

SAMSUNG

VRF

Technical Data Book

**BORACAY for Europe
(R410A, 50Hz, HP)**



Model : AM***KN*DEH/EU

History

| Version | Modification | Date | Remark |
|-----------|---|------------|--------|
| Ver. 1.0 | Release BORACAY TDB for Europe | 16. 09. 30 | |
| Ver. 1.01 | Modify the Accessory Compatibility table for MCU kit(P50) | 17. 09. 13 | |
| Ver. 1.1 | Updated the note of Specification/Sound/Installation page | 19. 08. 13 | |
| Ver. 1.2 | Updated the Summary Table page | 20. 10. 19 | |
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| | | | |
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| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Nomenclature

Indoor Unit

Model name

| | | | | | | | | | |
|-----------|------------|----------|----------|----------|----------|----------|----------|---|-----------|
| AM | 071 | K | N | T | D | E | H | / | EU |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | Buyer |

(1) Classification

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

(5) Product Notation

| | |
|---|------------------|
| T | EEV NOT INCLUDED |
| Q | EEV INCLUDED |

(2) Capacity

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

(6) Feature

| | |
|---|--------|
| D | DELUXE |
|---|--------|

(3) Version

| | |
|---|------|
| K | 2016 |
| M | 2017 |

(7) Rating Voltage

| | |
|---|--------------------|
| E | 1Ø, 220~240V, 50Hz |
| C | 1Ø, 208~230V, 60Hz |

(4) Product Type

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

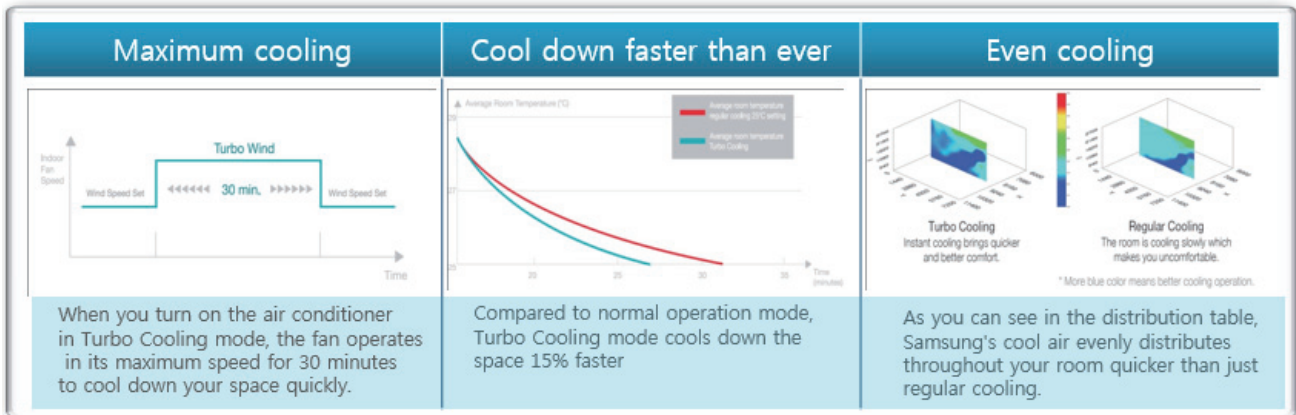
(8) Mode

| | |
|---|----------------------|
| C | Cooling Only (R410A) |
| H | Heat Pump (R410A) |

Features & Benefits

TURBO Cooling mode

Samsung's air conditioner operates in its maximum speed in Turbo Cooling mode to quickly reach the set temperature. Instantly cool down your space with Samsung's Turbo Cooling technology.



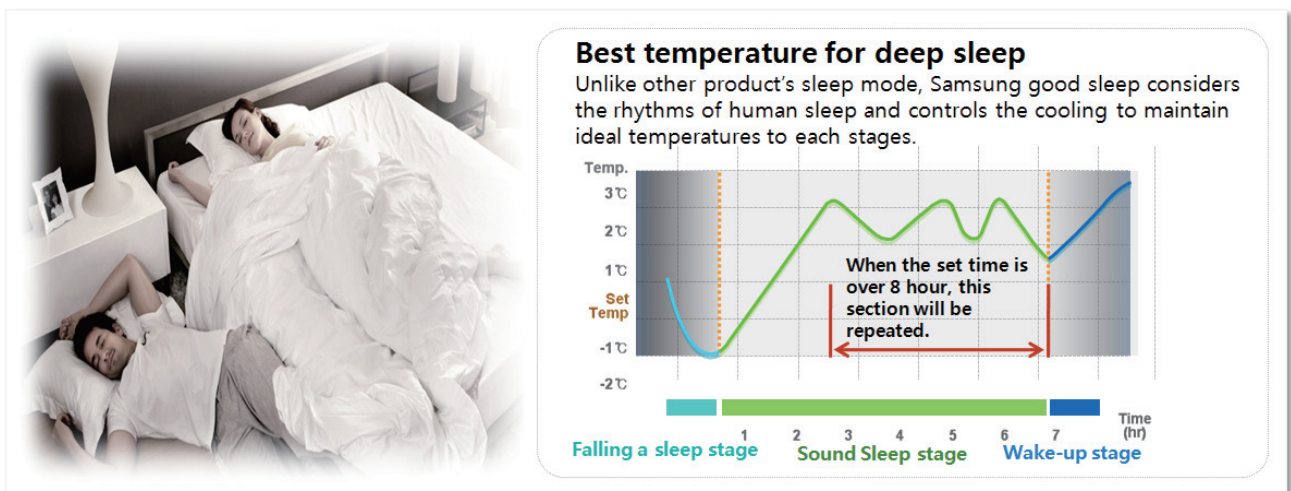
Full HD Filter

Full HD 80 Filter filtrates dust particles by up to 80%.

| | Image (x 40) | Fiber Dia. (μm) | Dust collection |
|-----------------------|--------------|-----------------|-----------------|
| FULL HD FILTER | | 60 | 80% |
| Conventional | | 211 | 40% |

Good sleep

The quality of sleep you get directly impacts your physical and mental health. Concerned with your health, Samsung performed extensive experiments to determine the ideal temperatures needed to quickly fall asleep.



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1. Specification

BORACAY

| Type | | | WALL MOUNTED | WALL MOUNTED | WALL MOUNTED | WALL MOUNTED | |
|--------------------|-----------------------------|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------|
| Model CODE | | | AM015KNTDEH/EU | AM022KNTDEH/EU | AM028KNTDEH/EU | AM036KNTDEH/EU | |
| Power Supply | | | Ø, #, V, Hz | 1, 2, 220-240, 50 | 1, 2, 220-240, 50 | 1, 2, 220-240, 50 | |
| Mode | | | - | HEAT PUMP | HEAT PUMP | HEAT PUMP | |
| Performance | Capacity (Nominal) | Cooling | kW | 1.5 | 2.2 | 2.8 | 3.6 |
| | | | Btu/h | 5,100 | 7,500 | 9,600 | 12,300 |
| | | Heating | kW | 1.7 | 2.5 | 3.2 | 4.0 |
| | | | Btu/h | 5,800 | 8,500 | 10,900 | 13,600 |
| Power | Power Input (Nominal) | Cooling | W | 32.0 | 32.0 | 38.0 | 42.0 |
| | | Heating | | 34.0 | 35.0 | 39.0 | 42.0 |
| | Current Input (Nominal) | Cooling | A | 0.20 | 0.20 | 0.22 | 0.23 |
| | | Heating | | 0.20 | 0.20 | 0.22 | 0.23 |
| | MCA | | 0.3 | 0.3 | 0.4 | 0.4 | |
| MFA | | 15.0 | 15.0 | 15.0 | 15.0 | | |
| Heat exchanger | Type | | - | Fin & Tube | Fin & Tube | Fin & Tube | Fin & Tube |
| | Material | Fin | - | Al | Al | Al | Al |
| | | Tube | - | Cu | Cu | Cu | Cu |
| | Fin Treatment | | - | Anti-corrosion | Anti-corrosion | Anti-corrosion | Anti-corrosion |
| Fan | Type | | - | Crossflow Fan | Crossflow Fan | Crossflow Fan | Crossflow Fan |
| | Quantity | | ea | 1 | 1 | 1 | 1 |
| | Air Flow Rate | H/M/L (UL) | CMM | 6.2/5.7/5.1 | 6.6/5.7/5.1 | 7.0/6.2/5.5 | 8.5/7.5/6.6 |
| | | | l/s | 103.3/95.0/85.0 | 110.0/95.0/85.0 | 116.7/103.3/91.7 | 141.7/125.0/110.0 |
| | External Pressure | Min/Std/Max | mmAq | - | - | - | - |
| Pa | | | - | - | - | - | |
| Fan motor | Type | | - | SSR Feedback | SSR Feedback | SSR Feedback | SSR Feedback |
| | Output x n | | - | 19W x 1 | 19W x 1 | 19W x 1 | 19W x 1 |
| Piping Connections | Liquid Pipe | Type | | Flare connection | Flare connection | Flare connection | Flare connection |
| | | Ø, mm | | 6.35 | 6.35 | 6.35 | 6.35 |
| | | Ø, inch | | 1/4" | 1/4" | 1/4" | 1/4" |
| | Gas Pipe | Type | | Flare connection | Flare connection | Flare connection | Flare connection |
| | | Ø, mm | | 12.7 | 12.7 | 12.7 | 12.7 |
| | | Ø, inch | | 1/2" | 1/2" | 1/2" | 1/2" |
| | Drain Pipe | | Ø, mm | ID 18 HOSE | ID 18 HOSE | ID 18 HOSE | ID 18 HOSE |
| Heat insulation | | - | Both liquid and gas pipes | Both liquid and gas pipes | Both liquid and gas pipes | Both liquid and gas pipes | |
| Field Wiring | Power Source Wire | Minimum | mm2 | 1.5 | 1.5 | 1.5 | 1.5 |
| | | For connection with indoor | Minimum | mm2 | 0.75 | 0.75 | 0.75 |
| | | Remark | - | F1, F2 | F1, F2 | F1, F2 | F1, F2 |
| Refrigerant | Type | | - | R410A | R410A | R410A | R410A |
| | Control Method | | - | EEV NOT INCLUDED | EEV NOT INCLUDED | EEV NOT INCLUDED | EEV NOT INCLUDED |
| Sound | Sound Pressure | High/Mid/Low | dB(A) | 30/28/25 | 31/28/25 | 31/29/26 | 36/33/29 |
| | Sound Power | Cooling | | 47 | 48 | 48 | 51 |
| Dimensions | Net Weight | | kg | 8.0 | 8.0 | 8.5 | 8.5 |
| | Shipping Weight | | kg | 9.7 | 9.7 | 10.2 | 10.2 |
| | Net Dimensions (W×H×D) | | mm | 820 x 285 x 227 | 820 x 285 x 227 | 820 x 285 x 227 | 820 x 285 x 227 |
| | Shipping Dimensions (W×H×D) | | mm | 880 x 280 x 363 | 880 x 280 x 363 | 880 x 280 x 363 | 880 x 280 x 363 |

NOTE

- Mode : HP(Heat Pump), HR(Heat Recovery)
- Nominal Cooling : Indoor temperature 27°CDB / 19°CWB, Outdoor temperature 35°CDB / 24°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Nominal Heating : Indoor temperature 20°CDB / 15°CWB, Outdoor temperature 7°CDB / 6°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- These products contain R410A which is fluorinated greenhouse gas.
- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

※ The concept of RAC with EEV included is commercial application only. Residential application such as Hotel, Hospital, Houses where the very quiet surrounding is required should be avoided to prevent such a noise claim.

1. Specification

BORACAY

| Type | | | | WALL MOUNTED | WALL MOUNTED | WALL MOUNTED |
|--------------------|-----------------------------|----------------------------|---------------------------|---------------------------|---------------------------|-------------------|
| Model CODE | | | | AM045KNTDEH/EU | AM056KNTDEH/EU | AM071KNTDEH/EU |
| Power Supply | | | Ø, #, V, Hz | 1,2,220-240,50 | 1,2,220-240,50 | 1,2,220-240,50 |
| Mode | | | | - | HEAT PUMP | HEAT PUMP |
| Performance | Capacity (Nominal) | Cooling | kW | 4.5 | 5.6 | 6.8 |
| | | | Btu/h | 15,400 | 19,100 | 23,200 |
| | | Heating | kW | 5.0 | 6.3 | 7.0 |
| | | | Btu/h | 17,100 | 21,500 | 23,900 |
| Power | Power Input (Nominal) | Cooling | W | 47.0 | 48.0 | 51.0 |
| | | Heating | | 47.0 | 48.0 | 53.0 |
| | Current Input (Nominal) | Cooling | A | 0.27 | 0.27 | 0.28 |
| | | Heating | | 0.27 | 0.27 | 0.28 |
| | MCA | | | 0.4 | 0.4 | 0.4 |
| | MFA | | | 15.0 | 15.0 | 15.0 |
| Heat exchanger | Type | | - | Fin & Tube | Fin & Tube | Fin & Tube |
| | Material | Fin | - | Al | Al | Al |
| | | Tube | - | Cu | Cu | Cu |
| | Fin Treatment | | - | Anti-corrosion | Anti-corrosion | Anti-corrosion |
| Fan | Type | | - | Crossflow Fan | Crossflow Fan | Crossflow Fan |
| | Quantity | | ea | 1 | 1 | 1 |
| | Air Flow Rate | H/M/L (UL) | CMM | 13.9/12.4/11.2 | 14.4/12.9/11.2 | 15.7/14.1/12.9 |
| | | | l/s | 231.7/206.7/186.7 | 240.0/215.0/186.7 | 261.7/235.0/215.0 |
| | External Pressure | Min/Std/Max | mmAq | - | - | - |
| Pa | | | - | - | - | |
| Fan motor | Type | | - | SSR Feedback | SSR Feedback | SSR Feedback |
| | Output x n | | - | 28W x 1 | 28W x 1 | 28W x 1 |
| Piping Connections | Liquid Pipe | Type | | Flare connection | Flare connection | Flare connection |
| | | Ø, mm | | 6.35 | 6.35 | 9.52 |
| | | Ø, inch | | 1/4" | 1/4" | 3/8" |
| | Gas Pipe | Type | | Flare connection | Flare connection | Flare connection |
| | | Ø, mm | | 12.7 | 12.7 | 15.88 |
| | | Ø, inch | | 1/2" | 1/2" | 5/8" |
| | Drain Pipe | | Ø, mm | ID 18 HOSE | ID 18 HOSE | ID 18 HOSE |
| Heat insulation | | - | Both liquid and gas pipes | Both liquid and gas pipes | Both liquid and gas pipes | |
| Field Wiring | Power Source Wire | Minimum | mm2 | 1.5 | 1.5 | 1.5 |
| | | For connection with indoor | Minimum | mm2 | 0.75 | 0.75 |
| | Remark | | - | F1, F2 | F1, F2 | F1, F2 |
| Refrigerant | Type | | - | R410A | R410A | R410A |
| | Control Method | | - | EEV NOT INCLUDED | EEV NOT INCLUDED | EEV NOT INCLUDED |
| Sound | Sound Pressure | High/Mid/Low | dB(A) | 38/35/33 | 39/36/33 | 40/38/35 |
| | Sound Power | Cooling | | 53 | 53 | 55 |
| Dimensions | Net Weight | | kg | 12.0 | 12.0 | 12.0 |
| | Shipping Weight | | kg | 14.0 | 14.0 | 14.0 |
| | Net Dimensions (W×H×D) | | mm | 1065 x 298 x 243 | 1065 x 298 x 243 | 1065 x 298 x 243 |
| | Shipping Dimensions (W×H×D) | | mm | 1128 x 299 x 378 | 1128 x 299 x 378 | 1128 x 299 x 378 |

NOTE

- Mode : HP(Heat Pump), HR(Heat Recovery)
- Nominal Cooling : Indoor temperature 27°CDB / 19°CWB, Outdoor temperature 35°CDB / 24°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Nominal Heating : Indoor temperature 20°CDB / 15°CWB, Outdoor temperature 7°CDB / 6°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- These products contain R410A which is fluorinated greenhouse gas.
- Specifications may be subject to change without prior notice.
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1. Specification

