

# Home Duct

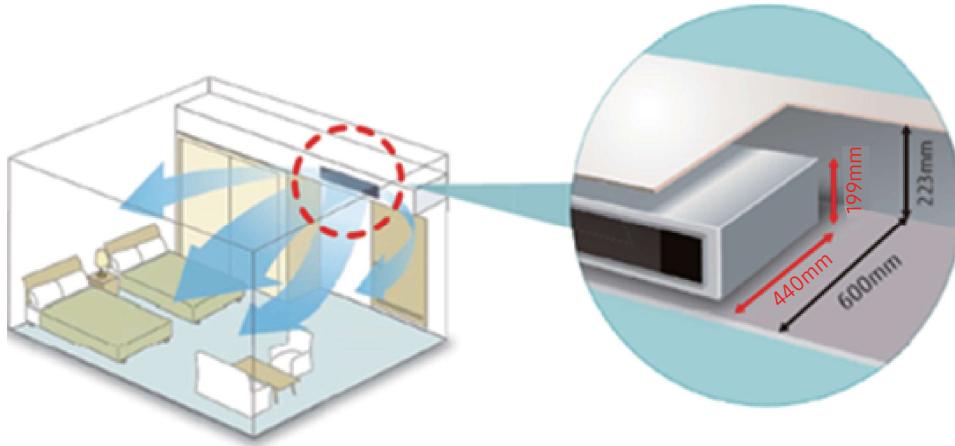
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# Features & Benefits

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Slim design of height 199mm : can easily mounted in a ceiling

Built-in drain pump with 750mm lift : increase installation speed and pipe work flexibility



Samsung		Compatitors		
Old Model	New Model	"A" company	"B" company	"C" company
600mm	440mm	450mm	447mm	460mm

# Line-up

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## Indoor unit

Model	Capacity (kW)		
	4.5	5.6	7.1
	AM045MNLDEH/EU	AM056MNLDEH/EU	AM071MNLDEH/EU
Home DUCT			

# 1. Specification

## Home DUCT

Type			Home Duct	Home Duct	Home Duct	
Model Name			AM045MNLDEH/EU	AM056MNLDEH/EU	AM071MNLDEH/EU	
Power Supply		Φ, #, V, Hz	1,220~240,50	1,220~240,50	1,220~240,50	
Mode		-	HP	HP	HP	
Performance	Capacity	Cooling	kW	4.5	5.6	
			Btu/h	15400	19100	
		Heating	kW	5	6.3	
			Btu/h	17100	21500	
Power	Power Input	Cooling	W	51	73	
				46	68	
	Current Input	Cooling	A	0.45	0.62	
				0.41	0.58	
	Current	MCA	A	0.56	0.78	
		MFA		15	15	
Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	
	Material	Fin	-	Al	Al	
		Tube	-	Cu	Cu	
	Fin Treatment		-	Green Hydrophile	Green Hydrophile	
Fan	Type		-	Sirocco Fan	Sirocco Fan	
	Quantity		EA	2	2	
	Air Flow Rate	H/M/L	m³/min	12.50/10.00/7.50	15.50/12.50/9.50	
			l/s	208.33/166.67/125.00	258.33/208.33/158.33	
	External Pressure	Max. (Min/Std/Max)	mmAq	4 (0/2/4)	4 (0/2/4)	
			Pa	39.2 (0/19.6/39.2)	39.2 (0/19.6/39.2)	
Fan Motor	Model		-	BLDC	BLDC	
	Output x n		W	84 x 1	84 x 1	
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	
			Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)	
	Gas Pipe		Type	Flare Connection	Flare Connection	
			Φ, mm (inch)	12.70 (1/2)	12.70 (1/2)	
	Heat Insulation		-	Both Insulation	Both Insulation	
	Drain Pipe		Φ,mm	Both Insulation	Both Insulation	
Wiring Connection	Communication	Min.	mm²	0.75	0.75	
		Remark	-	F1, F2	F1, F2	
Refrigerant	Type		-	R410A	R410A	
	Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED	
Sound	Sound Pressure Level	H/M/L	dB(A)	32/28/25	34/30/26	
	Sound Power Level	Cooling		49	51	
					34/30/27	

