

SAMSUNG

VRF

Technical

Data Book

Wind-Free 4Way Cassette
for North America

(R410A, HP)



Model : AM***BN4PCH/**

History

Version	Modification	Date	Remark
Ver.1.0	Released VRF Wind-Free 4Way Cassette for north America (60Hz)	22.03.05	

Features & Benefits

Stay cool without direct wind

WindFree™

- Wind-Free Cooling effectively maintains a comfortable level of coolness without the unpleasant feeling of cold wind. Cool air is gently dispersed through 15,672 micro air holes, so you won't feel too hot or cold.
 - PC4SUFMAN(4way 600*600) : 8,976 micro hole
 - PC4NUFMAN(4way) : 15,672 micro hole



Energy saving with WindFree™ Cooling

Energy Saving

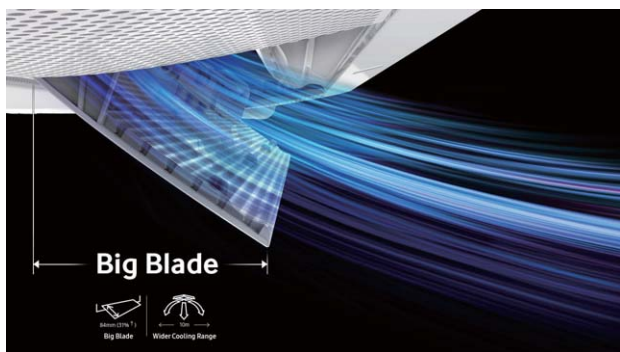
- Wind-Free Cooling allows efficient energy saving up to 55%.
 - Tested on Outdoor unit AC140MXADKH, Indoor unit AM140FN4DEH when running simultaneously. Individual result may vary depending on consumer usage.



Wider cooling range

Big Blade

- Big and optimized blades enable even wider cooling range.
 - Tested on Indoor unit AM140FN4DEH when running. Individual result may vary depending on consumer usage.



Optimized operation by MDS

Motion Detect Sensor

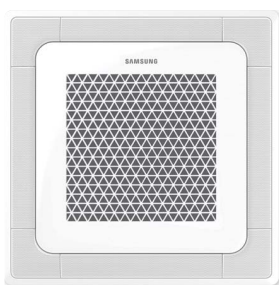
- Motion Detect Sensor enables customized air flow and energy efficient operation.



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.



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.

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.

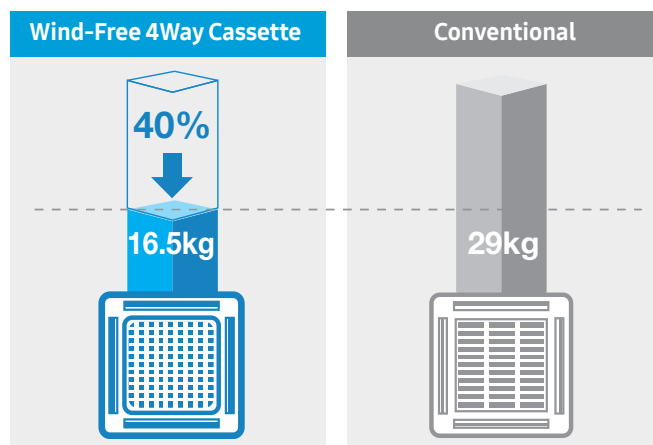


Neat and clean design

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

Nomenclature

Indoor Unit

Model Name

AM

015

B

N

4

P

C

H

/

**

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

Buyer

(1) Classification

AM	DVM
----	-----

(2) Capacity

X kBtu/h (3digits)

(3) Version

A	2021
B	2022

(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 2

P	Premium
D	Deluxe

(7) Rating Voltage

C	1Φ, 208~230V, 60Hz
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(8) Mode

H	Heat Pump (R410A)
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Line-up

Indoor Unit

Model	Capacity (kBtu/h)							
	6	9	12	18	24	30	36	48
Wind-Free 4Way CST								

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1. Specification

Wind-Free 4Way Cassette

Model Name				AM006BN4PCH/AA	AM009BN4PCH/AA	AM012BN4PCH/AA	
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	
Mode			-	HP/HR	HP/HR	HP/HR	
Performance	Capacity		Cooling	Ton	0.52	0.75	1.00
			kW	1.76	2.64	3.52	
			Btu/h	6,300	9,000	12,000	
			US RT	0.50	0.75	1.00	
			Heating	kW	2.08	2.93	3.96
			Btu/h	7,100	10,000	13,500	
			US RT	0.52	0.75	1.00	
Power	Power Input	Cooling	W	20.0	20.0	20.0	
		Heating		20.0	20.0	20.0	
	Current Input	Cooling	A	0.17	0.17	0.17	
		Heating		0.17	0.17	0.17	
	Current	MCA	A	0.40	0.28	0.28	
		MOP		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		-	Turbo Fan	Turbo Fan	Turbo Fan	
	Quantity		EA	1	1	1	
	Air Flow Rate	H/M/L	m ³ /min	15.5 / 13.0 / 10.0	15.5 / 14.0 / 13.0	15.5 / 14.0 / 13.0	
			ft ³ /min	547 / 459 / 353	547 / 494 / 459	547 / 494 / 459	
			l/s	258.39 / 216.71 / 166.70	258.39 / 233.38 / 216.71	258.39 / 233.38 / 216.71	
	External Pressure	Max. (Min/Std/Max)	mmAq	-	-	-	
			Pa	-	-	-	
			In Wg	-	-	-	
Fan Motor	Type		-	BLDC	BLDC	BLDC	
	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 (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection	
			Φ, mm (inch)	12.70 (1/2)	12.70 (1/2)	12.70 (1/2)	
	Heat insulation		-	Both liquid & gas pipes	Both liquid & gas pipes	Both liquid & gas pipes	
	Drain Pipe		Φ, mm	VP25 (OD 32,ID 26.5)	VP25 (OD 32,ID 26.5)	VP25 (OD 32,ID 26.5)	
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 Level	H/M/L	dB(A)	30/28/26	30/28/26	30/28/26	
	Sound Power Level	Cooling		46	46	46	
External Dimension	Net Weight		kg (lbs)	18.0 (39.7)	18.0 (39.7)	18.0 (39.7)	
	Shipping Weight		kg (lbs)	22.0 (48.5)	22.0 (48.5)	22.0 (48.5)	
	Net Dimensions (W×H×D)		mm	840 x 246 x 840	840 x 246 x 840	840 x 246 x 840	
			inch	33 1/16 x 9 11/16 x 33 1/16	33 1/16 x 9 11/16 x 33 1/16	33 1/16 x 9 11/16 x 33 1/16	
	Shipping Dimensions (W×H×D)		mm	898 x 316 x898	898 x 316 x898	898 x 316 x898	
			inch	35 3/8 x 12 7/16 x 35 3/8	35 3/8 x 12 7/16 x 35 3/8	35 3/8 x 12 7/16 x 35 3/8	

1. Specification

Wind-Free 4Way Cassette

Model Name			AM006BN4PCH/AA	AM009BN4PCH/AA	AM012BN4PCH/AA
Casing	Material	-	HIPS	HIPS	HIPS
Panel Size	Model Name	-	PC4NUFMUN	PC4NUFMUN	PC4NUFMUN
	Type	-	WindFree Type	WindFree Type	WindFree Type
	Material	-	HIPS	HIPS	HIPS
	Color	-	White	White	White
	Net Weight	kg (lbs)	6.3 (13.89)	6.3 (13.89)	6.3 (13.89)
	Shipping Weight	kg (lbs)	8.4 (18.5)	8.4 (18.5)	8.4 (18.5)
	Net Dimensions (WxHxD)	mm	950 x 45 x 950	950 x 45 x 950	950 x 45 x 950
		inch	37 3/8 x 1 3/4 x 37 3/8	37 3/8 x 1 3/4 x 37 3/8	37 3/8 x 1 3/4 x 37 3/8
	Shipping Dimensions (W×H×D)	mm	1,005 x 100 x 1,005	1,005 x 100 x 1,005	1,005 x 100 x 1,005
		inch	39 9/16 x 3 15/16 x 39 9/16	39 9/16 x 3 15/16 x 39 9/16	39 9/16 x 3 15/16 x 39 9/16
Drain Pump	Drain Pump	-	included	included	included
	Max. lifting Height / Displacement	in / gal/h	29-5/16 6.34gal/h	29-5/16 6.34gal/h	29-5/16 6.34gal/h
Additional Accessories	Drain pump	External Model	-	-	-
		Internal Modoe	-	-	-
		Max. lifting Height/ Displacement	in / gal/h	-	-
	Air Filter		-	Removable / Washable	Removable / Washable

NOTE

- Specification may be subject to change without prior notice.
 - 1) Mode : HP(Heat Pump), HR(Heat Recovery)
 - 2) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant pipe length 25ft(7.5m), Level differences 0ft(0m)
 - 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
 - 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741

1. Specification

Wind-Free 4Way Cassette

Model Name				AM018BN4PCH/AA	AM024BN4PCH/AA	AM030BN4PCH/AA	
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	
Mode			-	HP/HR	HP/HR	HP/HR	
Performance	Capacity		Ton	1.50	2.00	2.50	
			Cooling	kW	5.28	7.03	8.79
				Btu/h	18,000	24,000	30,000
				US RT	1.50	2.00	2.50
			Heating	kW	5.86	7.91	9.96
				Btu/h	20,000	27,000	34,000
				US RT	1.50	2.00	2.50
Power	Power Input	Cooling	W	38.0	42.0	110.0	
		Heating		38.0	42.0	110.0	
	Current Input	Cooling	A	0.32	0.35	0.90	
		Heating		0.32	0.35	0.90	
	Current	MCA	A	0.51	0.58	1.39	
		MOP		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		-	Turbo Fan	Turbo Fan	Turbo Fan	
	Quantity		EA	1	1	1	
	Air Flow Rate	H/M/L	m³/min	21.0 / 19.0 / 17.5	22.0 / 20.0 / 17.5	38.0 / 32.0 / 25.5	
			ft³/min	742 / 671 / 618	777 / 706 / 618	1342 / 1130 / 901	
			l/s	350.07 / 316.73 / 291.73	366.74 / 333.40 / 291.73	633.46 / 533.44 / 425.09	
	External Pressure	Max. (Min/Std/Max)	mmAq	-	-	-	
			Pa	-	-	-	
			In Wg	-	-	-	
Fan Motor	Type		-	BLDC	BLDC	BLDC	
	Output x n		W	65 x 1	65 x 1	97 x 1	
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection	
			Φ, mm (inch)	6.35 (1/4)	9.52 (3/8)	9.52 (3/8)	
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection	
			Φ, mm (inch)	12.70 (1/2)	15.88 (5/8)	15.88 (5/8)	
	Heat insulation		-	Both liquid & gas pipes	Both liquid & gas pipes	Both liquid & gas pipes	
	Drain Pipe		Φ, mm	VP25 (OD 32,ID 26.5)	VP25 (OD 32,ID 26.5)	VP25 (OD 32,ID 26.5)	
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 Level	H/M/L	dB(A)	35.5/34/32	36/35/32	43.5/39/35	
	Sound Power Level	Cooling		52	53	60	
External Dimension	Net Weight		kg (lbs)	18.0 (39.7)	18.0 (39.7)	21.5 (47.4)	
	Shipping Weight		kg (lbs)	22.0 (48.5)	22.0 (48.5)	25.5 (56.2)	
	Net Dimensions (W×H×D)		mm	840 x 246 x 840	840 x 246 x 840	840 x 288 x 840	
			inch	33 1/16 x 9 11/16 x 33 1/16	33 1/16 x 9 11/16 x 33 1/16	33 1/16 x 11 5/16 x 33 1/16	
	Shipping Dimensions (W×H×D)		mm	898 x 316 x898	898 x 316 x898	898 x 357 x 898	
			inch	35 3/8 x 12 7/16 x 35 3/8	35 3/8 x 12 7/16 x 35 3/8	35 3/8 x 14 1/16 x 35 3/8	

