

Specifications

Wind-Free™ 4-Way Cassette

- Fast Cooling mode and Wind-Free™ Cooling mode.
- Four-way air supply via independently adjustable blades.
- Built-in condensation drain pump and humidity sensor.
- Direct drive fan powered by a BLDC motor.
- Compatible with Wi-Fi Kit controller.
- Motion Detect Sensor (optional).



| Model | | | | AM045NN4DEH/EU | AM056NN4DEH/EU | AM071NN4DEH/EU |
|--------------------|----------------------------------|---------|---------------------|----------------------------------------------|-------------------------|-------------------------|
| Power Supply | | | Φ, #, V, Hz | 1Φ, 2, 220-240 V, 50 Hz | 1Φ, 2, 220-240 V, 50 Hz | 1Φ, 2, 220-240 V, 50 Hz |
| Mode | | | - | HP/HR | HP/HR | HP/HR |
| Performance | Capacity | Cooling | kW | 4.5 | 5.6 | 7.1 |
| | | Heating | | 5.0 | 6.3 | 8.0 |
| Power | Power Input | Cooling | W | 32 | 32 | 45 |
| | | Heating | | 32 | 32 | 45 |
| | Current Input | Cooling | A | 0.22 | 0.22 | 0.31 |
| | | Heating | | 0.22 | 0.22 | 0.31 |
| Current | MCA | A | 0.3 | 0.3 | 0.4 | |
| | MFA | | 15 | 15 | 15 | |
| Fan | Type | | - | Turbo Fan | Turbo Fan | Turbo Fan |
| | Number of Fans | | - | 1 | 1 | 1 |
| | Airflow Rate H/M/L | | m ³ /min | 14.5/13.5/12.5 | 15.0/14.0/13.0 | 17.0/15.5/14.5 |
| | | l/s | 242/225/208 | 250/233/217 | 283/258/242 | |
| Fan Motor | Model | | - | BLDC Motor | BLDC Motor | BLDC Motor |
| | Output x n | | W | 65 x 1 | 65 x 1 | 65 x 1 |
| Piping Connections | Liquid Pipe | | ø, mm | 6.35 | 6.35 | 9.52 |
| | | | ø, inch | 1/4 | 1/4 | 3/8 |
| | Gas Pipe | | ø, mm | 12.7 | 12.7 | 15.88 |
| | | | ø, inch | 1/2 | 1/2 | 5/8 |
| Drain Pipe | | ø, mm | VP25 (OD 32, ID 25) | VP25 (OD 32, ID 25) | VP25 (OD 32, ID 25) | |
| Wiring Connections | Communication | Minimum | mm ² | 0.75 | 0.75 | 0.75 |
| | | Remark | - | F1, F2 | F1, F2 | F1, F2 |
| Refrigerant | Type | | - | R410A(Fluorinated greenhouse gas, GWP=2,088) | | |
| | Electronic Expansion Valve | | - | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED |
| Sound ² | Sound Pressure | H/M/L | dB(A) | 33.0/32.0/30.0 | 33.0/32.0/30.0 | 35.0/34.0/33.0 |
| | Sound Power | Cooling | | 49 | 50 | 54 |
| Dimensions | Net Weight | | kg | 15.5 | 15.5 | 15.5 |
| | Net Dimensions (W × H × D) | | mm | 840 x 204 x 840 | 840 x 204 x 840 | 840 x 204 x 840 |
| Panel | Model Name | | - | PC4NUFMAN | PC4NUFMAN | PC4NUFMAN |
| Drain Pump | Drain Pump | | - | INCLUDED | INCLUDED | INCLUDED |
| | Max. Lifting Height/Displacement | | mm / litres/h | 750/24 | 750/24 | 750/24 |

Accessories



| Wireless Remote Controller | Simple Type Controller | Touch Controller | Wired Remote Controller | Wired Remote Controller | Wi-Fi Kit | External Room Sensor | Panel (Mandatory) |
|----------------------------|------------------------|------------------|-------------------------|-------------------------|-----------|----------------------|-------------------|
| AR-EH03E | MWR-SH00N | MWR-SH11N | MWR-WG00*N | MWR-WE13N | MIM-H04EN | MRW-TA | PC4NUFMAN |

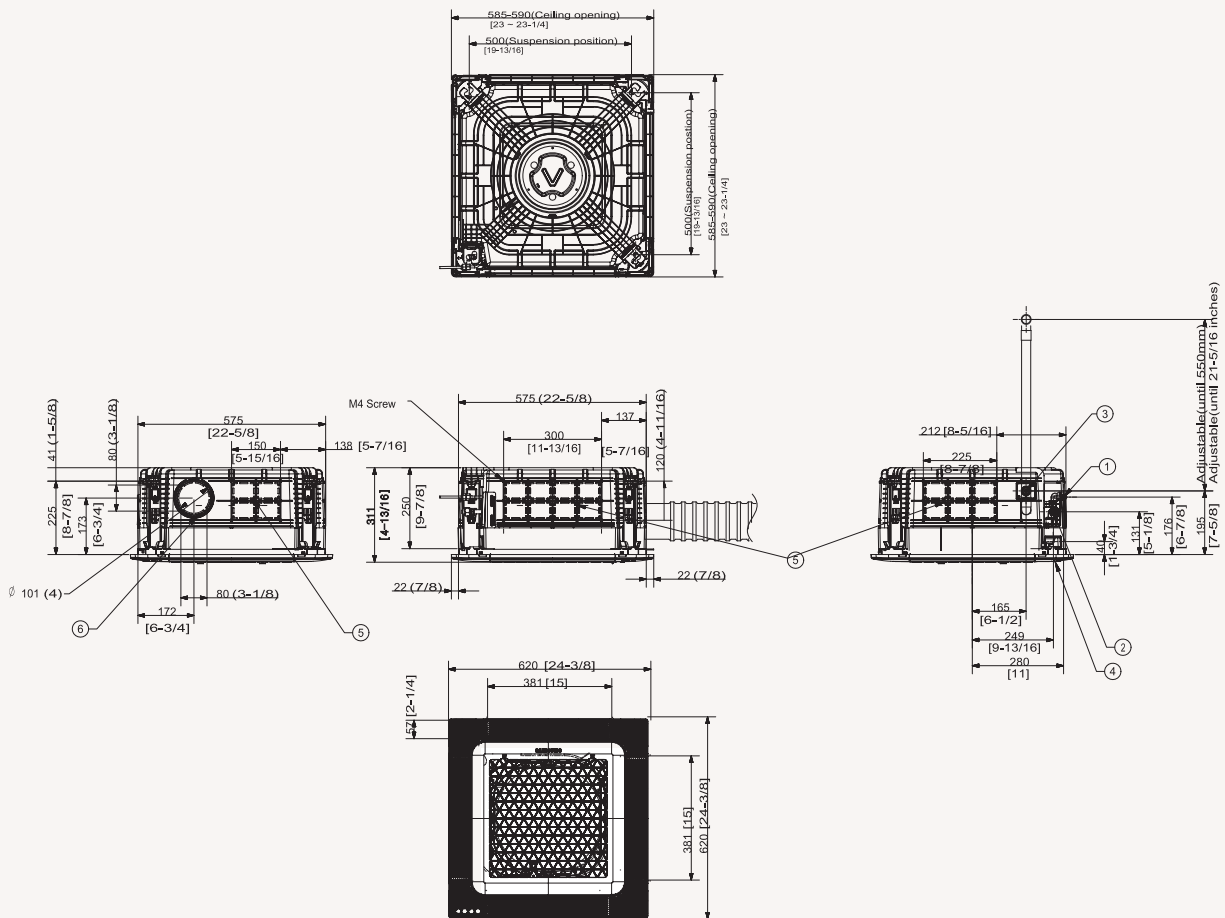


| AM090NN4DEH/EU | AM112NN4DEH/EU | AM128NN4DEH/EU | AM140NN4DEH/EU |
|----------------------------------------------|-------------------------|-------------------------|-------------------------|
| 1Φ, 2, 220–240 V, 50 Hz | 1Φ, 2, 220–240 V, 50 Hz | 1Φ, 2, 220–240 V, 50 Hz | 1Φ, 2, 220–240 V, 50 Hz |
| HP/HR | HP/HR | HP/HR | HP/HR |
| 9.0 | 11.2 | 12.8 | 14.0 |
| 10.0 | 12.5 | 13.8 | 16.0 |
| 62 | 78 | 73 | 89 |
| 62 | 78 | 73 | 89 |
| 0.43 | 0.55 | 0.51 | 0.62 |
| 0.43 | 0.55 | 0.51 | 0.62 |
| 0.6 | 0.9 | 0.8 | 0.9 |
| 15 | 15 | 15 | 15 |
| Turbo Fan | Turbo Fan | Turbo Fan | Turbo Fan |
| 1 | 1 | 1 | 1 |
| 19.5/18.0/16.5 | 26.0/24.0/22.0 | 28.0/26.0/23.0 | 30.0/28.0/26.0 |
| 325/300/275 | 433/400/367 | 467/433/383 | 500/467/433 |
| BLDC Motor | BLDC Motor | BLDC Motor | BLDC Motor |
| 65 x 1 | 65 x 1 | 97 x 1 | 97 x 1 |
| 9.52 | 9.52 | 9.52 | 9.52 |
| 3/8 | 3/8 | 3/8 | 3/8 |
| 15.88 | 15.88 | 15.88 | 15.88 |
| 5/8 | 5/8 | 5/8 | 5/8 |
| VP25 (OD 32, ID 25) | VP25 (OD 32, ID 25) | VP25 (OD 32, ID 25) | VP25 (OD 32, ID 25) |
| 0.75 | 0.75 | 0.75 | 0.75 |
| F1, F2 | F1, F2 | F1, F2 | F1, F2 |
| R410A(Fluorinated greenhouse gas, GWP=2,088) | | | |
| EEV INCLUDED | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED |
| 39.0/36.0/33.0 | 40.0/38.0/35.0 | 42.0/40.0/35.0 | 44.0/41.0/35.0 |
| 57 | 57 | 58 | 60 |
| 15.5 | 17.0 | 19.0 | 19.0 |
| 840 x 204 x 840 | 840 x 246 x 840 | 840 x 288 x 840 | 840 x 288 x 840 |
| PC4NUFMAN | PC4NUFMAN | PC4NUFMAN | PC4NUFMAN |
| INCLUDED | INCLUDED | INCLUDED | INCLUDED |
| 750/24 | 750/24 | 750/24 | 750/24 |

Technical Drawings

Wind-Free™ 4-Way Cassette

AM***NNNDEH/EU



| NO | Name | Description |
|----|--------------------------------------------|-----------------------|
| 1 | Liquid pipe connection | ø6.35 (1/4) |
| 2 | Gas pipe connection | ø12.70 (1/2) |
| 3 | Drain pipe connection | VP25 (OD 32, ID 25) |
| 4 | Power supply/communication wiring conduits | Use M4 Screw |
| 5 | Fresh air intake knock-out hole | ø10 [4], use M4 Screw |

Note: As for suspension bolt, please use M8-M10. (Procured at local site)

History

| Version | Modification | Date | Remark |
|---------|--------------------------------------------------------------|-------------|--------|
| Ver.1.0 | Released VRF Wind-Free 4Way Cassette for Global TDB (50Hz) | '18. 01. 26 | |
| Ver.1.1 | Added Wind-Free Performance Characteristics in Summary Table | '18. 05. 16 | |
| Ver.1.2 | Modified the Summary Table Error (P.38) | '18. 07. 11 | |
| Ver.1.3 | Updated the Summary Table page | '20.10. 20 | |
| Ver.1.4 | Updated the Summary Table page | '21.04.06 | |

Nomenclature

Indoor Unit

Model Name

| | | | | | | | | | |
|-----------|------------|----------|----------|----------|----------|----------|----------|---|-----------|
| AM | 015 | N | N | N | D | E | H | / | ** |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | Buyer |

(1) Classification

| | |
|-----------|-----|
| AM | DVM |
|-----------|-----|

(2) Capacity

| |
|-----------------------|
| X 100 Watt (3 digits) |
|-----------------------|

(3) Version

| | |
|----------|------|
| K | 2016 |
| M | 2017 |
| N | 2018 |

(4) Product Type

| | |
|----------|--------------|
| N | Indoor Unit |
| X | Outdoor Unit |

(5) Product Notation

| | |
|----------|------------------------------------|
| N | (Wind-Free) 4Way Cassette(600x600) |
| 4 | (Wind-Free) 4Way Cassette |

(6) Feature

| | |
|----------|---------|
| P | Premium |
| D | Deluxe |

(7) Rating Voltage















| | |
|----------|--------------------|
| E | 1Φ, 220~240V, 50Hz |
|----------|--------------------|

(8) Mode

| | |
|----------|-------------------|
| H | Heat Pump (R410A) |
|----------|-------------------|

Line-up

Indoor unit

| Model | Capacity (kW) | | | | | | | | | | | |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| | 1.5 | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 6.0 | 7.1 | 9.0 | 11.2 | 12.8 | 14.0 |
| Wind-Free 4Way CST (600x600) |  |  |  |  |  |  |  | | | | | |
| Wind-Free 4Way CST | | | | |  |  | |  |  |  |  |  |

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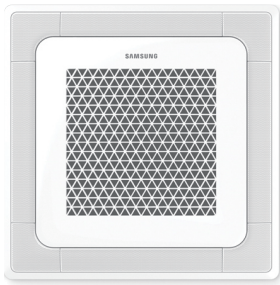
Wind-Free 4Way Cassette

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Features & Benefits

Stage a beautiful yet comfortable environment

With its newly improved design, Wind-Free 4Way Cassette supports a clean, aesthetically appealing atmosphere and adds a sense of sophistication to work and living spaces. Not only is this unit attractively designed, but it also uses advanced technologies to optimize comfort in any environment.



Wind-Free 4Way Cassette - Stylishly clean design

Aesthetic panel and display

Wind-Free 4Way Cassette offers two different pattern designs for the panel. The simple display design with rounded corners adds a chic sophistication to the interior.



The Samsung Wind-Free 4Way Cassette indoor air conditioning system delivers polish, comfort and efficiency with features such as:

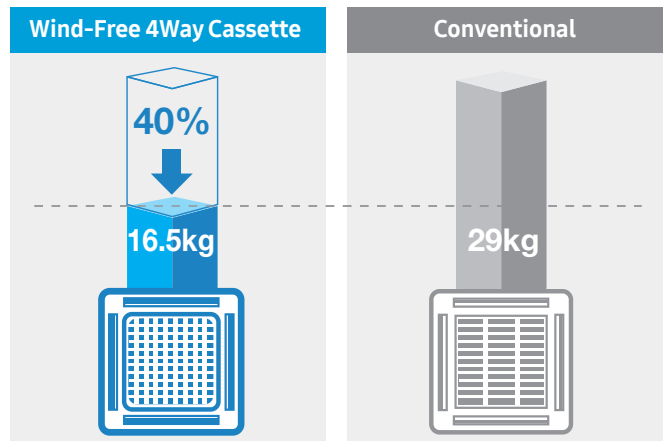
- **Stylishly clean design.** Add panache to interior spaces with a choice of clean, streamlined panel patterns in a lightweight build.
- **Robust operation.** Control the atmosphere perfectly with an advanced design for superior air flow and cooling/heating performance.
- **Low maintenance and simple installation.** Ease installation and minimize maintenance with a detachable, no-drip design.

Neat and clean design

The indoor Wind-Free 4Way Cassette boasts a smart design that promotes a neat and clean look. The completely hermetic blade structure keeps the indoor unit clean by preventing dust or other foreign substances from entering it. The internal parts of the indoor unit are also out of sight when the blade is shut, thus improving the unit's appearance.

Lightweight build

The Samsung Wind-Free 4Way Cassette indoor unit is now lighter in weight at 16.5kg is one of the lightest indoor units in the industry, about 40 percent lighter than conventional products.