# 1. Specification

## Home DUCT

Type			Home Duct	Home Duct	Home Duct
Model Name			AM045MNLDEH/EU	AM056MNLDEH/EU	AM071MNLDEH/EU
Dimensions	Net Weight	kg	18.9	18.9	22.3
	Shipping Weight	kg	21.8	21.8	25.3
	Net Dimensions (W×H×D)	mm	900×199×440	900×199×440	1100×199×440
	Shipping Dimensions (W×H×D)	mm	1151x280x544	1151x280x544	1351x280x544
Casing	Material	-	GI-SGCC	GI-SGCC	GI-SGCC
Drain Pump	Drain Pump	-	Drain Pump Included	Drain Pump Included	Drain Pump Included
	Max. lifting Height / Displacement	mm / Liter/h	750/24	750/24	750/24
Additional Accessories	Air Filter	-	Filter Included	Filter Included	Filter Included

### NOTE

- Specification may be subject to change without prior notice.
- 1) Mode : HP(Heat Pump), HR(Heat Recovery)
  - 2) Performances are based on the following test conditions.
    - 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
    - Equivalent refrigerant piping length 7.5m, Level differences 0m
  - 3) 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 = 20uPa
  - 4) 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
  - 5) Select wire size based on the value of MCA

## 2. Summary Table

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### Home DUCT

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#### Performance Characteristics

Model Code	Capacity(kW)		Fan speed	
	Cooling	Heating	Mode	CMM
AM045MNLDEH/EU	4.5	5.0	H / M / L	12.50/10.00/7.50
AM056MNLDEH/EU	5.6	6.3		15.50/12.50/9.50
AM071MNLDEH/EU	7.1	8.0		18.00/14.50/11.00

#### Electrical Characteristics

Indoor Unit	Power Supply (Ø, #, V, Hz)	Power Input (W)	Current Input (A)	MCA (A)	MFA (A)	FLA (A)
AM045MNLDEH/EU	1,2,220-240, 50Hz	51	0.45	0.56	15	0.45
AM056MNLDEH/EU		73	0.62	0.78	15	0.62
AM071MNLDEH/EU		82	0.69	0.86	15	0.69

