

SAMSUNG

VRF

Technical

Data Book

Wind-Free 4Way Cassette for Global
(R410A, HP)



Model : AM***NN*DEH/**

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	

Nomenclature

Indoor Unit

Model Name

AM

015

N

N

N

D

E

H

/

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(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

Buyer

(1) Classification

AM	DVM
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(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
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(8) Mode

H	Heat Pump (R410A)
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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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4Way Cassette (600x600)

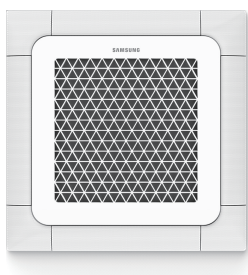
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Features & Benefits

Wind-Free 4Way Cassette (600x600)

Add chic flair to your interior design with a stylish yet powerful AC system

Samsung's advanced Wind-Free 4Way Cassette (600 x 600) builds on the aesthetic appeal and performance of the standard Wind-Free 4Way Cassette with an enhanced design. The Wind-Free 4Way Cassette (600 x 600) comes in a variety of patterns to complement any interior. The stylish cassette unit visually harmonizes with the indoor space, while efficient cooling and heating performance make it a dependable and practical air conditioning solution.



The Wind-Free 4Way Cassette (600 x 600) indoor air conditioning system provides high-performance heating and cooling in an elegant design with features such as:

- **Tasteful design and compact, lightweight build.** Create a polished ambiance with a discreetly sized design and a choice of attractive panel patterns.
- **Enhanced comfort control.** Optimize comfort and save energy with optional motion detection.
- **Low maintenance and powerful airflow.** Ease installation and maintenance and maximize airflow with an efficient design and robust performance.

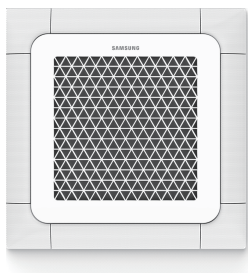
Wind-Free 4Way Cassette (600 x 600) - Tasteful design, Compact, Lightweight build

Refine the interior with an elegant, compact design

The enhanced Samsung Wind-Free 4Way Cassette (600 x 600) indoor air conditioner features a selection of simple panel patterns to blend seamlessly into any interior design. Its uniquely lightweight frame blends effortlessly and beautifully into any décor, while clever blade construction keeps the unit clean for a tidy appearance.

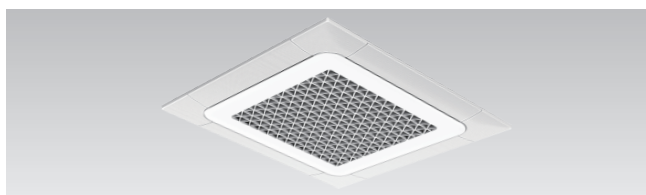
Attractive panel and display

The Wind-Free 4Way Cassette (600 x 600) features a fashionable panel with a simple, beveled corner design. The rounded panel frame promotes a neat, tidy look for an aesthetic flair that blends perfectly with any ambience.



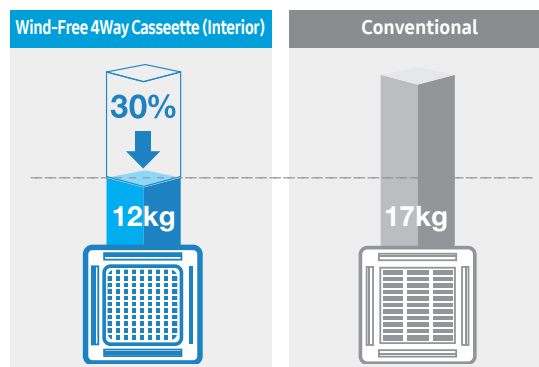
Ultra-compact size

Samsung's Wind-Free 4Way Cassette (600 x 600) air conditioner can be installed on a single standard ceiling tile (600W x 600D) which helps minimize installation time and effort.



Light, robust design

The Samsung Wind-Free 4Way Cassette (600 x 600) indoor unit is now lighter in weight at 12kg. It is the lightest indoor unit in the industry, about 30 percent lighter than our conventional products.



*Based on 3.6kW

1. Specification

Wind-Free 4Way Cassette (600x600)

Model Name				AM015NNNDEH/**	AM022NNNDEH/**	AM028NNNDEH/**	AM036NNNDEH/**
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	1.50	2.20	2.80	3.60
			Btu/h	5,100	7,500	9,600	12,300
		Heating	kW	1.70	2.50	3.20	4.00
			Btu/h	5,800	8,500	10,900	13,600
Power	Power Input	Cooling	W	18.00	18.00	18.00	20.00
		Heating		18.00	18.00	18.00	20.00
	Current Input	Cooling	A	0.17	0.17	0.17	0.19
		Heating		0.17	0.17	0.17	0.19
	Current	MCA	A	0.23	0.23	0.23	0.25
		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	8.5/7.2/6.5	9.0/7.7/6.5	10.0/8.5/7.5	10.5/9.0/7.5
			l/s	142/120/108	150/128/108	167/142/125	175/150/125
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	6.35	6.35
			Φ, inch	1/4"	1/4"	1/4"	1/4"
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ,mm	12.70	12.70	12.70	12.70
			Φ, inch	1/2"	1/2"	1/2"	1/2"
	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)

1. Specification

Wind-Free 4Way Cassette (600x600)

Model Name				AM015NNNDEH/**	AM022NNNDEH/**	AM028NNNDEH/**	AM036NNNDEH/**
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)	30/28/23	32/29/25	33/30/26	34/30/26
	Sound Power	Cooling		46	47	50	51
Dimensions	Net Weight		kg	11.7	12	12	12
	Shipping Weight		kg	13.7	14	14	14
	Net Dimensions (W×H×D)		mm	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575
	Shipping Dimensions (W×H×D)		mm	623 x 298 x 653	623 x 298 x 653	623 x 298 x 653	623 x 298 x 653
Panel	Model Name		-	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN
	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	2.7	2.7	2.7	2.7
	Shipping Weight		kg	3.9	3.9	3.9	3.9
	Net Dimensions (W×H×D)		mm	620 x 57 x 620	620 x 57 x 620	620 x 57 x 620	620 x 57 x 620
	Shipping Dimensions (W×H×D)		mm	670 x 120 x 655	670 x 120 x 655	670 x 120 x 655	670 x 120 x 655
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 (600x600)

Model Name				AM045NNNDEH/**	AM056NNNDEH/**	AM060NNNDEH/**
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	4.50	5.60	6.00
			Btu/h	15,400	19,100	20,500
		Heating	kW	5.00	6.30	6.80
			Btu/h	17,100	21,500	23,200
Power	Power Input	Cooling	W	23.00	28.00	31.00
		Heating		23.00	28.00	31.00
	Current Input	Cooling	A	0.22	0.27	0.30
		Heating		0.22	0.27	0.30
	Current	MCA	A	0.29	0.35	0.39
		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	11.5/10.2/9.0	13.0/11.0/9.5	13.5/12.0/10.2
			l/s	192/170/150	217/183/158	225/200/170
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		Type	Flare connection	Flare connection	Flare connection
			Φ,mm	6.35	6.35	6.35
			Φ, inch	1/4"	1/4"	1/4"
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection
			Φ,mm	12.70	12.70	12.70
			Φ, inch	1/2"	1/2"	1/2"
	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)

1. Specification

Wind-Free 4Way Cassette (600x600)

Model Name				AM045NNNDEH/**	AM056NNNDEH/**	AM060NNNDEH/**
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)	36/34/32	39/36/33	40/38/35
	Sound Power	Cooling		53	56	57
Dimensions	Net Weight		kg	12	12	12
	Shipping Weight		kg	14	14	14
	Net Dimensions (W×H×D)		mm	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575
	Shipping Dimensions (W×H×D)		mm	623 x 298 x 653	623 x 298 x 653	623 x 298 x 653
Panel	Model Name		-	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN
	Type		-	Wind-Free Type	Wind-Free Type	Wind-Free Type
	Material		-	HIPS	HIPS	HIPS
	Color		-	White	White	White
	Net Weight		kg	2.7	2.7	2.7
	Shipping Weight		kg	3.9	3.9	3.9
	Net Dimensions (W×H×D)		mm	620 x 57 x 620	620 x 57 x 620	620 x 57 x 620
	Shipping Dimensions (W×H×D)		mm	670 x 120 x 655	670 x 120 x 655	670 x 120 x 655
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 (600x600)

Performance Characteristics

Model Code	Net Weight (kg)	Fan Speed	Capacity			Airflow (CMM)	Sound Pressure (dBA)	Sound Power (dBA)
			Cooling	Sensible	Heating			
AM015NNNDEH/**	11.7	High	1.5	1.0	1.7	8.5	30	46
		Mid	1.2	0.9	1.6	7.2	28	
		Low	1.1	0.8	1.5	6.5	23	
		W/Free	0.8	0.6	-	3.5	23	
AM022NNNDEH/**	12	High	2.2	1.5	2.5	9.0	32	47
		Mid	1.8	1.3	2.3	7.7	29	
		Low	1.5	1.1	2.1	6.5	25	
		W/Free	1.1	0.8	-	3.6	25	
AM028NNNDEH/**	12	High	2.8	2.0	3.2	10.0	33	50
		Mid	2.2	1.7	3.0	8.5	30	
		Low	1.9	1.5	2.8	7.5	26	
		W/Free	1.3	1.0	-	3.8	26	
AM036NNNDEH/**	12	High	3.6	2.5	4.0	10.5	34	51
		Mid	2.8	2.1	3.7	9.0	30	
		Low	2.4	1.8	3.4	7.5	26	
		W/Free	1.7	1.2	-	4.4	26	
AM045NNNDEH/**	12	High	4.5	3.1	5.0	11.5	36	53
		Mid	3.6	2.6	4.7	10.2	34	
		Low	3.1	2.4	4.4	9.0	32	
		W/Free	2.2	1.6	-	4.6	32	
AM056NNNDEH/**	12	High	5.6	4.2	6.3	13.0	39	56
		Mid	4.3	3.5	5.8	11.0	36	
		Low	3.7	3.1	5.4	9.5	33	
		W/Free	2.6	1.9	-	4.8	33	
AM060NNNDEH/**	12	High	6.0	4.5	6.8	13.5	40	57
		Mid	4.7	3.8	6.4	12.0	38	
		Low	4.0	3.3	5.9	10.2	35	
		W/Free	2.8	2.1	-	5.0	33	



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)
AM015NNNDEH/**	1,2,220~240,50	18.0	0.17	0.23	15	0.18
AM022NNNDEH/**	1,2,220~240,50	18.0	0.17	0.23	15	0.18
AM028NNNDEH/**	1,2,220~240,50	18.0	0.17	0.23	15	0.18
AM036NNNDEH/**	1,2,220~240,50	20.0	0.19	0.25	15	0.20
AM045NNNDEH/**	1,2,220~240,50	23.0	0.22	0.29	15	0.23
AM056NNNDEH/**	1,2,220~240,50	28.0	0.27	0.35	15	0.28
AM060NNNDEH/**	1,2,220~240,50	31.0	0.30	0.39	15	0.31



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 (600x600)

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Model	Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
		TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW
1.50	10	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.90	1.00
	12	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	14	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	16	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	18	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	20	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	21	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	23	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	25	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	27	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	29	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	31	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	33	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	35	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	37	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.70	1.00	1.80	1.00
	39	1.00	0.90	1.20	1.00	1.40	1.10	1.50	1.00	1.60	1.00	1.60	1.00	1.70	1.00
2.20	42	1.00	0.90	1.20	1.00	1.40	1.10	1.40	1.00	1.50	1.00	1.60	1.00	1.70	1.00
	44	1.00	0.90	1.20	1.00	1.40	1.10	1.40	1.00	1.50	1.00	1.60	1.00	1.60	1.00
	10	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.50	1.60	2.60	1.40
	12	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.50	1.60	2.60	1.40
	14	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.50	1.60	2.60	1.40
	16	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	18	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	20	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	21	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	23	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	25	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	27	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	29	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	31	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	33	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	35	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	37	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.60	1.40
	39	1.50	1.30	1.80	1.40	2.10	1.50	2.20	1.50	2.30	1.50	2.40	1.50	2.50	1.30
	42	1.50	1.30	1.80	1.40	2.10	1.50	2.10	1.40	2.20	1.40	2.30	1.40	2.40	1.20
	44	1.50	1.30	1.80	1.40	2.00	1.40	2.10	1.40	2.10	1.30	2.20	1.40	2.20	1.10

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

Model	Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
		TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW
2.80	10	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.40	1.90
	12	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	14	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	16	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	18	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	20	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	21	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	23	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	25	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	27	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	29	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	31	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	33	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	35	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	37	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	2.00	3.10	2.00	3.30	1.80
	39	1.90	1.70	2.30	1.80	2.60	2.00	2.80	2.00	2.90	1.90	3.00	1.90	3.20	1.80
	42	1.90	1.70	2.30	1.80	2.60	2.00	2.70	1.90	2.80	1.90	2.90	1.80	3.00	1.70
	44	1.90	1.70	2.30	1.80	2.50	1.90	2.70	1.90	2.70	1.80	2.70	1.70	2.80	1.60
3.60	10	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.30	2.30
	12	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.30	2.30
	14	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.30	2.30
	16	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.30	2.30
	18	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.30	2.30
	20	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	21	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	23	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	25	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	27	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	29	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	31	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	33	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	35	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	4.00	2.50	4.20	2.30
	37	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	3.90	2.40	4.20	2.30
	39	2.50	2.10	2.90	2.20	3.40	2.40	3.60	2.50	3.70	2.50	3.90	2.40	4.10	2.20
	42	2.50	2.10	2.90	2.20	3.40	2.40	3.50	2.40	3.60	2.40	3.70	2.30	3.90	2.10
	44	2.50	2.10	2.90	2.20	3.20	2.30	3.40	2.30	3.50	2.30	3.50	2.20	3.60	2.00

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Model	Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
		TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW
4.50	10	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.40	2.90
	12	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.40	2.90
	14	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.40	2.90
	16	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	18	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	20	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	21	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	23	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	25	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	27	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	29	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	31	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	33	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	35	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.70	3.10	5.00	3.10	5.30	2.80
	37	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.60	3.00	4.90	3.00	5.20	2.70
	39	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.10	4.60	3.00	4.90	3.00	5.10	2.60
5.60	42	3.10	2.70	3.70	2.80	4.20	3.00	4.50	3.00	4.50	2.90	4.60	2.70	4.80	2.50
	44	3.10	2.70	3.70	2.80	4.00	2.90	4.30	2.90	4.30	2.80	4.40	2.60	4.50	2.40
	10	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.30	4.30	6.70	4.10
	12	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.30	4.30	6.70	4.10
	14	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.70	4.00
	16	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	18	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	20	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	21	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	23	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	25	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	27	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	29	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	31	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	33	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	35	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.20	4.20	6.60	4.00
	37	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.10	4.10	6.50	3.90
	39	3.90	3.30	4.60	3.80	5.30	4.10	5.60	4.20	5.80	4.20	6.10	4.10	6.40	3.80
	42	3.90	3.30	4.60	3.80	5.30	4.10	5.40	4.10	5.60	4.10	5.80	3.90	6.00	3.60
	44	3.90	3.30	4.60	3.80	5.00	4.00	5.30	4.00	5.40	4.00	5.50	3.80	5.60	3.40

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

Model	Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
6.00	10	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.70	4.60	7.20	4.40
	12	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.70	4.60	7.20	4.40
	14	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.70	4.60	7.10	4.30
	16	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.70	4.60	7.10	4.30
	18	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.70	4.60	7.10	4.30
	20	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	21	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	23	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	25	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	27	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	29	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	31	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	33	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	35	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.10	4.30
	37	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.60	4.50	7.00	4.20
	39	4.10	3.50	4.90	4.00	5.60	4.50	6.00	4.50	6.20	4.50	6.50	4.40	6.80	4.10
	42	4.10	3.50	4.90	4.00	5.60	4.50	5.80	4.40	6.10	4.40	6.30	4.30	6.40	3.80
	44	4.10	3.50	4.90	4.00	5.40	4.40	5.70	4.30	5.80	4.30	5.90	4.20	6.00	3.60

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

Heating

TC : Total Capacity (kW)

Model	Outdoor temperature (°C)		Indoor temperature (°C, DB)				
			16.0	18.0	20.0	22.0	24.0
	TC		TC	TC	TC	TC	TC
	DB	WB	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. Capacity Table

Wind-Free 4Way Cassette (600x600)

Model	Outdoor temperature (°C)		Indoor temperature (°C, DB)				
			16.0	18.0	20.0	22.0	24.0
	TC		TC	TC	TC	TC	TC
	DB	WB	kW	kW	kW	kW	kW
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	-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
	15	14	4.60	4.30	4.00	3.70	3.40

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

Heating

TC : Total Capacity (kW)

Model	Outdoor temperature (°C)		Indoor temperature (°C, DB)				
			16.0	18.0	20.0	22.0	24.0
	DB	WB	TC	TC	TC	TC	TC
			kW	kW	kW	kW	kW
4.50	-20	-21	3.10	3.10	2.90	2.90	2.90
	-17	-18	3.20	3.20	3.10	3.00	3.00
	-15	-16	3.30	3.30	3.20	3.10	3.00
	-12	-13	3.50	3.40	3.40	3.30	3.20
	-10	-11	3.70	3.60	3.60	3.50	3.50
	-7	-8	3.90	3.80	3.80	3.70	3.60
	-5	-6	4.10	4.00	4.00	3.90	3.70
	-3	-4	4.30	4.20	4.20	4.00	3.90
	0	-1	4.50	4.40	4.40	4.20	4.00
	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	5.10	5.10	5.00	4.60	4.20
	9	8	5.30	5.20	5.00	4.60	4.20
	11	10	5.50	5.20	5.00	4.60	4.20
	13	12	5.60	5.30	5.00	4.60	4.20
5.60	15	14	5.80	5.40	5.00	4.60	4.20
	-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
6.00	13	12	7.10	6.70	6.30	5.80	5.30
	15	14	7.30	6.80	6.30	5.80	5.30
	-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	6.80	6.50	5.90
	9	8	7.40	7.20	6.80	6.50	5.90
	11	10	7.60	7.30	6.80	6.50	5.90
	13	12	7.90	7.40	6.80	6.50	5.90
	15	14	8.10	7.50	6.80	6.50	5.90