1. Specification

Wind-Free 4Way Cassette

Model Name			AM018BN4PCH/AA	AM024BN4PCH/AA	AM030BN4PCH/AA
Casing	Material	-	HIPS	HIPS	HIPS
Panel Size	Model Name	-	PC4NUFMUN	PC4NUFMUN	PC4NUFMUN
	Type	-	WindFree Type	WindFree Type	WindFree Type
	Material	-	HIPS	HIPS	HIPS
	Color	-	White	White	White
	Net Weight	kg (lbs)	6.3 (13.89)	6.3 (13.89)	6.3 (13.89)
	Shipping Weight	kg (lbs)	8.4 (18.5)	8.4 (18.5)	8.4 (18.5)
	Net Dimensions (WxHxD)	mm	950 x 45 x 950	950 x 45 x 950	950 x 45 x 950
		inch	37 3/8 x 1 3/4 x 37 3/8	37 3/8 x 1 3/4 x 37 3/8	37 3/8 x 1 3/4 x 37 3/8
	Shipping Dimensions (W×H×D)	mm	1,005 x 100 x 1,005	1,005 x 100 x 1,005	1,005 x 100 x 1,005
		inch	39 9/16 x 3 15/16 x 39 9/16	39 9/16 x 3 15/16 x 39 9/16	39 9/16 x 3 15/16 x 39 9/16
Drain Pump	Drain Pump	-	included	included	included
	Max. lifting Height / Displacement	in / gal/h	29-5/16 6.34gal/h	29-5/16 6.34gal/h	29-5/16 6.34gal/h
Additional Accessories	Drain pump	External Model	-	-	-
		Internal Modoe	-	-	-
		Max. lifting Height/ Displacement	in / gal/h	-	-
	Air Filter		-	Removable / Washable	Removable / Washable

NOTE

- Specification may be subject to change without prior notice.
 - 1) Mode : HP(Heat Pump), HR(Heat Recovery)
 - 2) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant pipe length 25ft(7.5m), Level differences 0ft(0m)
 - 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
 - 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741

1. Specification

Wind-Free 4Way Cassette

Model Name				AM036BN4PCH/AA	AM048BN4PCH/AA
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode			-	HP/HR	HP/HR
Performance			Ton	3.00	4.00
	Capacity	Cooling	kW	10.55	14.07
			Btu/h	36,000	48,000
			US RT	3.00	4.00
		Heating	kW	11.72	15.83
	Btu/h		40,000	54,000	
	US RT		3.00	4.00	
Power	Power Input	Cooling	W	110.0	115.0
		Heating		110.0	115.0
	Current Input	Cooling	A	0.90	0.95
		Heating		0.90	0.95
	Current	MCA	A	1.39	1.45
		MOP		15	15
Heat exchanger	Type		-	Fin & tube	Fin & tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile
Fan	Type		-	Turbo Fan	Turbo Fan
	Quantity		EA	1	1
	Air Flow Rate	H/M/L	m³/min	38.0 / 32.0 / 25.5	39.0 / 32.0 / 25.5
			ft³/min	1342 / 1130 / 901	1377 / 1130 / 901
			l/s	633.46 / 533.44 / 425.09	650.13 / 533.44 / 425.09
	External Pressure	Max. (Min/Std/Max)	mmAq	-	-
			Pa	-	-
			In Wg	-	-
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	97 x 1	97 x 1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	9.52 (3/8)	9.52 (3/8)
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	15.88 (5/8)	15.88 (5/8)
	Heat insulation		-	Both liquid & gas pipes	Both liquid & gas pipes
Drain Pipe		Φ, mm	VP25 (OD 32,ID 26.5)	VP25 (OD 32,ID 26.5)	
Wiring connections	Communication	Min.	mm²	0.75	0.75
		Remark	-	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A
	Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure Level	H/M/L	dB(A)	44/39/35	45/39/35
	Sound Power Level	Cooling		60	61
External Dimension	Net Weight		kg (lbs)	21.5 (47.4)	21.5 (47.4)
	Shipping Weight		kg (lbs)	25.5 (56.2)	25.5 (56.2)
	Net Dimensions (W×H×D)		mm	840 x 288 x 840	840 x 288 x 840
			inch	33 1/16 x 11 5/16 x 33 1/16	33 1/16 x 11 5/16 x 33 1/16
	Shipping Dimensions (W×H×D)		mm	898 x 357 x 898	898 x 357 x 898
			inch	35 3/8 x 14 1/16 x 35 3/8	35 3/8 x 14 1/16 x 35 3/8

1. Specification

Wind-Free 4Way Cassette

Model Name			AM036BN4PCH/AA	AM048BN4PCH/AA
Casing	Material	-	HIPS	HIPS
Panel Size	Model Name	-	PC4NUFMUN	PC4NUFMUN
	Type	-	WindFree Type	WindFree Type
	Material	-	HIPS	HIPS
	Color	-	White	White
	Net Weight	kg (lbs)	6.3 (13.89)	6.3 (13.89)
	Shipping Weight	kg (lbs)	8.4 (18.5)	8.4 (18.5)
	Net Dimensions (WxHxD)	mm	950 x 45 x 950	950 x 45 x 950
		inch	37 3/8 x 1 3/4 x 37 3/8	37 3/8 x 1 3/4 x 37 3/8
	Shipping Dimensions (W×H×D)	mm	1,005 x 100 x 1,005	1,005 x 100 x 1,005
		inch	39 9/16 x 3 15/16 x 39 9/16	39 9/16 x 3 15/16 x 39 9/16
Drain Pump	Drain Pump	-	included	included
	Max. lifting Height / Displacement	in / gal/h	29-5/16 6.34gal/h	29-5/16 6.34gal/h
Additional Accessories	Drain pump	External Model	-	-
		Internal Modoe	-	-
		Max. lifting Height/ Displacement	in / gal/h	-
	Air Filter		-	Removable / Washable

NOTE

- Specification may be subject to change without prior notice.
 - 1) Mode : HP(Heat Pump), HR(Heat Recovery)
 - 2) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant pipe length 25ft(7.5m), Level differences 0ft(0m)
 - 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
 - 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741

2. Summary Table

Wind-Free 4Way Cassette

Performance Characteristics

Model Code	Net Weight (lbs)	Fan Speed	Nominal Capacity(Btu/h)			Airflow (CFM)	Sound Pressure (dBA)	Sound Power (dBA)
			Cooling	Sensible	Heating			
AM006BN4PCH/AA	40	High	6,300	4,500	7,100	547	30	46
		Mid	5,400	3,900	6,500	459	28	-
		Low	4,200	3,000	5,700	353	26	-
AM009BN4PCH/AA	40	High	9,000	6,400	10,000	547	30	46
		Mid	8,200	5,800	9,500	494	28	-
		Low	7,700	5,500	9,200	459	26	-
AM012BN4PCH/AA	40	High	12,000	8,400	13,500	547	30	46
		Mid	11,000	7,700	12,800	494	28	-
		Low	10,300	7,200	12,400	459	26	-
AM018BN4PCH/AA	40	High	18,000	12,600	20,000	742	35.5	52
		Mid	16,500	11,600	19,000	671	34	-
		Low	15,300	10,700	18,300	618	32	-
AM024BN4PCH/AA	40	High	24,000	16,300	27,000	777	36	53
		Mid	20,100	15,000	25,700	706	35	-
		Low	19,600	13,300	24,100	618	32	-
AM030BN4PCH/AA	47	High	30,000	21,000	34,000	1342	43.5	60
		Mid	25,800	18,100	31,200	1130	39	-
		Low	20,800	14,600	27,900	901	35	-
AM036BN4PCH/AA	47	High	36,000	24,800	40,000	1342	44	60
		Mid	31,000	21,400	36,700	1130	39	-
		Low	24,900	17,200	32,800	901	35	-
AM048BN4PCH/AA	47	High	48,000	32,600	54,000	1377	45	61
		Mid	40,300	27,400	48,900	1130	39	-
		Low	32,400	22,000	43,700	901	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)	MOP (A)
AM006BN4PCH/AA	1,2,208-230,60	20	0.17	0.28	15
AM009BN4PCH/AA		20	0.17	0.28	15
AM012BN4PCH/AA		20	0.17	0.28	15
AM018BN4PCH/AA		38	0.32	0.51	15
AM024BN4PCH/AA		42	0.35	0.58	15
AM030BN4PCH/AA		110	0.90	1.39	15
AM036BN4PCH/AA		110	0.90	1.39	15
AM048BN4PCH/AA		115	0.95	1.45	15

NOTE

- MCA : Minimum circuit amperes
- MOP : Maximum Overcurrent Protective Device
- Select wire size based on the value of MCA

3. Capacity Table

Wind-Free 4Way Cassette

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index (MBH)	Outdoor Air Temp. (°F, WB)	Indoor temperature (°F, WB)													
		57		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
006	50	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,100	4,600	7,500	4,300
	54	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	58	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	60	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	64	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	67	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	70	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	73	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	77	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	80	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	84	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	88	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	92	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	95	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,600	4,500	7,000	4,500	7,500	4,300
	99	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,500	4,400	6,900	4,400	7,300	4,200
	103	4,400	3,300	5,100	3,900	5,900	4,300	6,300	4,500	6,500	4,400	6,800	4,300	7,200	4,100
	107	4,400	3,300	5,100	3,900	5,900	4,300	6,100	4,300	6,200	4,200	6,500	4,100	6,700	4,000
	111	4,400	3,300	5,100	3,900	5,600	4,100	5,900	4,000	6,000	4,100	6,200	4,000	6,300	3,800
	115	4,400	3,300	5,100	3,900	5,600	4,100	5,900	4,000	6,000	4,100	6,200	4,000	6,300	3,800
	118	4,400	3,300	5,100	3,900	5,600	4,100	5,900	4,000	6,000	4,100	6,200	4,000	6,300	3,800
009	50	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,200	6,400	10,800	6,100
	54	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,200	6,400	10,800	6,100
	58	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,800	6,100
	60	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	64	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	67	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	70	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	73	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	77	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	80	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	84	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	88	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	92	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	95	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,900
	99	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,800
	103	6,300	5,200	7,400	5,800	8,500	6,400	9,000	6,400	9,300	6,400	10,000	6,200	10,600	5,600
	107	6,300	5,200	7,400	5,800	8,500	6,400	8,700	6,200	9,000	6,200	9,300	5,900	9,700	5,200
	111	6,300	5,200	7,400	5,800	8,100	6,200	8,500	6,100	8,700	6,100	8,900	5,800	9,000	4,900
	115	6,300	5,200	7,400	5,800	8,100	6,200	8,500	6,100	8,700	6,100	8,900	5,800	9,000	4,900
	118	6,300	5,200	7,400	5,800	8,100	6,200	8,500	6,200	8,700	6,100	8,900	5,800	9,000	4,900

3. Capacity Table

Wind-Free 4Way Cassette

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index (MBH)	Outdoor Air Temp. (°F, WB)	Indoor temperature (°F, WB)													
		57		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
012	50	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,300	8,100
	54	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,300	8,100
	58	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,300	8,100
	60	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,300	8,100
	64	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,300	8,100
	67	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	70	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	73	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	77	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	80	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	84	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	88	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	92	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	95	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,300	8,400	14,000	7,900
	99	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	13,200	8,100	14,000	7,900
	103	8,300	6,600	9,700	7,500	11,300	8,100	12,000	8,400	12,300	8,400	12,900	8,100	13,700	7,700
	107	8,300	6,600	9,700	7,500	11,300	8,100	11,800	8,300	12,000	8,200	12,400	7,900	13,000	7,500
	111	8,300	6,600	9,700	7,500	11,000	7,900	11,500	8,100	11,700	8,100	12,000	7,700	12,400	7,200
	115	8,300	6,600	9,700	7,500	10,800	7,900	11,300	8,100	11,500	8,000	11,700	7,600	12,000	7,100
	118	8,300	6,600	9,700	7,500	10,700	7,800	11,100	8,880	11,300	8,000	11,400	7,500	11,800	7,000
018	50	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	20,300	12,600	21,500	12,000
	54	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	20,300	12,600	21,500	12,000
	58	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,500	12,000
	60	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	64	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	67	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	70	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	73	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	77	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	80	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	84	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	88	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	92	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	95	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,700
	99	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,400
	103	12,500	10,400	14,800	11,400	17,000	12,600	18,000	12,600	18,600	12,600	19,900	12,300	21,200	11,000
	107	12,500	10,400	14,800	11,400	17,000	12,600	17,400	12,300	18,000	12,300	18,600	11,700	19,300	10,400
	111	12,500	10,400	14,800	11,400	16,100	12,300	17,000	12,000	17,400	12,000	17,700	11,400	18,000	9,700
	115	12,500	10,400	14,800	11,400	16,100	12,300	17,000	12,000	17,400	12,000	17,700	11,400	18,000	9,700
	118	12,500	10,400	14,800	11,400	16,100	12,300	17,000	11,900	17,400	12,000	17,700	11,400	18,000	9,700

