ 16°C, indoor unit stops running and sends stop-unit signal to outdoor.

Tai≤Tset, indoor motor runs at low speed and sends stop-unit signal to outdoor

### 1.3.3 Fan Operation

Indoor fan motor will run as the fan speed set on the remote controller or the wired controller and indoor unit will send the stop-unit signal to outdoor.

### 1.3.4 Auto Operation

A: If the unit enters Auto mode for the first time, the system will adjust the operation mode according to the room temp. and the set temp.

When Tai ≥ Tset, entering auto cooling mode;

When Tai ＜ Tset, entering auto heating mode.

B: Auto cooling mode is as the same as the cooling mode. After the thermostat is OFF for 15 minutes, if Tai+ 1+Tcomp2 ＜ Tset, the unit will enter auto heating mode, or the unit will still stay at auto cooling mode and stop when it reaches the set temperature; while the indoor motor will be at low speed.

C: Auto heating mode is as the same as the heating mode. After the thermostat is OFF for 15 minutes, if Tai≥Tset+1 +Tcomp1, the unit will enter auto cooling mode, or the unit will still stay at auto heating mode;

D: In this mode, the Sleep function is available, run as cooling sleep in cooling mode and as heating sleep in heating mode. Once sleep mode is set, the mode will not change after the unit stops for 15 minutes when it arrives Tset.

E: Mode conversion will be confirmed after compressor has stopped for 10 minutes.

### 1.3.5 Abnormal Operation

A: When outdoor modes from the request of indoor unit conflict, the one entering firstly will take priority.

B: After indoor receives the ON command from wired controller, it will firstly confirm the outdoor current operation mode. If they are the same modes, indoor unit will run as the request of remote controller. If they are different modes, the system will forbid to operate, and indoor will keep the OFF mode and send the “standby” signal to wired controller until outdoor stops or outdoor mode the requested mode of wired controller are the same, the unit will run as the requested mode of wired controller.

C: After indoor receives the ON command from remote controller, it will firstly confirm the outdoor current operation mode. If they are the same mode, indoor unit will run as the request of remote controller. If they are different modes, the system will forbid to operate, and indoor will keep the OFF mode. After setting on remote controller, if the buzzer sounds two times, that shows abnormal operation. Indoor will run until the outdoor mode and the requested mode of remote controller are the same.

D: In AUTO mode, when the indoor unit occurs abnormal operation, the indoor unit will keep OFF state, and the buzzer will not sound until the outdoor mode and the requested mode of indoor unit are the same.

F: COOL (included AUTO COOL), DRY, FAN are not abnormal mode.

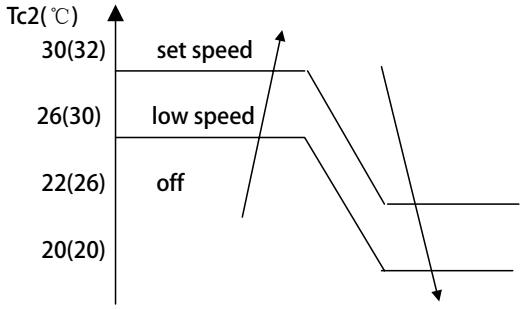
G: HEAT and FAN are not abnormal mode.

### 1.3.6 Control for Discontinuous Operation

After the unit starts up in cooling/heating mode, in 5 minutes, the compressor run/stop will not be controlled by the room temp., but after changing the set temp., if compressor stop condition can be met, the system will stop compressor immediately.

### 1.3.7 Anti-Cold Air Control

In heating mode, after compressor startup, the system will control indoor fan motor according to indoor coil temperature. Detailed operation is as below:




***Note:***

1) The data in the parentheses is the control point when Tao>10°C;

2) Indoor unit will send "pre-heat" signal to wired controller in anti-cold air period.

### 1.3.8. Fan Motor Control in Defrosting

A. On receiving outdoor defrosting signal, indoor unit will stop after blowing remaining heat at slow speed for 20 seconds.

B. In defrosting period, indoor fan motor stops running.

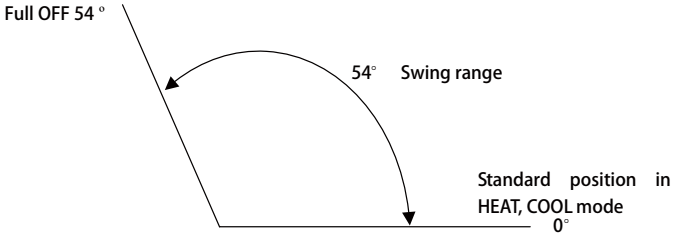
C. Defrosting is over, and indoor motor will run as anti-cold air state.

### 1.3.9 Blowing Remaining Heat Operation

When the unit shuts off in heating mode or the thermostat is OFF, indoor motor will stop running after running at low speed for 30 seconds.

### 1.3.10 Swing Motor Control

Indoor unit will control the swing motor according to the swing signal from the wired controller.




### 1.3.11 Water Pump Control

A.Cooling and dry mode: The water pump will work when the compressor startup and will stop after 5min the compressor stops. When switching to heating or other mode, the water pump will runs for 5min then work based on its current working mode.

B.Cooling standby, heating, fan mode: Water pump will not work when floating switch closed. If floating switch disconnected, indoor units will detect this signal and last for 2 seconds, water pump starts to work. When floating switch returns to the closed state, the pump will continue to run for 5min then stops.

C. If the “disconnecting” signal from floating switch is detected for 5min, compressor will stops; then water pump keep running for another 5min; if floating switch still disconnects, then system will show a drain system failure; Water pump still runs until receiving the signal of floating switch closed for continuously 5min then stops

**1.3.12 Compulsory Defrosting Operation**

A: After indoor receives the compulsory defrosting signal, it will send continously the signal to outdoor for 10 times, in this period, indoor unit will work normally and it will enter defrosting operation until it receives the enter-defrost signal from outdoor unit.

B: Wired control type: In heating mode, make a jumper for D2 to enter compulsory defrosting.

C: Remote control type: In heating mode, high speed, 30°C, press SLEEP button 6 times, and the buzzer will sound 3 times, then enter the manual defrosting.

**1.3.13 Trial Operation**

A: Enter condition

a: Wired control type: In OFF state of COOL or HEAT mode, press ON/OFF button for over 5 seconds to enter the cooling or heating trial operation;

b: Remote control type: In OFF state, keep pressing ON/OFF button until 5 seconds later, the buzzer sounds twice, then enter the cooling or heating trial operation;

B: Response in trial operation

a: Cooling trial operation: indoor sends S-CODE=SD to outdoor, indoor: at high speed, set temp: 16°C;

b: Heating trial operation: indoor sends S-CODE=SF to outdoor, indoor: at high speed, set temp: 30°C;

c: In this period, anti-freezed and overheat functions are invalid.

C: Quit condition

a: Receiving the signal of cancelling trial operation from wired controller or remote controller;

b: After trial operation has run for 20 minutes, it will quit trial operation automatically and enter the normal mode with the set temp.: 24°C.

**1.3.14 Timer Operation**

A: Wired control type: wired controller will control the unit ON/OFF;

B: Remote control type: indoor unit will confirm the unit ON or OFF according to the current clock and the timer clock set by remote controller. When setting timer function, the timer LED will be ON.

**1.3.15 SLEEP Function**

A: Wired control type unit is without sleep function;

B: Remote control type unit consists of cooling sleep and heating sleep, after the sleep is set, the unit will change mode; the sleep will begin to count.

a: In cooling/dry mode, after running for 1 hour, the set temp. will increase 1°C, another 1 hour later, the set temp. will increase 1°C again, then 6 hours (or set time-2) later , it will stop.

b: In heating mode, after running for 1 hour, the set temp. will reduce 2°C, another 1 hour later, the set temp. will reduce 2°C again, then 3 hours later, the set temp. will increase 1°C, and another 3 hours(or set time-5), it will stop.

c: When setting sleep function, indoor motor is forced at low speed.

### 1.3.16 Healthy Negative Ion Function

When receiving the healthy signal from the wired controller or remote controller, if fan motor is running, the negative ion will work;

If the fan motor stops, the negative ion generator will stop.

### 1.3.17 Auto-Restart Function

A: Wired control type:

**YR-E17:**Please refer to the DIP switch setting SW4: ON means auto-restart unavailable; OFF means auto-restart available(SW4=OFF is factory default setting)

B: Remote control type:

**YR-HQS01:**

In 5 seconds, press SLEEP button 10 times continuously, the buzzer will beep 4 times and enter auto-restart function. In 5 seconds, press SLEEP 10 times continuously, the buzzer will beep twice and quit auto-restart functioh

C: Memory information: ON/OFF state, mode, fan speed, set temp., health, swing position;

D: If the memory includes timer or sleep function, when being electrified again, timer and sleep will be cancelled;

E: If the memory includes auto mode, when the jumper shows cooling only type, auto mode will change to cooling mode.

### 1.3.18 Room Card Function

**Room Card Function**

**1) Room card function (SW1-4) switched off**

**a.Indoor unit restart in 24ºC AUTO mode (manufactured before 30th Nov. 2020)**

**b.Indoor unit cannot be controlled by room card (manufactured before 30th Nov. 2020)**

Note: before 30th Nov. 2020, most indoor units run as “a” and a few as “b”

**c.If room card function switched off, indoor unit could be switched on/off by remote controller, wired controller, central controller and dry contact (When dry contact close the unit switched ON, when dry contact disconnect the unit switched OFF). (manufactured before 30th Nov. 2020). Details as following:**

When the dry contact close, the unit will operate as per the state set by controller during the previous operation (EE memory separated), that will remember operating modes, fan speed, temperature setting, healthy mode, swing position etc. Timer and sleep mode will be canceled when the unit startup again.

When dry contact disconnect, indoor unit can be controlled by controller when turned off.

**2) Room card function (SW1-4) switched on**

If room card function valid, the indoor unit will only runs when the room card connect first then switched ON by remote controller, wired controller or central controller. (The indoor unit stops when the room card disconnects, or switched OFF by remote controller, wired controller or central controller.)

When dry contact close, the indoor unit will be at stand-by state, indoor unit will be ON and run as per the controller setting state when it’s switched on by wireless controller or auto start.

When dry contact disconnect, the indoor unit will switched off immediately and cannot be controlled by controller.

| Model | PCB | Room Card Connection Port | Dip Switch |
|---|---|---|---|
| AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA | 0151800244A | CN1 | BM1-4 |
| AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA | 0151800244AE (Before 6th May,2021)<br>0151800208CM(After 6th May,2021) | CN1 | BM1-4 |
| AD71S2SM1FA | 0151800267 | CN16 | BM1-4 |

| | | | |
|---|---|---|---|
| AD71S2SM6FA | 0151800637 | CN16 | BM1-4 |
| AD25S2SS1FA AD35S2SS1FA AD50S2SS1FA AD71S2SS1FA AD25S2SS2FA AD35S2SS2FA AD50S2SS2FA AD71S2SS2FA AD100S2SM6FA AD35S2SM3FA AD50S2SM3FA AD71S2SM3FA AD90S2SM3FA AD105S2SM3FA AD50S2SM1FA AD125S2SM8FA AD140S2SM8FA AD160S2SM3FA | 0151800267(Before 30th Nov. 2020) | CN16 | BM1-4 |
| | 0151800644(After 30th Nov. 2020) | | |
| AB71S2SG1FA | 0151800208CE (Before 6th May,2021) | CN1 | SW1-4 |
| | 0151800208CF (After 6th May,2021) | | |
| AF25S2SD1FA AF35S2SD1FA AF42S2SD1FA | 0151800348 | CN1, CN1-1 | BM1-4 |
| AC35S2SG1FA AC50S2SG1FA AC105S2SH1FA AC125S2SK1FA AC140S2SK1FA | 0151800459 | CN1 | BM1-4 |
| AD125S2SM3FA AD140S2SM3FA | 0151800106E | CN20 | SW1-4 |

Note: For console type indoor unit, if need room card function, both CN1,CN1-1 should be shorted.

**1.3.19 Setting Method of Temperature Compensation Tcomp**

A. Wired control type unit: this function is not available

B. Remote control type unit:

In cooling or heating mode, there is always with the temp. compensation.

In heating mode: In 24°C heating mode, press SLEEP(or SWING) button 7 times continuously within 5 seconds, indoor buzzer sounds twice, that shows temp. compensation works. Switch on the unit in heating mode by the remote controller, press TEMP button to set the set temp., so temperature compensation=the current set temp. - 24°C. For example, if the set temp. is 24°C, the temp. compensation is 0°C; if the set temp. is 25°C, the temp. compensation is 1°C. The max. compensation temp. is 6°C (the set temp. is 30°C). If you want to cancel it, set the temp. as 24°C.

In cooling mode: In 24°C cooling mode, press SLEEP(or SWING) button 7 times continuously within 5 seconds, indoor buzzer sounds twice, that shows temp. compensation works. Switch on the unit in heating mode by the remote controller, press TEMP button to set the set temp., so temperature compensation=24°C-the current set temp. For example, if the set temp is 24°C, the temp. compensation is 0°C; if the set temp. is 23°C, the temp. compensation is -1°C. The max. compensation temp is -8°C (the set temp is 16°C). If you want to cancel it, set the temp as 24°C.

So the temp. compensation range is +8°C~-6°C.

**1.3.20 Anti-Freezed Protection**

When compressor has run for over 5 minutes, to prevent indoor evaporator freezing (in cooling/dry mode), if indoor mid-coil temp is below -1 degree for over 5 minutes, indoor EEV will close, and compressor will stop. When indoor mid-coil temp is over about 10 degree, the unit will be normal.

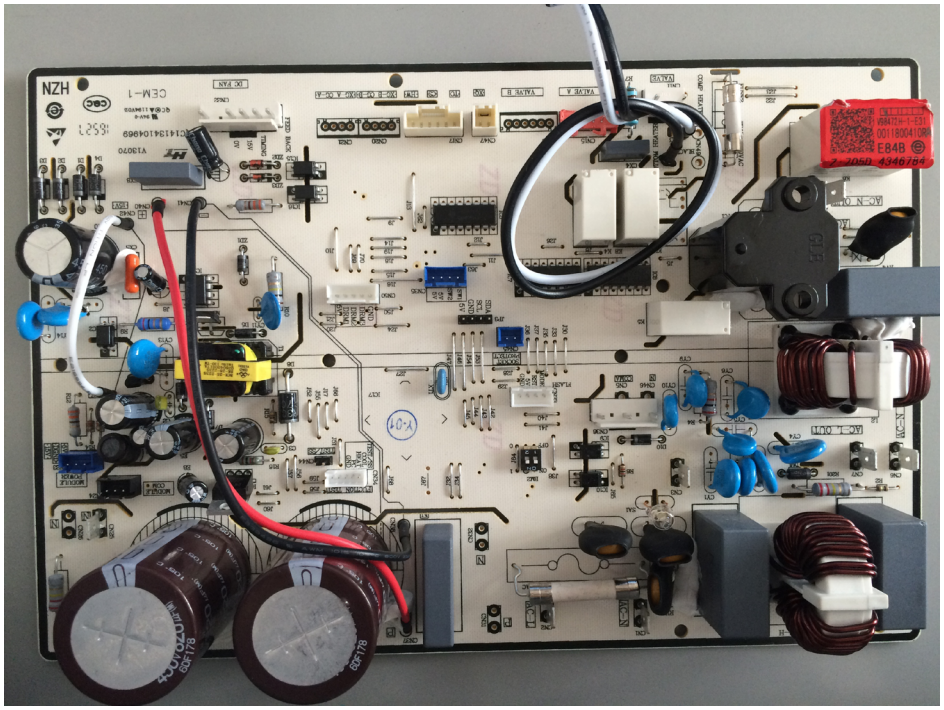
**1.3.21 Overload Protection in Heating Mode**

It is valid only in heating mode, if indoor mid-coil temp. is over about 65 degree continuously for 10 seconds, indoor will stop; while when indoor mid-coil temp. is below 52 degree for 3 seconds, indoor will resume.

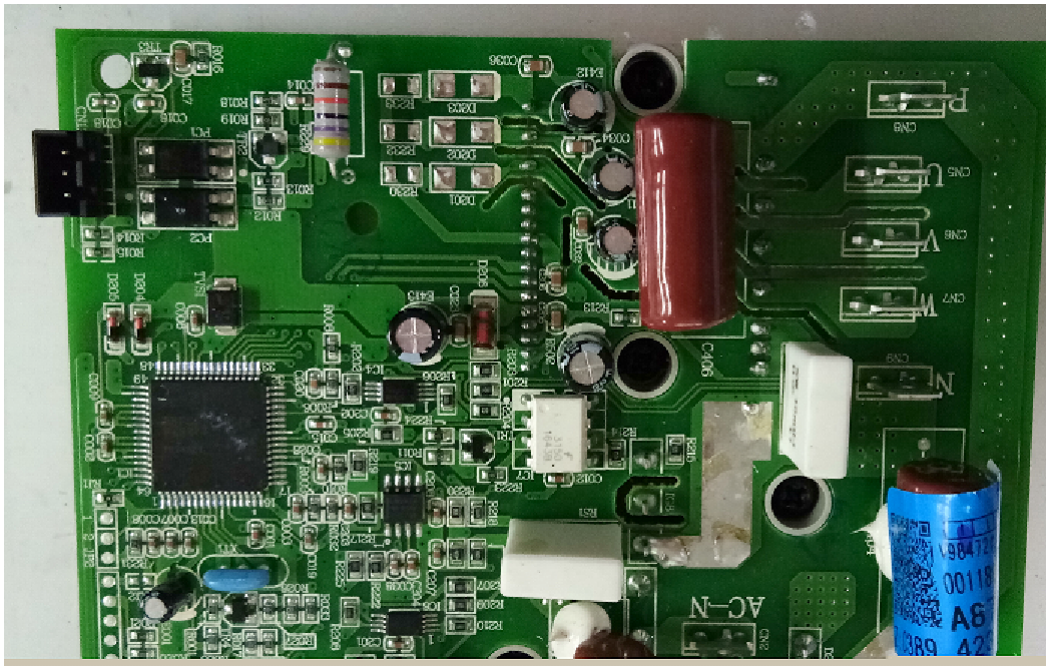
## 9.5 Outdoor unit PCB Photo, Dip Switch Setting and Function

| Model | PCB | Power Module |
|---|---|---|
| 1U71S2SG1FA | 0011800410RA | 0011800377C |
| 1U71S2SR2FA | 0011800930E | 0011800377C |
| 1U105S2SS1FA | 0151800349(Used before 7th Apr.2021)<br>0151800349TA(Used after 7th Apr.2021) | 0011800377AH |
| 1U105S2SS2FA | 0151800349TA | 0011800377AH |
| 1U105S2SS1FB | 0151800383BC | 0150402092AC |
| 1U125S2SN1FA | 0151800054BH | 015041945CB |
| 1U125S2SN1FB | 0151800054BE | 0150402903 |
| 1U140S2SP1FA | 0151800054BH | 015041945CA |
| 1U140S2SP2FA | 0151800054BH | 015041945CA |
| 1U140S2SP1FB | 0151800054BE | 0150402903 |
| 1U140S2SN1FA | 0151800383EA | 0150401945CB |
| 1U125S2SN2FA | 0151800383EA | 0150401945CB |
| 1U140S2SN1FB | 0151800383EA | 0150402903 |
| 1U125S2SN2FB | 0151800383EA | 0150402903 |
| 1U140S2SP2FB | 0151800383EA | 0150402903C |
| 1U160S2SP1FB | 0151800383EA | 0150402903C |
| 3U55S2SR5FA | 0151800364E | 0011800377C |
| 3U70S2SR3FA | 0151800364E | 0011800377C |
| 4U75S2SR5FA | 0151800364B | 0011800377A |
| 4U85S2SR5FA | 0151800364B | 0011800377A |
| 5U90S2SS5FA | 0151800364B | 0011800377AA |
| 5U105S2SS5FA | 0151800364B | 0011800377AA |
| 5U125S2SN1FA | 0151800578A | 0150401945EAB |