BORACAY

| Type | | | WALL MOUNTED | WALL MOUNTED | WALL MOUNTED | WALL MOUNTED | |
|--------------------|-----------------------------|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------|
| Model CODE | | | AM015KNQDEH/EU | AM022KNQDEH/EU | AM028KNQDEH/EU | AM036KNQDEH/EU | |
| Power Supply | | | Ø, #, V, Hz | 1,2,220-240,50 | 1,2,220-240,50 | 1,2,220-240,50 | |
| Mode | | | - | HEAT PUMP | HEAT PUMP | HEAT PUMP | |
| Performance | Capacity (Nominal) | Cooling | kW | 1.5 | 2.2 | 2.8 | 3.6 |
| | | | Btu/h | 5,100 | 7,500 | 9,600 | 12,300 |
| | | Heating | kW | 1.7 | 2.5 | 3.2 | 4.0 |
| | | | Btu/h | 5,800 | 8,500 | 10,900 | 13,600 |
| Power | Power Input (Nominal) | Cooling | W | 32.0 | 32.0 | 38.0 | 42.0 |
| | | Heating | | 34.0 | 35.0 | 39.0 | 42.0 |
| | Current Input (Nominal) | Cooling | A | 0.20 | 0.20 | 0.22 | 0.23 |
| | | Heating | | 0.20 | 0.20 | 0.22 | 0.23 |
| | MCA | | 0.3 | 0.3 | 0.4 | 0.4 | |
| MFA | | 15.0 | 15.0 | 15.0 | 15.0 | | |
| Heat exchanger | Type | | - | Fin & Tube | Fin & Tube | Fin & Tube | Fin & Tube |
| | Material | Fin | - | Al | Al | Al | Al |
| | | Tube | - | Cu | Cu | Cu | Cu |
| | Fin Treatment | | - | Anti-corrosion | Anti-corrosion | Anti-corrosion | Anti-corrosion |
| Fan | Type | | - | Crossflow Fan | Crossflow Fan | Crossflow Fan | Crossflow Fan |
| | Quantity | | ea | 1 | 1 | 1 | 1 |
| | Air Flow Rate | H/M/L (UL) | CMM | 6.2/5.7/5.1 | 6.6/5.7/5.1 | 7.0/6.2/5.5 | 8.5/7.5/6.6 |
| | | | l/s | 103.3/95.0/85.0 | 110.0/95.0/85.0 | 116.7/103.3/91.7 | 141.7/125.0/110.0 |
| | External Pressure | Min/Std/Max | mmAq | - | - | - | - |
| Pa | | | - | - | - | - | |
| Fan motor | Type | | - | SSR Feedback | SSR Feedback | SSR Feedback | SSR Feedback |
| | Output x n | | - | 19W x 1 | 19W x 1 | 19W x 1 | 19W x 1 |
| Piping Connections | Liquid Pipe | | Type | Flare connection | Flare connection | Flare connection | Flare connection |
| | | | Ø, mm | 6.35 | 6.35 | 6.35 | 6.35 |
| | | | Ø, inch | 1/4" | 1/4" | 1/4" | 1/4" |
| | Gas Pipe | | Type | Flare connection | Flare connection | Flare connection | Flare connection |
| | | | Ø, mm | 12.7 | 12.7 | 12.7 | 12.7 |
| | | | Ø, inch | 1/2" | 1/2" | 1/2" | 1/2" |
| | Drain Pipe | | Ø, mm | ID 18 HOSE | ID 18 HOSE | ID 18 HOSE | ID 18 HOSE |
| Heat insulation | | - | Both liquid and gas pipes | Both liquid and gas pipes | Both liquid and gas pipes | Both liquid and gas pipes | |
| Field Wiring | Power Source Wire | Minimum | mm2 | 1.5 | 1.5 | 1.5 | 1.5 |
| | | For connection with indoor | Minimum | mm2 | 0.75 | 0.75 | 0.75 |
| | | | Remark | - | F1, F2 | F1, F2 | F1, F2 |
| Refrigerant | Type | | - | R410A | R410A | R410A | R410A |
| | Control Method | | - | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED |
| Sound | Sound Pressure | High/Mid/Low | dB(A) | 30/28/25 | 31/28/25 | 31/29/26 | 36/33/29 |
| | Sound Power | Cooling | | 47 | 48 | 48 | 51 |
| Dimensions | Net Weight | | kg | 8.5 | 8.5 | 9.0 | 9.0 |
| | Shipping Weight | | kg | 10.2 | 10.2 | 10.6 | 10.6 |
| | Net Dimensions (W×H×D) | | mm | 820 x 285 x 227 | 820 x 285 x 227 | 820 x 285 x 227 | 820 x 285 x 227 |
| | Shipping Dimensions (W×H×D) | | mm | 880 x 280 x 363 | 880 x 280 x 363 | 880 x 280 x 363 | 880 x 280 x 363 |

NOTE

- Mode : HP(Heat Pump), HR(Heat Recovery)
- Nominal Cooling : Indoor temperature 27°CDB / 19°CWB, Outdoor temperature 35°CDB / 24°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Nominal Heating : Indoor temperature 20°CDB / 15°CWB, Outdoor temperature 7°CDB / 6°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- These products contain R410A which is fluorinated greenhouse gas.
- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

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1. Specification

BORACAY

| Type | | | | WALL MOUNTED | WALL MOUNTED | WALL MOUNTED |
|--------------------|-----------------------------|--------------|---------------------------|---------------------------|---------------------------|-------------------|
| Model CODE | | | | AM045KNQDEH/EU | AM056KNQDEH/EU | AM071KNQDEH/EU |
| Power Supply | | | Ø, #, V, Hz | 1,2,220-240,50 | 1,2,220-240,50 | 1,2,220-240,50 |
| Mode | | | | - | HEAT PUMP | HEAT PUMP |
| Performance | Capacity (Nominal) | Cooling | kW | 4.5 | 5.6 | 6.8 |
| | | | Btu/h | 15,400 | 19,100 | 23,200 |
| | | Heating | kW | 5.0 | 6.3 | 7.0 |
| | | | Btu/h | 17,100 | 21,500 | 23,900 |
| Power | Power Input (Nominal) | Cooling | W | 47.0 | 48.0 | 51.0 |
| | | Heating | | 47.0 | 48.0 | 53.0 |
| | Current Input (Nominal) | Cooling | A | 0.27 | 0.27 | 0.28 |
| | | Heating | | 0.27 | 0.27 | 0.28 |
| | MCA | | | 0.4 | 0.4 | 0.4 |
| | MFA | | | 15.0 | 15.0 | 15.0 |
| Heat exchanger | Type | | - | Fin & Tube | Fin & Tube | Fin & Tube |
| | Material | Fin | - | Al | Al | Al |
| | | Tube | - | Cu | Cu | Cu |
| | Fin Treatment | | - | Anti-corrosion | Anti-corrosion | Anti-corrosion |
| Fan | Type | | - | Crossflow Fan | Crossflow Fan | Crossflow Fan |
| | Quantity | | ea | 1 | 1 | 1 |
| | Air Flow Rate | H/M/L (UL) | CMM | 13.9/12.4/11.2 | 14.4/12.9/11.2 | 15.7/14.1/12.9 |
| | | | l/s | 231.7/206.7/186.7 | 240.0/215.0/186.7 | 261.7/235.0/215.0 |
| | External Pressure | Min/Std/Max | mmAq | - | - | - |
| Pa | | | - | - | - | |
| Fan motor | Type | | - | SSR Feedback | SSR Feedback | SSR Feedback |
| | Output x n | | - | 28W x 1 | 28W x 1 | 28W x 1 |
| Piping Connections | Liquid Pipe | | Type | Flare connection | Flare connection | Flare connection |
| | | | Ø, mm | 6.35 | 6.35 | 9.52 |
| | | | Ø, inch | 1/4" | 1/4" | 3/8" |
| | Gas Pipe | | Type | Flare connection | Flare connection | Flare connection |
| | | | Ø, mm | 12.7 | 12.7 | 15.88 |
| | | | Ø, inch | 1/2" | 1/2" | 5/8" |
| | Drain Pipe | | Ø, mm | ID 18 HOSE | ID 18 HOSE | ID 18 HOSE |
| Heat insulation | | - | Both liquid and gas pipes | Both liquid and gas pipes | Both liquid and gas pipes | |
| Field Wiring | Power Source Wire | Minimum | mm2 | 1.5 | 1.5 | 1.5 |
| | For connection with indoor | Minimum | mm2 | 0.75 | 0.75 | 0.75 |
| | | Remark | - | F1, F2 | F1, F2 | F1, F2 |
| Refrigerant | Type | | - | R410A | R410A | R410A |
| | Control Method | | - | EEV INCLUDED | EEV INCLUDED | EEV INCLUDED |
| Sound | Sound Pressure | High/Mid/Low | dB(A) | 38/35/33 | 39/36/33 | 40/38/35 |
| | Sound Power | Cooling | | 53 | 53 | 55 |
| Dimensions | Net Weight | | kg | 12.5 | 12.5 | 12.5 |
| | Shipping Weight | | kg | 14.5 | 14.5 | 14.5 |
| | Net Dimensions (W×H×D) | | mm | 1065 x 298 x 243 | 1065 x 298 x 243 | 1065 x 298 x 243 |
| | Shipping Dimensions (W×H×D) | | mm | 1128 x 299 x 378 | 1128 x 299 x 378 | 1128 x 299 x 378 |

NOTE

- Mode : HP(Heat Pump), HR(Heat Recovery)
- Nominal Cooling : Indoor temperature 27°CDB / 19°CWB, Outdoor temperature 35°CDB / 24°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Nominal Heating : Indoor temperature 20°CDB / 15°CWB, Outdoor temperature 7°CDB / 6°CWB, Refrigerant pipe length 7.5m, Level difference 0m.
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- These products contain R410A which is fluorinated greenhouse gas.
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- Select wire size based on the value of MCA

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2. Summary Table

BORACAY

Performance Characteristics

| Model Code | Net Weight (kg) | Fan Speed | Nominal Capacity(kW) | | | Airflow (CMM) | Sound Pressure (dBA) | Sound Power (dBA) |
|------------------------------------|-----------------|-----------|----------------------|----------|---------|---------------|----------------------|-------------------|
| | | | Cooling | Sensible | Heating | | | |
| AM015KNTDEH/EU (AM015KNQDEH/EU) | 8.0 (8.5) | High | 1.5 | 1.0 | 1.7 | 6.2 | 30 | 47 |
| | | Mid | 1.4 | 0.9 | 1.6 | 5.7 | 28 | - |
| | | Low | 1.3 | 0.9 | 1.5 | 5.1 | 25 | - |
| AM022KNTDEH/EU (AM022KNQDEH/EU) | 8.0 (8.5) | High | 2.2 | 1.5 | 2.5 | 6.6 | 31 | 48 |
| | | Mid | 1.9 | 1.3 | 2.3 | 5.7 | 28 | - |
| | | Low | 1.7 | 1.2 | 2.2 | 5.1 | 25 | - |
| AM028KNTDEH/EU (AM028KNQDEH/EU) | 8.5 (9.0) | High | 2.8 | 1.9 | 3.2 | 7.0 | 31 | 48 |
| | | Mid | 2.5 | 1.7 | 3.0 | 6.2 | 29 | - |
| | | Low | 2.3 | 1.6 | 2.8 | 5.5 | 26 | - |
| AM036KNTDEH/EU (AM036KNQDEH/EU) | 8.5 (9.0) | High | 3.6 | 2.4 | 4.0 | 8.5 | 36 | 51 |
| | | Mid | 3.2 | 2.1 | 3.8 | 7.5 | 33 | - |
| | | Low | 2.9 | 1.9 | 3.5 | 6.6 | 29 | - |
| AM045KNTDEH/EU (AM045KNQDEH/EU) | 12.0 (12.5) | High | 4.5 | 3.1 | 5.0 | 13.9 | 38 | 53 |
| | | Mid | 4.1 | 2.8 | 4.7 | 12.4 | 35 | - |
| | | Low | 3.7 | 2.5 | 4.5 | 11.2 | 33 | - |
| AM056KNTDEH/EU (AM056KNQDEH/EU) | 12.0 (12.5) | High | 5.6 | 3.8 | 6.3 | 14.4 | 39 | 53 |
| | | Mid | 5.1 | 3.5 | 6.0 | 12.9 | 36 | - |
| | | Low | 4.5 | 3.1 | 5.6 | 11.2 | 33 | - |
| AM071KNTDEH/EU (AM071KNQDEH/EU) | 12.0 (12.5) | High | 6.8 | 4.6 | 7.0 | 15.7 | 40 | 55 |
| | | Mid | 6.2 | 4.2 | 6.6 | 14.1 | 38 | - |
| | | Low | 5.7 | 3.9 | 6.3 | 12.9 | 35 | - |

Electrical Characteristics

| Model Code | Power Supply (Ø, #, V, Hz) | Power Input (W) (C / H) | Current Input (A) (C / H) | MCA (A) | MFA (A) | FLA (A) |
|----------------|----------------------------|----------------------------|------------------------------|---------|---------|---------|
| AM015KN*DEH/EU | 1Ø/220~240V/50Hz | 32/34 | 0.20/0.20 | 0.3 | 15 | 0.22 |
| AM022KN*DEH/EU | 1Ø/220~240V/50Hz | 32/35 | 0.20/0.20 | 0.3 | 15 | 0.22 |
| AM028KN*DEH/EU | 1Ø/220~240V/50Hz | 38/39 | 0.22/0.22 | 0.4 | 15 | 0.25 |
| AM036KN*DEH/EU | 1Ø/220~240V/50Hz | 42/42 | 0.23/0.23 | 0.4 | 15 | 0.25 |
| AM045KN*DEH/EU | 1Ø/220~240V/50Hz | 47/47 | 0.27/0.27 | 0.4 | 15 | 0.30 |
| AM056KN*DEH/EU | 1Ø/220~240V/50Hz | 48/48 | 0.27/0.27 | 0.4 | 15 | 0.30 |
| AM071KN*DEH/EU | 1Ø/220~240V/50Hz | 51/53 | 0.28/0.28 | 0.4 | 15 | 0.30 |

NOTE

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

3. Capacity Table

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Heating

TC: Total Capacity

| Model | Outdoor temperature (°C) | | Indoor temperature (°C, WB) | | | | |
|-------|--------------------------|------|-----------------------------|------|------|------|------|
| | | | 16.0 | 18.0 | 20.0 | 22.0 | 24.0 |
| | DB | WB | TC | TC | TC | TC | TC |
| | | | kW | kW | kW | kW | kW |
| 1.50 | -20 | -21 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 |
| | -17 | -18 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 |
| | -15 | -16 | 1.10 | 1.10 | 1.00 | 1.00 | 0.90 |
| | -12 | -13 | 1.10 | 1.10 | 1.10 | 1.10 | 1.00 |
| | -10 | -11 | 1.20 | 1.20 | 1.20 | 1.20 | 1.10 |
| | -7 | -8 | 1.30 | 1.30 | 1.30 | 1.30 | 1.20 |
| | -5 | -6 | 1.40 | 1.40 | 1.30 | 1.30 | 1.20 |
| | -3 | -4 | 1.40 | 1.40 | 1.40 | 1.30 | 1.30 |
| | 0 | -1 | 1.50 | 1.50 | 1.50 | 1.40 | 1.40 |
| | 3 | 2 | 1.50 | 1.50 | 1.50 | 1.40 | 1.40 |
| | 5 | 4 | 1.60 | 1.60 | 1.60 | 1.50 | 1.40 |
| | 7 | 6 | 1.70 | 1.70 | 1.70 | 1.60 | 1.40 |
| | 9 | 8 | 1.80 | 1.70 | 1.70 | 1.60 | 1.40 |
| | 11 | 10 | 1.80 | 1.70 | 1.70 | 1.60 | 1.40 |
| 13 | 12 | 2.00 | 1.80 | 1.70 | 1.60 | 1.40 | |
| 15 | 14 | 2.10 | 1.80 | 1.70 | 1.60 | 1.40 | |
| 2.20 | -20 | -21 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 |
| | -17 | -18 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 |
| | -15 | -16 | 1.70 | 1.60 | 1.60 | 1.60 | 1.60 |
| | -12 | -13 | 1.80 | 1.80 | 1.80 | 1.80 | 1.70 |
| | -10 | -11 | 2.00 | 2.00 | 1.90 | 1.90 | 1.90 |
| | -7 | -8 | 2.30 | 2.20 | 2.20 | 2.00 | 2.00 |
| | -5 | -6 | 2.40 | 2.30 | 2.30 | 2.20 | 2.20 |
| | -3 | -4 | 2.50 | 2.50 | 2.40 | 2.30 | 2.20 |
| | 0 | -1 | 2.60 | 2.50 | 2.50 | 2.30 | 2.20 |
| | 3 | 2 | 2.70 | 2.60 | 2.50 | 2.30 | 2.20 |
| | 5 | 4 | 2.80 | 2.70 | 2.50 | 2.30 | 2.20 |
| | 7 | 6 | 2.80 | 2.70 | 2.50 | 2.30 | 2.20 |
| | 9 | 8 | 3.00 | 2.70 | 2.50 | 2.30 | 2.20 |
| | 11 | 10 | 3.00 | 2.70 | 2.50 | 2.30 | 2.20 |
| 13 | 12 | 3.00 | 2.70 | 2.50 | 2.30 | 2.20 | |
| 15 | 14 | 3.00 | 2.70 | 2.50 | 2.30 | 2.20 | |
| 2.80 | -20 | -21 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 |
| | -17 | -18 | 2.00 | 2.00 | 2.00 | 2.00 | 1.90 |
| | -15 | -16 | 2.10 | 2.10 | 2.00 | 2.00 | 1.90 |
| | -12 | -13 | 2.20 | 2.20 | 2.20 | 2.10 | 2.10 |
| | -10 | -11 | 2.30 | 2.30 | 2.30 | 2.30 | 2.20 |
| | -7 | -8 | 2.50 | 2.40 | 2.40 | 2.40 | 2.30 |
| | -5 | -6 | 2.60 | 2.60 | 2.50 | 2.50 | 2.40 |
| | -3 | -4 | 2.80 | 2.70 | 2.70 | 2.60 | 2.50 |
| | 0 | -1 | 2.90 | 2.80 | 2.80 | 2.70 | 2.60 |
| | 3 | 2 | 3.00 | 3.00 | 2.90 | 2.80 | 2.70 |
| | 5 | 4 | 3.20 | 3.10 | 3.10 | 2.90 | 2.70 |
| | 7 | 6 | 3.30 | 3.20 | 3.20 | 3.00 | 2.70 |
| | 9 | 8 | 3.40 | 3.30 | 3.20 | 3.00 | 2.70 |
| | 11 | 10 | 3.50 | 3.30 | 3.20 | 3.00 | 2.70 |
| 13 | 12 | 3.60 | 3.40 | 3.20 | 3.00 | 2.70 | |
| 15 | 14 | 3.70 | 3.40 | 3.20 | 3.00 | 2.70 | |
| 3.60 | -20 | -21 | 2.40 | 2.40 | 2.30 | 2.30 | 2.30 |
| | -17 | -18 | 2.60 | 2.50 | 2.40 | 2.40 | 2.30 |
| | -15 | -16 | 2.70 | 2.60 | 2.50 | 2.50 | 2.40 |
| | -12 | -13 | 2.80 | 2.70 | 2.70 | 2.60 | 2.60 |
| | -10 | -11 | 2.90 | 2.90 | 2.90 | 2.80 | 2.80 |
| | -7 | -8 | 3.10 | 3.10 | 3.00 | 3.00 | 2.90 |
| -5 | -6 | 3.30 | 3.20 | 3.20 | 3.10 | 3.00 | |