3. Capacity Table

Wind-Free 4Way Cassette

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index (MBH)	Outdoor Air Temp. (°F, WB)	Indoor temperature (°F, WB)													
		57		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
024	50	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	27,000	16,600	28,700	15,600
	54	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,700	15,600
	58	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,700	15,600
	60	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	64	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	67	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	70	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	73	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	77	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	80	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	84	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	88	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	92	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	95	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	25,000	16,300	26,700	16,300	28,400	15,600
	99	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	24,700	16,000	26,400	16,000	27,700	15,300
	103	16,600	13,000	19,600	14,700	22,600	15,600	24,000	16,300	24,700	16,000	26,000	15,600	27,400	14,900
	107	16,600	13,000	19,600	14,700	22,600	15,600	23,300	15,600	23,700	15,300	24,700	14,900	25,700	14,400
	111	16,600	13,000	19,600	14,700	21,300	14,900	22,600	14,700	23,000	14,900	23,700	14,700	24,000	13,700
030	50	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,300	21,000	33,700	21,000	36,000	21,000
	54	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,300	21,000	33,700	21,000	36,000	21,000
	58	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,700	20,700
	60	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,700	20,700
	64	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	67	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	70	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	73	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	77	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	80	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	84	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	88	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	92	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	95	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,300	20,700	35,300	20,300
	99	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,000	31,000	21,000	33,000	20,300	34,700	20,000
	103	20,700	17,300	24,300	19,000	28,000	21,000	30,000	21,300	30,700	20,700	32,300	20,000	34,000	19,700
	107	20,700	17,300	24,300	19,000	28,000	21,000	29,000	20,700	29,700	20,700	31,000	19,300	32,000	19,300
	111	20,700	17,300	24,300	19,000	26,700	20,300	28,700	20,300	28,700	20,300	29,300	18,700	30,000	18,300
	115	20,700	17,300	24,300	19,000	26,700	20,300	28,700	20,300	28,700	20,300	29,300	18,700	30,000	18,300
	118	20,700	17,300	24,300	19,000	26,700	20,300	28,700	20,300	28,700	20,300	29,300	18,700	30,000	18,300

3. Capacity Table

Wind-Free 4Way Cassette

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index (MBH)	Outdoor Air Temp. (°F, WB)	Indoor temperature (°F, WB)													
		57		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
036	50	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	40,200	24,800	43,100	24,800
	54	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	40,200	24,800	43,100	24,800
	58	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	40,200	24,800	42,800	24,500
	60	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	40,200	24,800	42,800	24,500
	64	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	67	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	70	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	73	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	77	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	80	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	84	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	88	24,800	20,100	29,300	22,300	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	92	24,800	19,800	29,300	22,000	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	95	24,800	19,800	29,300	22,000	33,800	24,500	36,000	24,800	37,300	24,800	39,900	24,800	42,400	24,200
	99	24,800	19,800	29,300	22,000	33,800	24,500	36,000	24,800	37,300	24,800	39,500	24,500	41,800	23,800
	103	24,800	19,800	29,300	22,000	33,800	24,500	36,000	25,100	37,000	24,500	38,900	24,200	40,800	23,500
	107	24,800	19,800	29,300	22,000	33,800	24,500	35,000	24,200	35,700	23,800	37,300	23,500	38,600	23,200
	111	24,800	19,800	29,300	22,000	32,100	23,200	34,100	23,800	34,700	23,500	35,400	22,600	36,000	22,000
	115	24,800	19,800	29,300	22,000	32,100	23,200	34,100	23,800	34,700	23,500	35,400	22,600	36,000	22,000
	118	24,800	19,800	29,300	22,000	32,100	23,200	34,100	24,400	34,700	23,500	35,400	22,600	36,000	22,000
048	50	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	50,100	32,600	53,800	32,300	57,600	33,000
	54	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,500	32,600	57,300	32,600
	58	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,500	32,600	57,300	32,600
	60	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,500	32,600	56,900	32,300
	64	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,900	32,300
	67	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	70	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	73	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	77	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	80	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	84	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	88	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	92	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	95	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	53,100	32,300	56,600	31,900
	99	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,700	32,600	52,800	31,900	55,900	31,200
	103	33,300	26,200	39,100	28,800	44,900	31,900	48,000	32,600	49,400	31,900	51,800	31,600	54,500	30,600
	107	33,300	26,200	39,100	28,800	44,900	31,900	46,600	31,600	47,700	31,200	49,400	30,200	51,400	28,800
	111	33,300	26,200	39,100	28,800	42,900	30,900	45,600	31,200	45,900	29,900	47,000	28,500	48,000	27,500
	115	33,300	26,200	39,100	28,800	42,900	30,900	45,600	31,200	45,900	29,900	47,000	28,500	48,000	27,500
	118	33,300	26,200	39,100	28,800	42,900	30,900	45,600	31,200	45,900	29,900	47,000	28,500	48,000	27,500

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

Heating

TC : Total Capacity (kW)

Capacity Index (MBH)	Outdoor Air Temp.(°F)		Indoor temperature (°F, WB)				
			61	65	70	72	75
			TC	TC	TC	TC	TC
	DB	WB	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
006	-3.6	-4	4,500	4,500	4,400	4,300	4,300
	-1.8	-2	4,600	4,600	4,400	4,400	4,400
	2	1	4,700	4,600	4,500	4,400	4,400
	6	5	4,900	4,800	4,600	4,500	4,400
	10	9	5,200	5,100	4,900	4,900	4,800
	13	12	5,400	5,300	5,200	5,200	5,200
	17	15	5,600	5,500	5,300	5,300	5,300
	19	18	5,700	5,600	5,500	5,400	5,300
	23	21	6,000	6,000	5,800	5,700	5,500
	26	24	6,400	6,300	6,000	5,900	5,700
	30	28	6,500	6,400	6,200	6,000	5,800
	35	32	6,600	6,500	6,300	6,200	5,900
	39	36	7,000	6,900	6,600	6,500	6,300
	44	40	7,300	7,200	6,900	6,600	6,300
	47	43	7,600	7,500	7,100	6,800	6,300
	51	47	7,800	7,600	7,100	6,800	6,300
009	54	50	8,000	7,800	7,100	6,800	6,300
	57	53	8,300	7,800	7,100	6,800	6,300
	60	56	8,500	7,900	7,100	6,800	6,300
	-3.6	-4	6,500	6,300	6,200	6,100	6,100
	-1.8	-2	6,600	6,500	6,300	6,200	6,200
	2	1	6,600	6,600	6,400	6,300	6,300
	6	5	7,000	6,800	6,600	6,500	6,300
	10	9	7,300	7,100	7,000	7,000	6,800
	13	12	7,600	7,600	7,400	7,300	7,300
	17	15	7,900	7,800	7,600	7,500	7,400
	19	18	8,100	8,000	7,900	7,800	7,500
	23	21	8,600	8,500	8,200	8,100	7,800
	26	24	9,000	8,800	8,600	8,500	8,100
	30	28	9,200	9,000	8,800	8,600	8,200
	35	32	9,400	9,300	9,000	8,800	8,300
	39	36	9,800	9,800	9,400	9,300	8,800
012	44	40	10,300	10,100	9,700	9,400	8,800
	47	43	10,800	10,600	10,000	9,600	8,800
	51	47	11,100	10,800	10,000	9,600	8,800
	54	50	11,400	10,900	10,000	9,600	8,800
	57	53	11,800	11,100	10,000	9,600	8,800
	60	56	12,100	11,300	10,000	9,600	8,800
	-3.6	-4	8,400	8,300	8,100	8,100	8,100
	-1.8	-2	8,800	8,500	8,200	8,200	8,100
	2	1	9,100	8,800	8,400	8,400	8,100
	6	5	9,500	9,100	8,800	8,800	8,400
	10	9	9,800	9,500	9,300	9,100	9,000
	13	12	10,200	10,100	10,000	9,800	9,600
	17	15	10,500	10,400	10,300	10,200	10,000
	19	18	10,900	10,700	10,500	10,500	10,200
	23	21	11,600	11,200	11,000	10,900	10,500
	26	24	11,900	11,700	11,400	11,200	10,900
	30	28	12,300	12,100	11,700	11,600	11,000
	35	32	12,600	12,500	12,100	11,900	11,400
	39	36	13,300	13,000	12,600	12,300	11,900
	44	40	13,800	13,600	13,000	12,600	11,900
	47	43	14,400	14,100	13,500	13,000	11,900
	51	47	14,800	14,400	13,500	13,000	11,900
	54	50	15,400	14,700	13,500	13,000	11,900
	57	53	15,800	14,900	13,500	13,000	11,900
	60	56	16,100	15,000	13,500	13,000	11,900

3. Capacity Table

Wind-Free 4Way Cassette

Heating

TC : Total Capacity (kW)

Capacity Index (MBH)	Outdoor Air Temp.(°F)		Indoor temperature (°F, WB)				
			61	65	70	72	75
			TC	TC	TC	TC	TC
	DB	WB	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
018	-3.6	-4	12,900	12,600	12,400	12,200	12,200
	-1.8	-2	13,100	12,900	12,600	12,400	12,400
	2	1	13,200	13,200	12,700	12,600	12,600
	6	5	13,900	13,600	13,100	12,900	12,600
	10	9	14,500	14,200	13,900	13,900	13,600
	13	12	15,200	15,200	14,700	14,500	14,500
	17	15	15,700	15,500	15,200	15,000	14,700
	19	18	16,200	15,900	15,700	15,500	14,900
	23	21	17,200	16,900	16,400	16,200	15,500
	26	24	17,900	17,500	17,200	16,900	16,200
	30	28	18,300	18,000	17,500	17,200	16,400
	35	32	18,800	18,500	17,900	17,500	16,500
	39	36	19,500	19,500	18,800	18,500	17,500
	44	40	20,500	20,200	19,300	18,800	17,500
	47	43	21,500	21,200	20,000	19,200	17,500
	51	47	22,100	21,500	20,000	19,200	17,500
024	-3.6	-4	17,200	17,200	16,700	16,500	16,500
	-1.8	-2	17,500	17,400	16,800	16,700	16,700
	2	1	17,900	17,500	17,000	16,800	16,800
	6	5	18,600	18,200	17,500	17,200	16,800
	10	9	19,600	19,300	18,800	18,600	18,200
	13	12	20,700	20,300	19,800	19,600	19,600
	17	15	21,200	20,900	20,300	20,200	20,000
	19	18	21,700	21,400	20,900	20,700	20,300
	23	21	22,800	22,800	22,100	21,700	21,000
	26	24	24,200	23,800	23,000	22,400	21,700
	30	28	24,700	24,400	23,500	23,000	22,100
	35	32	25,200	24,900	24,000	23,500	22,400
	39	36	26,600	26,300	25,200	24,900	23,800
	44	40	27,700	27,400	26,100	25,200	23,800
	47	43	28,800	28,400	27,000	25,900	23,800
	51	47	29,800	28,800	27,000	25,900	23,800
030	-3.6	-4	21,300	21,300	20,700	20,500	20,500
	-1.8	-2	21,800	21,800	21,100	20,900	20,700
	2	1	22,300	22,300	21,400	21,300	20,900
	6	5	23,700	23,000	22,000	21,600	21,300
	10	9	24,800	24,400	23,600	23,400	23,000
	13	12	25,900	25,500	25,000	24,800	24,800
	17	15	26,700	26,400	25,800	25,500	25,100
	19	18	27,600	27,300	26,600	26,200	25,500
	23	21	29,000	28,700	27,800	27,300	26,600
	26	24	30,500	30,100	29,200	28,700	27,300
	30	28	31,200	30,800	29,800	29,200	27,800
	35	32	31,900	31,500	30,500	29,800	28,300
	39	36	33,300	32,900	31,900	31,200	29,800
	44	40	35,100	34,400	32,900	31,900	29,800
	47	43	36,500	35,800	34,000	32,600	29,800
	51	47	37,500	36,500	34,000	32,600	29,800
	54	50	38,600	37,200	34,000	32,600	29,800
	57	53	39,700	37,500	34,000	32,600	29,800
	60	56	41,100	38,300	34,000	32,600	29,800

3. Capacity Table

Wind-Free 4Way Cassette

Heating

TC : Total Capacity (kW)