NOTE

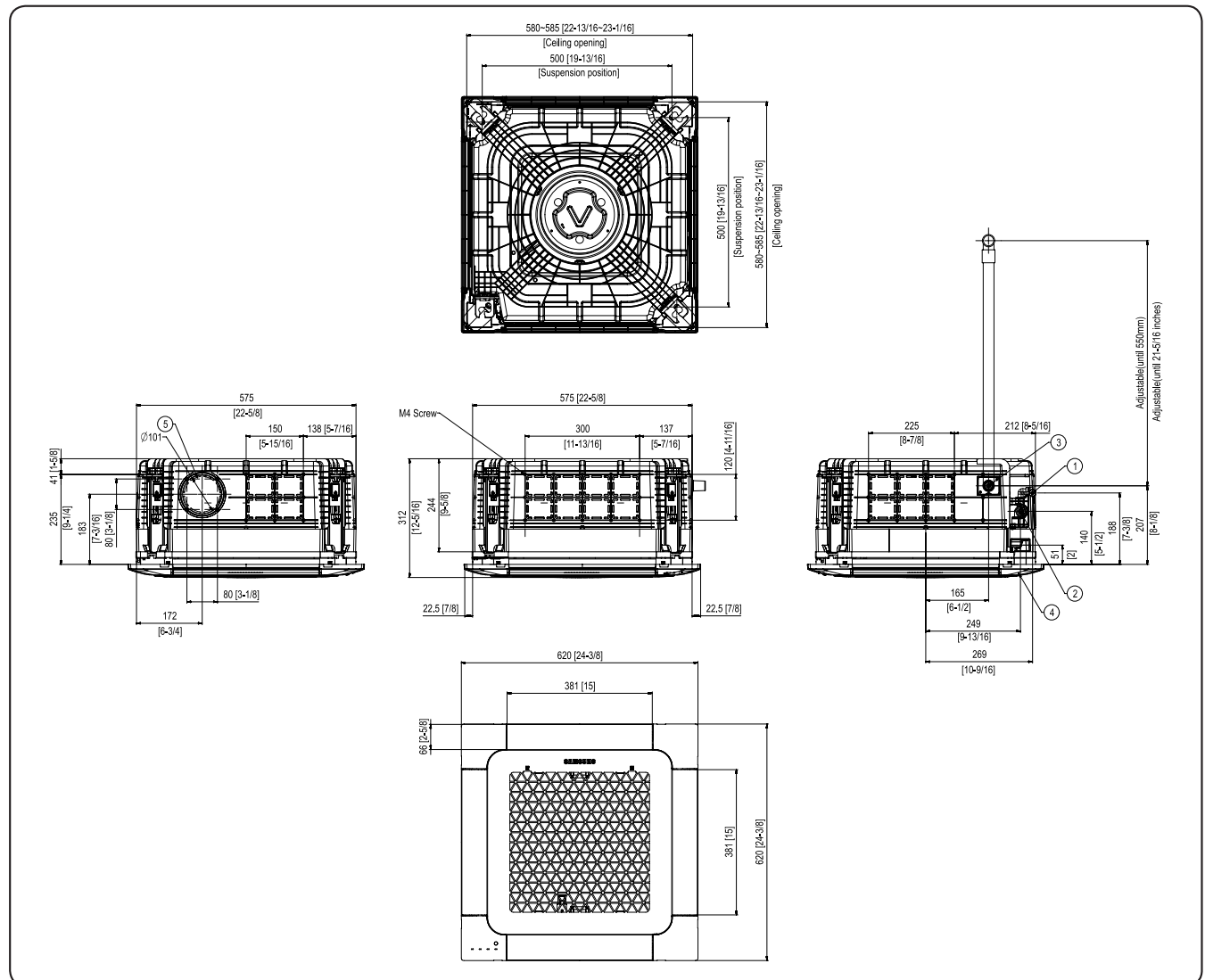
- The performance table shows the average value of each conditions.

4. Dimensional Drawing

Wind-Free 4Way Cassette (600x600)

AM015/022/028/036/045/056/060NNNDEH/**

Units : mm [inches]



No.	Name	Description
1	Liquid pipe connection	$\Phi 6.35(1/4)$
2	Gas pipe connection	$\Phi 12.7(1/2)$
3	Drain pipe connection	VP-25(OD32, ID25)
4	Power supply & Communication wiring conduit	Use M4 Screw
5	Fresh air intake knockout hole	$\Phi 10[4]$, Use M4 Screw

NOTE

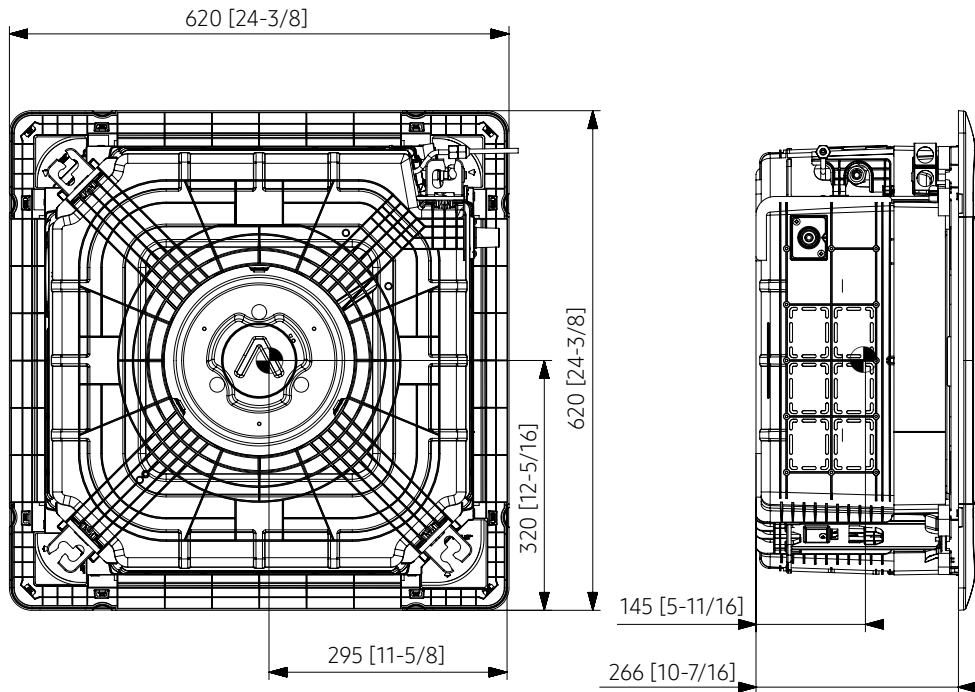
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

5. Center of Gravity

Wind-Free 4Way Cassette (600x600)

AM015/022/028/036/045/056/060NNNDEH/**

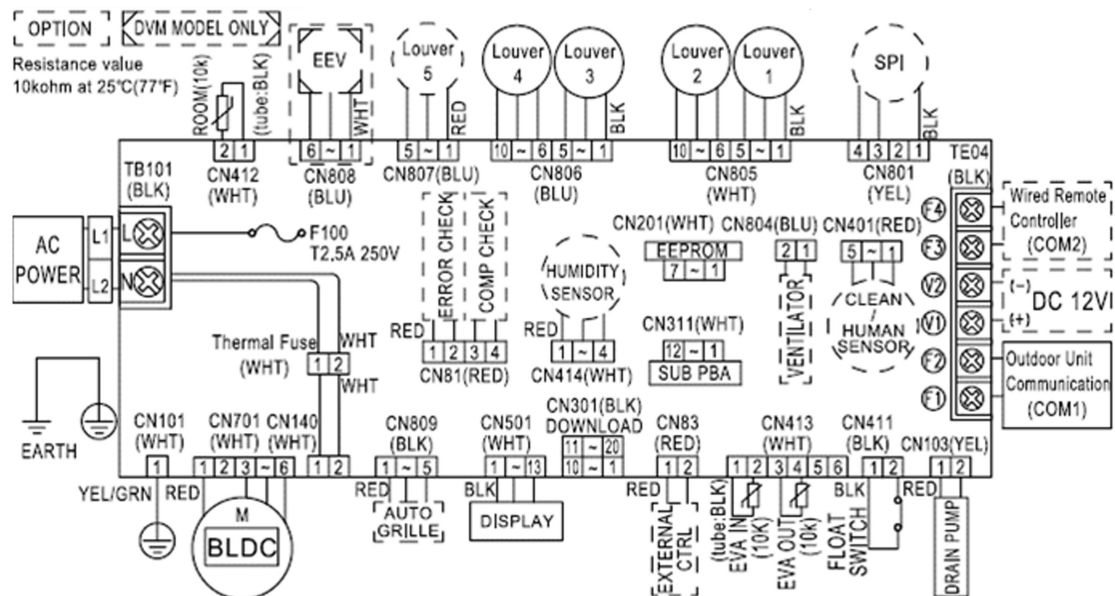
Units : mm [inches]



6. Electrical Wiring Diagram

Wind-Free 4Way Cassette (600x600)

AM015/022/028/036/045/056/060NNNDEH/**



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

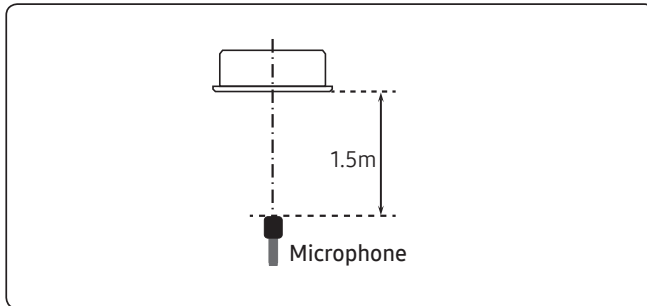
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
-  Protective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

7. Sound Data

Wind-Free 4Way Cassette (600x600)

Sound Pressure level

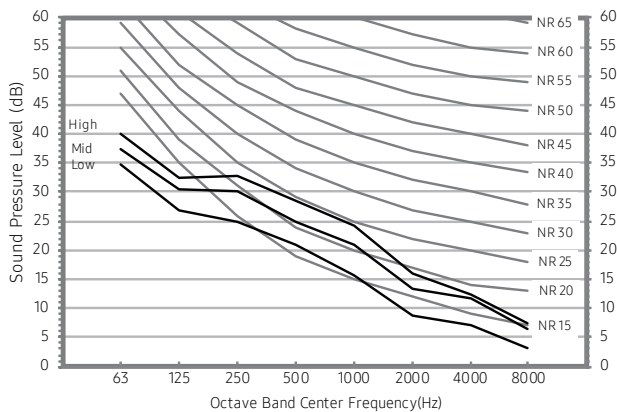
Unit: dB(A)



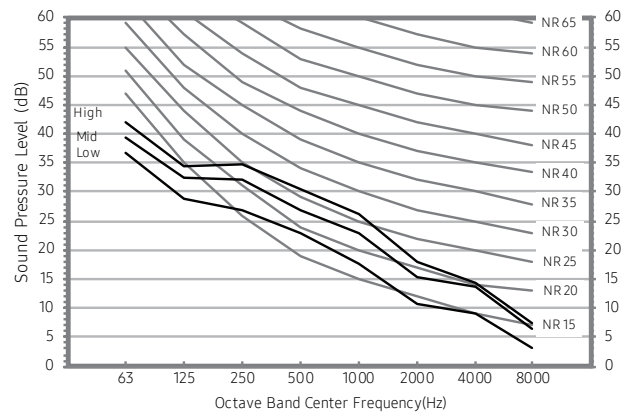
Model	High	MID	LOW
AM015NNNDEH/**	30	28	23
AM022NNNDEH/**	32	29	25
AM028NNNDEH/**	33	30	26
AM036NNNDEH/**	34	30	26

• NR Curve

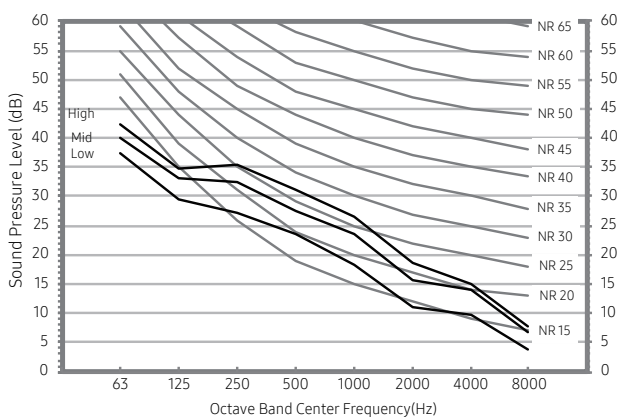
1) AM015NNNDEH/**



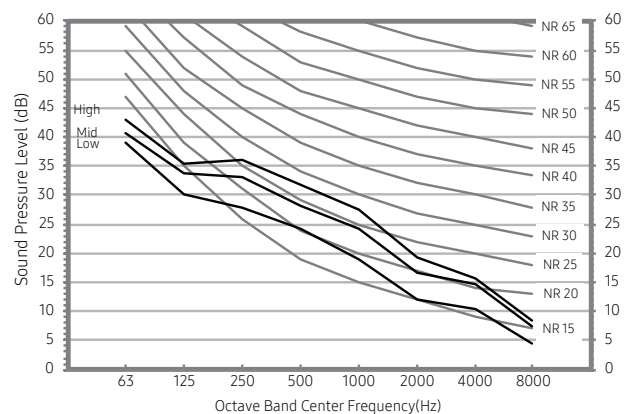
2) AM022NNNDEH/**



3) AM028NNNDEH/**



4) AM036NNNDEH/**



NOTE

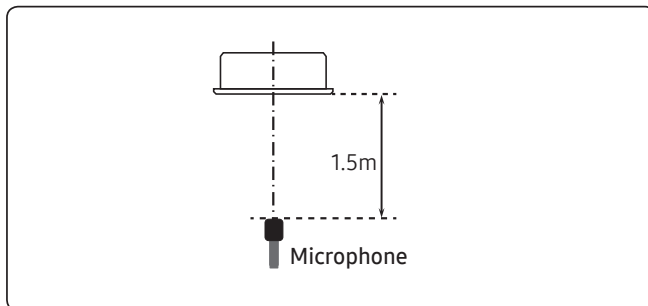
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A weighted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

7. Sound Data

Wind-Free 4Way Cassette (600x600)

Sound Pressure level

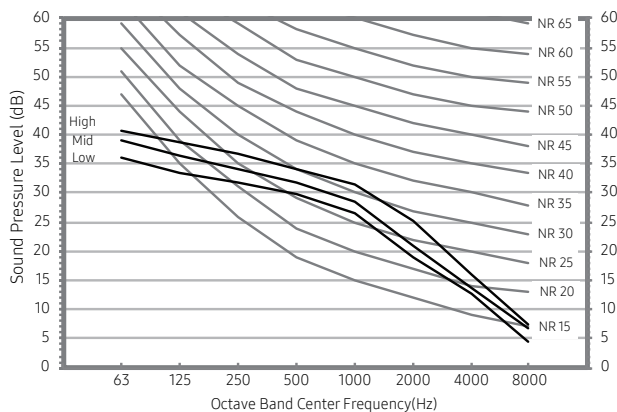
Unit: dB(A)



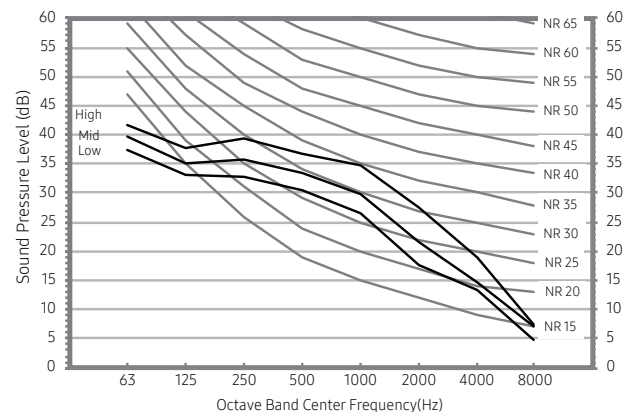
Model	High	MID	LOW
AM045NNNDEH/**	36	34	32
AM056NNNDEH/**	39	36	33
AM060NNNDEH/**	40	38	35

• NR Curve

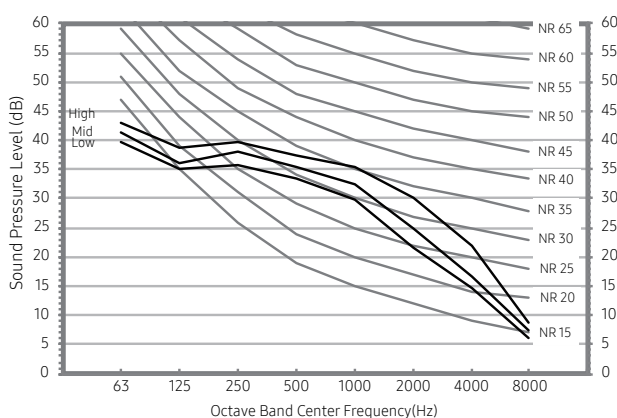
5) AM015NNNDEH/**



6) AM022NNNDEH/**



7) AM028NNNDEH/**



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.
 - dB(A) = A weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa