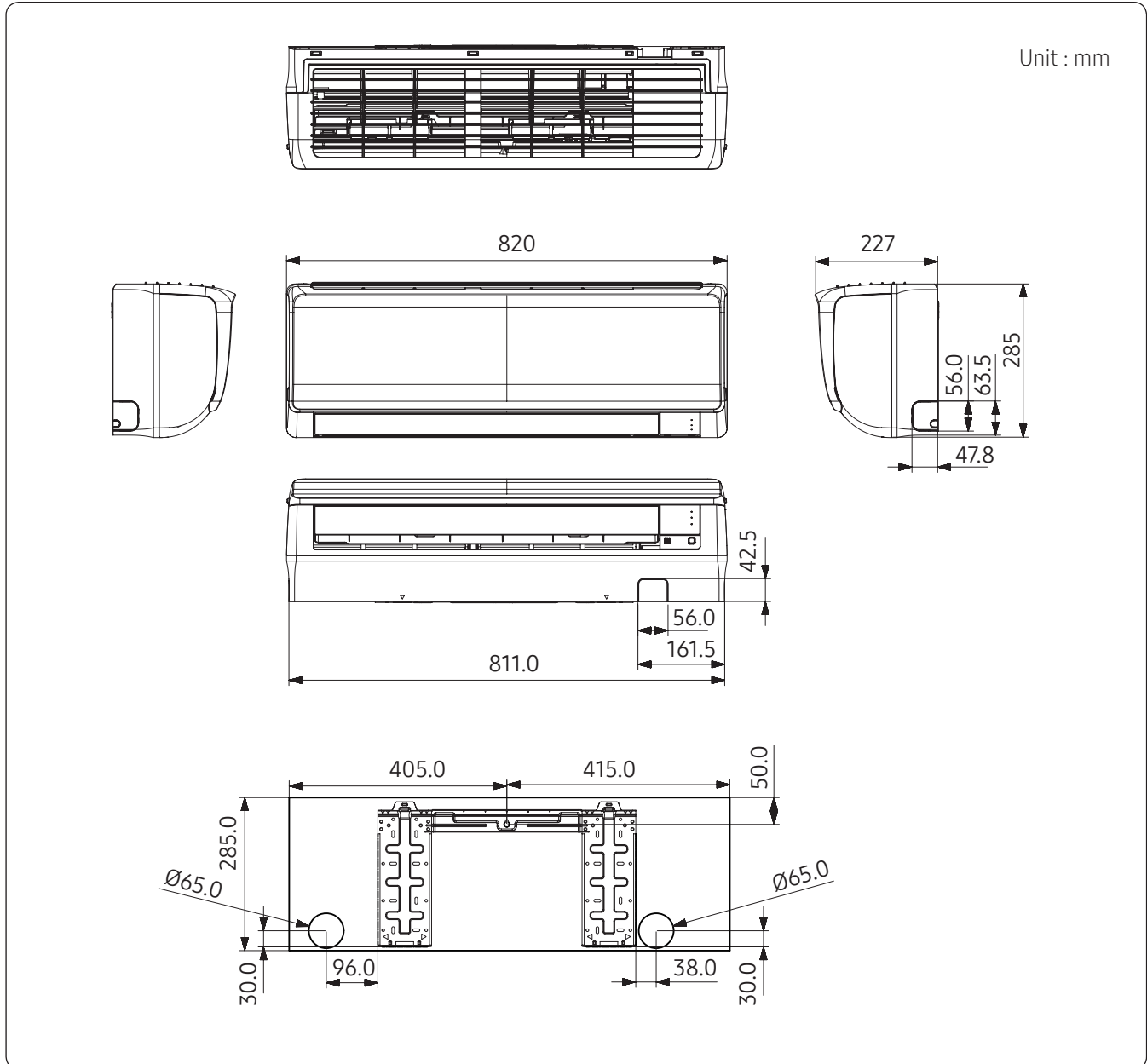
3. Capacity Table

| Model | Outdoor temperature (°C) | | 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 |
| 3.60 | -3 | -4 | 3.40 | 3.40 | 3.30 | 3.20 | 3.10 |
| | 0 | -1 | 3.60 | 3.60 | 3.50 | 3.40 | 3.20 |
| | 3 | 2 | 3.80 | 3.70 | 3.70 | 3.50 | 3.40 |
| | 5 | 4 | 3.90 | 3.90 | 3.80 | 3.60 | 3.40 |
| | 7 | 6 | 4.10 | 4.10 | 4.00 | 3.70 | 3.40 |
| | 9 | 8 | 4.20 | 4.10 | 4.00 | 3.70 | 3.40 |
| | 11 | 10 | 4.40 | 4.20 | 4.00 | 3.70 | 3.40 |
| | 13 | 12 | 4.50 | 4.20 | 4.00 | 3.70 | 3.40 |
| 4.50 | 15 | 14 | 4.60 | 4.30 | 4.00 | 3.70 | 3.40 |
| | -20 | -21 | 3.10 | 3.02 | 3.02 | 2.94 | 2.94 |
| | -17 | -18 | 3.17 | 3.17 | 3.10 | 3.02 | 3.02 |
| | -15 | -16 | 3.33 | 3.25 | 3.17 | 3.10 | 3.02 |
| | -12 | -13 | 3.49 | 3.41 | 3.33 | 3.33 | 3.25 |
| | -10 | -11 | 3.65 | 3.65 | 3.57 | 3.49 | 3.49 |
| | -7 | -8 | 3.89 | 3.81 | 3.81 | 3.73 | 3.57 |
| | -5 | -6 | 4.13 | 4.05 | 3.97 | 3.89 | 3.73 |
| | -3 | -4 | 4.29 | 4.21 | 4.21 | 4.05 | 3.89 |
| | 0 | -1 | 4.52 | 4.44 | 4.37 | 4.21 | 3.97 |
| | 3 | 2 | 4.68 | 4.68 | 4.60 | 4.44 | 4.21 |
| | 5 | 4 | 4.92 | 4.84 | 4.76 | 4.52 | 4.21 |
| | 7 | 6 | 5.16 | 5.08 | 5.00 | 4.60 | 4.21 |
| | 9 | 8 | 5.32 | 5.16 | 5.00 | 4.60 | 4.21 |
| | 11 | 10 | 5.48 | 5.24 | 5.00 | 4.60 | 4.21 |
| 13 | 12 | 5.63 | 5.32 | 5.00 | 4.60 | 4.21 | |
| 15 | 14 | 5.79 | 5.40 | 5.00 | 4.60 | 4.21 | |
| 5.60 | -20 | -21 | 3.90 | 3.80 | 3.80 | 3.70 | 3.70 |
| | -17 | -18 | 4.00 | 4.00 | 3.90 | 3.80 | 3.80 |
| | -15 | -16 | 4.20 | 4.10 | 4.00 | 3.90 | 3.80 |
| | -12 | -13 | 4.40 | 4.30 | 4.20 | 4.20 | 4.10 |
| | -10 | -11 | 4.60 | 4.60 | 4.50 | 4.40 | 4.40 |
| | -7 | -8 | 4.90 | 4.80 | 4.80 | 4.70 | 4.50 |
| | -5 | -6 | 5.20 | 5.10 | 5.00 | 4.90 | 4.70 |
| | -3 | -4 | 5.40 | 5.30 | 5.30 | 5.10 | 4.90 |
| | 0 | -1 | 5.70 | 5.60 | 5.50 | 5.30 | 5.00 |
| | 3 | 2 | 5.90 | 5.90 | 5.80 | 5.60 | 5.30 |
| | 5 | 4 | 6.20 | 6.10 | 6.00 | 5.70 | 5.30 |
| | 7 | 6 | 6.50 | 6.40 | 6.30 | 5.80 | 5.30 |
| | 9 | 8 | 6.70 | 6.50 | 6.30 | 5.80 | 5.30 |
| | 11 | 10 | 6.90 | 6.60 | 6.30 | 5.80 | 5.30 |
| | 13 | 12 | 7.10 | 6.70 | 6.30 | 5.80 | 5.30 |
| 15 | 14 | 7.30 | 6.80 | 6.30 | 5.80 | 5.30 | |
| 7.10 | -20 | -21 | 4.40 | 4.30 | 4.20 | 4.20 | 4.20 |
| | -17 | -18 | 4.50 | 4.40 | 4.30 | 4.30 | 4.20 |
| | -15 | -16 | 4.70 | 4.60 | 4.40 | 4.30 | 4.20 |
| | -12 | -13 | 4.90 | 4.80 | 4.70 | 4.60 | 4.50 |
| | -10 | -11 | 5.10 | 5.10 | 5.00 | 4.90 | 4.90 |
| | -7 | -8 | 5.40 | 5.40 | 5.30 | 5.20 | 5.10 |
| | -5 | -6 | 5.70 | 5.60 | 5.60 | 5.40 | 5.20 |
| | -3 | -4 | 6.00 | 5.90 | 5.90 | 5.60 | 5.40 |
| | 0 | -1 | 6.30 | 6.20 | 6.10 | 5.90 | 5.60 |
| | 3 | 2 | 6.60 | 6.50 | 6.40 | 6.20 | 5.90 |
| | 5 | 4 | 6.90 | 6.80 | 6.70 | 6.30 | 5.90 |
| | 7 | 6 | 7.20 | 7.10 | 7.00 | 6.50 | 5.90 |
| | 9 | 8 | 7.40 | 7.20 | 7.00 | 6.50 | 5.90 |
| | 11 | 10 | 7.60 | 7.30 | 7.00 | 6.50 | 5.90 |
| | 13 | 12 | 7.90 | 7.40 | 7.00 | 6.50 | 5.90 |
| 15 | 14 | 8.10 | 7.50 | 7.00 | 6.50 | 5.90 | |

4. Dimensional Drawing

BORACAY

AM015/022/028/036KN*D*****

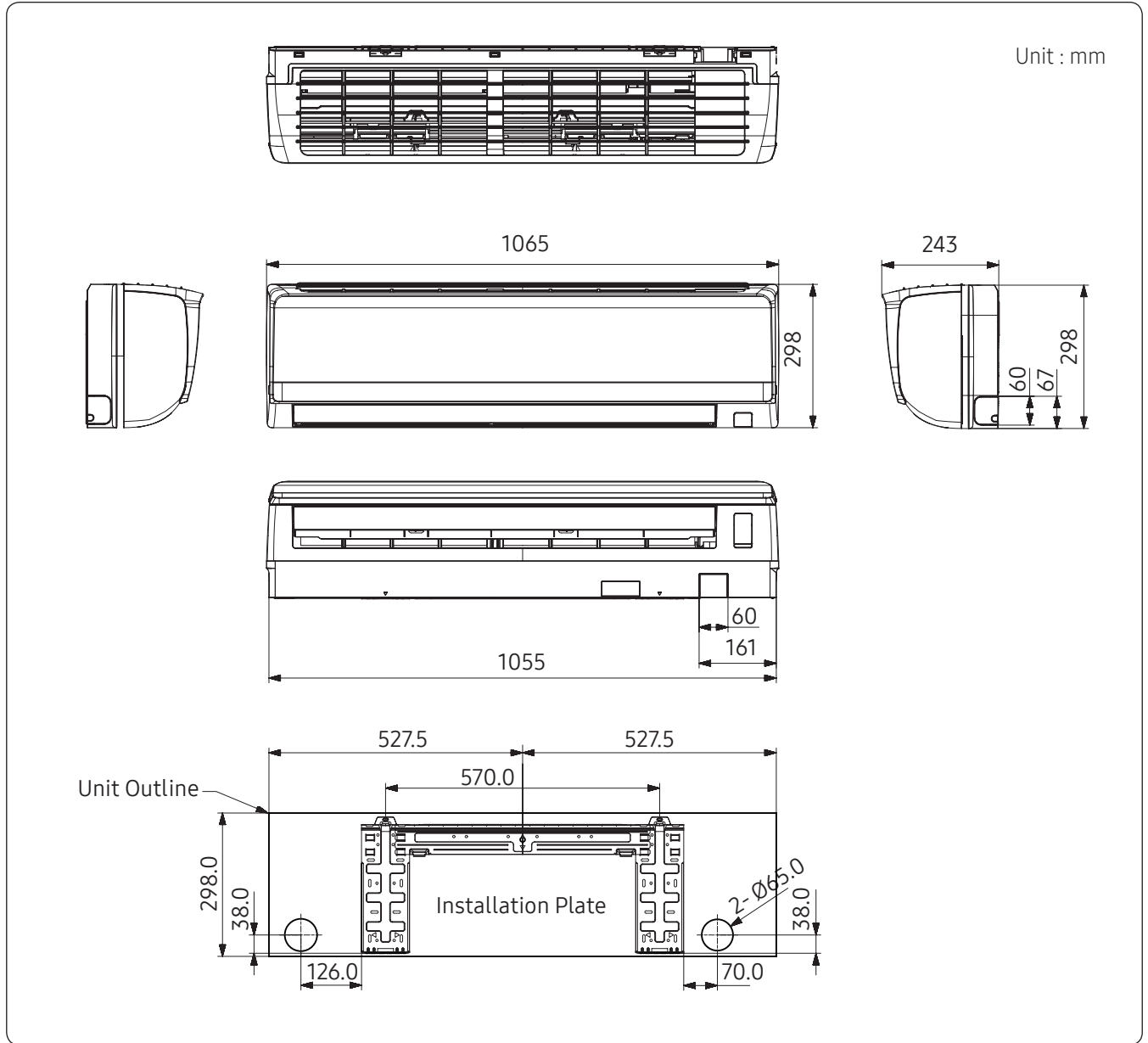


| No. | Name | Description |
|-----|--------------------------------------|--------------|
| 1 | Liquid pipe connection | Ø6.35 (Ø1/4) |
| 2 | Gas pipe connection | Ø12.7 (Ø1/2) |
| 3 | Drain pipe connection | ID 18 HOSE |
| 4 | Power & Communication wiring conduit | |