*Based on 11.2kW

1. Specification

Wind-Free 4Way Cassette

| Model Name | | | | AM045NN4DEH/** | AM056NN4DEH/** | AM071NN4DEH/** | AM090NN4DEH/** |
|--------------------|-----------------------------|---------|-----------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Power Supply | | | Φ, #, V, Hz | 1,2,220-240,50 | 1,2,220-240,50 | 1,2,220-240,50 | 1,2,220-240,50 |
| Mode | | | - | HP/HR | HP/HR | HP/HR | HP/HR |
| Performance | Capacity | Cooling | kW | 4.50 | 5.60 | 7.10 | 9.00 |
| | | | Btu/h | 15,400 | 19,100 | 24,200 | 30,700 |
| | | Heating | kW | 5.00 | 6.30 | 8.00 | 10.00 |
| | | | Btu/h | 17,100 | 21,500 | 27,300 | 34,100 |
| Power | Power Input | Cooling | W | 32.00 | 32.00 | 45.00 | 62.00 |
| | | Heating | | 32.00 | 32.00 | 45.00 | 62.00 |
| | Current Input | Cooling | A | 0.22 | 0.22 | 0.31 | 0.43 |
| | | Heating | | 0.22 | 0.22 | 0.31 | 0.43 |
| | Current | MCA | A | 0.30 | 0.30 | 0.40 | 0.60 |
| | | MFA | | 15 | 15 | 15 | 15 |
| Heat exchanger | Type | | - | Fin & Tube | Fin & Tube | Fin & Tube | Fin & Tube |
| | Material | Fin | - | Al | Al | Al | Al |
| | | Tube | - | Cu | Cu | Cu | Cu |
| | Fin Treatment | | - | Green Hydrophile | Green Hydrophile | Green Hydrophile | Green Hydrophile |
| Fan | Type | Type | - | Turbo Fan | Turbo Fan | Turbo Fan | Turbo Fan |
| | Quantity | | ea | 1 | 1 | 1 | 1 |
| | Air Flow Rate | H/M/L | CMM | 14.5/13.5/12.5 | 15.0/14.0/13.0 | 17.0/15.5/14.5 | 19.5/18.0/16.5 |
| | | | l/s | 242/225/208 | 250/233/217 | 283/258/242 | 325/300/275 |
| Fan Motor | Model | | - | BLDC Motor | BLDC Motor | BLDC Motor | BLDC Motor |
| | Output x n | | W | 65 x 1 | 65 x 1 | 65 x 1 | 65 x 1 |
| Piping Connections | Liquid Pipe | | Type | Flare connection | Flare connection | Flare connection | Flare connection |
| | | | Φ,mm | 6.35 | 6.35 | 9.52 | 9.52 |
| | | | Φ, inch | 1/4" | 1/4" | 3/8" | 3/8" |
| | Gas Pipe | | Type | Flare connection | Flare connection | Flare connection | Flare connection |
| | | | Φ,mm | 12.70 | 12.70 | 15.88 | 15.88 |
| | | | Φ, inch | 1/2" | 1/2" | 5/8" | 5/8" |
| | Heat insulation | | - | Both liquid & gas pipes | Both liquid & gas pipes | Both liquid & gas pipes | Both liquid & gas pipes |
| | Drain Pipe | | Φ,mm | VP25 (OD 32,ID 25) | VP25 (OD 32,ID 25) | VP25 (OD 32,ID 25) | VP25 (OD 32,ID 25) |
| Wiring connections | Communication | Min. | mm ² | 0.75 | 0.75 | 0.75 | 0.75 |
| | | Remark | - | F1, F2 | F1, F2 | F1, F2 | F1, F2 |
| Refrigerant | Type | | - | R410A | R410A | R410A | R410A |
| | Electronic Expansion Valve | | - | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED |
| Sound | Sound Pressure | H/M/L | dB(A) | 33/32/30 | 33/32/30 | 35/34/33 | 39/36/33 |
| | Sound Power | Cooling | | 49 | 50 | 54 | 57 |
| Dimensions | Net Weight | | kg | 15.0 | 15.0 | 15.0 | 15.0 |
| | Shipping Weight | | kg | 18.5 | 18.5 | 18.5 | 18.5 |
| | Net Dimensions (W×H×D) | | mm | 840 x 204 x 840 | 840 x 204 x 840 | 840 x 204 x 840 | 840 x 204 x 840 |
| | Shipping Dimensions (W×H×D) | | mm | 898 x 275 x 898 | 898 x 275 x 898 | 898 x 275 x 898 | 898 x 275 x 898 |

1. Specification

Wind-Free 4Way Cassette

| Model Name | | | AM045NN4DEH/** | AM056NN4DEH/** | AM071NN4DEH/** | AM090NN4DEH/** |
|------------|------------------------------------|--------------|---------------------|---------------------|---------------------|---------------------|
| Panel | Model Name | - | PC4NUFMAN | PC4NUFMAN | PC4NUFMAN | PC4NUFMAN |
| | Type | - | Wind-Free Type | Wind-Free Type | Wind-Free Type | Wind-Free Type |
| | Material | - | HIPS | HIPS | HIPS | HIPS |
| | Color | - | White | White | White | White |
| | Net Weight | kg | 6.3 | 6.3 | 6.3 | 6.3 |
| | Shipping Weight | kg | 8.7 | 8.7 | 8.7 | 8.7 |
| | Net Dimensions (W×H×D) | mm | 950 x 64 x 950 | 950 x 64 x 950 | 950 x 64 x 950 | 950 x 64 x 950 |
| | Shipping Dimensions (W×H×D) | mm | 1,010 x 117 x 1,000 | 1,010 x 117 x 1,000 | 1,010 x 117 x 1,000 | 1,010 x 117 x 1,000 |
| Drain Pump | Drain Pump | - | INCLUDED | INCLUDED | INCLUDED | INCLUDED |
| | Max. lifting Height / Displacement | mm / Liter/h | 750 / 24 | 750 / 24 | 750 / 24 | 750 / 24 |

NOTE

- Specification may be subject to change without prior notice.
 - 1) Mode : HP(Heat Pump), HR(Heat Recovery)
 - 2) Capacities are based on (Equivalent refrigerant piping 7.5m, Level differences 0m);
 - Cooling : Indoor temperature 27°C DB, 19°C WB / Outdoor temperature 35°C DB, 24°C WB
 - Heating : Indoor temperature 20°C DB, 15°C WB / Outdoor temperature 7°C DB, 6°C WB
 - 3) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 - 4) These products contain R410A (GWP=2,088) which is fluorinated greenhouse gas.
 - 5) Select wire size based on the value of MCA

1. Specification

Wind-Free 4Way Cassette

| Model Name | | | | AM112NN4DEH/** | AM128NN4DEH/** | AM140NN4DEH/** |
|--------------------|-----------------------------|---------|--------------------|-------------------------|-------------------------|-------------------------|
| Power Supply | | | Φ, #, V, Hz | 1,2,220-240,50 | 1,2,220-240,50 | 1,2,220-240,50 |
| Mode | | | - | HP/HR | HP/HR | HP/HR |
| Performance | Capacity | Cooling | kW | 11.20 | 12.80 | 14.00 |
| | | | Btu/h | 38,200 | 43,700 | 47,800 |
| | | Heating | kW | 12.50 | 13.80 | 16.00 |
| | | | Btu/h | 42,700 | 47,100 | 54,600 |
| Power | Power Input | Cooling | W | 78.00 | 73.00 | 89.00 |
| | | Heating | | 78.00 | 73.00 | 89.00 |
| | Current Input | Cooling | A | 0.55 | 0.51 | 0.62 |
| | | Heating | | 0.55 | 0.51 | 0.62 |
| | Current | MCA | A | 0.70 | 0.70 | 0.80 |
| | | MFA | | 15 | 15 | 15 |
| Heat exchanger | Type | | - | Fin & Tube | Fin & Tube | Fin & Tube |
| | Material | Fin | - | Al | Al | Al |
| | | Tube | - | Cu | Cu | Cu |
| | Fin Treatment | | - | Green Hydrophile | Green Hydrophile | Green Hydrophile |
| Fan | Type | Type | - | Turbo Fan | Turbo Fan | Turbo Fan |
| | Quantity | | ea | 1 | 1 | 1 |
| | Air Flow Rate | H/M/L | CMM | 26.0/24.0/22.0 | 28.0/26.0/23.0 | 30.0/28.0/26.0 |
| | | | l/s | 433/400/367 | 467/433/383 | 500/467/433 |
| Fan Motor | Model | | - | BLDC Motor | BLDC Motor | BLDC Motor |
| | Output x n | | W | 65 x 1 | 97 x 1 | 97 x 1 |
| Piping Connections | Liquid Pipe | | Type | Flare connection | Flare connection | Flare connection |
| | | | Φ,mm | 9.52 | 9.52 | 9.52 |
| | | | Φ, inch | 3/8" | 3/8" | 3/8" |
| | Gas Pipe | | Type | Flare connection | Flare connection | Flare connection |
| | | | Φ,mm | 15.88 | 15.88 | 15.88 |
| | | | Φ, inch | 5/8" | 5/8" | 5/8" |
| | Heat insulation | | - | Both liquid & gas pipes | Both liquid & gas pipes | Both liquid & gas pipes |
| Drain Pipe | | Φ,mm | VP25 (OD 32,ID 25) | VP25 (OD 32,ID 25) | VP25 (OD 32,ID 25) | |
| Wiring connections | Communication | Min. | mm ² | 0.75 | 0.75 | 0.75 |
| | | Remark | - | F1, F2 | F1, F2 | F1, F2 |
| Refrigerant | Type | | - | R410A | R410A | R410A |
| | Electronic Expansion Valve | | - | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED |
| Sound | Sound Pressure | H/M/L | dB(A) | 40/38/35 | 42/40/35 | 44/41/35 |
| | Sound Power | Cooling | | 57 | 58 | 60 |
| Dimensions | Net Weight | | kg | 16.5 | 18.5 | 18.5 |
| | Shipping Weight | | kg | 20 | 22.5 | 22.5 |
| | Net Dimensions (W×H×D) | | mm | 840 x 246 x 840 | 840 x 288 x 840 | 840 x 288 x 840 |
| | Shipping Dimensions (W×H×D) | | mm | 898 x 316 x 898 | 898 x 357 x 898 | 898 x 357 x 898 |

1. Specification

Wind-Free 4Way Cassette

| Model Name | | | AM112NN4DEH/** | AM128NN4DEH/** | AM140NN4DEH/** |
|------------|------------------------------------|--------------|---------------------|---------------------|---------------------|
| Panel | Model Name | - | PC4NUFMAN | PC4NUFMAN | PC4NUFMAN |
| | Type | - | Wind-Free Type | Wind-Free Type | Wind-Free Type |
| | Material | - | HIPS | HIPS | HIPS |
| | Color | - | White | White | White |
| | Net Weight | kg | 6.3 | 6.3 | 6.3 |
| | Shipping Weight | kg | 8.7 | 8.7 | 8.7 |
| | Net Dimensions (W×H×D) | mm | 950 x 64 x 950 | 950 x 64 x 950 | 950 x 64 x 950 |
| | Shipping Dimensions (W×H×D) | mm | 1,010 x 117 x 1,000 | 1,010 x 117 x 1,000 | 1,010 x 117 x 1,000 |
| Drain Pump | Drain Pump | - | INCLUDED | INCLUDED | INCLUDED |
| | Max. lifting Height / Displacement | mm / Liter/h | 750 / 24 | 750 / 24 | 750 / 24 |

NOTE

- Specification may be subject to change without prior notice.
 - 1) Mode : HP(Heat Pump), HR(Heat Recovery)
 - 2) Capacities are based on (Equivalent refrigerant piping 7.5m, Level differences 0m);
 - Cooling : Indoor temperature 27°C DB, 19°C WB / Outdoor temperature 35°C DB, 24°C WB
 - Heating : Indoor temperature 20°C DB, 15°C WB / Outdoor temperature 7°C DB, 6°C WB
 - 3) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 - 4) These products contain R410A (GWP=2,088) which is fluorinated greenhouse gas.
 - 5) Select wire size based on the value of MCA

2. Summary Table

Wind-Free 4Way Cassette

Performance Characteristics

| Model Code | Net Weight (kg) | Fan Speed | Nominal Capacity (kW) | | | Airflow (CMM) | Sound Pressure (dBA) | Sound Power (dBA) |
|----------------|-----------------|-----------|-----------------------|----------|---------|---------------|----------------------|-------------------|
| | | | Cooling | Sensible | Heating | | | |
| AM045NN4DEH/** | 15.0 | High | 4.5 | 3.1 | 5.0 | 14.5 | 33 | 49 |
| | | Mid | 4.2 | 2.9 | 4.8 | 13.5 | 32 | - |
| | | Low | 4.0 | 2.7 | 4.6 | 12.5 | 30 | - |
| | | W/Free | 2.2 | 1.8 | - | 8.0 | 30 | - |
| AM056NN4DEH/** | 15.0 | High | 5.6 | 3.9 | 6.3 | 15.0 | 33 | 50 |
| | | Mid | 5.3 | 3.7 | 6.1 | 14.0 | 32 | - |
| | | Low | 4.9 | 3.4 | 5.9 | 13.0 | 30 | - |
| | | W/Free | 2.6 | 2.2 | - | 8.1 | 30 | - |
| AM071NN4DEH/** | 15.0 | High | 7.1 | 5.0 | 8.0 | 17.0 | 35 | 54 |
| | | Mid | 6.6 | 4.6 | 7.6 | 15.5 | 34 | - |
| | | Low | 6.2 | 4.3 | 7.4 | 14.5 | 33 | - |
| | | W/Free | 3.3 | 2.7 | - | 8.2 | 33 | - |
| AM090NN4DEH/** | 15.0 | High | 9.0 | 6.3 | 10.0 | 19.5 | 39 | 57 |
| | | Mid | 8.4 | 5.8 | 9.6 | 18.0 | 36 | - |
| | | Low | 7.8 | 5.4 | 9.2 | 16.5 | 33 | - |
| | | W/Free | 4.1 | 3.4 | - | 8.5 | 33 | - |
| AM112NN4DEH/** | 16.5 | High | 11.2 | 7.9 | 12.5 | 26.0 | 40 | 57 |
| | | Mid | 10.5 | 7.4 | 12.0 | 24.0 | 38 | - |
| | | Low | 9.7 | 6.7 | 11.5 | 22.0 | 35 | - |
| | | W/Free | 5.0 | 4.2 | - | 11.0 | 35 | - |
| AM128NN4DEH/** | 18.5 | High | 12.8 | 9.1 | 13.8 | 28.0 | 42 | 58 |
| | | Mid | 12.0 | 8.5 | 13.3 | 26.0 | 40 | - |
| | | Low | 10.8 | 7.6 | 12.5 | 23.0 | 35 | - |
| | | W/Free | 5.8 | 4.8 | - | 11.2 | 35 | - |
| AM140NN4DEH/** | 18.5 | High | 14.0 | 9.6 | 16.0 | 30.0 | 44 | 60 |
| | | Mid | 13.2 | 9.0 | 15.5 | 28.0 | 41 | - |
| | | Low | 12.4 | 8.4 | 14.9 | 26.0 | 35 | - |
| | | W/Free | 6.2 | 5.2 | - | 11.5 | 35 | - |

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

| Indoor Unit | Power Supply (Ø, #, V, Hz) | Power Input (W) | Current Input (A) | MCA (A) | MFA (A) | FLA (A) |
|----------------|----------------------------|-----------------|-------------------|---------|---------|---------|
| AM045NN4DEH/** | 1,2,220~240,50 | 32.0 | 0.22 | 0.30 | 15 | 0.23 |
| AM056NN4DEH/** | 1,2,220~240,50 | 32.0 | 0.22 | 0.30 | 15 | 0.23 |
| AM071NN4DEH/** | 1,2,220~240,50 | 45.0 | 0.31 | 0.40 | 15 | 0.33 |
| AM090NN4DEH/** | 1,2,220~240,50 | 62.0 | 0.43 | 0.60 | 15 | 0.45 |
| AM112NN4DEH/** | 1,2,220~240,50 | 78.0 | 0.55 | 0.70 | 15 | 0.58 |
| AM128NN4DEH/** | 1,2,220~240,50 | 73.0 | 0.51 | 0.70 | 15 | 0.53 |
| AM140NN4DEH/** | 1,2,220~240,50 | 89.0 | 0.62 | 0.80 | 15 | 0.65 |

NOTE

- MCA : Minimum circuit amperes
- MFA : Maximum fuse amperes
- FLA : Full load amperes
- Select wire size based on the value of MCA

3. Capacity Table

Wind-Free 4Way Cassette

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

| Combination, % (Capacity index) | Outdoor temperature (°C, DB) | Indoor temperature (°C, WB) | | | | | | | | | | | | | |
|------------------------------------|---------------------------------|-----------------------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|
| | | 20 (°C, DB) | | 23 (°C, DB) | | 26 (°C, DB) | | 27 (°C, DB) | | 28 (°C, DB) | | 30 (°C, DB) | | 32 (°C, DB) | |
| | | 14 (°C, WB) | | 16 (°C, WB) | | 18 (°C, WB) | | 19 (°C, WB) | | 20 (°C, WB) | | 22 (°C, WB) | | 24 (°C, WB) | |
| | | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 045 | 10 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.4 | 2.9 |
| | 12 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.4 | 2.9 |
| | 14 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.4 | 2.9 |
| | 16 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 18 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 20 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 21 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 23 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 25 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 27 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 29 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 31 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 33 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| | 35 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.1 | 5.3 | 2.8 |
| 37 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.6 | 3.0 | 4.9 | 3.0 | 5.2 | 2.7 | |
| 39 | 3.1 | 2.7 | 3.7 | 2.8 | 4.2 | 3.0 | 4.5 | 3.1 | 4.6 | 3.0 | 4.9 | 3.0 | 5.1 | 2.6 | |
| 056 | 10 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.3 | 3.9 | 6.7 | 3.7 |
| | 12 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.3 | 3.9 | 6.7 | 3.7 |
| | 14 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.7 | 3.7 |
| | 16 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 18 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 20 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 21 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 23 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 25 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 27 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 29 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 31 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 33 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| | 35 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.6 |
| 37 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.5 | |
| 39 | 3.9 | 3.2 | 4.6 | 3.5 | 5.3 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.2 | 3.8 | 6.6 | 3.4 | |
| 071 | 10 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 8.0 | 5.1 | 8.5 | 4.8 |
| | 12 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.5 | 4.8 |
| | 14 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.5 | 4.8 |
| | 16 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 18 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 20 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 21 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 23 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 25 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 27 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 29 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 31 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 33 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| | 35 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.4 | 5.0 | 7.9 | 5.0 | 8.4 | 4.8 |
| 37 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.3 | 4.9 | 7.8 | 4.9 | 8.2 | 4.7 | |
| 39 | 4.9 | 4.0 | 5.8 | 4.5 | 6.7 | 4.8 | 7.1 | 5.0 | 7.3 | 4.9 | 7.7 | 4.8 | 8.1 | 4.6 | |