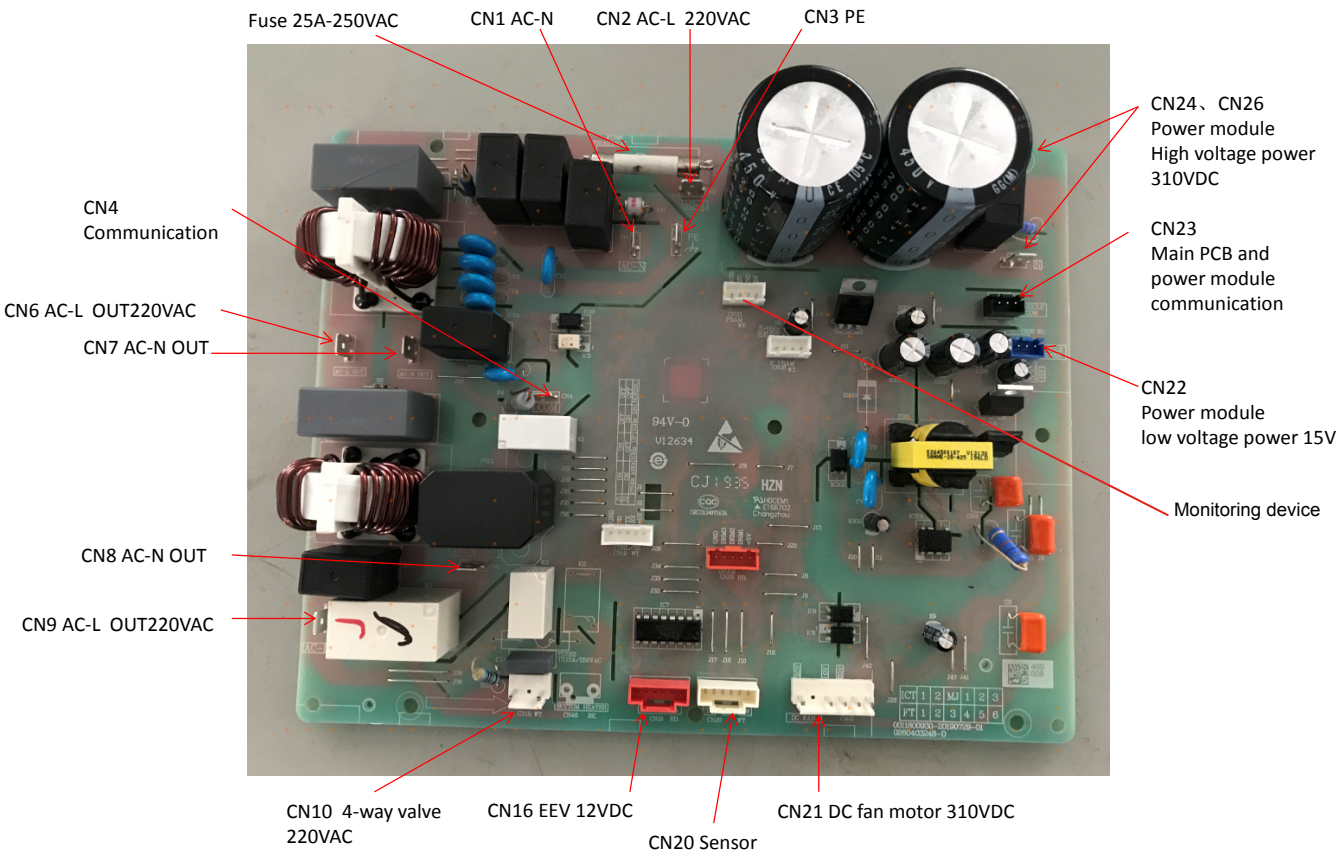
**PCB(**0011800410RA**)** 1U71S2SG1FA



Power module(0011800377C) 1U71S2SG1FA

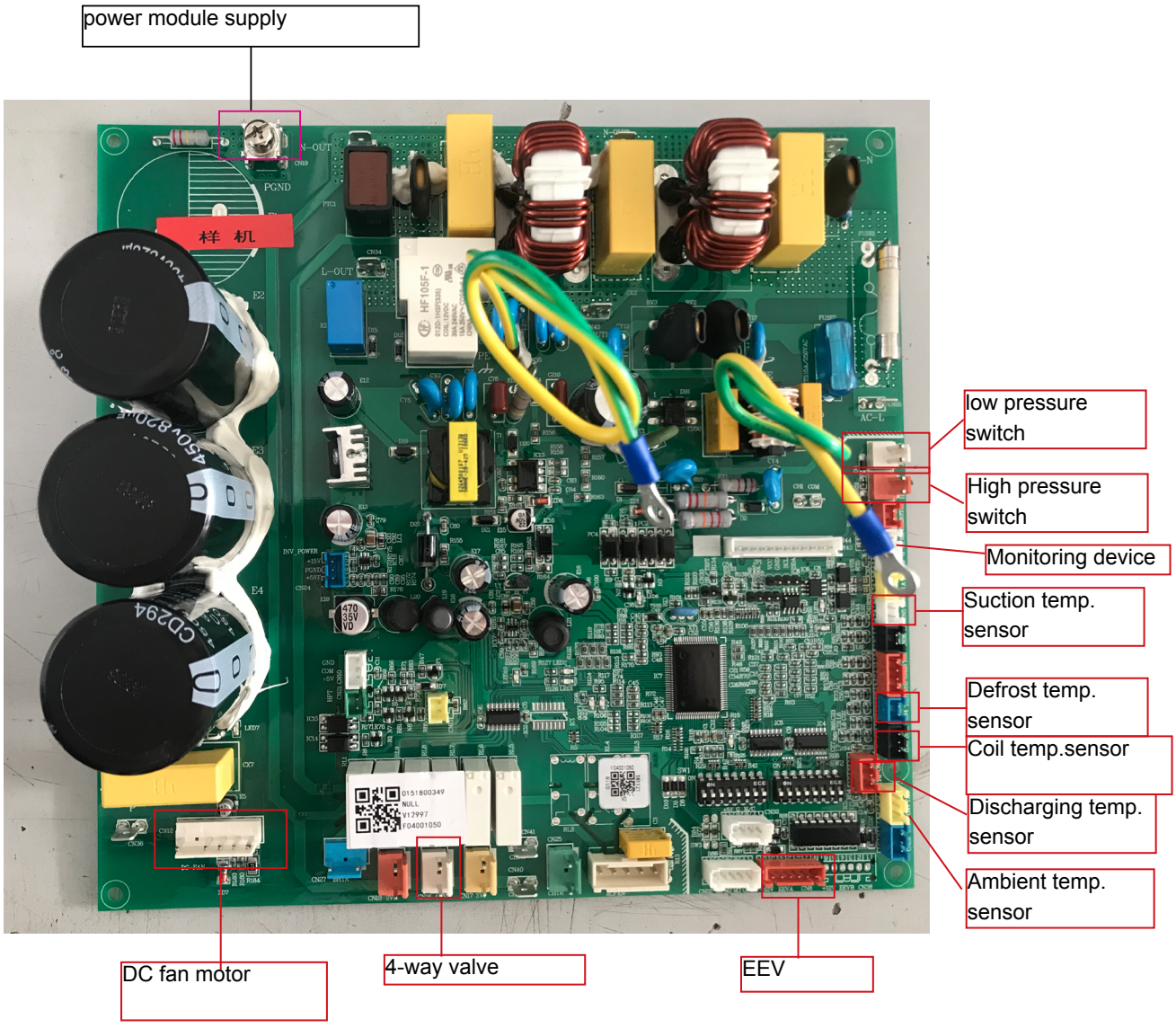


**PCB(**0011800930E) 1U71S2SR2FA



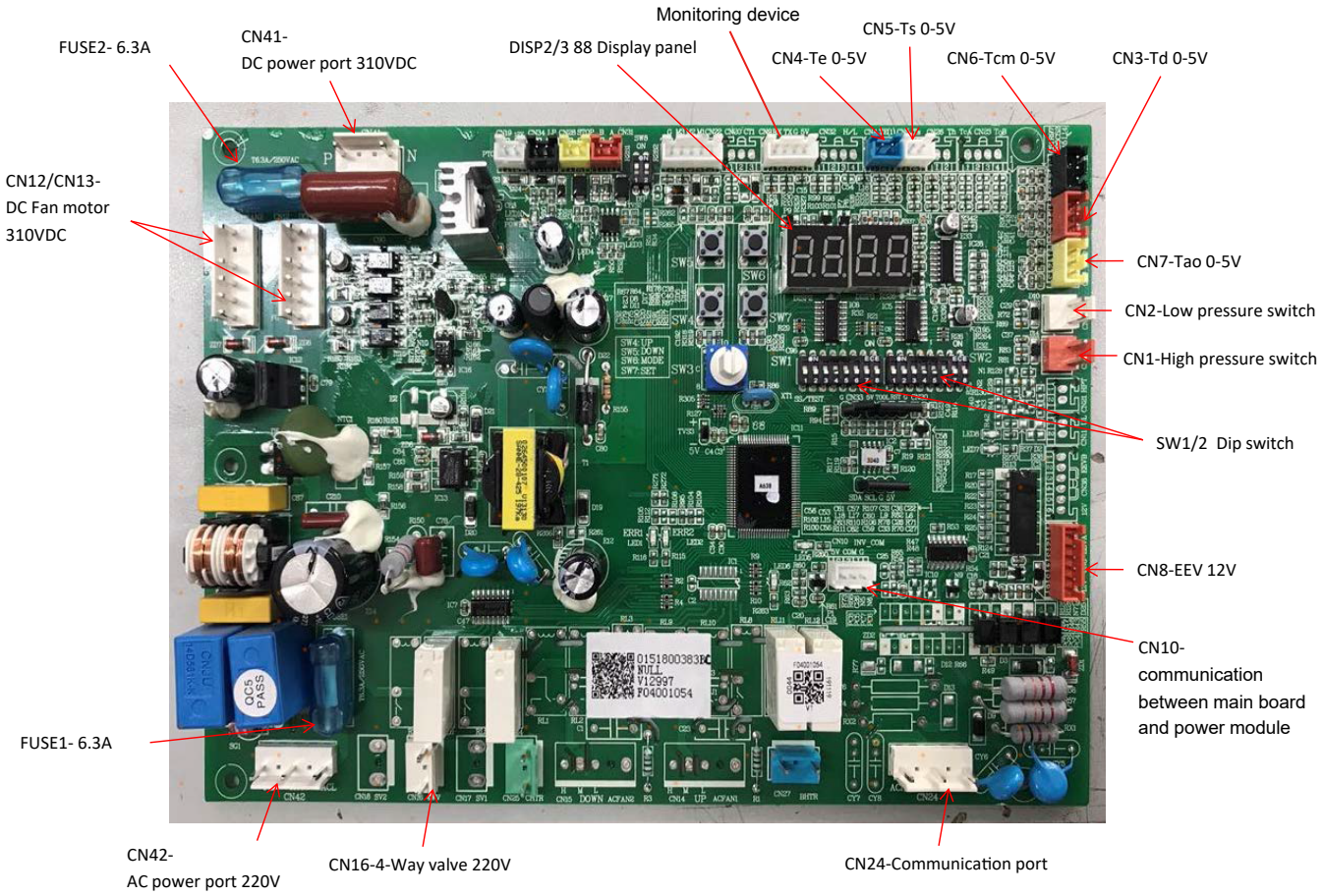
**PCB**(0151800349)　1U105S2SS1FA

**PCB**(0151800349TA) **1U90S2SS2FA**　1U105S2SS1FA / 1U105S2SS2FA

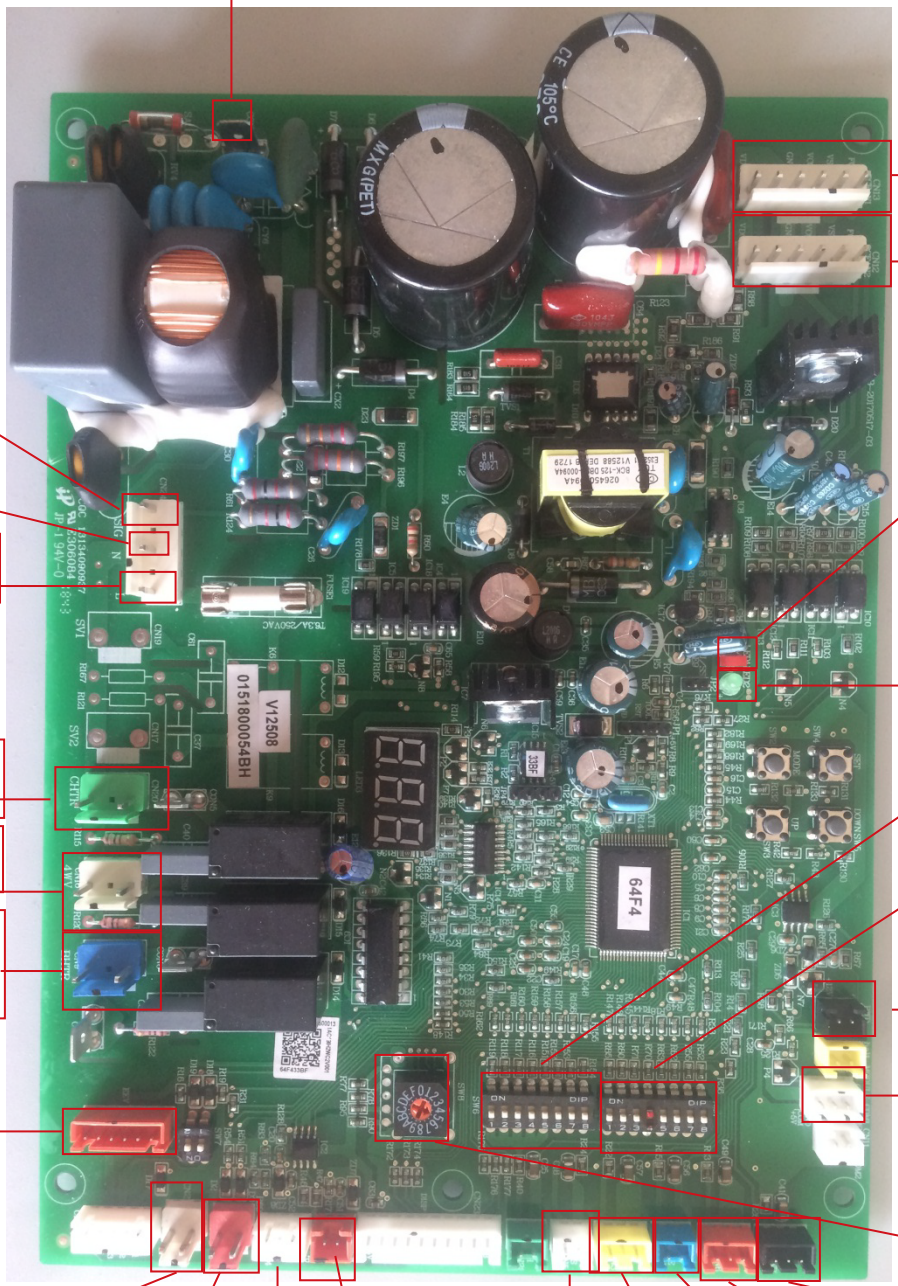


**PCB**(0011800383BC)  1U105S2SS1FB

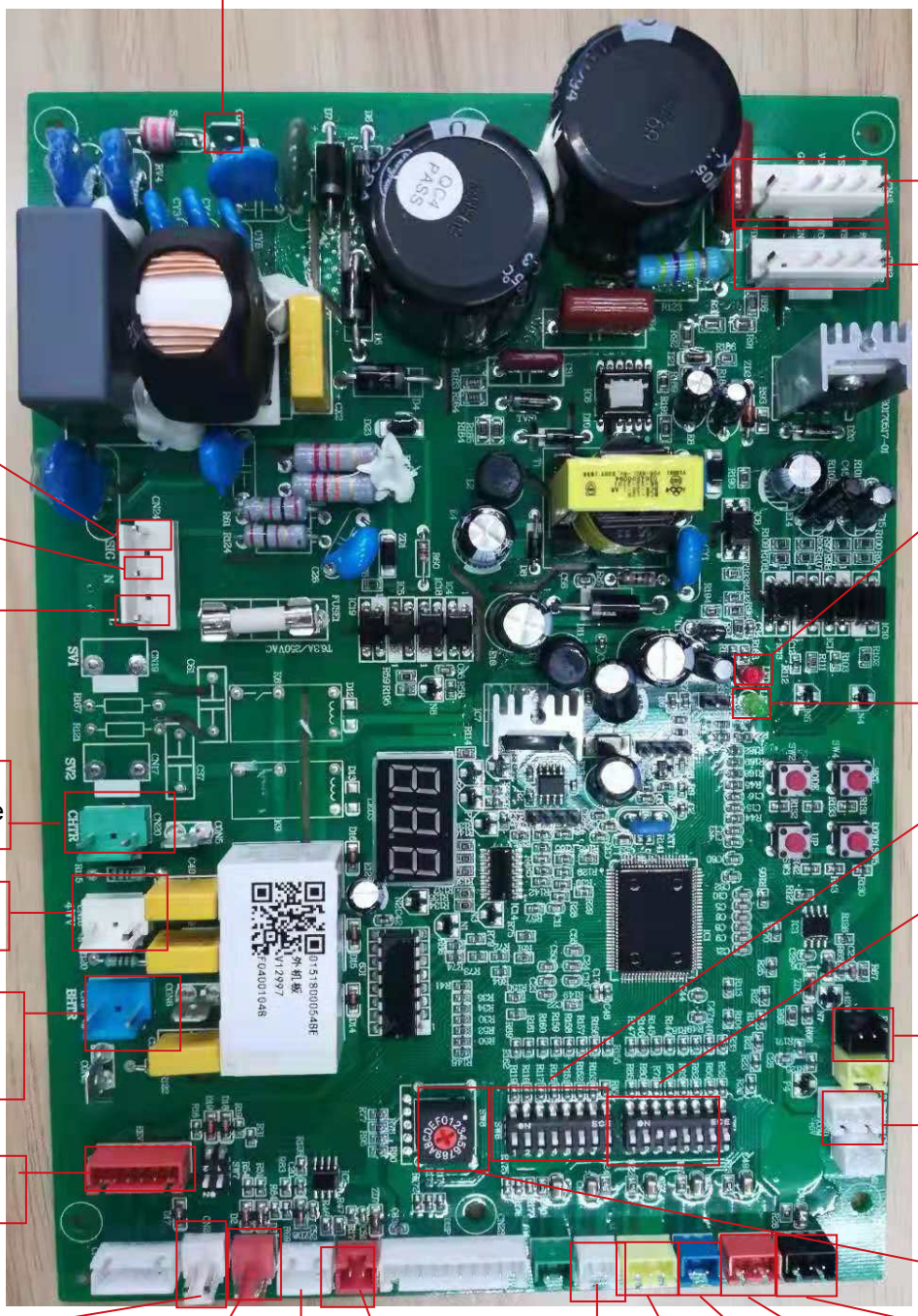
0151800383BC



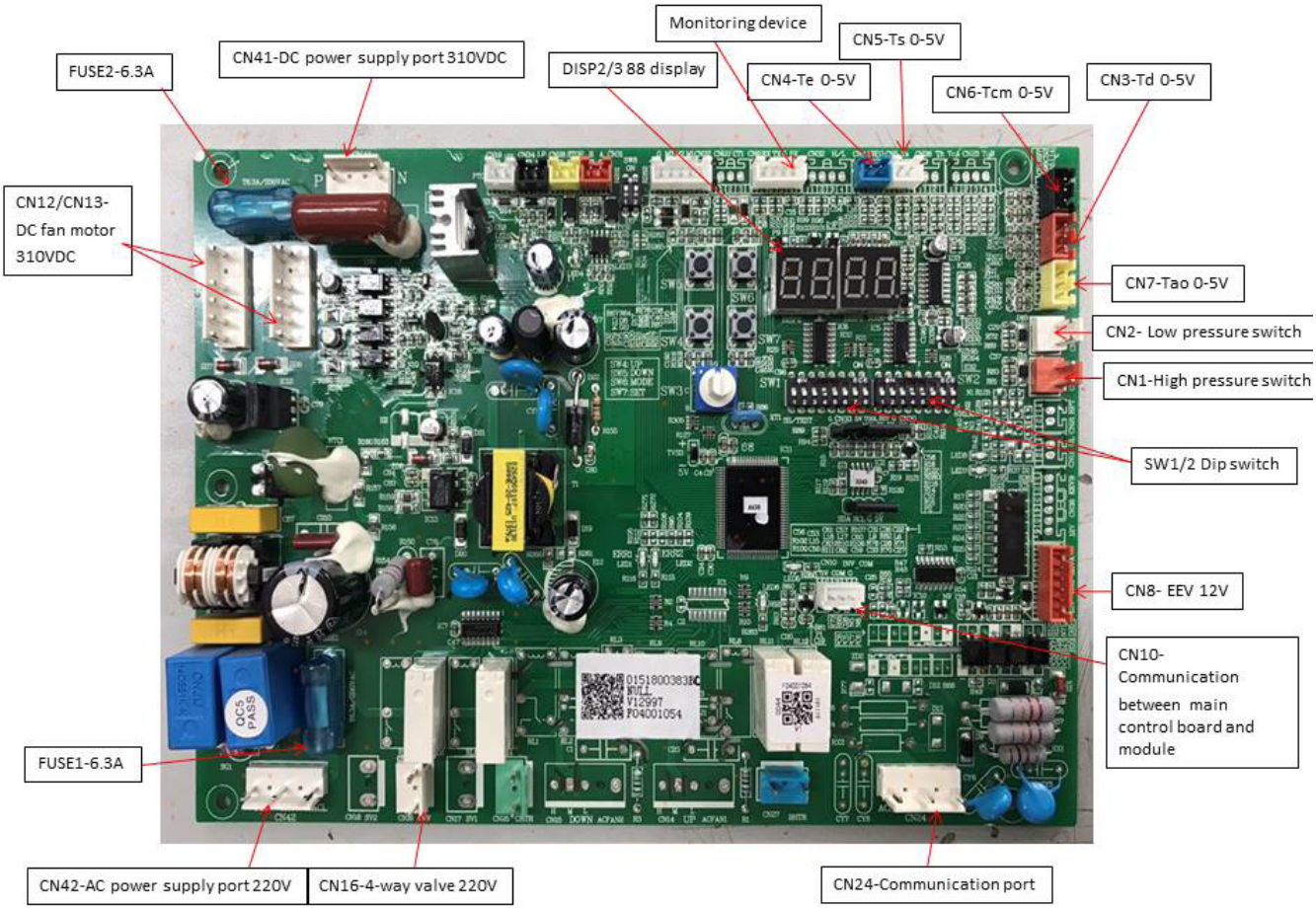
**PCB(**0151800054BH**)** 1U125S2SN1FA 1U140S2SP1FA 1U140S2SP2FA



**PCB(**0151800054BE**)** 1U125S2SN1FB 1U140S2SP1FB

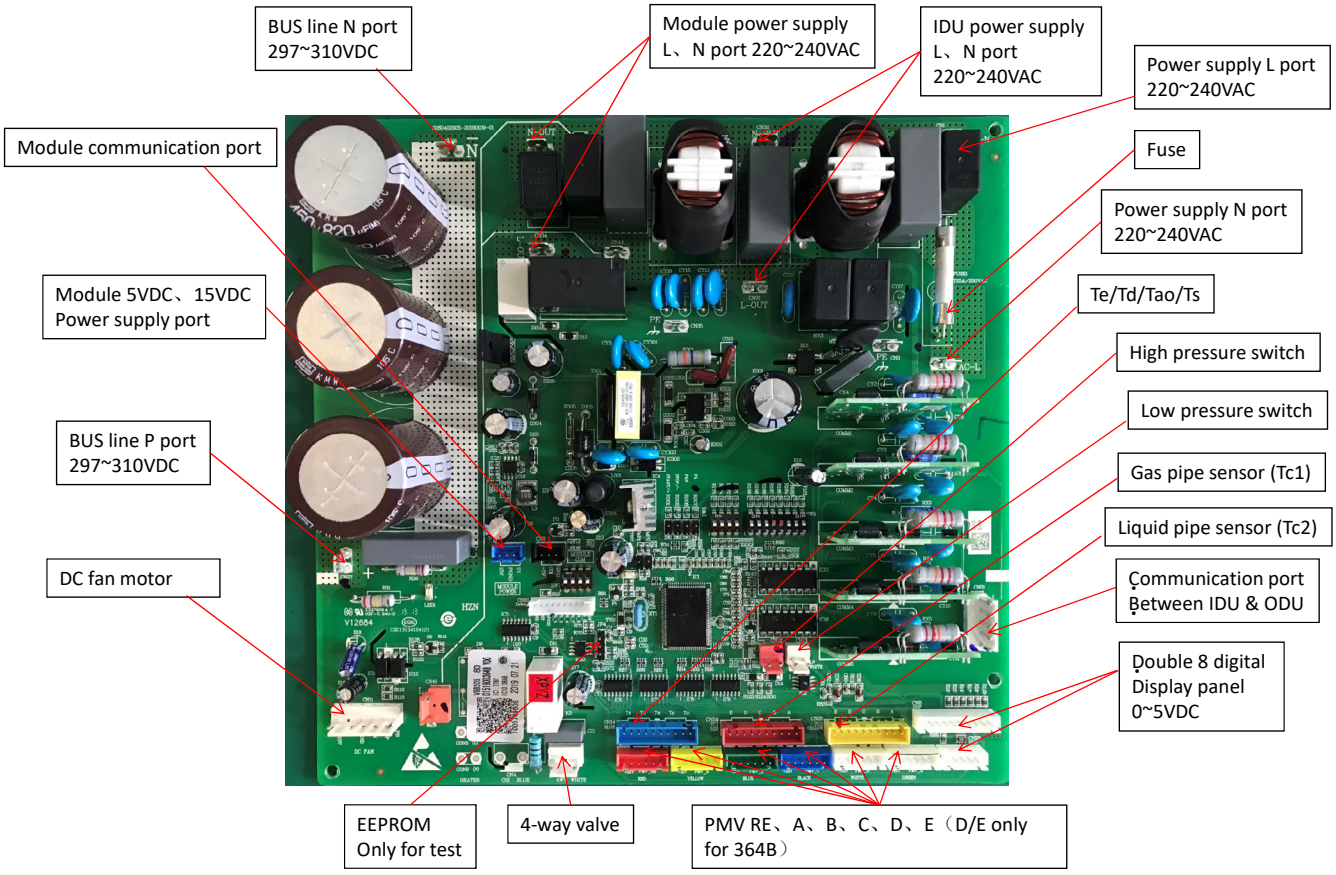


PCB （0151800383EA） 1U125S2SN2FA 1U125S2SN2FB 1U140S2SN1FA 1U140S2SN1FB 1U140S2SP2FB 1U160S2SP1FB

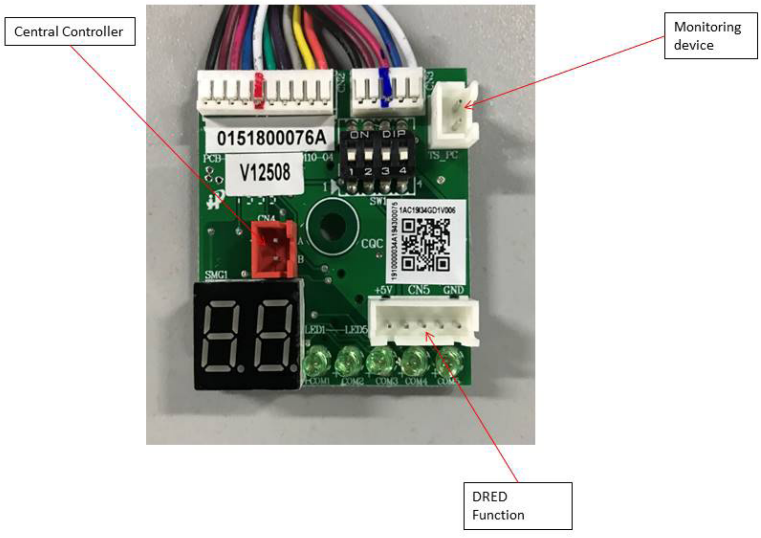


PCB (0151800364E) 3U55S2SR5FA 3U70S2SR5FA

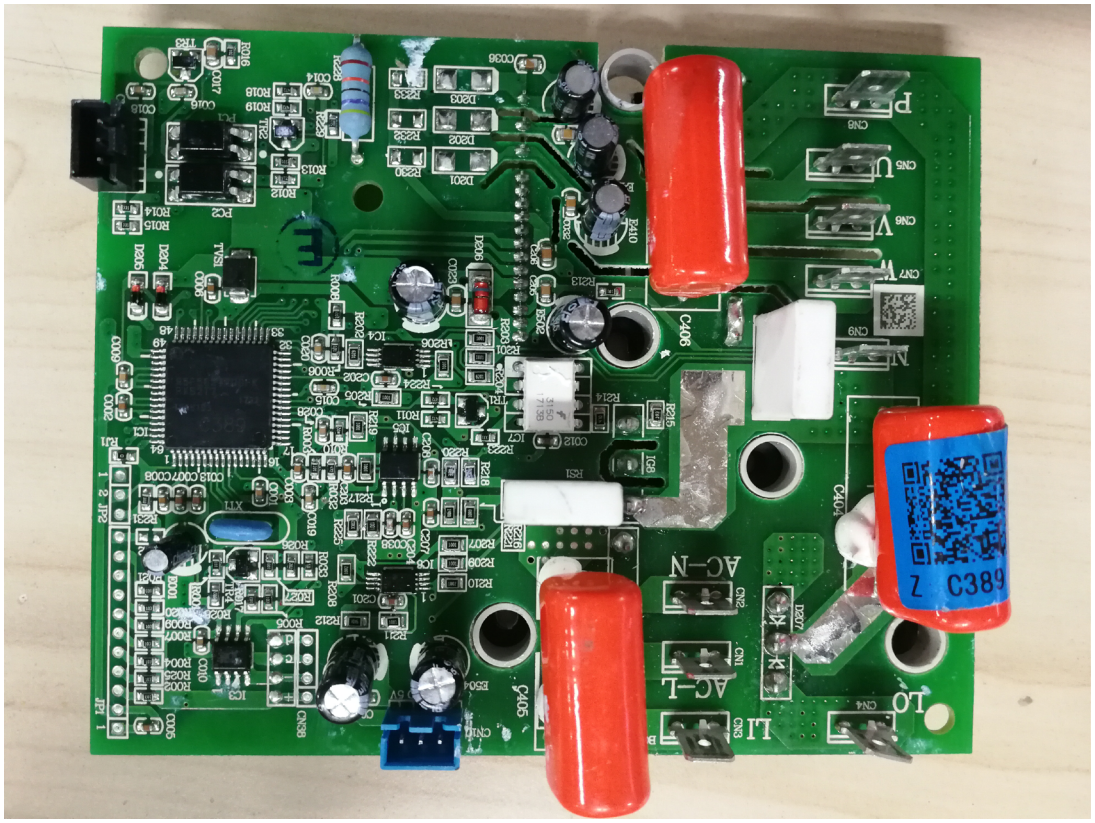
PCB (0151800364B) 4U75S2SR5FA 4U85S2SR5FA 5U90S2SS5FA 5U105S2SS5FA



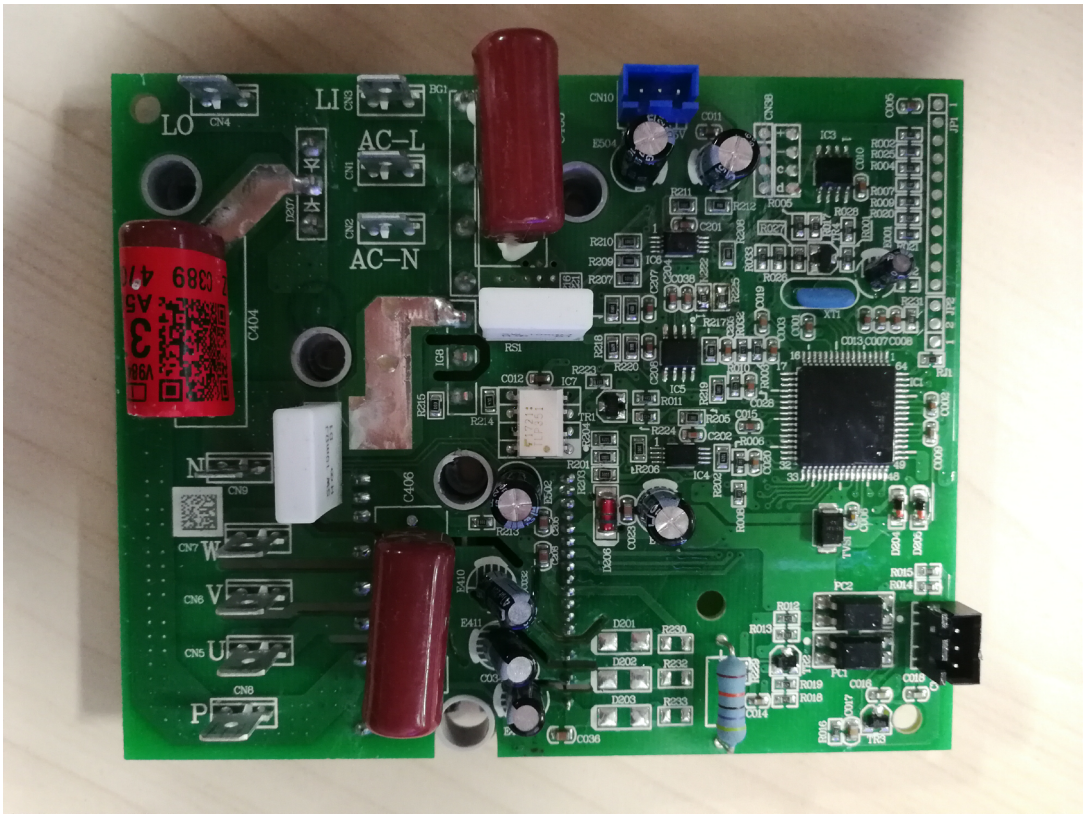

PCB (0151800076A)



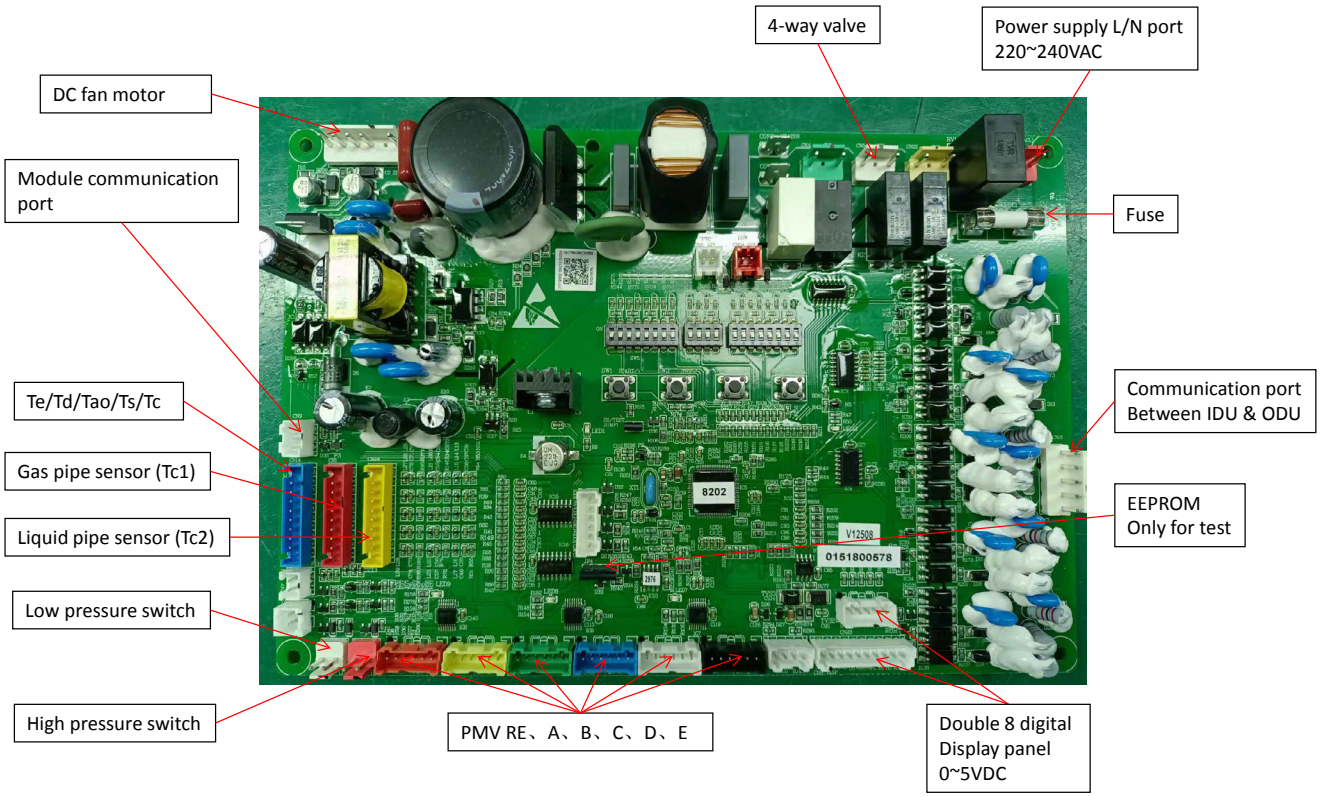
Power Module (0011800865A)  3U55S2SR5FA  3U70S2SR5FA



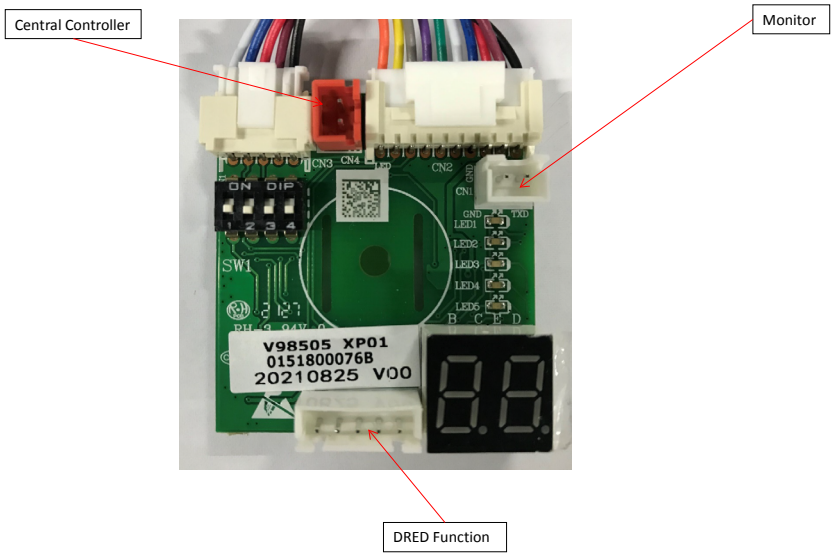

Power Module (0011800865B)  4U75S2SR5FA  4U85S2SR5FA



PCB (0151800578A) 5U125S2SN1FA




PCB (0151800076B)



Power Module (0150401945EAB)  5U125S2SN1FA



## 9.6 Dip Switch Setting

Outdoor main PCB 0151800349
Model: 1U105S2SS1FA (Used before 7th May. 2021)

| SW1 dip switch setting | | Definition |
|---|---|---|
| SW1-1 | OFF | Manually forced operation invalid(default) |
| | ON | Manually forced operation valid |
| SW1-2 | OFF | Manually forced heating(default) |
| | ON | Manually forced cooling |
| SW1-3 | OFF | normal stand by cost |
| | ON | low stand by power cost(default)<br>(powe module is power off) |
| SW1-4 | OFF | reserved |
| | ON | reserved |
| SW1-5 | OFF | central control(default) |
| | ON | BMS |
| SW1-6 | OFF | reserved |
| | ON | reserved |
| SW1-7 | OFF | Defrost automatic(default) |
| | ON | Defrost by time |
| SW1-8 | OFF | reserved |
| | ON | reserved |

| SW2 dip switch setting | | | | | | | | Select model |
|---|---|---|---|---|---|---|---|---|
| SW2-1 | SW2-2 | SW2-3 | SW2-4 | SW2-5 | SW2-6 | SW2-7 | SW2-8 | |
| OFF | OFF | OFF | OFF | ON | OFF | OFF | ON | 1U105S2SS1FA |

Outdoor main PCB 0151800349TA

Model: 1U105S2SS1FA (Used after 7th May. 2021) / 1U105S2SS2FA

| SW1 dip switch setting | | Definition |
|---|---|---|
| SW1-1 | OFF | Manually forced operation invalid(default) |
| | ON | Manually forced operation valid |
| SW1-2 | OFF | Manually forced heating(default) |
| | ON | Manually forced cooling |
| SW1-3 | OFF | normal stand by cost |
| | ON | low stand by power cost(default)<br>(powe module is power off) |
| SW1-4 | OFF | reserved |
| | ON | reserved |
| SW1-5 | OFF | central control(default) |
| | ON | BMS |
| SW1-6 | OFF | reserved |
| | ON | reserved |
| SW1-7 | OFF | Defrost automatic(default) |
| | ON | Defrost by time |
| SW1-8 | OFF | reserved |
| | ON | reserved |

| SW2 dip switch setting | | | | | | | | Select model |
|---|---|---|---|---|---|---|---|---|
| SW2-1 | SW2-2 | SW2-3 | SW2-4 | SW2-5 | SW2-6 | SW2-7 | SW2-8 | |
| OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON | 1U105S2SS1FA<br>1U105S2SS2FA |

Outdoor main PCB 0011800383BC dip switch setting
Model: 1U105S2SS1FB

| SW1 dip switch setting | | Definition |
|---|---|---|
| SW1-1 | OFF | Forced operation invalid |
| | ON | Forced operation valid |
| SW1-2 | OFF | Forced heating |
| | ON | Forced cooling |
| SW1-3 | OFF | Standard standy power consumption |
| | ON | Low standby power consumption |
| SW1-4 | OFF | Reserved |
| | ON | Reserved |
| SW1-5 | OFF | Central control |
| | ON | BMS |
| SW1-6 | OFF | Reserved |
| | ON | Reserved |
| SW1-7 | OFF | Auto defrost |
| | ON | Timely defrost |
| SW1-8 | OFF | Standard noise |
| | ON | Low noise |

| SW2 dip switch setting | | | | | | | | Select model |
|---|---|---|---|---|---|---|---|---|
| SW2-1 | SW2-2 | SW2-3 | SW2-4 | SW2-5 | SW2-6 | SW2-7 | SW2-8 | |
| OFF | OFF | OFF | OFF | ON | OFF | ON | ON | 1U105S2SS1FB |