7. Sound Data

Wind-Free 4Way Cassette (600x600)

Sound Power level

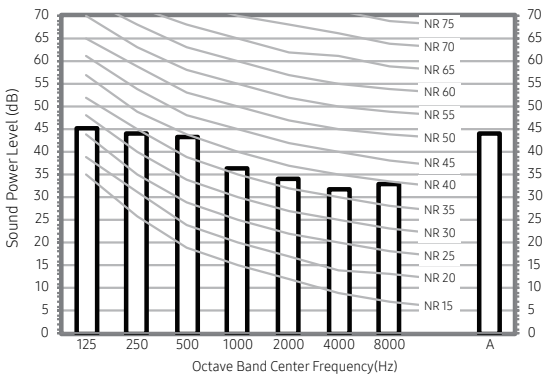
 NOTE

Unit: dB(A)

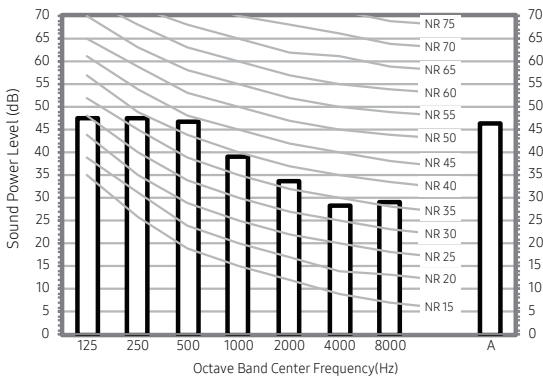
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.
- NR Curve

Model	Power
AM015NNNDEH/**	46
AM022NNNDEH/**	47
AM028NNNDEH/**	50
AM036NNNDEH/**	51

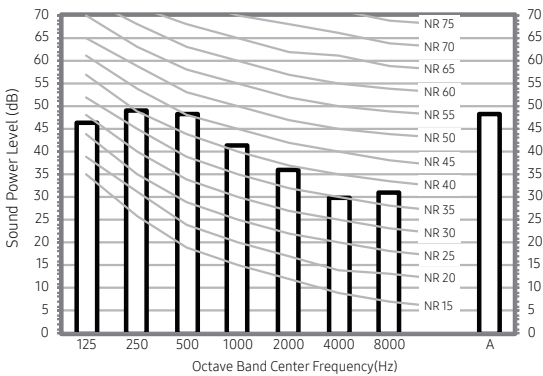
1) AM015NNNDEH/**



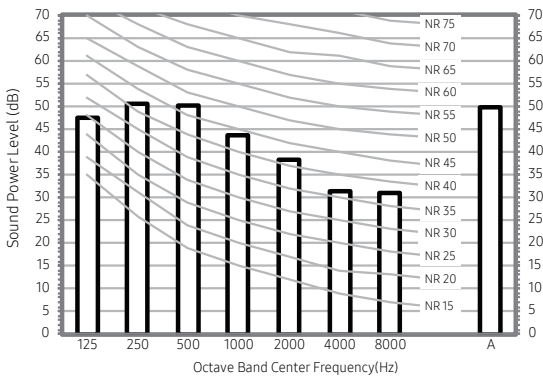
2) AM022NNNDEH/**



3) AM028NNNDEH/**



4) AM036NNNDEH/**



7. Sound Data

Wind-Free 4Way Cassette (600x600)

Sound Power level

NOTE

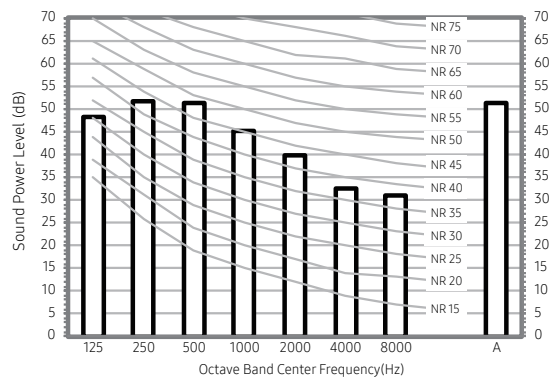
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

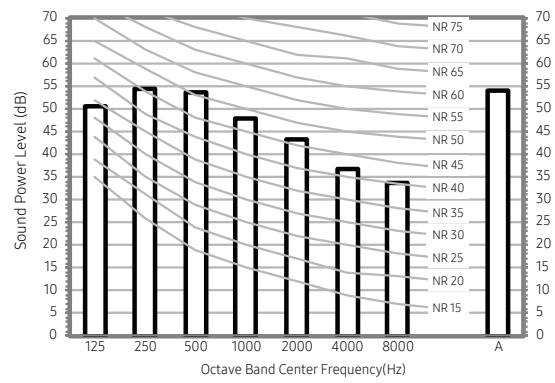
Model	Power
AM045NNNDEH/**	53
AM056NNNDEH/**	56
AM060NNNDEH/**	57

- NR Curve

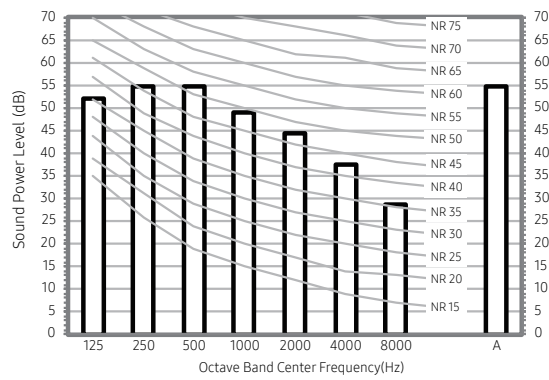
5) AM045NNNDEH/**



6) AM056NNNDEH/**



7) AM060NNNDEH/**

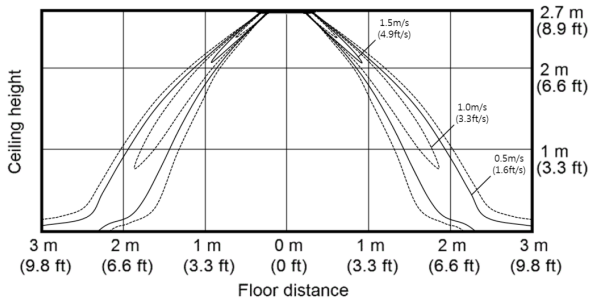


8. Temperature and air flow distribution

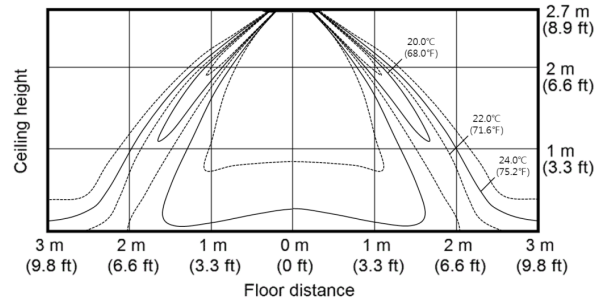
Wind-Free 4Way Cassette (600x600)

AM015NNNDEH/**

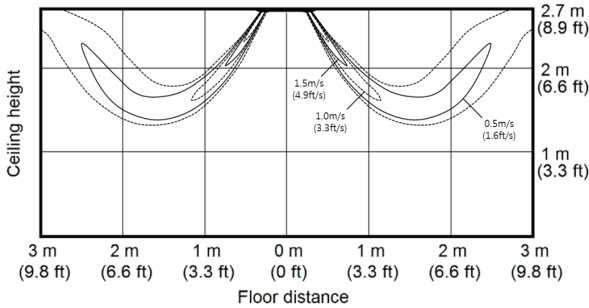
- Cooling Air Velocity distribution
(Discharge angle : 41 degree)



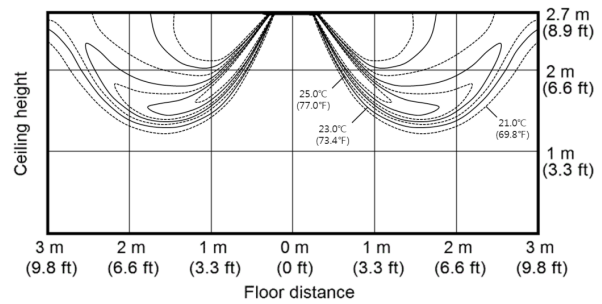
- Cooling temperature distribution
(Discharge angle : 41 degree)



- Heating Air Velocity distribution
(Discharge angle : 56 degree)

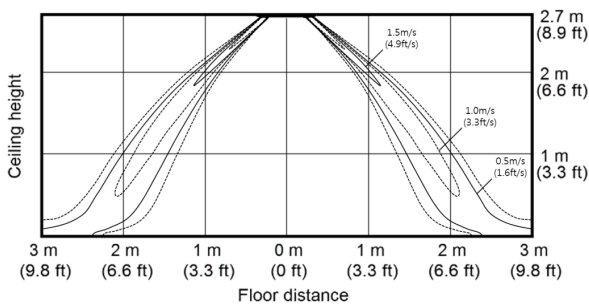


- Heating temperature distribution
(Discharge angle : 56 degree)

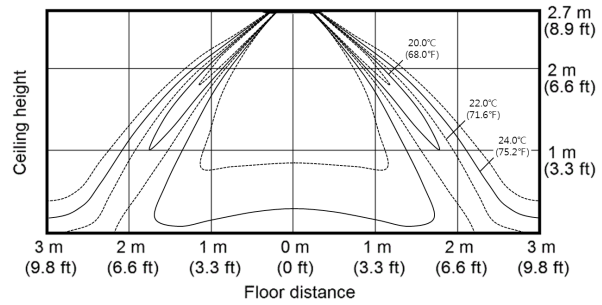


AM022NNNDEH/**

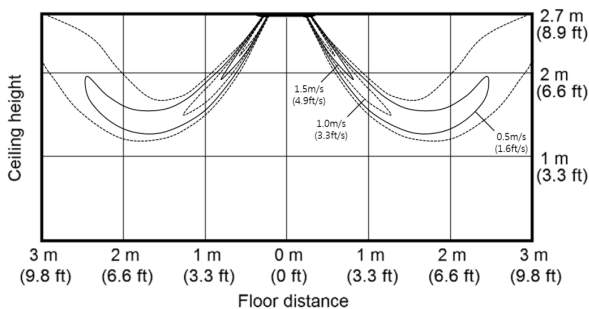
- Cooling Air Velocity distribution
(Discharge angle : 41 degree)



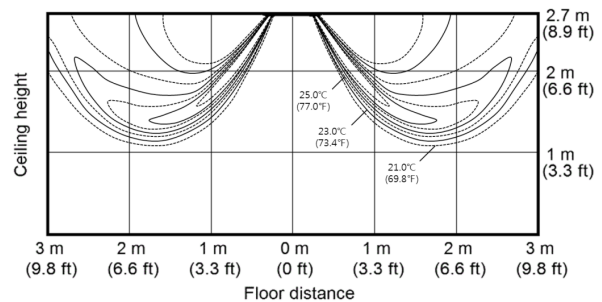
- Cooling temperature distribution
(Discharge angle : 41 degree)



- Heating Air Velocity distribution
(Discharge angle : 56 degree)



- Heating temperature distribution
(Discharge angle : 56 degree)

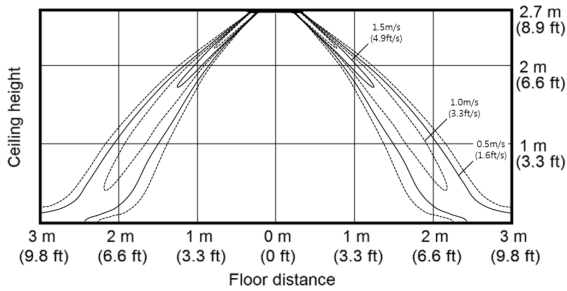


8. Temperature and air flow distribution

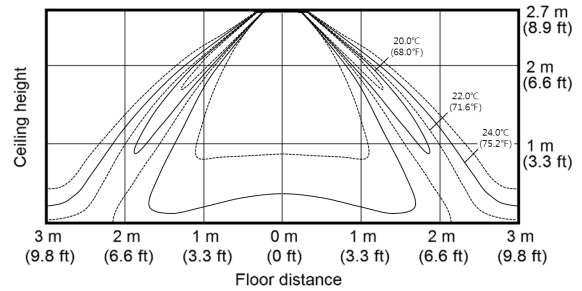
Wind-Free 4Way Cassette (600x600)

AM028NNNDEH/**

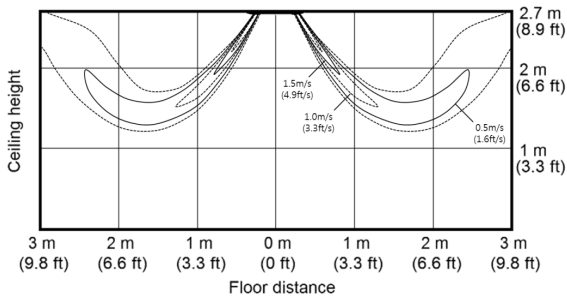
- Cooling Air Velocity distribution
(Discharge angle : 41 degree)



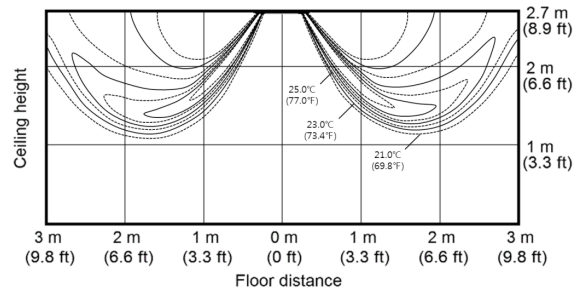
- Cooling temperature distribution
(Discharge angle : 41 degree)



- Heating Air Velocity distribution
(Discharge angle : 56 degree)

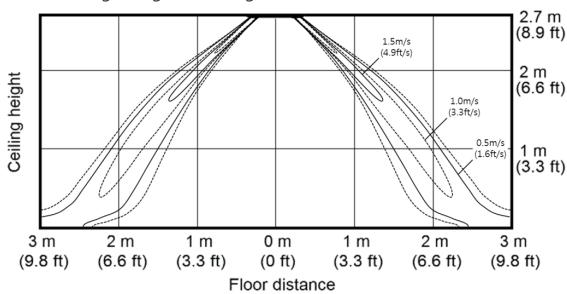


- Heating temperature distribution
(Discharge angle : 56 degree)

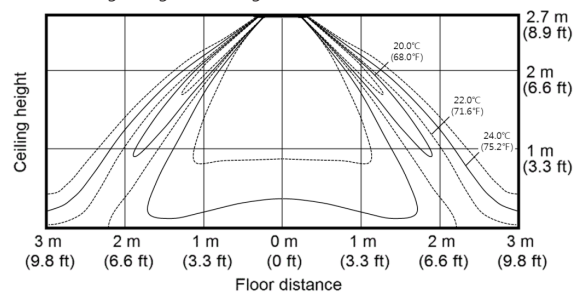


AM036NNNDEH/**

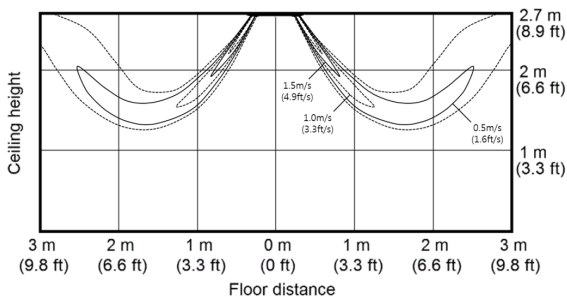
- Cooling Air Velocity distribution
(Discharge angle : 41 degree)



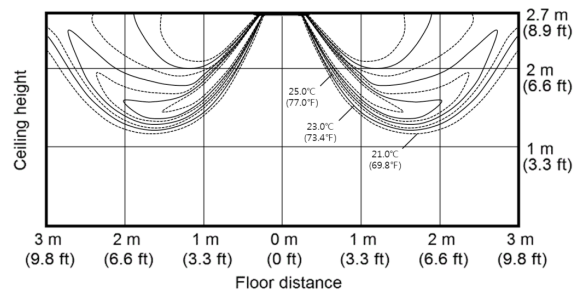
- Cooling temperature distribution
(Discharge angle : 41 degree)



- Heating Air Velocity distribution
(Discharge angle : 56 degree)



- Heating temperature distribution
(Discharge angle : 56 degree)

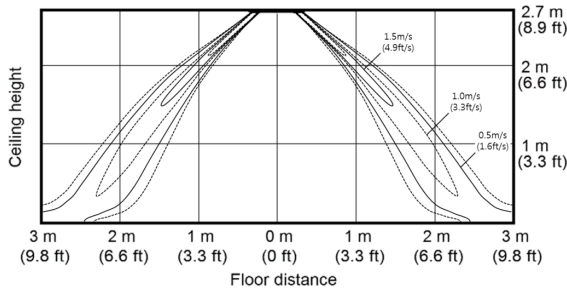


8. Temperature and air flow distribution

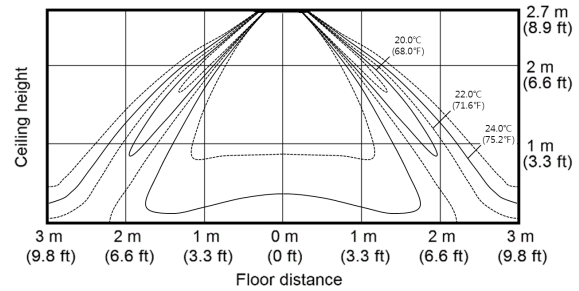
Wind-Free 4Way Cassette (600x600)