3. Capacity Table

Wind-Free 4Way Cassette

| Combination, % (Capacity index) | Outdoor temperature (°C, DB) | Indoor temperature (°C, WB) | | | | | | | | | | | | | |
|------------------------------------|---------------------------------|-----------------------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|------|-------------|-----|
| | | 20 (°C, DB) | | 23 (°C, DB) | | 26 (°C, DB) | | 27 (°C, DB) | | 28 (°C, DB) | | 30 (°C, DB) | | 32 (°C, DB) | |
| | | 14 (°C, WB) | | 16 (°C, WB) | | 18 (°C, WB) | | 19 (°C, WB) | | 20 (°C, WB) | | 22 (°C, WB) | | 24 (°C, WB) | |
| | | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 090 | 10 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.4 | 6.3 | 10.1 | 6.3 | 10.8 | 6.3 |
| | 12 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.4 | 6.3 | 10.1 | 6.3 | 10.8 | 6.3 |
| | 14 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.7 | 6.2 |
| | 16 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.7 | 6.2 |
| | 18 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 20 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 21 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 23 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 25 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 27 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 29 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 31 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 33 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| | 35 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 10.0 | 6.2 | 10.6 | 6.1 |
| 37 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.3 | 9.3 | 6.3 | 9.9 | 6.1 | 10.4 | 6.0 | |
| 39 | 6.2 | 5.2 | 7.3 | 5.7 | 8.4 | 6.3 | 9.0 | 6.4 | 9.2 | 6.2 | 9.7 | 6.0 | 10.2 | 5.9 | |

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

Wind-Free 4Way Cassette

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

| Combination, % (Capacity index) | Outdoor temperature (°C, DB) | Indoor temperature (°C, WB) | | | | | | | | | | | | | |
|------------------------------------|------------------------------------|-----------------------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|-----|
| | | 20 (°C, DB) | | 23 (°C, DB) | | 26 (°C, DB) | | 27 (°C, DB) | | 28 (°C, DB) | | 30 (°C, DB) | | 32 (°C, DB) | |
| | | 14 (°C, WB) | | 16 (°C, WB) | | 18 (°C, WB) | | 19 (°C, WB) | | 20 (°C, WB) | | 22 (°C, WB) | | 24 (°C, WB) | |
| | | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 112 | 10 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.5 | 7.9 | 13.4 | 7.9 |
| | 12 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.5 | 7.9 | 13.4 | 7.9 |
| | 14 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.5 | 7.9 | 13.3 | 7.8 |
| | 16 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.5 | 7.9 | 13.3 | 7.8 |
| | 18 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 20 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 21 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 23 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 25 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 27 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 29 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 31 | 7.7 | 6.4 | 9.1 | 7.1 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 33 | 7.7 | 6.3 | 9.1 | 7.0 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| | 35 | 7.7 | 6.3 | 9.1 | 7.0 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.4 | 7.9 | 13.2 | 7.7 |
| 37 | 7.7 | 6.3 | 9.1 | 7.0 | 10.5 | 7.8 | 11.2 | 7.9 | 11.6 | 7.9 | 12.3 | 7.8 | 13.0 | 7.6 | |
| 39 | 7.7 | 6.3 | 9.1 | 7.0 | 10.5 | 7.8 | 11.2 | 8.0 | 11.5 | 7.8 | 12.1 | 7.7 | 12.7 | 7.5 | |
| 128 | 10 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.3 | 9.1 | 15.4 | 9.1 |
| | 12 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.3 | 9.1 | 15.3 | 9.0 |
| | 14 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.3 | 9.1 | 15.3 | 9.0 |
| | 16 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.2 | 8.9 |
| | 18 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 20 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 21 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 23 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 25 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 27 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 29 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 31 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 33 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| | 35 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.3 | 9.1 | 14.2 | 9.0 | 15.1 | 8.8 |
| 37 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.1 | 13.2 | 9.0 | 14.0 | 8.9 | 14.9 | 8.7 | |
| 39 | 8.8 | 7.3 | 10.4 | 8.1 | 12.0 | 9.0 | 12.8 | 9.2 | 13.1 | 8.9 | 13.8 | 8.8 | 14.5 | 8.6 | |
| 140 | 10 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.6 | 9.6 | 15.7 | 9.5 | 16.8 | 9.7 |
| | 12 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.6 | 9.6 | 16.7 | 9.6 |
| | 14 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.6 | 9.6 | 16.7 | 9.6 |
| | 16 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.6 | 9.6 | 16.6 | 9.5 |
| | 18 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.6 | 9.5 |
| | 20 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 21 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 23 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 25 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 27 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 29 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 31 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 33 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| | 35 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.5 | 9.5 | 16.5 | 9.4 |
| 37 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.5 | 9.6 | 15.4 | 9.4 | 16.3 | 9.2 | |
| 39 | 9.7 | 7.7 | 11.4 | 8.5 | 13.1 | 9.4 | 14.0 | 9.6 | 14.4 | 9.4 | 15.1 | 9.3 | 15.9 | 9.0 | |

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

Wind-Free 4Way Cassette

Heating

TC : Total Capacity (kW)

| Combination, % (Capacity index) | Outdoor temperature (°C, DB) | | Indoor temperature (°C, WB) | | | | |
|------------------------------------|------------------------------|-----|-----------------------------|----------|----------|----------|----------|
| | | | 16.0 | 18.0 | 20.0 | 22.0 | 24.0 |
| | DB | WB | TC kW | TC kW | TC kW | TC kW | TC kW |
| 045 | -20 | -21 | 3.1 | 3.1 | 2.9 | 2.9 | 2.9 |
| | -17 | -18 | 3.2 | 3.2 | 3.1 | 3.0 | 3.0 |
| | -15 | -16 | 3.3 | 3.3 | 3.2 | 3.1 | 3.0 |
| | -12 | -13 | 3.5 | 3.4 | 3.4 | 3.3 | 3.2 |
| | -10 | -11 | 3.7 | 3.6 | 3.6 | 3.5 | 3.5 |
| | -7 | -8 | 3.9 | 3.8 | 3.8 | 3.7 | 3.6 |
| | -5 | -6 | 4.1 | 4.0 | 4.0 | 3.9 | 3.7 |
| | -3 | -4 | 4.3 | 4.2 | 4.2 | 4.0 | 3.9 |
| | 0 | -1 | 4.5 | 4.4 | 4.4 | 4.2 | 4.0 |
| | 3 | 2.2 | 4.7 | 4.7 | 4.6 | 4.4 | 4.2 |
| | 5 | 4.1 | 4.9 | 4.9 | 4.8 | 4.5 | 4.2 |
| | 7 | 6 | 5.1 | 5.1 | 5.0 | 4.6 | 4.2 |
| | 9 | 7.9 | 5.3 | 5.2 | 5.0 | 4.6 | 4.2 |
| | 11 | 9.8 | 5.5 | 5.2 | 5.0 | 4.6 | 4.2 |
| | 13 | 12 | 5.6 | 5.3 | 5.0 | 4.6 | 4.2 |
| 15 | 14 | 5.8 | 5.4 | 5.0 | 4.6 | 4.2 | |
| 056 | -20 | -21 | 3.9 | 3.8 | 3.8 | 3.7 | 3.7 |
| | -17 | -18 | 4.0 | 4.0 | 3.9 | 3.8 | 3.8 |
| | -15 | -16 | 4.2 | 4.1 | 4.0 | 3.9 | 3.8 |
| | -12 | -13 | 4.4 | 4.3 | 4.2 | 4.2 | 4.1 |
| | -10 | -11 | 4.6 | 4.6 | 4.5 | 4.4 | 4.4 |
| | -7 | -8 | 4.9 | 4.8 | 4.8 | 4.7 | 4.5 |
| | -5 | -6 | 5.2 | 5.1 | 5.0 | 4.9 | 4.7 |
| | -3 | -4 | 5.4 | 5.3 | 5.3 | 5.1 | 4.9 |
| | 0 | -1 | 5.7 | 5.6 | 5.5 | 5.3 | 5.0 |
| | 3 | 2.2 | 5.9 | 5.9 | 5.8 | 5.6 | 5.3 |
| | 5 | 4.1 | 6.2 | 6.1 | 6.0 | 5.7 | 5.3 |
| | 7 | 6 | 6.5 | 6.4 | 6.3 | 5.8 | 5.3 |
| | 9 | 7.9 | 6.7 | 6.5 | 6.3 | 5.8 | 5.3 |
| | 11 | 9.8 | 6.9 | 6.6 | 6.3 | 5.8 | 5.3 |
| | 13 | 12 | 7.1 | 6.7 | 6.3 | 5.8 | 5.3 |
| 15 | 14 | 7.3 | 6.8 | 6.3 | 5.8 | 5.3 | |
| 071 | -20 | -21 | 4.9 | 4.9 | 4.8 | 4.7 | 4.7 |
| | -17 | -18 | 5.1 | 5.0 | 4.9 | 4.8 | 4.8 |
| | -15 | -16 | 5.3 | 5.2 | 5.1 | 4.9 | 4.8 |
| | -12 | -13 | 5.6 | 5.5 | 5.4 | 5.3 | 5.2 |
| | -10 | -11 | 5.9 | 5.8 | 5.7 | 5.6 | 5.6 |
| | -7 | -8 | 6.2 | 6.1 | 6.0 | 5.9 | 5.8 |
| | -5 | -6 | 6.5 | 6.5 | 6.4 | 6.2 | 6.0 |
| | -3 | -4 | 6.9 | 6.8 | 6.7 | 6.4 | 6.2 |
| | 0 | -1 | 7.2 | 7.1 | 7.0 | 6.7 | 6.4 |
| | 3 | 2.2 | 7.6 | 7.5 | 7.3 | 7.1 | 6.8 |
| | 5 | 4.1 | 7.9 | 7.8 | 7.7 | 7.2 | 6.8 |
| | 7 | 6 | 8.2 | 8.1 | 8.0 | 7.4 | 6.8 |
| | 9 | 7.9 | 8.5 | 8.2 | 8.0 | 7.4 | 6.8 |
| | 11 | 9.8 | 8.7 | 8.4 | 8.0 | 7.4 | 6.8 |
| | 13 | 12 | 9.0 | 8.5 | 8.0 | 7.4 | 6.8 |
| 15 | 14 | 9.2 | 8.6 | 8.0 | 7.4 | 6.8 | |

3. Capacity Table

Wind-Free 4Way Cassette

| Combination, % (Capacity index) | Outdoor temperature (°C, DB) | | Indoor temperature (°C, WB) | | | | |
|------------------------------------|------------------------------|------|-----------------------------|------|------|------|------|
| | | | 16.0 | 18.0 | 20.0 | 22.0 | 24.0 |
| | | | TC | TC | TC | TC | TC |
| | DB | WB | kW | kW | kW | kW | kW |
| 090 | -20 | -21 | 6.0 | 6.0 | 5.9 | 5.8 | 5.8 |
| | -17 | -18 | 6.3 | 6.3 | 6.1 | 6.0 | 5.9 |
| | -15 | -16 | 6.7 | 6.5 | 6.3 | 6.1 | 6.0 |
| | -12 | -13 | 7.0 | 6.9 | 6.7 | 6.6 | 6.5 |
| | -10 | -11 | 7.3 | 7.2 | 7.1 | 7.0 | 7.0 |
| | -7 | -8 | 7.8 | 7.7 | 7.6 | 7.4 | 7.2 |
| | -5 | -6 | 8.2 | 8.1 | 8.0 | 7.7 | 7.5 |
| | -3 | -4 | 8.6 | 8.5 | 8.4 | 8.1 | 7.7 |
| | 0 | -1 | 9.0 | 8.9 | 8.8 | 8.4 | 8.0 |
| | 3 | 2.2 | 9.4 | 9.3 | 9.2 | 8.8 | 8.4 |
| | 5 | 4.1 | 9.9 | 9.7 | 9.6 | 9.0 | 8.4 |
| | 7 | 6 | 10.3 | 10.1 | 10.0 | 9.2 | 8.4 |
| | 9 | 7.9 | 10.6 | 10.3 | 10.0 | 9.2 | 8.4 |
| | 11 | 9.8 | 10.9 | 10.5 | 10.0 | 9.2 | 8.4 |
| 13 | 12 | 11.2 | 10.6 | 10.0 | 9.2 | 8.4 | |
| 15 | 14 | 11.6 | 10.8 | 10.0 | 9.2 | 8.4 | |

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

Wind-Free 4Way Cassette

Heating

TC : Total Capacity (kW)

| Combination, % (Capacity index) | Outdoor temperature (°C, DB) | | Indoor temperature (°C, WB) | | | | |
|------------------------------------|------------------------------|------|-----------------------------|----------|----------|----------|----------|
| | | | 16.0 | 18.0 | 20.0 | 22.0 | 24.0 |
| | DB | WB | TC kW | TC kW | TC kW | TC kW | TC kW |
| 112 | -20 | -21 | 7.4 | 7.4 | 7.3 | 7.3 | 7.3 |
| | -17 | -18 | 8.0 | 7.8 | 7.6 | 7.5 | 7.4 |
| | -15 | -16 | 8.4 | 8.1 | 7.9 | 7.7 | 7.5 |
| | -12 | -13 | 8.8 | 8.6 | 8.4 | 8.2 | 8.1 |
| | -10 | -11 | 9.2 | 9.0 | 8.9 | 8.8 | 8.7 |
| | -7 | -8 | 9.7 | 9.6 | 9.4 | 9.2 | 9.0 |
| | -5 | -6 | 10.2 | 10.1 | 9.9 | 9.6 | 9.3 |
| | -3 | -4 | 10.7 | 10.6 | 10.5 | 10.1 | 9.7 |
| | 0 | -1 | 11.3 | 11.1 | 11.1 | 10.5 | 10.0 |
| | 3 | 2.2 | 11.8 | 11.6 | 11.5 | 11.0 | 10.6 |
| | 5 | 4.1 | 12.3 | 12.2 | 12.0 | 11.3 | 10.6 |
| | 7 | 6 | 12.9 | 12.7 | 12.5 | 11.5 | 10.6 |
| | 9 | 7.9 | 13.3 | 12.9 | 12.5 | 11.5 | 10.6 |
| | 11 | 9.8 | 13.7 | 13.1 | 12.5 | 11.5 | 10.6 |
| | 13 | 12 | 14.0 | 13.3 | 12.5 | 11.5 | 10.6 |
| 15 | 14 | 14.4 | 13.5 | 12.5 | 11.5 | 10.6 | |
| 128 | -20 | -21 | 8.1 | 8.1 | 8.0 | 8.0 | 8.0 |
| | -17 | -18 | 8.7 | 8.5 | 8.4 | 8.3 | 8.1 |
| | -15 | -16 | 9.2 | 9.0 | 8.7 | 8.5 | 8.2 |
| | -12 | -13 | 9.7 | 9.5 | 9.3 | 9.1 | 8.9 |
| | -10 | -11 | 10.1 | 10.0 | 9.9 | 9.7 | 9.6 |
| | -7 | -8 | 10.7 | 10.6 | 10.4 | 10.2 | 10.0 |
| | -5 | -6 | 11.3 | 11.1 | 11.0 | 10.7 | 10.3 |
| | -3 | -4 | 11.9 | 11.7 | 11.5 | 11.1 | 10.7 |
| | 0 | -1 | 12.4 | 12.3 | 12.1 | 11.6 | 11.0 |
| | 3 | 2.2 | 13.0 | 12.9 | 12.7 | 12.2 | 11.7 |
| | 5 | 4.1 | 13.6 | 13.4 | 13.2 | 12.4 | 11.7 |
| | 7 | 6 | 14.2 | 14.0 | 13.8 | 12.7 | 11.7 |
| | 9 | 7.9 | 14.6 | 14.2 | 13.8 | 12.7 | 11.7 |
| | 11 | 9.8 | 15.1 | 14.4 | 13.8 | 12.7 | 11.7 |
| | 13 | 12 | 15.5 | 14.7 | 13.8 | 12.7 | 11.7 |
| 15 | 14 | 15.9 | 14.9 | 13.8 | 12.7 | 11.7 | |
| 140 | -20 | -21 | 9.5 | 9.5 | 9.4 | 9.4 | 9.3 |
| | -17 | -18 | 10.1 | 9.9 | 9.6 | 9.6 | 9.4 |
| | -15 | -16 | 10.7 | 10.4 | 10.1 | 9.8 | 9.5 |
| | -12 | -13 | 11.2 | 11.0 | 10.8 | 10.6 | 10.3 |
| | -10 | -11 | 11.7 | 11.6 | 11.4 | 11.3 | 11.1 |
| | -7 | -8 | 12.4 | 12.2 | 12.1 | 11.8 | 11.5 |
| | -5 | -6 | 13.1 | 12.9 | 12.7 | 12.3 | 12.0 |
| | -3 | -4 | 13.8 | 13.6 | 13.4 | 12.9 | 12.4 |
| | 0 | -1 | 14.4 | 14.2 | 14.0 | 13.4 | 12.8 |
| | 3 | 2.2 | 15.1 | 14.9 | 14.7 | 14.1 | 13.5 |
| | 5 | 4.1 | 15.8 | 15.6 | 15.3 | 14.4 | 13.5 |
| | 7 | 6 | 16.5 | 16.2 | 16.0 | 14.8 | 13.5 |
| | 9 | 7.9 | 17.0 | 16.5 | 16.0 | 14.8 | 13.5 |
| | 11 | 9.8 | 17.5 | 16.7 | 16.0 | 14.8 | 13.5 |
| | 13 | 12 | 18.0 | 17.0 | 16.0 | 14.8 | 13.5 |
| 15 | 14 | 18.5 | 17.2 | 16.0 | 14.8 | 13.5 | |