Capacity Index (MBH)	Outdoor Air Temp.(°F)		Indoor temperature (°F, WB)				
			61	65	70	72	75
			TC	TC	TC	TC	TC
	DB	WB	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
036	-3.6	-4	24,700	24,700	24,300	24,300	24,300
	-1.8	-2	25,700	25,300	24,800	24,700	24,500
	2	1	26,700	26,000	25,200	25,000	24,700
	6	5	28,000	27,000	26,000	25,700	25,000
	10	9	29,300	28,700	27,700	27,300	27,000
	13	12	30,700	30,000	29,500	29,300	29,000
	17	15	31,500	31,000	30,300	30,000	29,500
	19	18	32,300	32,000	31,000	30,700	30,000
	23	21	34,000	33,700	32,500	32,000	31,000
	26	24	35,700	35,300	34,300	33,700	32,300
	30	28	36,700	36,200	35,200	34,300	32,800
	35	32	37,700	37,000	36,000	35,000	33,300
	39	36	39,300	38,700	37,500	36,700	35,300
	44	40	41,000	40,700	38,800	37,700	35,300
	47	43	43,000	42,300	40,000	38,300	35,300
	51	47	44,300	43,000	40,000	38,300	35,300
048	54	50	45,700	43,700	40,000	38,300	35,300
	57	53	46,700	44,300	40,000	38,300	35,300
	60	56	48,000	45,000	40,000	38,300	35,300
	-3.6	-4	33,300	33,300	33,000	33,000	32,600
	-1.8	-2	34,400	34,000	33,300	33,300	32,800
	2	1	35,400	34,700	33,700	33,700	33,000
	6	5	37,500	36,500	34,900	34,400	33,300
	10	9	39,300	38,600	37,500	37,200	36,100
	13	12	41,000	40,700	39,800	39,600	38,900
	17	15	42,300	41,700	40,900	40,500	39,600
	19	18	43,500	42,800	41,900	41,400	40,300
	23	21	45,900	45,200	43,800	43,100	42,100
	26	24	48,400	47,700	46,100	45,200	43,500
	30	28	49,400	48,700	47,100	46,100	44,200
	35	32	50,500	49,800	48,000	47,000	44,900
	39	36	52,900	52,200	50,500	49,400	47,300
	44	40	55,400	54,700	52,100	50,500	47,300
	47	43	57,900	56,800	54,000	51,900	47,300
	51	47	59,600	57,900	54,000	51,900	47,300
	54	50	61,400	58,600	54,000	51,900	47,300
	57	53	63,100	59,600	54,000	51,900	47,300
	60	56	64,900	60,300	54,000	51,900	47,300

NOTE

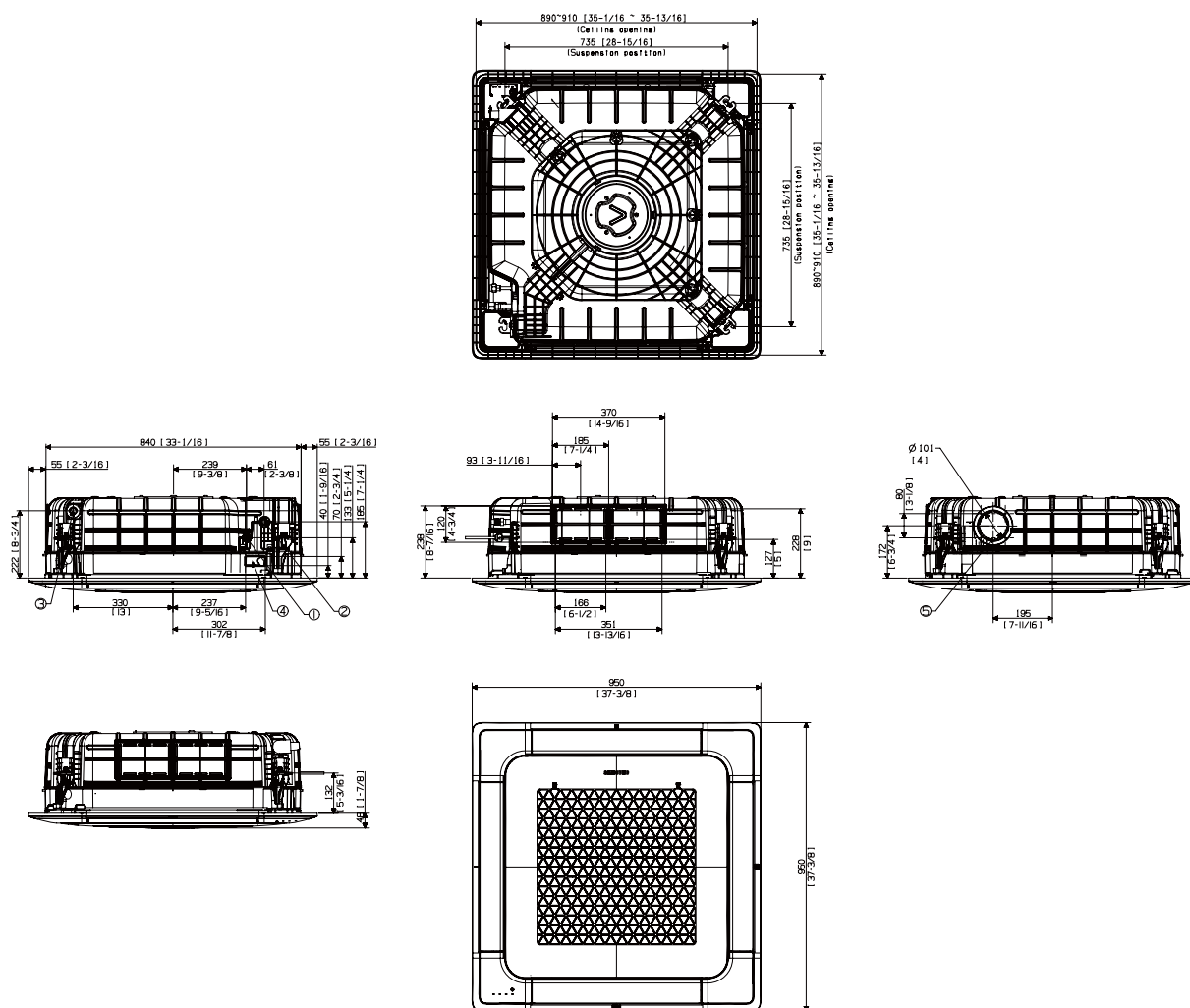
- The performance table shows the average value of each conditions.

4. Dimensional Drawing

Wind-Free 4Way Cassette

AM006/009/012/018BN4PCH/AA, AM024BN4PCH/AA

Units : mm [inches]



No.	Name	Description	
		AM006/009/012/018BN4PCH/AA	AM024BN4PCH/AA
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	3/4 inch [OD 1.05 inch(26.67mm)]	
4	Power supply & Communication wiring conduit	-	
5	Fresh air intake knockout hole	Φ10[4] , Use M4 Screw	

NOTE

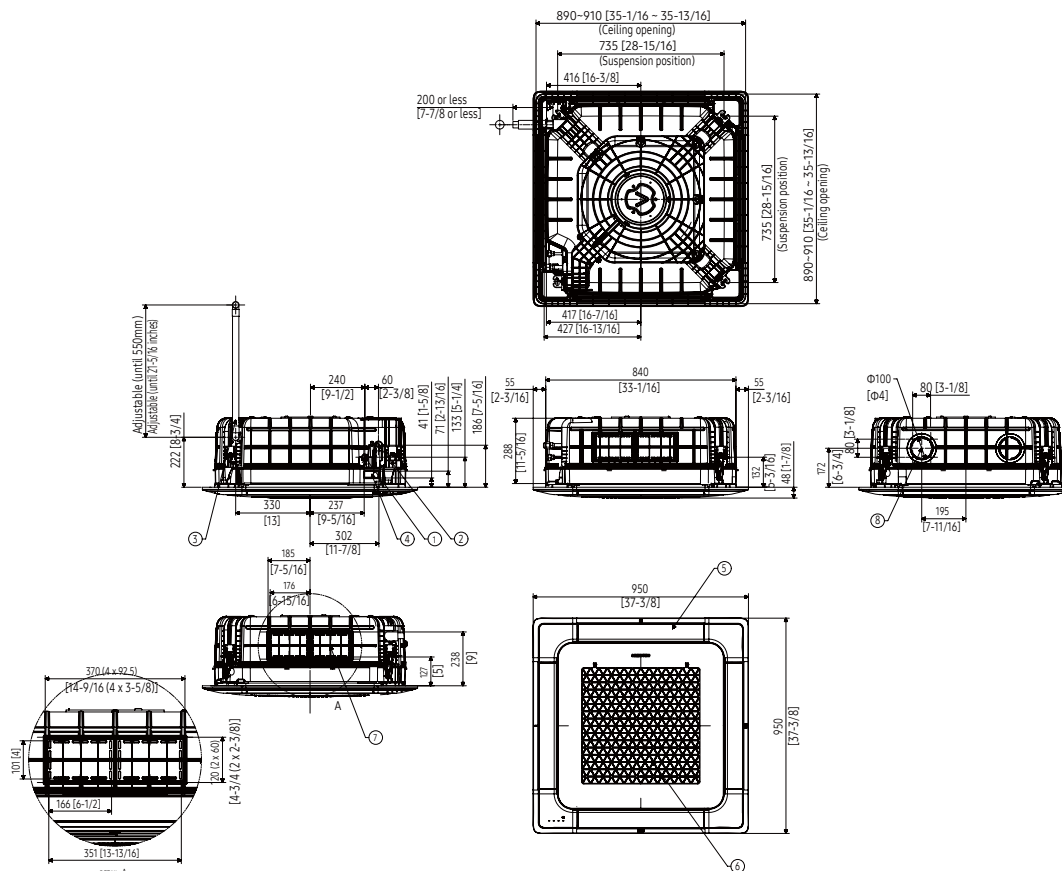
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

4. Dimensional Drawing

Wind-Free 4Way Cassette

AM030BN4PCH/AA, AM036BN4PCH/AA, AM048BN4PCH/AA

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	3/4 inch [OD 1.05 inch(26.67mm)]
4	Power supply & Communication wiring conduit	-
5	Fresh air intake knockout hole	Φ10[4], Use M4 Screw