Outdoor main PCB 015180054BH dip switch setting
Model: 1U125S2SN1FA 1U140S2SP1FA 1U140S2SP2FA

| SW1 dip switch setting | | Definition |
|---|---|---|
| SW1-1 | OFF | Manually forced operation invalid( default) |
| | ON | Manually forced operation valid |
| SW1-2 | OFF | Manually forced heating( default) |
| | ON | Manually forced cooling |
| SW1-3 | OFF | normal stand by cost( default) |
| | ON | low standby power cost |
| SW1-4 | OFF | drive moudle select-RS type |
| | ON | drive moudle select-RK type( default) |
| SW1-5 | OFF | central control( default) |
| | ON | BMS |
| SW1-6 | OFF | Refrigerant R32 ( default) |
| | ON | Refrigerant R410A |
| SW1-7 | OFF | Defrost automatic( default) |
| | ON | Defrost by time |
| SW1-8 | OFF | Not for base station ( default) |
| | ON | Base station application |

| SW6 dip switch setting | | | | | | | | Unit address for central control |
|---|---|---|---|---|---|---|---|---|
| SW6-1 | SW6-2 | SW6-3 | SW6-4 | SW6-5 | SW6-6 | SW6-7 | SW6-8 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | address 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | address 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | address 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | address 3 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | address 4 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | address 5 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | address 6 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | address 7 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | address 8 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | address 9 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | address 10 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | address 11 |
| 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | address 12 |
| 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | address 13 |
| 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | address 14 |
| 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | address 15 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | address 16 |
| .... | | | | | | | | .... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | address 256 |

| SW8 | MODEL SELCET |
|---|---|
| 4 | 1U125S2SN1FA |
| 5 | 1U140S2SP1FA / 1U140S2SP2FA |

Outdoor main PCB 015180054BE dip switch setting
Model: 1U125S2SN1FB 1U140S2SP1FB

| SW1 dip switch setting | | Definition |
|---|---|---|
| SW1-1 | OFF | Manually forced operation invalid( default) |
| | ON | Manually forced operation valid |
| SW1-2 | OFF | Manually forced heating( default) |
| | ON | Manually forced cooling |
| SW1-3 | OFF | normal stand by cost( default) |
| | ON | low standby power cost |
| SW1-4 | OFF | drive moudle select-RS type |
| | ON | drive moudle select-RK type( default) |
| SW1-5 | OFF | central control( default) |
| | ON | BMS |
| SW1-6 | OFF | Refrigerant R32 ( default) |
| | ON | Refrigerant R41OA |
| SW1-7 | OFF | Defrost automatic( default) |
| | ON | Defrost by time |
| SW1-8 | OFF | Not for base station ( default) |
| | ON | Base station application |

| SW6 dip switch setting | | | | | | | | Unit address for central control |
|---|---|---|---|---|---|---|---|---|
| SW6-1 | SW6-2 | SW6-3 | SW6-4 | SW6-5 | SW6-6 | SW6-7 | SW6-8 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | address 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | address 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | address 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | address 3 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | address 4 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | address 5 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | address 6 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | address 7 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | address 8 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | address 9 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | address 10 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | address 11 |
| 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | address 12 |
| 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | address 13 |
| 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | address 14 |
| 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | address 15 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | address 16 |
| .... | | | | | | | | .... |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | address 256 |

| SW8 | MODEL SELCET |
|---|---|
| 8 | 1U125S2SN1FB |
| 9 | 1U140S2SP1FB |

PCB CODE:0151800383EA

Model: 1U125S2SN2FA 1U125S2SN2FB 1U140S2SN1FA 1U140S2SN1FB 1U140S2SP2FB 1U160S2SN1FB

| SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | --- | --- | --- | --- | --- | --- | No forced heating or cooling |
| --- | --- | ON | --- | --- | --- | --- | --- | Lower power standby(default) |
| --- | --- | OFF | --- | --- | --- | --- | --- | Normal power standby |
| --- | --- | --- | OFF | --- | --- | --- | --- | Reserved |
| --- | --- | --- | --- | ON | --- | --- | --- | BMS |
| --- | --- | --- | --- | OFF | --- | --- | --- | Central control (default) |
| --- | --- | --- | --- | --- | OFF | --- | --- | Reserved |
| --- | --- | --- | --- | --- | --- | ON | --- | Defrosting under specifical condition |
| --- | --- | --- | --- | --- | --- | OFF | --- | Auto defrosting(default) |
| --- | --- | --- | --- | --- | --- | --- | ON | Mute mode valid |
| --- | --- | --- | --- | --- | --- | --- | OFF | Mute mode invalid (default) |

| SW2-1 | SW2-2 | SW2-3 | SW2-4 | SW2-5 | SW2-6 | SW2-7 | SW2-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | ON | ON | ON | 1U140S2SN1FA |
| OFF | OFF | OFF | OFF | ON | OFF | OFF | OFF | 1U140S2SN1FB |
| OFF | OFF | OFF | OFF | ON | ON | OFF | OFF | 1U160S2SN1FB |
| OFF | OFF | OFF | OFF | OFF | OFF | ON | ON | 1U125S2SN2FA |
| OFF | OFF | OFF | OFF | OFF | ON | OFF | OFF | 1U125S2SN2FB |
| OFF | OFF | OFF | OFF | ON | OFF | ON | OFF | 1U140S2SP2FB |

| SW8-1 | SW8-2 | Description |
|---|---|---|
| OFF | OFF | Reserved |

Outdoor main PCB 0151800364E/0151800364B dip switch setting SW5

Model : 3U52S2SR3FA 3U70S2SR3 FA 4U75S2SR5FA 4U85S2SR5FA 5U90S2SS5FA 5U105S2SS5FA

| SW5-1 | SW5-2 | SW5-3 | SW5-4 | SW5-5 | SW5-6 | SW5-7 | SW5-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | --- | --- | --- | --- | --- | --- | Heat Pump (Default) |
| ON | OFF | --- | --- | --- | --- | --- | --- | Cooling Only |
| ON | ON | --- | --- | --- | --- | --- | --- | Heating Only |
| --- | --- | OFF | --- | --- | --- | --- | --- | Adjust by Machine Types |
| --- | --- | ON | --- | --- | --- | --- | --- | Max Running Current:15A (Default) |
| --- | --- | --- | OFF | OFF | OFF | --- | --- | 3U55S2SR5FA |
| --- | --- | --- | OFF | OFF | ON | --- | --- | 3U70S2SR3FA |
| --- | --- | --- | OFF | ON | ON | --- | --- | 4U75S2SR5FA |
| --- | --- | --- | ON | OFF | OFF | --- | --- | 4U85S2SR5FA |
| --- | --- | --- | ON | OFF | ON | --- | --- | 5U90S2SS5FA |
| --- | --- | --- | ON | ON | OFF | --- | --- | 5U105S2SS5FA |
| --- | --- | --- | --- | --- | --- | OFF | --- | Temperature Correction Invalid (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | Temperature Correction Valid |
| --- | --- | --- | --- | --- | --- | --- | OFF | Mute Unavailable (Default) |
| --- | --- | --- | --- | --- | --- | --- | ON | Mute Available |

Small service PCB:0151800076A dip switch setting SW1

| SW1-1 | SW1-2 | SW1-3 | SW1-4 | Description |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | State When Out of Factory |
| ON | OFF | OFF | OFF | Compulsory Heating: 50Hz, Outdoor Motor 5-Class, Standard Open Angle 200, The Others are Normal |
| OFF | ON | OFF | OFF | Compulsory Cooling: 60Hz, Outdoor Motor 7-Class, Standard Open Angle 200, the Others are Normal |
| OFF | OFF | ON | OFF | Rated Operation |
| OFF | OFF | OFF | ON | Time Defrost Valid |
| ON | ON | ON | ON | Detection for Wrong Wiring |

SW7: Except the SW7-2 and SW7-3, all the other dip switch setting is OFF

| SW7-2 | SW7-3 | Description |
|---|---|---|
| ON | ON | Defrosting Temperature:6°C |
| OFF | OFF | Defrosting Temperature:8°C (Default) |

Outdoor main PCB 0151800578A dip switch setting SW5

Model : 5U125S2SN1FA

| SW5-1 | SW5-2 | SW5-3 | SW5-4 | SW5-5 | SW5-6 | SW5-7 | SW5-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | --- | --- | --- | --- | --- | --- | --- | Heat Pump (Default) |
| ON | --- | --- | --- | --- | --- | --- | --- | Cooling Only |
| --- | OFF | --- | --- | --- | --- | --- | --- | Defrosting Temperature:8°C (Default) |
| --- | ON | --- | --- | --- | --- | --- | --- | Defrosting Temperature:6°C |
| --- | --- | OFF | --- | --- | --- | --- | --- | Adjust by Machine Types (Default) |
| --- | --- | ON | --- | --- | --- | --- | --- | Max Running Current:15A |
| --- | --- | --- | ON | ON | ON | --- | --- | 5U125S2SN1FA |
| --- | --- | --- | --- | --- | --- | OFF | --- | Temperature Correction Invalid (Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | Temperature Correction Valid |
| --- | --- | --- | --- | --- | --- | --- | OFF | Quite Unavailable (Default) |
| --- | --- | --- | --- | --- | --- | --- | ON | Quite available |

SW7:

| SW7-1 | SW7-2 | SW7-3 | SW7-4 | SW7-5 | SW7-6 | SW7-7 | SW7-8 | Description |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | --- | --- | --- | --- | --- | --- | Reserve |
| --- | --- | OFF | OFF | --- | --- | --- | --- | Adjust by Machine Types |
| --- | --- | OFF | ON | --- | --- | --- | --- | Max Running Current in grade I (Only available in Singapore) |
| --- | --- | ON | OFF | --- | --- | --- | --- | Max Running Current in grade II (Only available in Singapore) |
| --- | --- | ON | ON | --- | --- | --- | --- | BMS available |
| --- | --- | --- | --- | --- | --- | --- | --- | Max Running Current:15A |
| --- | --- | --- | | OFF | --- | --- | --- | Reserve |
| --- | --- | --- | --- | --- | OFF | --- | --- | Long pipe unavailable(Default) |
| --- | --- | --- | --- | --- | ON | --- | --- | Long pipe available |
| --- | --- | --- | --- | --- | --- | OFF | --- | America area unavailable(Default) |
| --- | --- | --- | --- | --- | --- | ON | --- | America area available |
| --- | --- | --- | --- | --- | --- | --- | OFF | Central controller unavailable(Default) |
| --- | --- | --- | --- | --- | --- | --- | ON | Central controller avaiable |

Small service PCB:0151800076B dip switch setting SW1

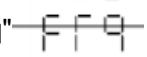
| SW1-1 | SW1-2 | SW1-3 | SW1-4 | Description |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | State When Out of Factory |
| ON | OFF | OFF | OFF | Compulsory Heating: 50Hz, Outdoor Motor 5-Class, Standard Open Angle 200, The Others are Normal |
| OFF | ON | OFF | OFF | Compulsory Cooling: 60Hz, Outdoor Motor 7-Class, Standard Open Angle 200, the Others are Normal |
| OFF | OFF | ON | OFF | Rated Operation |
| OFF | OFF | OFF | ON | Time Defrost Valid |
| ON | ON | ON | ON | Detection for Wrong Wiring |

| Indoor unit Central Control Address | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Set Address by Outdoor PCB | | | | | Indoor connect port | | | | |
| 3U*** | | | | | A | B | C | | |
| 4U*** | | | | | A | B | C | D | |
| 5U*** | | | | | A | B | C | D | E |
| | SW06-4 | SW06-3 | SW06-2 | SW06-1 | Indoor central control address | | | | |
| | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 5 |
| | 0 | 0 | 0 | 1 | 6 | 7 | 8 | 9 | 10 |
| | 0 | 0 | 1 | 0 | 11 | 12 | 13 | 14 | 15 |
| | 0 | 0 | 1 | 1 | 16 | 17 | 18 | 19 | 20 |
| | 0 | 1 | 0 | 0 | 21 | 22 | 23 | 24 | 25 |
| | 0 | 1 | 0 | 1 | 26 | 27 | 28 | 29 | 30 |
| | 0 | 1 | 1 | 0 | 31 | 32 | 33 | 34 | 35 |
| SW06 | 0 | 1 | 1 | 1 | 36 | 37 | 38 | 39 | 40 |
| | 1 | 0 | 0 | 0 | 41 | 42 | 43 | 44 | 45 |
| | 1 | 0 | 0 | 1 | 46 | 47 | 48 | 49 | 50 |
| | 1 | 0 | 1 | 0 | 51 | 52 | 53 | 54 | 55 |
| | 1 | 0 | 1 | 1 | 56 | 57 | 58 | 59 | 60 |
| | 1 | 1 | 0 | 0 | 61 | 62 | 63 | 64 | 65 |
| | 1 | 1 | 0 | 1 | 66 | 67 | 68 | 69 | 70 |
| | 1 | 1 | 1 | 0 | 71 | 72 | 73 | 74 | 75 |
| | 1 | 1 | 1 | 1 | 76 | 77 | 78 | 79 | 80 |

## 9.7 Central controller address setting through outdoor unit

For 383 series PCBs (model 1U105S2SS1FB 1U125S2SN2FA 1U125S2SN2FB 1U140S2SN1FA 1U140S2SN1FB 1U140S2SP2FB 1U160S2SP1FB), setting by the function button as following:

Step1: Press SW5 for 5-10sec. to enter the Menu1, digital tube will display "COOL"

Step2: Press SW4 for 5-10sec. to enter Menu2, digital tube will display "Frq" 

Step3: Press SW6/SW7 up and down and select "Addr"

Step4: Press SW4 for 5-10sec.

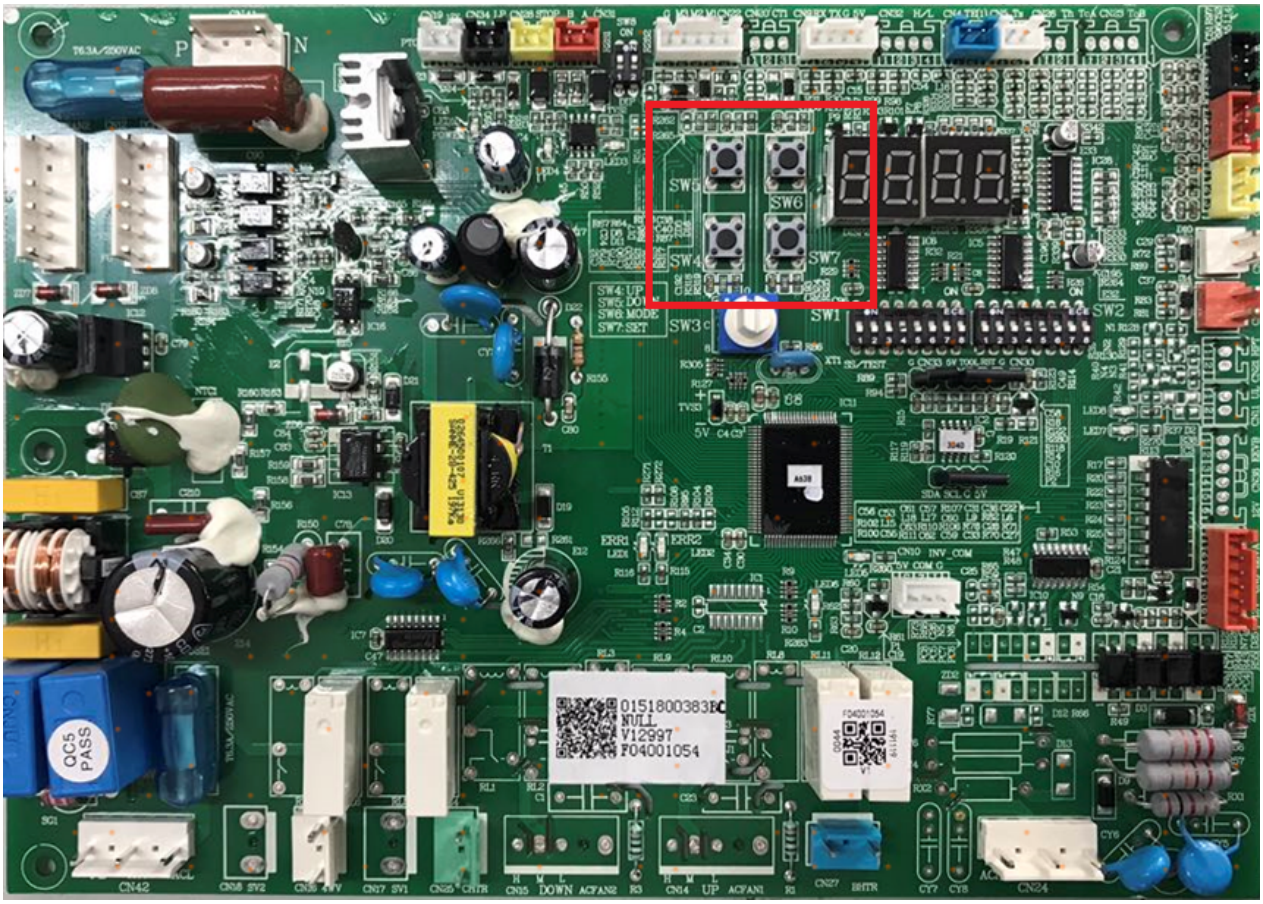
Step5: Press SW6/SW7 up and down to adjust the "Addr" data

Step6: Press SW5 for 5-10sec. to exit Menu2, digital tube will display "COOL"

Step7: Press SW5 again to exit Menu1, digital tube will display qut 

Step8: Press SW4 for 5-10sec. to confirm the previous setting

Step9: Central controller will show the address after the system is powered on again



## 9.8 Outdoor Unit Control

**Outdoor Frequency Control**

A.Compressor running frequency range:

1U: 30-91RPS

3U55: cooling--20~100RPS, heating---20~110RPS

3U75: cooling--20~100RPS, heating---20~110RPS

The others: cooling--20~90RPS, heating---20~95RPS

B.Defination of high-efficiency operation and its frequency control

In order to meet the cooling request at a high ambient temperature and the heating request at low ambient temperature, we set the high-efficiency operation.

Entering condition: cooling mode, Tao≥33°C( E), heating mode, Tao≤5°C( E)

**Electronic Expansion Valve (EEV) Control**

A: Electronic characteristic

| | |
|---|---|
| Max. open angle | 470 pulse |
| Driving speed | PPS |

B: Initialization of EEV

EEV driving speed: open direction: 32MS; close direction: 32MS

C: Open angle limitation of EEV

| Unitary | Unit Stop | Adjustable Upper Limit |
|---|---|---|
| Cool/Dry | 300(E) | 470(E) |
| Heat | 300(E) | 470(E) |

| | Unit Stop | Adjustable Upper limit | Thermostat ON | Thermostat OFF | Adjustable Lower Limitation |
|---|---|---|---|---|---|
| Cool/Dry | 5(E) | 470(E) | Standard Open Angle+Tolerance | 5(E) | 250(E) |
| Heat | 50(E) | 470(E) | Standard Open Angle+Tolerance | 50(E) | 250(E) |

D: Standard open angle control

Unitary: In Cool/Dry mode, standard open angle: outdoor ambient temp.≥22°C, 260pulse (E);Outdoor ambient temp.≤22°C, 210pulse (E);

In heat mode, standard open angle: outdoor ambient temp.≥6°C, 240pulses (E) ;Outdoor ambient temp. ≤6°C, 160pulse (E)

Multi: In Cool/Dry mode, standard open angle: outdoor ambient temp.≥20°C, 250 pulse(E);Outdoor ambient temp.<20°C, 210 pulse(E);

In Heat mode, standard open angle: outdoor ambient temp.≥10°C, pulse (E);outdoor ambient temp.<10°C, 210 pulse (E).

F: When discharging temp. Td is too high or too low, modify the EEV angle Unitary

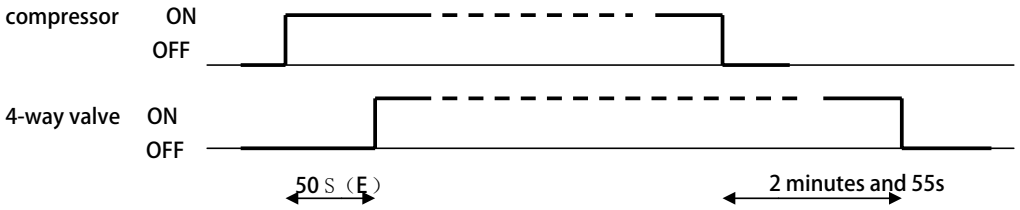
| Mode | Modification Process | Max. Modification |
|---|---|---|
| Cooling | If TD>106 Degree and -1 Degree /2 Minutes, Open Angle Keeps Between 106-50. | -3 |
| Cooling | If TD<50 Degree and +1 Degree /2 Minutes, Open Angle Keeps Between 50-106. | +3 |
| Heating | If TD>100 Degree and -1 Degree /2 minutes, Open Angle Keeps Between 100-50. | -3 |
| Heating | If TD<50 Degree and +1 Degree /2 Minutes, Open Angle Keeps Between 50-100. | +3 |

**Multi:** In order to cooperate the compressor discharging temp. over high protection, the system will enlarge the EEV open angle. Within 5 minutes after compressor starts up, it will not modify. The detecting period is 30 seconds.

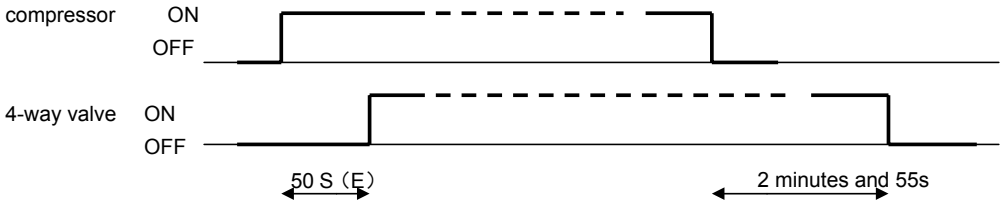
| Cooling Mode | Indoor Modification Angle |
|---|---|
| 105°C< Discharging Temp. | +50degree/60seconds, it Will Stop Until Up to the Max. Permitted Opening Angle |
| 98°C< Discharging Temp.<=105°C | Keep the Angle |
| <=98°C | 5degree/60seconds, and Reduce to 0 Degree Gradually |
| Heating Mode | Indoor Modification Angle |
| 105°C< Discharging Temp. | 10degree/60seconds, it Will Stop Until Up to the Max. Permitted Opening Angle |
| 98°C< Discharging Temp.<=105°C | Keep the angle |
| <=98°C | 5degree/60seconds, and Reduce to 0 Degree Gradually |

**4-way Valve Control in Heating**

Unitary: 50s later after compressor start up, the 4-way valve start to operate. When compressor stops or unit is not in heating mode, the 4-way valve is closed after compressor stop for 2 minutes and 55s.




**Multi:** Protection when 4-way valve can not reverse in heating: 15 minutes later after compressor startup, if indoor coil average temp. is below 5degree and keeps for 1 minute, the unit will stop and occur the 4-way valve protection.

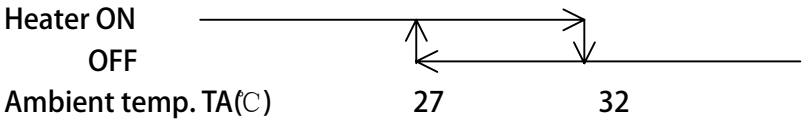



**Electric Heater Control**

If compressor has not run for a long time, the refrigerant will deposit on the bottom of compressor and mix with the refrigeranr oil. When re-startup, because low pressure reduces, refrigerant will be segregated from the refrigerant oil and cause soam in the oil, which will make compressor exhaust a lot of oil. Therefore please stop heating the compressor bottom to ensure the low pressure in startup period should not go down greatly.

• Ambient temp. TA≤32degree, when compressor stops, the electric heater will be electrified.

• When TA≥32degree, or compressor running, the electric heater will be off.



**Control of defrosting in heating**

In heating mode, defrosting temp. sensor will check the frosting condition of outdoor heat exchanger and make defrosting control.

A: Enter condition:

**Unitary:** After the unit is in heating for 10 minutes and compressor run for 45 minutes in all, according to check the defrosting temp. sensor Te and outdoor ambient temp. sensor Tao, if they can meet the following condition, entering in defrosting operation.

Tc≤C×TA-α

Herein: C: TA<0°, C=0.8  TA≥0°C, C=0.6

| Jumper Selection | M (Out of Factory) |
|---|---|
| α (°C) | 8 (E) |

**temperature limitation:**

1. -15°C≤C×TA-α≤-2°C
2. C×TA - α< -15°C,and Te≤-15°C for 5 minutes continously and for 90 minutes, the system will enter in defrostiong

3.Stop and Pause condition of compressor running accumulative time in heating mode:

Checking Stop: running operation changes from heating to cooling.

Checking Pause: thermostat OFF, or the unit stops.

1. 5°C< (E) <Tao, Te<=-6°C< (E) ;
2. -6°C< (E) <=Tao<=5°C, Te≤C×Tao-α;

Herein :α=8 (E) ; C:Tao<0°C; C=0.8; Tao≥0°C, C=0.6;

3.Tao<-6°C, Te≤-15°C< (E) and defrosting compressor run for 48 minutes in all.

**Cancel condition:**

It will take the max. 10 minutes from beginning defrosting to quit it. Te sensor will measure the condition of outdoor heat exchanger, if the temp. is over 10°C for 60 seconds in all or is up to 14°C for 30 seconds in all or the temperature is over 20°C, the defrosting will be over.

**Multi:**

a. In heating mode, if the compressor has run for 10 minutes continously and run for 55 minutes in all, the system will measure the defrosting temperature sensor Te and outdoor ambient temp. sensor TA, if the below condition can be met for continous 5 minutes, the unit will enter defrosting operation:

Tc≤C×TA-α

Herein: C: TA<0°, C=0.8  TA≥0°C, C=0.6

According to SW2, the setting is as follow: in the place easy to frost, it is H; when out of factory, it is M.

| Jumper Selection | M (Out of Factory) | H |
|---|---|---|
| α (°C) | 8 (E) | 6 (E) |

b. Defrosting entering condition: -15°C≤C×TA-α≤-2°C;

c. Stop and Pause condition of compressor running accumulative time in heating mode:

Checking Stop: running operation changes from heating to cooling.

Checking Pause: thermostat OFF, or the unit stops.

Cancel condition:

It will take the max. 10 minutes from beginning defrosting to quit it. Te sensor will measure the condition of outdoor heat exchanger, if the temp. is over 7°C for 60 seconds in all or is up to 12°C for 30 seconds in all, the defrosting will be over.

**Compulsory Defrosting Control**

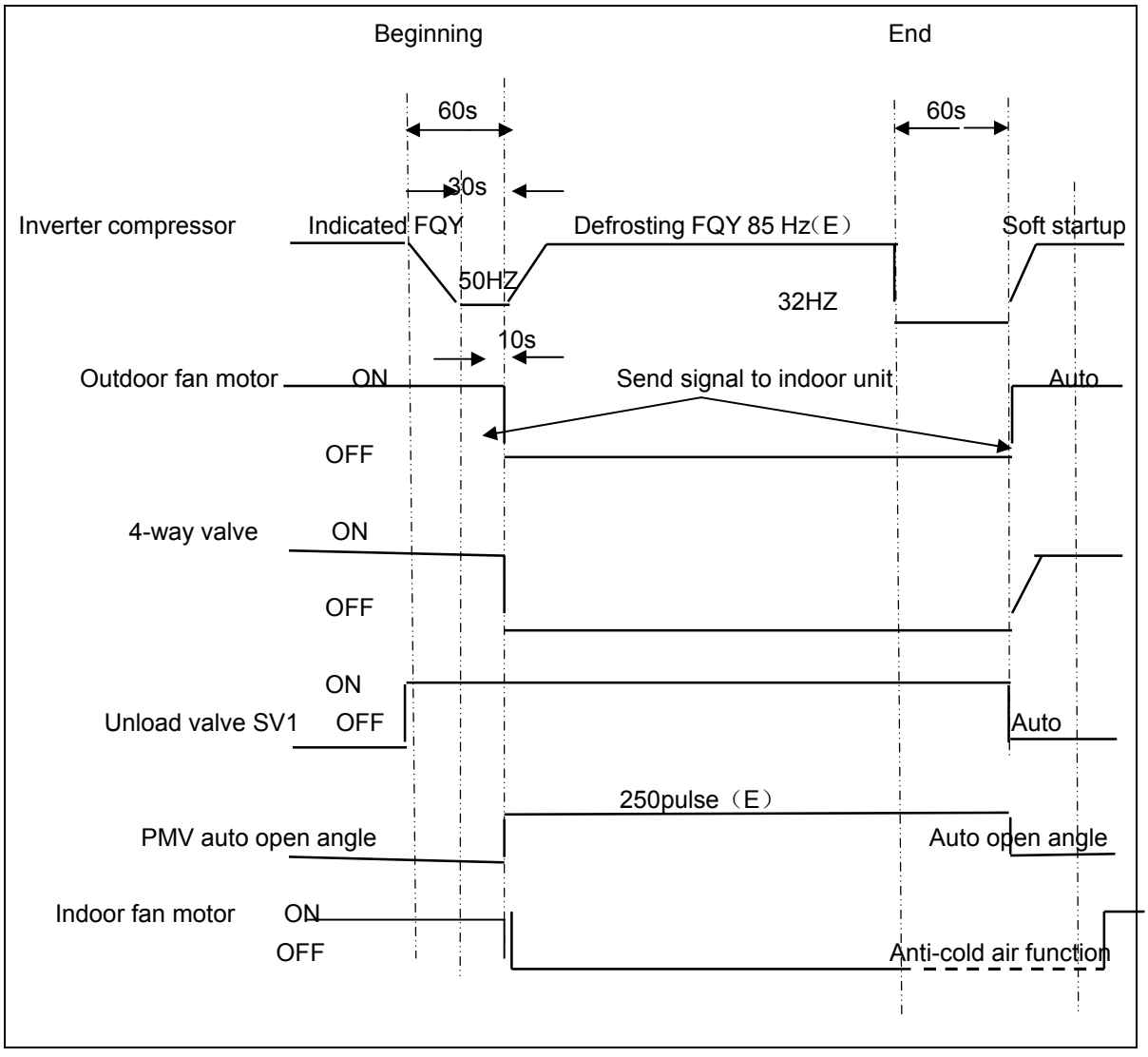
Enter condition: in heating mode, after receiving the compulsory defrosting signal from indoor unit, the unit will perform the compulsory defrosting operation.

Cancel condition: Te≥12°C and keep for 1 minute or the defrosting time is over 10 minutes. The manual defrosting signal of indoor unit will remain until the outdoor enters defrosting mode.

***Note:*** When outdoor compressor not running, the unti still can enter manual defrosting, but it will comply with the 3-minute protection of compressor.