AM045NNNDEH/**

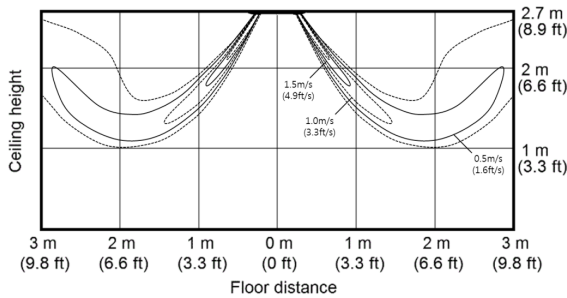
- Cooling Air Velocity distribution
(Discharge angle : 41 degree)



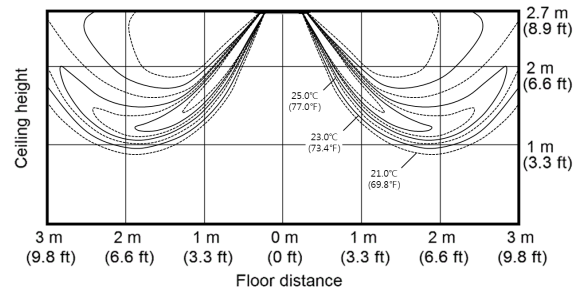
- Cooling temperature distribution
(Discharge angle : 41 degree)



- Heating Air Velocity distribution
(Discharge angle : 56 degree)

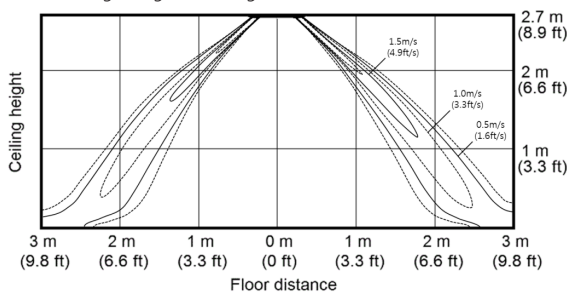


- Heating temperature distribution
(Discharge angle : 56 degree)

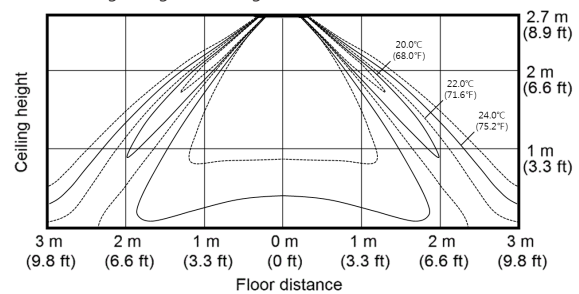


AM056NNNDEH/**

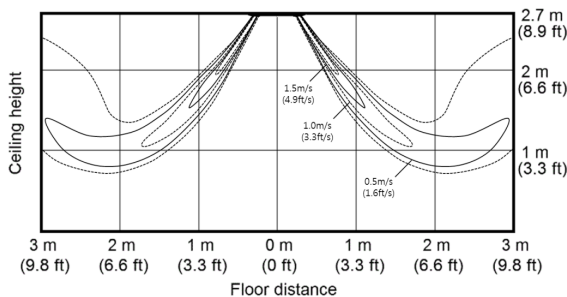
- Cooling Air Velocity distribution
(Discharge angle : 41 degree)



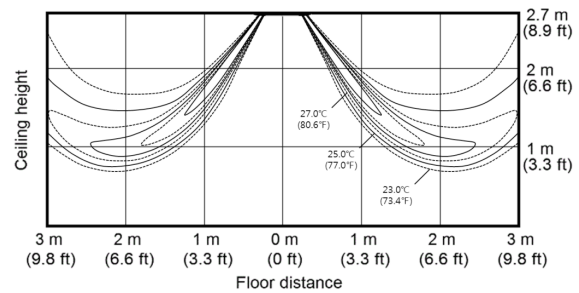
- Cooling temperature distribution
(Discharge angle : 41 degree)



- Heating Air Velocity distribution
(Discharge angle : 56 degree)



- Heating temperature distribution
(Discharge angle : 56 degree)



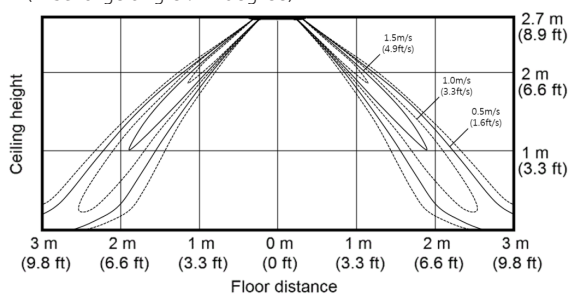
8. Temperature and air flow distribution

Wind-Free 4Way Cassette (600x600)

AM060NNNDEH/**

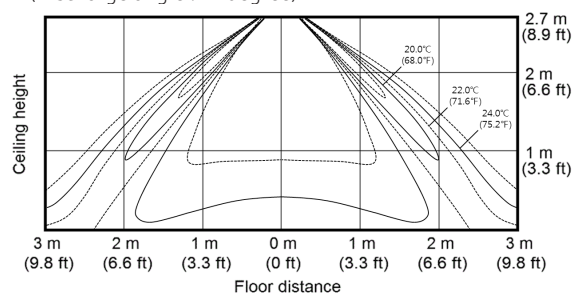
- Cooling Air Velocity distribution

(Discharge angle : 41 degree)



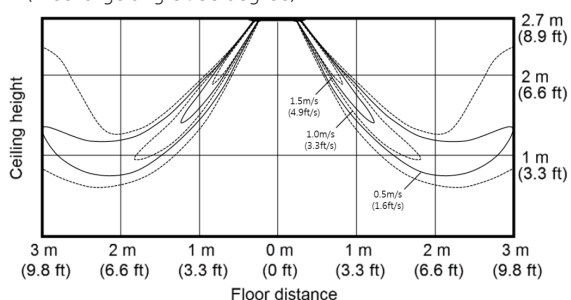
- Cooling temperature distribution

(Discharge angle : 41 degree)



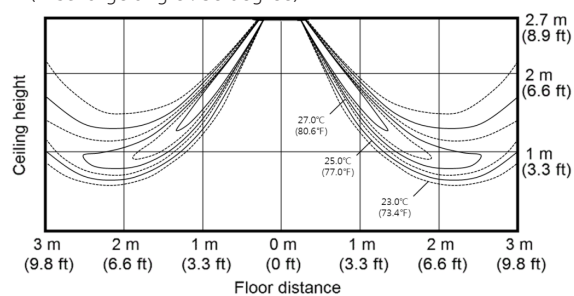
- Heating Air Velocity distribution

(Discharge angle : 56 degree)



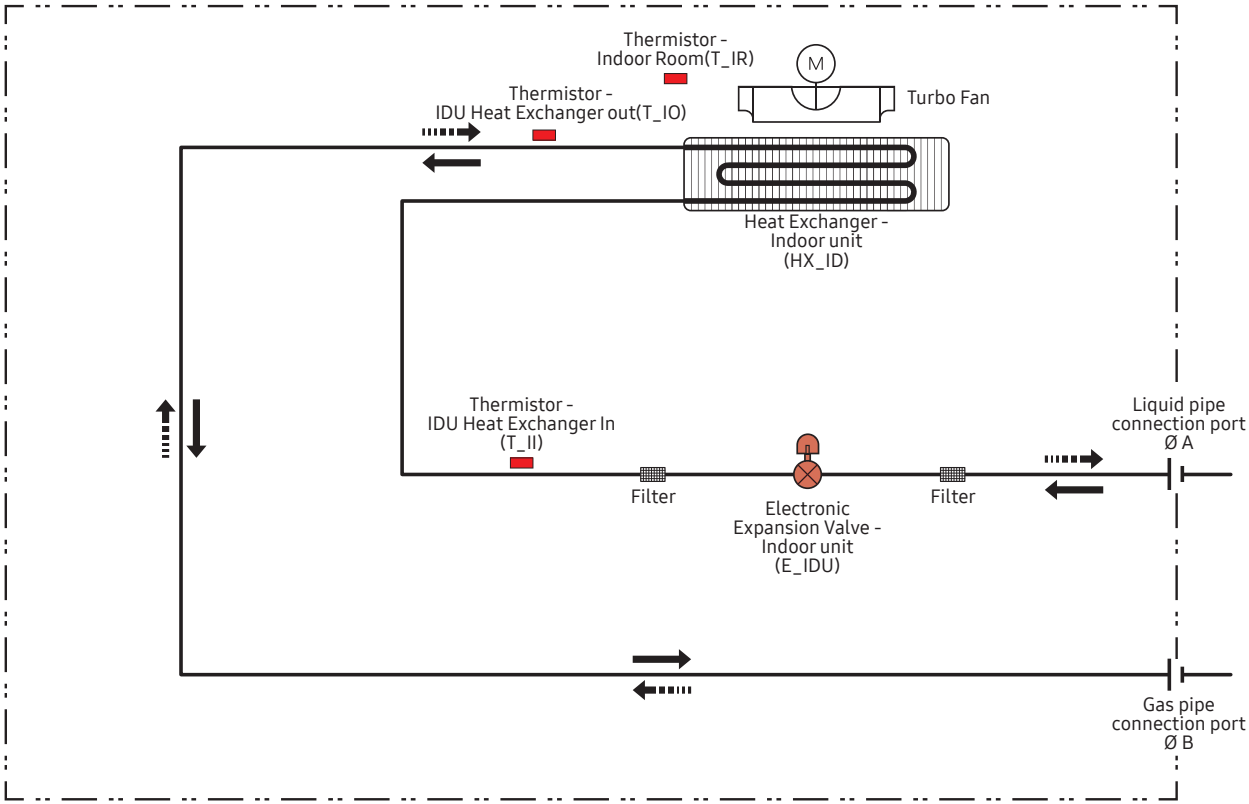
- Heating temperature distribution

(Discharge angle : 56 degree)



9. Piping Diagram

Wind-Free 4Way Cassette (600x600)



Refrigerant flow	
Cooling	Heating
	

Unit : mm [Inches]

Model	A	B
AM015NNNDEH/**	6.35	12.7
AM022NNNDEH/**		
AM028NNNDEH/**		
AM036NNNDEH/**		
AM045NNNDEH/**		
AM056NNNDEH/**		
AM060NNNDEH/**		

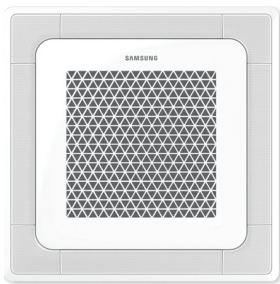
Wind-Free 4Way Cassette

1. Specification	34
2. Summary Table	38
3. Capacity Table	39
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8. Temperature and air flow distribution	54
9. Piping Diagram	58

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:

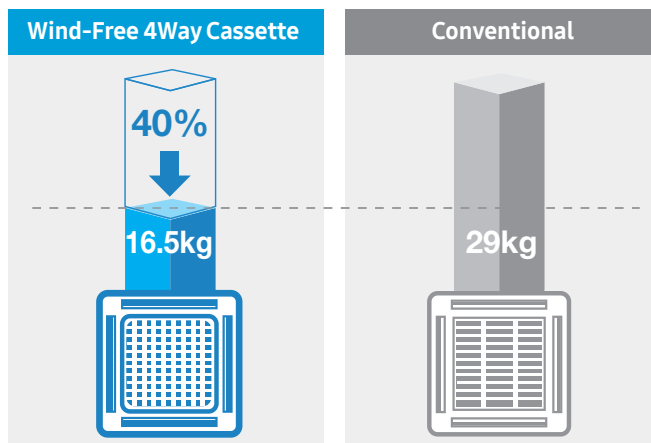
- **Stylishly clean design.** Add panache to interior spaces with a choice of clean, streamlined panel patterns in a lightweight build.
- **Robust operation.** Control the atmosphere perfectly with an advanced design for superior air flow and cooling/heating performance.
- **Low maintenance and simple 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.	mm²	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.	mm²	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	Capacity			Airflow (CMM)	Sound Pressure (dBA)	Sound Power (dBA)
			Cooling	Sensible	Heating			
AM045NN4DEH/**	15.0	High	4.5	3.3	5.0	14.5	33	49
		Mid	3.3	2.6	4.8	13.5	32	
		Low	2.7	2.3	4.6	12.5	30	
		W/Free	2.2	1.8	-	8.0	30	
AM056NN4DEH/**	15.0	High	5.6	4.2	6.3	15.0	33	50
		Mid	4.0	3.2	6.1	14.0	32	
		Low	3.3	2.8	5.9	13.0	30	
		W/Free	2.6	2.2	-	8.1	30	
AM071NN4DEH/**	15.0	High	7.1	5.4	8.0	17.0	35	54
		Mid	5.0	4.0	7.6	15.5	34	
		Low	4.1	3.4	7.4	14.5	33	
		W/Free	3.3	2.7	-	8.2	33	
AM090NN4DEH/**	15.0	High	9.0	7.1	10.0	19.5	39	57
		Mid	6.3	5.2	9.6	18.0	36	
		Low	5.1	4.4	9.2	16.5	33	
		W/Free	4.1	3.4	-	8.5	33	
AM112NN4DEH/**	16.5	High	11.2	8.6	12.5	26.0	40	57
		Mid	7.8	6.2	12.0	24.0	38	
		Low	6.3	5.3	11.5	22.0	35	
		W/Free	5.0	4.2	-	11.0	35	
AM128NN4DEH/**	18.5	High	12.8	9.9	13.8	28.0	42	58
		Mid	8.3	7.2	13.3	26.0	40	
		Low	7.2	6.0	12.5	23.0	35	
		W/Free	5.8	4.8	-	11.2	35	
AM140NN4DEH/**	18.5	High	14.0	10.8	16.0	30.0	44	60
		Mid	9.7	7.8	15.5	28.0	41	
		Low	7.8	6.6	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	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A
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	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A
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	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A	TC	D²A
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
090	DB	WB	kW	kW	kW	kW	kW
	-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

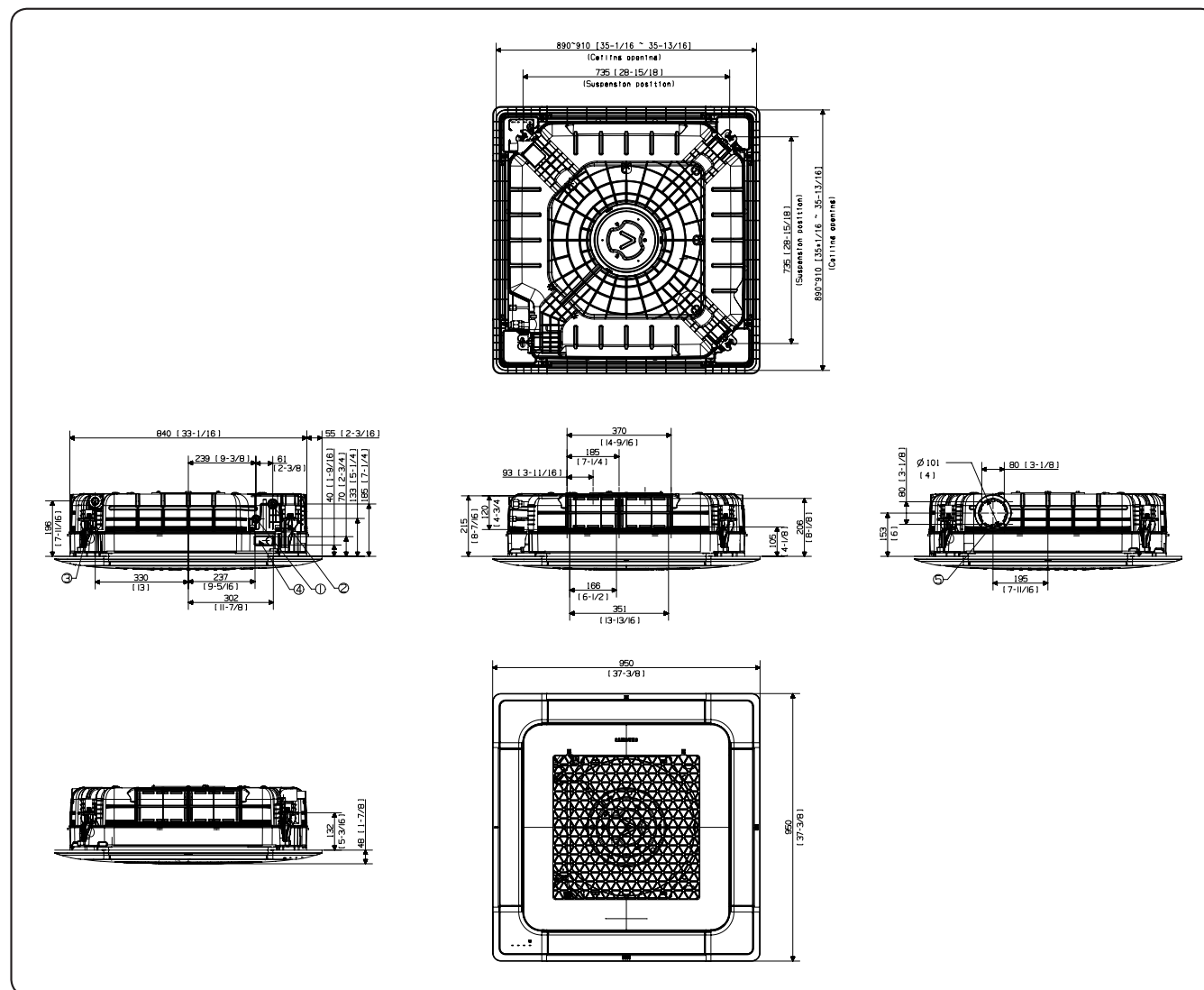
- The performance table shows the average value of each conditions.