#### 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

## Home DUCT

### Heating

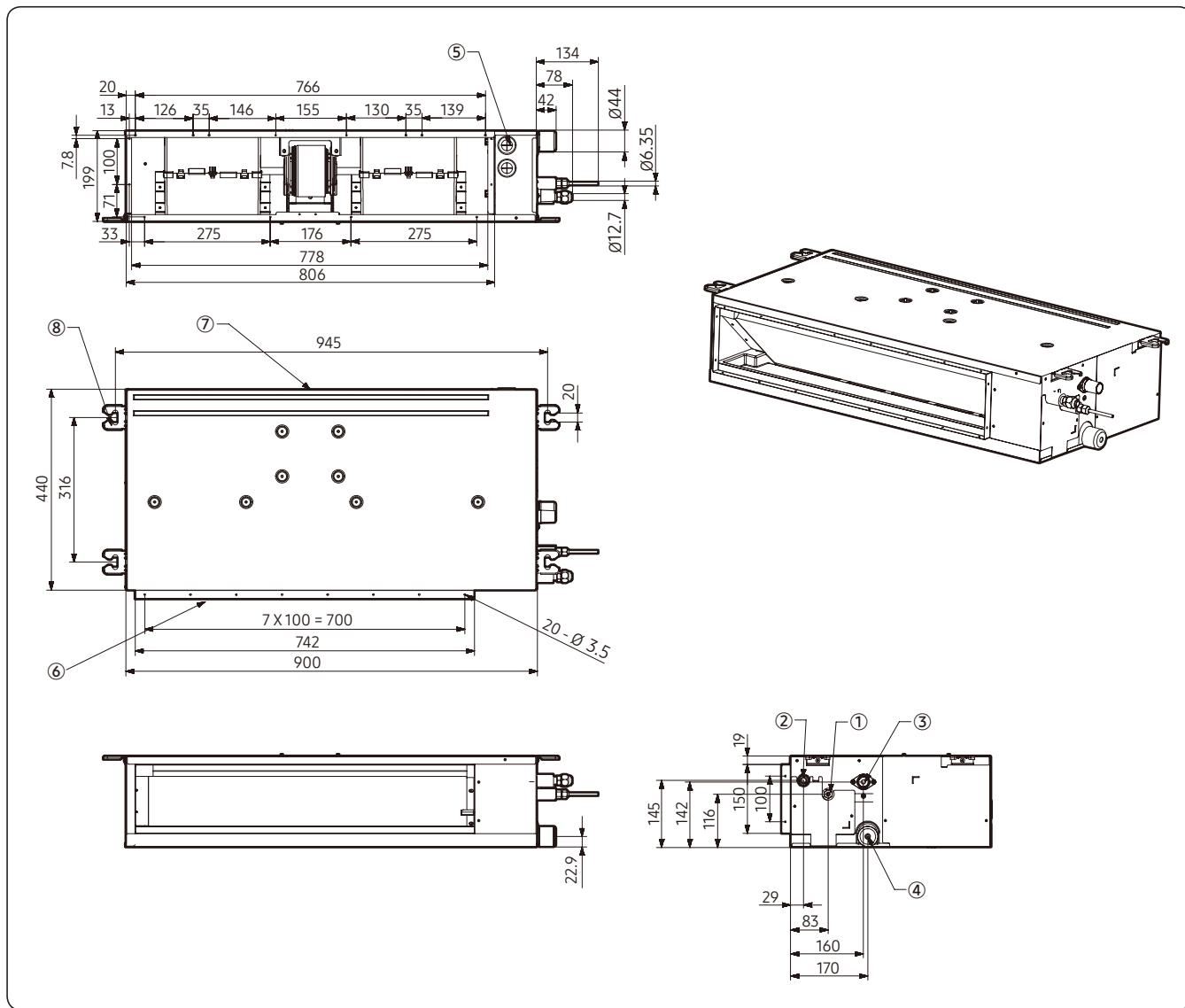
TC: Total Capacity

Capacity Index	Outdoor Air Temp. ( °C )		Indoor temperature ( °C,DB )				
			16(°C,DB)	18(°C,DB)	20(°C,DB)	22(°C,DB)	24(°C,DB)
	DB	WB	kW	kW	kW	kW	kW
045	-19.8	-20.0	3.1	3.1	2.9	2.9	2.9
	-18.8	-19.0	3.1	3.1	3.0	2.9	2.9
	-16.7	-17.0	3.2	3.2	3.1	3.0	3.0
	-14.7	-15.0	3.3	3.3	3.2	3.1	3.0
	-12.6	-13.0	3.5	3.4	3.4	3.3	3.2
	-10.5	-11.0	3.7	3.6	3.6	3.5	3.4
	-9.5	-10.0	3.7	3.6	3.6	3.5	3.5
	-8.5	-9.1	3.8	3.7	3.7	3.6	3.6
	-7.0	-7.6	3.9	3.8	3.8	3.7	3.6
	-5.0	-5.6	4.1	4.0	4.0	3.9	3.7
	-3.0	-3.7	4.3	4.2	4.2	4.0	3.9
	0.0	-0.7	4.5	4.4	4.4	4.2	4.0
	3.0	2.2	4.7	4.7	4.6	4.4	4.2
	5.0	4.1	4.9	4.9	4.8	4.5	4.2
	7.0	6.0	5.1	5.1	5.0	4.6	4.2
	9.0	7.9	5.3	5.2	5.0	4.6	4.2
	11.0	9.8	5.5	5.2	5.0	4.6	4.2
	13.0	11.8	5.6	5.3	5.0	4.6	4.2
	15.0	13.7	5.8	5.4	5.0	4.6	4.2
056	-19.8	-20.0	3.9	3.8	3.8	3.7	3.7
	-18.8	-19.0	3.9	3.9	3.8	3.7	3.7
	-16.7	-17.0	4.0	4.0	3.9	3.8	3.8
	-14.7	-15.0	4.2	4.1	4.0	3.9	3.8