4. Dimensional Drawing

BORACAY

AM045/056/071KN*D****

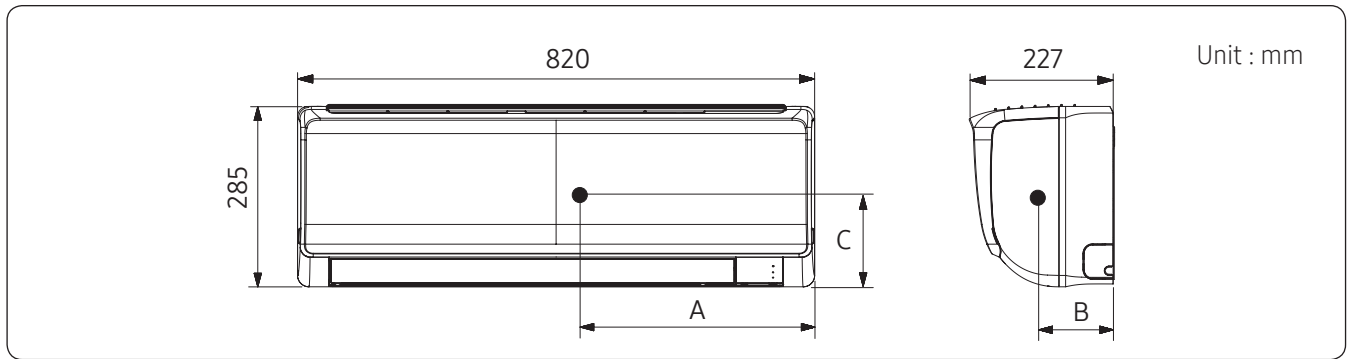


| No. | Name | Description | |
|-----|--------------------------------------|--------------|---------------|
| | | 045 / 056 | 071 |
| 1 | Liquid pipe connection | Ø6.35 (Ø1/4) | Ø9.52 (Ø3/8) |
| 2 | Gas pipe connection | Ø12.7 (Ø1/2) | Ø15.88 (Ø5/8) |
| 3 | Drain pipe connection | ID18 HOSE | |
| 4 | Power & Communication wiring conduit | | |

5. Center of Gravity

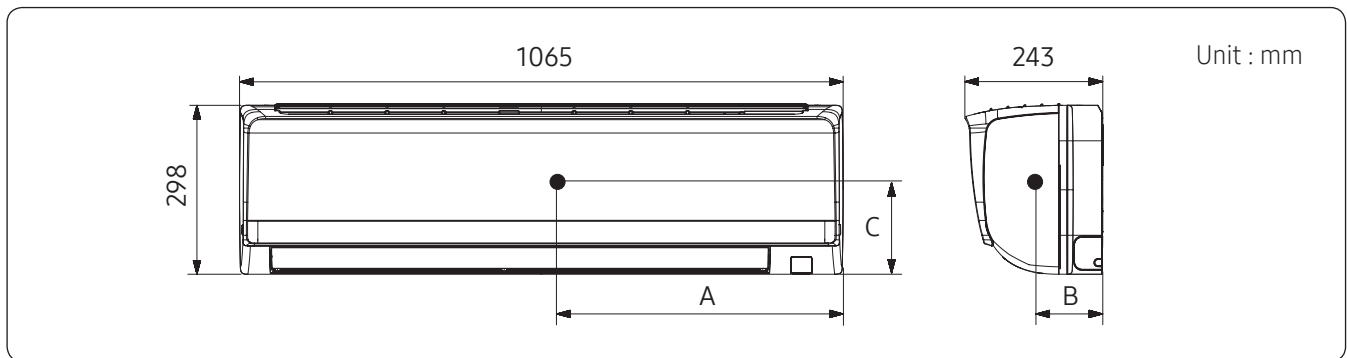
BORACAY

AM015/022/028/036KN*D*****



| A | B | C |
|-----|-----|-----|
| 375 | 105 | 155 |

AM045/056/071KN*D*****

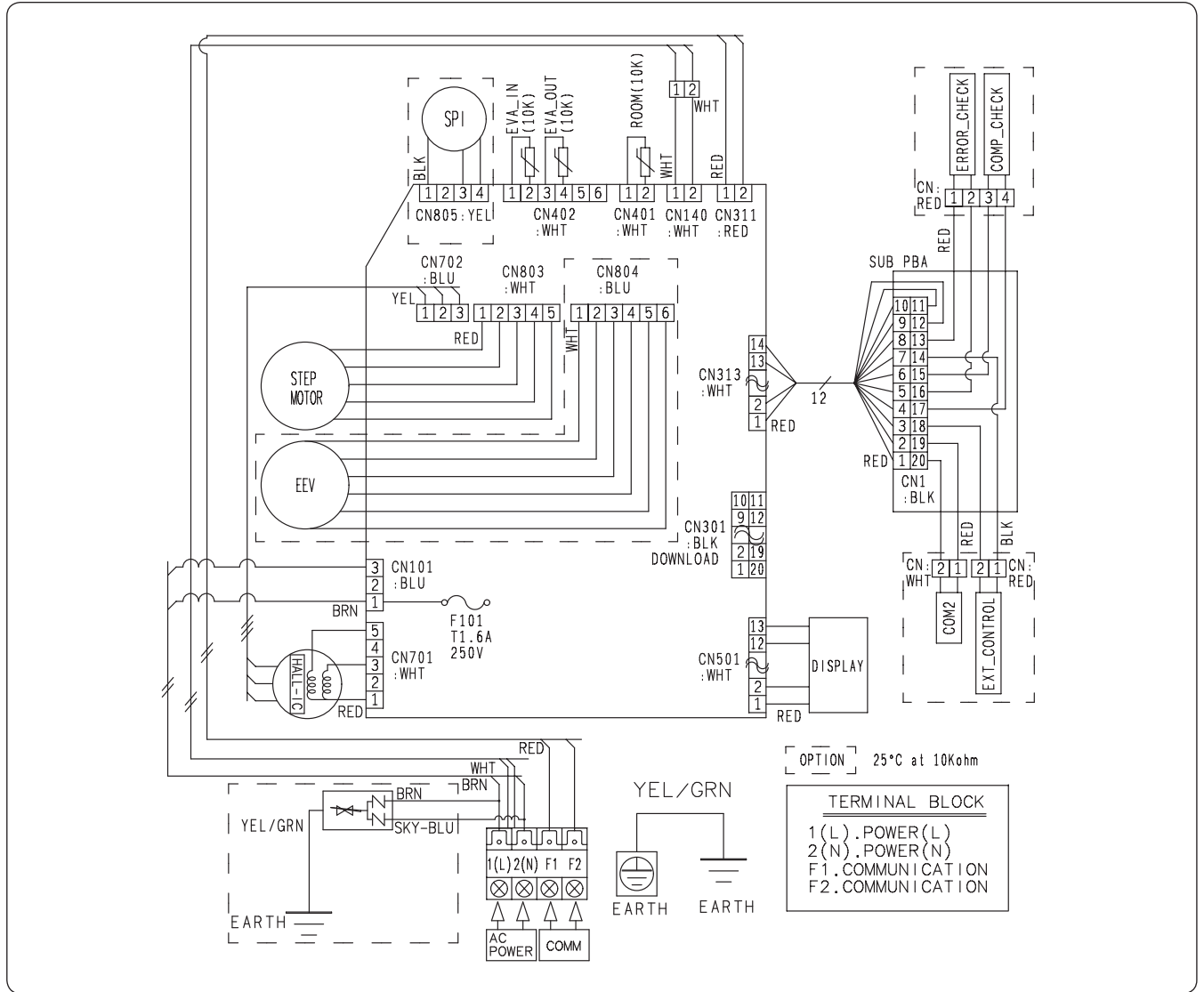


| A | B | C |
|-----|-----|-----|
| 460 | 120 | 160 |

6. Electrical Wiring Diagram


BORACAY

AM***KN*D****



| | | | | | |
|-----------|----------------------------|-----------|-------------------------|--------------|-------------------------|
| SUB PBA | Printed Circuit Board(SUB) | SPI | S-Plasma ion | EVA-OUT(10K) | Thermistor EVA OUT(10K) |
| [HALL IC] | Motor For FAN | ROOM(10K) | Thermistor ROOM In(10K) | EVA-IN(10K) | Thermistor EVA IN(10K) |
| EEV | electronic expansion valve | | | | |

NOTE

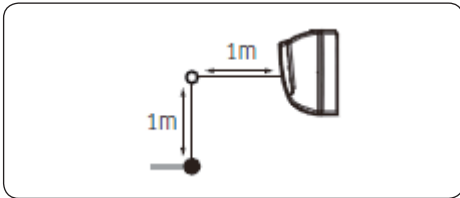
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, sky: sky blue, GRN: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
-  Protective earth(SCREW)

7. Sound Data

BORACAY

Sound Pressure Level

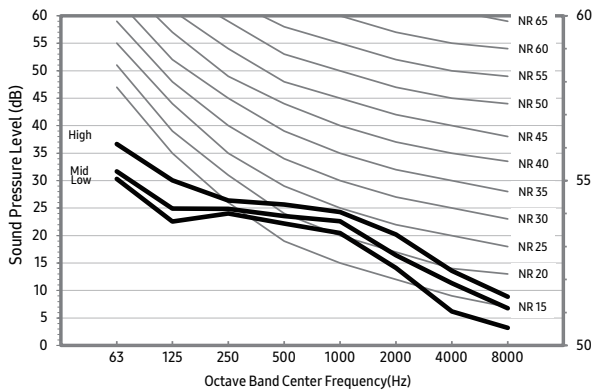
Unit: dB(A)



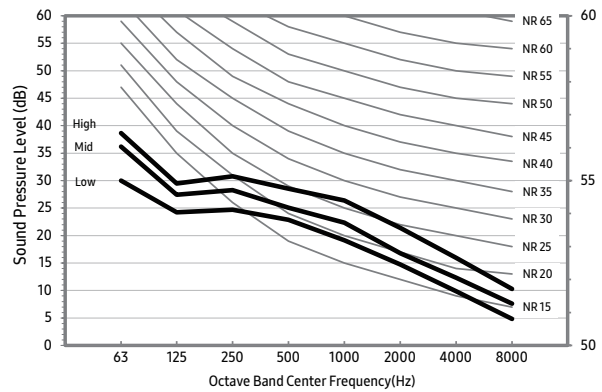
| MODEL | Hi | MID | LOW |
|----------------|----|-----|-----|
| AM015KN*D***** | 30 | 28 | 25 |
| AM022KN*D***** | 31 | 28 | 25 |
| AM028KN*D***** | 31 | 29 | 26 |
| AM036KN*D***** | 36 | 33 | 29 |

NR Curve

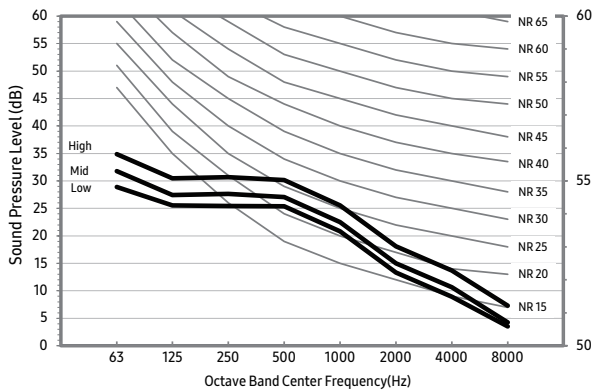
1) AM015KN*D*****



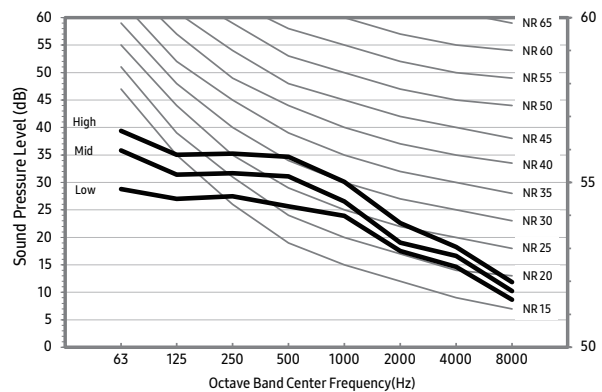
2) AM022KN*D*****



3) AM028KN*D*****



4) AM036KN*D*****



NOTE

- Specifications may be subject to change without prior notice
- Sound Pressure Level
 - 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 power level.
 - Reference acoustic pressure 0 dB = 20μPa

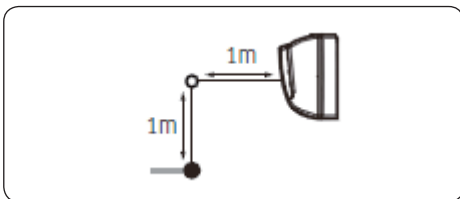
※ The concept of RAC with EEV included is commercial application only. Residential application such as Hotel, Hospital, Houses where the very quiet surrounding is required should be avoided to prevent such a noise claim.

7. Sound Data

BORACAY

Sound Pressure Level

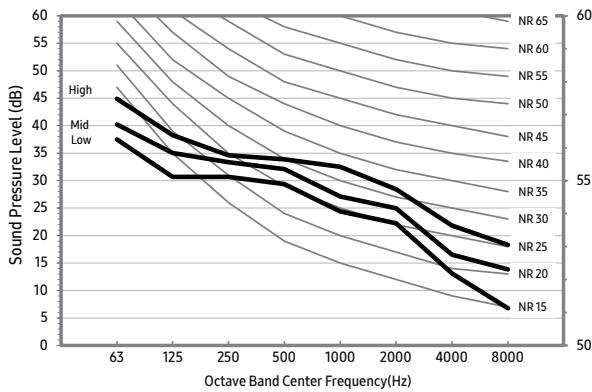
Unit: dB(A)



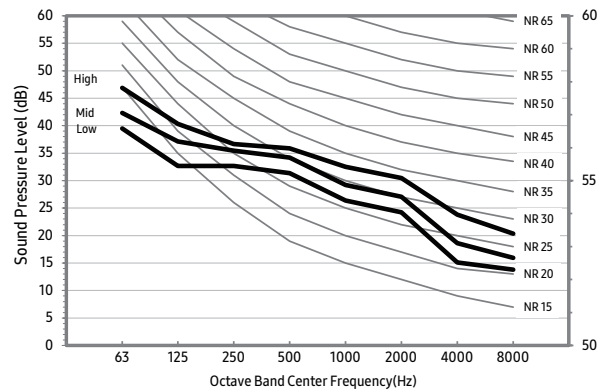
| MODEL | Hi | MID | LOW |
|----------------|----|-----|-----|
| AM045KN*D***** | 38 | 35 | 33 |
| AM056KN*D***** | 39 | 36 | 33 |
| AM071KN*D***** | 40 | 38 | 35 |

NR Curve

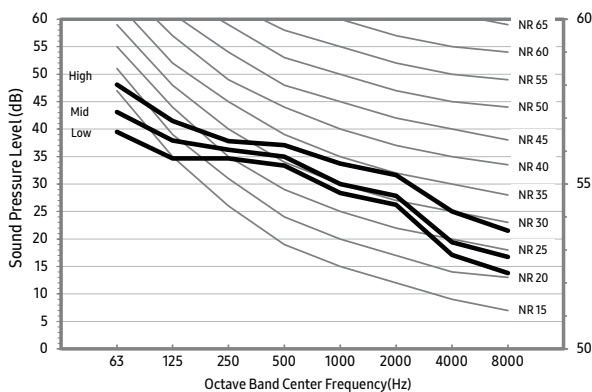
5) AM045KN*D*****



6) AM056KN*D*****



7) AM071KN*D*****



NOTE

- Specifications may be subject to change without prior notice
- Sound Pressure Level
 - 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 power level.
 - Reference acoustic pressure 0 dB = 20μPa

※ The concept of RAC with EEV included is commercial application only. Residential application such as Hotel, Hospital, Houses where the very quiet surrounding is required should be avoided to prevent such a noise claim.