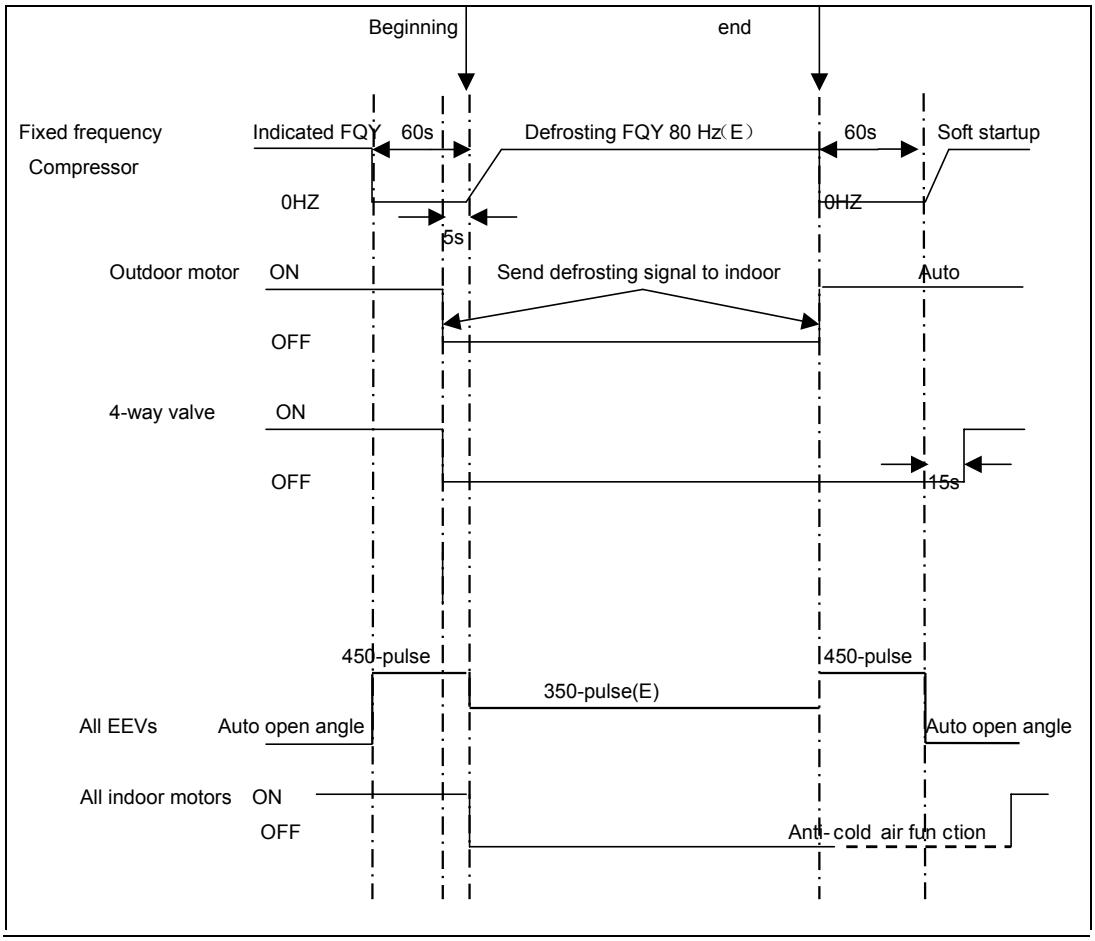
**2.3.7 Defrosting operation flow chart:**

Unitary



**Defrosting Operation Flow Chart:**

Multi:

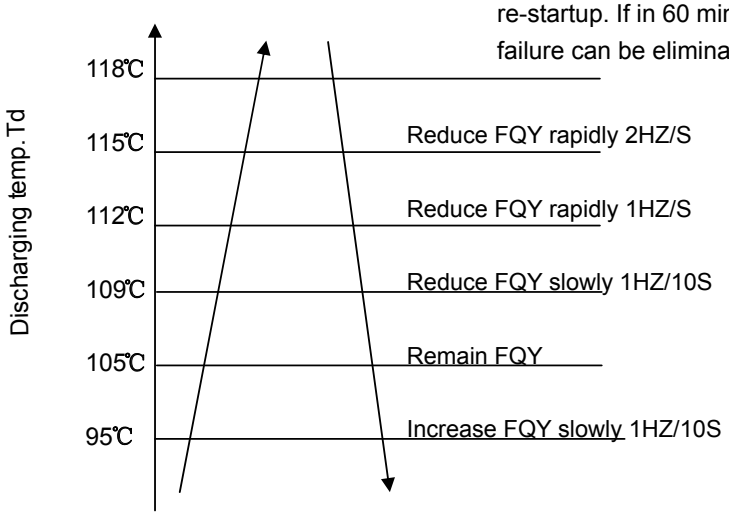



**Frequency Control When Td is too High**

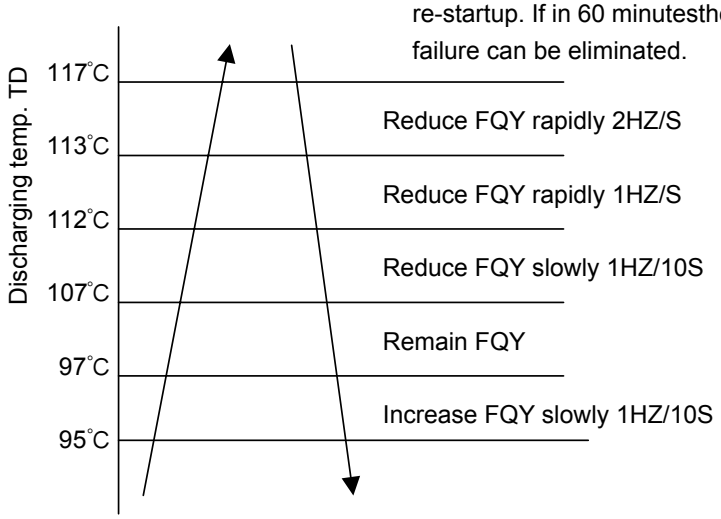
Purpose: make compressor frequency control if the discharging temp. is too high, to lower the discharging temp. efficiently and ensure the system can run normally.

Unitary:

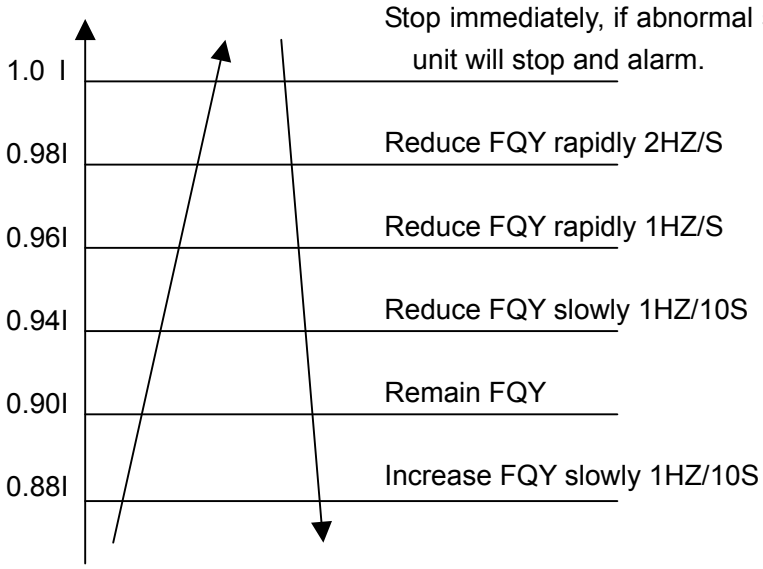
If keeping for 10s, the unit stops, 3 minutes later, the unit can re-startup. If in 60 minutesthe unit occurs alarm for 3 times, the failure can be eliminated.



Multi:



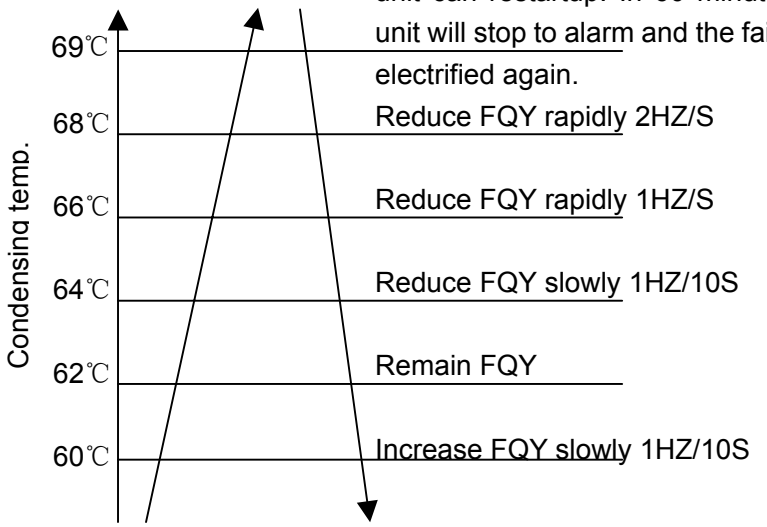

**Frequency Control When There is CT Over Current Protection**




**High Pressure Protection (Multi)**

When the input signal of pressure switch is high level:1, that shows there is no protection. When the input signal of pressure switch is low level: 0 for 1 minute, that shows high pressure protection works. At this time, compressor stops, outdoor will send the alarm signal. The alarm can be resumable. If in 60 minutes, the failure occurs 3 times, the failure can be confirmed and send failure code to indoor. Meanwhile, by controling the max. condensate temp. Tc (cooling) or TmAVE (heating), please confirm as follow:

In nominal cooling/dry/heating mode, high pressure can be controlled by limiting the max. frequency.




**Low Pressure Protection (Multi)**

(1) When compressor is running, if output signal of low pressure switch is low level: 0 for 1 minute continously, compressor will stop,outdoor alarms. The alarm can be resumable. If in 60 minutes, the failure occurs 3 times, the failure can be confirmed and send failure code to indoor.

(2) When compressor no running, if output signal of low pressure switch is low level: 0 for 30 seconds continously, alarm will occur.

• When unit stops, the reason that system still checks the low pressure : in a long time stop, make protection for the compressor on the condition of great refrigerant leakage.

• The reason that low pressure switch action time is 30 seconds: when compressor stops, low pressure does not change, so it will be shorter than the set time in operation.

(3) When compressor starts up, in 8 minutes, low pressure switch signal will be shielded.

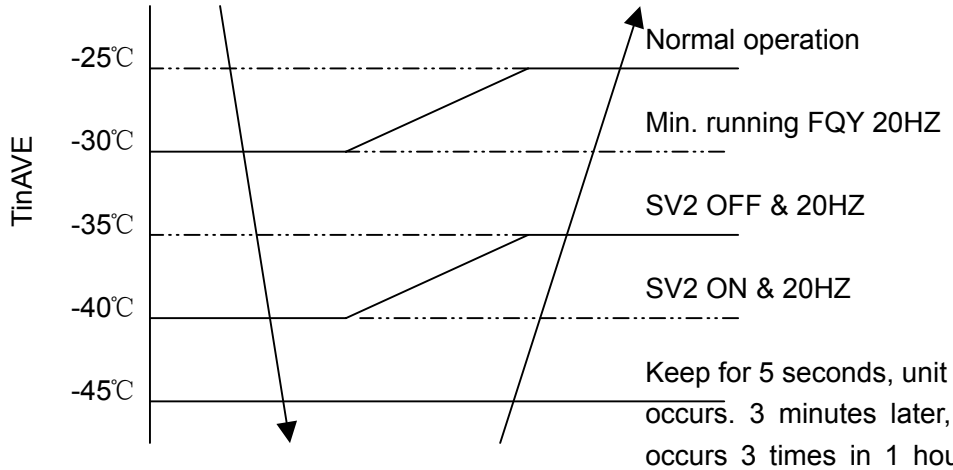
(4) In defrosting, low pressure switch will be shielded.

(5) In oil return procedure, low pressure switch will be shielded.

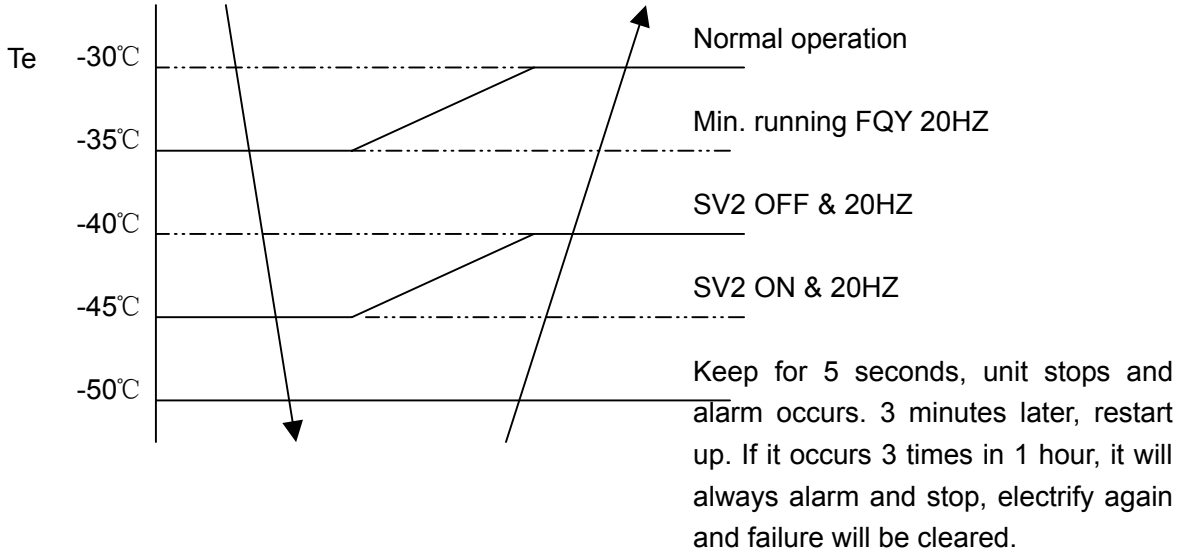
(6) In the refrigerant discharging procedure after the oil return in cooling is over, low pressure switch will be shielded.

In addition, the system will control low pressure through the evaporator temp. TE to realize the low pressure protection function.

In cooling, confirm through Tc2AVE:




In heating, confirm through defrosting temp. Te:




If the failure is not confirmed as the permanent protection, outdoor will not send failure code to indoor, and indoor will not alarm.

### 2.3.12 Oil return operation control

Unitary:

A: Entering condition

When the compressor running frequency is lower than 58Hz continuously in all and outdoor unit Tcm is lower than 50 degree for 5 hours, the system will enter oil return operation. In the course of mode changeover, manual unit stop or protective unit stop, the time will be accumulative. After compressor restarts up, the time will counted continuously. In counting time for 5 hour, if the compressor running frequency is over 80Hz for 10 minutes continuously, the time will be cleared. Also after the heating defrosting , the time will be cleared.

B: Procedure

Cooling mode: refer to "the oil return procedure in cooling mode"

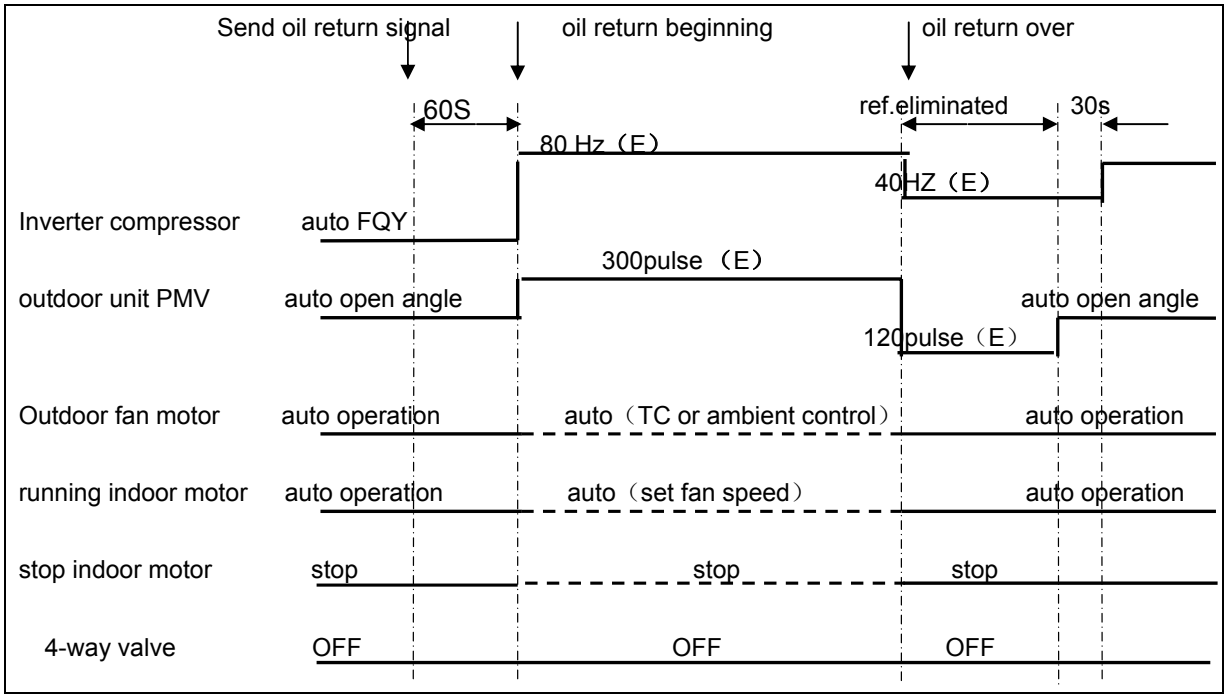
Heating mode: refer to "the oil return procedure in heatingmode" mode"

C: The protection treatment in oil return operation:

In the course of cooling oil return, because of all kinds of protection or abnormal unit stop, after the unit restart, the time will not be cleared, the system need another oil return operation. In the refrigerant flow course in oil return of cooling mode or after oil return, and within 5 minutes after the refrigerant being eliminated is over, the anti-freeze protection and low pressure protection are invalid, other protection is valid.

In the course of heating oil return, because of all kinds of protection or abnormal unit stop, the system need not another oil return operation after the unit stop for 3 minutes and enter in heating mode directly. In the course of changing to cooling oil return, the anti-freeze protection and low pressure protection are invalid, other protection is valid.

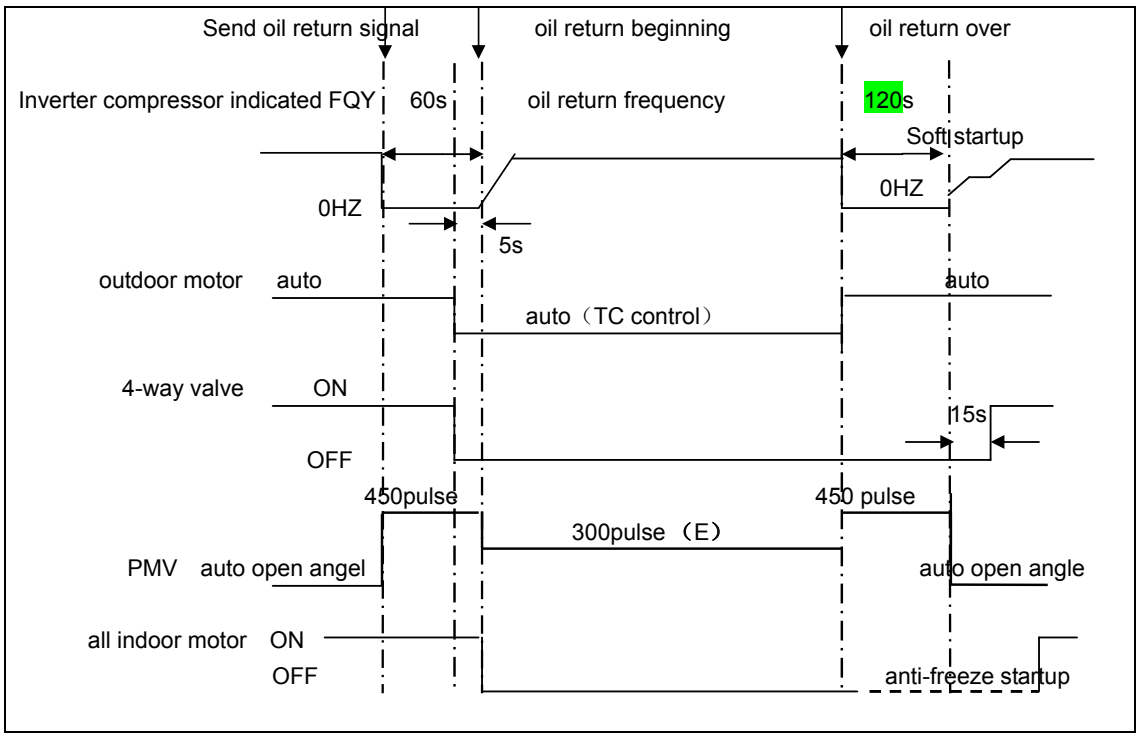
Oil return procedure in cooling mode:



**Quit condition of oil return:**

OR
- &
  - 1 minutes later after oil return is over
  - OR
    - Td-Tcm ＞ 30°C
    - Ts-Tc ＞ 30°C
    - Ts-Tc ＜ -35°C
  - Max.10 minutes

**Oil return procedure in heating mode:**




**Quit condition of oil return**

OR
- Max.9 minutes (E)
- &
  - OR
    - Td-Tcm ＜ 20°C for 30s (5 minutes later, begin to count)
    - Ts-Tc ＜ 15°C for 30s (5 minutes later, begin to count)
  - Running for min.5 (E)

**Multi:**

D: Entering condition

When the compressor running frequency is lower than 58Hz (E) continuously for 4 hrs, the system will enter oil return operation. In the course of mode changeover, manual unit stop or protective unit stop, the time will be accumulative. After the compressor restarts up, the time will be counted continuously. In a continuous 4 hrs, if the compressor running frequency is not less than 72Hz for over 10 minutes continuously, the accumulative time will be cleared. Also after the heating defrosting, the time will be cleared.

E: Procedure

Cooling mode: refer to “the oil return procedure in cooling mode”

Heating mode: refer to “the oil return procedure in heating mode”

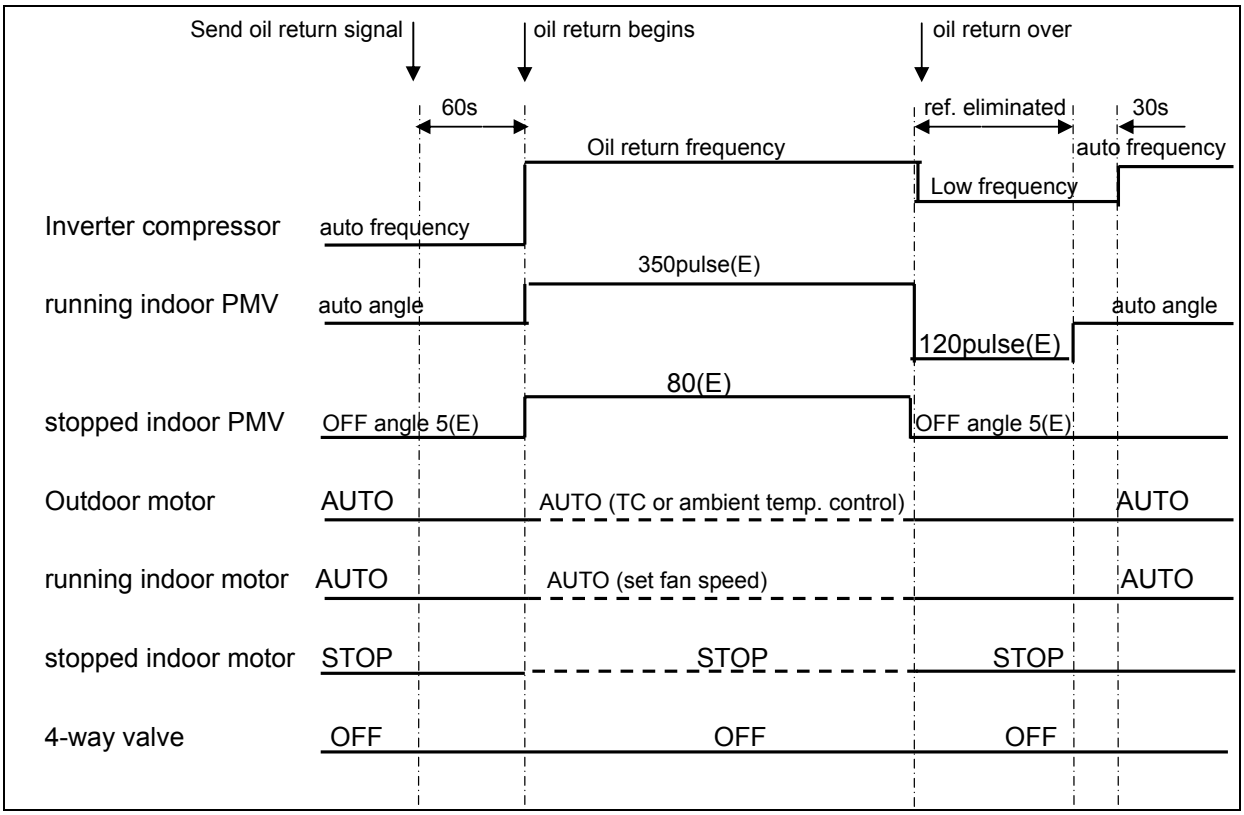
F: The protection treatment in oil return operation

In the course of oil return, because of protection or abnormal unit stop, after the unit restarts up, the time will not be cleared, the system will need another oil return operation. In the refrigerant flow course in the oil return of cooling mode or after the oil return, and within 5 minutes after the refrigerant being eliminated is over, the anti-freezed protection is invalid, and also the low voltage protection is invalid. But the other protection is valid.

In the course of oil return from heating mode to cooling mode, if abnormal condition occurs or the unit stops for protection, then the system needs not another oil return within 3 minutes after the unit stops and it will start up directly, then to heating mode.

In the course of oil return from heating mode to cooling mode, the anti-freezed protection is null and void, and the low voltage protection is null either. The other protection is valid.

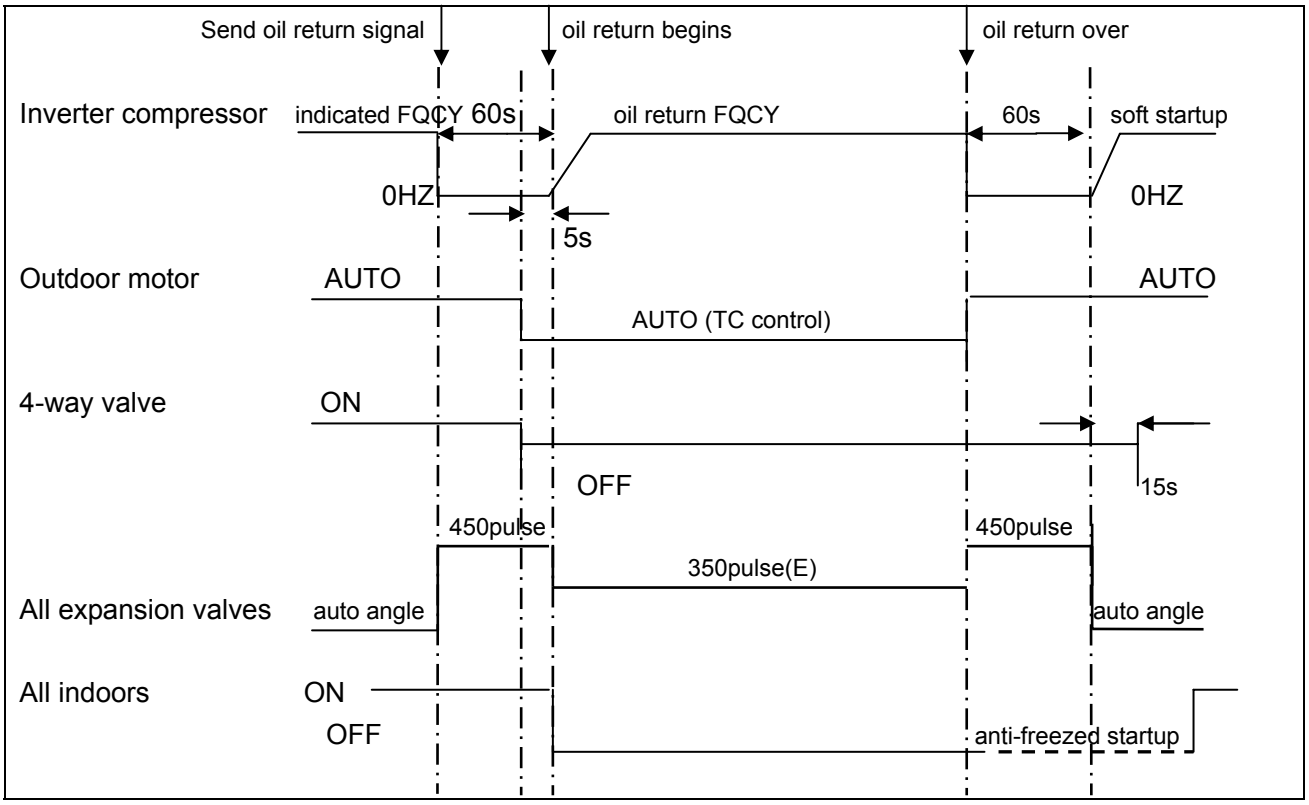
Oil return procedure in cooling mode:



After oil return in cooling mode, the quit condition of refrigerant eliminated:

OR
- & 1 minute later after oil return is over
  - OR Td - Tc＞30°C
  - OR Ts - Tc2AVE＞30°C
  - OR Tc2AVE＜ - 35°C
- Max. 10 minutes

Oil return procedure in heating mode:




Quit condition of oil return:

OR
- Max. 9 minutes (E)
- & OR
  - Td - Tc＜20°C for 30s continuously(5 minutes later, begin to count)
  - Ts - Tc2AVE＜15°C for 30s continuously(5 minutes later, begin to count)
- Running for min. 5 minutes(E)

### 9.9 Diagnostic Code

AB25S2SC1FA AB35S2SC1FA AB50S2SC1FA AB25S2SC2FA AB35S2SC2FA AB50S2SC2FA

# INDOOR UNIT TROUBLE SHOOTING

| LED flash times of indoor PCB | | Wired controller display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED5 | LED1 | | | |
| 0 | 1 | 01 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 2 | 02 | Malfunction of indoor unit piping temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 4 | 04 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong programmed,or PCB broken |
| 0 | 7 | 07 | Abnormal communication between indoor and outdoor units | Wrong connection,or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB or slave unit malfunction in MAXI system |
| 0 | 8 | / | Abnormal communication between wired controller and indoor unit | Wrong connection or wired controller broken,or PCB faulty |
| 0 | 12 | 0C | Malfunction of drain system | Pump motor disconnected or at wrong position,or the float switch,disconnected，or at wrong position,or the short circuit bridge disconne ted |
| 0 | 13 | 0D | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | 0E | Indoor unit DC fan motor abnormal | DC Fan motor disconnected or DC Fan broken or circuit broken |

Note:

1.The outdoor failure can also be indicated by the indoor unit,the checking method as follows: LED5 flash times stands for tens digit,and LED1 flash times stands for units digit, use this bidigitate figure minus 20,then will get the outdoor error code.For example,if the outdoor error code is 15,LED5 will flash 3 times firstly,two seconds later,LED1 will flash 5 times , and four seconds later the process will repeat again.

2.LED5 is a red one on the indoor PCB,LED1 is a yellow one.

3.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

0150515407

AB71S2SG1FA ABH071H1ERG ABH90H1ERG ABH105H1ERG ABH125K1ERG ABH140K1ERG ABH160K1ERG

| LED flash times of indoor PCB | | LR.Recever digital display | Contents of malfunction | Possible reasons |
|---|---|---|---|---|
| LED4 | LED1 | | | |
| 0 | 1 | 01 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected, or briken, or at wrong position, or short circuit |
| 0 | 2 | 02 | Malfunction of indoor unit piping temperature sensor | Sensor disconected, or briken, or at wrong position, or short circuit |
| 0 | 4 | 04 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong programmed, or PCB broken |
| 0 | 7 | 07 | Abnormal communication between indoor and outdoor units | Wrong connection, or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB or slave unit malfunction in MAXI system |
| 0 | 8 | 08 | Abnormal communication between wired controller (or I.R. RECE IVER) and indoor unit | Wrong connection or wired controller broken, or PCB faulty |
| 0 | 12 | 0C | Malfunction of drain system | Pump motor disconnected or at wrong position, or the float switch, disconnected, or at wrong position, or the short circuit bridge disconne ted |
| 0 | 13 | 0D | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | 0E | Indoor unit DC fan motor abnormal | DC Fan motor disconnectde or DC Fan broken or circuit broken |

Note:

*1. The outdoor failure can also be indicated by the indoor unit, the checking method as follows: If the outdoorerror code is M (DECIMAL) , the indoor unit's I.R. receiver display will show the after converted hexadecimal code of "M+20" (DECIMAL) , for example, if the outdoor error code is 2, the indoor unit I.R. receiver display will flash the error code 16 (2→2+20=22→change deciaml 22 to hexadecimal code, get 16)*

*2. LED4 is a red one on the indoor PCB, LED1 is a yellow one.*

*3. To get much more details about the out door unit failure, please refer to the outdoor unit trouble shooting list.*

* For cassette type with PB-950KB panel, when failure occurs the panel will not only display error code, but all other LED lights (including timer and running lights) on the panel will show and flash. In this case only need to read the two-digital error code and ignore other lights information.