	-12.6	-13.0	4.4	4.3	4.2	4.1	4.0
	-10.5	-11.0	4.6	4.5	4.4	4.4	4.3
	-9.5	-10.0	4.7	4.6	4.6	4.5	4.4
	-8.5	-9.1	4.8	4.7	4.7	4.6	4.5
	-7.0	-7.6	4.9	4.8	4.8	4.7	4.5
	-5.0	-5.6	5.2	5.1	5.0	4.9	4.7
	-3.0	-3.7	5.4	5.3	5.3	5.1	4.9
	0.0	-0.7	5.7	5.6	5.5	5.3	5.0
	3.0	2.2	5.9	5.9	5.8	5.6	5.3
	5.0	4.1	6.2	6.1	6.0	5.7	5.3
	7.0	6.0	6.5	6.4	6.3	5.8	5.3
	9.0	7.9	6.7	6.5	6.3	5.8	5.3
	11.0	9.8	6.9	6.6	6.3	5.8	5.3
	13.0	11.8	7.1	6.7	6.3	5.8	5.3
	15.0	13.7	7.3	6.8	6.3	5.8	5.3
071	-19.8	-20.0	4.9	4.9	4.8	4.7	4.7
	-18.8	-19.0	5.0	4.9	4.8	4.7	4.7
	-16.7	-17.0	5.1	5.0	4.9	4.8	4.8
	-14.7	-15.0	5.3	5.2	5.1	4.9	4.8
	-12.6	-13.0	5.5	5.4	5.3	5.2	5.1
	-10.5	-11.0	5.8	5.7	5.6	5.5	5.5
	-9.5	-10.0	6.0	5.9	5.8	5.7	5.6
	-8.5	-9.1	6.1	6.0	5.9	5.8	5.7
	-7.0	-7.6	6.2	6.1	6.0	5.9	5.8
	-5.0	-5.6	6.5	6.5	6.4	6.2	6.0
	-3.0	-3.7	6.9	6.8	6.7	6.4	6.2
	0.0	-0.7	7.2	7.1	7.0	6.7	6.4
	3.0	2.2	7.6	7.5	7.3	7.1	6.8
	5.0	4.1	7.9	7.8	7.7	7.2	6.8
	7.0	6.0	8.2	8.1	8.0	7.4	6.8
	9.0	7.9	8.5	8.2	8.0	7.4	6.8
	11.0	9.8	8.7	8.4	8.0	7.4	6.8
	13.0	11.8	9.0	8.5	8.0	7.4	6.8
	15.0	13.7	9.2	8.6	8.0	7.4	6.8