NOTE

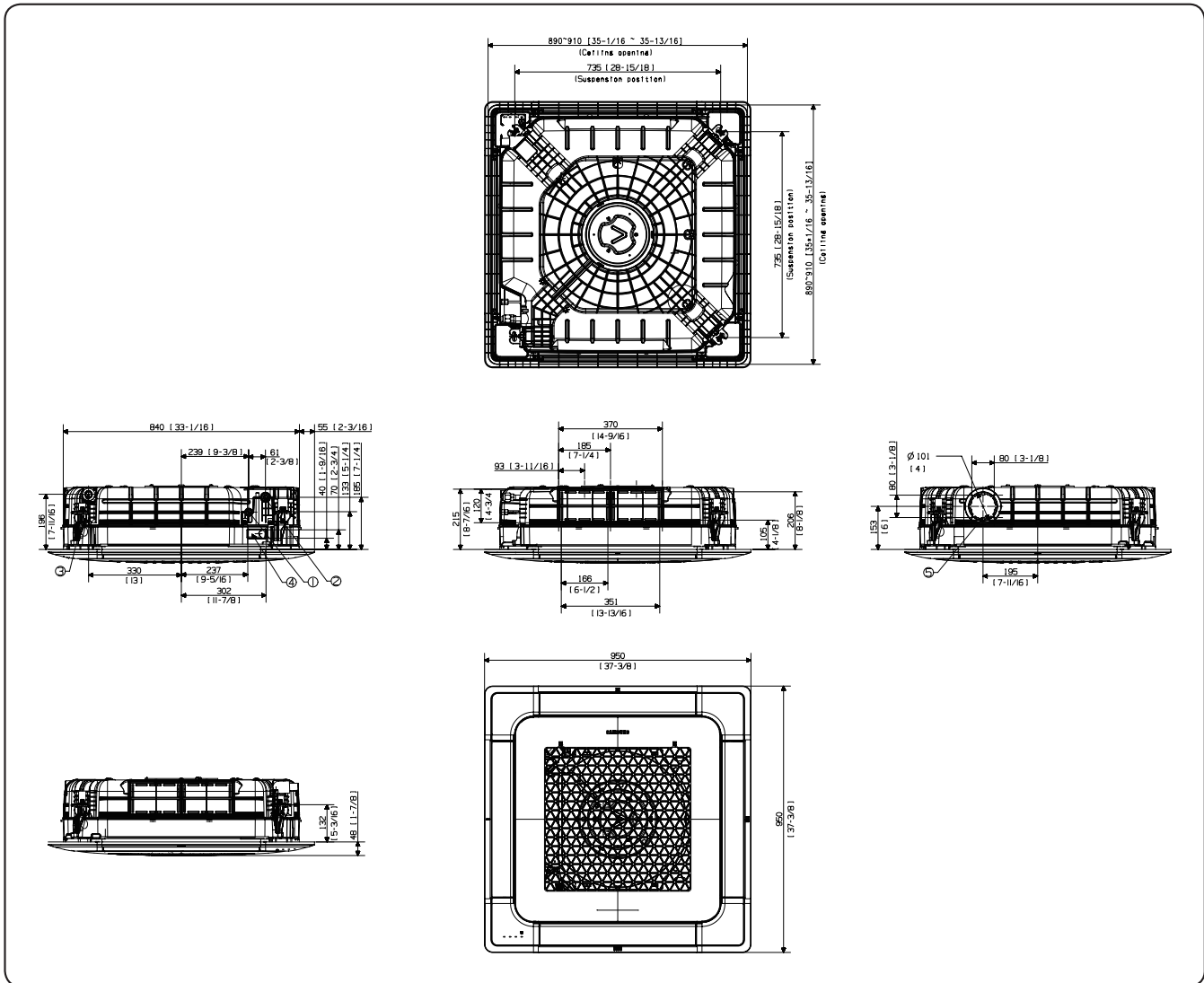
- The performance table shows the average value of each conditions.

4. Dimensional Drawing

Wind-Free 4Way Cassette

AM045/056/071/090NN4DEH/**

Units : mm [inches]



| No. | Name | Description | |
|-----|---------------------------------------------|-----------------------|--------------------|
| | | AM045/056NN4DEH/** | AM071/090NN4DEH/** |
| 1 | Liquid pipe connection | Φ6.35(1/4) | Φ9.52(3/8) |
| 2 | Gas pipe connection | Φ12.7(1/2) | Φ15.88(5/8) |
| 3 | Drain pipe connection | VP-25(OD32, ID25) | |
| 4 | Power supply & Communication wiring conduit | - | |
| 5 | Fresh air intake knockout hole | Φ10[4] , Use M4 Screw | |

NOTE

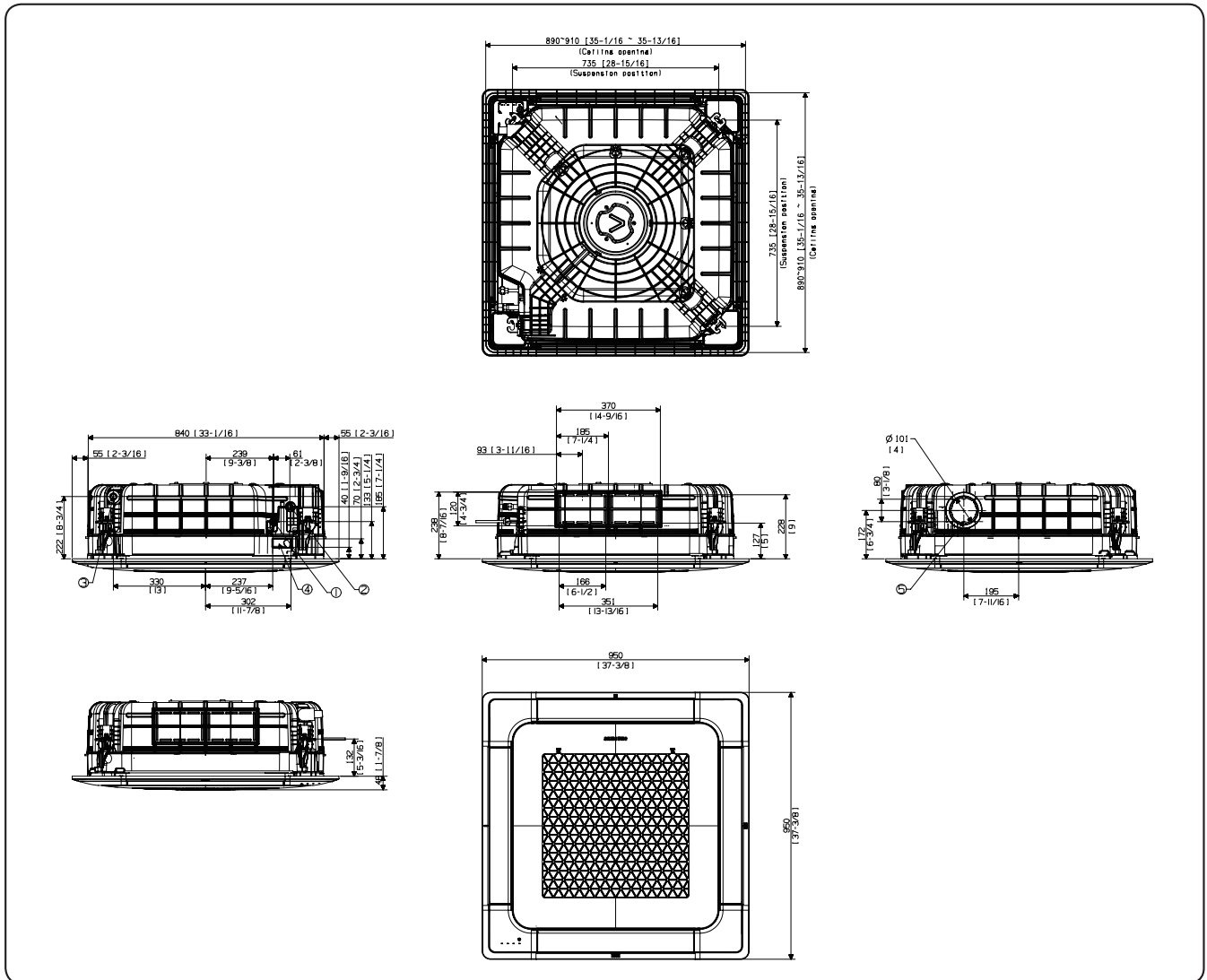
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

4. Dimensional Drawing

Wind-Free 4Way Cassette

AM112NN4DEH/**

Units : mm [inches]



| No. | Name | Description |
|-----|---------------------------------------------|-----------------------|
| 1 | Liquid pipe connection | Φ9.52(3/8) |
| 2 | Gas pipe connection | Φ15.88(5/8) |
| 3 | Drain pipe connection | VP-25(OD32, ID25) |
| 4 | Power supply & Communication wiring conduit | - |
| 5 | Fresh air intake knockout hole | Φ10[4] , Use M4 Screw |

NOTE

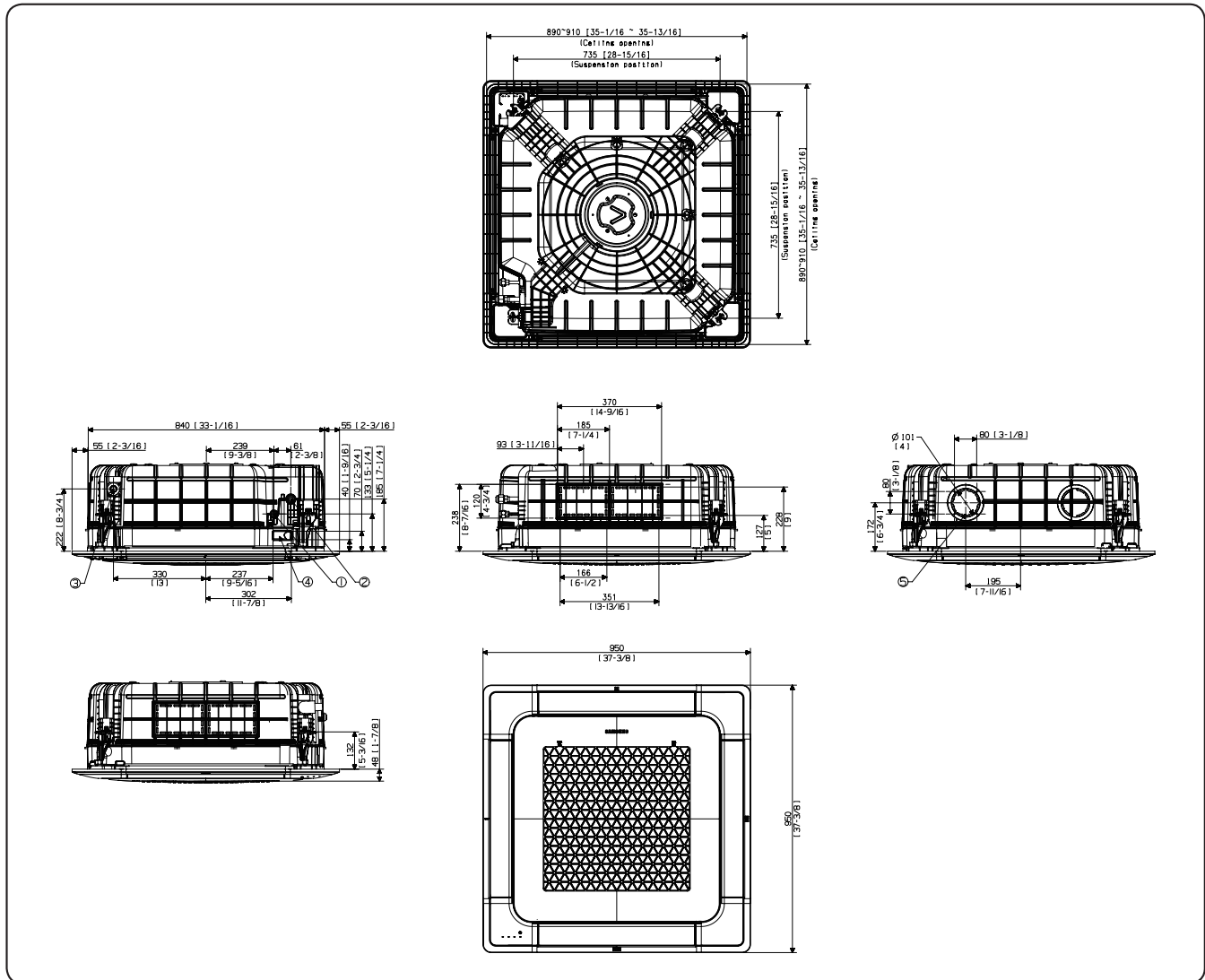
- As for suspension bolt, please use M8 ~ M10. (Procured at local site)

4. Dimensional Drawing

Wind-Free 4Way Cassette

AM128/140NN4DEH/**

Units : mm [inches]



| No. | Name | Description |
|-----|---------------------------------------------|----------------------|
| 1 | Liquid pipe connection | Φ9.52(3/8) |
| 2 | Gas pipe connection | Φ15.88(5/8) |
| 3 | Drain pipe connection | VP-25(OD32, ID25) |
| 4 | Power supply & Communication wiring conduit | - |
| 5 | Fresh air intake knockout hole | Φ10[4], Use M4 Screw |