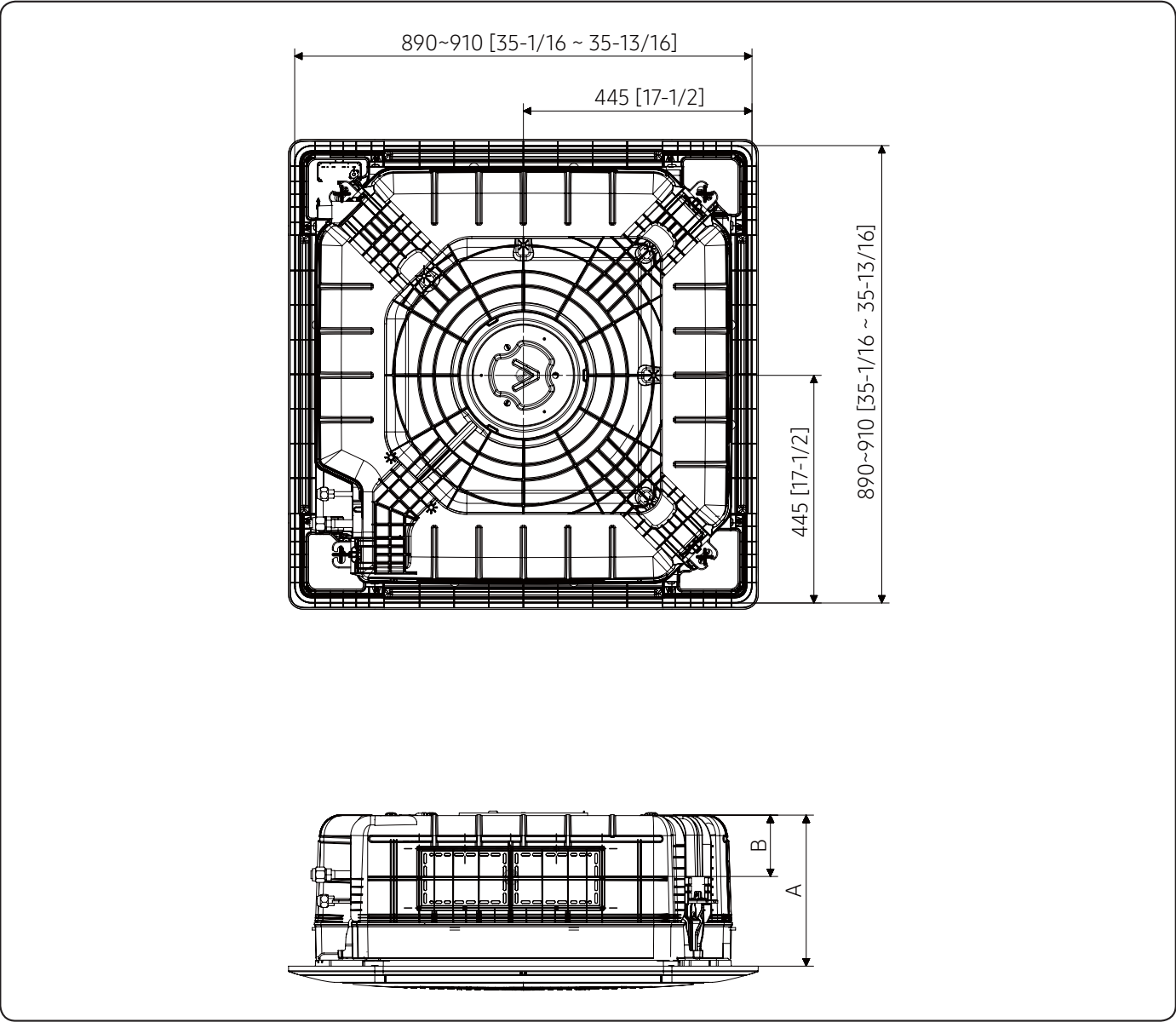
NOTE

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

5. Center of Gravity

Wind-Free 4Way Cassette

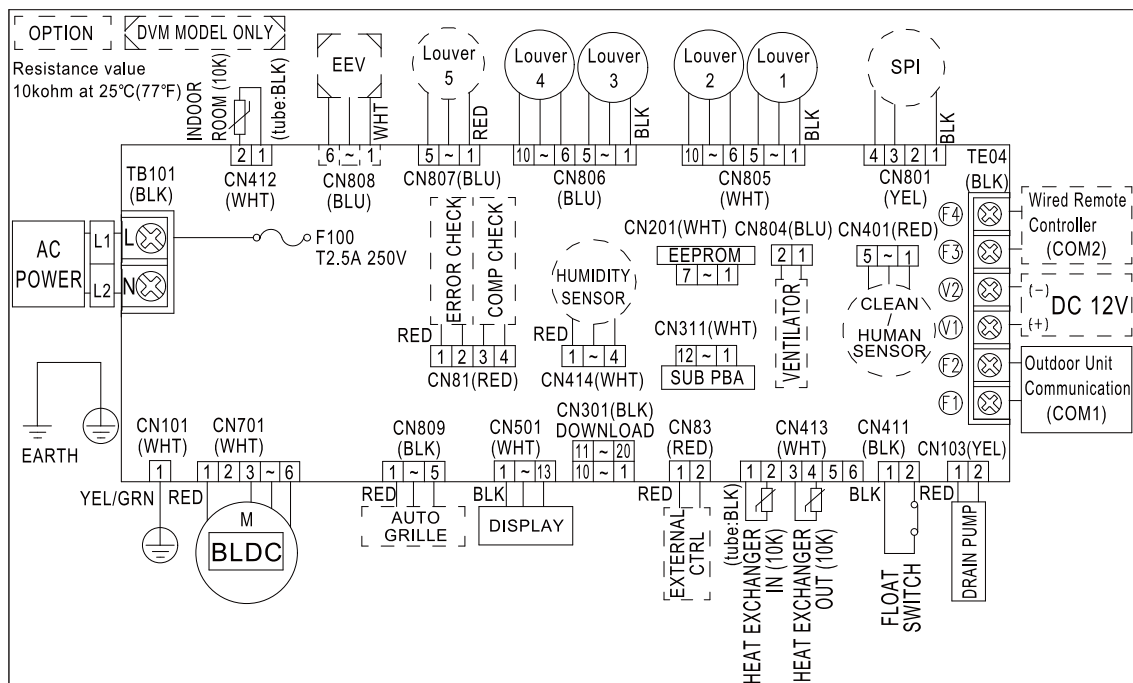
Units : mm [inches]



	A	B
AM006/009/012/018/024BN4PCH/AA	263 [10-7/20]	100[4]
AM030/036/048BN4PCH/AA	305 [12]	130 [5-1/8]

6. Electrical Wiring Diagram

Wind-Free 4Way Cassette



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

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

F100	FUSE	INDOOR ROOM(10K)	Thermistor -Indoor Room
EEV	Electronic Expansion Valve	HEAT EXCHANGER IN (10K)	Thermistor -IDU heat exchanger IN
SPI	S-Plasma ion	HEAT EXCHANGER OUT (10K)	Thermistor -IDU heat exchanger OUT
M-BLDC	Motor for indoor fan	EEPROM	EEPROM SUB PBA
DISPLAY	Panel LED display	SUB PBA	SUB PBA for wired remote control communication
ERROR CHECK	Contact output port for error check	VENTILATOR	Contact output port for Ventilator control
COMP CHECK	Contact output port for compressor operation check	EXTERNAL CTRL	Input port for external contact control

NOTE

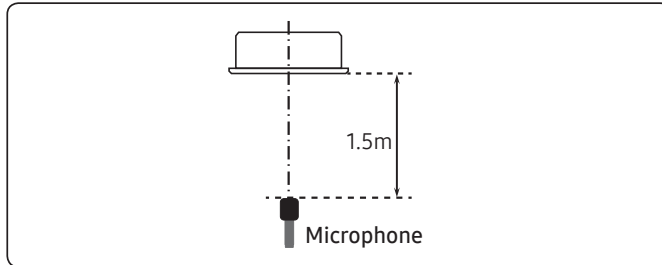
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⏏ Protective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

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

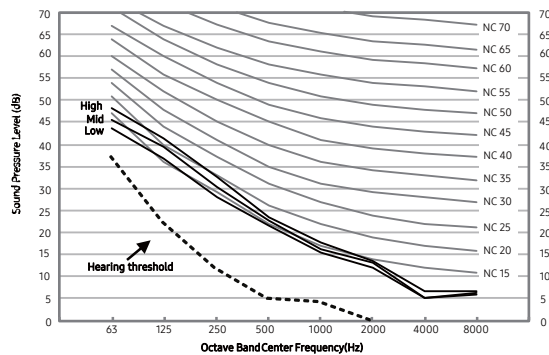
Unit: dB(A)



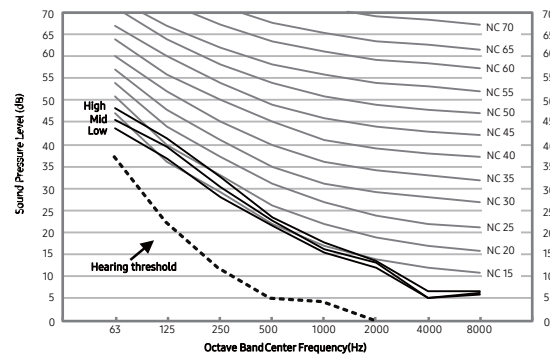
Model	High	MID	LOW
AM006BN4PCH/AA	30	28	26
AM009BN4PCH/AA	30	28	26
AM012BN4PCH/AA	30	28	26
AM018BN4PCH/AA	35.5	34	32

• NC Curve

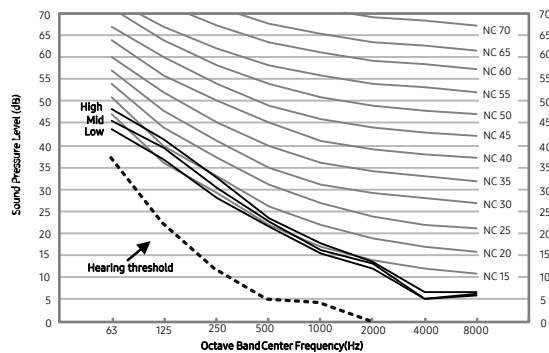
1) AM006BN4PCH/AA



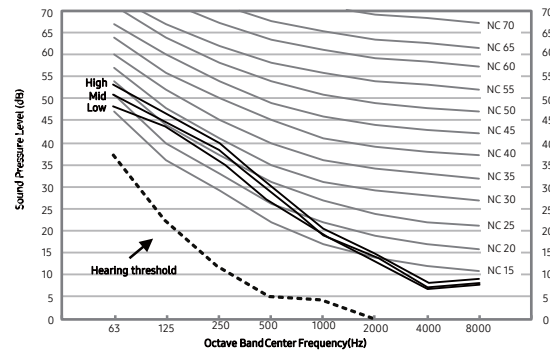
2) AM009BN4PCH/AA



3) AM012BN4PCH/AA



4) AM018BN4PCH/AA



NOTE

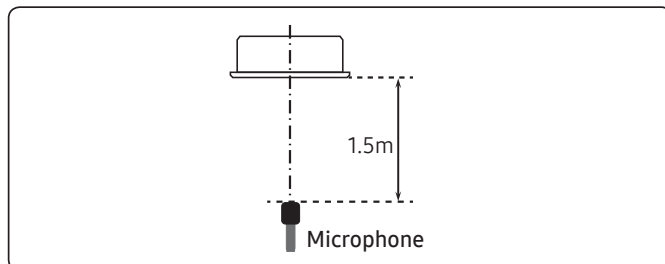
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

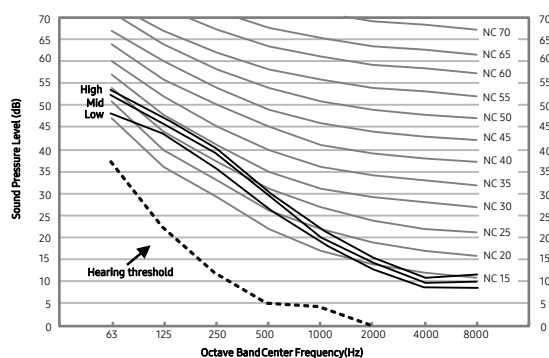
Unit: dB(A)



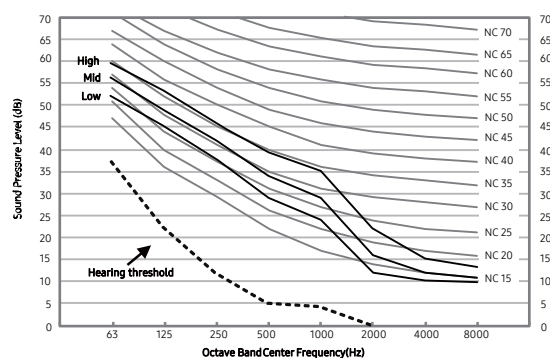
Model	High	MID	LOW
AM024BN4PCH/AA	36	35	32
AM030BN4PCH/AA	43.5	39	35
AM036BN4PCH/AA	44	39	35
AM048BN4PCH/AA	45	39	35

- NC Curve

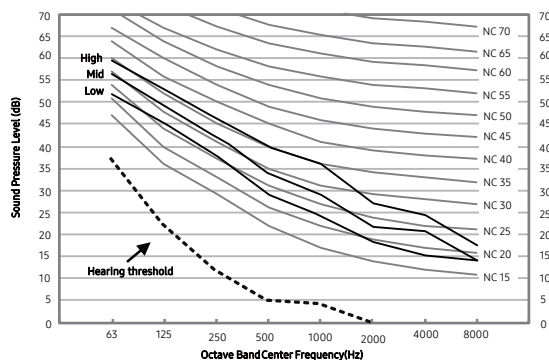
5) AM024BN4PCH/AA



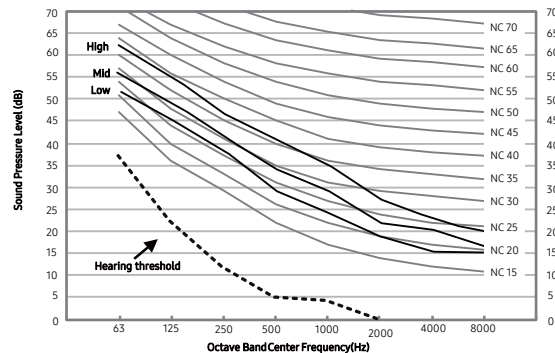
6) AM030BN4PCH/AA



7) AM036BN4PCH/AA



8) AM048BN4PCH/AA



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

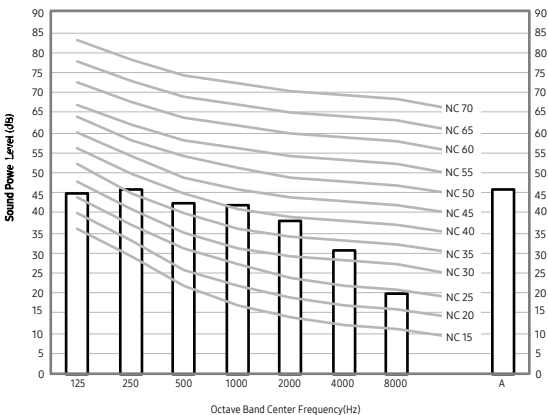
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

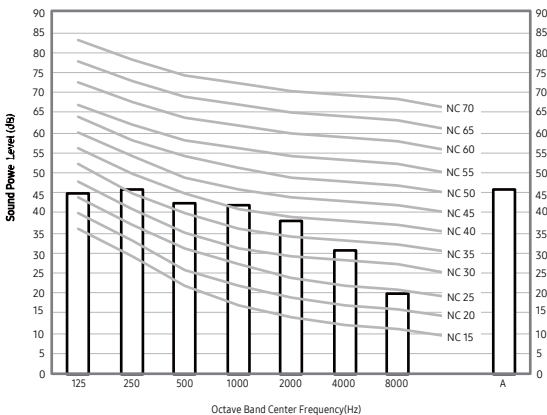
Model	Power
AM006RN4DCH/AA	46
AM009RN4DCH/AA	46
AM012RN4DCH/AA	46
AM018RN4DCH/AA	52