7. Sound Data

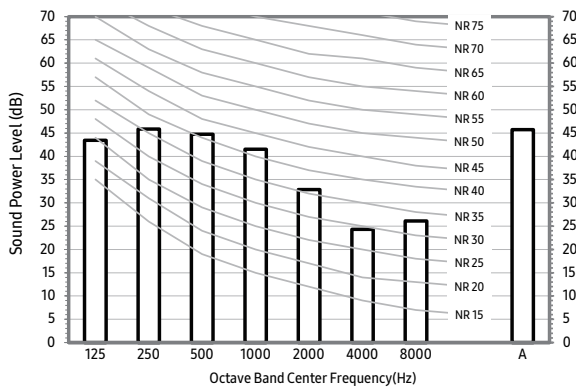
BORACAY

Sound Power Level

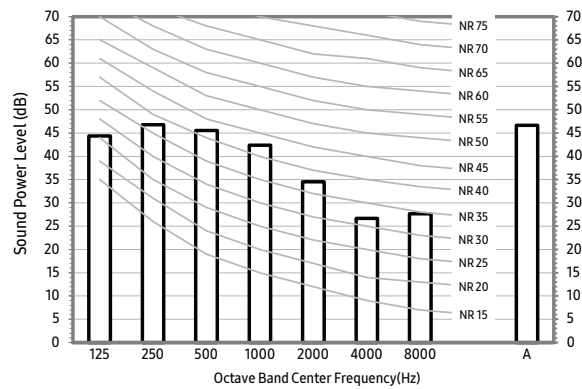
Unit: dB(A)

| MODEL | Power |
|----------------|-------|
| AM015KN*D***** | 47 |
| AM022KN*D***** | 48 |
| AM028KN*D***** | 48 |
| AM036KN*D***** | 51 |

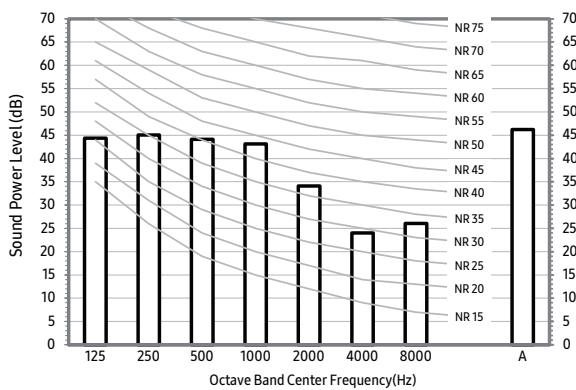
1) AM015KN*D*****



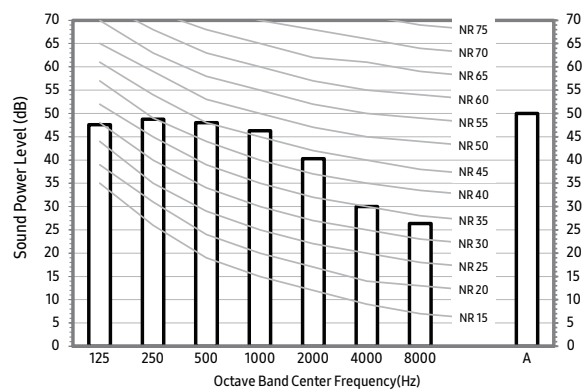
2) AM022KN*D*****



3) AM028KN*D*****



4) AM036KN*D*****



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.

※ The concept of RAC with EEV included is commercial application only. Residential application such as Hotel, Hospital, Houses where the very quiet surrounding is required should be avoided to prevent such a noise claim.

7. Sound Data

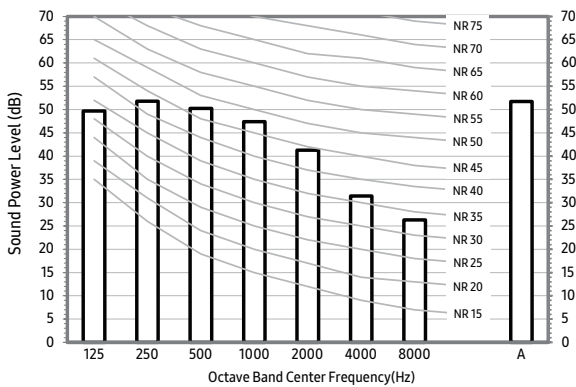
BORACAY

Sound Power Level

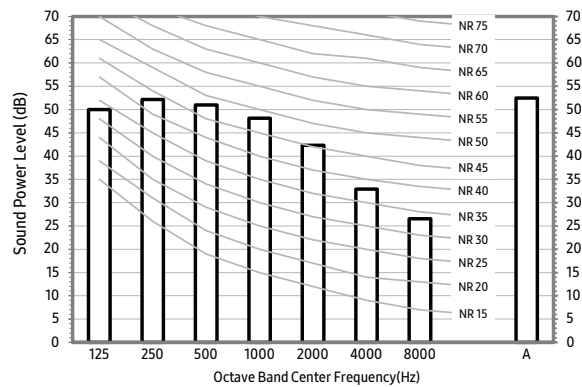
Unit: dB(A)

| MODEL | Power |
|----------------|-------|
| AM045KN*D***** | 53 |
| AM056KN*D***** | 53 |
| AM071KN*D***** | 55 |

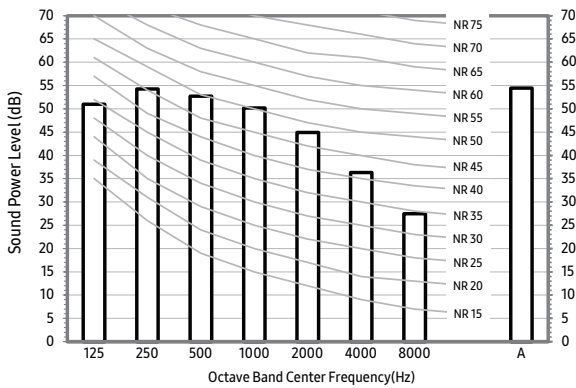
5) AM045KN*D*****



6) AM056KN*D*****



7) AM071KN*D*****



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.

※ The concept of RAC with EEV included is commercial application only. Residential application such as Hotel, Hospital, Houses where the very quiet surrounding is required should be avoided to prevent such a noise claim.

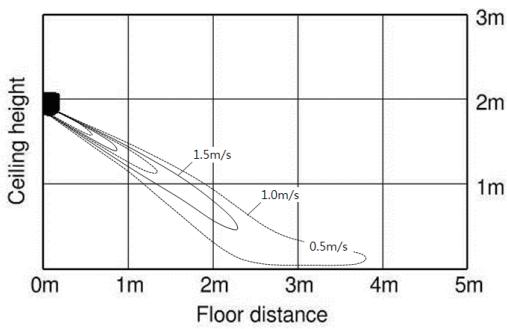
8. Temperature and Air Flow Distribution

BORACAY

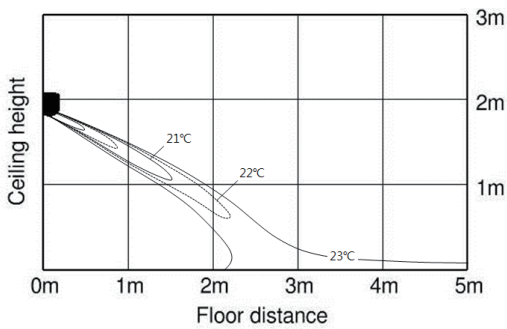
AM015KN*D*****

Discharge angle : 26°

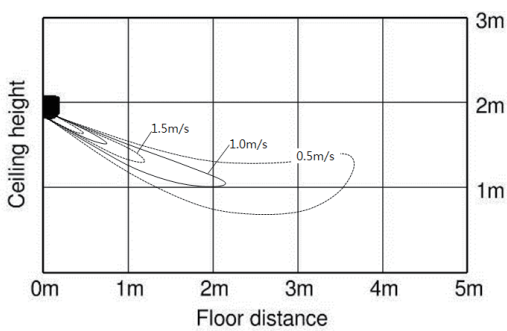
1) Cooling air velocity distribution



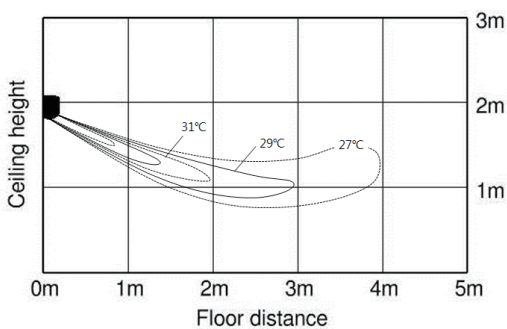
2) Cooling temperature distribution



3) Heating air velocity distribution



4) Heating temperature distribution



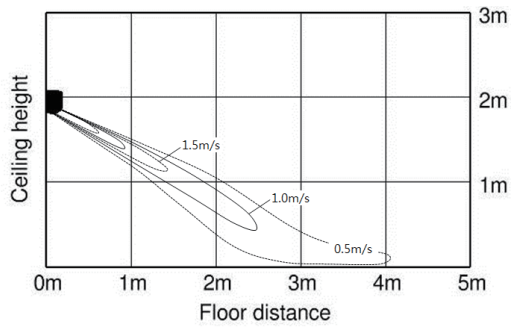
8. Temperature and Air Flow Distribution

BORACAY

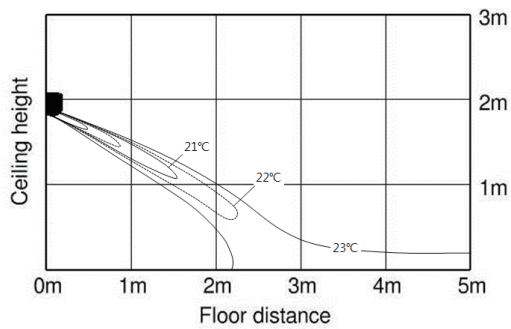
AM022KN*D*****

Discharge angle : 26°

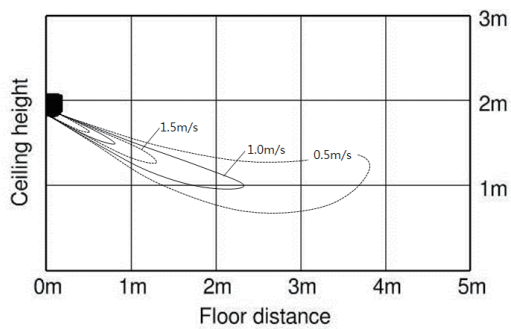
1) Cooling air velocity distribution



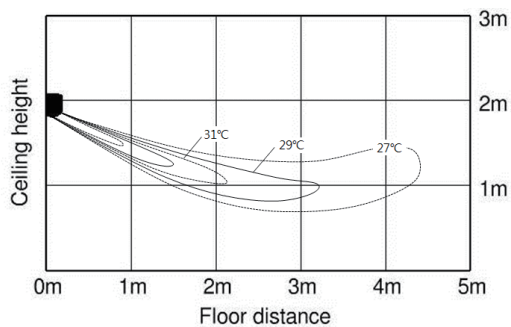
2) Cooling temperature distribution



3) Heating air velocity distribution



4) Heating temperature distribution



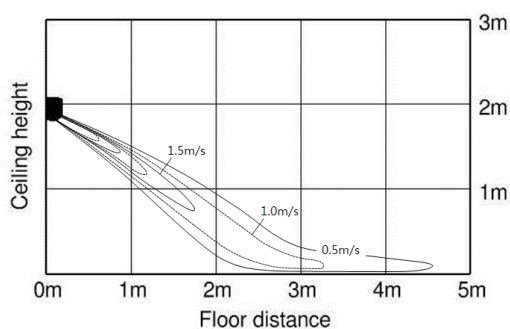
8. Temperature and Air Flow Distribution

BORACAY

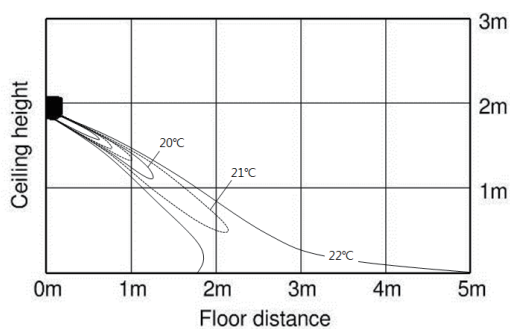
AM028KN*D*****

Discharge angle : 26°

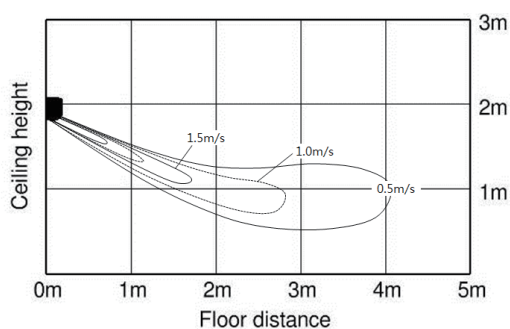
1) Cooling air velocity distribution



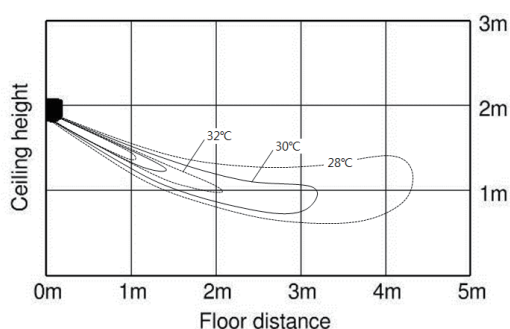
2) Cooling temperature distribution



3) Heating air velocity distribution



4) Heating temperature distribution



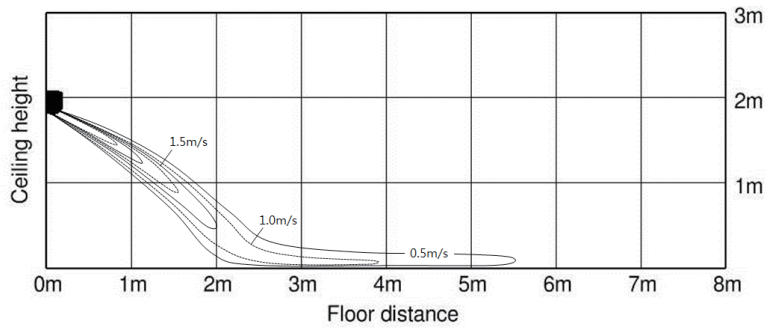
8. Temperature and Air Flow Distribution

BORACAY

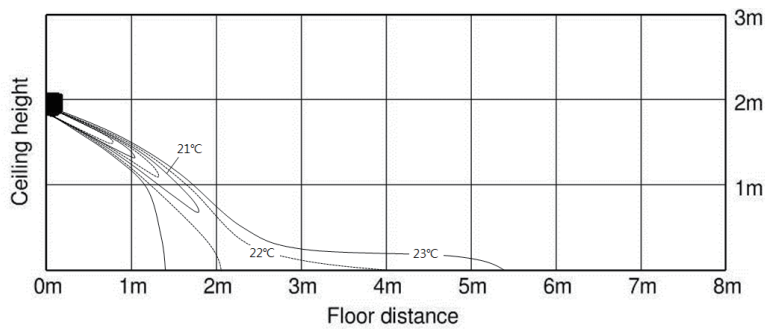
AM036KN*D*****

Discharge angle : 26°

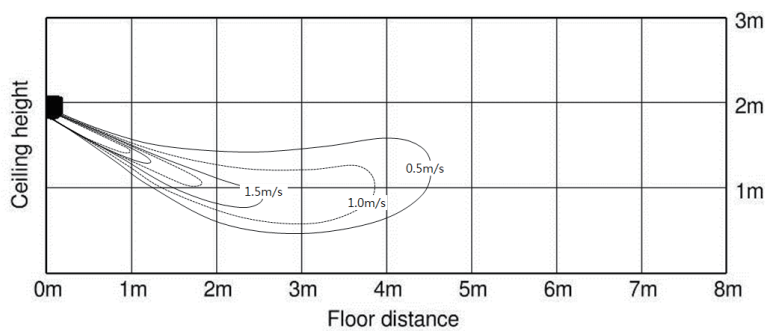
1) Cooling air velocity distribution



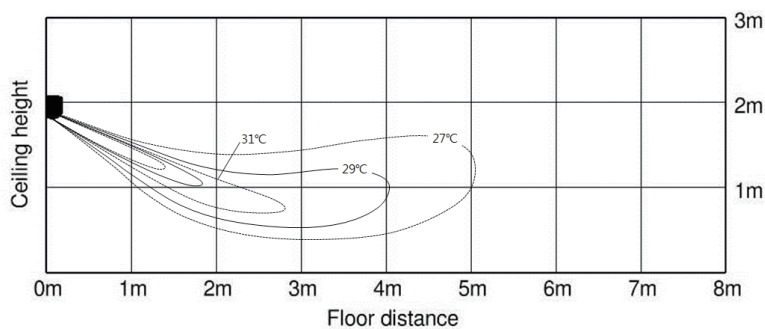
2) Cooling temperature distribution



3) Heating air velocity distribution



4) Heating temperature distribution



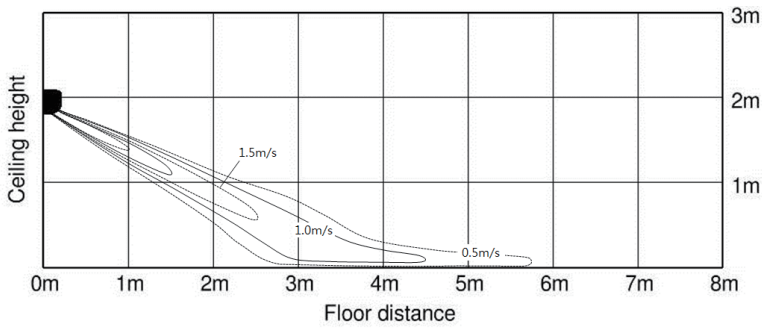
8. Temperature and Air Flow Distribution