AD25S2SS2FA AD35S2SS2FA AD50S2SS1FA
AD50S2SS2FA AD71S2SS1FA AD35S2SM3FA AD71S2SS2FA AD50S2SM3FA

# INDOOR UNIT TROUBLE SHOOTING

| LED flash times of indoor PCB | | Wired controller display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED4 | LED3 | | | |
| 0 | 1 | 01 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 2 | 02 | Malfunction of indoor unit piping temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 4 | 04 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong programmed,or PCB broken |
| 0 | 7 | 07 | Abnormal communication between indoor and outdoor units | Wrong connection,or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB or slave unit malfunction in MAXI system |
| 0 | 8 | / | Abnormal communication between wired controller and indoor unit | Wrong connection or wired controller broken,or PCB faulty |
| 0 | 12 | 0C | Malfunction of drain system | Pump motor disconnected or at wrong position,or the float switch,disconnected，or at wrong position,or the short circuit bridge disconnected |
| 0 | 13 | 0D | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | 0E | Indoor unit DC fan motor abnormal | DC Fan motor disconnected or DC Fan broken or circuit broken |

Note:

1.The outdoor failure can also be indicated by the indoor unit,the checking method as follows: If the outdoor error code is M（DECIMAL)， the indoor unit's wired controller display will show the after converted hexadecimal code of "M+20"(DECIMAL), for example,if the outdoor error code is 2,the indoor unit wired controller display will flash the error code 16 (2→2+20=22 →change decimal 22 to hexadecimal code,get 16）

2.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

0150521239

AD50S2SM1FA AD71S2SM1FA

| LED flash times of indoor PCB | | Wired controller display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED4 | LED3 | | | |
| 0 | 1 | 01 | Malfunction of indoor unit ambient temper-ature sensor | Sensor disconected, or brok-en,or at wrong position, or short circuit |
| 0 | 2 | 02 | Malfunction of indoor unit piping temper-ature sensor | Sensor disconected, or brok-en,or at wrong position, or short circuit |
| 0 | 4 | 04 | EEPROM wrongof indoor PCB | EEPROM chip disconected or broken or wrong program-med, or PCB broken |
| 0 | 7 | 07 | Abnormal communi-cation between indo-or and outdoor units | Wrong connection, or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB or slave unit malfunction in MAXI system |
| 0 | 8 | 07*flashing | Abnormal communi-cation between wired controlleer and indoor unit | Wrong connection or wired controller broken, or PCB faulty |
| 0 | 12 | 0C | Malfunction of drain system | Pump motor disconnected or at wrong position, or the float switch disconnected or at wrong position, or the short circuit bridge disconne ted |
| 0 | 13 | 0D | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | 0E | Indoor unit DC fan motor abnormal | DC Fan motor disconnected or DC Fan broken or circuit broken or motor blocked |

***Note:***

1.The outdoor failure can also be indicated by the indoor unit, the checking method as follows: If the outdoor error code is M (DECIMAL), the indoor unit's wired controller display will show the after converted hexadecimal code of "M+20" (DECIMAL) , for example, if the outdoor error code is 2, the indoor unit wired controller display will flash the error code 16 (2-2+20=22-change decimal 22 to hexadecimal code, get 16 )

2.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

3. For YR-E17, communication error between I.D.PCB and wired controller, 07 will flash in the main display interface not the check display interface.

# INDOOR UNIT TROUBLE SHOOTING

| LED flash times of indoor PCB | | Wired controller display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED4 | LED3 | | | |
| 0 | 1 | 01 | Malfunction of indoor unit ambient temper-ature sensor | Sensor disconected, or brok-en,or at wrong position, or short circuit |
| 0 | 2 | 02 | Malfunction of indoor unit piping temper-ature sensor | Sensor disconected, or brok-en,or at wrong position, or short circuit |
| 0 | 4 | 04 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong program-med, or PCB broken |
| 0 | 7 | 07 | Abnormal communi-cation between indo-or and outdoor units | Wrong connection, or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB or slave unit malfunction in MAXI system |
| 0 | 8 | 07*flashing | Abnormal communi-cation between wired controlleer and indoor unit | Wrong connection or wired controller broken, or PCB faulty |
| 0 | 12 | 0C | Malfunction of drain system | Pump motor disconnected or at wrong position, or the float switch disconnected or at wrong position, or the short circuit bridge disconne ted |
| 0 | 13 | 0D | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | 0E | Indoor unit DC fan motor abnormal | DC Fan motor disconnected or DC Fan broken or circuit broken or motor blocked |

***Note:***

1.The outdoor failure can also be indicated by the indoor unit, the checking method as follows: If the outdoor error code is M (DECIMAL), the indoor unit's wired controller display will show the after converted hexadecimal code of "M+20" (DECIMAL) , for example, if the outdoor error code is 2, the indoor unit wired controller display will flash the error code 16 (2-2+20=22-change decimal 22 to hexadecimal code, get 16 )

2.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

3. For YR-E17, communication error between I.D.PCB and wired controller, 07 will flash in the main display not the check display interface.

AD125S2SM3FA AD140S2SM3FA

# INDOOR UNIT TROUBLE SHOOTING

| LED flash times of indoor PCB | | Wired controller display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED4 | LED3 | | | |
| 0 | 1 | 01 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 2 | 02 | Malfunction of indoor unit piping temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 4 | 04 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong programmed,or PCB broken |
| 0 | 7 | 07 | Abnormal communication between indoor and outdoor units | Wrong connection,or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or PCB hardware malfunction |
| 0 | 8 | 07 *flashing | Abnormal communication between wired controller and indoor unit | Wrong connection or wired controller broken,or PCB hardware malfunction |
| 0 | 12 | 0C | Malfunction of drain system | Pump motor disconnected or at wrong position,or the float switch disconnected, or at wrong position,or the short circuit bridge disconnected |
| 0 | 13 | 0D | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | 0E | Abnormal communication between main control PCB & fan motor driver | communication wire disconected or wrong conected or PCB hardware malfunction |
| 0 | 15 | 0F | Fan motor overcurrent | fan motor current too high |
| 0 | 17 | 11 | DC voltage high or low | DC voltage of the fan motor driver too high or too low |
| 0 | 18 | 12 | F.M.D temperature high | Fan motor driver over 95℃ |
| 0 | 19 | 13 | Fan motor out of step | wrong rotor location detected |
| M(≥1) | N(≥0) | / | Error of the outdoor unit | See note 1, 2 |

Note:1.The outdoor failure can also be indicated by the indoor unit,the checking method as following:outdoor unit error code=(M*10+N)-20.LED4 flash M times and LED3 flash N times .
2. LED4 is a yellow one on the indoor main control PCB,LED3 is a green one.3.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.4.For YR-E17,communication error between indoor PCB and wired controller, 07 will flash in the main display interface instead of display at the check interface

0150519893

**AC35S2SG1FA AC50S2SG1FA AC71S2SG1FA AC105S2SH1FA AC125S2SK1FA AC140S2SK1FA AC160S2SK1FA**

# INDOOR UNIT TROUBLE SHOOTING

| LED flash times of indoor PCB | | Malfunction display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED6 | LED1 | | | |
| 0 | 1 | E1 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected, or broken,or at wrong position, or short circuit |
| 0 | 2 | E2 | Malfunction of indoor unit piping temperature sensor | Sensor disconected, or broken,or at wrong position, or short circuit |
| 0 | 4 | E4 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong programmed, or PCB broken |
| 0 | 7 | E7 | Abnormal communi-cation between indoor and outdoor units | Wrong connection, or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB |
| 0 | 8 | E8 | Abnormal communication between wired controlleer and indoor unit | Wrong connection or wired controller broken, or PCB faulty |
| 0 | 12 | E10 | Malfunction of drain system | Pump motor disconnected or at wrong position, or the float switch disconnected or at wrong position, or the short circuit bridge disconne ted |
| 0 | 13 | C1 | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | E14 | Indoor unit DC fan motor abnormal | DC Fan motor disconnected or DC Fan broken or circuit broken or circuit broken |

***Note:***

1.The outdoor failure can also be indicated by the indoor unit,the checking method as follows: LED6 flash times stands for ten's place,and LED1 flash times stands for one's place, use this ten-digit number minus 20,then will get the outdoor error code.For example,if the outdoor error code is 15,LED6 will flash 3 times firstly,two seconds later,LED1 will flash 5 times , and four seconds later the process will repeat again.

2.LED6 is a green one on the indoor PCB,LED1 is a yellow one.

3.To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

**AF25S2SD1FA AF35S2SD1FA AF42S2SD1FA**

| LED flash times of indoor PCB | | panel display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED4 | LED3 | | | |
| 0 | 1 | E1 | Malfunction of indoor unit ambient temper-ature sensor | Sensor disconected, or brok-en,or at wrong position, or short circuit |
| 0 | 2 | E2 | Malfunction of indoor unit piping temper-ature sensor | Sensor disconected, or brok-en,or at wrong position, or short circuit |
| 0 | 4 | E4 | EEPROM wrong of indoor PCB | EEPROM chip disconected or broken or wrong program-med, or PCB broken |
| 0 | 7 | E7 | Abnormal communi-cation between indo-or and outdoor units | Wrong connection, or the wires be disconected or wrong adress setting of indoor unit or faulty power supply or faulty PCB or slave unit malfunction in MAXI system |
| 0 | 8 | E8 | Abnormal communi-cation between wired controlleer and indoor unit | Wrong connection or wired controller broken, or PCB faulty |
| 0 | 12 | E10 | Malfunction of drain system | Pump motor disconnected or at wrong position, or the float switch disconnected or at wrong position, or the short circuit bridge disconne ted |
| 0 | 13 | C1 | Zero cross sigal wrong | Zero cross sigal detected wrong |
| 0 | 14 | E14 | Indoor unit DC fan motor abnormal | DC Fan motor disconnected or DC Fan broken or circuit broken |

**AP140S2SK1FA**

| LED flash times of indoor PCB | | Malfunction display | Contents of Malfunction | Possible reasons |
|---|---|---|---|---|
| LED6 | LED1 | | | |
| 0 | 1 | E1 | Malfunction of indoor unit ambient temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 2 | E2 | Malfunction of indoor unit piping temperature sensor | Sensor disconected,or broken,or at wrong position,or short circuit |
| 0 | 6 | E6 | Outdoor high pressure exceeds the setpoint | The pressure switch is dama-ged or bad control board |
| 0 | 7 | E7 | Over-voltage protection | The power supply voltage,or the control board is damaged |
| 0 | 8 | E8 | Abnormal communication between wired controller and indoor unit | Wrong connection or wired controller broken,or PCB faulty |
| 0 | 9 | E9 | Indoor and outdoor unit communication failure | Indoor or outdoor control board is damaged; or the communication wiring is damaged |
| 0 | 14 | EA | Indoor unit DC fan motor abnormal | DC Fan motor disconected,or DC Fan broken or circuit broken |
| 0 | / | FC | Indoor pipe temperature is too high | The compressor is not running or damaged |

Note:

1. The outdoor failure can also be indicated by the indoor unit,the checking method as follows: LED6 flash times stands for ten's place,and LED1 flash times stands for one's place, use this tendigit number minus 20,then will get the outdoor error code.For example,if the outdoor error code is 15,LED6 will flash 3 times firstly,two seconds later,LED1 will flash 5 times , and four seconds later the process will repeat again.
2. LED6 is a green one on the indoor PCB,LED1 is a yellow one.
3. To get much more details about the out door unit failure,please refer to the outdoor unit trouble shooting list.

1U71S2SG1FA 1U71S2SR2FA

| Flash times of LED on mainboard | Touble descipion | Analyze and diagnose |
|---|---|---|
| 1 | Eeprom failure | Outdoor main board eeprom fail |
| 2 | IPM failure | IPMfailure |
| 4 | Communication eror between main boarc and spdumodule SPDU Communicatior error | Comunication fail over 4min |
| 5 | High pressure protection | System high pessure over 4. 15 Mpa |
| 6 | Module over-voltage protection (only for Spdu)Module lack-voltage potecion (only for Spdu) | Send from Spdu module |
| 8 | Compressor discharging temperature protecio | Compressor discharging temperature over 110 centigrade |
| 9 | Abnormalof DC motor | Jam of DC motor or motor failure |
| 10 | Abnomal of piping sensor | Piping sensor short-circuit or open-circuit |
| 11 | Suction temperature sensor failure | Suction temperature sensor short or open-circuit or the compressor connection is poor |
| 12 | Abnormal of oudoor ambient sensor | Outddoor ambient short-circuit or open-circuit |
| 13 | Abnormal of outdoor ambient sensor | Compressor discharge sensor short-circuit |
| 15 | Communication error between indoor and outdoor unit | Communication fail over4min |
| 16 | Lack of efrigerant | check if there is leakage in the unit |
| 17 | 4-way valve reverse filure | Alarm and stop ifdetect Td-Tci<=15 last for 1min afte compressor has started for 10min in heating mode,confrmthe filurlel it appears 3times in one hour. |
| 18 | Compressor jam(only for spdu) | Iner compressor is abnomal jamed |
| 19 | Module PWM select circuit error | Module PWM select crcuil eor |
| 25 | Compressor U-phase over-urrent | The curent of comressol U-phase is too high |
| 25 | Compressor V-phase over-current | The curent of comressol V-phase is too high |
| 25 | Compressor W-phase over-current | The curent of compressol W-phase is too high |

**1U90S2SS2FA 1U105S2SS1FA 1U105S2SS2FA**

# OUTDOOR UNIT TROUBLE SHOOTING

| Error code | Malfunction Description | Diagnosis and Analysis | Remark |
|---|---|---|---|
| 1 | EEPROM malfunction | EEPROM chip damaged or data wrong or related circuit damaged | Non-resumable |
| 2 | PIM （power intelligent module) hardware over current | Input over current occured been detected by PIM's hardware | Non-resumable |
| 3 | Compressor over current during deceleration | Over current occured during compressor deceleration period | Non-resumable |
| 4 | Communication abnormal between control board and compressor driver module | Control board can not communicating with compressor driver module over 4 minutes | Resumable |
| 5 | Compressor overcurrent detected by control board | Compressor over current been detected by control board | Non-resumable |
| 6 | DC voltage or AC voltage high | AC power supply of the driver module get voltage over 280VAC or driver module get high DC-BUS voltage over 390VDC | Resumable |
| 7 | Compressor current sampling circuit fault | The driver module's Compressor current sampling circuit damaged | Non-resumable |
| 8 | Discharge temperature too high protection | Compressor discharge temperature over 115°C， error clear within 3 minutes if temperature goes down and lower than 115°C. Error status lock if it occurs 3 times in 1 hour. | Non-resumable |
| 9 | DC fan motor fault | DC fan motor damage or not connected or related circuit broken. Error status confirm and lock if occurs 3 times within 30 minutes | Non-resumable |
| 10 | Outdoor defrosting temp. sensor Te abnormal | Sensor temperature been detected below -55°C or higher than 90°C or been detected as short circuit or open circuit. | Resumable |
| 11 | Suction temp.sensor Ts abnormal | | |
| 12 | Outdoor ambient temp. sensor Ta abnormal | Sensor temperature been detected below -40°C or higher than 90°C or been detected short circuit or open circuit | Resumable |
| 13 | Discharging temp. sensor Td abnormal | Sensor temperature been detected below -40°C or higher than 150°C or been detected short circuit or open circuit . | Resumable |
| 14 | PFC circuit loop high voltage | Overvoltage been detected in driver module's power factor correction circuit loop. | Resumable |
| 15 | Communication abnormal between indoor unit and outdoor unit | Outdoor unit control board can not communicating with intdoor unit control board over 4 minutes | Resumable |
| 16 | Lack of refrigerant or discharging pipe blocked | Discharge & suction temperatureTd-Ts≥80°C after compressor started 10 minutes.Error status lock if it occurs 3 times in 1 hour. | Non-resumable |
| 17 | 4-way vavle converse abnormal | Indoor pipe & indoor ambient temperatureTm-Tai≥5°C after compressor started 10 minutes.Error status lock if it occurs 3 times in 1 hour. | Non-resumable |
| 18 | Compressor motor desynchronizing | Rotor desynchronizing occured ,caused by overload or load sharply fluctuating or compressor current sensor cicuit abnormal | Non-resumable |
| 19 | DC voltage or AC voltage low | AC power supply of the driver module get voltage lower than 155VAC or driver module get high DC-BUS voltage lower than 180VDC | Resumable |
| 20 | Indoor pipe temperature too high protection | Indoor pipe temperature Tm over 63°C， error clear within 3 minutes if temperature goes down and lower than 52°C. | Resumable |
| 21 | Indoor pipe temperature sensor too low protection | Indoor pipe temperature too low，outdoor unit stop toprevent indoor heat exchange system icing and to prevent the indoor unit outlet air too low at the same time . | Resumable |
| 22 | PFC circuit loop overcurrent | Overcurrent been detected in power factor correction circuit loop. | Non-resumable |
| 23 | Temperature too high for compressor driver module | Compressor driver module's PIM temperature over 90°C, Error status lock if it occurs 3 times in 1 hour. | Non-resumable |
| 24 | Compressor start failure | Compressor start failure been detected by driver driver module or wrong compressor wiring | Non-resumable |
| 25 | Input overcurrent of the drive module | Input current of the compressor drive module higher than EEPROM setting(details refer to service manual ） Lock if occurs 3 times in 1 hour | Non-resumable |
| 26 | Lack phase of the drive module | Lack phase of the drive module's power supply（three phase type） | Non-resumable |
| 27 | Input current sampling circuit fault | The driver module's input current sampling circuit damaged | Non-resumable |
| 28 | No wiring of the compressor | No wiring between compressor and it's driver module | Non-resumable |
| 37 | Compressor overcurrent detected by compressor driver module | Compressor phase U or V or W over current detected by compressor driver module（details refer to service manual ） | Non-resumable |
| 38 | Drive module's ambient temp. sensor abnormal | The temperature detected is not within the range of -25°C to 150 °C | Resumable |
| 39 | Mid-condenser temp. sensor TC abnormal | The temperature detected is not within the range of -55°C to 90 °C | Resumable |
| 42 | High pressure switch abnormal | After compressor running for 3 minutes, switch been detected open circuit for 30seconds ,Error lock if it occurs 3 times in 1 hour. | Non-resumable |
| 43 | Low pressure switch abnormal | After compressor running for 3 minutes, switch been detected unconnected for 60seconds Or unconnected for 30seconds at standby | Non-resumable |
| 44 | Outdoor condenser temperatureTC too high protection | The maximum temperature value of Tc and Te is over 65 °C, Error lock if it occurs 3 times in 30 minutes | Non-resumable |
| 45 | System low pressure protection | The minimum temperature value of indoor pipe Tm and outdoorTs is lower than-45 °C at cooling mode or minimum temperature value of outdoor Tc and outdoor Te is lower than-45 °C at heating mode | Non-resumable |

Note: 1.The outdoor error code=(M*10+N). LED1 flash M times and LED2 flash N times.
2.NO-resumable means error will not clear unless:a. clean out the fault factor b. Cut the power supply off and re-offer again after point a achieved
3. The indoor unit can also indictes the outdoor malfuction code too. Please refer to indoor unit manul or indoor trouble shooting to get the method .

**1U105S2SS1FB 1U125S2SN1FA 1U125S2SN1FB 1U125S2SN2FA 1U125S2SN2FB 1U140S2SP1FA 1U140S2SN1FA 1U140S2SN1FB 1U140S2SP2FA 1U140S2SP2FB 1U140S2SP1FB 1U160S2SP1FB**

| OUTDOOR UNIT TROUBLE SHOOTING | | | |
|---|---|---|---|
| Error code | Malfunction Description | Diagnosis and Analysis. | Remark |
| 1 | EEPROM malfunction | EEPROM chip damaged or data wrong or related circuit damaged. | Non-resumable |
| 2 | PIM (power intelligent module) hardware over current | Input over current occured been detected by PIM's hardware. | Resumable |
| 3 | Compressor over current during deceleration | Over current occured during compressor deceleration period. | Non-resumable |
| 4 | Communication abnormal between control board and compressor driver module | Control board can not communicating with compressor driver module over 4 minutes | Resumable |
| 5 | Compressor overcurrent detected by control board | Compressor over current been detected by control board | Non-resumable |
| 6 | DC voltage or AC voltage high | AC power supply of the driver module get voltage over 280VAC or driver module get high DC-BUS voltage over 390VDC. | Resumable |
| 7 | Compressor current sampling circuit fault | The driver module's Compressor current sampling circuit damaged. | Non-resumable |
| 8 | Discharge temperature too high protection | Compressor discharge temperature over 115° C, error clear within 3 minutes if temperature goes down and lower than 115°C. Error status lock if it occurs 3 times in 1 hour. | Non-resumable |
| 9 | DC fan motor fault | DC fan motor damage or not connected or related circuit broken. Error status confirm and lock if occurs 3 times within 30 minutes. | Non-resumable |
| 10 | Outdoor defrosting temp, sensor Te abnormal | Sensor temperature been detected below -55°C or higher than 90° C or been detected as short circuit or open circuit.. | Resumable |
| 11 | Suction temp. sensor Ts abnormal | | |
| 12 | Outdoor ambient temp, sensor Ta abnormal | Sensor temperature been detected below -40°C or higher than 90° C or been detected short circuit or open circuit. | Resumable |
| 13 | Discharging temp, sensor Td abnormal | Sensor temperature been detected below -40°C or higher than 150° C or been detected short circuit or open circuit. | Resumable |
| 14 | PFC circuit loop high voltage | Overvoltage been detected in driver module's power factor correction circuit loop. | Resumable |
| 15 | Communication abnormal between indoor unit and outdoor unit | Outdoor unit control board can not communicating with intdoor unit control board over 4 minutes. | Resumable |
| 16 | Lack of refrigerant or discharging pipe blocked | Discharge & suction temperatureTd-Ts≥80°C after compressor started 10 minutes. Error status lock if it occurs 3 times in 1 hour. | Non-resumable |
| 17 | 4-way vavle converse abnormal | Indoor pipe & indoor ambient temperature Tm-Ta≥ -2°C after compressor started 10 minutes. Error status lock if it occurs 3 times in 1 hour. | Non-resumable |
| 18 | Compressor motor desynchronizing | Rotor desynchronizing occured, caused by overload or load sharply fluctuating or compressor current sensor cicuit abnormal or one of the inverse gate drive signal missing. | Non-resumable |

| Error code | Malfunction Description | Diagnosis and Analysis | Remark |
|---|---|---|---|
| 19 | DC voltage or AC voltage low | AC power supply of the driver module get voltage lower than 155VAC or driver module get high DC-BUS voltage lower than 180VDC. | Resumable |
| 20 | Indoor pipe temperature too high protection | Indoor pipe temperature Tm over 63° C, error clear within 3 minutes if temperature goes down and lower than 52° C. | Resumable |
| 21 | Indoor pipe sensor temperature too low protection | Indoor pipe temperature too low,outdoor unit stop to prevent indoor heat exchange system icing and to prevent the indoor unit outlet air too low at the same time | Resumable |
| 22 | PFC circuit loop overcurrent | Overcurrent been detected in power factor correction circuit loop. | Resumable |
| 23 | Temperature too high for compressor driver module | Compressor driver module’s PIM temperature over 90°C, Error stat-us lock if it occurs 3 times in 1 hour. | Non-resumable |
| 24 | Compressor start failure | Compressor start failure been detected by driver driver module or wrong compressor wiring | Non-resumable |
| 25 | Input overcurrent of the drive module | Input current of the compressor drive module higher than EEPROM setting(details refer to service manual ). Lock if it occurs 3 times in 1 hour. | Non-resumable |
| 26 | Lack phase of the drive module | Lack phase of the drive module’s power supply.(three phase type) | Non-resumable |
| 27 | Input current sampling circuit fault | The driver module’s input current sampling circuit damaged. | Resumable |
| 28 | No wiring of the compressor | No wiring between compressor and it’s driver module. | Non-resumable |
| 37 | Compressor overcurrent detected by compressor driver module | Compressor phase U or V or W current overcurrent detected by compressor driver module (details refer to service manual ) | Resumable |
| 38 | Drive module’s ambient temp, sensor abnormal | The temperature detected is not within the range of -25°C to 150 °C. | Resumable |
| 39 | Mid-condenser temp, sensor TC abnormal | The temperature detected is not within the range of -55°C to 90 °C. | Resumable |
| 42 | High pressure switch abnormal | After compressor running for 3 minutes, switch been detected open circuit for 30seconds, Error lock if it occurs 3 times in 1 hour. | Non-resumable |
| 43 | Low pressure switch abnormal | After compressor running for 3 minutes, switch been detected uncon-nected for 60seconds or unconnected for 30seconds at standby. | Non-resumable |
| 44 | Outdoor condenser temperatureTC too high protection | The maximum temperature value of Tc and Te is over 65 ° C, Error lock if it occurs 3 times in 30 minutes. | Non-resumable |
| 45 | System low pressure protection | The minimum temperature value of indoor pipe Tm and outdoorTs is lower than-45 °C at cooling mode or minimum temperature value of outdoor Tc and outdoor Te is lower than-45 °C. | Non-resumable |

Note:

1. The ou.tdoor control board's LED3 indicates the outdoor error code, for example, the error code 12, LED3 will *display 12 and keep flashing.*
2. NO-resumable means error will not clear unless: a. clean out the fault factor b. Cut the power supply off and *reoffer again after point a achieved.*
3. *The indoor unit can also indictes the outdoor malfuction code too. Please refer to indoor unit manul to get the* method.

3U55S2SR5FA 3U70S2SR3FA 4U75S2SR5FA 4U85S2SR5FA 5U90S2SS5FA 5U105S2SS5FA 5U125S2SN1FA

**PRODUCT DIAGNOSIS PROCEDURE** Diagnosis using the Numeral Light Indicator

| Code | Diagnosis |
|---|---|
| 1 | Faulty of outdoor unit EEPROM |
| 2 | IPM overcurrent or short circuit |
| 4 | Communication failure between Module and ECU |
| 5 | Module operated overload |
| 6 | Module low or high voltage |
| 8 | Discharging temperature overheating.Lack of refrigerant, ambient temperature too high or PMVs blocked. |
| 9 | Malfunction of the DC fan motor |
| 10 | Malfunction of defrosting temp. sensor |
| 11 | Malfunction of compressor suction temp. sensor |
| 12 | Malfunction of ambient temp. sensor |
| 13 | Malfunction of compressor discharge temp. sensor |
| 15 | Communication failure between indoor&outdoor unit |
| 17 | 4-way valve switching failure |
| 18 | Loss of synchronism detection |
| 20 | Indoor thermal overload |
| 23 | Module thermal overload |
| 24 | Compressor start failure |
| 25 | Module input overcurrent |
| 26 | MCU reset |
| 27 | Module current detect circuit malfunction |
| 28 | Malfunction of liquid pipe temp. sensor for indoor unit A |
| 29 | Malfunction of liquid pipe temp. sensor for indoor unit B |
| 30 | Malfunction of liquid pipe temp. sensor for indoor unit C |
| 31 | Malfunction of liquid pipe temp. sensor for indoor unit D |
| 32 | Malfunction of gas pipe temp. sensor for indoor unit A |
| 33 | Malfunction of gas pipe temp. sensor for indoor unit B |
| 34 | Malfunction of gas pipe temp. sensor for indoor unit C |
| 35 | Malfunction of gas pipe temp. sensor for indoor unit D |
| 36 | Malfunction of gas pipe temp. sensor for indoor unit E |
| 38 | Momentary power failure detection |
| 39 | Malfunction of condensing temp. sensor |
| 40 | Malfunction of liquid pipe temp. sensor for indoor unit E |

| Code | Diagnosis |
|---|---|
| 42 | System high pressure switch off |
| 43 | System low pressure switch off |
| 44 | System high pressure protection.Refrigerant overabundance, High condensing temp. or malfunction of fan motor. |
| 45 | System low pressure protection.Refrigerant shortage, Low defrosting temp.,Faulty of model code. or malfunction of fan motor |

Definition of SW1 on Malfunction Display

| 1 | 2 | 3 | 4 | Definition |
|---|---|---|---|---|
| OFF | OFF | OFF | OFF | State when out of factory |
| ON | OFF | OFF | OFF | Compulsive Heating: Frequency 50HZ; PMV 200 pulse; Class 5 of outdoor fan motor. |
| OFF | ON | OFF | OFF | Compulsive Cooling: Frequency 60HZ; PMV 200 pulse; Class 7 of outdoor fan motor. |
| OFF | OFF | ON | OFF | Rated Operating |
| OFF | OFF | OFF | ON | Time Defrost Valid |
| ON | ON | ON | ON | Detection for Wrong Wiring |

**Notes:**

1.When using this product,you need not to set the address. But the L/N wires between indoor & outdoor units must be corresponded,or there will be communication failure.

2.Quiet Operation Setting.Set the DIP ”8” to ON position of SW5,the system will run with lower noise,but the max capacity will also reduce slightly.

3.Do NOT change the settings of other switchs,wrong settings can make the system damage or other malfunctions.

4.For some malfunctions, this system can make back up running.