# 4. Dimensional Drawing

## Home DUCT

AM045MNLDEH/EU, AM056MNLDEH/EU

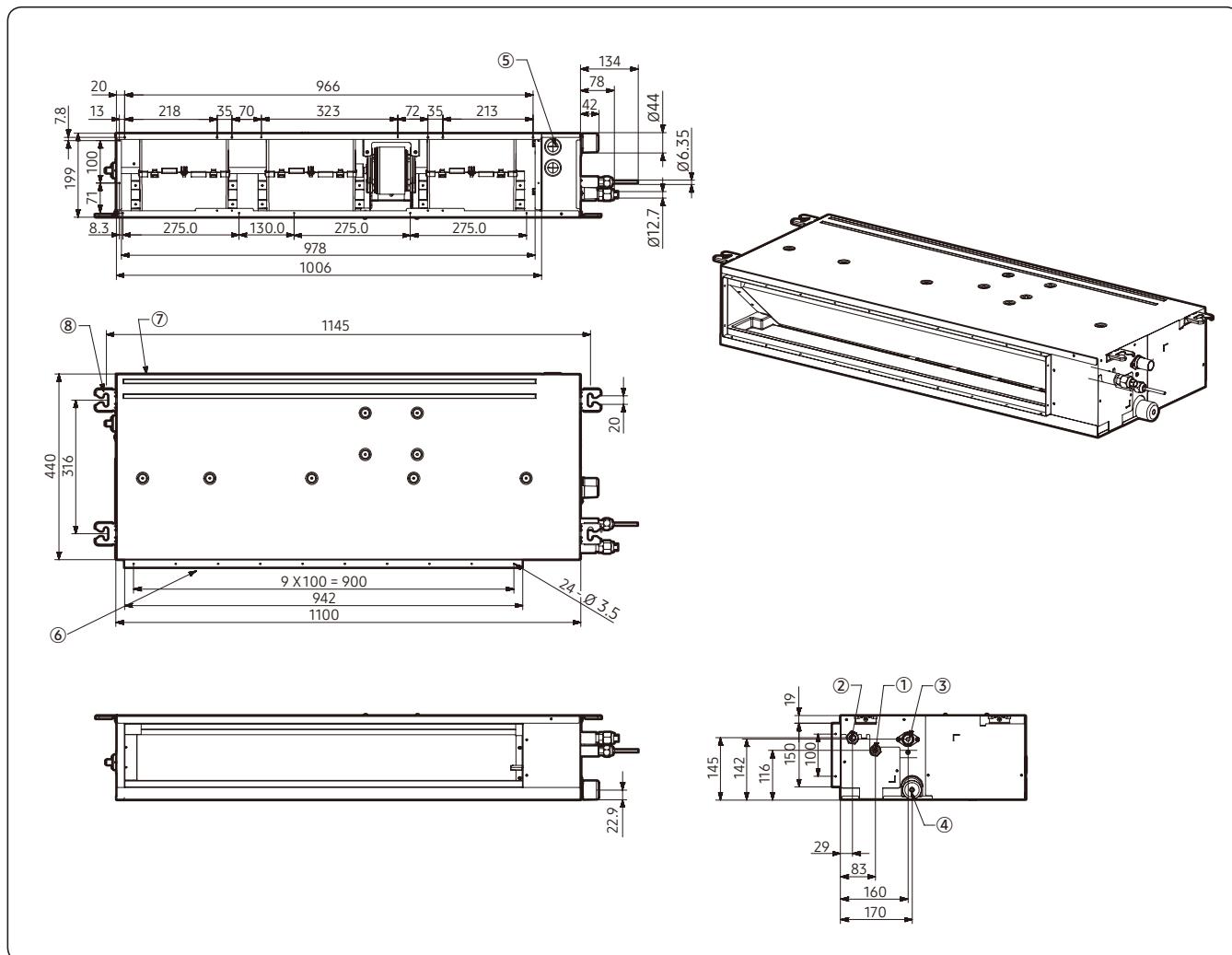


No.	Name	Description
(1)	Refrigerant Liquid Pipe	Ø6.35 [1/4"] Flare Connection
(2)	Refrigerant Gas Pipe	Ø12.70 [1/2"] Flare Connection
(3)	Condensate Drain	VP25 (OD 32, ID 25)
(4)	Condensate Drain (Option)	VP25 (OD 32, ID 25)
(5)	Power & Comm. Wiring Conduits	-
(6)	Supply Air Flange	-
(7)	Return Air Flange	-
(8)	Hook	-