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

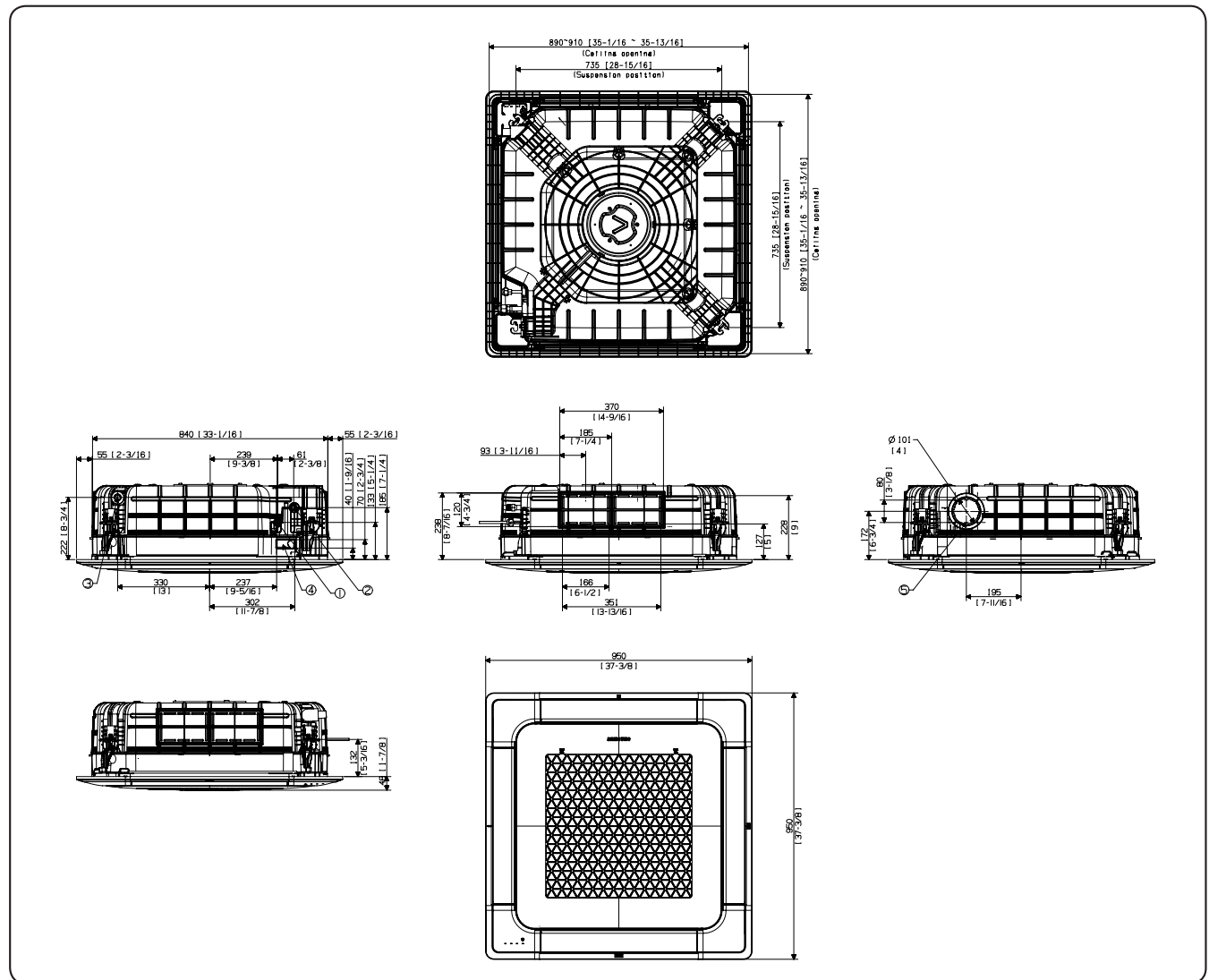
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

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

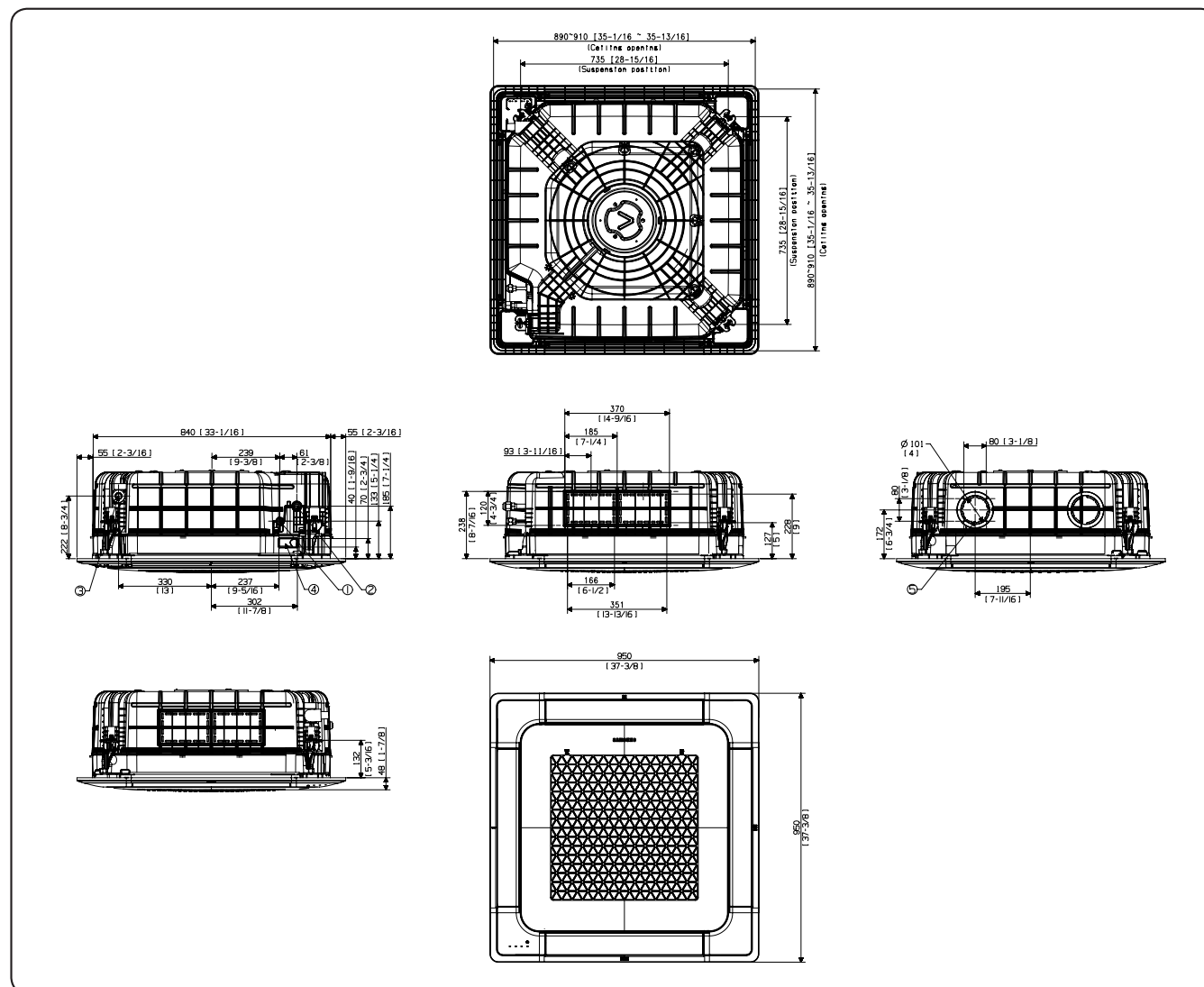
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

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

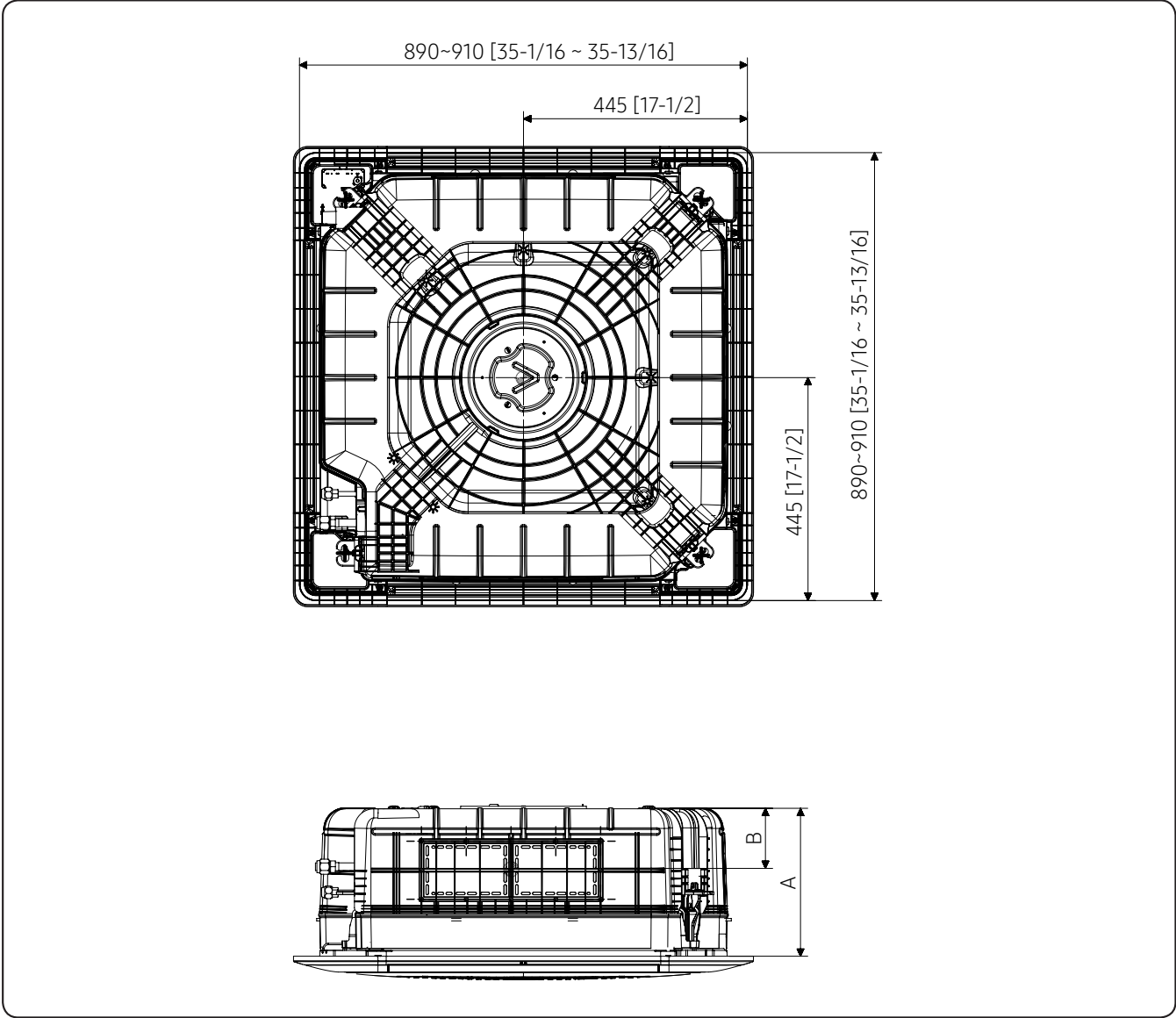
NOTE

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

5. Center of Gravity

Wind-Free 4Way Cassette

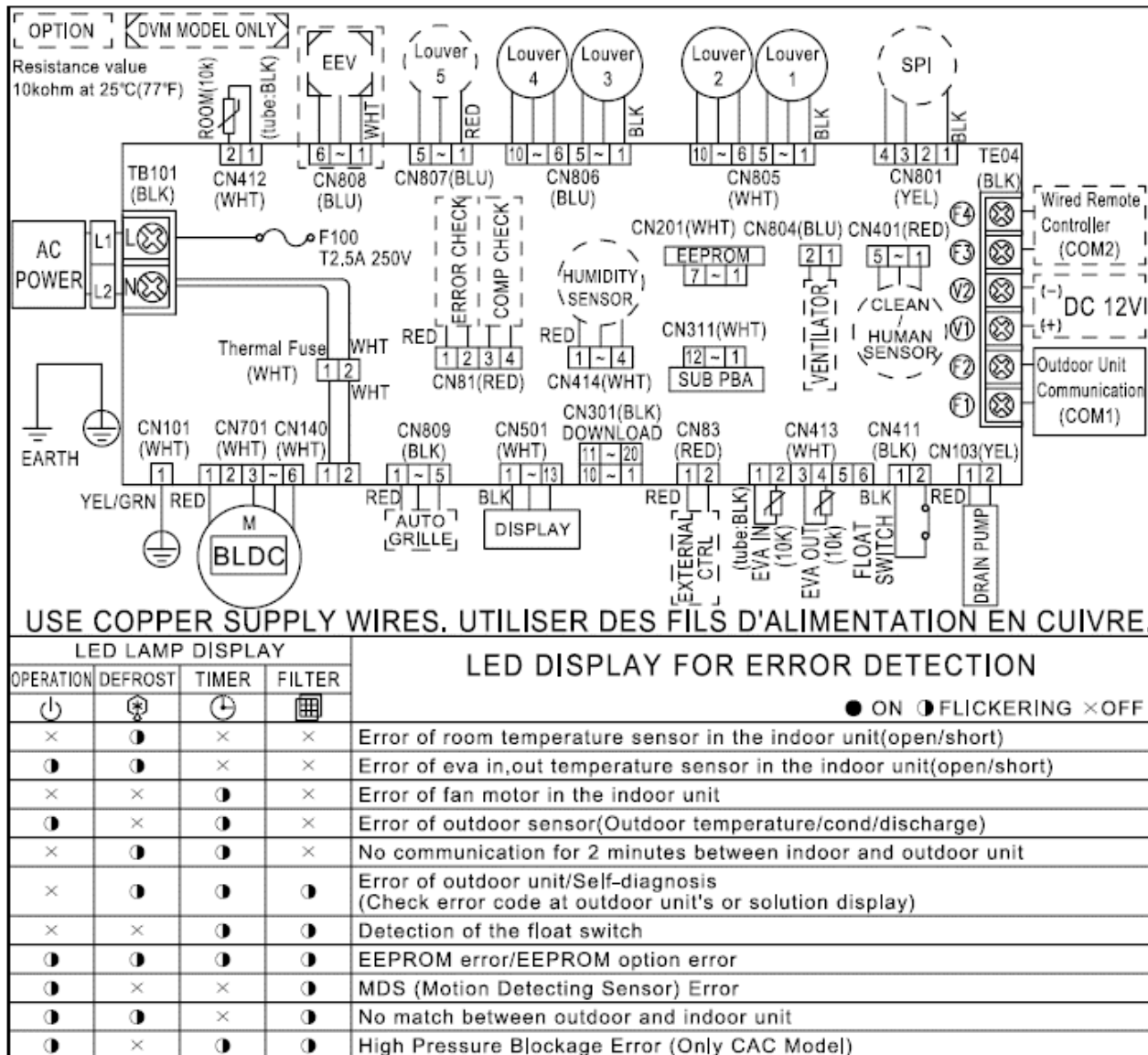
Units : mm [inches]



	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



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

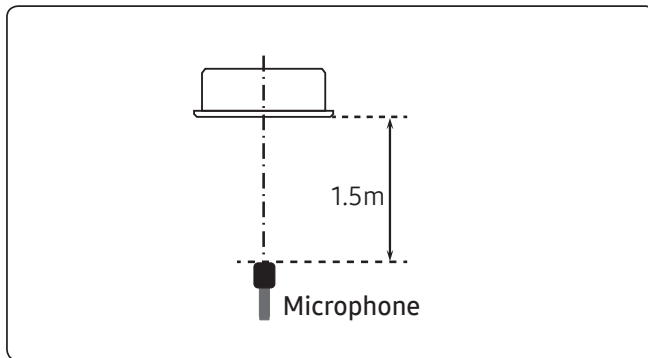
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⏏ Protective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

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

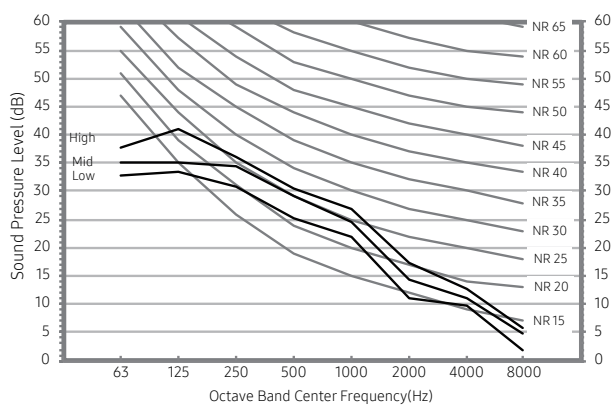
Unit: dB(A)



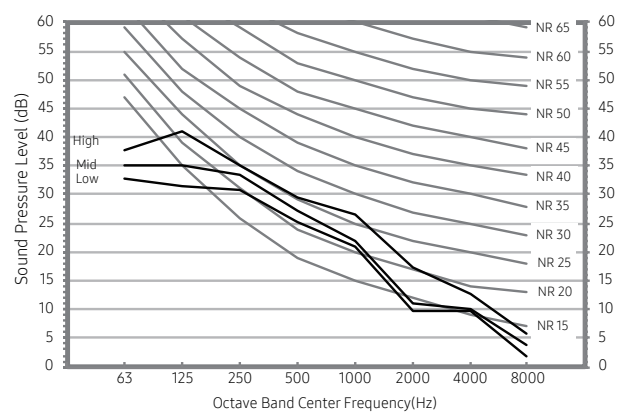
Model	High	MID	LOW
AM045NN4DEH/**	33	32	30
AM056NN4DEH/**	33	32	30
AM071NN4DEH/**	35	34	33
AM090NN4DEH/**	39	36	33