* ECU:Electronic Control Unit
* MCU:Micro Control Unit
* PMV:Pulse Modulated Valve

0150526300

# Multi Outdoor unit Trouble shooting

| Outdoor LED display | Fault possible reasons | Wired controller display(Hex-YR-E17/YR-E17A)---for duct/cassette | Wired controller display(Decimal-YR-E16/YR-E16A/YR-E16B)---for duct/ cassette | Panel display(Hex)---for cassette | Round way cassette---indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Compact design 4-way cassette--indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Wall mounted indoor display |
|---|---|---|---|---|---|---|---|---|---|
| | Outdoor unit(3U 4U 5U) | | | | Timer lamp flash time(I.D. PCBLED5) | Running lamp flash time(I.D. PCBLED1) | Timer lamp flash time(I.D. PCBLED4) | Running lamp flash time(I.D. PCBLED3) | |
| 1 | Faulty of outdoor unit EEPROM | 15 | 21 | 15 | 2 | 1 | 2 | 1 | F12 |
| 2 | IPM overcurrent or short circuit | 16 | 22 | 16 | 2 | 2 | 2 | 2 | F1 |
| 4 | Communication failure between Module and ECU | 18 | 24 | 18 | 2 | 4 | 2 | 4 | F3 |
| 5 | Module operated overload | 19 | 25 | 19 | 2 | 5 | 2 | 5 | F20 |
| 6 | Module low or high voltage | 1A | 26 | 1A | 2 | 6 | 2 | 6 | F19 |
| 8 | "Discharging temperature overheating.Lack of refrigerant, ambient temperature too high or PMVs blocked." | 1C | 28 | 1C | 2 | 8 | 2 | 8 | F4 |
| 9 | Malfunction of the DC fan motor | 1D | 29 | 1D | 2 | 9 | 2 | 9 | F8 |
| 10 | Malfunction of defrosting temp. sensor | 1E | 30 | 1E | 3 | 0 | 3 | 0 | F21 |
| 11 | Malfunction of compressor suction temp. sensor | 1F | 31 | 1F | 3 | 1 | 3 | 1 | F7 |
| 12 | Malfunction of ambient temp. sensor | 20 | 32 | 20 | 3 | 2 | 3 | 2 | F6 |
| 13 | Malfunction of compressor discharge temp. sensor | 21 | 33 | 21 | 3 | 3 | 3 | 3 | F25 |
| 15 | Communication failure between indoor&outdoor unit | 23 | 35 | 23 | 3 | 5 | 3 | 5 | E7 |
| 17 | 4-way valve switching failure | 25 | 37 | 25 | 3 | 7 | 3 | 7 | F14 |
| 18 | Loss of synchronism detection | 26 | 38 | 26 | 3 | 8 | 3 | 8 | F11 |
| 20 | Indoor thermal overload | 28 | 40 | 28 | 4 | 0 | 4 | 0 | E9 |
| 23 | Module thermal overload | 2B | 43 | 2B | 4 | 3 | 4 | 3 | F5 |
| 24 | Compressor start failure | 2C | 44 | 2C | 4 | 4 | 4 | 4 | F2 |
| 25 | Module input overcurrent | 2D | 45 | 2D | 4 | 5 | 4 | 5 | F23 |

| Outdoor LED display | Fault possible reasons | Wired controller display(Hex-YR-E17/YR-E17A)---for duct/cassette | Wired controller display(Decimal-YR-E16/YR-E16A/YR-E16B)---for duct/cassette | Panel display(Hex)---for round way cassette | Round way cassette---indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Compact design 4-way cassette/-- indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Wall mounted indoor display |
|---|---|---|---|---|---|---|---|---|---|
| | Outdoor unit(3U 4U 5U) | | | | Timer lamp flash time(I.D. PCBLED5) | Running lamp flash time(I.D. PCBLED1) | Timer lamp flash time(I.D. PCBLED4) | Running lamp flash time(I.D. PCBLED3) | |
| 26 | MCU reset | 2E | 46 | 2E | 4 | 6 | 4 | 6 | F9 |
| 27 | Module current detect circuit malfunction | 2F | 47 | 2F | 4 | 7 | 4 | 7 | F24 |
| 28 | Malfunction of liquid pipe temp. sensor for indoor unit A | 30 | 48 | 30 | 4 | 8 | 4 | 8 | F10 |
| 29 | Malfunction of liquid pipe temp. sensor for indoor unit B | 31 | 49 | 31 | 4 | 9 | 4 | 9 | F16 |
| 30 | Malfunction of liquid pipe temp. sensor for indoor unit C | 32 | 50 | 32 | 5 | 0 | 5 | 0 | F17 |
| 31 | Malfunction of liquid pipe temp. sensor for indoor unit D | 33 | 51 | 33 | 5 | 1 | 5 | 1 | F18 |
| 32 | Malfunction of gas pipe temp. sensor for indoor unit A | 34 | 52 | 34 | 5 | 2 | 5 | 2 | F29 |
| 33 | Malfunction of gas pipe temp. sensor for indoor unit B | 35 | 53 | 35 | 5 | 3 | 5 | 3 | F30 |
| 34 | Malfunction of gas pipe temp. sensor for indoor unit C | 36 | 54 | 36 | 5 | 4 | 5 | 4 | F31 |
| 35 | Malfunction of gas pipe temp. sensor for indoor unit D | 37 | 55 | 37 | 5 | 5 | 5 | 5 | F32 |
| 36 | Malfunction of gas pipe temp. sensor for indoor unit E | 38 | 56 | 38 | 5 | 6 | 5 | 6 | F26 |
| 38 | "Malfunction of module temp.sensor Momentary power failure detection" | 3A | 58 | 3A | 5 | 8 | 5 | 8 | F35 |
| 39 | Malfunction of condensing temp. sensor | 3B | 59 | 3B | 5 | 9 | 5 | 9 | F36 |
| 40 | Malfunction of liquid pipe temp. sensor for indoor unit E | 3C | 60 | 3C | 6 | 0 | 6 | 0 | F33 |
| 42 | System high pressure switch off | 3E | 62 | 3E | 6 | 2 | 6 | 2 | F39 |
| 43 | System low pressure switch off | 3F | 63 | 3F | 6 | 3 | 6 | 3 | F40 |
| 44 | System high pressure protection.Refrigerant overabundance,high condensing temp. or malfunction of fan motor. | 40 | 64 | 40 | 6 | 4 | 6 | 4 | F41 |
| 45 | System low pressure protection.Refrigerant shortage,low defrosting temp., or malfunction of fan motor. | 41 | 65 | 41 | 6 | 5 | 6 | 5 | F42 |

# Multi Outdoor unit Trouble shooting

| Outdoor LED display | Fault possible reasons | Wired controller display(Hex-YR-E17/YR-E17A)---for duct/cassette | Wired controller display(Decimal-YR-E16/YR-E16A/YR-E16B)---for duct/ cassette | Duct unit-- indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Convertible unit/Console unit/ one way cassette--- indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Panel display(Hex) ---for Duct (PCB 0151800644)/ Convertible unit/ Console unit/ one way cassette |
|---|---|---|---|---|---|---|---|---|
| | Outdoor unit(3U 4U 5U) | | | Timer lamp flash time(I.D. PCBLED4) | Running lamp flash time(I.D. PCBLED3) | Timer lamp flash time(I.D. PCBLED6) | Running lamp flash time(I.D. PCBLED1) | |
| 1 | Faulty of outdoor unit EEPROM | 15 | 21 | 2 | 1 | 2 | 1 | F01 |
| 2 | IPM overcurrent or short circuit | 16 | 22 | 2 | 2 | 2 | 2 | F02 |
| 4 | Communication failure between Module and ECU | 18 | 24 | 2 | 4 | 2 | 4 | F04 |
| 5 | Module operated overload | 19 | 25 | 2 | 5 | 2 | 5 | F05 |
| 6 | Module low or high voltage | 1A | 26 | 2 | 6 | 2 | | F06 |
| 8 | "Discharging temperature overheating.Lack of refrigerant, ambient temperature too high or PMVs blocked." | 1C | 28 | 2 | 8 | 2 | 8 | F08 |
| 9 | Malfunction of the DC fan motor | 1D | 29 | 2 | 9 | 2 | 9 | F09 |
| 10 | Malfunction of defrosting temp. sensor | 1E | 30 | 3 | 0 | 3 | 0 | F10 |
| 11 | Malfunction of compressor suction temp. sensor | 1F | 31 | 3 | 1 | 3 | 1 | F11 |
| 12 | Malfunction of ambient temp. sensor | 20 | 32 | 3 | 2 | 3 | 2 | F12 |
| 13 | Malfunction of compressor discharge temp. sensor | 21 | 33 | 3 | 3 | 3 | 3 | F13 |
| 15 | Communication failure between indoor&outdoor unit | 23 | 35 | 3 | 5 | 3 | 5 | F15 |
| 17 | 4-way valve switching failure | 25 | 37 | 3 | 7 | 3 | 7 | F17 |
| 18 | Loss of synchronism detection | 26 | 38 | 3 | 8 | 3 | 8 | F18 |
| 20 | Indoor thermal overload | 28 | 40 | 4 | 0 | 4 | 0 | F20 |
| 23 | Module thermal overload | 2B | 43 | 4 | 3 | 4 | 3 | F23 |
| 24 | Compressor start failure | 2C | 44 | 4 | 4 | 4 | 4 | F24 |
| 25 | Module input overcurrent | 2D | 45 | 4 | 5 | 4 | 5 | F25 |

| Outdoor LED display | Fault possible reasons | Wired controller display(Hex-YR-E17/YR-E17A)---for duct/cassette | Wired controller display(Decimal-YR-E16/YR-E16A/YR-E16B)---for duct/ cassette | Duct unit-- indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Convertible unit/Console unit/ one way cassette---indoor display outdoor error code use the timer and running lamp OR I.D. PCB LED | | Panel display(Hex) ---for Duct (PCB 0151800644)/ Convertible unit/ Console unit/ one way cassette |
|---|---|---|---|---|---|---|---|---|
| | Outdoor unit(3U 4U 5U) | | | Timer lamp flash time(I.D. PCBLED4) | Running lamp flash time(I.D. PCBLED3) | Timer lamp flash time(I.D. PCBLED6) | Running lamp flash time(I.D. PCBLED1) | |
| 26 | MCU reset | 2E | 46 | 4 | 6 | 4 | 6 | F26 |
| 27 | Module current detect circuit malfunction | 2F | 47 | 4 | 7 | 4 | 7 | F27 |
| 28 | Malfunction of liquid pipe temp. sensor for indoor unit A | 30 | 48 | 4 | 8 | 4 | 8 | F28 |
| 29 | Malfunction of liquid pipe temp. sensor for indoor unit B | 31 | 49 | 4 | 9 | 4 | 9 | F29 |
| 30 | Malfunction of liquid pipe temp. sensor for indoor unit C | 32 | 50 | 5 | 0 | 5 | 0 | F30 |
| 31 | Malfunction of liquid pipe temp. sensor for indoor unit D | 33 | 51 | 5 | 1 | 5 | 1 | F31 |
| 32 | Malfunction of gas pipe temp. sensor for indoor unit A | 34 | 52 | 5 | 2 | 5 | 2 | F32 |
| 33 | Malfunction of gas pipe temp. sensor for indoor unit B | 35 | 53 | 5 | 3 | 5 | 3 | F33 |
| 34 | Malfunction of gas pipe temp. sensor for indoor unit C | 36 | 54 | 5 | 4 | 5 | 4 | F34 |
| 35 | Malfunction of gas pipe temp. sensor for indoor unit D | 37 | 55 | 5 | 5 | 5 | 5 | F35 |
| 36 | Malfunction of gas pipe temp. sensor for indoor unit E | 38 | 56 | 5 | 6 | 5 | 6 | F36 |
| 38 | "Malfunction of module temp.sensor Momentary power failure detection" | 3A | 58 | 5 | 8 | 5 | 8 | F38 |
| 39 | Malfunction of condensing temp. sensor | 3B | 59 | 5 | 9 | 5 | 9 | F39 |
| 40 | Malfunction of liquid pipe temp. sensor for indoor unit E | 3C | 60 | 6 | 0 | 6 | 0 | F40 |
| 42 | System high pressure switch off | 3E | 62 | 6 | 2 | 6 | 2 | F42 |
| 43 | System low pressure switch off | 3F | 63 | 6 | 3 | 6 | 3 | F43 |
| 44 | System high pressure protection.Refrigerant overabundance,high condensing temp. or malfunction of fan motor. | 40 | 64 | 6 | 4 | 6 | 4 | F44 |
| 45 | System low pressure protection.Refrigerant shortage,low defrosting temp., or malfunction of fan motor. | 41 | 65 | 6 | 5 | 6 | 5 | F45 |

# Single Split Outdoor unit Trouble shooting

| Outdoor display | Fault Discription | Outdoor Unit Model | | |
|---|---|---|---|---|
| | | 1U71S2SG1FA 1U71S2SR2FA | 1U105S2SS1FA 1U105S2SS2FA | 1U125S2SN1FA 1U125S2SN1FB 1U140S2SP1FA 1U140S2SP1FB |
| 1 | Outdoor unit EEPROM malfunction | 1 | 1 | 1 |
| 2 | IPM hardware overcurrent | 2 | 2 | 2 |
| 3 | Compressor over current during deceleration | / | 3 | 3 |
| 4 | Communication abnormal between control board and compressor driver module | 4 | 4 | 4 |
| 5 | Compressor overcurrent detected by control board | 5 | 5 | 5 |
| 6 | DC voltage or AC voltage high | 6 | 6 | 6 |
| 7 | Compressor current sampling circuit fault | / | 7 | 7 |
| 8 | Discharging temperature too high protection | 8 | 8 | 8 |
| 9 | DC fan motor fault | 9 | 9 | 9 |
| 10 | Outdoor defrosting temp. sensor Te abnormal | 10 | 10 | 10 |
| 11 | Suction temp. sensor Ts abnormal | 11 | 11 | 11 |
| 12 | Ambient temp. sensor Ta abnormal | 12 | 12 | 12 |
| 13 | Discharge temp. sensor Td abnormal | 13 | 13 | 13 |
| 14 | PFC circuit too high voltage | 14 | 14 | 14 |
| 15 | Communication abnornal between indoor&outdoor unit | 15 | 15 | 15 |
| 16 | Lack of refrigerant or discharging pipe is blocked | 16 | 16 | 16 |
| 17 | 4-way valve converse failure | 17 | 17 | 17 |
| 18 | Loss of synchronism detection | 18 | 18 | 18 |
| 19 | DC voltage or AC voltage low | / | 19 | 19 |
| 19 | Module PWM select circuit error | 19 | / | / |
| 20 | Indoor pipe temperature too high protection | / | 20 | 20 |
| 21 | Indoor pipe temperature too low protection | / | 21 | 21 |
| 22 | PFC circuit loop overcurrent | / | 22 | 22 |
| 23 | Temperature too high for compressor drivrer module | / | 23 | 23 |
| 24 | Compressor start failure | / | 24 | 24 |
| 25 | Compressor U-phase over-current | 25 | / | / |
| 25 | Compressor V-phase over-current | 25 | / | / |
| 25 | Compressor W-phase over-current | 25 | / | / |
| 25 | Module input overcurrent | / | 25 | 25 |
| 26 | Lack phase of driver module | / | 26 | 26 |
| 27 | Input current sampling circuit fault | / | 27 | 27 |
| 28 | No wiring of the compressor | / | 28 | 28 |
| 37 | Compressor oevercurrent detected by compressor driver module | / | 37 | 37 |
| 38 | Driver module temp.sensor abnornal | / | 38 | 38 |
| 39 | Mid-condensor temp.sensor TC abnormal | / | 39 | 39 |
| 42 | High pressure switch abnormal | / | 42 | 42 |
| 43 | Low pressure switch abnormal | / | 43 | 43 |
| 44 | Outdoor condenser temperature TC too high protection | / | 44 | 44 |
| 45 | System low pressure protection | / | 45 | 45 |

# Single Split Outdoor unit Trouble shooting

| Outdoor display | Fault Discription | Slim ESP duct (PCB code 0151800267) | | | Slim duct & Medium ESP duct (PCB code 0151800644) | | |
|---|---|---|---|---|---|---|---|
| | | Timer lamp flash time(I.D. PCB LED4) | Running lamp flash time(I.D. PCB LED3) | Panel display--for P1B-890IA/D P1B-1210IA/D | Timer lamp flash time(I.D. PCB LED4 | "Running lamp flash time(I.D. PCB LED3)" | Panel display--for P1B-890IA/D P1B-1210IA/D |
| 1 | Outdoor unit EEPROM malfunction | 2 | 1 | E20 | 2 | 1 | F01 |
| 2 | IPM hardware overcurrent | 2 | 2 | E20 | 2 | 2 | F02 |
| 3 | Compressor over current during deceleration | 2 | 3 | E20 | 2 | 3 | F03 |
| 4 | Communication abnormal between control board and compressor driver module | 2 | 4 | E20 | 2 | 4 | F04 |
| 5 | Compressor overcurrent detected by control board | 2 | 5 | E20 | 2 | 5 | F05 |
| 6 | DC voltage or AC voltage high | 2 | 6 | E20 | 2 | 6 | F06 |
| 7 | Compressor current sampling circuit fault | 2 | 7 | E20 | 2 | 7 | F07 |
| 8 | Discharging temperature too high protection | 2 | 8 | E20 | 2 | 8 | F08 |
| 9 | DC fan motor fault | 2 | 9 | E20 | 2 | 9 | F09 |
| 10 | Outdoor defrosting temp. sensor Te abnormal | 3 | 0 | E20 | 3 | 0 | F10 |
| 11 | Suction temp. sensor Ts abnormal | 3 | 1 | E20 | 3 | 1 | F11 |
| 12 | Ambient temp. sensor Ta abnormal | 3 | 2 | E20 | 3 | 2 | F12 |
| 13 | Discharge temp. sensor Td abnormal | 3 | 3 | E20 | 3 | 3 | F13 |
| 14 | PFC circuit too high voltage | 3 | 4 | E20 | 3 | 4 | F14 |
| 15 | Communication abnornal between indoor&outdoor unit | 3 | 5 | E20 | 3 | 5 | F15 |
| 16 | Lack of refrigerant or discharging pipe is blocked | 3 | 6 | E20 | 3 | 6 | F16 |
| 17 | 4-way valve converse failure | 3 | 7 | E20 | 3 | 7 | F17 |
| 18 | Loss of synchronism detection | 3 | 8 | E20 | 3 | 8 | F18 |
| 19 | DC voltage or AC voltage low | 3 | 9 | E20 | 3 | 9 | F19 |
| 19 | Module PWM select circuit error | 3 | 9 | E20 | 3 | 9 | F19 |
| 20 | Indoor pipe temperature too high protection | 4 | 0 | E20 | 4 | 0 | F20 |
| 21 | Indoor pipe temperature too low protection | 4 | 1 | E20 | 4 | 1 | F21 |
| 22 | PFC circuit loop overcurrent | 4 | 2 | E20 | 4 | 2 | F22 |
| 23 | Temperature too high for compressor drivrer module | 4 | 3 | E20 | 4 | 3 | F23 |
| 24 | Compressor start failure | 4 | 4 | E20 | 4 | 4 | F24 |
| 25 | Compressor U-phase over-current | 4 | 5 | E20 | 4 | 5 | F25 |
| 25 | Compressor V-phase over-current | 4 | 5 | E20 | 4 | 5 | F25 |
| 25 | Compressor W-phase over-current | 4 | 5 | E20 | 4 | 5 | F25 |
| 25 | Module input overcurrent | 4 | 5 | E20 | 4 | 5 | F25 |
| 26 | Lack phase of driver module | 4 | 6 | E20 | 4 | 6 | F26 |

| Outdoor display | Fault Discription | Slim ESP duct (PCB code 0151800267) | | | Slim duct & Medium ESP duct (PCB code 0151800644) | | |
|---|---|---|---|---|---|---|---|
| | | Timer lamp flash time(I.D. PCB LED4) | Running lamp flash time(I.D. PCB LED3) | Panel display--for P1B-890IA/D P1B-1210IA/D | Timer lamp flash time(I.D. PCB LED4 | "Running lamp flash time(I.D. PCB LED3)" | Panel display--for P1B-890IA/D P1B-1210IA/D |
| 27 | Input current sampling circuit fault | 4 | 7 | E20 | 4 | 7 | F27 |
| 28 | No wiring of the compressor | 4 | 8 | E20 | 4 | 8 | F28 |
| 37 | Compressor oevercurrent detected by compressor driver module | 5 | 7 | E20 | 5 | 7 | F37 |
| 38 | Driver module temp.sensor abnornal | 5 | 8 | E20 | 5 | 8 | F38 |
| 39 | Mid-condensor temp.sensor TC abnormal | 5 | 9 | E20 | 5 | 9 | F39 |
| 42 | High pressure switch abnormal | 6 | 2 | E20 | 6 | 2 | F42 |
| 43 | Low pressure switch abnormal | 6 | 3 | E20 | 6 | 3 | F43 |
| 44 | Outdoor condenser temperature TC too high protection | 6 | 4 | E20 | 6 | 4 | F44 |
| 45 | System low pressure protection | 6 | 5 | E20 | 6 | 5 | F45 |

# Single Split Outdoor unit Trouble shooting

| Outdoor display | Fault Discription | AC35/50/71S2SG1FA AC90/105S2SH1FA AC125/140/160S2SK1FA | | |
|---|---|---|---|---|
| | | Timer lamp flash time(I.D. PCB LED6) | Running lamp flash time(I.D. PCB LED1) | Panel display |
| 1 | Outdoor unit EEPROM malfunction | 2 | 1 | F01 |
| 2 | IPM hardware overcurrent | 2 | 2 | F02 |
| 3 | Compressor over current during deceleration | 2 | 3 | F03 |
| 4 | Communication abnormal between control board and compressor driver module | 2 | 4 | F04 |
| 5 | Compressor overcurrent detected by control board | 2 | 5 | F05 |
| 6 | DC voltage or AC voltage high | 2 | 6 | F06 |
| 7 | Compressor current sampling circuit fault | 2 | 7 | F07 |
| 8 | Discharging temperature too high protection | 2 | 8 | F08 |
| 9 | DC fan motor fault | 2 | 9 | F09 |
| 10 | Outdoor defrosting temp. sensor Te abnormal | 3 | 0 | F10 |
| 11 | Suction temp. sensor Ts abnormal | 3 | 1 | F11 |
| 12 | Ambient temp. sensor Ta abnormal | 3 | 2 | F12 |
| 13 | Discharge temp. sensor Td abnormal | 3 | 3 | F13 |
| 14 | PFC circuit too high voltage | 3 | 4 | F14 |
| 15 | Communication abnornal between indoor&outdoor unit | 3 | 5 | F15 |
| 16 | Lack of refrigerant or discharging pipe is blocked | 3 | 6 | F16 |
| 17 | 4-way valve converse failure | 3 | 7 | F17 |
| 18 | Loss of synchronism detection | 3 | 8 | F18 |
| 19 | DC voltage or AC voltage low | 3 | 9 | F19 |
| 19 | Module PWM select circuit error | 3 | 9 | F19 |
| 20 | Indoor pipe temperature too high protection | 4 | 0 | F20 |
| 21 | Indoor pipe temperature too low protection | 4 | 1 | F21 |
| 22 | PFC circuit loop overcurrent | 4 | 2 | F22 |
| 23 | Temperature too high for compressor drivrer module | 4 | 3 | F23 |
| 24 | Compressor start failure | 4 | 4 | F24 |
| 25 | Compressor U-phase over-current | 4 | 5 | F25 |
| 25 | Compressor V-phase over-current | 4 | 5 | F25 |
| 25 | Compressor W-phase over-current | 4 | 5 | F25 |
| 25 | Module input overcurrent | 4 | 5 | F25 |
| 26 | Lack phase of driver module | 4 | 6 | F26 |
| 27 | Input current sampling circuit fault | 4 | 7 | F27 |
| 28 | No wiring of the compressor | 4 | 8 | F28 |
| 37 | Compressor oevercurrent detected by compressor driver module | 5 | 7 | F37 |
| 38 | Driver module temp.sensor abnornal | 5 | 8 | F38 |
| 39 | Mid-condensor temp.sensor TC abnormal | 5 | 9 | F39 |
| 42 | High pressure switch abnormal | 6 | 2 | F42 |
| 43 | Low pressure switch abnormal | 6 | 3 | F43 |
| 44 | Outdoor condenser temperature TC too high protection | 6 | 4 | F44 |
| 45 | System low pressure protection | 6 | 5 | F45 |

# Single Split Outdoor unit Trouble shooting

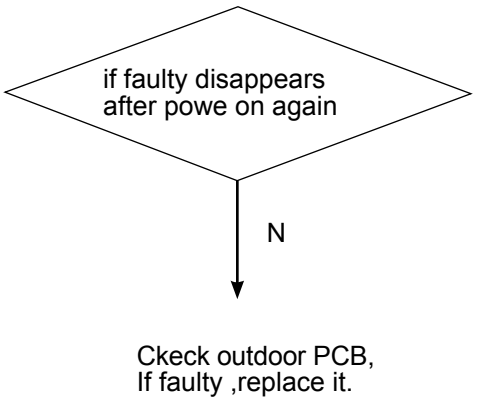
| Outdoor display | Fault Discription | AF25S2SD1FA AF35S2SD1FA AF42S2SD1FA | | |
|---|---|---|---|---|
| | | Timer lamp flash time(I.D. PCB LED6) | Running lamp flash time(I.D. PCB LED1) | Panel display |
| 1 | Outdoor unit EEPROM malfunction | 2 | 1 | F01 |
| 2 | IPM hardware overcurrent | 2 | 2 | F02 |
| 3 | Compressor over current during deceleration | 2 | 3 | F03 |
| 4 | Communication abnormal between control board and compressor driver module | 2 | 4 | F04 |
| 5 | Compressor overcurrent detected by control board | 2 | 5 | F05 |
| 6 | DC voltage or AC voltage high | 2 | 6 | F06 |
| 7 | Compressor current sampling circuit fault | 2 | 7 | F07 |
| 8 | Discharging temperature too high protection | 2 | 8 | F08 |
| 9 | DC fan motor fault | 2 | 9 | F09 |
| 10 | Outdoor defrosting temp. sensor Te abnormal | 3 | 0 | F10 |
| 11 | Suction temp. sensor Ts abnormal | 3 | 1 | F11 |
| 12 | Ambient temp. sensor Ta abnormal | 3 | 2 | F12 |
| 13 | Discharge temp. sensor Td abnormal | 3 | 3 | F13 |
| 14 | PFC circuit too high voltage | 3 | 4 | F14 |
| 15 | Communication abnornal between indoor&outdoor unit | 3 | 5 | F15 |
| 16 | Lack of refrigerant or discharging pipe is blocked | 3 | 6 | F16 |
| 17 | 4-way valve converse failure | 3 | 7 | F17 |
| 18 | Loss of synchronism detection | 3 | 8 | F18 |
| 19 | DC voltage or AC voltage low | 3 | 9 | F19 |
| 19 | Module PWM select circuit error | 3 | 9 | F19 |
| 20 | Indoor pipe temperature too high protection | 4 | 0 | F20 |
| 21 | Indoor pipe temperature too low protection | 4 | 1 | F21 |
| 22 | PFC circuit loop overcurrent | 4 | 2 | F22 |
| 23 | Temperature too high for compressor drivrer module | 4 | 3 | F23 |
| 24 | Compressor start failure | 4 | 4 | F24 |
| 25 | Compressor U-phase over-current | 4 | 5 | F25 |
| 25 | Compressor V-phase over-current | 4 | 5 | F25 |
| 25 | Compressor W-phase over-current | 4 | 5 | F25 |
| 25 | Module input overcurrent | 4 | 5 | F25 |
| 26 | Lack phase of driver module | 4 | 6 | F26 |
| 27 | Input current sampling circuit fault | 4 | 7 | F27 |
| 28 | No wiring of the compressor | 4 | 8 | F28 |
| 37 | Compressor oevercurrent detected by compressor driver module | 5 | 7 | F37 |
| 38 | Driver module temp.sensor abnornal | 5 | 8 | F38 |
| 39 | Mid-condensor temp.sensor TC abnormal | 5 | 9 | F39 |
| 42 | High pressure switch abnormal | 6 | 2 | F42 |
| 43 | Low pressure switch abnormal | 6 | 3 | F43 |
| 44 | Outdoor condenser temperature TC too high protection | 6 | 4 | F44 |
| 45 | System low pressure protection | 6 | 5 | F45 |

# Single Split Outdoor unit Trouble shooting

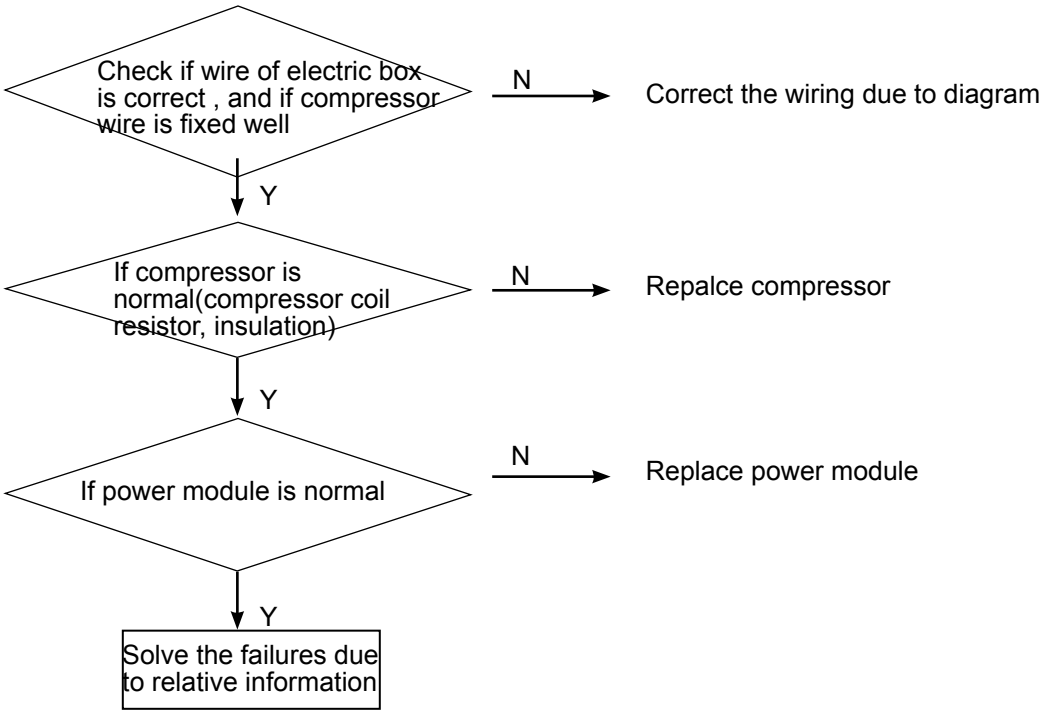
| Outdoor display | Fault Discription | Cassette | | |
|---|---|---|---|---|
| | | Timer lamp flash time | Running lamp flash time | Panel display |
| 1 | Outdoor unit EEPROM malfunction | 2 | 1 | 15 |
| 2 | IPM hardware overcurrent | 2 | 2 | 16 |
| 3 | Compressor over current during deceleration | 2 | 3 | 17 |
| 4 | Communication abnormal between control board and compressor driver module | 2 | 4 | 18 |
| 5 | Compressor overcurrent detected by control board | 2 | 5 | 19 |
| 6 | DC voltage or AC voltage high | 2 | 6 | 1A |
| 7 | Compressor current sampling circuit fault | 2 | 7 | 1B |
| 8 | Discharging temperature too high protection | 2 | 8 | 1C |
| 9 | DC fan motor fault | 2 | 9 | 1D |
| 10 | Outdoor defrosting temp. sensor Te abnormal | 3 | 0 | 1E |
| 11 | Suction temp. sensor Ts abnormal | 3 | 1 | 1F |
| 12 | Ambient temp. sensor Ta abnormal | 3 | 2 | 20 |
| 13 | Discharge temp. sensor Td abnormal | 3 | 3 | 21 |
| 14 | PFC circuit too high voltage | 3 | 4 | 22 |
| 15 | Communication abnornal between indoor&outdoor unit | 3 | 5 | 23 |
| 16 | Lack of refrigerant or discharging pipe is blocked | 3 | 6 | 24 |
| 17 | 4-way valve converse failure | 3 | 7 | 25 |
| 18 | Loss of synchronism detection | 3 | 8 | 26 |
| 19 | DC voltage or AC voltage low | 3 | 9 | 27 |
| 19 | Module PWM select circuit error | 3 | 9 | 27 |
| 20 | Indoor pipe temperature too high protection | 4 | 0 | 28 |
| 21 | Indoor pipe temperature too low protection | 4 | 1 | 29 |
| 22 | PFC circuit loop overcurrent | 4 | 2 | 2A |
| 23 | Temperature too high for compressor drivrer module | 4 | 3 | 2B |
| 24 | Compressor start failure | 4 | 4 | 2C |
| 25 | Compressor U-phase over-current | 4 | 5 | 2D |
| 25 | Compressor V-phase over-current | 4 | 5 | 2D |
| 25 | Compressor W-phase over-current | 4 | 5 | 2D |
| 25 | Module input overcurrent | 4 | 5 | 2D |
| 26 | Lack phase of driver module | 4 | 6 | 2E |
| 27 | Input current sampling circuit fault | 4 | 7 | 2F |
| 28 | No wiring of the compressor | 4 | 8 | 30 |
| 37 | Compressor oevercurrent detected by compressor driver module | 5 | 7 | 39 |
| 38 | Driver module temp.sensor abnornal | 5 | 8 | 3A |
| 39 | Mid-condensor temp.sensor TC abnormal | 5 | 9 | 3B |
| 42 | High pressure switch abnormal | 6 | 2 | 3E |
| 43 | Low pressure switch abnormal | 6 | 3 | 3F |
| 44 | Outdoor condenser temperature TC too high protection | 6 | 4 | 40 |
| 45 | System low pressure protection | 6 | 5 | 41 |