# 4. Dimensional Drawing

## Home DUCT

AM071MNLDEH/EU

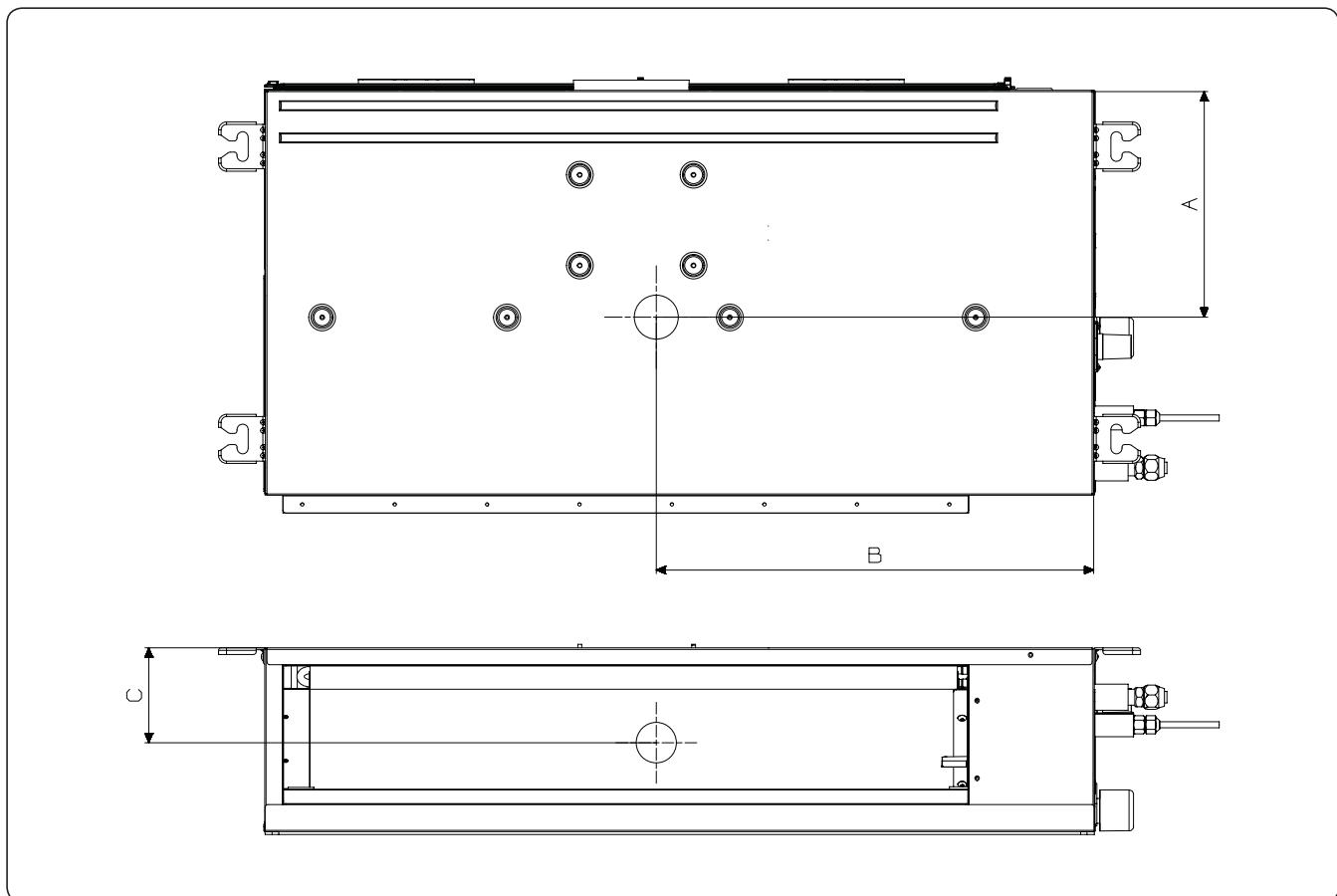


No.	Name	Description
①	Refrigerant Liquid Pipe	Ø9.52 [3/8"] Flare Connection
②	Refrigerant Gas Pipe	Ø15.88 [5/8"] Flare Connection
③	Condensate Drain	VP25 (OD 32, ID 25)
④	Condensate Drain (Option)	VP25 (OD 32, ID 25)
⑤	Power & Comm. Wiring Conduits	-
⑥	Supply Air Flange	-
⑦	Return Air Flange	-
⑧	Hook	-