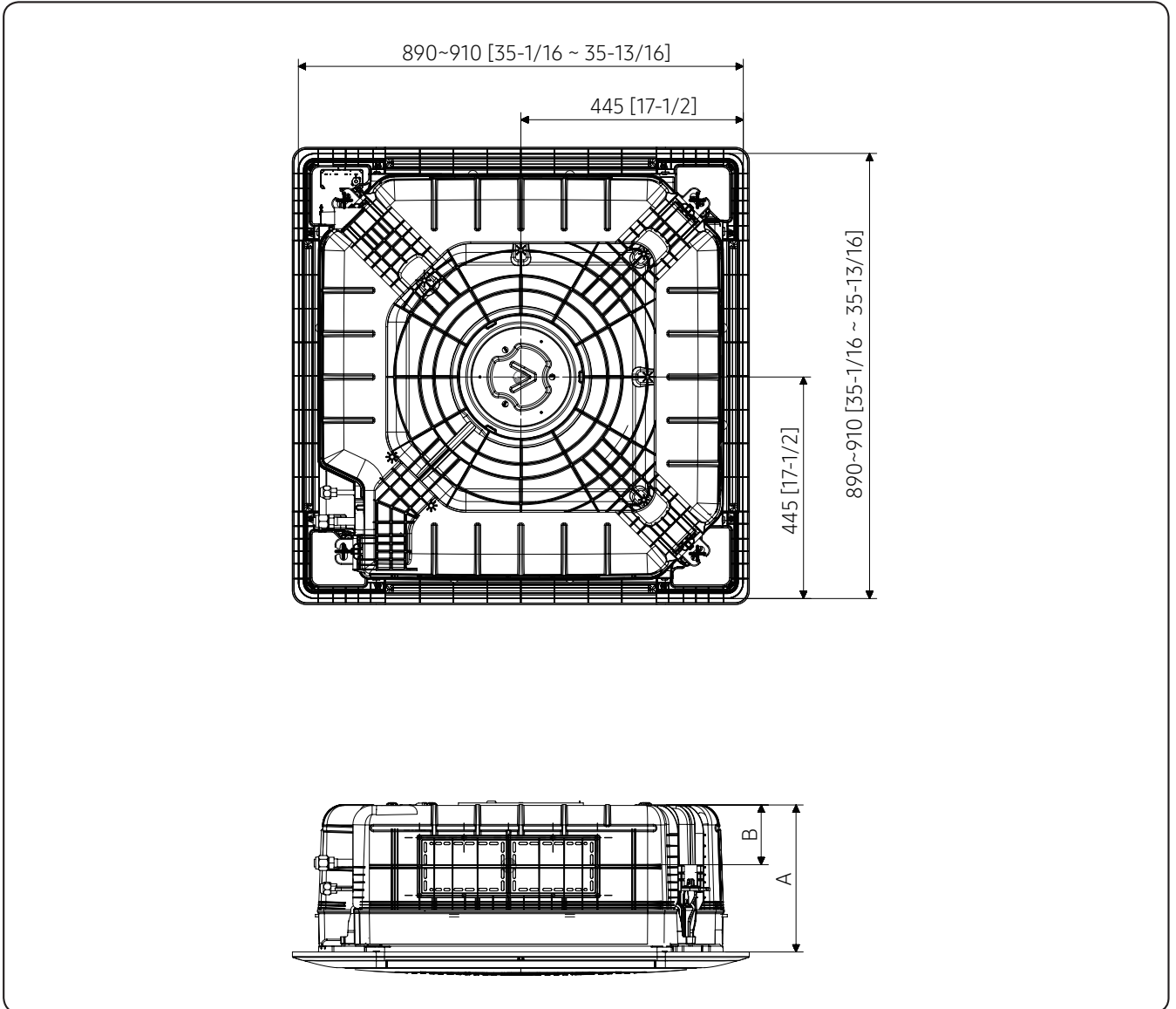
NOTE

- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

5. Center of Gravity

Wind-Free 4Way Cassette

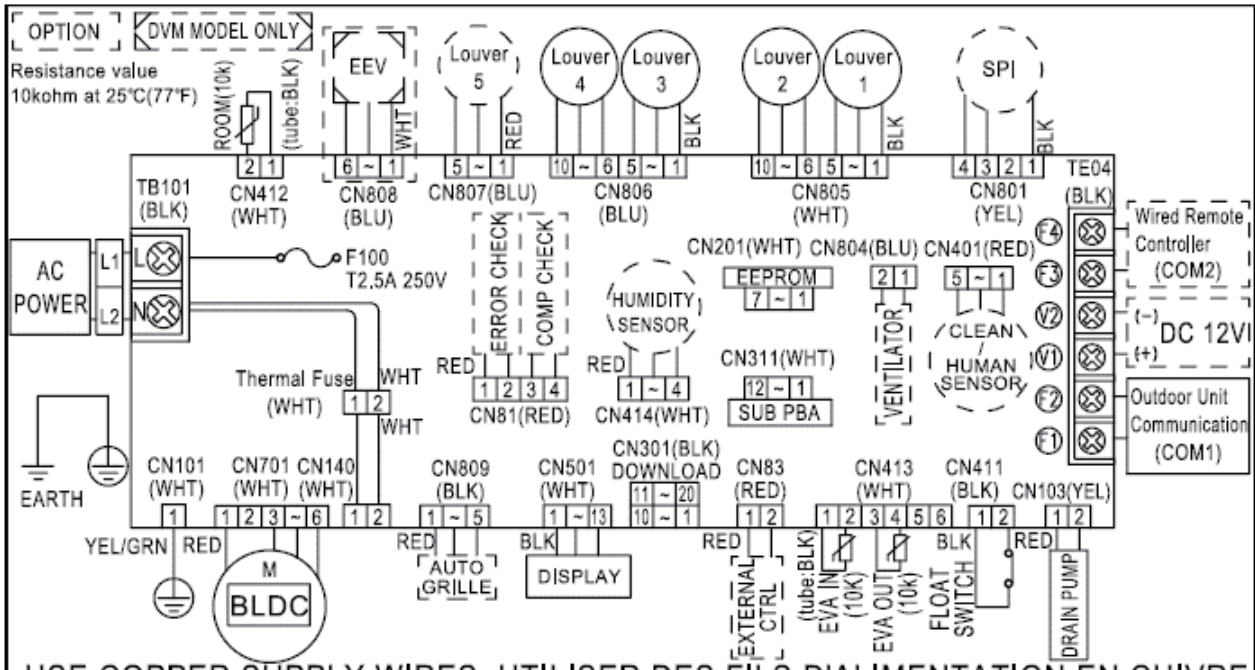
Units : mm [inches]



| | A | B |
|---------------|---------------|-------------|
| ~9.0kW | 221 [8-11/16] | 70 [2-3/4] |
| 11.2kW | 263 [10-7/20] | 100[4] |
| 12.8kW~14.0kW | 305 [12] | 130 [5-1/8] |

6. Electrical Wiring Diagram

Wind-Free 4Way Cassette



USE COPPER SUPPLY WIRES. UTILISER DES FILS D'ALIMENTATION EN CUIVRE.

| LED LAMP DISPLAY | | | | LED DISPLAY FOR ERROR DETECTION |
|------------------|---------|-------|--------|-----------------------------------------------------------------------------------------------|
| OPERATION | DEFROST | TIMER | FILTER | |
| ● | ● | ● | ● | ● ON ○ FLICKERING × OFF |
| × | ● | × | × | Error of room temperature sensor in the indoor unit(open/short) |
| ● | ● | × | × | Error of eva in,out temperature sensor in the indoor unit(open/short) |
| × | × | ● | × | Error of fan motor in the indoor unit |
| ● | × | ● | × | Error of outdoor sensor(Outdoor temperature/cond/discharge) |
| × | ● | ● | × | No communication for 2 minutes between indoor and outdoor unit |
| × | ● | ● | ● | Error of outdoor unit/Self-diagnosis (Check error code at outdoor unit's or solution display) |
| × | × | ● | ● | Detection of the float switch |
| ● | ● | ● | ● | EEPROM error/EEPROM option error |
| ● | × | × | ● | MDS (Motion Detecting Sensor) Error |
| ● | ● | × | ● | No match between outdoor and indoor unit |
| ● | × | ● | ● | High Pressure Blockage Error (Only CAC Model) |

| | | | | | |
|--------|------------|-------------|----------------------------|--------------|--------------------------|
| F100 | FUSE | SPI | S-Plasma ion | ROOM(10K) | Thermistor ROOM OUT(10K) |
| M-BLDC | BLDC Motor | EEV | Electronic Expansion Valve | EVA-IN(10K) | Thermistor EVA IN(10K) |
| | | EXT_CONTROL | EXTERNAL_CONTROL | EVA-OUT(10K) | Thermistor EVA OUT(10K) |

NOTE

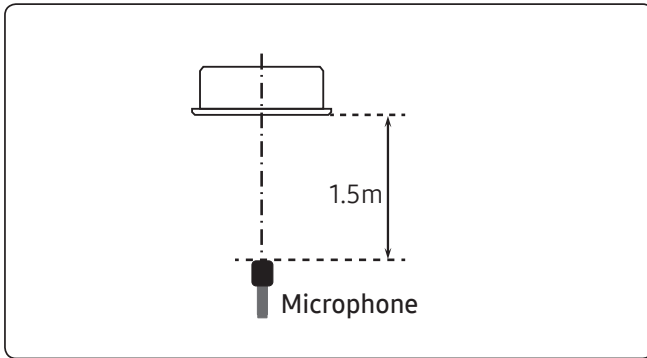
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⊕ Protective earth(screw), □□□□ : connector, $\frac{1}{2}$: The wire quantity

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

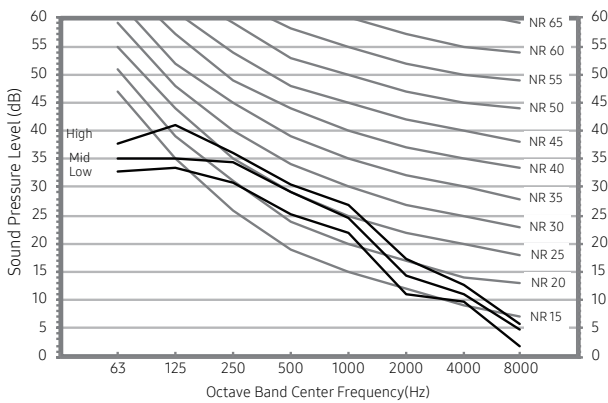
Unit: dB(A)



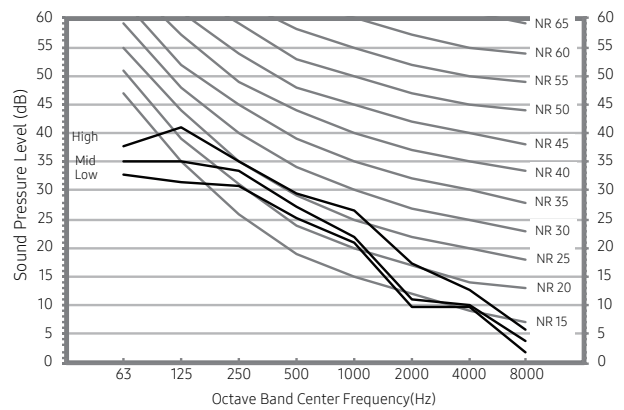
| Model | High | MID | LOW |
|----------------|------|-----|-----|
| AM045NN4DEH/** | 33 | 32 | 30 |
| AM056NN4DEH/** | 33 | 32 | 30 |
| AM071NN4DEH/** | 35 | 34 | 33 |
| AM090NN4DEH/** | 39 | 36 | 33 |

- NR Curve

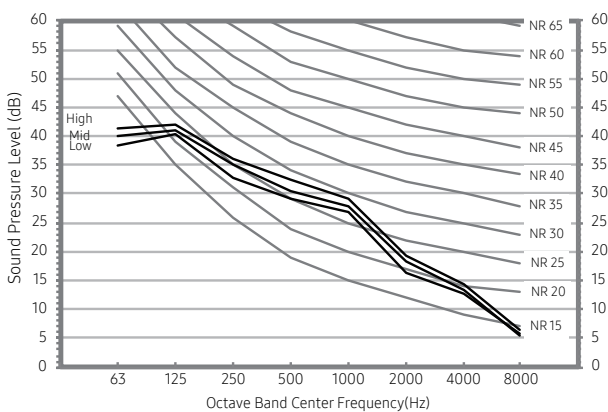
1) AM045NN4DEH/**



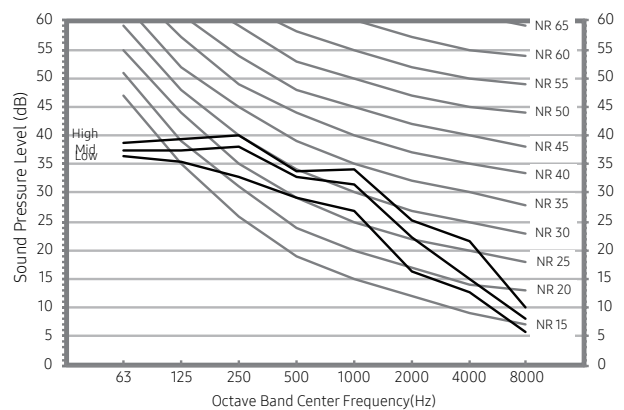
2) AM056NN4DEH/**



3) AM071NN4DEH/**



4) AM090NN4DEH/**



NOTE

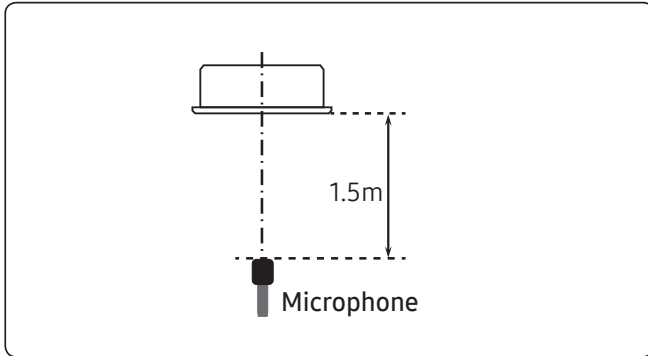
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

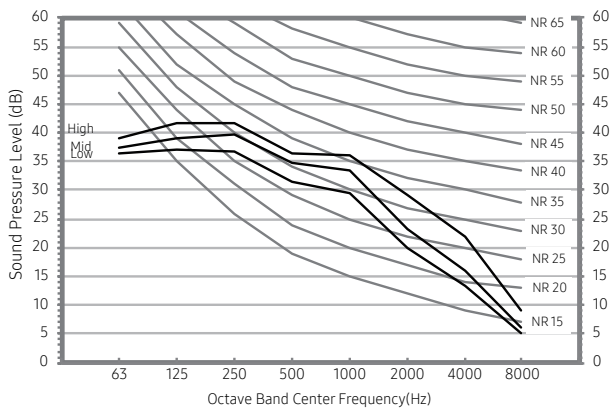
Unit: dB(A)



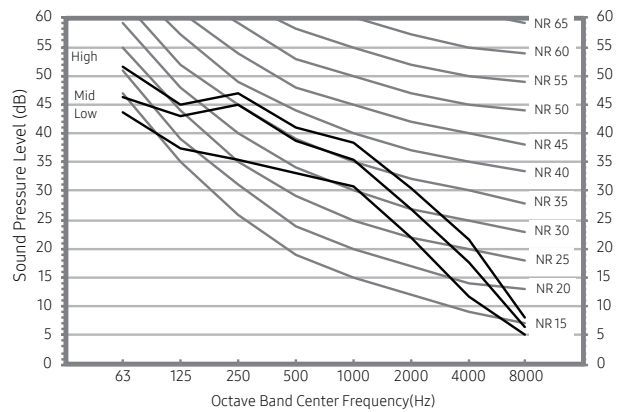
| Model | High | MID | LOW |
|----------------|------|-----|-----|
| AM112NN4DEH/** | 40 | 38 | 35 |
| AM128NN4DEH/** | 42 | 40 | 35 |
| AM140NN4DEH/** | 44 | 41 | 35 |

- NR Curve

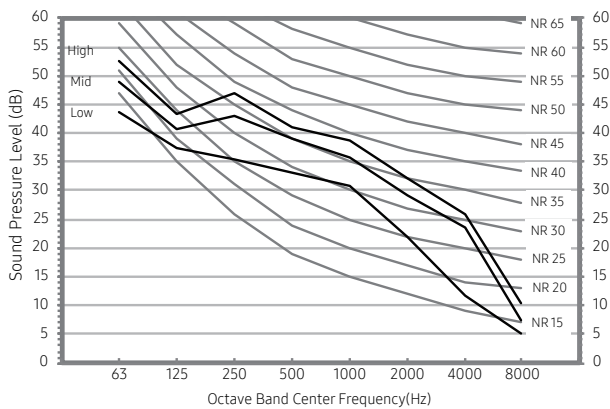
5) AM112NN4DEH/**



6) AM128NN4DEH/**



7) AM140NN4DEH/**



NOTE

- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa

7. Sound Data

Wind-Free 4Way Cassette

Sound Power level

NOTE

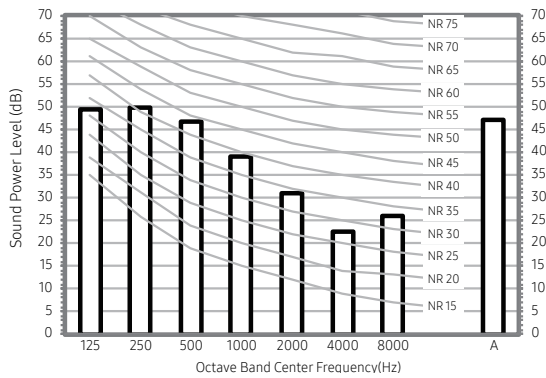
Unit: dB(A)

- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

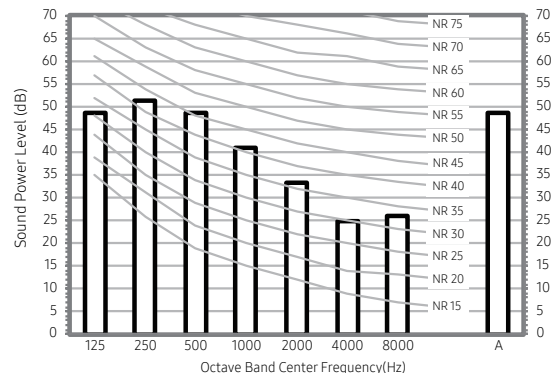
| Model | Power |
|----------------|-------|
| AM045NN4DEH/** | 49 |
| AM056NN4DEH/** | 50 |
| AM071NN4DEH/** | 54 |
| AM090NN4DEH/** | 57 |