## 9.10 Trouble Shooting

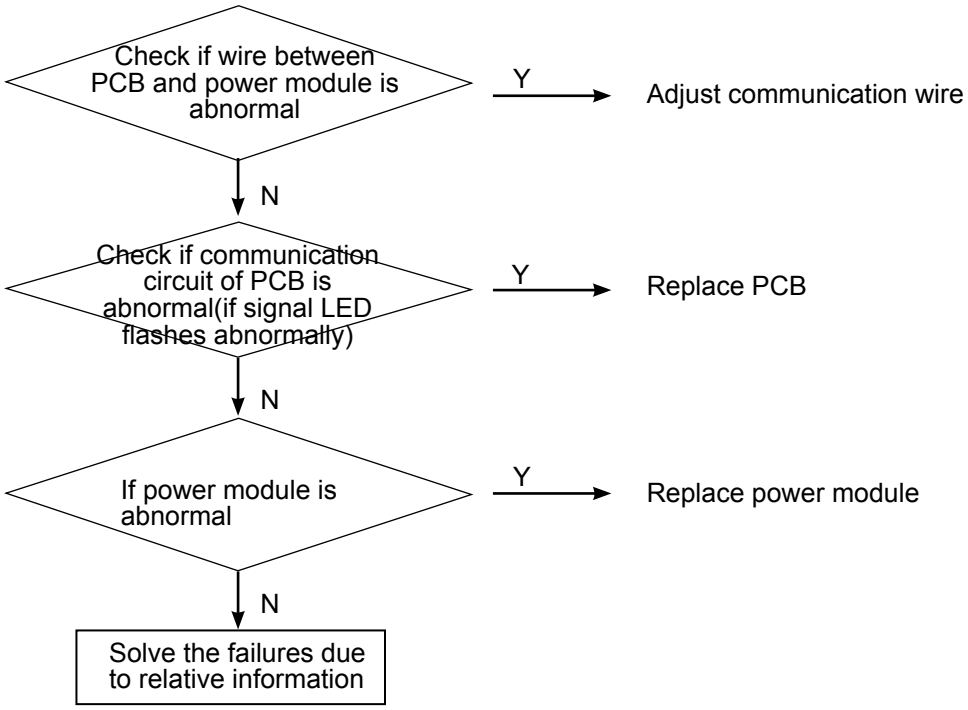
[1] Outdoor EEPROM Failure



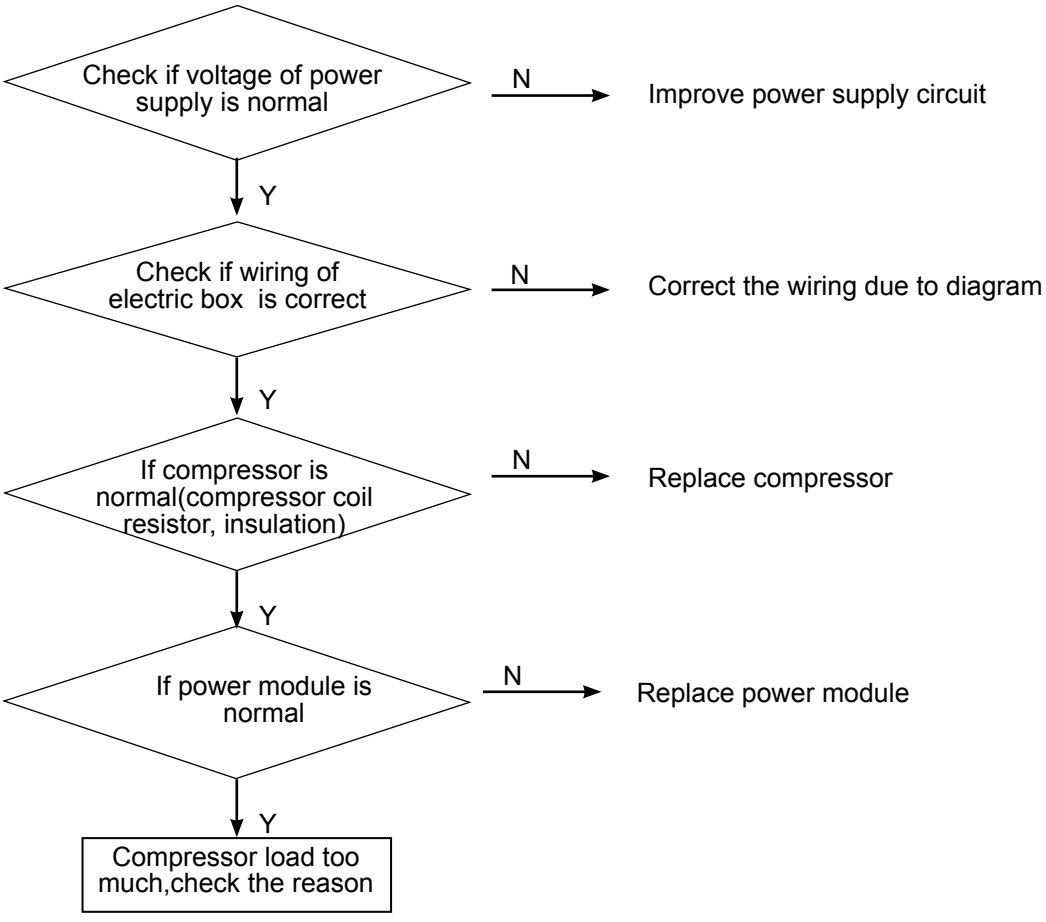

[2] IPM Over Current or Short Circuit



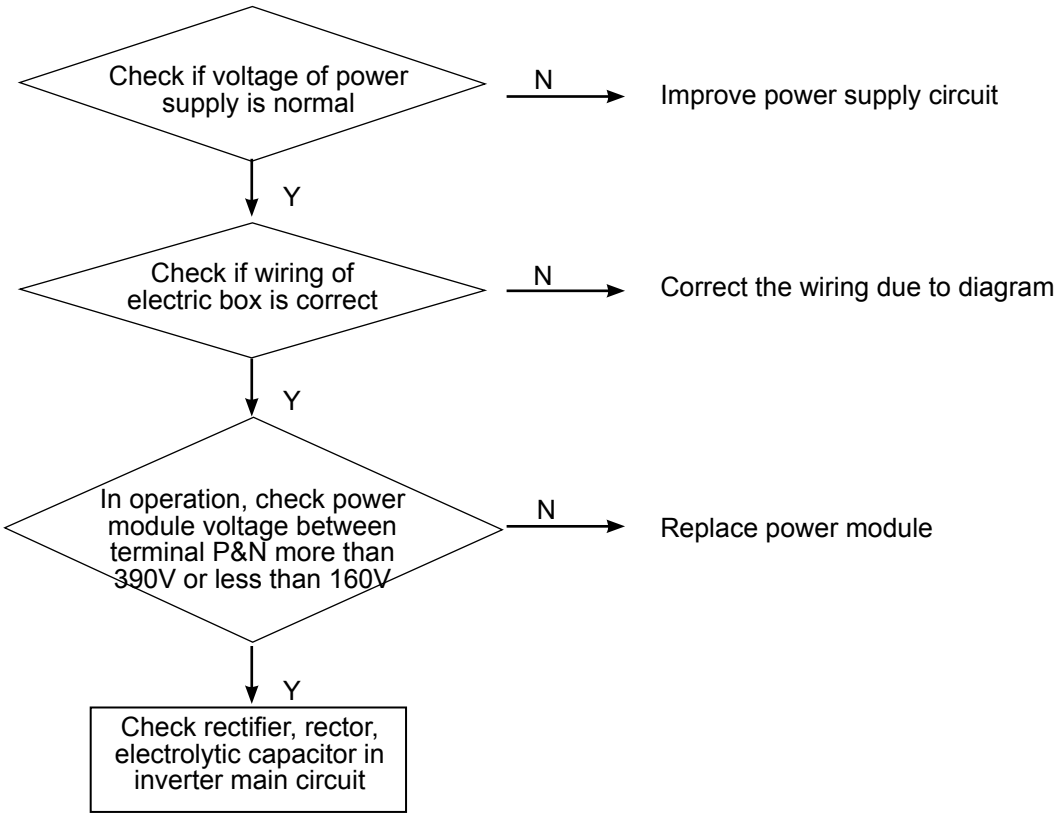
[4] Communication Failure Between Module Ans Ecu



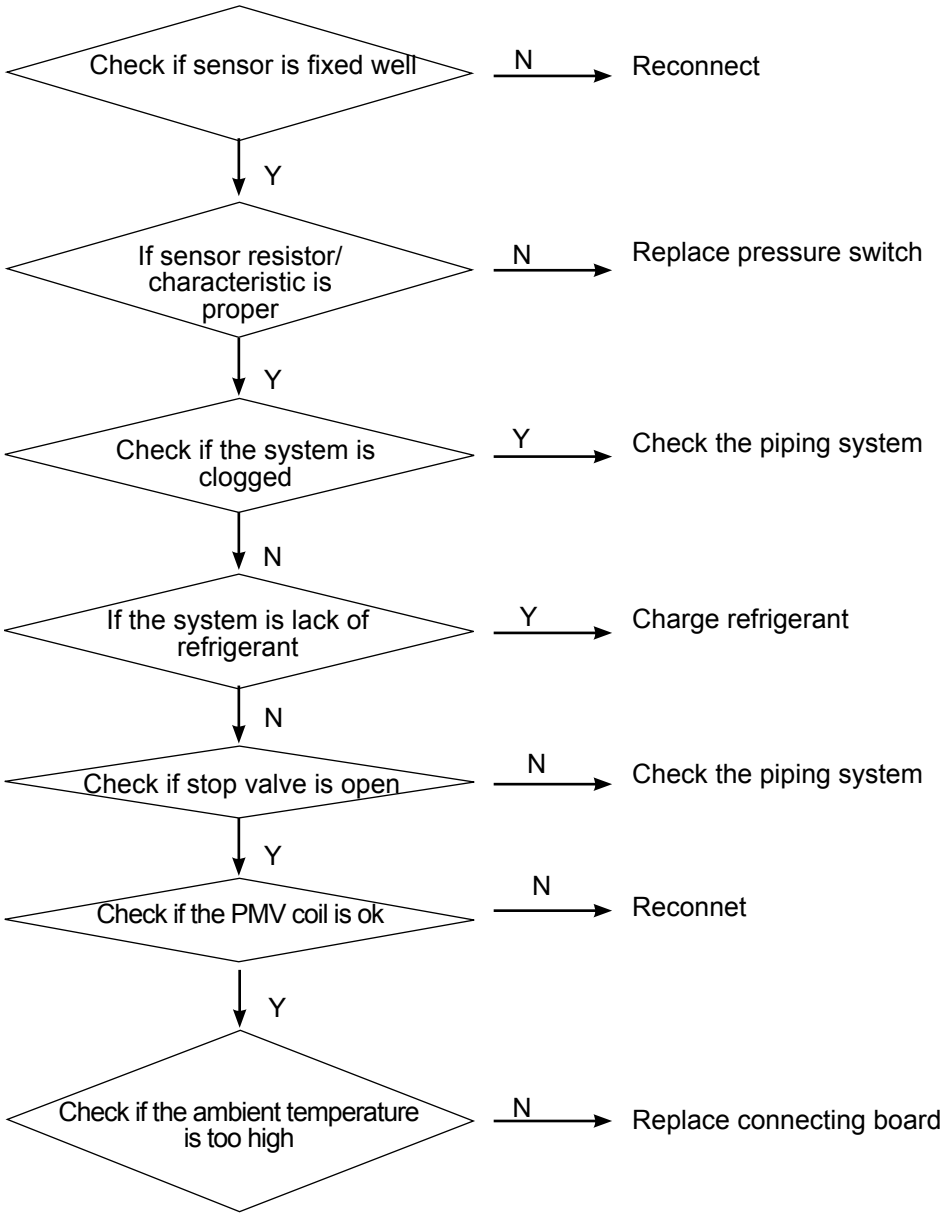

[5] Module Operated Overload



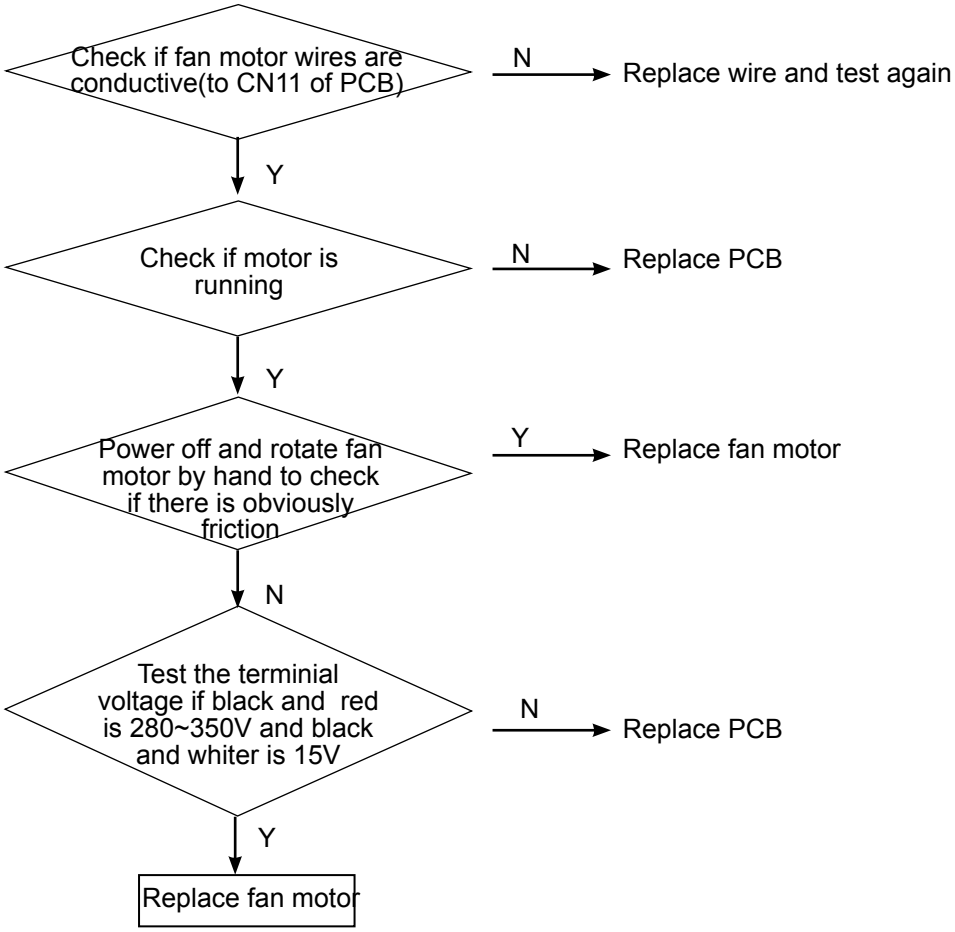
[6] Voltage too High or Low



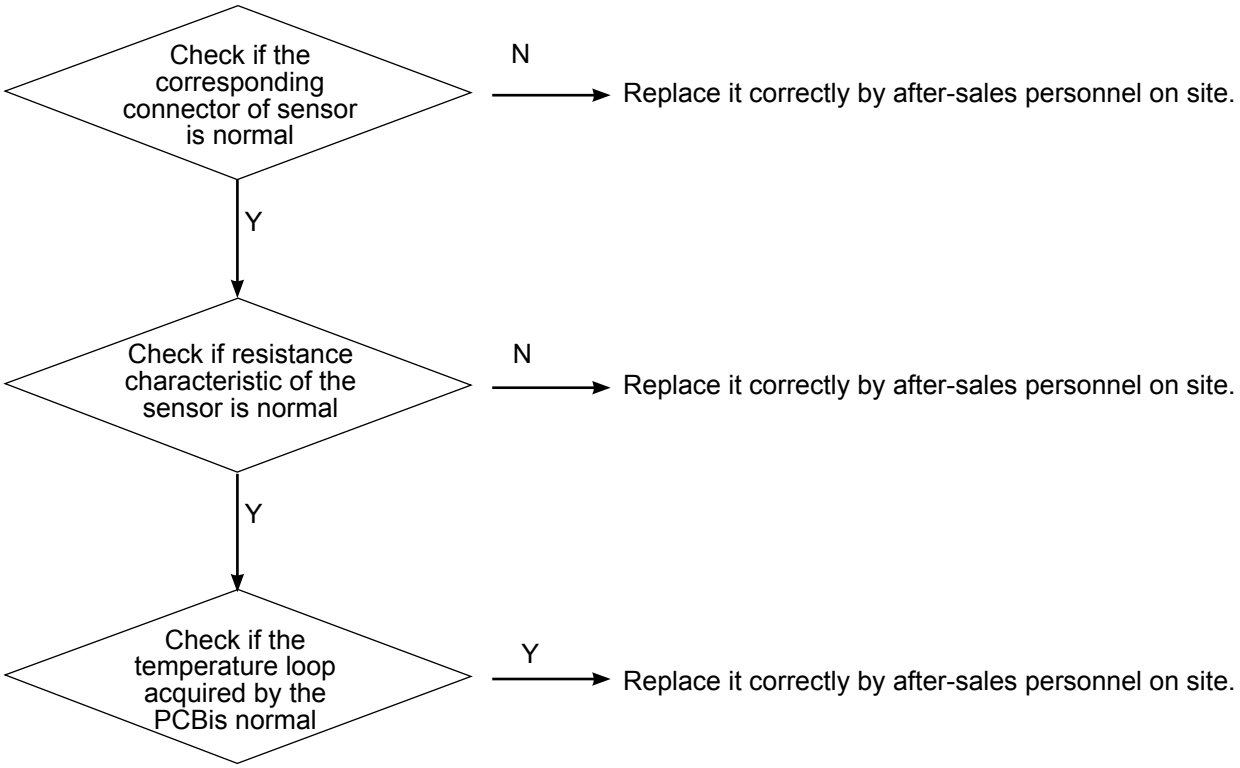
[8] Discharging Temperature Overheating



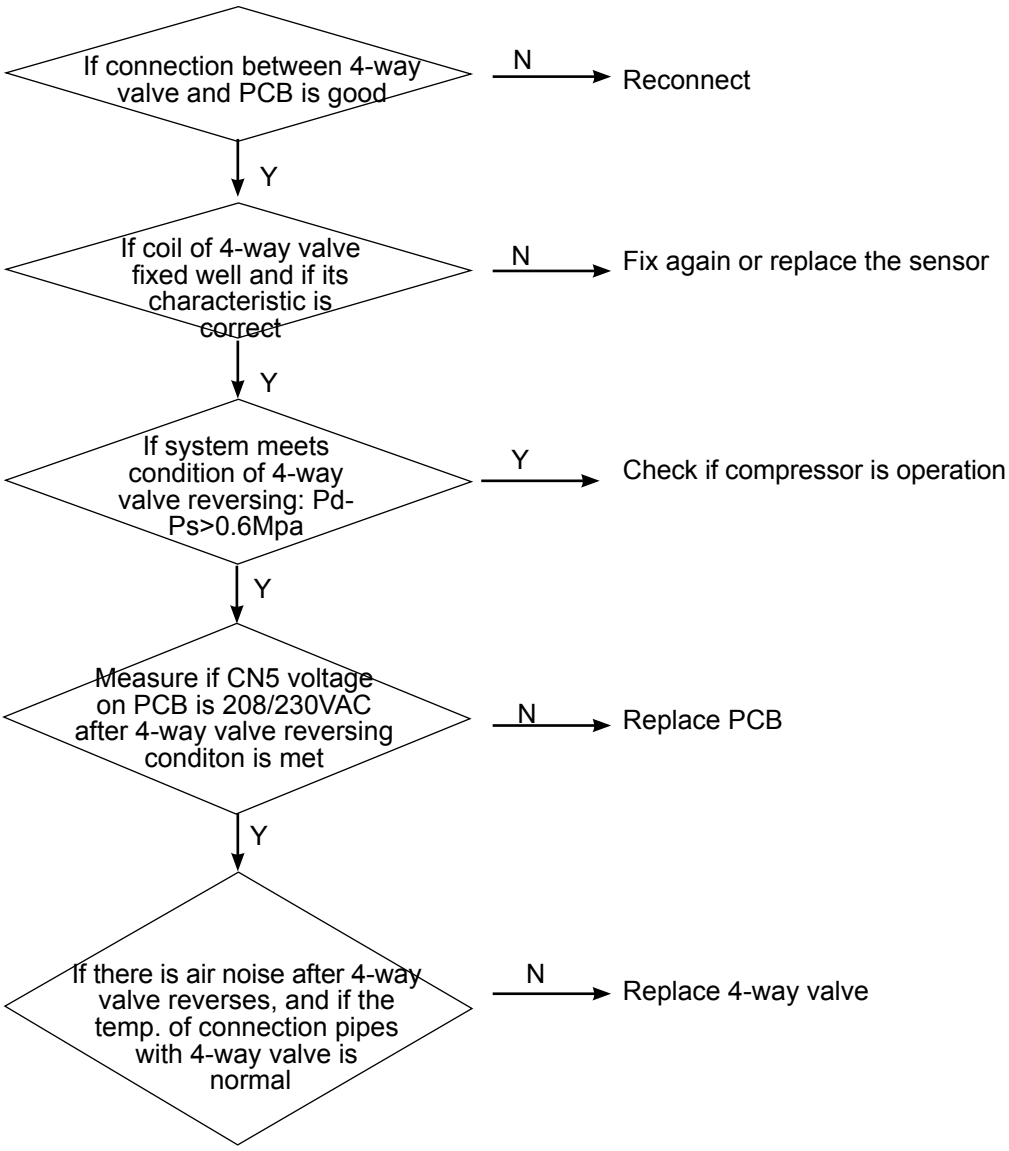
[9] DC Fan Motor Failure



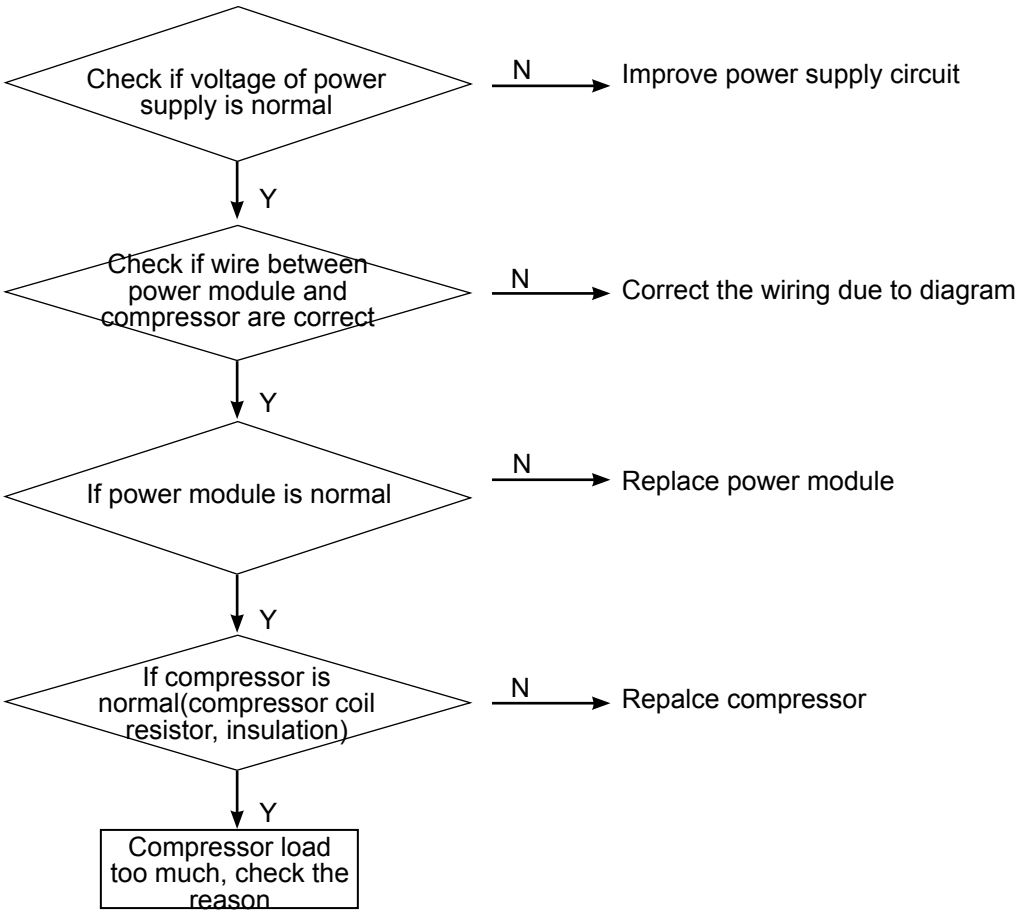
[10~13,28~36,38~41] Temperature Sensor Failure