- NC Curve

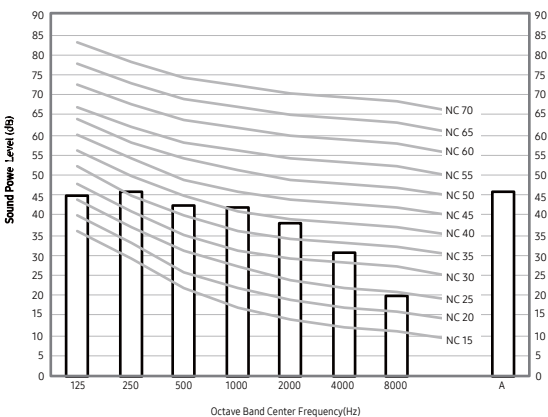
1) AM006BN4PCH/AA



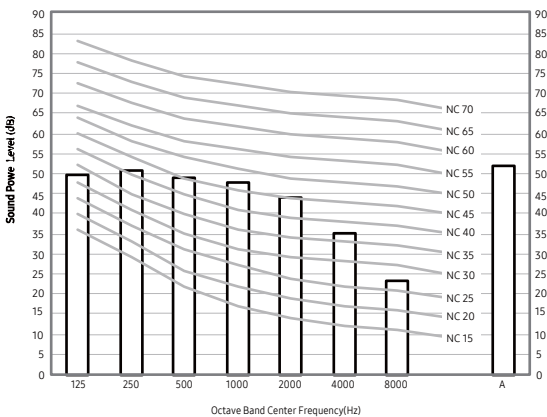
2) AM009RN4DCH/AA



3) AM012RN4DCH/AA



4) AM018RN4DCH/AA



7. Sound Data

Wind-Free 4Way Cassette

Sound Power level

NOTE

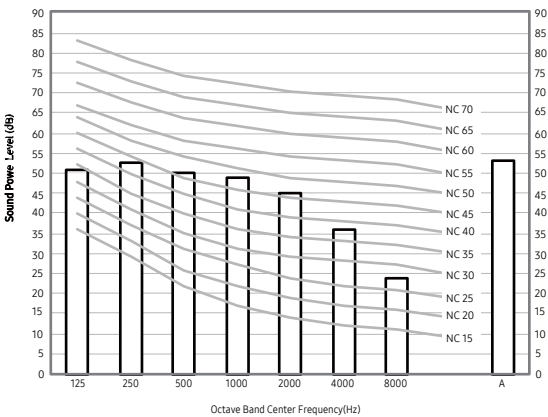
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

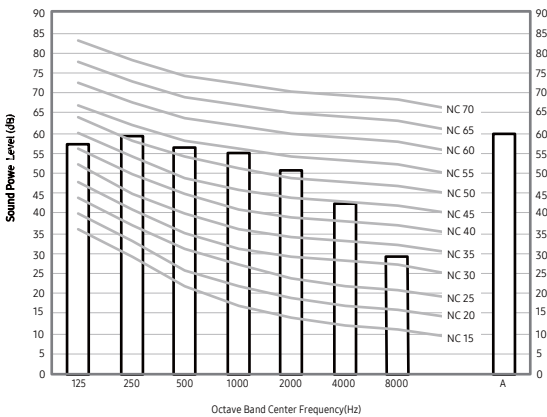
Model	Power
AM024RN4DCH/AA	53
AM030RN4DCH/AA	60
AM036RN4DCH/AA	60
AM048RN4DCH/AA	61

- NC Curve

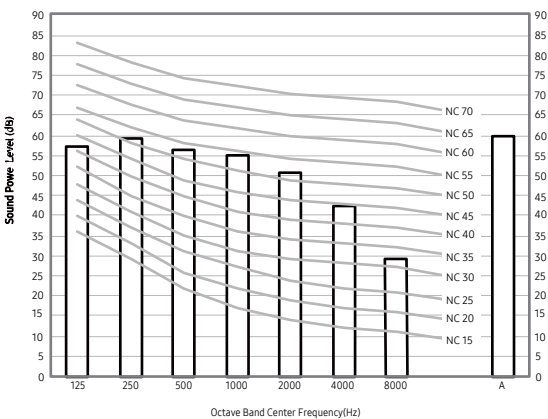
5) AM024BN4PCH/AA



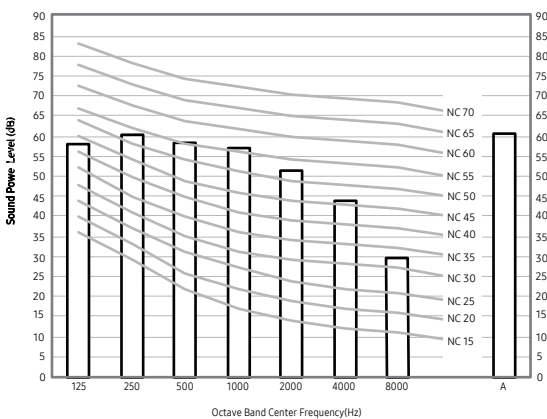
6) AM030RN4DCH/AA



7) AM036RN4DCH/AA



8) AM048RN4DCH/AA

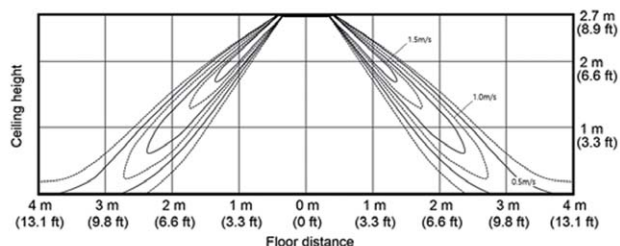


8. Temperature and air flow distribution

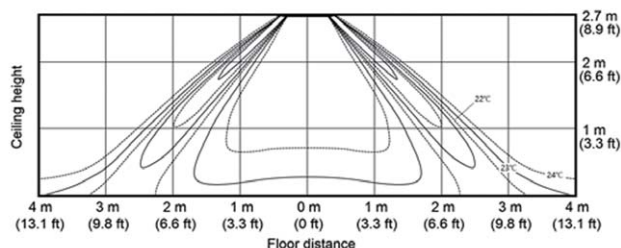
Wind-Free 4Way Cassette

AM006BN4PCH/AA

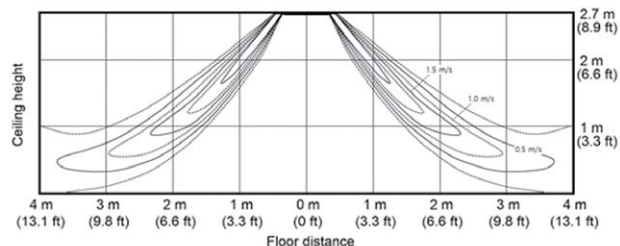
- Cooling Air Velocity distribution
Discharge angle : 45°



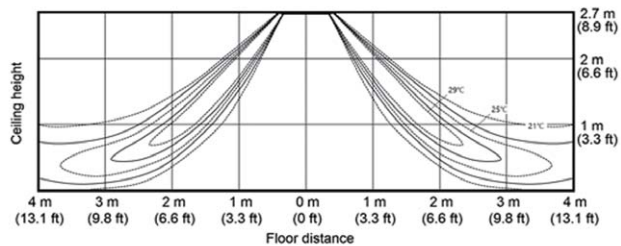
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°

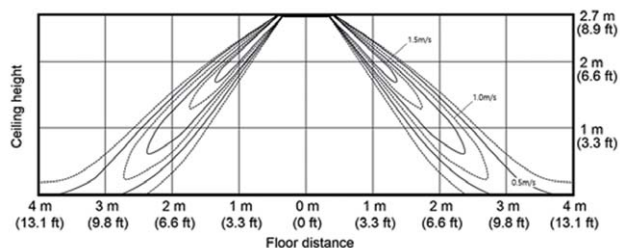


- Heating Temperature distribution
Discharge angle : 52°

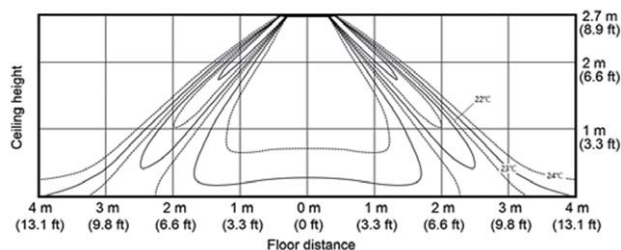


AM009BN4PCH/AA

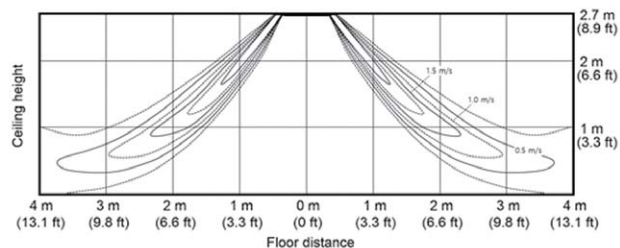
- Cooling Air Velocity distribution
Discharge angle : 45°



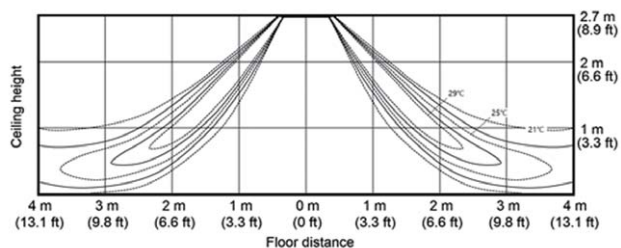
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°



- Heating Temperature distribution
Discharge angle : 52°

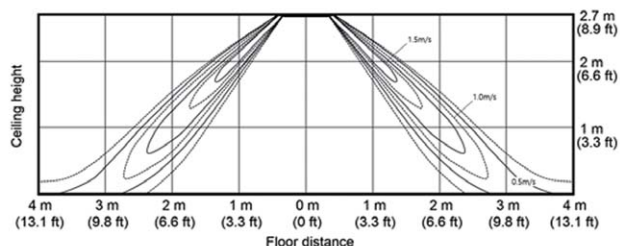


8. Temperature and air flow distribution

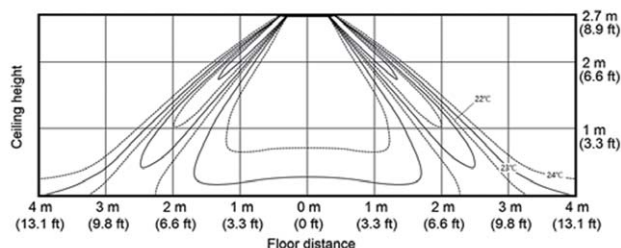
Wind-Free 4Way Cassette

AM012BN4PCH/AA

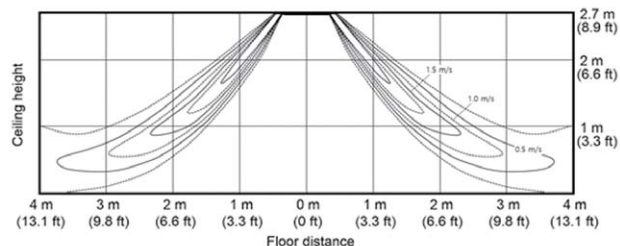
- Cooling Air Velocity distribution
Discharge angle : 45°



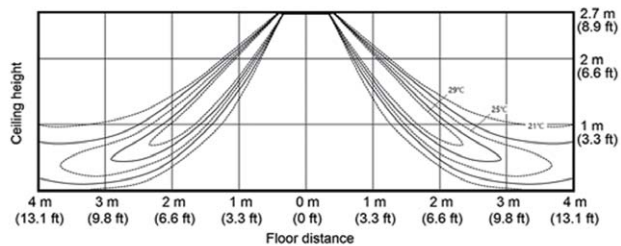
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°