• NR Curve

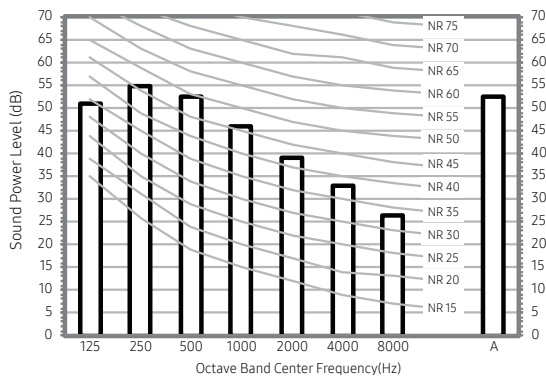
1) AM045NN4DEH/**



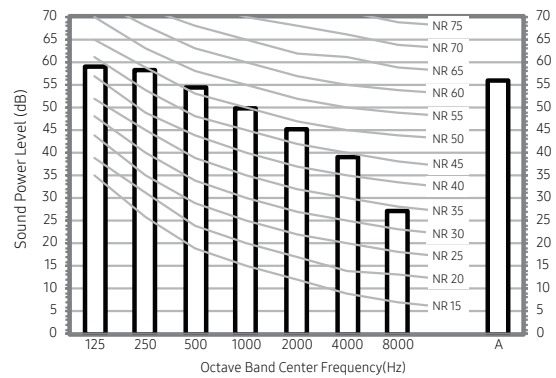
2) AM056NN4DEH/**



3) AM071NN4DEH/**



4) AM090NN4DEH/**



7. Sound Data

Wind-Free 4Way Cassette

Sound Power level

NOTE

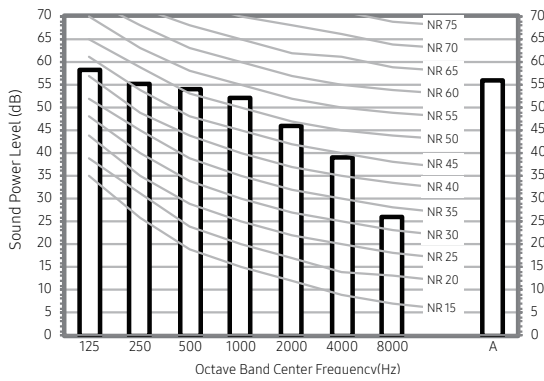
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

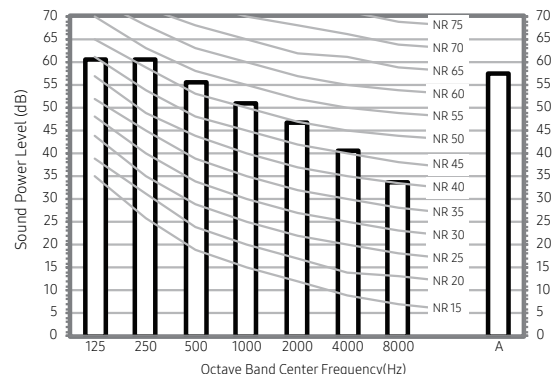
| Model | Power |
|----------------|-------|
| AM112NN4DEH/** | 57 |
| AM128NN4DEH/** | 58 |
| AM140NN4DEH/** | 60 |

• NR Curve

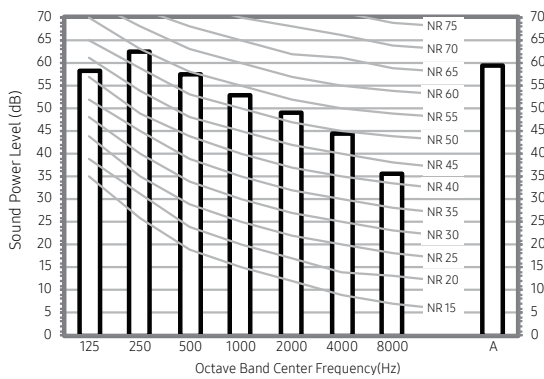
5) AM112NN4DEH/**



6) AM128NN4DEH/**



7) AM140NN4DEH/**

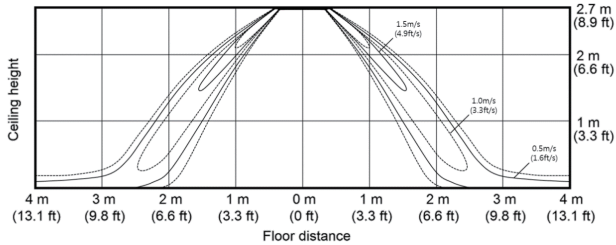


8. Temperature and air flow distribution

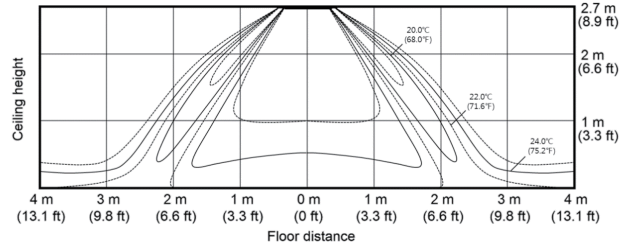
Wind-Free 4Way Cassette

AM045NN4DEH/**

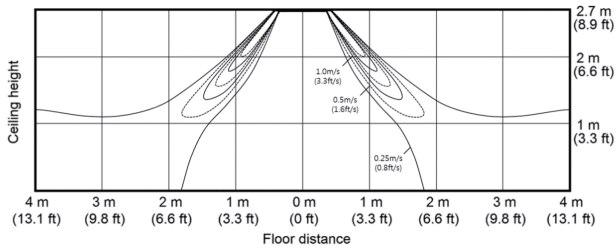
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



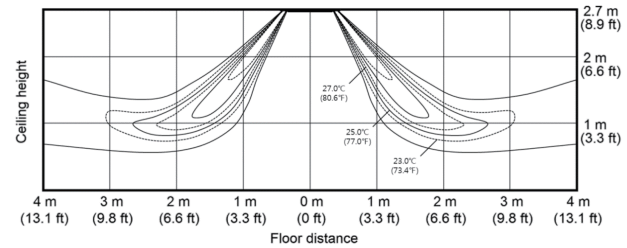
- Cooling temperature distribution
(Discharge angle : 45 degree)



- Heating Air Velocity distribution
(Discharge angle : 52 degree)

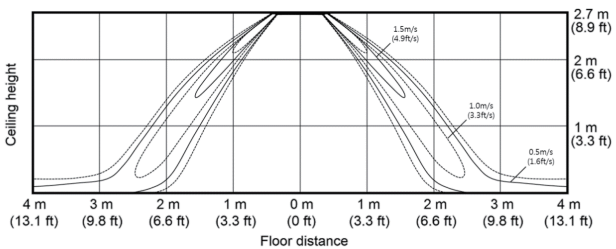


- Heating temperature distribution
(Discharge angle : 52 degree)

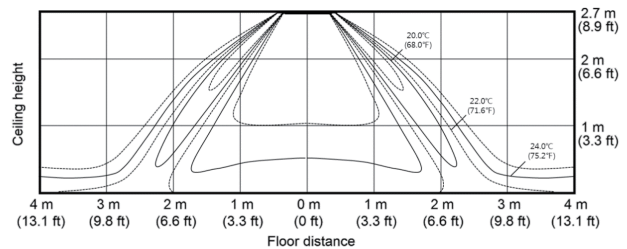


AM056NN4DEH/**

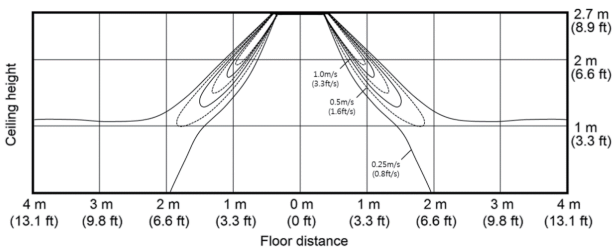
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



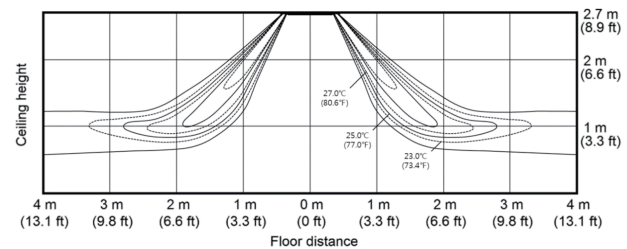
- Cooling temperature distribution
(Discharge angle : 45 degree)



- Heating Air Velocity distribution
(Discharge angle : 52 degree)



- Heating temperature distribution
(Discharge angle : 52 degree)

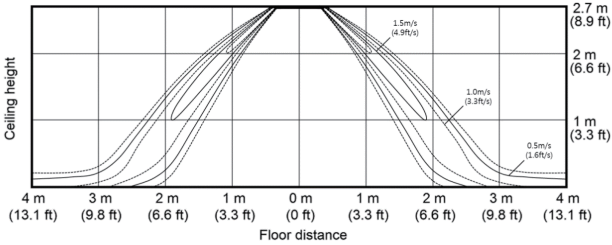


8. Temperature and air flow distribution

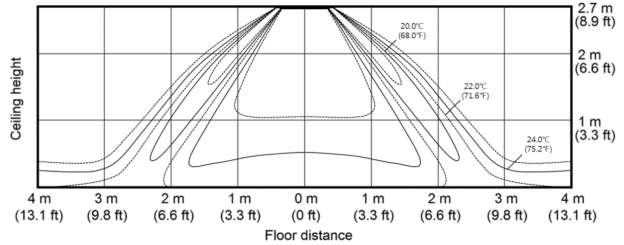
Wind-Free 4Way Cassette

AM071NN4DEH/**

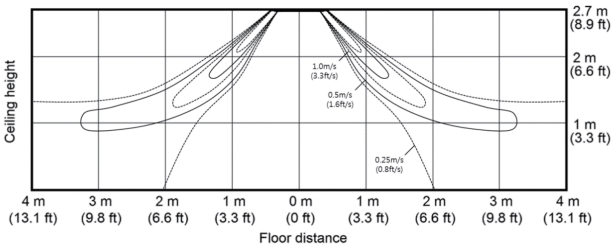
- Cooling Air Velocity distribution (Discharge angle : 45 degree)



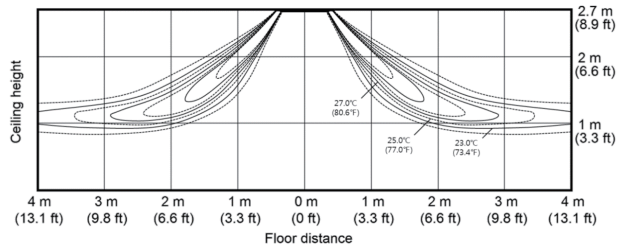
- Cooling temperature distribution (Discharge angle : 45 degree)



- Heating Air Velocity distribution (Discharge angle : 52 degree)

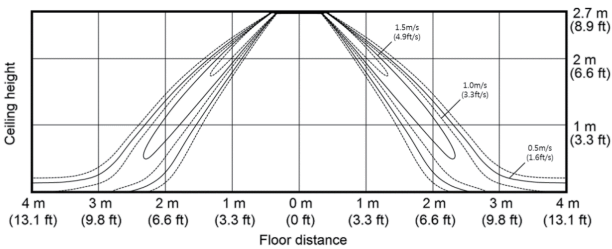


- Heating temperature distribution (Discharge angle : 52 degree)

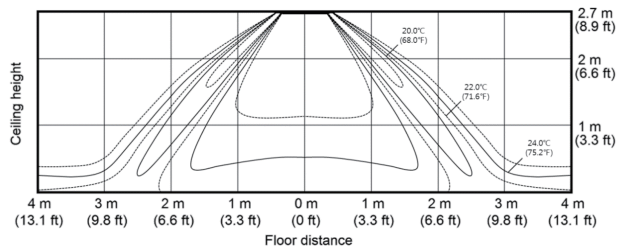


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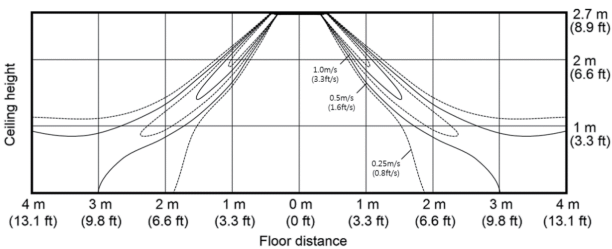
- Cooling Air Velocity distribution (Discharge angle : 45 degree)



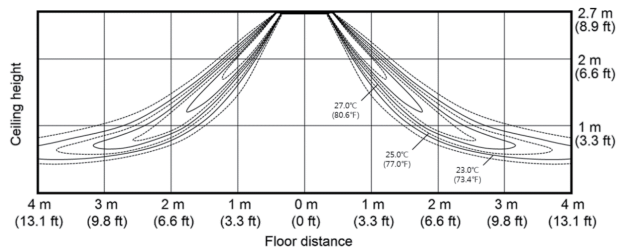
- Cooling temperature distribution (Discharge angle : 45 degree)



- Heating Air Velocity distribution (Discharge angle : 52 degree)



- Heating temperature distribution (Discharge angle : 52 degree)

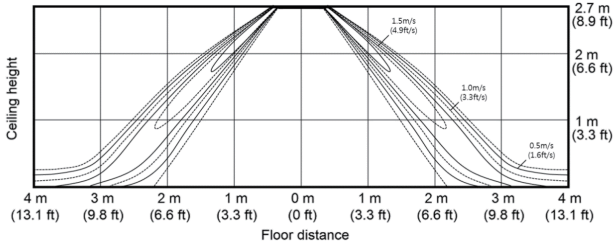


8. Temperature and air flow distribution

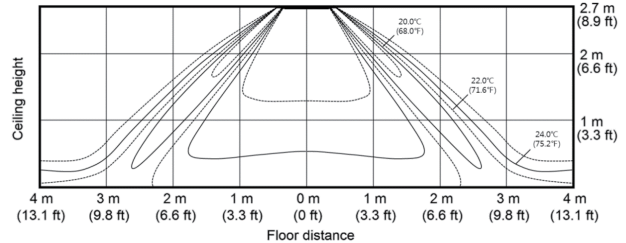
Wind-Free 4Way Cassette

AM112NN4DEH/**

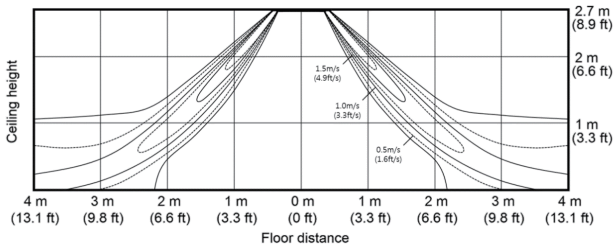
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



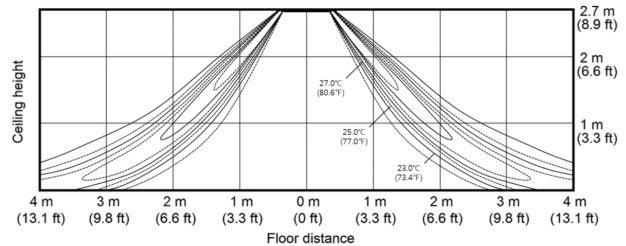
- Cooling temperature distribution
(Discharge angle : 45 degree)



- Heating Air Velocity distribution
(Discharge angle : 52 degree)

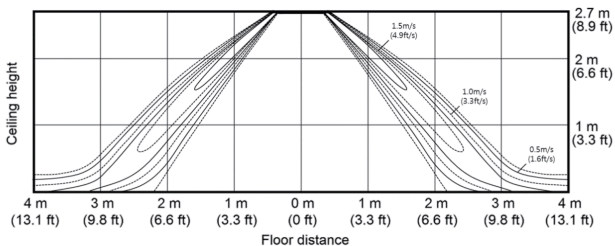


- Heating temperature distribution
(Discharge angle : 52 degree)

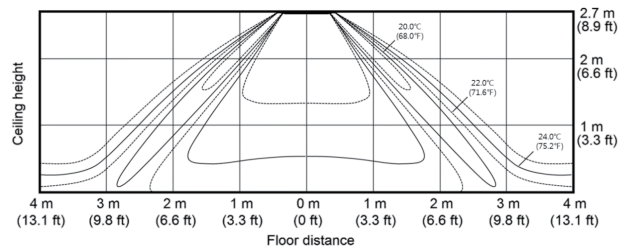


AM128NN4DEH/**

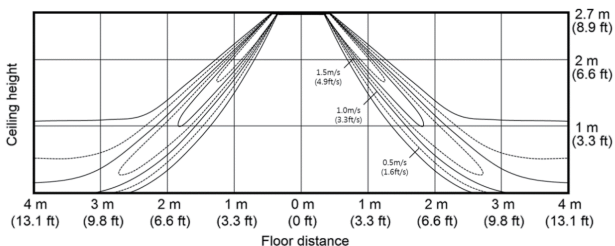
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



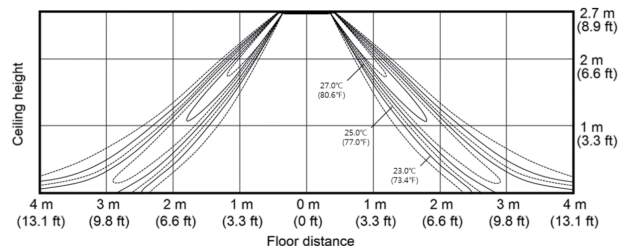
- Cooling temperature distribution
(Discharge angle : 45 degree)



- Heating Air Velocity distribution
(Discharge angle : 52 degree)



- Heating temperature distribution
(Discharge angle : 52 degree)