BORACAY

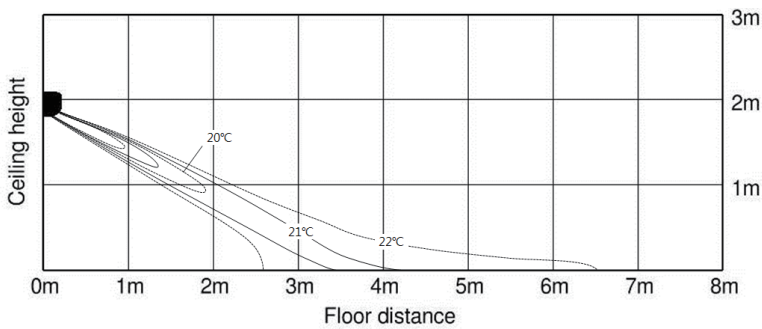
AM045KN*D*****

Discharge angle : 26°

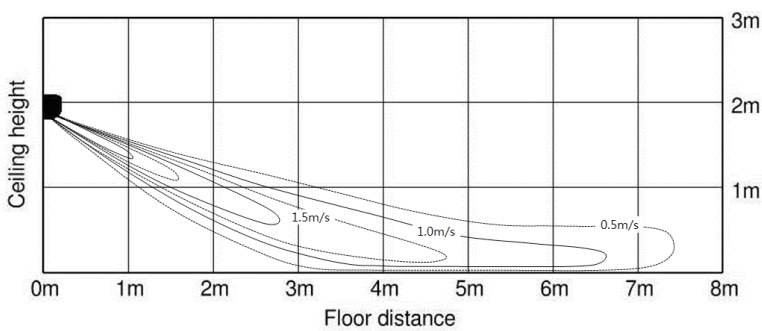
1) Cooling air velocity distribution



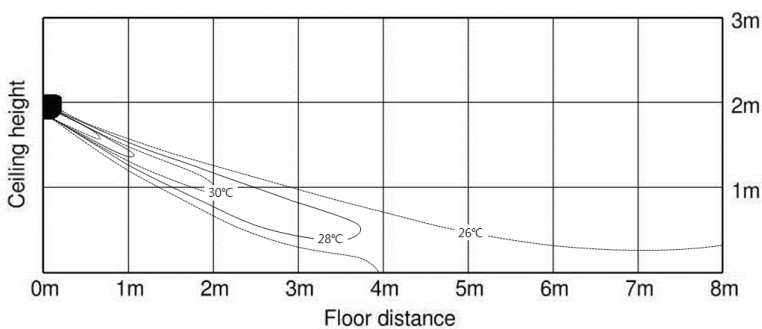
2) Cooling temperature distribution



3) Heating air velocity distribution



4) Heating temperature distribution



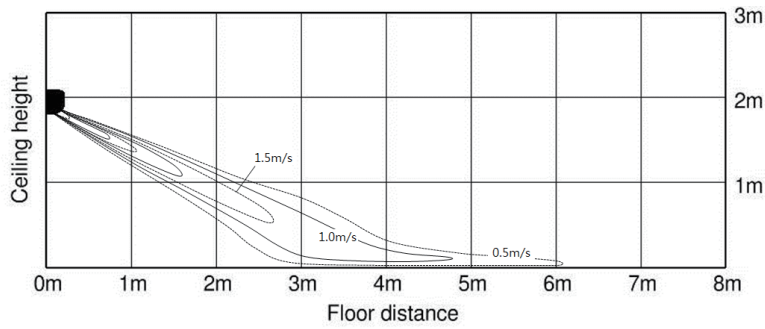
8. Temperature and Air Flow Distribution

BORACAY

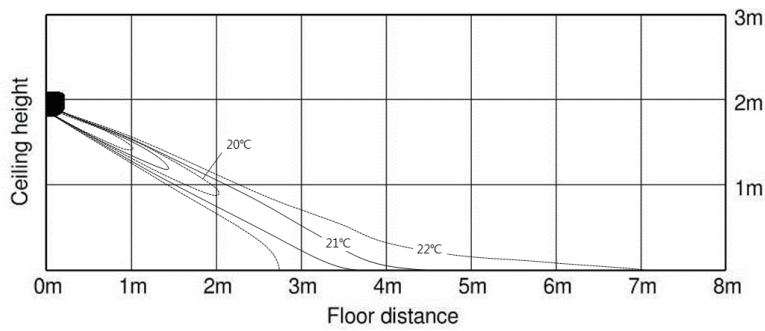
AM056KN*D*****

Discharge angle : 26°

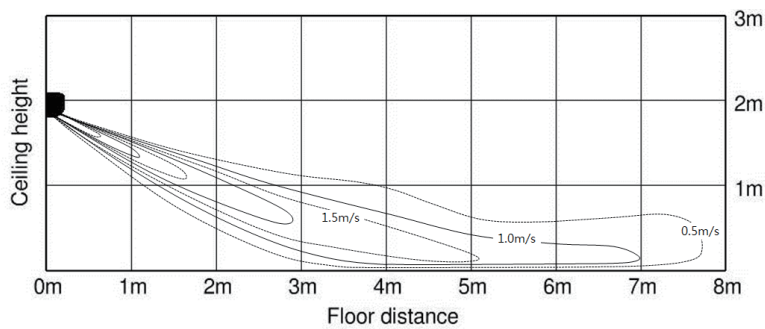
1) Cooling air velocity distribution



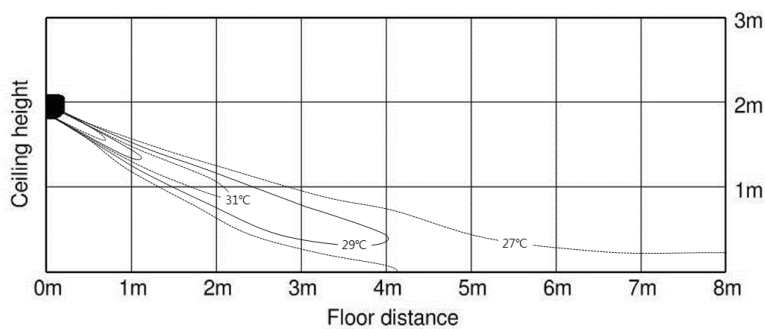
2) Cooling temperature distribution



3) Heating air velocity distribution



4) Heating temperature distribution



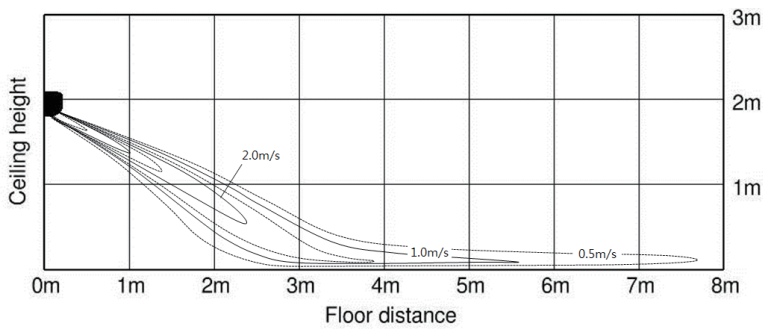
8. Temperature and Air Flow Distribution

BORACAY

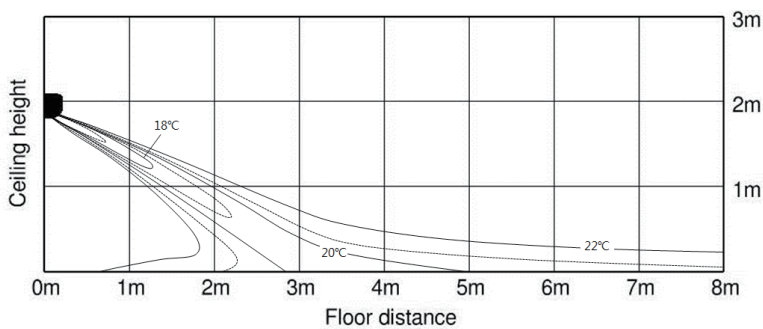
AM071KN*D*****

Discharge angle : 26°

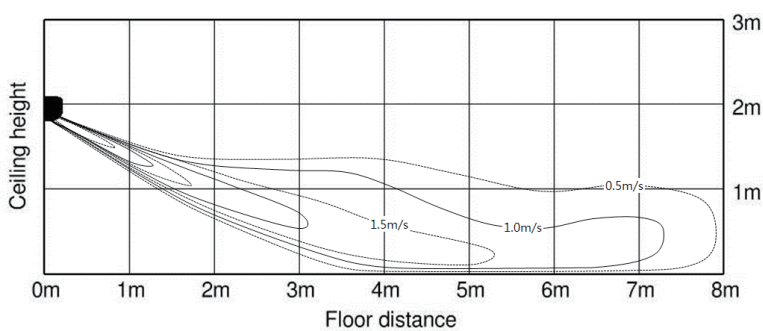
1) Cooling air velocity distribution



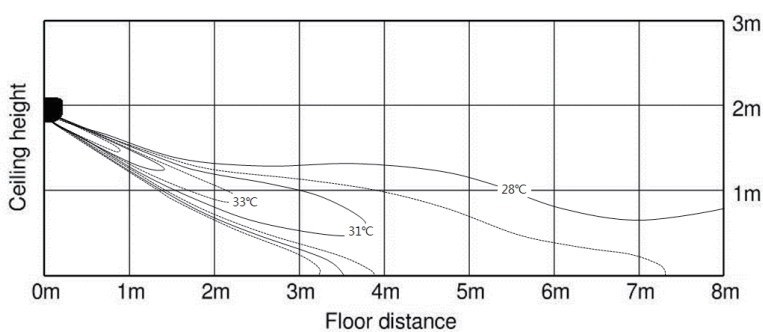
2) Cooling temperature distribution



3) Heating air velocity distribution



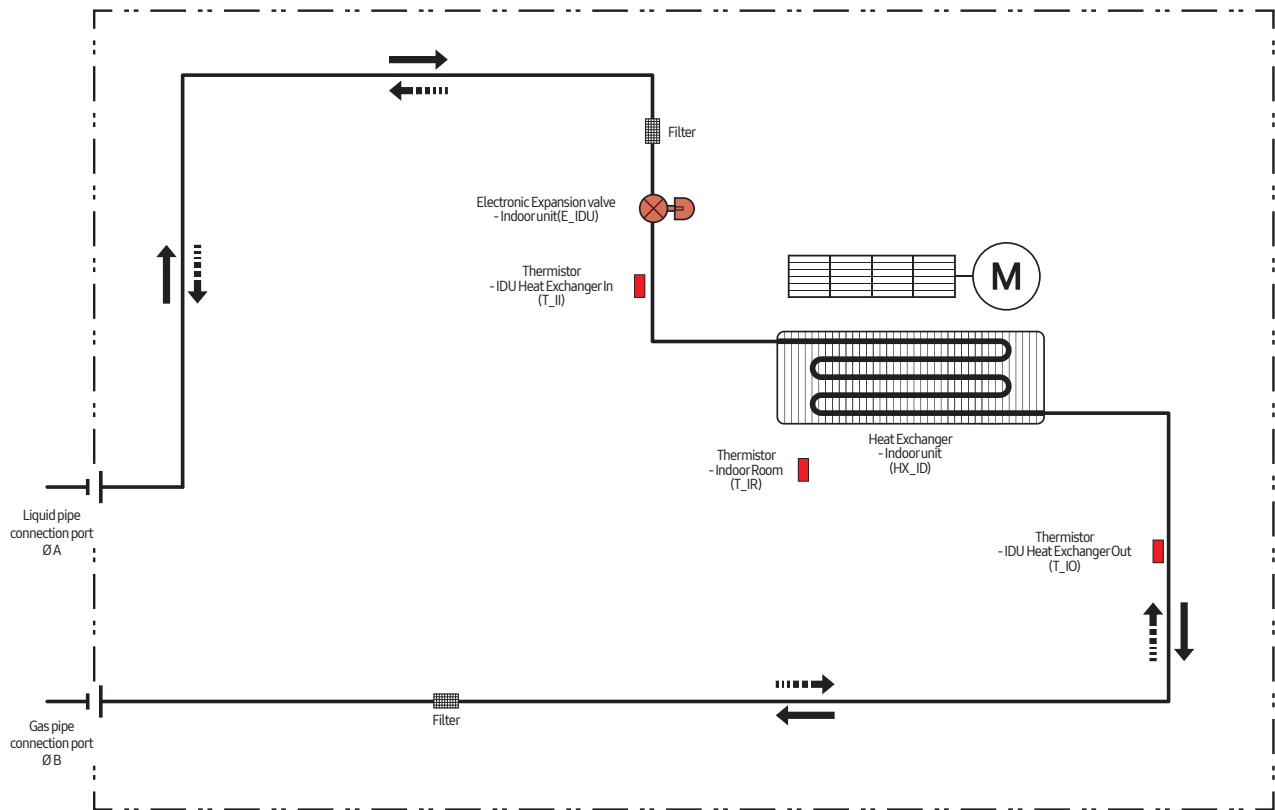
4) Heating temperature distribution



9. Piping Diagram

BORACAY

EEV included Model



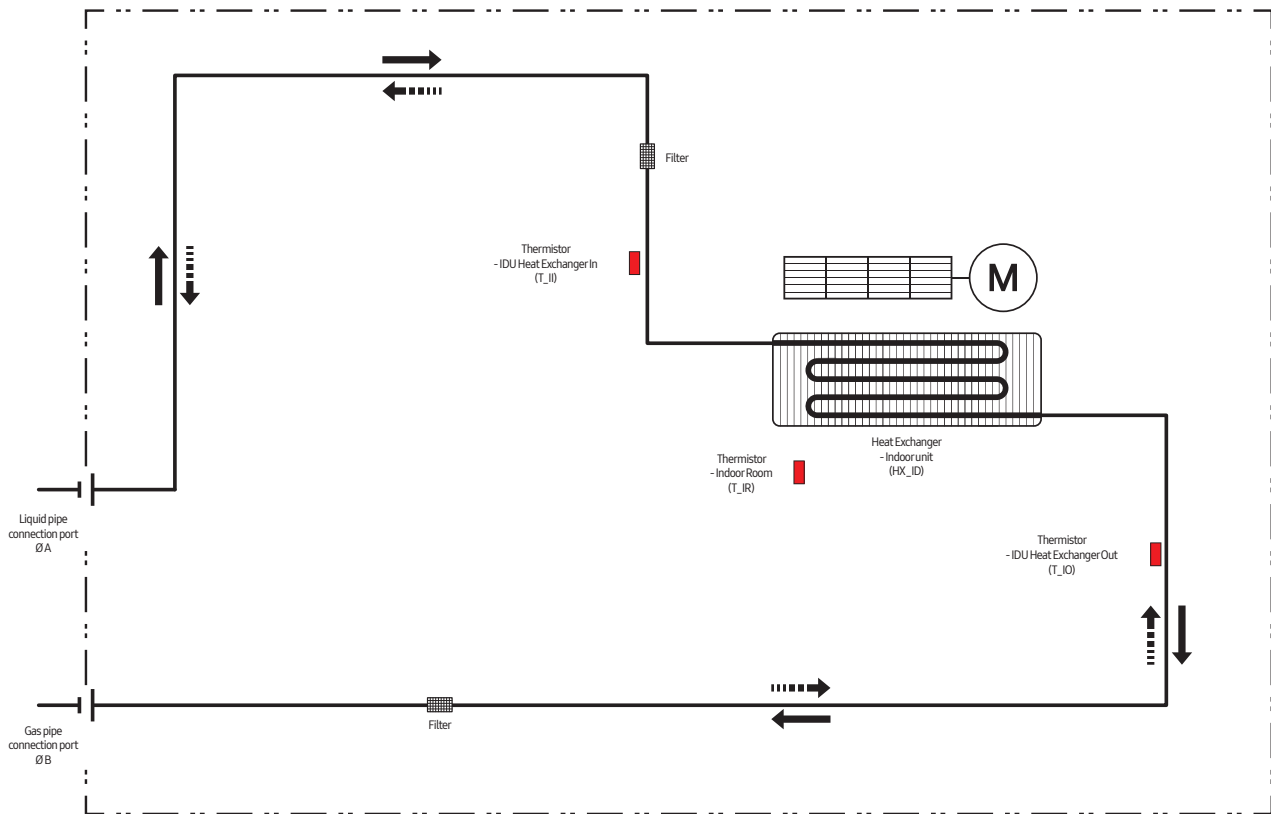
| Refrigerant flow | |
|------------------|------------|
| Cooling | Heating |
| → | - - - - -> |

| MODEL | A | B |
|----------------|------|-------|
| AM015KNQD***** | 6.35 | 12.7 |
| AM022KNQD***** | | |
| AM028KNQD***** | | |
| AM036KNQD***** | | |
| AM045KNQD***** | | |
| AM056KNQD***** | | |
| AM071KNQD***** | 9.52 | 15.88 |