# 5. Center of Gravity

## Home DUCT

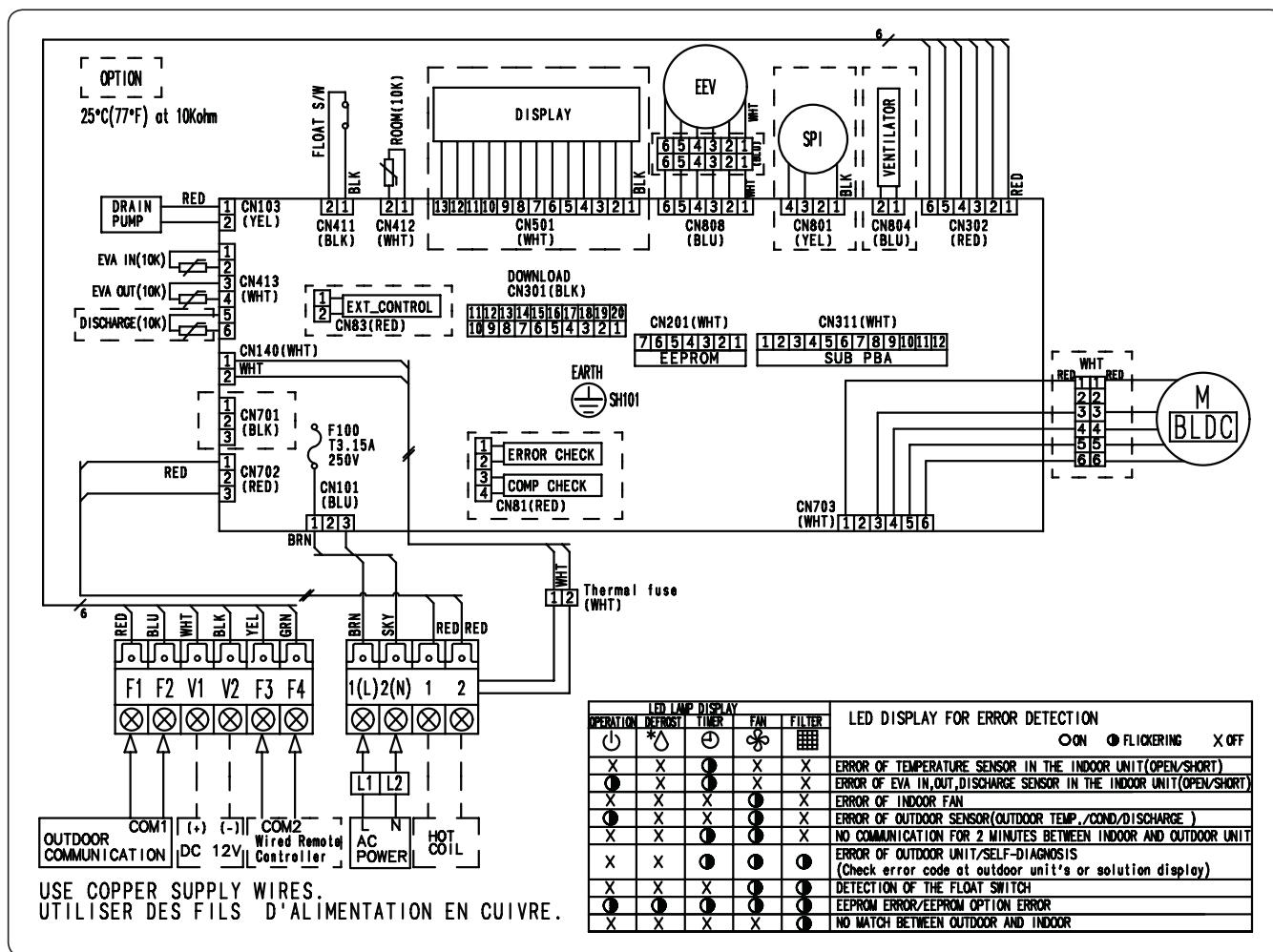
(Unit: mm)



Model	A	B	C
4.5kW/5.6kW	233	436	100
7.1kW	240	540	100

# 6. Electrical Wiring Diagram

## Home DUCT



F100	FUSE	EEV	Electronic Expansion Valve	EVA-IN(10K)	Thermistor EVA IN(10K)
M[BLDC]	Motor (IDU fan)	SPI	S-Plasma ion	EVA-OUT(10K)	Thermistor EVA OUT(10K)
Thermal Fuse	Terminal Block Thermal Fuse	ROOM(10K)	Thermistor ROOM(10K)	DISCHARGE(10K)	Thermistor DISCHARGE(10K)