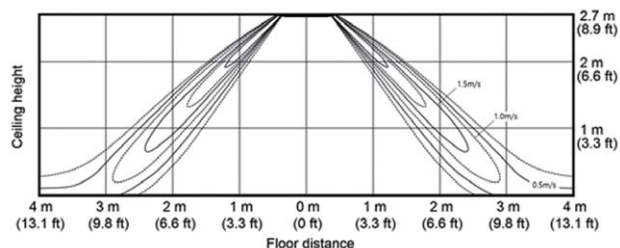


- Heating Temperature distribution
Discharge angle : 52°

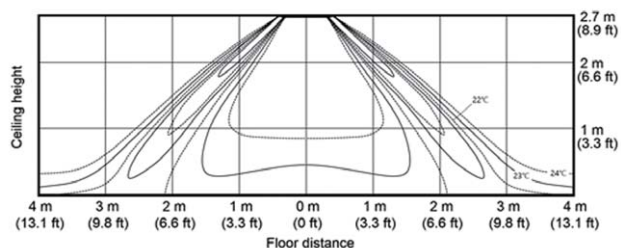


AM018BN4PCH/AA

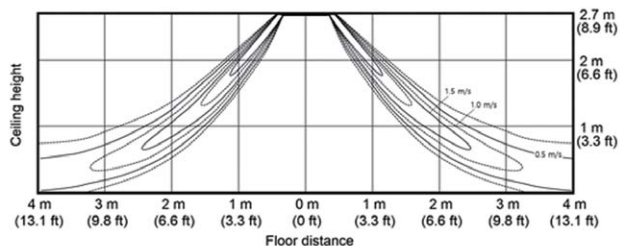
- Cooling Air Velocity distribution
Discharge angle : 45°



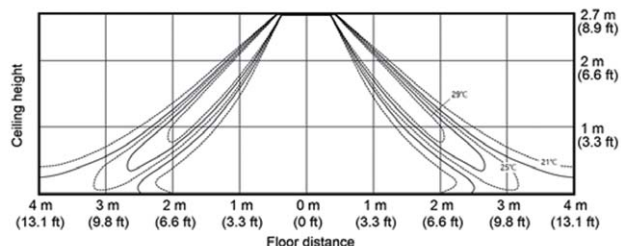
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°



- Heating Temperature distribution
Discharge angle : 52°

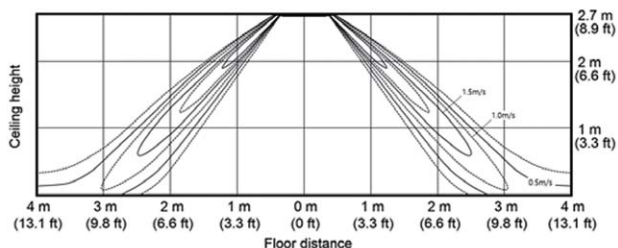


8. Temperature and air flow distribution

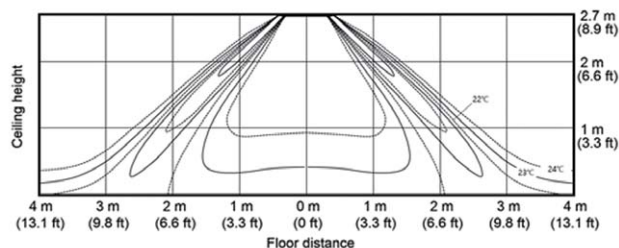
Wind-Free 4Way Cassette

AM024BN4PCH/AA

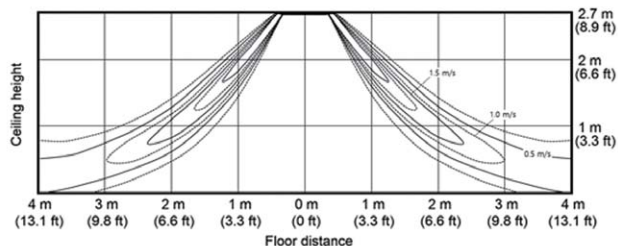
- Cooling Air Velocity distribution
Discharge angle : 45°



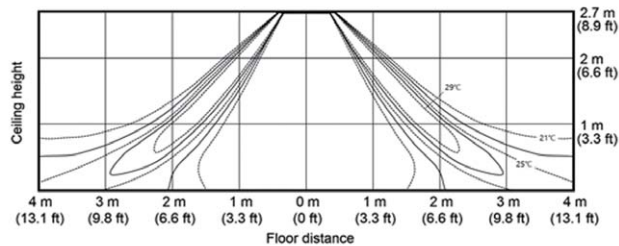
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°

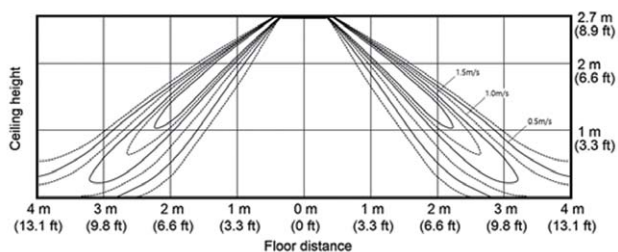


- Heating Temperature distribution
Discharge angle : 52°

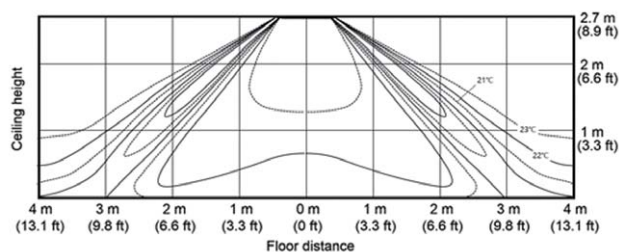


AM030BN4PCH/AA

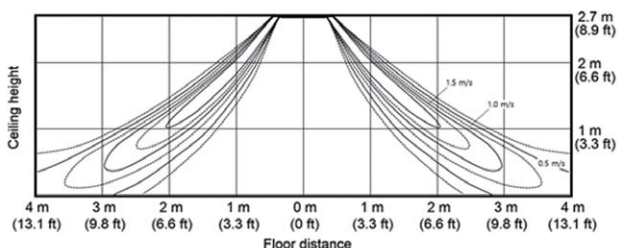
- Cooling Air Velocity distribution
Discharge angle : 45°



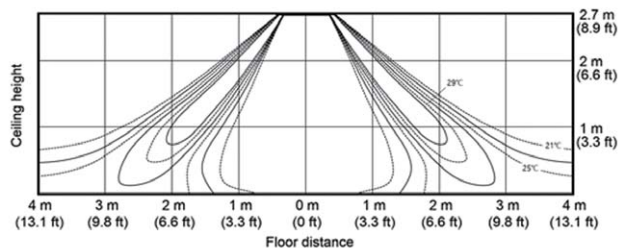
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°



- Heating Temperature distribution
Discharge angle : 52°

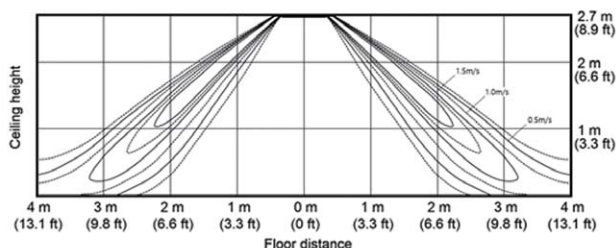


8. Temperature and air flow distribution

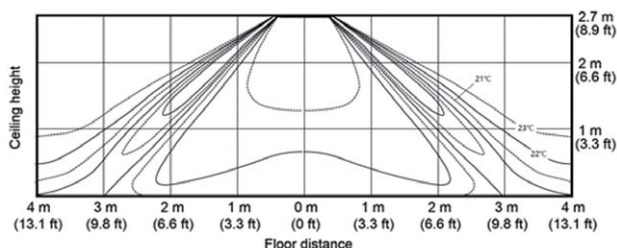
Wind-Free 4Way Cassette

AM036BN4PCH/AA

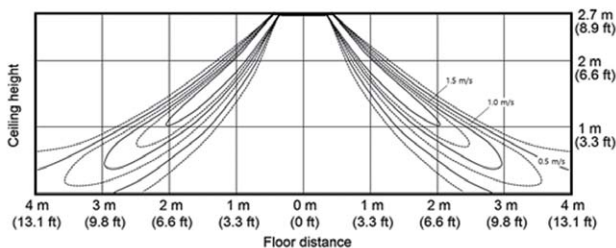
- Cooling Air Velocity distribution
Discharge angle : 45°



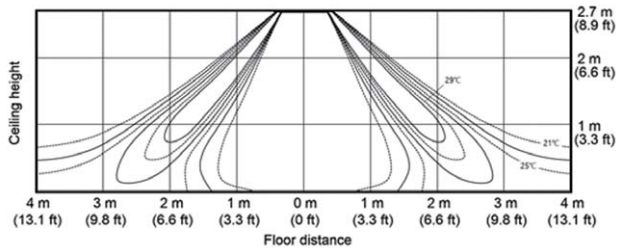
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°

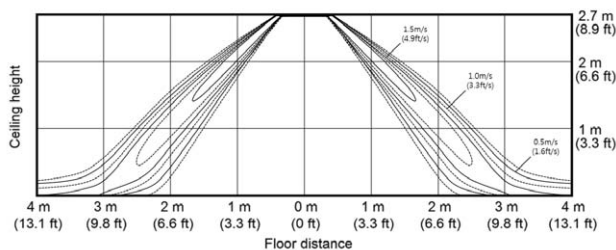


- Heating Temperature distribution
Discharge angle : 52°

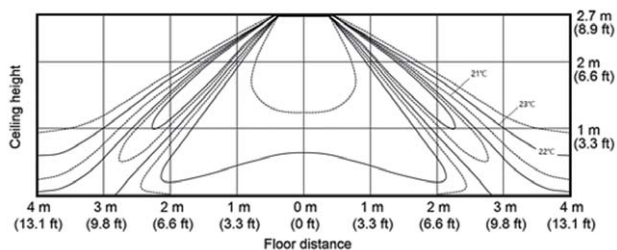


AM048BN4PCH/AA

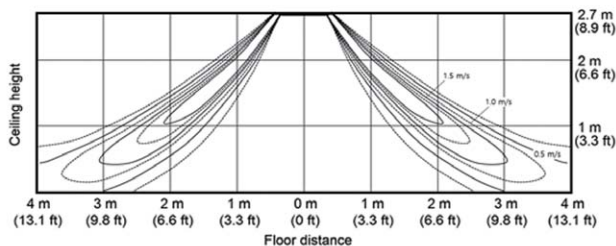
- Cooling Air Velocity distribution
Discharge angle : 45°



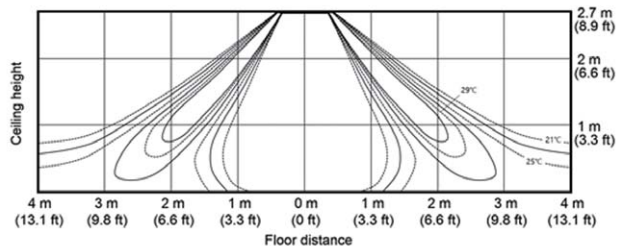
- Cooling Temperature distribution
Discharge angle : 45°