9. Piping Diagram

BORACAY

EEV not included Model



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

| MODEL | A | B |
|----------------|------|-------|
| AM015KNTD***** | 6.35 | 12.7 |
| AM022KNTD***** | | |
| AM028KNTD***** | | |
| AM036KNTD***** | | |
| AM045KNTD***** | | |
| AM056KNTD***** | 9.52 | 15.88 |
| AM071KNTD***** | | |

10. Installation

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Selecting the installation location

Indoor Unit

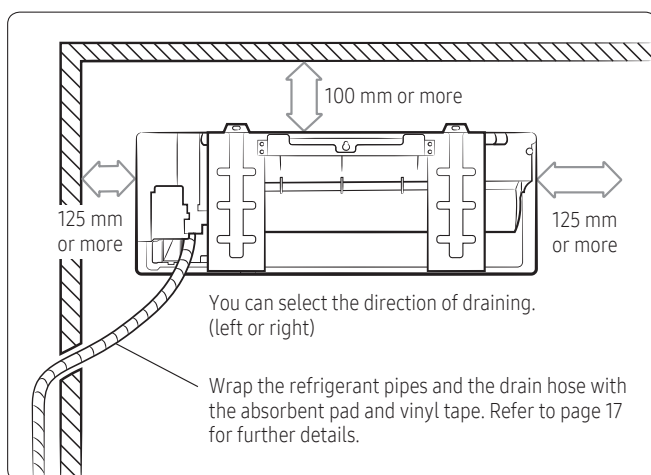
- Where airflow is not blocked.
- Where cool air can be distributed throughout the room.
- Install the refrigerant piping length and the height difference of both indoor and outdoor units as indicated in the installation diagram.
- Wall that prevents vibration and is strong enough to hold the product weight.
- Out of the direct sunlight .
- 1m or more away from the TV or radio (to prevent the screen from being distorted or noise from being generated).
- As far away as possible from fluorescent and incandescent lights (so that the remote control can be operated well).
- A place where the air filter can be replaced easily.

⚠ CAUTION

- Avoid the following places to prevent malfunction of the unit
 - Where there is machine oil
 - Salty environment such as the seaside areas
 - Where sulfide gas exists
 - Other special atmosphere areas

Space requirements for installation & service

Observe the clearances and maximum lengths as seen in the picture below when installing the air conditioner.

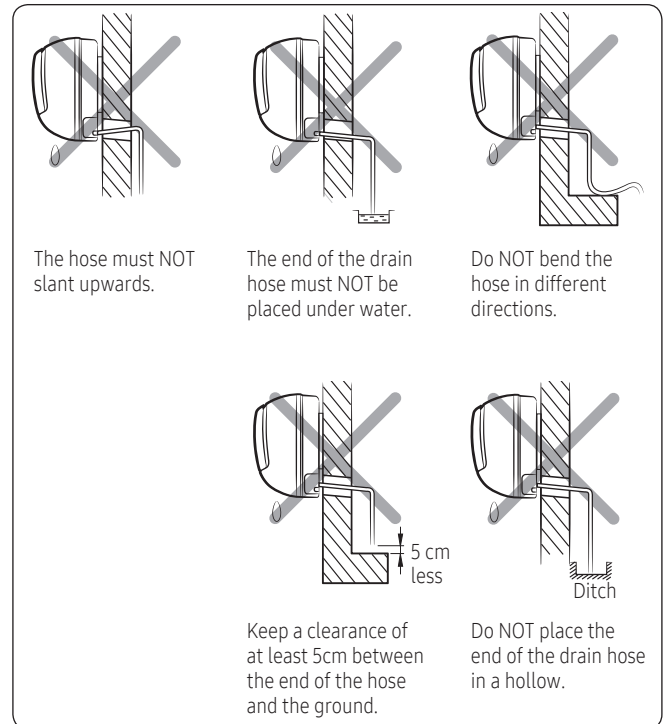


📖 NOTE

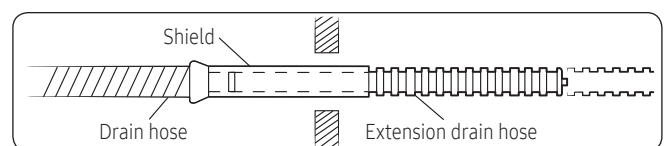
- The appearance of the unit may be different from the diagram depending on the model.

Installing the drain hose

When installing the drain hose for the indoor unit, check if condensation draining is adequate. When passing the drain hose through the 65-mm hole drilled in the wall, check the following:



- 1 If necessary, connect the 2-meter extension drain hose to the drain hose.
- 2 If you use the extension drain hose, insulate the inside of the extension drain hose with a shield.
- 3 Fit the drain hose into 1 of 2 drain hose holes, then fix the end of the drain hose tightly with a clamp.



📖 NOTE

- If you don't use the other drain hose hole, block it with a rubber stopper.
- 4 Pass the drain hose under the refrigerant pipe, keeping the drain hose tight.
 - 5 Pass the drain hose through the hole in the wall. Check if it slants downwards as seen in the picture.

📖 NOTE

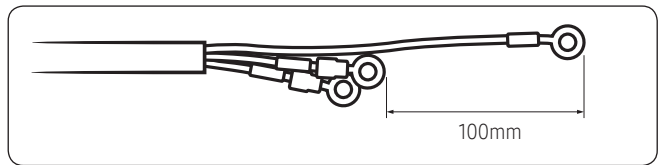
- The hose will be fixed permanently into position after finishing the installation and the gas leak test; refer to page 12 for further details.
- DO NOT WALL UP THE DRAIN HOSE CONNECTION!
Drain hose connection must be easy accessible and serviceable.

※ The concept of RAC with EEV included is commercial application only. Residential application such as Hotel, Hospital, Houses where the very quiet surrounding is required should be avoided to prevent such a noise claim.

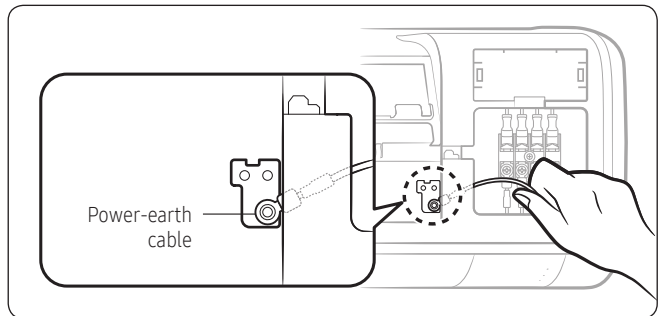
10. Installation

Connecting the power and communication cables

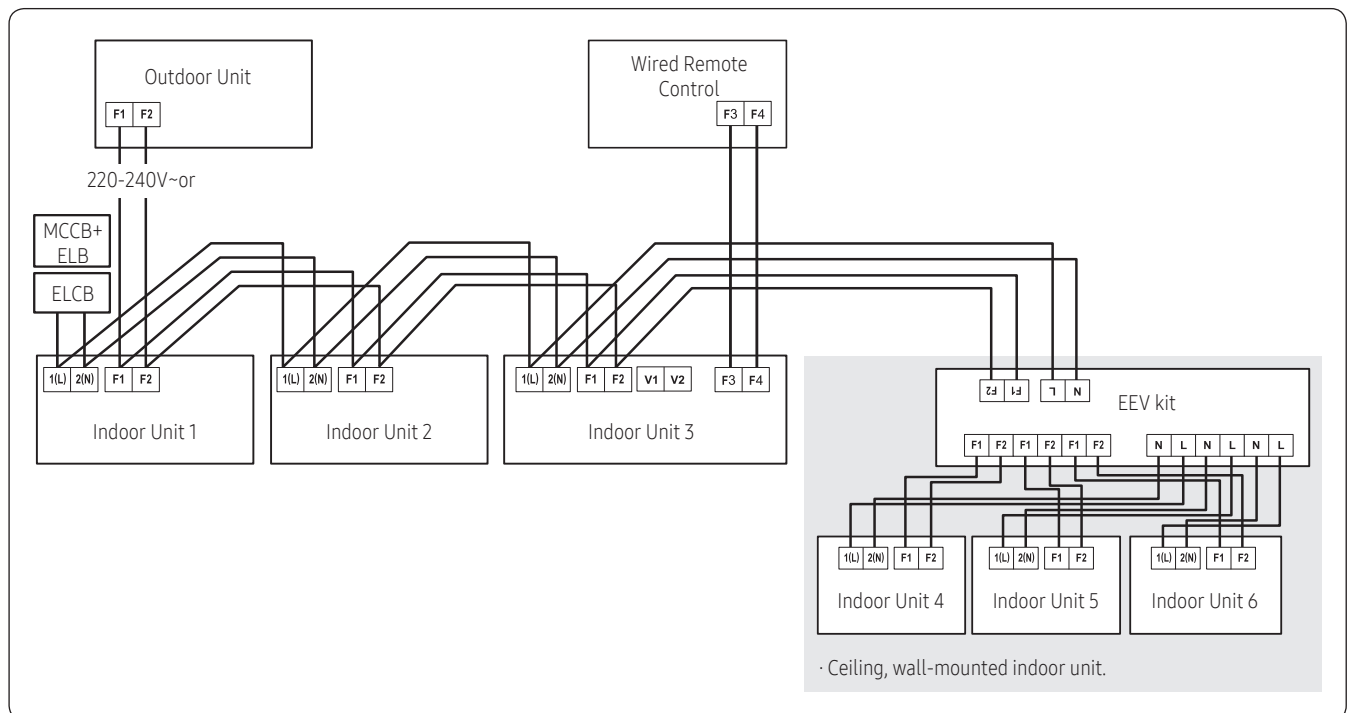
- 1 Before wiring work, you must turn off all power source.
- 2 Indoor unit power should be supplied through the breaker (ELCB or MCCB+ELB) separated by the outdoor power.
 - ELCB:Earth Leakage Circuit Breaker
 - MCCB:Molded Case Circuit Breaker
 - ELB:Earth Leakage Breaker
- 3 The power cable should be used only copper wires.
- 4 Connect the power cable{1(L), 2(N)} among the units within maximum length and communication cable(F1, F2) each.
- 5 Cut the cable as like the following picture. The earth cable need to be longer than the power cable (1(L), 2(N)) by 100 mm.



- 6 Connect the earth cable to the plate on the evaporator as like the following picture.



- 7 Connect F3, F4(for communication) wires at the back side of the indoor unit when installing the wired remote control.



- ELCB : Essential Installation
- The EEV Kit is optional component.

⚠ WARNING

- Power off before connecting any wires;Indoor PBA will be damaged while V1,V2,F3,F4 short each other.
- You must connect the earth cable. If earthing is not complete, electric shock or fire may occur.

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10. Installation

Specification of electronic wire

| Power supply | MCCB | ELB or ELCB | Power cable | Earth cable | Communication cable |
|-------------------------|------|-------------------|---------------------|---------------------|--------------------------|
| Max : 242V / Min : 198V | XA | XA, 30 mmA, 0.1 s | 2.5 mm ² | 2.5 mm ² | 0.75~1.5 mm ² |

- Refer to the unit nameplate for rating current.
- Decide the capacity of ELCB(or MCCB+ELB) by below formula.
- 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)

$$\text{The capacity of ELCB(or MCCB+ELB) } X[A] = 1.25 \times 1.1 \times \sum A_i$$

- X : The capacity of ELCB(or MCCB+ELB).
- $\sum A_i$: Sum of Rating currents of each indoor unit.
- Refer to each installation manual about the rating current of indoor unit.

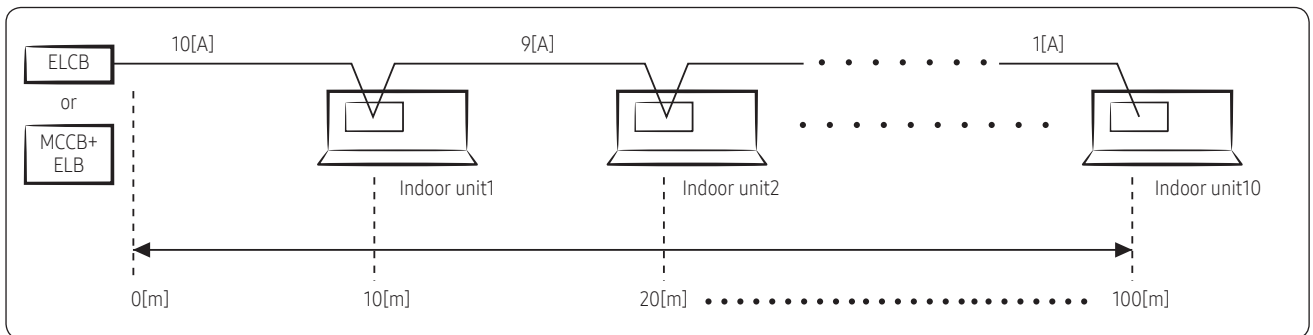
- Decide the power cable specification and maximum length within 10% power drop among indoor units.

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

- coef: 1.55
- L_k: Distance among each indoor unit[m],
- A_k: Power cable specification[mm²]
- i_k: Running current of each unit[A]

Example of Installation

- Total power cable length L = 100(m), Running current of each units 1[A]
- Total 10 indoor units were installed



- Apply following equation.

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

- Calculation

- Installing with 1 sort wire

$$\begin{array}{c} \begin{array}{ccccccc} | & 2.5 \text{ [mm}^2\text{]} & | & 2.5 \text{ [mm}^2\text{]} & | & \dots & 2.5 \text{ [mm}^2\text{]} & \dots & | & \text{Within 198V to 242V} \\ | & -2.2 \text{ [V]} & | & -2.0 \text{ [V]} & | & & & & | & \\ \hline 220 \text{ [V]} & & & & & & & & & 208.8 \text{ [V]} : \text{ it's okay} \end{array} \\ \\ -(2.2+2.0+1.8+1.5+1.3+1.1+0.9+0.7+0.4+0.2)=-11.2 \text{ [V]} \end{array}$$

- Installing with 2 different sort wire.

$$\begin{array}{c} \begin{array}{ccccccc} | & 4.0 \text{ [mm}^2\text{]} & | & 4.0 \text{ [mm}^2\text{]} & | & \dots & 2.5 \text{ [mm}^2\text{]} & \dots & | & \text{Within 198V to 242V} \\ | & -1.4 \text{ [V]} & | & -1.2 \text{ [V]} & | & & & & | & \\ \hline 220 \text{ [V]} & & & & & & & & & 209.5 \text{ [V]} : \text{ it's okay} \end{array} \\ \\ -(1.4+1.2+1.8+1.5+1.3+1.1+0.9+0.7+0.4+0.2)=-10.5 \text{ [V]} \end{array}$$

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10. Installation

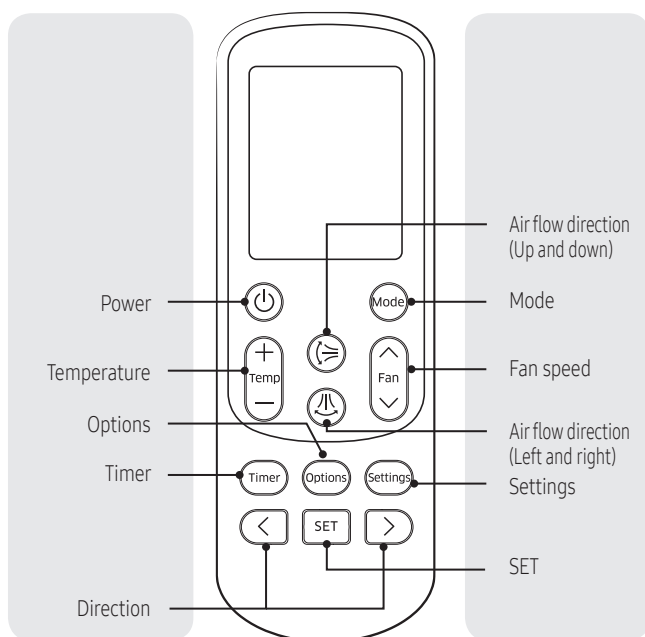
⚠ CAUTION

- Select the power cable in accordance with relevant local and national regulations.
- Wire size must comply with local and national code.
- For the power cable, use the grade of H07RN-F or H05RN-F materials.
- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- The unbalanced power must be maintained within 10% of supply rating among whole indoor units.
- If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 10% of supply rating, the indoor unit is protected, stopped and the error mode indicates.
- To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units in the iron pipe.
- Connect the power cable to the auxiliary circuit breaker. An all pole disconnection from the power supply must be incorporated in the fixed wiring(≥3mm).