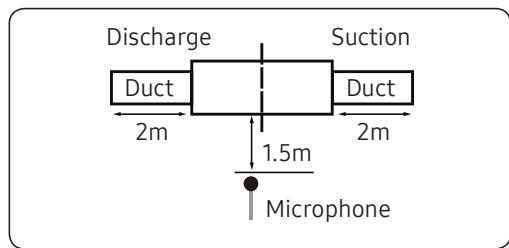
### NOTE

- 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, : The wire quantity

# 7. Sound Data

## Home DUCT

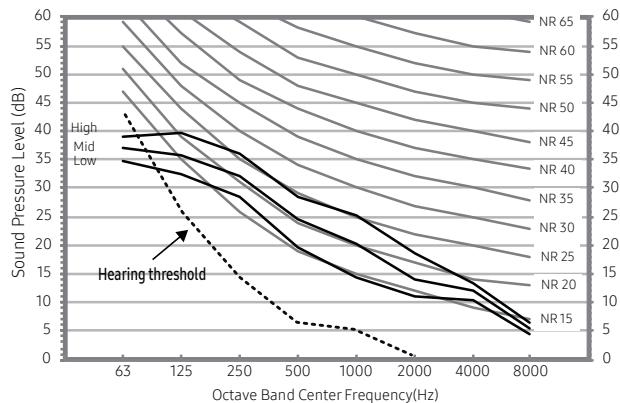
### Sound pressure level



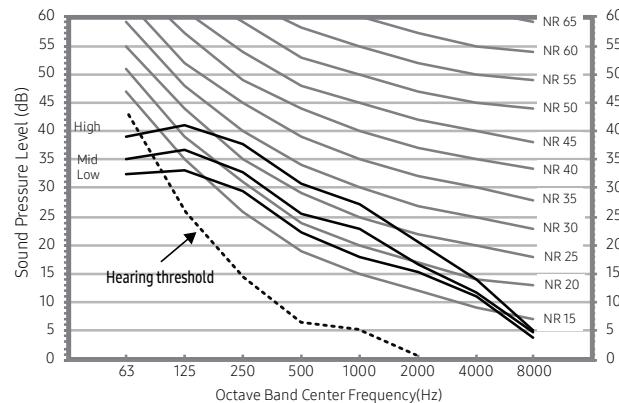
MODEL	High	Mid	Low
AM045MNLDEH/EU	32	28	25
AM056MNLDEH/EU	34	30	26
AM071MNLDEH/EU	34	30	27

- NR Curve

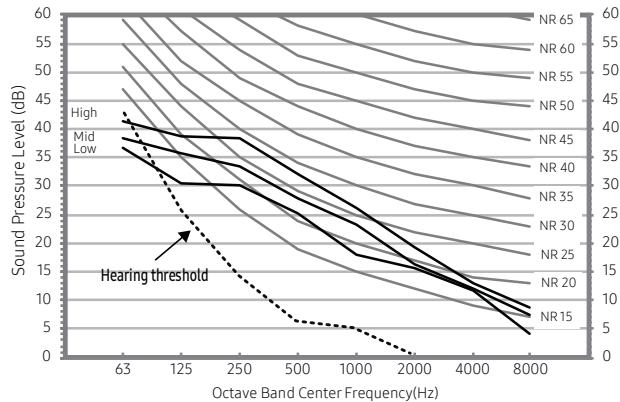
1) AM045MNLDEH/EU



2) AM056MNLDEH/EU



3) AM071MNLDEH/EU



### NOTE

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  - 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

## Home DUCT

### Sound Power level

#### NOTE

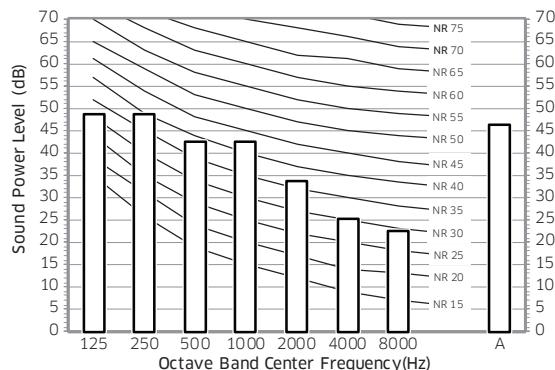
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

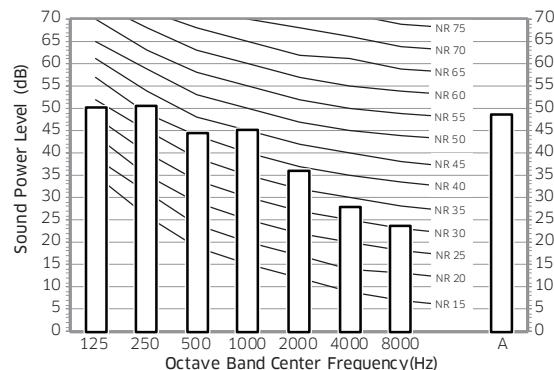
Model	Power
AM045MNLDEH/EU	47
AM056MNLDEH/EU	49
AM071MNLDEH/EU	49

- NR Curve

1) AM045MNLDEH/EU



2) AM056MNLDEH/EU



3) AM071MNLDEH/EU