• NR Curve

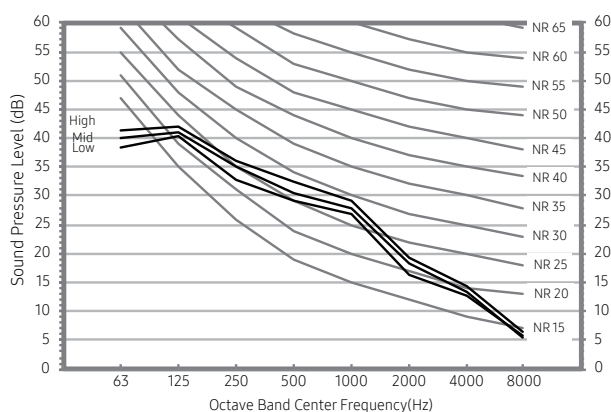
1) AM045NN4DEH/**



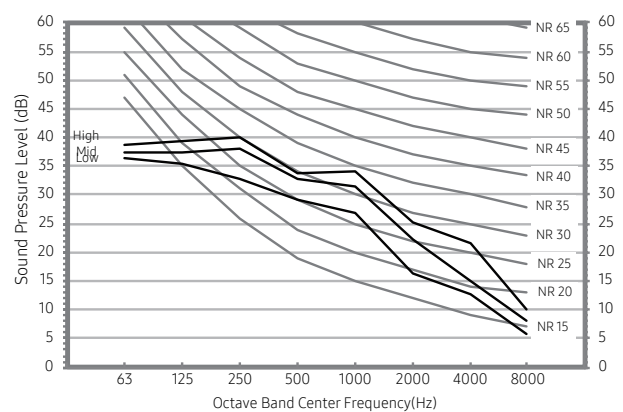
2) AM056NN4DEH/**



3) AM071NN4DEH/**



4) AM090NN4DEH/**



NOTE

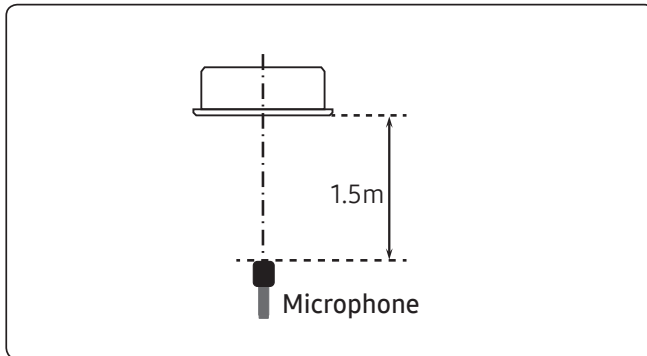
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

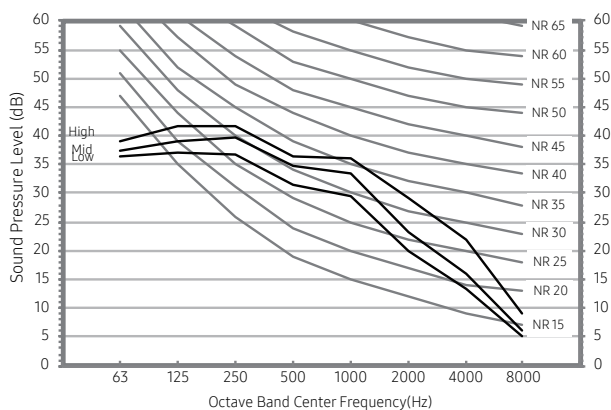
Unit: dB(A)



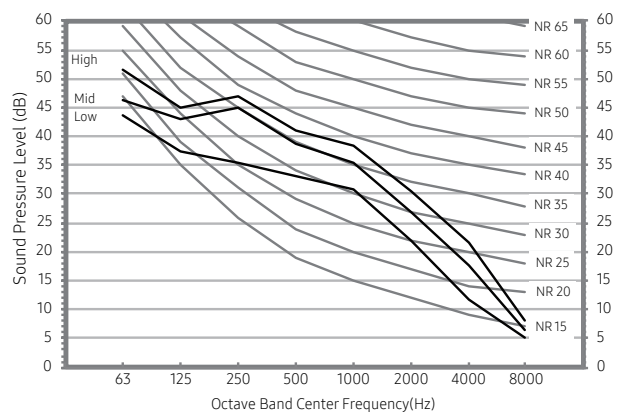
Model	High	MID	LOW
AM112NN4DEH/**	40	38	35
AM128NN4DEH/**	42	40	35
AM140NN4DEH/**	44	41	35

- NR Curve

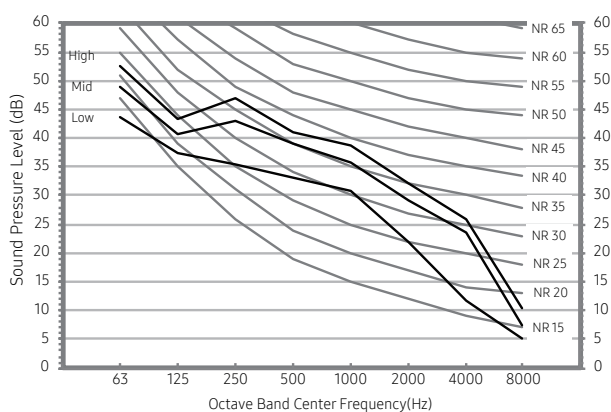
5) AM112NN4DEH/**



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

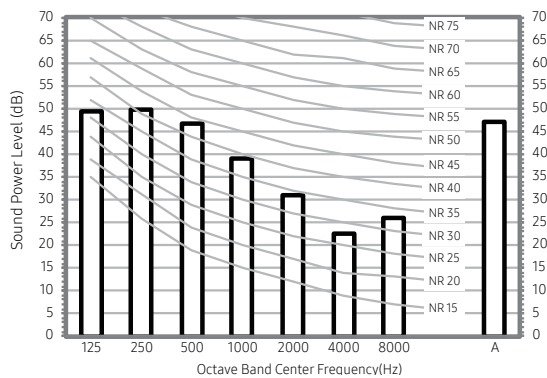
Unit: dB(A)

- 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.

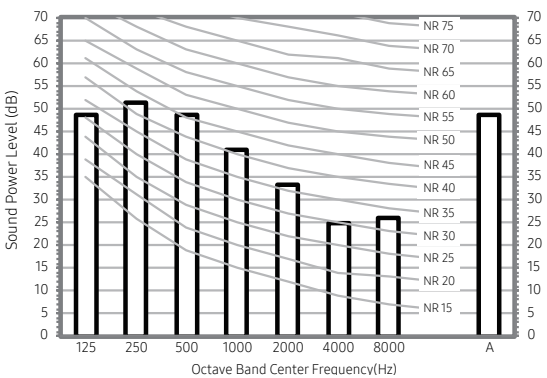
Model	Power
AM045NN4DEH/**	49
AM056NN4DEH/**	50
AM071NN4DEH/**	54
AM090NN4DEH/**	57

• NR Curve

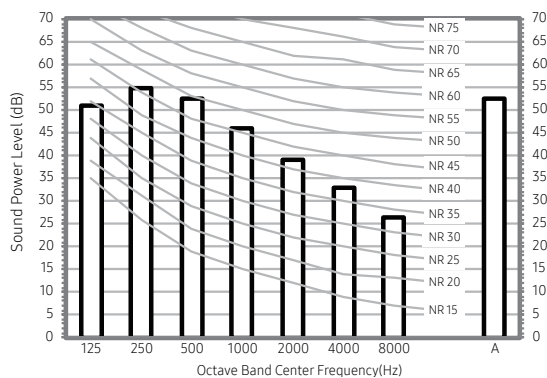
1) AM045NN4DEH/**



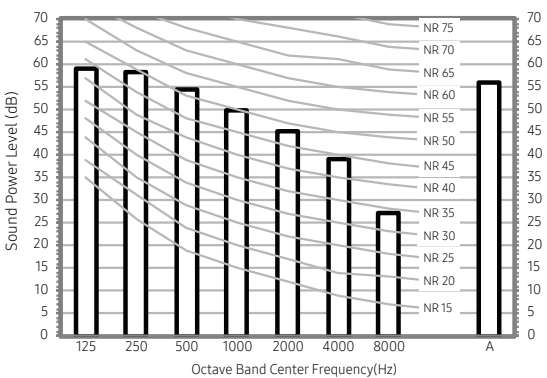
2) AM056NN4DEH/**



3) AM071NN4DEH/**



4) AM090NN4DEH/**



7. Sound Data

Wind-Free 4Way Cassette

Sound Power level

 NOTE

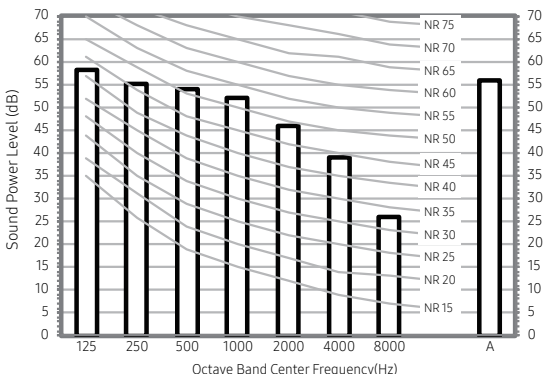
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

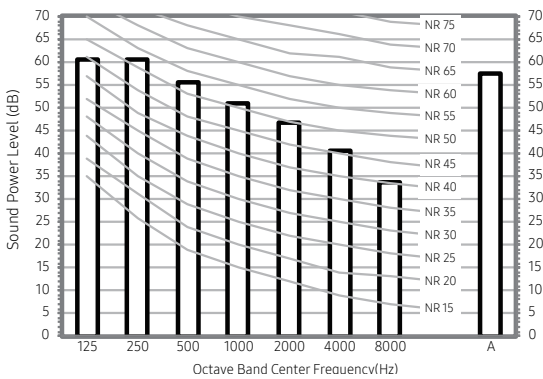
Model	Power
AM112NN4DEH/**	57
AM128NN4DEH/**	58
AM140NN4DEH/**	60

- NR Curve

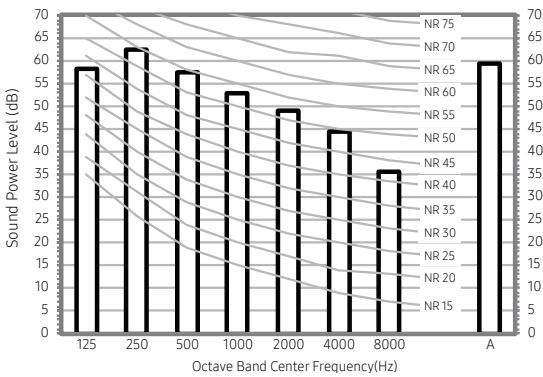
5) AM112NN4DEH/**



6) AM128NN4DEH/**



7) AM140NN4DEH/**

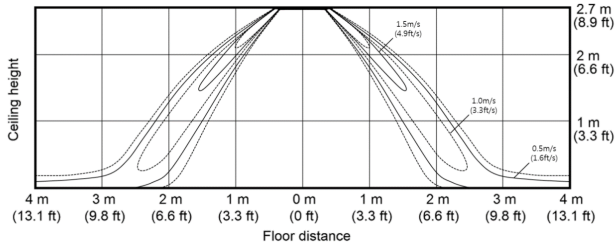


8. Temperature and air flow distribution

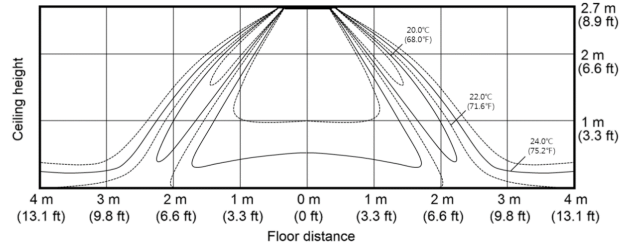
Wind-Free 4Way Cassette

AM045NN4DEH/**

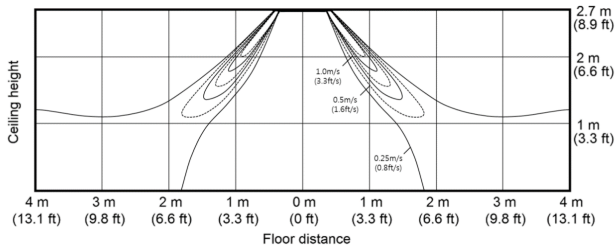
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



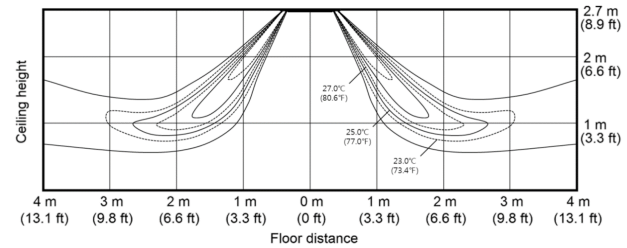
- Cooling temperature distribution
(Discharge angle : 45 degree)



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

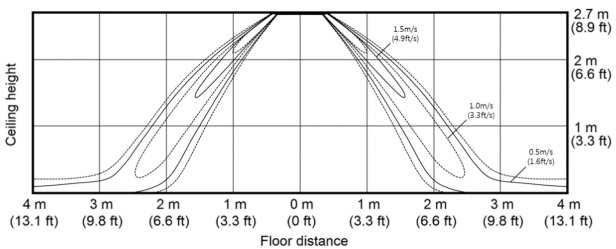


- Heating temperature distribution
(Discharge angle : 52 degree)

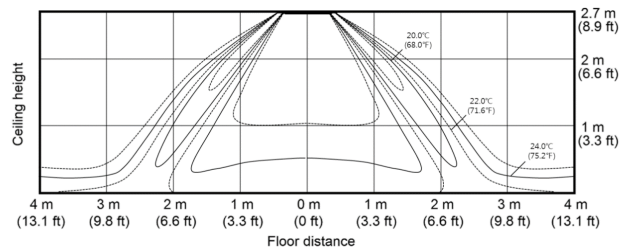


AM056NN4DEH/**

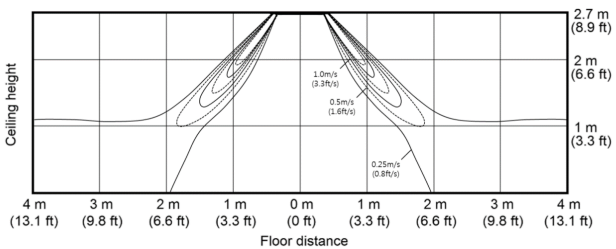
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



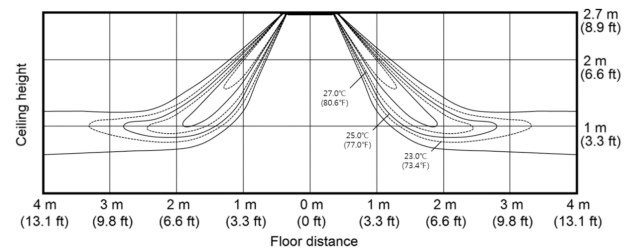
- Cooling temperature distribution
(Discharge angle : 45 degree)



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



- Heating temperature distribution
(Discharge angle : 52 degree)

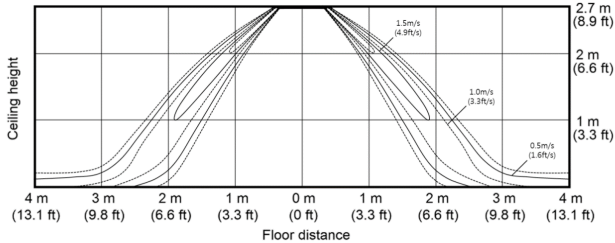


8. Temperature and air flow distribution

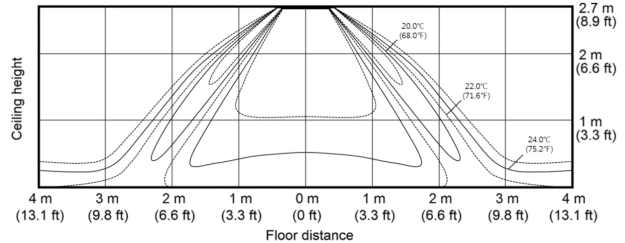
Wind-Free 4Way Cassette

AM071NN4DEH/**

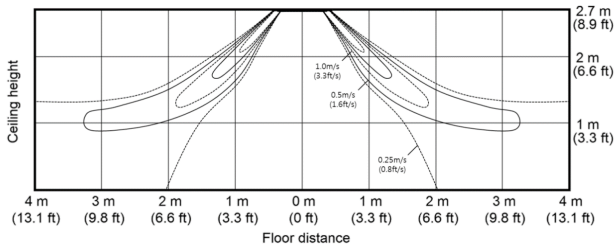
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



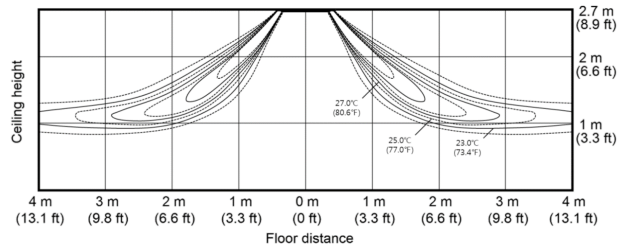
- Cooling temperature distribution
(Discharge angle : 45 degree)



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

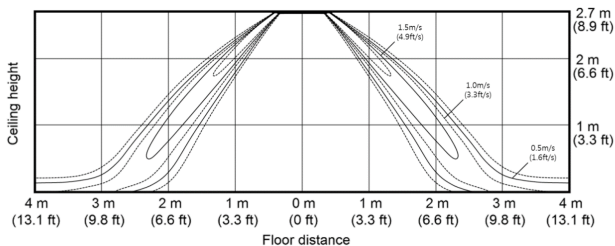


- Heating temperature distribution
(Discharge angle : 52 degree)