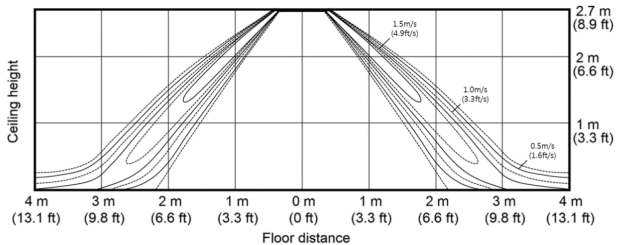


8. Temperature and air flow distribution

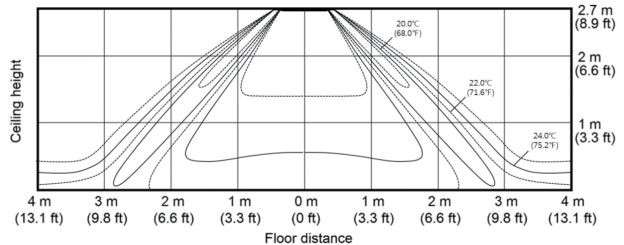
Wind-Free 4Way Cassette

AM140NN4DEH/**

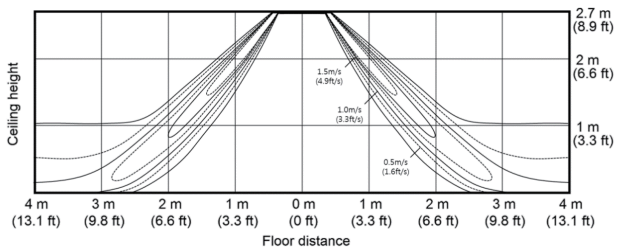
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



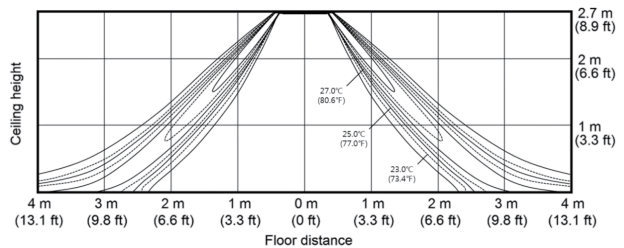
- Cooling temperature distribution
(Discharge angle : 45 degree)



- Heating Air Velocity distribution
(Discharge angle : 52 degree)

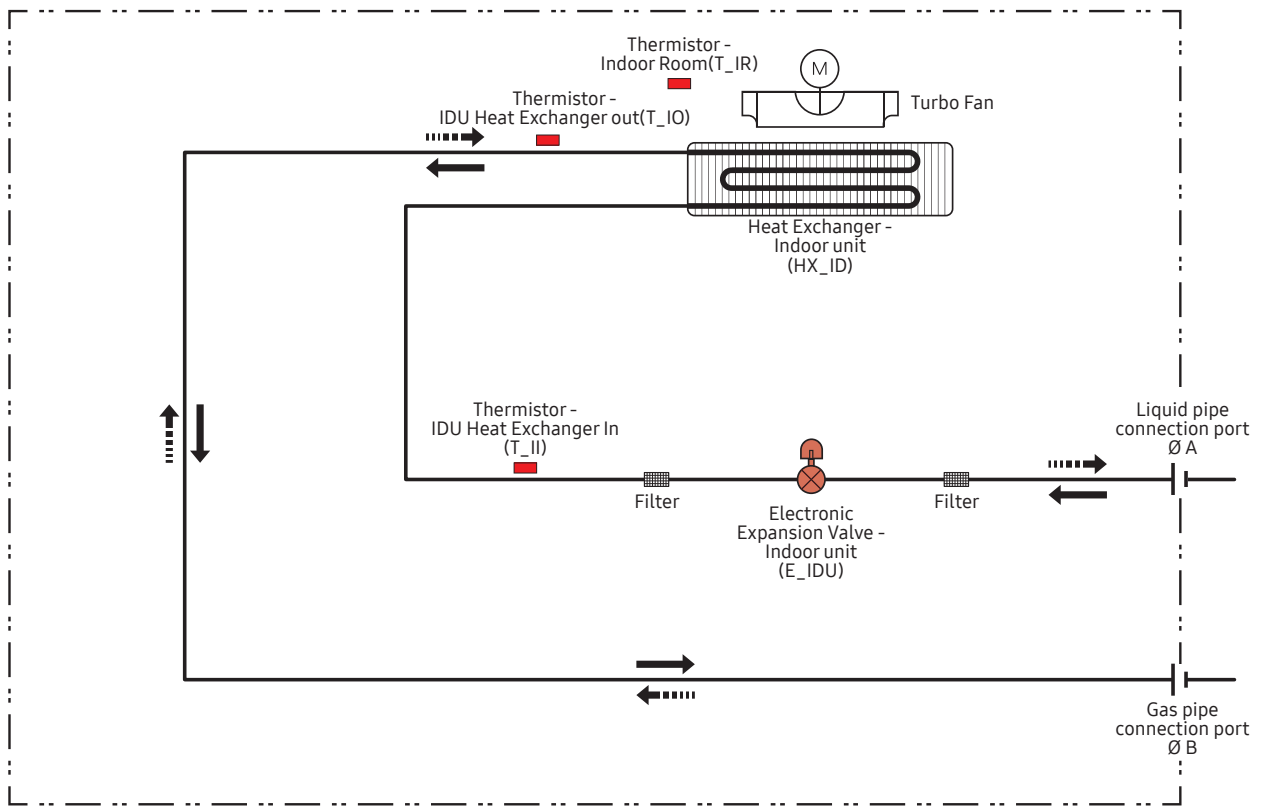


- Heating temperature distribution
(Discharge angle : 52 degree)



9. Piping Diagram

Wind-Free 4Way Cassette



| Refrigerant flow | |
|------------------|---------|
| Cooling | Heating |
| → | ⋯→ |

Unit : mm [Inches]

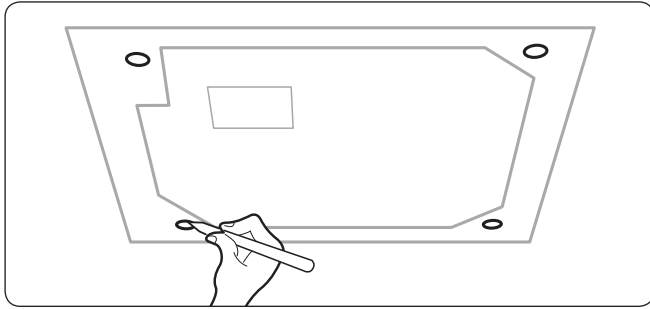
| Model | A | B |
|----------------|------|-------|
| AM045NN4DEH/** | 6.35 | 12.7 |
| AM056NN4DEH/** | | |
| AM071NN4DEH/** | 9.52 | 15.88 |
| AM090NN4DEH/** | | |
| AM112NN4DEH/** | | |
| AM128NN4DEH/** | | |
| AM140NN4DEH/** | | |

Installation

Step 1 Installing the indoor unit

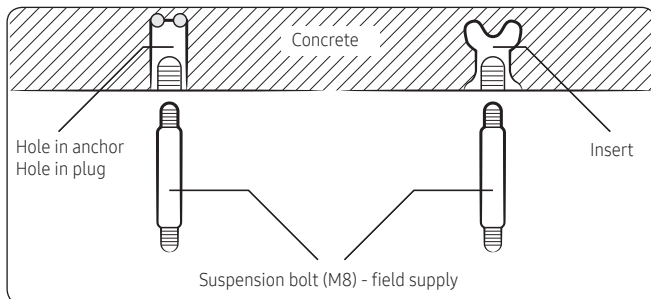
When deciding on the location of the air conditioner the following restrictions must be taken into account.

- 1 Place the pattern sheet on the ceiling at the spot where you want to install the indoor unit.

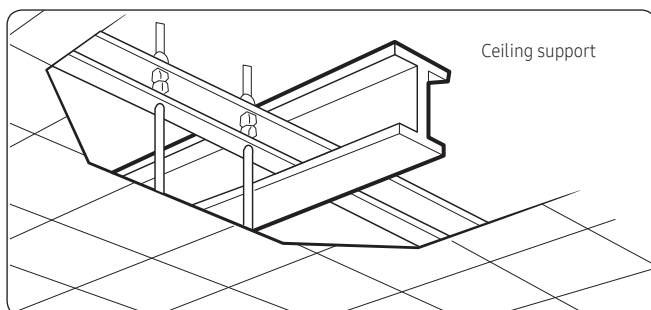


NOTE

- Since the diagram is made of paper, it may shrink or stretch slightly due to temperature or humidity. For this reason, before drilling the holes, be sure to maintain the correct dimensions between the markings.
- 2 Insert bolt anchors, use existing ceiling supports or construct a suitable support as shown in figure.



- 3 Install the suspension bolts, depending on the ceiling type.

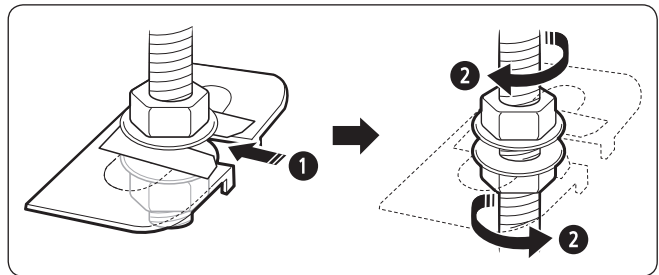


CAUTION

- Make sure that the ceiling is strong enough to support the weight of the indoor unit. Before hanging the unit, test the strength of each attached suspension bolt.
 - If the length of the suspension bolt is more than 1.5 m, you are required to prevent vibration.
- 4 Screw eight pairs of nuts and washers to the suspension bolts, making space for hanging the indoor unit.

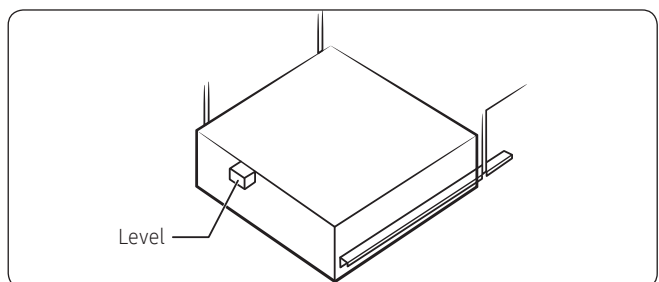
CAUTION

- You must install all of the suspension rods.
 - It is important to leave sufficient space in the false ceiling to allow access for maintenance or repairs to the drainage pipe connection, the refrigerant pipe connection, or to remove the unit if necessary.
- 5 Hang the indoor unit to the suspension bolts between two nuts. Cut a pad stopper and place it on the suspension bolts to hold the washer. Remove the stopper and screw the nuts to fix the unit.



- 6 Check the level of the indoor unit by using a leveler.

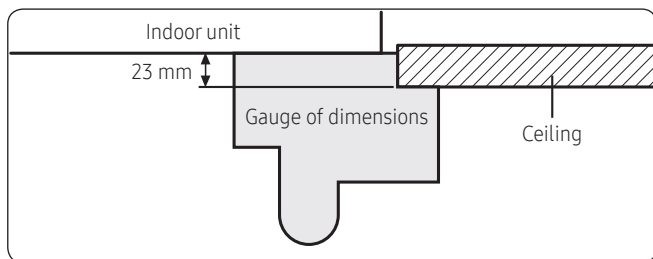
- A tilt of the indoor unit may cause malfunction of a built-in float switch and water leaks.



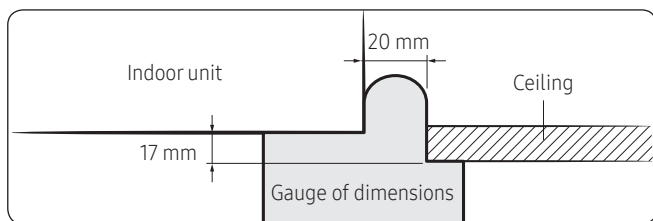
Installation

- 7 Adjust the unit to the appropriate position, taking into account the installation area for the front panel.
- Place the pattern sheet on the indoor unit.
 - Adjust the space between the ceiling and the indoor unit by using a dimension gauge.
 - Fix the indoor unit securely after adjusting the level of the unit by using a leveller.
 - Remove the pattern sheet, connect the other cables, and install the front panel.

Wind-Free 4Way Cassette (600x600)



Wind-Free 4Way Cassette

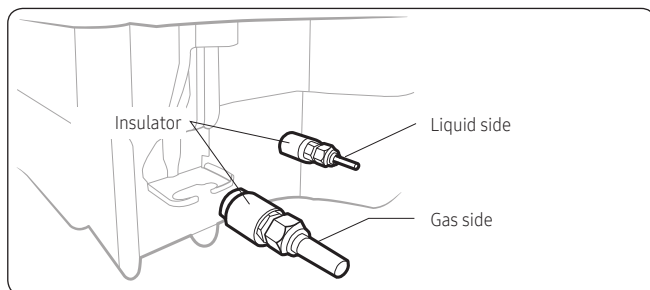


Step 2 Performing the gas leak test

To identify potential gas leaks on the indoor unit, inspect the connection area of each refrigerant pipe using a leak detector for R-410A.

Before recreating the vacuum and recirculating the refrigerant gas, pressurize the whole system with nitrogen (using a cylinder with a pressure reducer) at a pressure above 0.2 MPa, less than 4 MPa (gauge) in order to immediately detect leaks on the refrigerant fittings.

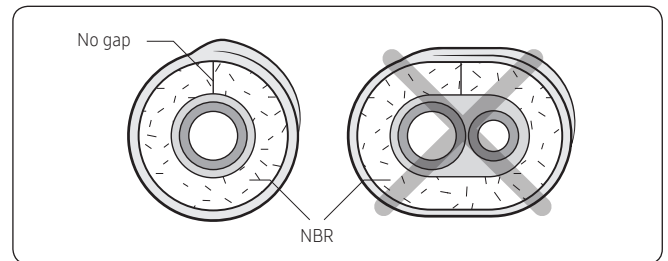
Made vacuum for 15 minutes and pressurizing system with nitrogen.



Step 3 Insulating the refrigerant pipes

Once you have checked that there are no leaks in the system, you can insulate the piping and hose.

- To avoid condensation problems, place Acrylonitrile Butadien Rubber separately around each refrigerant pipe.

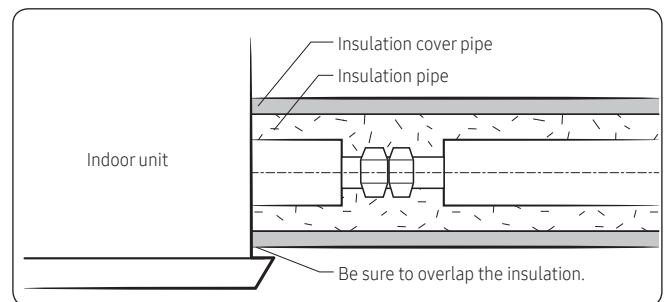


NOTE

- Always make the seam of pipes face upwards.

CAUTION

- The insulation has to be produced in full compliance with European regulation EEC / EU 2037 / 2000 requiring the use of sheaths insulation without using CFC and HCFC gases for health and the environment.
- Wind insulating tape around the pipes and drain hose avoiding compressing the insulation too much.



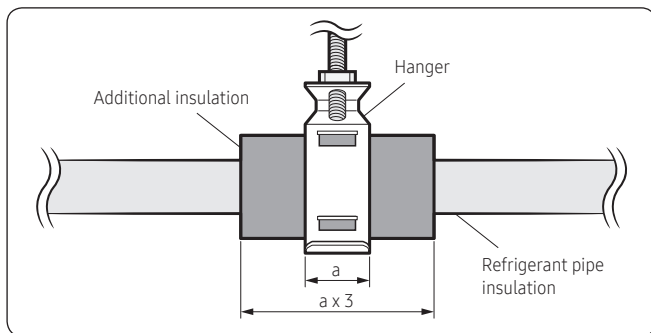
CAUTION

- Be sure to wrap insulation tightly without any gaps.
- Finish wrapping insulating tape around the rest of the pipes leading to the outdoor unit.
 - The pipes and electrical cables connecting the indoor unit with the outdoor unit must be fixed to the wall with suitable ducts.

Installation

⚠ CAUTION

- Must fit tightly against body without any gap.
- Make sure that all refrigerant connection must be accessible for easy maintenance and detachment.
- Install the insulation not to get wider and use the adhesives on the connection part of it to prevent moisture from entering.
- Wind the refrigerant pipe with insulation tape if it is exposed to outside sunlight.
- Install the refrigerant pipe respecting that the insulation does not get thinner on the bent part or hanger of pipe.
- Add the additional insulation if the insulation plate gets thinner.