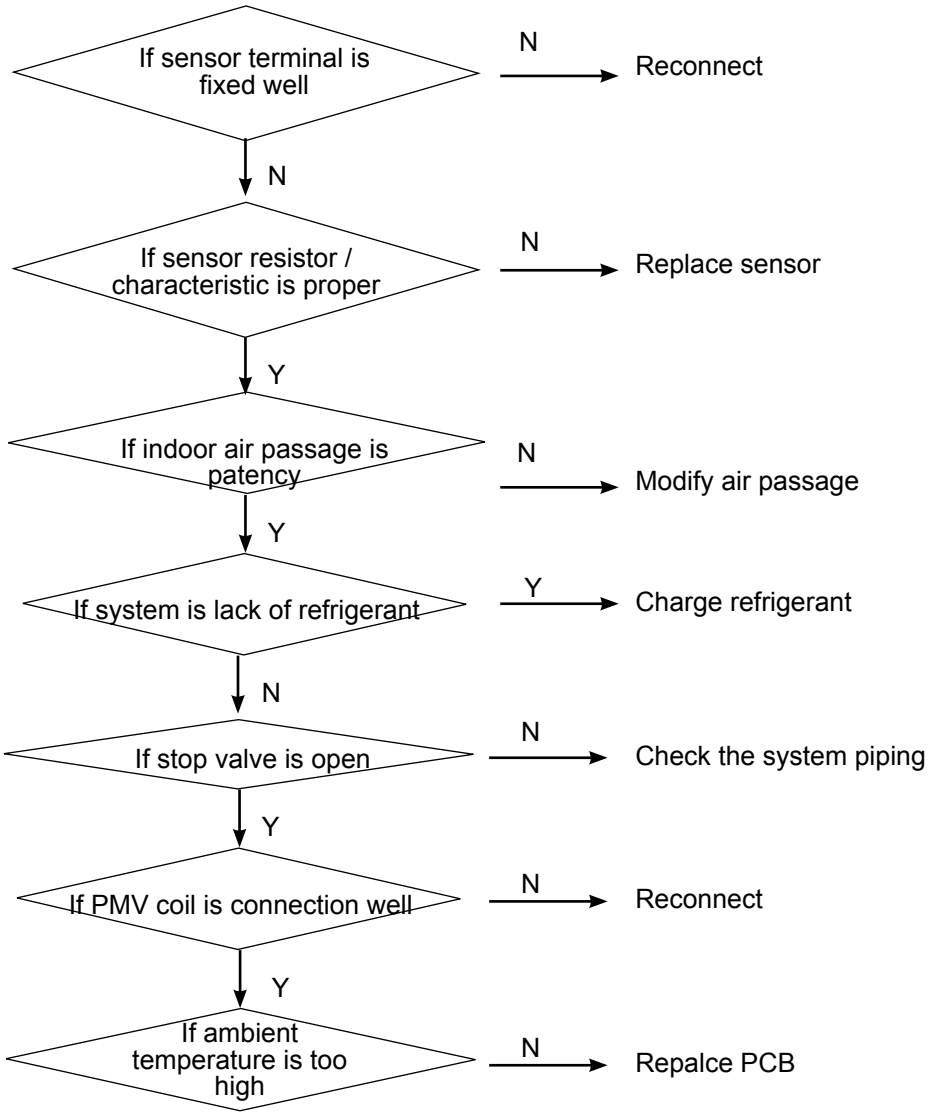
[17] 4-Way Valve Reversing Failure



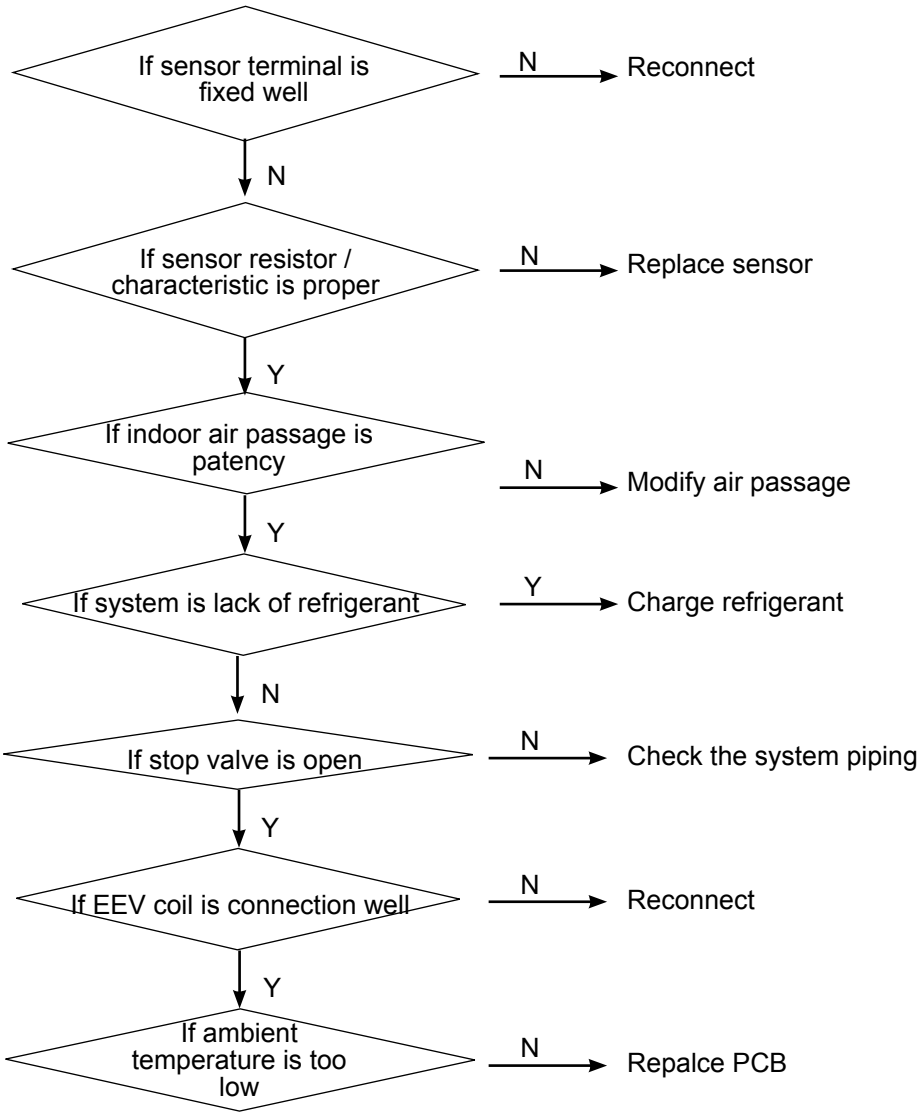
[18] Compressor Out Of Control Circuit



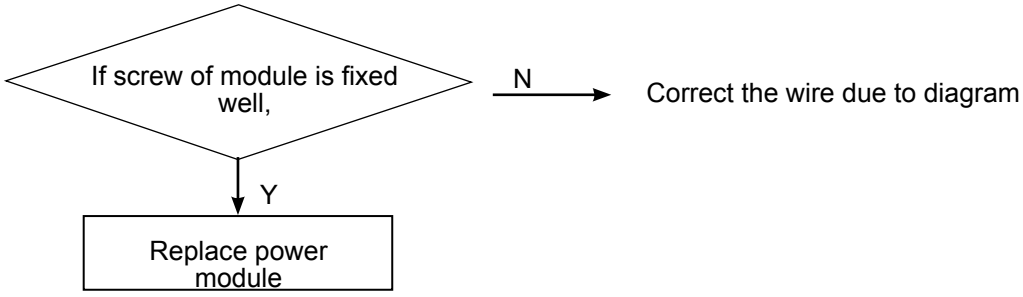
[20] Indoor Thermal Overload



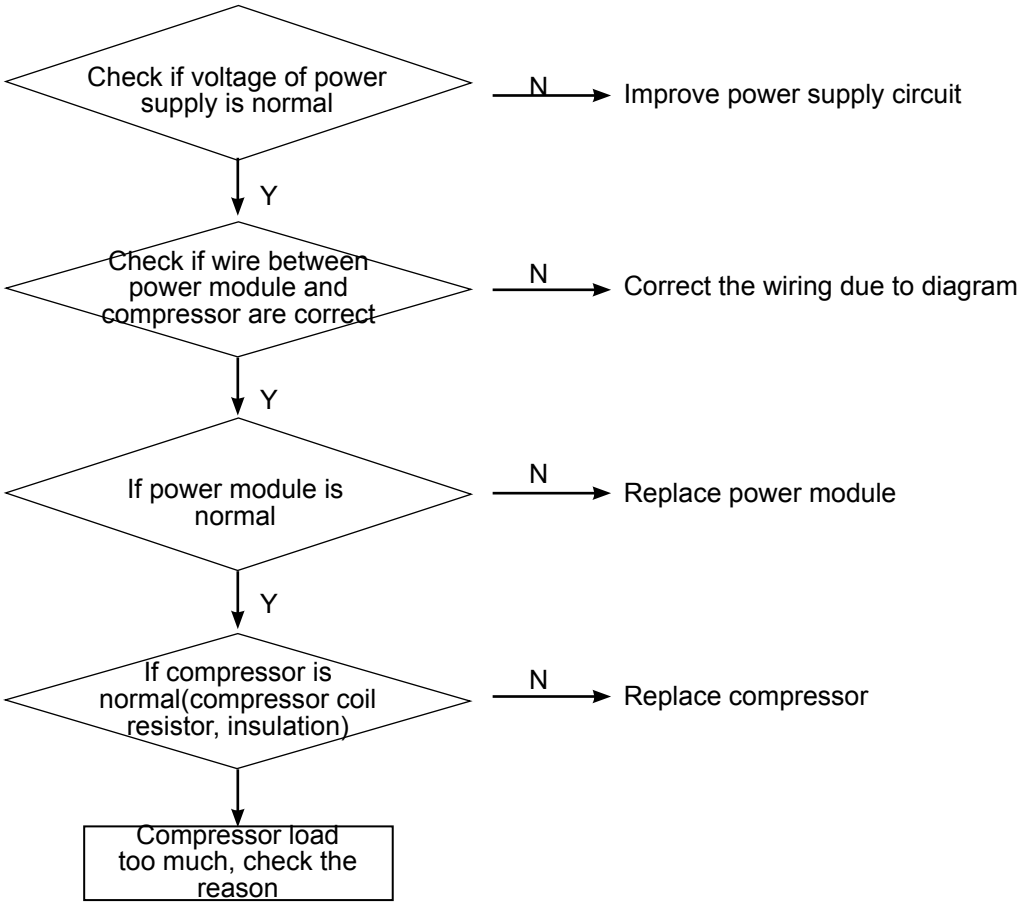
[21] Indoor Frosted



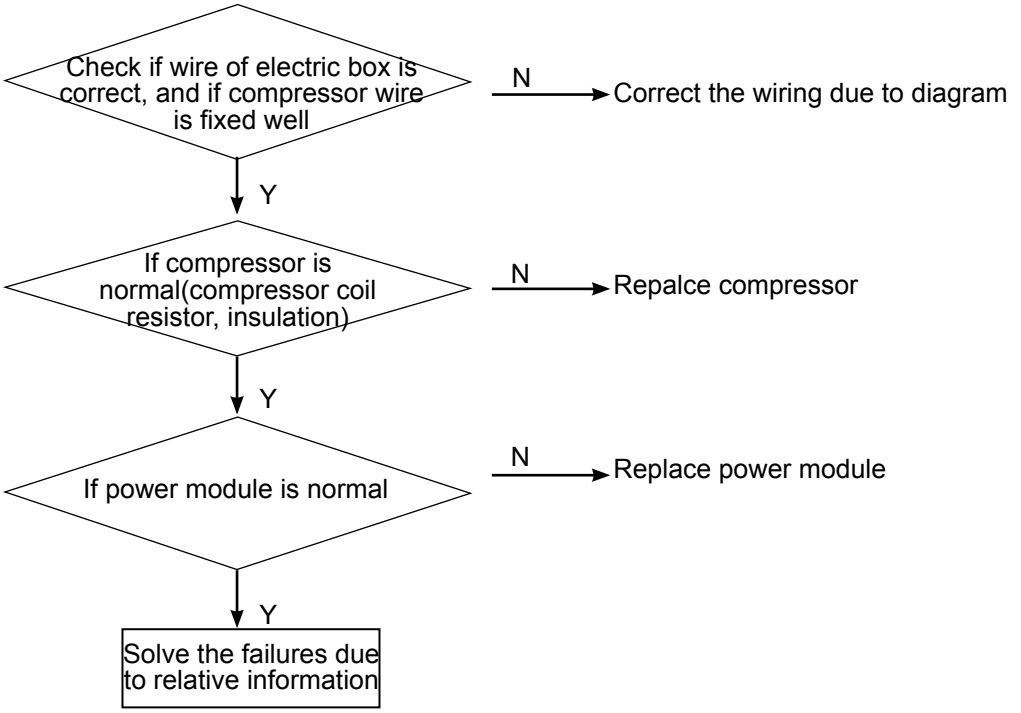
[23] Module Thermal Overload



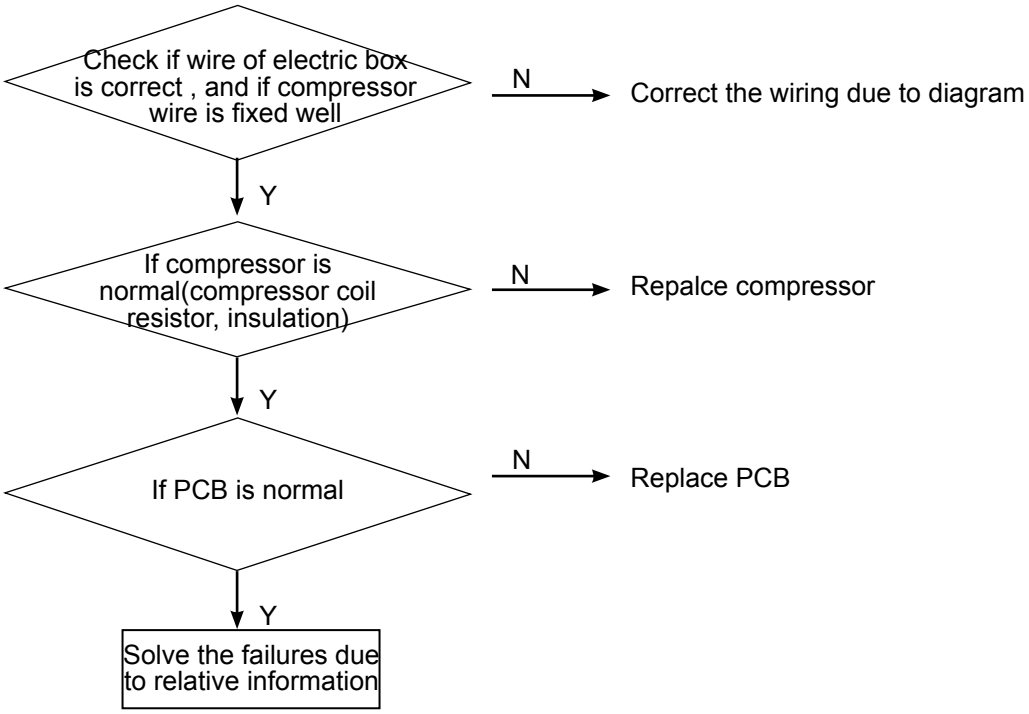

[24] Compressor Startup Failure



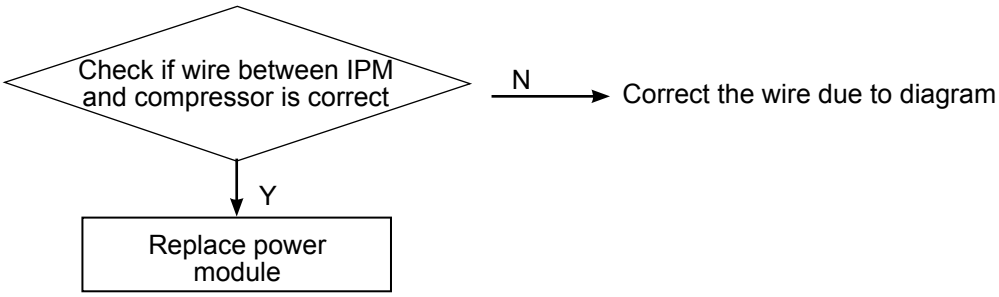
[25] Module Input Over-Current



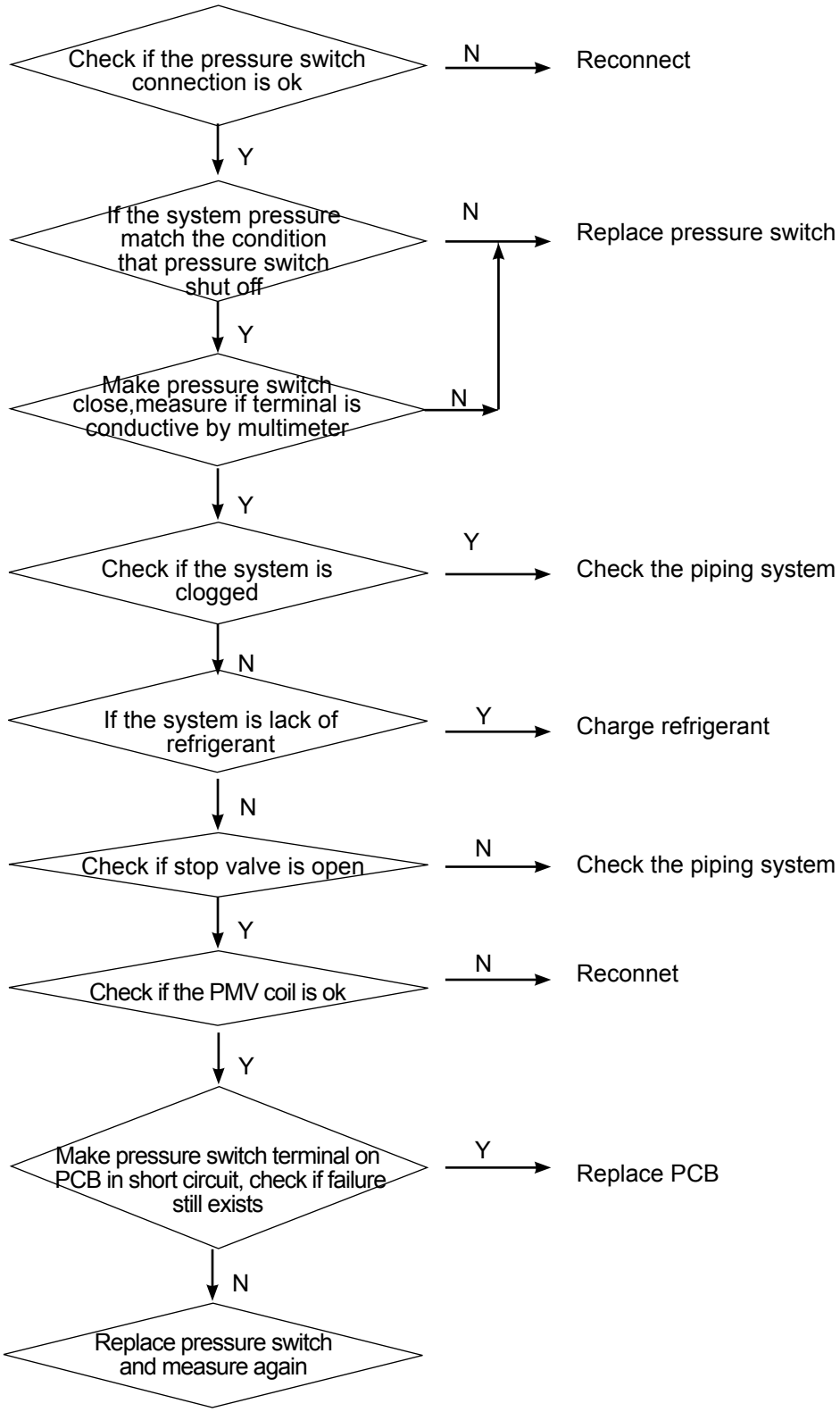

[26] MCU Reset



[27] Module Current Detect Circuit Failure



[42,43] High Or Low Pressure Switch Shut Off Failure



## Appendix I Sensor Characteristic

| Model | Function | Part Code | Characteristic |
|---|---|---|---|
| AB25S2SC1FA<br>AB35S2SC1FA<br>AB50S2SC1FA<br>AD25S2SS1FA<br>AD25S2SS2FA<br>AD35S2SS1FA<br>AD35S2SS2FA<br>AD50S2SS1FA<br>AD50S2SS2FA<br>AD71S2SS1FA<br>AD71S2SS2FA<br>AD35S2SM3FA<br>AD50S2SM3FA<br>AD35S2SS1FA<br>AD50S2SM1FA | Indoor Ambient Temperature Sensor | 001A3900159 | R25=23KΩ±3%<br>B25/50=4200K±3% |
| | Indoor Coil Temperature Sensor | 001A3900006 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| AB71S2SG1FA | Indoor Ambient Temperature Sensor | 0150402268 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Indoor Coil Temp. Sensor | 0010401922 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| AD71S2SM1FA | Indoor ambient temperature sensor | 001A3900159 | R25=23KΩ±3%<br>B25/50=4200K±3% |
| | Indoor coil temperature sensor | 0010401922 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| AD50S2SM3FA<br>AD71S2SM3FA<br>AD105S2SM3FA<br>AD125S2SM3FA<br>AD125S2SM8FA<br>AD140S2SM3FA<br>AD140S2SM8FA<br>AD160S2SM3FA<br>AC160S2SK1FA | Indoor Ambient Temperature Sensor | 001A3900159 | R25=23KΩ±3%<br>B25/50=4200K±3% |
| | Indoor Coil Temp. Sensor | 0010401922 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| AD71S2SM6FA<br>AD100S2SM6FA | Indoor Ambient Temperature Sensor | 001A3900159 | R25=23KΩ±3%<br>B25/50=4200K±3% |
| | Indoor Coil Temp. Sensor | 001A3900006 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| AF25S2SD1FA<br>AF35S2SD1FA<br>AF42S2SD1FA | Indoor Ambient Temperature Sensor | 001A3900159 | R25=23KΩ±3%<br>B25/50=4200K±3% |
| | Indoor Coil Temperature Sensor | 001A3900006 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| AC71S2SG1FA<br>AC90S2SH1FA<br>AC105S2SH1FA<br>AC125S2SK1FA<br>AC140S2SK1FA | Indoor Ambient Temperature Sensor | 001A3900159 | R25=23KΩ±3%<br>B25/50=4200K±3% |
| | Indoor Coil Temperature Sensor | 001A3900006 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| AP140S2SK1FA | Indoor Ambient Temperature Sensor | 0010451323A | R25=23KΩ±3%<br>B25/50=4200K±3% |
| | Indoor Coil Temperature Sensor | 0010401922 | R25=10KΩ±3%<br>B25/50=3700K±3% |

| Model | Function | Part Code | Characteristic |
|---|---|---|---|
| 1U71S2SG1FA<br>1U71S2SR2FA | Defrost temperature sensor | 0010401830A | R25=10KΩ±3%<br>B25/50=3700K±9% |
| | Outdoor ambient temperature sensor | 0010401830A | R25=10KΩ±3%<br>B25/50=3700K±9% |
| | Discharge temperature sensor | 0010401830A | R80=50KΩ±3%<br>B25/50=4450K±9% |
| | Suction temperature sensor | 0010401826 | R25=10KΩ±3%<br>B25/50=3700K±9% |
| 1U90S2SS2FA<br>1U105S2SS1FA<br>1U105S2SS2FA<br>1U105S2SS1FB<br>1U125S2SN1FA<br>1U140S2SP1FA<br>1U125S2SN1FB<br>1U140S2SP1FB<br>1U140S2SP2FA | Defrost temp.sensor | 0010450194 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Ambient temp.sensor | 0010450192 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Discharging temp.sensor | 0010451303 | R80=50KΩ±3%<br>B25/50=4450K±3% |
| | coil temp.sensor | 0010451329 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Suction temperature sensor | 0010451307 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| 1U140S2SP2FB<br>1U160S2SP1FB | Defrost temp.sensor | 0010451307 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Ambient temp.sensor | 0010450192 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Discharging temp.sensor | 0010451303 | R80=50KΩ±3%<br>B25/50=4450K±3% |
| | coil temp.sensor | 0010451328 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Suction temperature sensor | 0010450949 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| 1U125S2SN2FA<br>1U125S2SN2FB<br>1U140S2SN1FA<br>1U140S2SN1FB | Ambient temp.sensor | 0010450192 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Coil temp.sensor | 0010451328 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Suction temperature sensor | 0010450949 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Defrost temp.sensor | 0010451307 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Discharging temp.sensor | 0010451303 | R80=50KΩ±3%<br>B25/50=4450K±3% |
| 3U55S2SR5FA<br>3U70S2SR3FA | Gas Liquid Sensor | 0150402454 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Defrost Temperature Sensor | 0150402521 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| 4U75S2SR5FA<br>4U85S2SR5FA | Gas Liquid Sensor | 0150402453A | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Defrost Temperature Sensor | 0150402521 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| 5U90S2SS5FA<br>5U105S2SR3FA<br>5U125S2SN1FA | Gas liquid sensor | 0150402453 | R25=10KΩ±3%<br>B25/50=3700K±3% |
| | Defrosting temp sensor | 0150402521 | R25=10KΩ±3%<br>B25/50=3700K±3% |

| R25=10KΦ±3% B25/50=3700K±3% | | R25=10KΦ±3% B25/50=3700K±3% | |
|---|---|---|---|
| T (°C) | Rnom (KΦ) | T (°C) | Rnom (KΦ) |
| -20 | 90.79 | 31 | 7.83 |
| -19 | 85.72 | 32 | 7.52 |
| -18 | 80.96 | 33 | 7.23 |
| -17 | 76.51 | 34 | 6.95 |
| -16 | 72.33 | 35 | 6.68 |
| -15 | 68.41 | 36 | 5.43 |
| -14 | 64.73 | 37 | 5.6 |
| -13 | 61.27 | 38 | 5.59 |
| -12 | 58.02 | 39 | 5.73 |
| -11 | 54.97 | 40 | 5.52 |
| -10 | 52.1 | 41 | 5.32 |
| -9 | 49.4 | 42 | 5.12 |
| -8 | 46.86 | 43 | 4.93 |
| -7 | 44.46 | 44 | 4.9 |
| -6 | 42.21 | 45 | 4.58 |
| -5 | 40.08 | 46 | 4.42 |
| -4 | 38.08 | 47 | 4.26 |
| -3 | 36.19 | 48 | 4.11 |
| -2 | 34.41 | 49 | 3.97 |
| -1 | 32.73 | 50 | 3.83 |
| 0 | 31.14 | 51 | 3.7 |
| 1 | 29.64 | 52 | 3.57 |
| 2 | 28.22 | 53 | 3.45 |
| 3 | 26.4 | 54 | 3.33 |
| 4 | 25.61 | 55 | 3.22 |
| 5 | 24.41 | 56 | 3.11 |
| 6 | 23.27 | 57 | 3.11 |
| 7 | 22.2 | 58 | 2.9 |
| 8 | 21.18 | 59 | 2.81 |
| 9 | 20.21 | 60 | 2.72 |
| 10 | 19.3 | 61 | 2.63 |
| 11 | 18.43 | 62 | 2.54 |
| 12 | 17.61 | 63 | 2.49 |
| 13 | 16.83 | 64 | 2.38 |
| 14 | 16.09 | 65 | 2.3 |
| 15 | 15.38 | 66 | 2.23 |
| 16 | 14.71 | 67 | 2.16 |
| 17 | 14.08 | 68 | 2.09 |
| 18 | 13.48 | 69 | 2.03 |
| 19 | 12.9 | 70 | 1.96 |
| 20 | 12.36 | 71 | 1.9 |
| 21 | 11.84 | 72 | 1.85 |
| 22 | 11.34 | 73 | 1.79 |
| 23 | 10.87 | 74 | 1.73 |
| 24 | 10.43 | 75 | 1.68 |
| 25 | 10 | 76 | 1.63 |
| 26 | 9.59 | 77 | 1.58 |
| 27 | 9.21 | 78 | 1.54 |
| 28 | 8.84 | 79 | 1.49 |
| 29 | 8.48 | 80 | 1.45 |
| 30 | 8.15 | | |

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| R25=23KΩ±3%B25/50=4200K±3% | | | | | | | |
|---|---|---|---|---|---|---|---|
| T (°C) | Rnom (KΩ) | T (°C) | Rnom (KΩ) | T (°C) | Rnom (KΩ) | T(°C) | Rnom (KΩ) |
| -10 | 149.07 | 27 | 20.94 | 64 | 4.52 | 101 | 1.32 |
| -9 | 140.35 | 28 | 20.00 | 65 | 4.36 | 102 | 1.28 |
| -8 | 132.20 | 29 | 19.10 | 66 | 4.21 | 103 | 1.25 |
| -7 | 124.59 | 30 | 18.24 | 67 | 4.05 | 104 | 1.21 |
| -6 | 117.46 | 31 | 17.43 | 68 | 3.91 | 105 | 1.18 |
| -5 | 110.79 | 32 | 16.66 | 69 | 3.77 | 106 | 1.14 |
| -4 | 104.54 | 33 | 15.93 | 70 | 3.64 | 107 | 1.11 |
| -3 | 98.69 | 34 | 15.24 | 71 | 3.51 | 108 | 1.08 |
| -2 | 93.20 | 35 | 14.58 | 72 | 3.39 | 109 | 1.05 |
| -1 | 88.06 | 36 | 13.95 | 73 | 3.28 | 110 | 1.02 |
| 0 | 83.23 | 37 | 13.35 | 74 | 3.16 | 111 | 0.99 |
| 1 | 78.70 | 38 | 12.79 | 75 | 3.06 | 112 | 0.96 |
| 2 | 74.45 | 39 | 12.25 | 76 | 2.95 | 113 | 0.93 |
| 3 | 70.46 | 40 | 11.73 | 77 | 2.85 | 114 | 0.91 |
| 4 | 66.70 | 41 | 11.24 | 78 | 2.76 | 115 | 0.88 |
| 5 | 63.18 | 42 | 10.78 | 79 | 2.66 | 116 | 0.86 |
| 6 | 59.86 | 43 | 10.33 | 80 | 2.58 | 117 | 0.84 |
| 7 | 56.74 | 44 | 9.91 | 81 | 2.49 | 118 | 0.81 |
| 8 | 53.80 | 45 | 9.51 | 82 | 2.41 | 119 | 0.79 |
| 9 | 51.03 | 46 | 9.12 | 83 | 2.33 | 120 | 0.77 |
| 10 | 48.42 | 47 | 8.76 | 84 | 2.26 | 121 | 0.75 |
| 11 | 45.97 | 48 | 8.41 | 85 | 2.18 | 122 | 0.73 |
| 12 | 43.65 | 49 | 8.07 | 86 | 2.11 | 123 | 0.71 |
| 13 | 41.46 | 50 | 7.75 | 87 | 2.05 | 124 | 0.69 |
| 14 | 39.40 | 51 | 7.45 | 88 | 1.98 | 125 | 0.67 |
| 15 | 37.46 | 52 | 7.16 | 89 | 1.92 | 126 | 0.66 |
| 16 | 35.62 | 53 | 6.88 | 90 | 1.86 | 127 | 0.64 |
| 17 | 33.89 | 54 | 6.62 | 91 | 1.80 | 128 | 0.62 |
| 18 | 32.25 | 55 | 6.36 | 92 | 1.74 | 129 | 0.61 |
| 19 | 30.70 | 56 | 6.12 | 93 | 1.69 | 130 | 0.59 |
| 20 | 29.23 | 57 | 5.89 | 94 | 1.64 | 131 | 0.58 |
| 21 | 27.84 | 58 | 5.67 | 95 | 1.59 | 132 | 0.56 |
| 22 | 26.53 | 59 | 5.46 | 96 | 1.54 | 133 | 0.55 |
| 23 | 25.29 | 60 | 5.25 | 97 | 1.49 | 134 | 0.53 |
| 24 | 24.11 | 61 | 5.06 | 98 | 1.45 | | |
| 25 | 23.00 | 62 | 4.87 | 99 | 1.41 | | |
| 26 | 21.94 | 63 | 4.70 | 100 | 1.36 | | |

## Appendix II Model With water pump list

| Type | Model | With Pump |
|---|---|---|
| 4-way cassette | AB25S2SC1FA AB35S2SC1FA<br>AB50S2SC1FA AB71S2SG1FA<br>AB25S2SC2FA AB35S2SC2FA<br>AB50S2SC2FA ABH071H1ERG<br>ABH105H1ERG ABH125K1ERG<br>ABH140K1ERG ABH160K1ERG | Yes |
| Low ESP Duct | AD25S2SS1FA AD35S2SS1FA<br>AD50S2SS1FA AD50S2SS2FA<br>AD71S2SS1FA | Yes |
| | AD25S2SS2FA AD35S2SS2FA<br>AD50S2SS2FA AD71S2SS2FA | No |
| Medium ESP Duct | AD35S2SM3FA AD50S2SM1FA<br>AD71S2SM1FA AD50S2SM3FA<br>AD71S2SM3FA AD71S2SM6FA<br>AD90S2SM3FA AD100S2SM6FA<br>AD105S2SM3FA AD125S2SM3FA<br>AD140S2SM3FA AD160S2SM3FA | Yes |
| | AD35S2SM4FA AD50S2SM4FA<br>AD71S2SM4FA AD90S2SM4FA<br>AD105S2SM4FA AD125S2SM4FA<br>AD140S2SM4FA | No |
| High ESP Duct | ADH105H1ERG ADH140H1ERG | Yes |
| Console | AF25S2SD1FA AF35S2SD1FA<br>AF42S2SD1FA | No |
| Convertible | AC35S2SG1FA AC50S2SG1FA<br>AC71S2SG1FA AC105S2SH1FA<br>AC125S2SK1FA AC140S2SK1FA<br>AC160S2SK1FA | No |
| Cabinet | AP140S2SK1FA | No |

## Appendix III Filter information

| RANGE | PIC | HAIER MODEL | Material | Effect |
|---|---|---|---|---|
| **SUPER MATCH R32 COMPACT CASSETTE** |  | AB25S2SC1FA | | |
| | | AB35S2SC1FA | | |
| | | AB50S2SC1FA | | |
| | | PB-700KB | Nylon | No rating. Can filter dust |
| SUPER MATCH R32 COMPACT CASSETTE |  | AB25S2SC2FA | | |
| | | AB35S2SC2FA | | |
| | | AB50S2SC2FA | | |
| | | PB-620KB | Nylon | No rating. Can filter dust |
| SUPER MATCH R32 ROUND WAY CASSETTE |  | AB71S2SG1FA | | |
| | | ABH105H1ERG | | |
| | | ABH125K1ERG | | |
| | | ABH140K1ERG | | |
| | | PB-950KB | Nylon | No rating. Can filter dust |
| SUPER MATCH R32 SLIM DUCT (Drain Pump Included) |   | AD25S2SS1FA | High density PET | No rating. Can filter dust |
| | | AD35S2SS1FA | High density PET | No rating. Can filter dust |
| | | P1B-890IA | | |
| | | AD50S2SS1FA | High density PET | No rating. Can filter dust |
| | | AD71S2SS1FA | High density PET | No rating. Can filter dust |
| | | P1B-1210IA | | |
| SUPER MATCH R32 MEDIUM ESP DUCT (150Pa) (Drain Pump Included) |  | AD35S2SM3FA | High density PET | No rating. Can filter dust |
| | | AD50S2SM3FA | High density PET | No rating. Can filter dust |
| | | AD71S2SM3FA | High density PET | No rating. Can filter dust |
| | | AD90S2SM3FA | High density PET | No rating. Can filter dust |
| | | AD105S2SM3FA | High density PET | No rating. Can filter dust |
| | | AD125S2SM3FA | High density PET | No rating. Can filter dust |
| | | AD140S2SM3FA | High density PET | No rating. Can filter dust |
| **SUPER MATCH R32&R410A HIGH ESP DUCT** |  | ADH105H1ERG | none | |
| | | ADH125H1ERG | none | |
| | | ADH140H1ERG | none | |
| | | ADH160H1ERG | none | |
| |  | ADH200H1ERG | none | |
| | | ADH250H1ERG | none | |
| **SUPER MATCH R32 CONSOLE** |  | AF25S2SD1FA | High density PET | No rating. Can filter dust |
| | | AF35S2SD1FA | High density PET | No rating. Can filter dust |
| | | AF42S2SD1FA | High density PET | No rating. Can filter dust |
| SUPER MATCH R32 CONVERTIBLE |  | AC35S2SG1FA | High density PET | No rating. Can filter dust |
| | | AC50S2SG1FA | High density PET | No rating. Can filter dust |
| | | AC71S2SG1FA | High density PET | No rating. Can filter dust |
| | | AC105S2SH1FA | High density PET | No rating. Can filter dust |
| | | AC125S2SK1FA | High density PET | No rating. Can filter dust |
| | | AC140S2SK1FA | High density PET | No rating. Can filter dust |

## Appendix IV Table for manual updated information

| No. | Version | Updated information |
|---|---|---|
| 1 | SYJS-2020.B | 1. Add new model 1U105S2SS1FB<br>2. Add information of instalation MAXI SPLIT UNITS including refrigeration connections and wiring connection method |
| 2 | SYJS-2020.C | 1. Change the max leakage test preesure from 3.0MPa to 4.15MPa<br>2. Extend the test working temperature range of the heating performance data to -15°C for model 1U71S2SR2FA/1U105S2SS1FA/1U105S2SS1B/1U125S2SN1FA/1U125S2SN1FB<br>3. Add information of the effect and materials of air filter<br>4. Update the description of oil trap on single split units<br>5. Add 4U75S2SR2FA performance curve |
| 3 | SYJS-2020.D | 6. Add 16KW relatated models<br>7.Add 1U125S2SN2FA/1U125S2SN2FB/1U140S2SP2FA/1U140S2SP2FB models |
| 4 | SYJS-2021.A | 1. Correct the static pressure setting in installation part of slim duct type.<br>2. Correct the performance data of 1U125S2SN1FA/B, 1U125S2SN2FA/B |
| 5 | SYJS-2021.B | 1. Add 1U105S2SS2FA model information<br>2. Multi R3/S3 series upgraded to R5/S5 |
| 6 | SYJS-2021.C | Add the new model 1U90S2SS2FA information. |




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