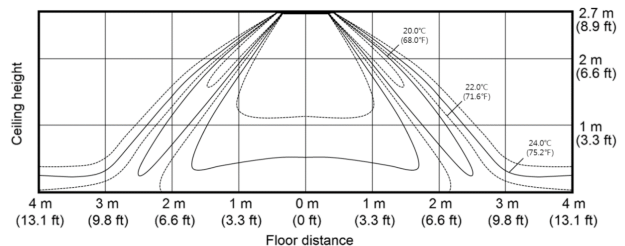


AM090NN4DEH/**

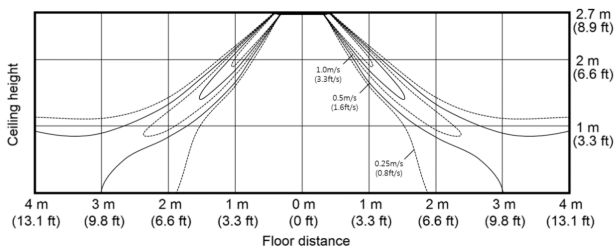
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



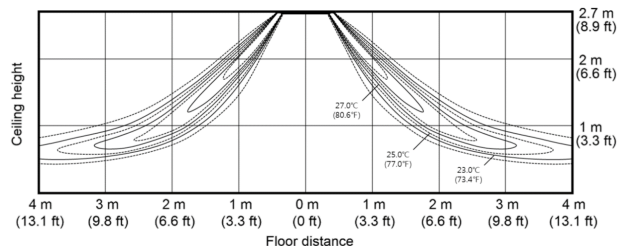
- Cooling temperature distribution
(Discharge angle : 45 degree)



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



- Heating temperature distribution
(Discharge angle : 52 degree)

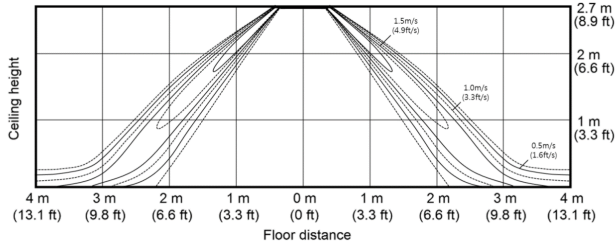


8. Temperature and air flow distribution

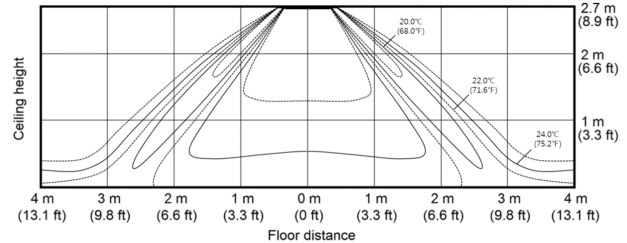
Wind-Free 4Way Cassette

AM112NN4DEH/**

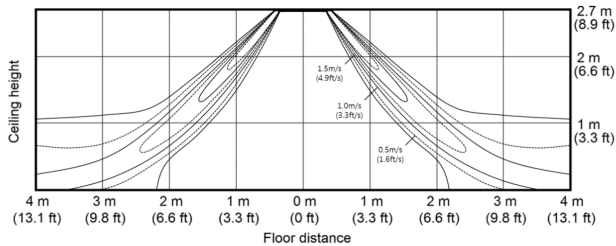
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



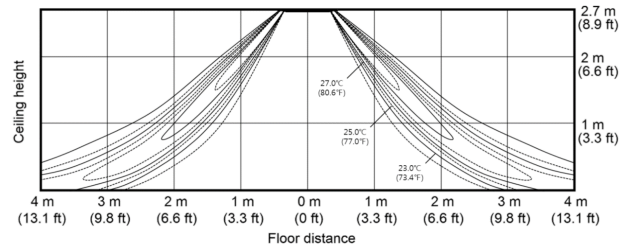
- Cooling temperature distribution
(Discharge angle : 45 degree)



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

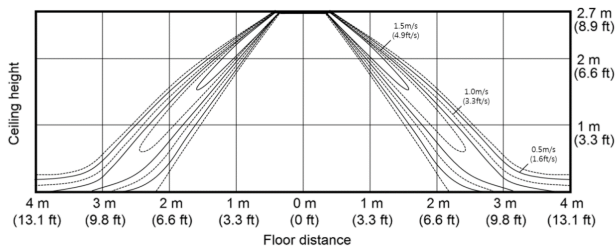


- Heating temperature distribution
(Discharge angle : 52 degree)

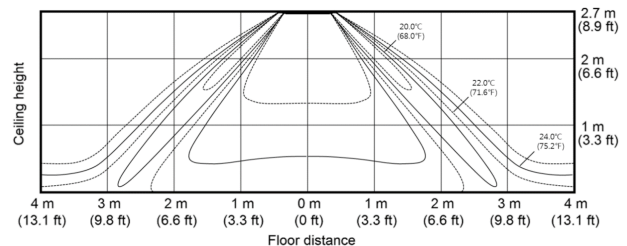


AM128NN4DEH/**

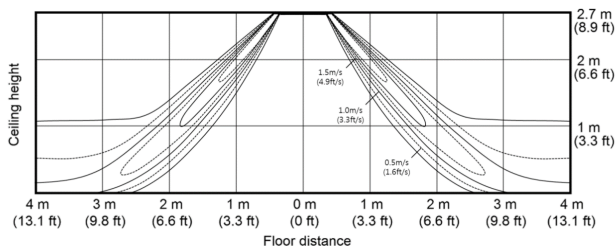
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



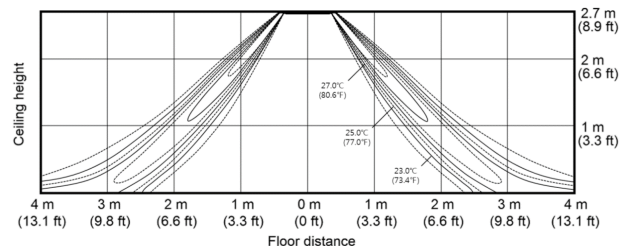
- Cooling temperature distribution
(Discharge angle : 45 degree)



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



- Heating temperature distribution
(Discharge angle : 52 degree)

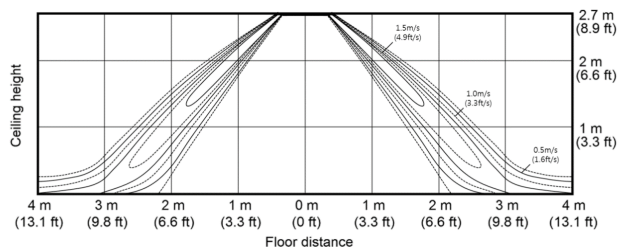


8. Temperature and air flow distribution

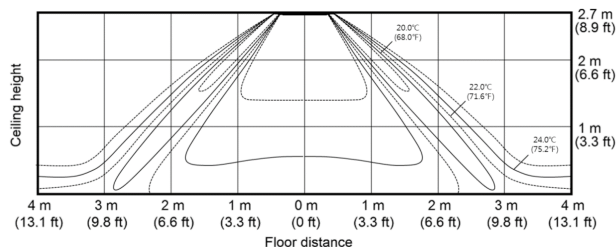
Wind-Free 4Way Cassette

AM140NN4DEH/**

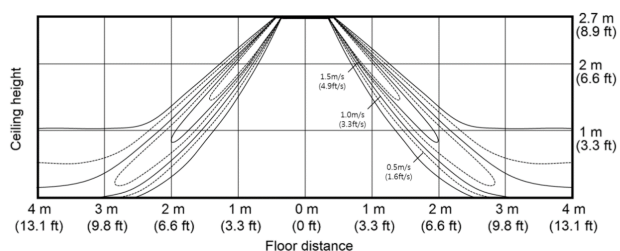
- Cooling Air Velocity distribution
(Discharge angle : 45 degree)



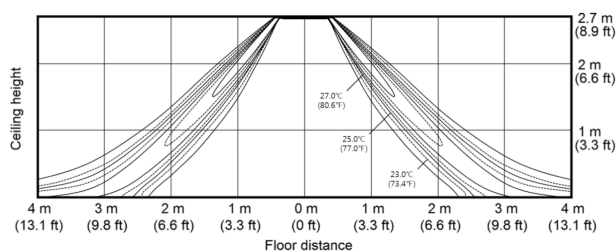
- Cooling temperature distribution
(Discharge angle : 45 degree)



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

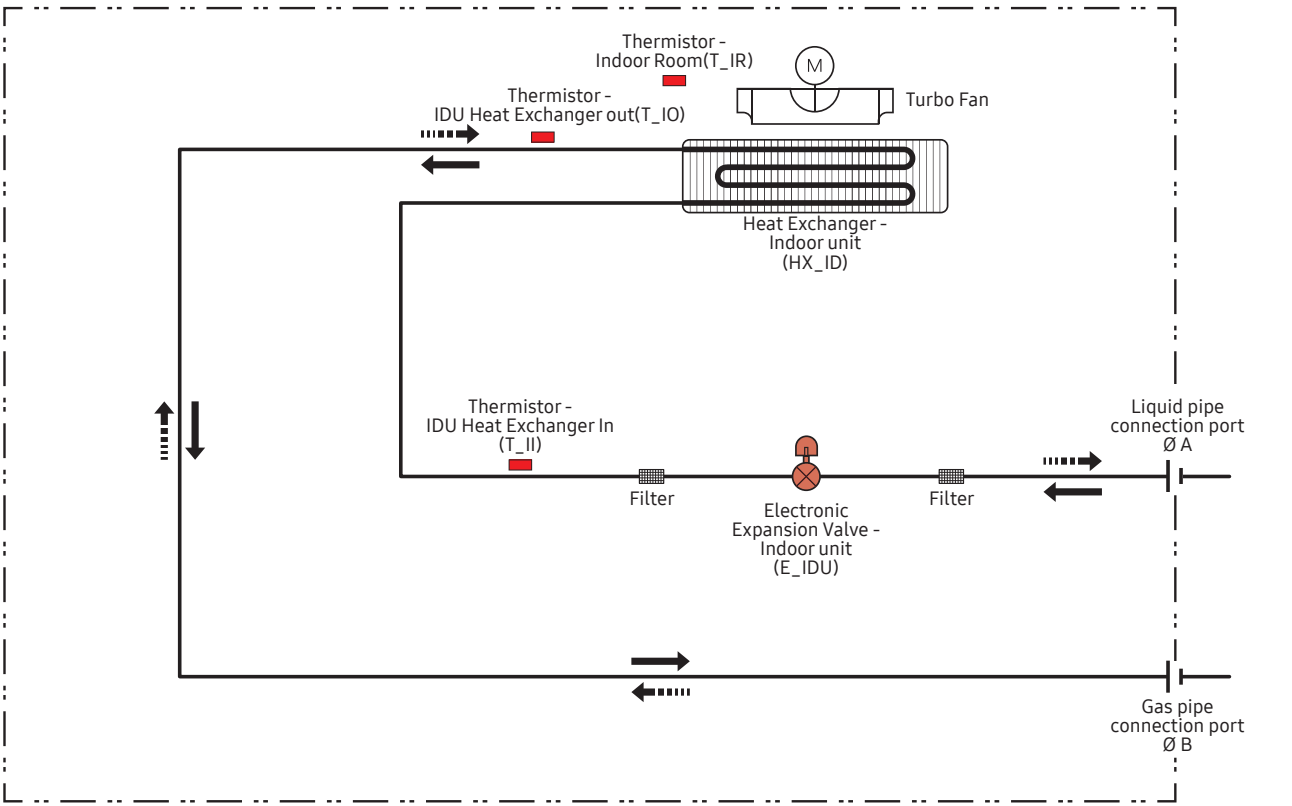


- Heating temperature distribution
(Discharge angle : 52 degree)



9. Piping Diagram

Wind-Free 4Way Cassette



Refrigerant flow	
Cooling	Heating

Unit : mm [Inches]

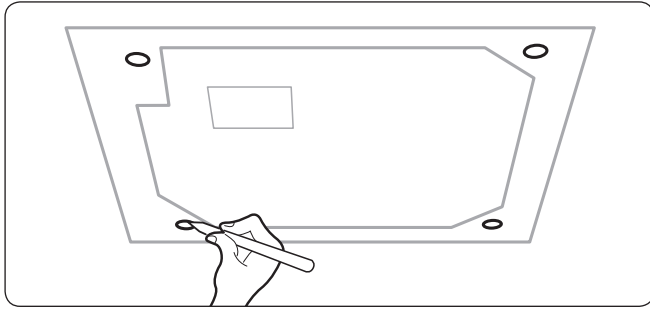
Model	A	B
AM045NN4DEH/**	6.35	12.7
AM056NN4DEH/**		
AM071NN4DEH/**	9.52	15.88
AM090NN4DEH/**		
AM112NN4DEH/**		
AM128NN4DEH/**		
AM140NN4DEH/**		

Installation

Step 1 Installing the indoor unit

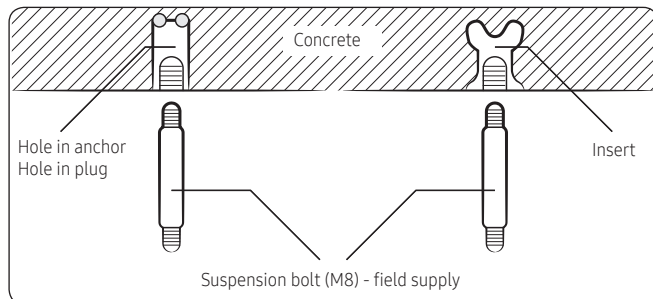
When deciding on the location of the air conditioner the following restrictions must be taken into account.

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

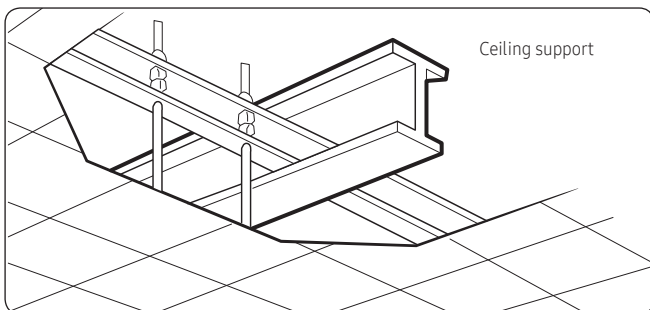


NOTE

- 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.

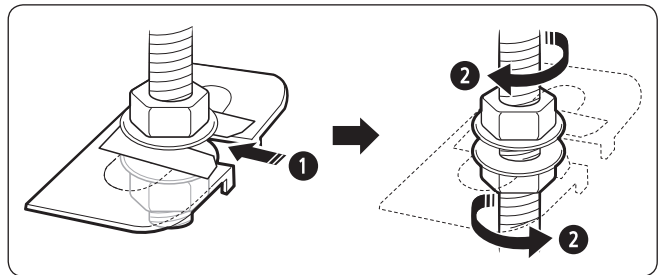


CAUTION

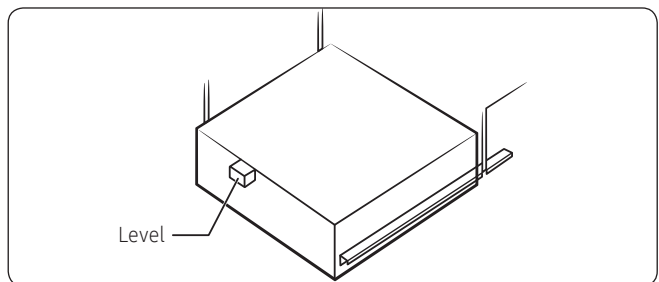
- Make sure that the ceiling is strong enough to support the weight of the indoor unit. Before hanging the unit, test the strength of each attached suspension bolt.
 - If the length of the suspension bolt is more than 1.5 m, you are required to prevent vibration.
- 4 Screw eight pairs of nuts and washers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



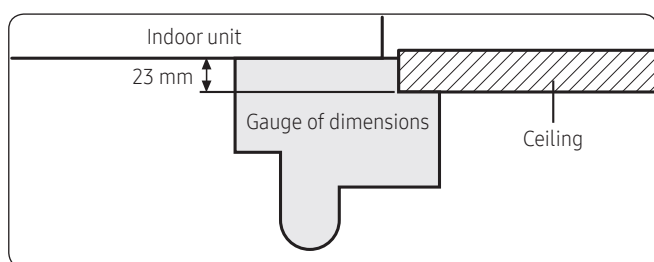
- 6 Check the level of the indoor unit by using a leveler.
 - A tilt of the indoor unit may cause malfunction of a built-in float switch and water leaks.



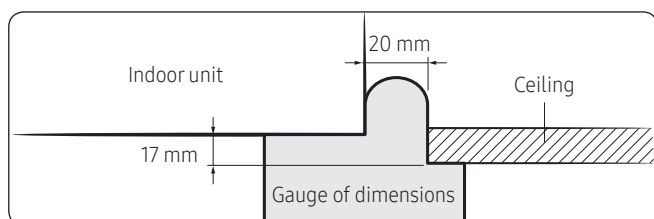
Installation

- 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

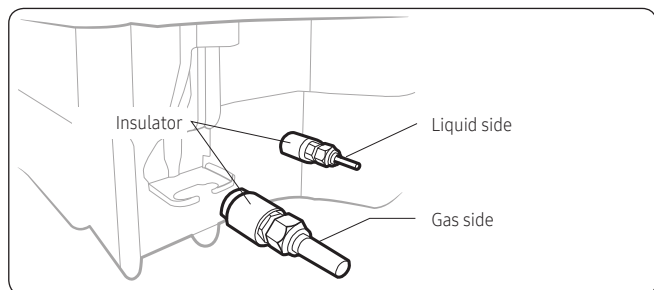


Step 2 Performing the gas leak test

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.