5 Select the insulation of the refrigerant pipe.

- Insulate the gas side and liquid side pipe, noting the insulation thickness that must differ according to the pipe size.
- Standard: Less than an indoor temperature of 30°C, with humidity at 85%. If installing in a high humidity environment, use one grade thicker insulator by referring to the table below. If installing in an unfavourable environment, use thicker one.
- The heat-resistance temperature of the insulator must be more than 120°C.

| Pipe | Pipe size (mm) | Insulation Type (Heating/Cooling) | | Remarks |
|-------------|------------------|-----------------------------------|--------------------------------|-------------------------------------------|
| | | Standard [30°C, 85%] | High humidity [30°C, over 85%] | |
| EPDM, NBR | | | | |
| Liquid pipe | Ø6.35 to Ø9.52 | 9t | ← | Internal temperature is higher than 120°C |
| | Ø12.7 to Ø50.80 | 13t | ← | |
| Gas pipe | Ø6.35 | 13t | 19t | |
| | Ø9.52 to Ø25.40 | 19t | 25t | |
| | Ø28.58 to Ø44.45 | | 32t | |
| | Ø50.80 | 25t | 38t | |

- When installing insulation in the places and conditions below, use the same insulation that is used for high humidity conditions.

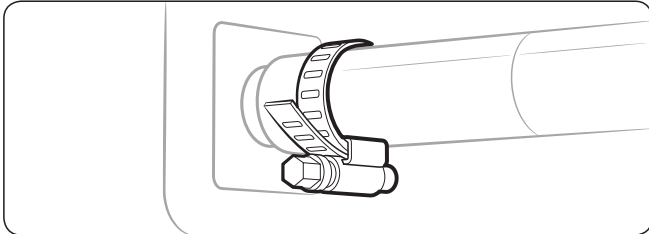
| <Geological condition> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High humidity locations such as shorelines, hot springs, lake or riversides, and ridges (when part of the building is covered by earth and sand) |
| <Operation purpose condition> |
| Restaurant ceiling, sauna, swimming pool etc. |
| <Building construction condition> |
| Ceilings frequently exposed to moisture and cooling are not covered. For example, pipes installed at a corridor of a dormitory and studio or near an exit that opens and closes frequently. |
| Places (where the pipes are installed) that are highly humid due to a lack of ventilation. |

- Refrigerant pipe before EEV kit and MCU or without EEV kit and MCU
 - You can contact the gas side and liquid side pipes but the pipes should not be pressed.
 - When contacting the gas side and liquid side pipe, use 1 grade thicker insulator.
- Refrigerant pipe after EEV kit and MCU
 - Install the gas side and liquid side pipes, leave 10mm of space.
 - When contacting the gas side and liquid side pipe, use 1 grade thicker insulator.

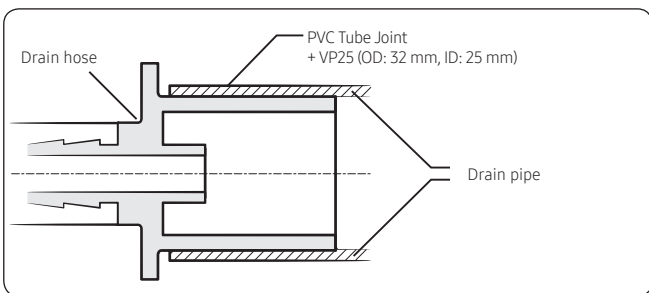
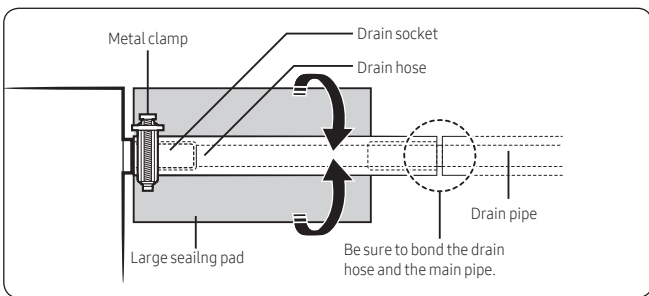
Installation

Step 4 Installing the drain hose and drain pipe

- 1 Push the supplied drain hose as far as possible over the drain socket.
- 2 Tighten the metal clamp as shown in the picture.



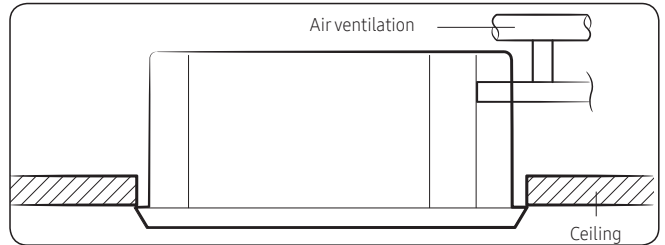
- 3 Wrap the supplied large sealing pad over the metal clamp and drain hose to insulate and fix it with clamps.
- 4 Insulate the complete drain piping inside the building (field supply). If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).
- 5 Push the drain hose up to insulation when connecting the drain hose to drain socket.



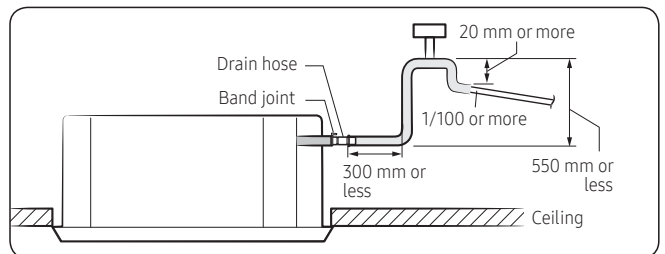
⚠ CAUTION

Check that the indoor unit is level with the ceiling by using the leveller.

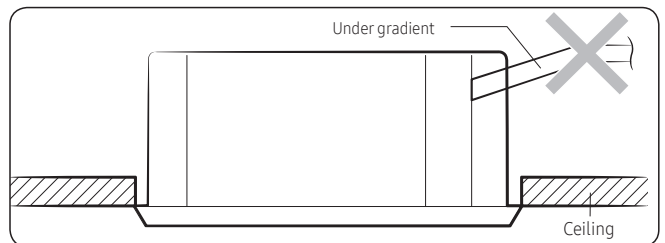
- Install air ventilation to drain condensation smoothly.



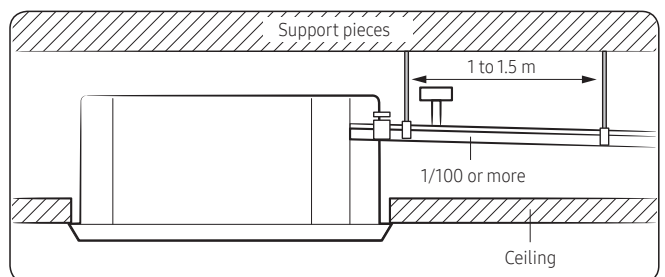
- If it is necessary to increase the height of the drain pipe, install the drain pipe straight within 300 mm from the drain hose port. If it is raised higher than 550 mm, there may be water leaks.



- Do not give the hose an upward gradient beyond the connection port. This will cause water to flow backwards when the unit is stopped, resulting in water leaks.

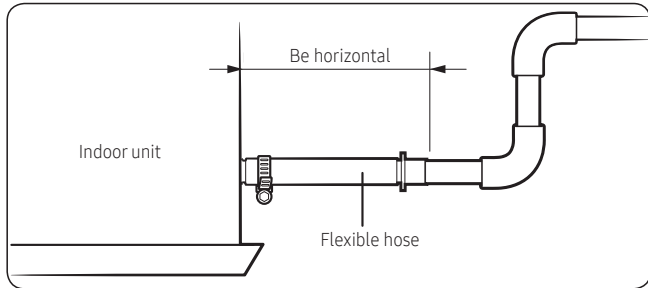


- Do not apply force to the piping on the unit side when connecting the drain hose. The hose should not be allowed to hang loose from its connection to the unit. Fasten the hose to a wall, frame or other support as close to the unit as possible.

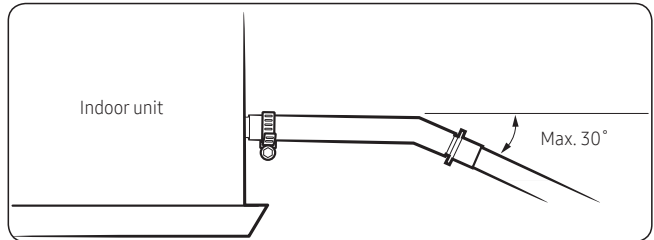


Installation

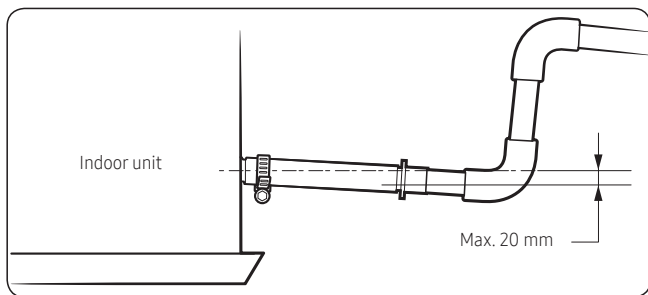
- Install horizontally.



- Max. allowable bending angle.

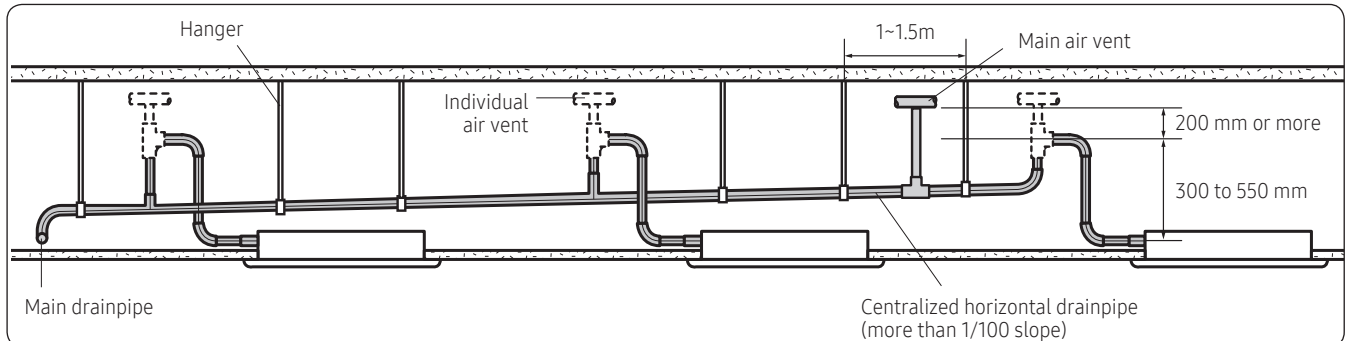


- Max. allowable axis gap.



NOTE

- If a concentrated drain pipe is installed, refer to the figure below.



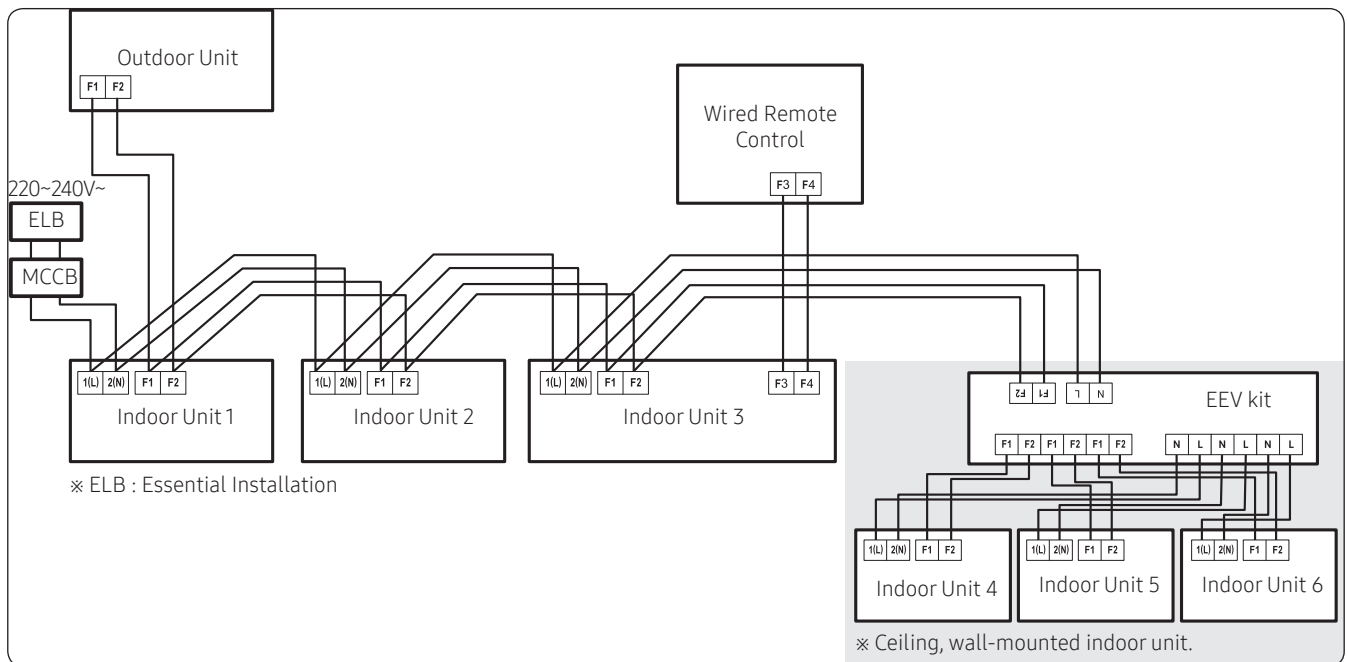
- If 3 or more units are installed, install the main air vent at the front of the farthest indoor unit from the main drain pipe.
- To prevent water from flowing back to indoor units, install an individual air vent at the top of each indoor unit.
 - The air vents should be T or 7 shaped to prevent dust or foreign substances from entering.
 - You may not need to install air vent if the horizontal drain pipe is in proper slope.

Installation

Step 5 Connecting the power and communication cables

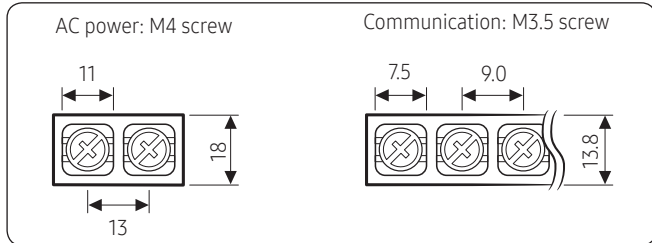
Power and communication cable connection

- Before wiring work, you must turn off all power source.
- Connect the power and communication cable among the units within maximum length to set the voltage drop under 10%.
- The auxiliary circuit breaker (ELCB, MCCB, ELB) should be considered more capacity if many indoor units are connected from one breaker.
- Connect F3, F4(for communication) to the communication cable of the wired remote control.
- Tighten the electric wires with a proper tool within the torque limit to connect and fix them firmly, and then organize the wires to prevent outside pressure being exerted on the covers and other parts. Failure to do so may result in overheating, electric shock, and fire.
- To protect the product from water and possible shock, you should keep the power and the communication cables of the indoor and outdoor units in the iron pipe.
- Connect the power cable to the auxiliary circuit breaker (ELCB, MCCB, ELB).
- Keep distances of 50mm or more between power cable and communication cables.
- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)
- Screws on terminal block must not be unscrewed with the torque less than 12 kgf•cm.
- When installing the indoor unit in a computer room, use the double shielded (tape aluminum / polyester braid + copper) cable of FROHH2R type.



Installation

Specifications of the terminal blocks



| Power supply (single phase) | MCCB | ELB |
|-----------------------------|---------------------|-----------------------------|
| Min : 198V Max : 242V | XA | XA, 30 mA 0.1 s |
| Power cable | Earth cable | Communication cable |
| 2.5 mm ² or more | 2.5 mm ² | 0.75 to 1.5 mm ² |

Decide the power cable specification and maximum length by formula 2.

1 Decide the capacity of ELB and MCCB by below formula.

$$\text{The capacity of ELB, MCCB } X[A] = 1.25 \times 1.1 \times \sum A_i$$

NOTE

- X : The capacity of ELB, MCCB
- $\sum A_i$: Sum of rating currents of each indoor unit.

Rated currents

Wind-Free 4Way Cassette (600x600)

| Model | Rating current(A) |
|--------------|-------------------|
| AM015NNNDEH* | 0.14 |
| AM022NNNDEH* | 0.15 |
| AM028NNNDEH* | 0.20 |
| AM036NNNDEH* | 0.23 |
| AM045NNNDEH* | 0.25 |
| AM056NNNDEH* | 0.28 |
| AM060NNNDEH* | 0.40 |

Wind-Free 4Way Cassette

| Model | Rating current(A) |
|--------------|-------------------|
| AM045NN4DEH* | 0.22 |
| AM056NN4DEH* | 0.22 |
| AM071NN4DEH* | 0.31 |
| AM090NN4DEH* | 0.43 |
| AM112NN4DEH* | 0.55 |
| AM128NN4DEH* | 0.51 |
| AM140NN4DEH* | 0.62 |

2 Decide the power cable specification and maximum length within 10% voltage drop among indoor units.

$$\sum_{k=1}^n \left(\frac{\text{Coef} \times 35.6 \times L_k}{1000 \times A_k} \times i_k \right) < 10\% \text{ of input voltage[V]}$$

NOTE

- Coef: 1.55
- Lk: Distance among each indoor unit[m], Ak: Power cable specification[mm²]
- ik: Running current of each unit[A]

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