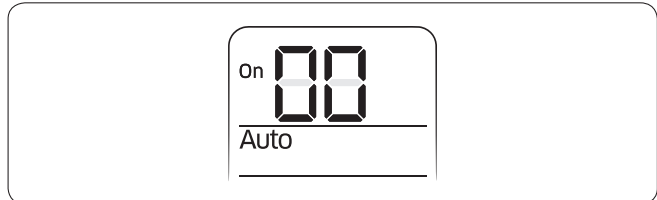
Setting an indoor unit address and installation option

Set the indoor unit address and installation option with remote control option. Set the each option separately since you cannot set the ADDRESS setting and indoor unit installation setting option at the same time. You need to set twice when setting indoor unit address and installation option.

Option setting procedure



- 1 Remove batteries from the remote control.
- 2 Insert batteries and enter the option setting mode while pressing (High Temp button) and (Low Temp button).
- 3 Check if you have entered the option setting status.



- 4 After entering the option setting status, select the option.

⚠ CAUTION

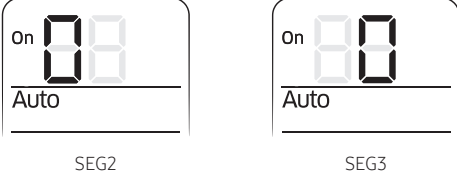

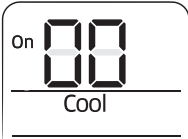
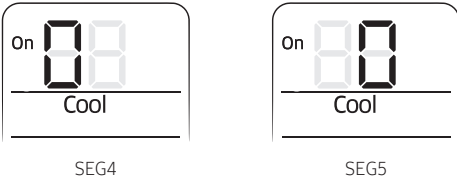

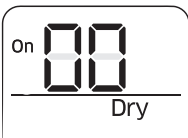
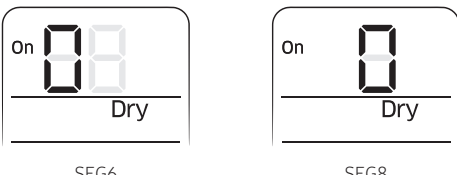


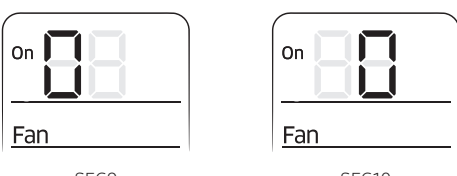
- Option setting is available from SEG1 to SEG 24
- SEG1, SEG7, SEG13, SEG19 are not set as page option.
- Set the SEG2~SEG6, SEG8~SEG12 as ON status and SEG14~18, SEG20~24 as OFF status.

| SEG1 | SEG2 | SEG3 | SEG4 | SEG5 | SEG6 |
|-------|-------|-------|-------|-------|-------|
| 0 | X | X | X | X | X |
| SEG7 | SEG8 | SEG9 | SEG10 | SEG11 | SEG12 |
| 1 | X | X | X | X | X |
| SEG13 | SEG14 | SEG15 | SEG16 | SEG17 | SEG18 |
| 2 | X | X | X | X | X |
| SEG19 | SEG20 | SEG21 | SEG22 | SEG23 | SEG24 |
| 3 | X | X | X | X | X |

| On (SEG1~12) | Off (SEG13~24) |
|--------------|----------------|
| | |

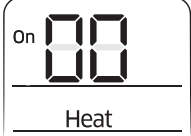
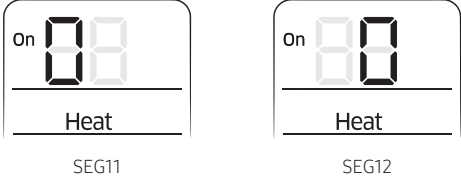

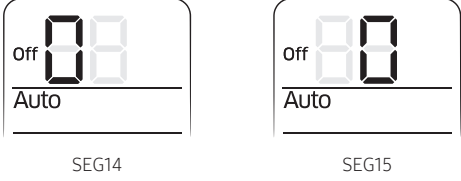
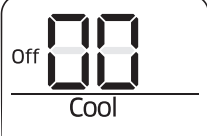
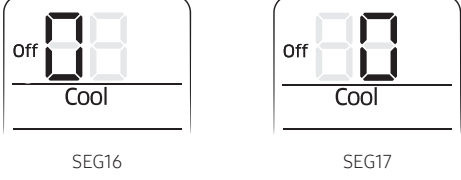
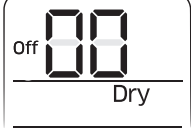
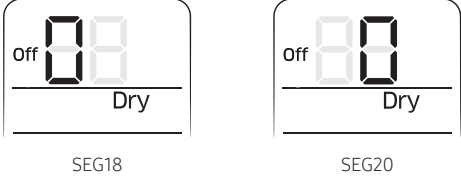
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10. Installation

| Option setting | Status |
|--|---|
| <p>1 Setting SEG2, SEG3 option</p> <p>a Press Low Fan button(V) to enter SEG2 value.</p> <p>b Press High Fan button(Λ) to enter SEG3 value.</p> <p>Each time you press the button, $\square \rightarrow \updownarrow \rightarrow \dots \rightarrow \text{E} \rightarrow \text{F}$ will be selected in rotation.</p> |  <p>SEG2 SEG3</p> |
| <p>2 Setting Cool mode</p> <p> Press Mode button to be changed to Cool mode in the ON status.</p> |  |
| <p>3 Setting SEG4, SEG5 option</p> <p>a Press Low Fan button(V) to enter SEG4 value.</p> <p>b Press High Fan button(Λ) to enter SEG5 value.</p> <p>Each time you press the button, $\square \rightarrow \updownarrow \rightarrow \dots \rightarrow \text{E} \rightarrow \text{F}$ will be selected in rotation.</p> |  <p>SEG4 SEG5</p> |
| <p>4 Setting Dry mode</p> <p> Press Mode button to be changed to Dry mode in the ON status.</p> |  |
| <p>5 Setting SEG6, SEG8 option</p> <p>a Press Low Fan button(V) to enter SEG6 value.</p> <p>b Press High Fan button(Λ) to enter SEG8 value.</p> <p>Each time you press the button, $\square \rightarrow \updownarrow \rightarrow \dots \rightarrow \text{E} \rightarrow \text{F}$ will be selected in rotation.</p> |  <p>SEG6 SEG8</p> |
| <p>6 Setting Fan mode</p> <p> Press Mode button to be changed to Fan mode in the ON status.</p> |  |
| <p>7 Setting SEG9, SEG10 option</p> <p>a Press Low Fan button(V) to enter SEG9 value.</p> <p>b Press High Fan button(Λ) to enter SEG10 value.</p> <p>Each time you press the button, $\square \rightarrow \updownarrow \rightarrow \dots \rightarrow \text{E} \rightarrow \text{F}$ will be selected in rotation.</p> |  <p>SEG9 SEG10</p> |


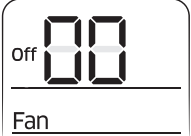







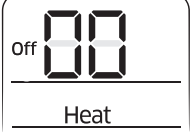




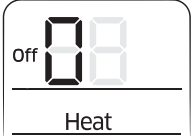
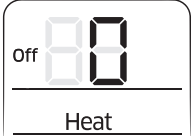
※ The concept of RAC with EEV included is commercial application only. Residential application such as Hotel, Hospital, Houses where the very quiet surrounding is required should be avoided to prevent such a noise claim.

10. Installation

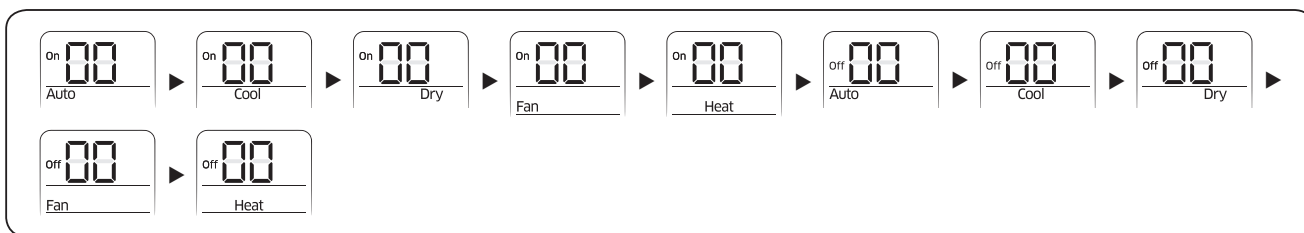
| Option setting | Status |
|--|---|
| <p>8 Setting Heat mode (Mode) Press Mode button to be changed to Heat mode in the ON status.</p> |  |
| <p>9 Setting SEG11, SEG12 option</p> <p>a Press Low Fan button(V) to enter SEG11 value. b Press High Fan button(Λ) to enter SEG12 value.</p> <p>Each time you press the button, 0 → 1 → ... E → F will be selected in rotation.</p> |  |
| <p>10 Setting Auto mode (Mode) Press Mode button to be changed to Auto mode in the OFF status.</p> |  |
| <p>11 Setting SEG14, SEG15 option</p> <p>a Press Low Fan button(V) to enter SEG14 value. b Press High Fan button(Λ) to enter SEG15 value.</p> <p>Each time you press the button, 0 → 1 → ... E → F will be selected in rotation.</p> |  |
| <p>12 Setting Cool mode (Mode) Press Mode button to be change to Cool mode in the OFF status.</p> |  |
| <p>13 Setting SEG16, SEG17 option</p> <p>a Press Low Fan button(V) to enter SEG16 value. b Press High Fan button(Λ) to enter SEG17 value.</p> <p>Each time you press the button, 0 → 1 → ... E → F will be selected in rotation.</p> |  |
| <p>14 Setting Dry mode (Mode) Press Mode button to be change to Dry mode in the OFF status.</p> |  |
| <p>15 Setting SEG18, SEG20 option</p> <p>a Press Low Fan button(V) to enter SEG18 value. b Press High Fan button(Λ) to enter SEG20 value.</p> <p>Each time you press the button, 0 → 1 → ... E → F will be selected in rotation.</p> |  |


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10. Installation

| Option setting | Status |
|---|--|
| <p>16 Setting Fan mode</p> <p> Press Mode button to be change to Fan mode in the OFF status.</p> |  |
| <p>17 Setting SEG21, SEG22 option</p> <p>a Press Low Fan button(V) to enter SEG21 value.</p> <p>b Press High Fan button(Λ) to enter SEG22 value.</p> <p>Each time you press the button,  →  → ... →  →  will be selected in rotation.</p> |   |
| <p>18 Setting Heat mode</p> <p> Press Mode button to be change to Heat mode in the OFF status.</p> |  |
| <p>19 Setting SEG23, SEG24 mode</p> <p>a Press Low Fan button(V) to enter SEG23 value.</p> <p>b Press High Fan button(Λ) to enter SEG2 4 value.</p> <p>Each time you press the button,  →  → ... →  →  will be selected in rotation.</p> |   |

5 After setting option, press  button to check whether the option code you input is correct or not.



6 Press operation button  with the direction of remote control for set. For the correct option setting, you must input the option twice.

7 Check operation.

- a Reset the indoor unit by pressing the **RESET** button of indoor unit or outdoor unit.
- b Take the batteries out of the remote control and insert them again and then press the operation button.

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10. Installation

Setting an indoor unit address (MAIN/RMC)

- 1 Check whether power is supplied or not.
 - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
- 2 Before installing the indoor unit, assign an address to the indoor unit according to the air conditioning system plan.
- 3 Assign an indoor unit address by wireless remote control.
The initial setting status of indoor unit ADDRESS(MAIN/RMC) is “0A0000-100000-200000-300000”.

Option No. : 0AXXXX-1XXXXX-2XXXXX-3XXXXX

| Option | SEG1 | | SEG2 | | SEG3 | | SEG4 | | SEG5 | | SEG6 | |
|------------------------|------------|---------|------------|---------|---------------------------|-----------------|----------------------------------|-----------|-------------------------|----------|----------------------------------|--------------|
| Explanation | PAGE | | Mode | | Setting Main address | | 100-digit of indoor unit address | | 10-digit of indoor unit | | The unit digit of an indoor unit | |
| Indication and Details | Indication | Details | Indication | Details | Indication | Details | Indication | Details | Indication | Details | Indication | Details |
| | 0 | | A | | 0 | No Main address | 0~9 | 100-digit | 0~9 | 10-digit | 0~9 | A unit digit |
| 1 | | | | 1 | Main address setting mode | | | | | | | |
| Option | SEG7 | | SEG8 | | SEG9 | | SEG10 | | SEG11 | | SEG12 | |
| Explanation | PAGE | | | | Setting RMC address | | | | Group channel(*16) | | Group address | |
| Indication and Details | Indication | Details | | | Indication | Details | | | Indication | Details | Indication | Details |
| | 1 | | | | 0 | No RMC address | | | RMC1 | 0~F | RMC2 | 0~F |
| | | | | 1 | RMC address setting mode | | | | | | | |

⚠ CAUTION

- When A~F is entered to SEG5~6, the indoor unit MAIN ADDRESS is not changed.
- If you set the SEG 3 as 0, the indoor unit will maintain the previous MAIN ADDRESS even if you input the option value of SEG5~6.
- If you set the SEG 9 as 0, the indoor unit will maintain previous RMC ADDRESS even if you input the option value of SEG11~12.
- You cannot set SEG11 and SEG12 as F value at the same time.

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10. Installation

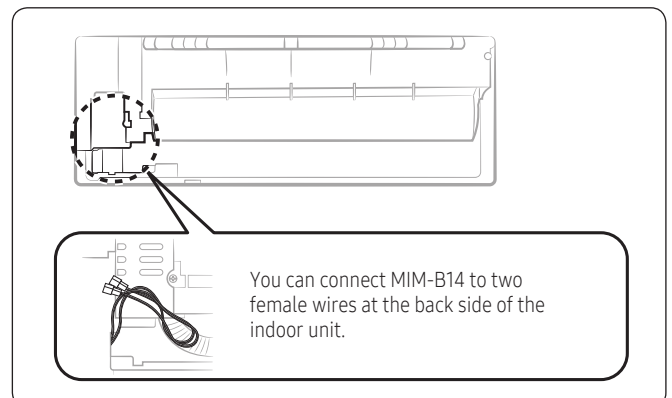
Setting an indoor unit installation option (suitable for the condition of each installation location)

- 1 Check whether power is supplied or not.
 - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
- 2 Set the installation option according to the installation condition of an air conditioner.
 - The default setting of an indoor unit installation option is 020010-100000- 200000-300000.
 - Individual control of a remote control(SEG20) is the function that controls an indoor unit individually when there is more than one indoor unit.
- 3 Set the indoor unit option by wireless remote control.

02 series installation option

| SEG1 | SEG2 | SEG3 | SEG4 | SEG5 | SEG6 |
|-------|--|---|--|-----------------------------|------------------------------|
| 0 | 2 | - | External room temperature sensor / Minimizing fan operation when thermostat is off | Central control | FAN RPM compensation |
| SEG7 | SEG8 | SEG9 | SEG10 | SEG11 | SEG12 |
| 1 | - | - | - | EEV Step when heating stops | - |
| SEG13 | SEG14 | SEG15 | SEG16 | SEG17 | SEG18 |
| 2 | External control | External control output / External heater On or Off signal | S-Plasma ion | Buzzer | Number of hours using filter |
| SEG19 | SEG20 | SEG21 | SEG22 | SEG23 | SEG24 |
| 3 | Individual control of a remote control | Heating setting compensation / Removing condensated water in heating mode | EEV Step of stopped unit during oil return/ defrost mode | - | - |

- When setting the option other than above SEG values, the option will be set as "0".
- SEG5 central control option is basically set as 1 (Use), so you don't need to set the central control option additionally.
However, if the central control is not connected but it doesn't indicate an error message, you need to set the central control option as 0 (Disuse) to exclude the indoor unit from the central control.
- The external output of SEG15 is generated by MIM-B14 connection. (Refer to the manual of MIM-B14.)



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