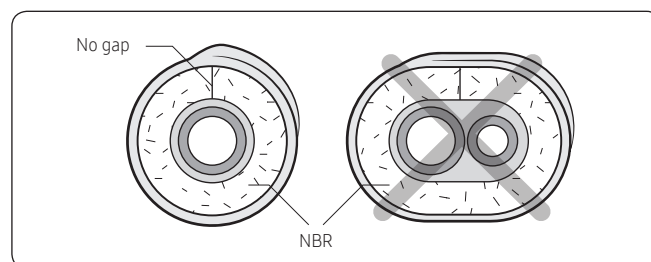
Made vacuum for 15 minutes and pressurizing system with nitrogen.



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.

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

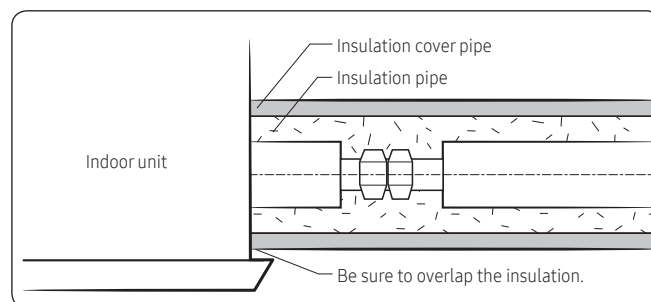


NOTE

- 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.
- 2 Wind insulating tape around the pipes and drain hose avoiding compressing the insulation too much.

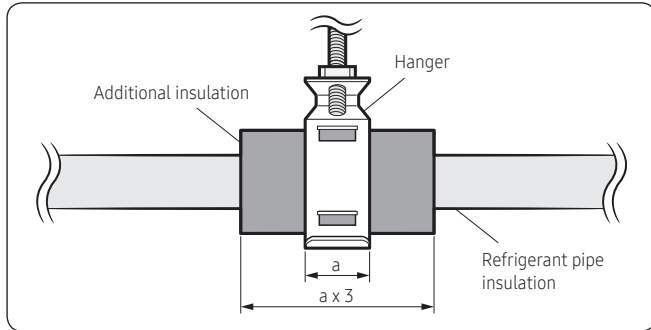


CAUTION

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

 CAUTION

- 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.

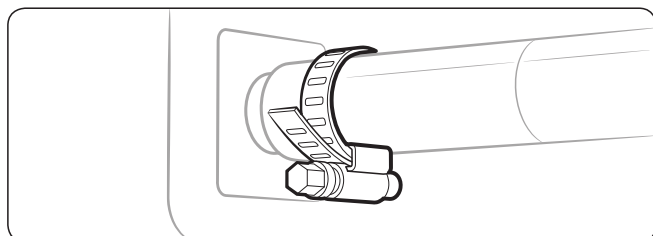
Places (where the pipes are installed) that are highly humid due to a lack of ventilation.

- 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.

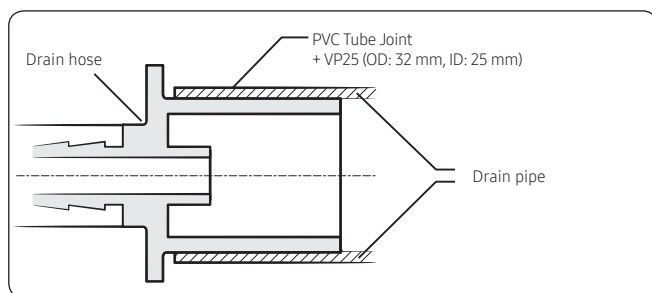
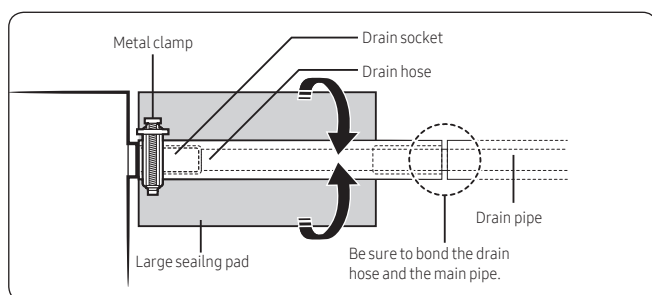
Installation

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.



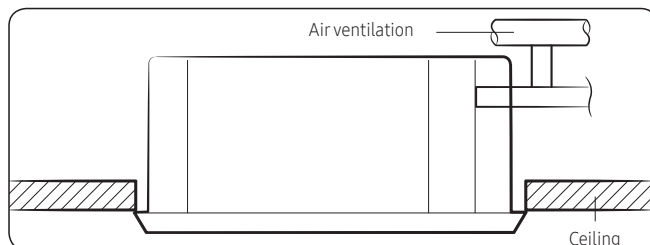
- 3 Wrap the supplied large sealing pad over the metal clamp and drain hose to insulate and fix it with clamps.
- 4 Insulate the complete drain piping inside the building (field supply). If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).
-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



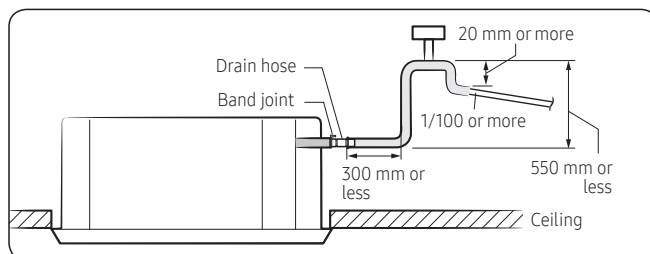
⚠ CAUTION

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

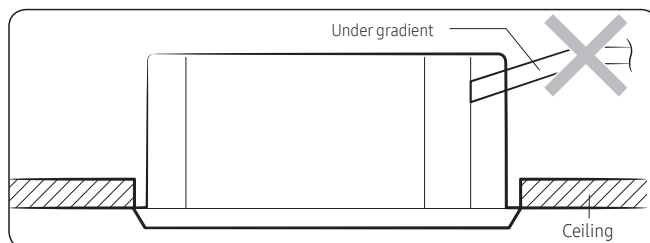
- Install air ventilation to drain condensation smoothly.



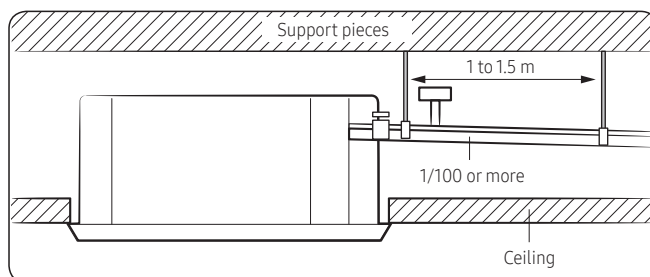
- If it is necessary to increase the height of the drain pipe, install the drain pipe straight within 300 mm from the drain hose port. If it is raised higher than 550 mm, there may be water leaks.



- 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.

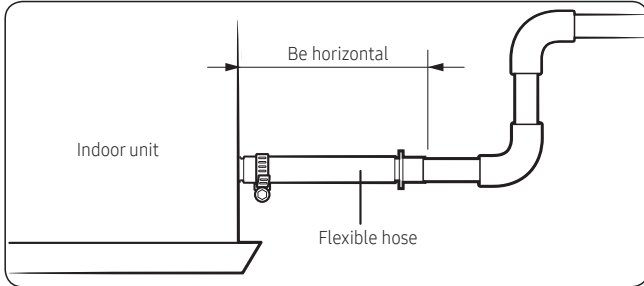


- Do not apply force to the piping on the unit side when connecting the drain hose. The hose should not be allowed to hang loose from its connection to the unit. Fasten the hose to a wall, frame or other support as close to the unit as possible.

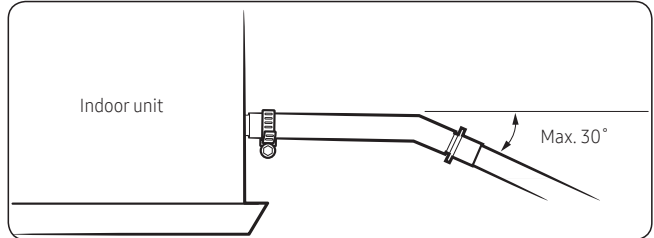


Installation

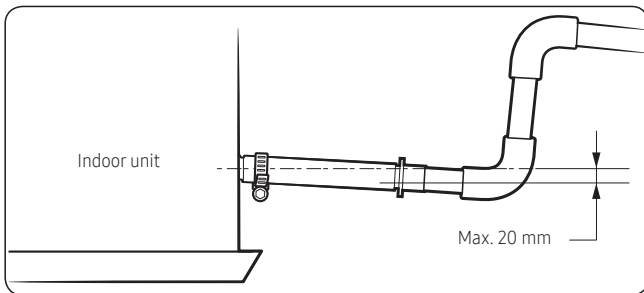
- Install horizontally.



- Max. allowable bending angle.

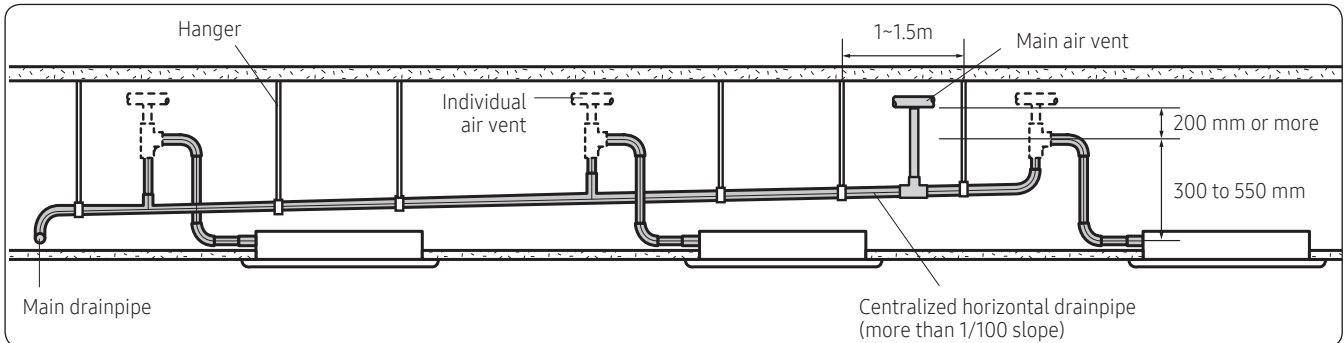


- Max. allowable axis gap.



NOTE

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



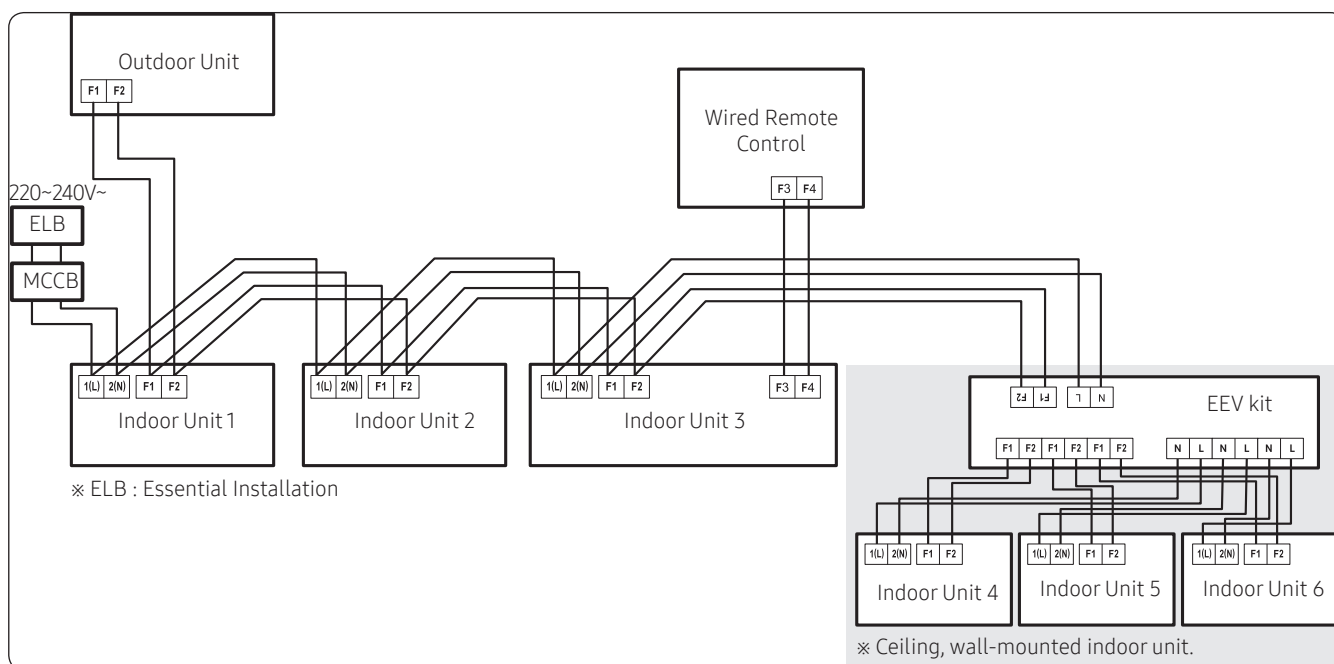
- If 3 or more units are installed, install the main air vent at the front of the farthest indoor unit from the main drain pipe.
- To prevent water from flowing back to indoor units, install an individual air vent at the top of each indoor unit.
 - The air vents should be T or 7 shaped to prevent dust 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

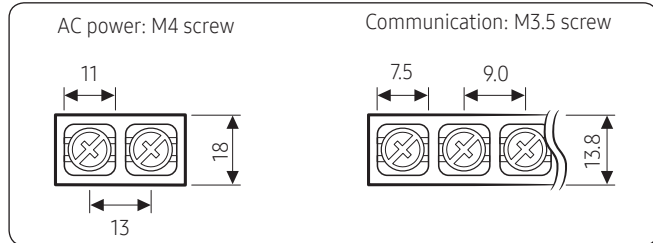
Power and communication cable connection

- 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]

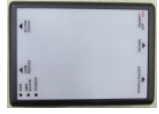
Accessory

Controller

Classification	Product	Image	Model	Remark
Intergrated Management System	DMS 2.0		MIM-D00AN	
	DMS 2.5		MIM-D01AN	
	S-NET 3		MST-P3P	
Buiding Management System	BACnet G/W		MIM-B17N	
			MIM-B17BN	
	LONWORKS G/W		MIM-B18N	
			MIM-B18BN	
Centralized Control System	On/Off Controller		MCM-A202DN	
	Touch Controller		MCM-A300N	
	Wi-Fi Kit		MIM-H03N	
Individual Control System	Wireless remote Controller		AR-EH03E	Except for 360 Cassette
			MR-KH00E	360 Cassette Only
	Wired remote Controller		MWR-WE13N	
			MWR-SH00N	Simple Type
			MWR-SH10N	Touch Simple Type

Accessory

Controller

Classification	Product	Image	Model	Remark
Zone Control System	External room sensor		MRW-TS	
Others	External room sensor		MRW-TA	
	Compatible interface module		MIM-N01	
	External contact interface module		MIM-B14	
	Modbus Interface Module		MIM-B19N	
	S-Converter		MIM-C02N	
	Wireless signal receiver		MRK-A10N	Duct type only

- In case you want more information about the accessories, please refer to the control and accessories TDB on pvi.samsung.com site.

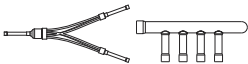
Accessory

Indoor Unit's Accessory

Product	Image	Model	Remark
Panel		PC1NUSMAN	Slim 1Way Cassette
		PC1NUPMAN	Slim 1Way Cassette (Z-sliding)
		PC1MWSKAN	Slim 1Way Cassette
		PC4SUSMBN	4 Way Cassette(600 x 600) (Waffle)
		PC4SUSMFN	4 Way Cassette(600 x 600) (Classic)
		PC4SUFMAN	Wind-Free 4 Way Cassette(600 x 600)
		PC4NUSKAN	4 Way Cassette (Waffle)
		PC4NUSKEN	4 Way Cassette (Classic)
		PC4NUFMAN	Wind-Free 4 Way Cassette
		PC4NBSKAN	4 Way Cassette (Waffle / Black)
		PC4NUDMAN	360 Cassette Square (White)
		PC4NUNMAN	360 Cassette Circle (White)

Accessory

Indoor Unit's Accessory

Product	Image	Model	Remark
Panel		PC4NBDMAN	360 Cassette Square (Black)
		PC4NBNMAN	360 Cassette Circle (Black)
S-Plasma Ion KIT		MSD-CAN1	[Option] 4Way, 4Way(600x600), 360, Ceiling [Included] Console
		MSD-EAN1	[Option] Duct S, Big Duct, ERV, ERV Plus
Motion detect Sensor		MCR-SMC	Wind-Free 4Way Cassette
		MCR-SMD	Wind-Free 4Way Cassette (600x600)
		MCR-SMA	4Way Cassette (600x600)
Drain Pump		MDP-E075SEE3D	Slim Duct
		MDP-G075SP	Duct S (External)
		MDP-G075SQ	Duct S (Internal)
Joint		MXJ-2D2509K	2 indoor units connection
		MXJ-3D2509K	3 indoor units connection
		MXJ-4D2509K	4 indoor units connection

- In case you want more information about the accessories, please refer to the control and accessories TDB on pvi.samsung.com site.



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B2B PM / SE

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