- Heating Air Velocity distribution
Discharge angle : 52°

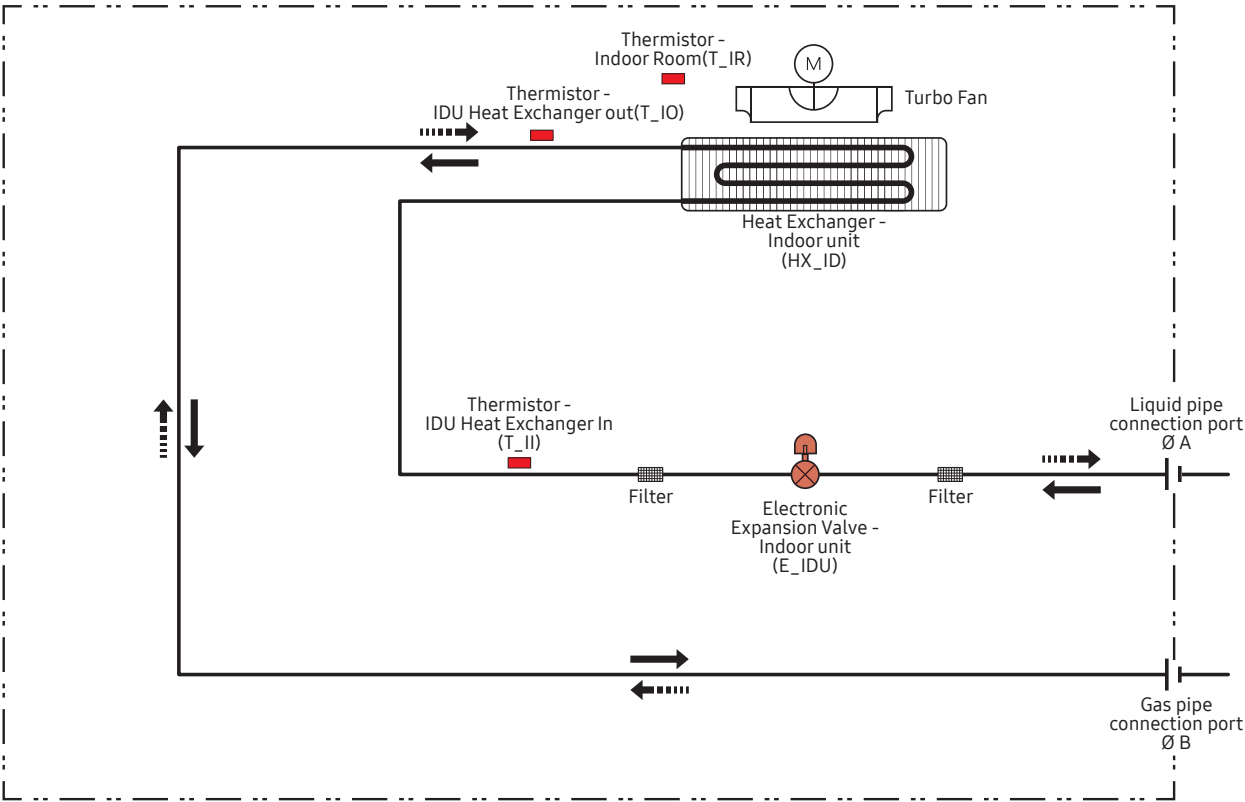


- Heating Temperature distribution
Discharge angle : 52°



9. Piping Diagram

Wind-Free 4Way Cassette



Refrigerant flow	
Cooling	Heating

Unit : inches

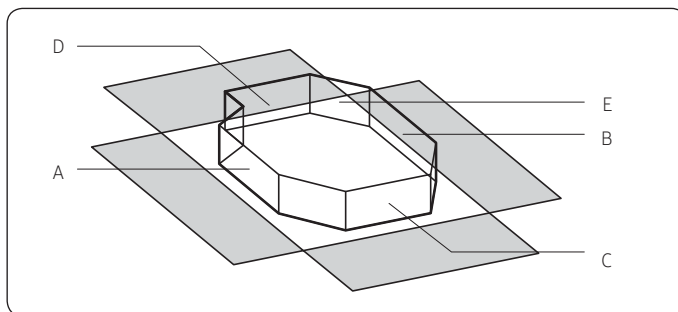
Model	A	B
AM006BN4PCH/AA	1/4"	1/2"
AM009BN4PCH/AA		
AM012BN4PCH/AA		
AM018BN4PCH/AA		
AM024BN4PCH/AA	3/8"	5/8"
AM030BN4PCH/AA		
AM036BN4PCH/AA		
AM048BN4PCH/AA		

10. Installation

Step1 Optional: Insulating the body of the indoor unit

If you install a cassette type indoor unit on the ceiling when temperature is over 27°C and humidity is over 80%, you must apply an extra 10 mm thick polyethylene insulation or a similar type of insulation to the body of the indoor unit.

Cut away the part where pipes are pulled out for the insulating work.

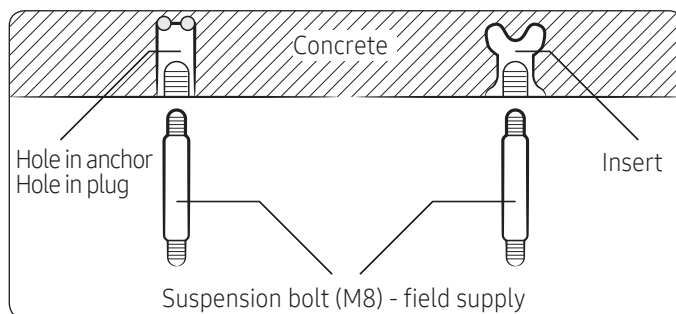


Insulate the end of the pipe and some curved area by using separate insulator.

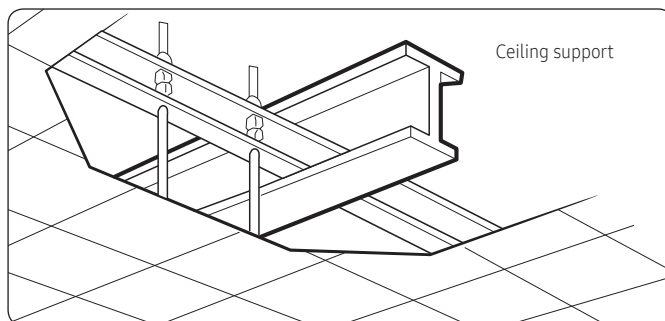
Step 2 Installing the indoor unit

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.

- 1 Insert bolt anchors, use existing ceiling supports or construct a suitable



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



⚠ CAUTION

- Make sure that the ceiling is strong enough to support the weight of the Make sure that the ceiling is strong enough to support the weight of the
 - If the length of the suspension bolt is more than 4.92ft (1.5m), you are required to prevent vibration.
- 3 Screw eight pairs of nuts and washers to the suspension bolts, making space for hanging the indoor unit.

10. Installation

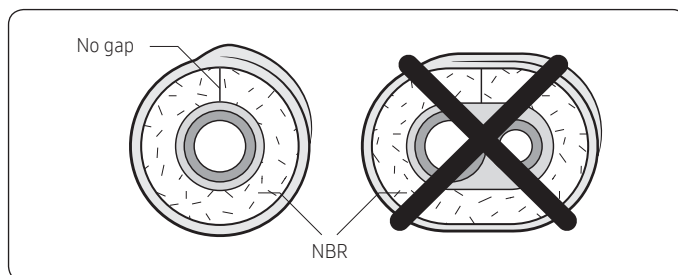
CAUTION

- 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.

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 Butadien Rubber separately around each refrigerant pipe.



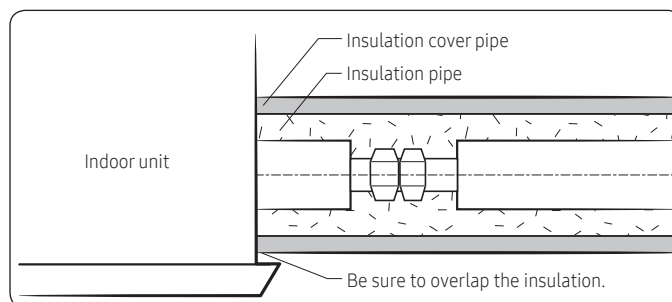
NOTE

- Always make the seam of pipes face upwards.

CAUTION

- The insulation has to be produced in full compliance with European regulation EEC / EU 2037 / 2000 requiring the use of sheaths insulation without using CFC and HCFC gases for health and the environment.

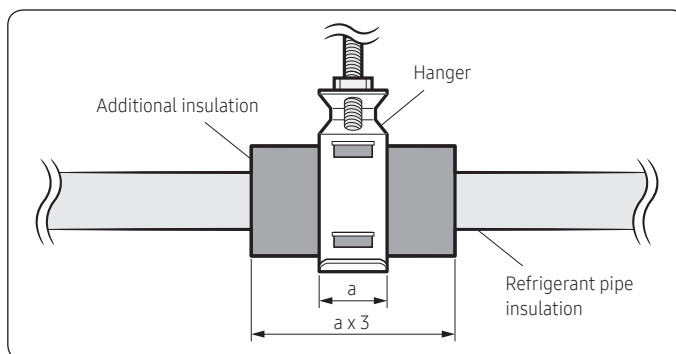
- 2 Wind insulating tape around the pipes and drain hose avoiding compressing the insulation too much.



CAUTION

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

10. Installation



3 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 86°F (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 248°F (120°C).

Pipe	Pipe size inch (mm)	Insulation Type (Heating/ Cooling)		Remarks
		Standard [86°F (30°C), 85%]	High humidity [86°F (30°C), over 85%]	
		EPDM, NBR		
Liquid pipe	Ø 1/4 (6.35) to Ø 3/8 (9.52)	9t	←	Internal temperature is higher than 248°F (120°C)
	Ø 1/2 (12.7) to Ø 2 (50.80)	13t	←	
Gas pipe	Ø 1/4 (6.35)	13t	19t	
	Ø 3/8 (9.52) to Ø 1 (25.40)	19t	25t	
	Ø 1-1/8 (28.58) to Ø 1-3/4 (44.45)		32t	
	Ø 2 (50.80)	25t	38t	

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

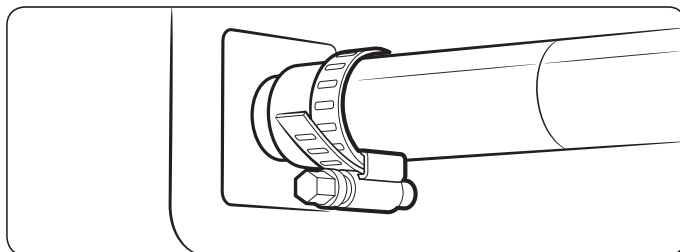
<Geological condition>
High humidity locations such as shorelines, hot springs, lake or riversides, and ridges (when part of the building is covered by earth and sand)
<Operation purpose condition>
Restaurant ceiling, sauna, swimming pool etc.
<Building construction condition>
Ceilings frequently exposed 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.

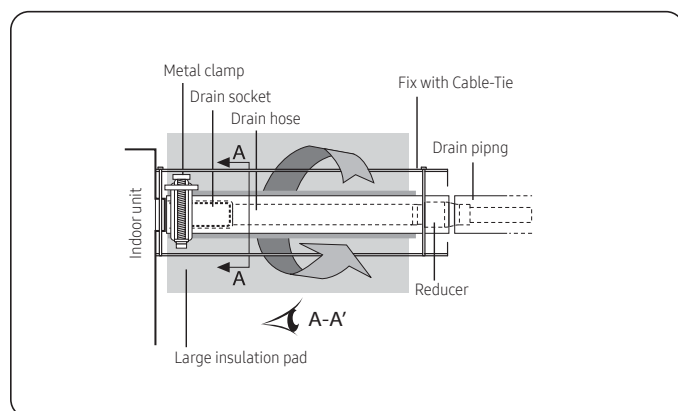
10. Installation

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.

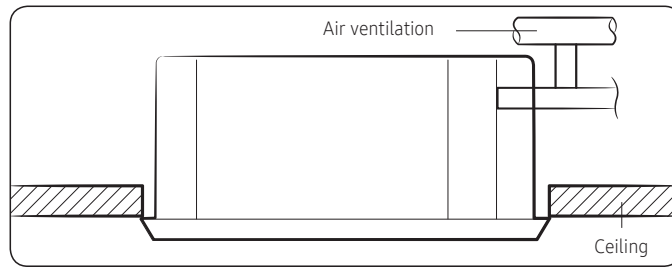


CAUTION

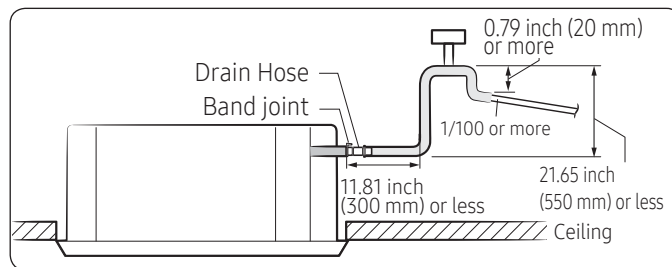
Check that the indoor unit is level with the ceiling by using the leveller.

10. Installation

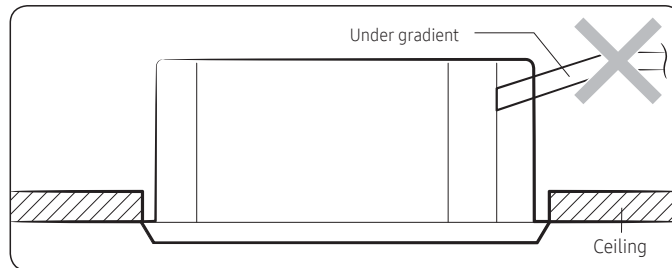
- Install air ventilation to drain condensation smoothly.



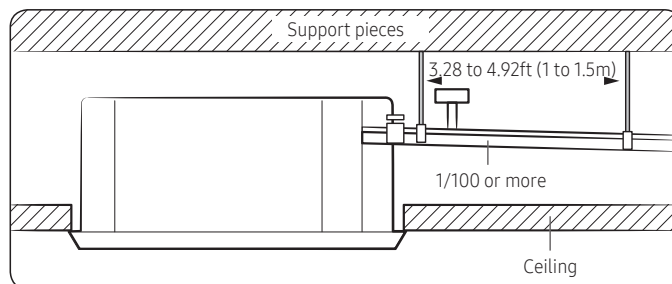
- If it is necessary to increase the height of the drain pipe, install the drain pipe straight within 11.81 inch(300 mm) from the drain hose port. If it is raised higher than 21.65 inch (550 mm), there may be water leaks.



- 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.

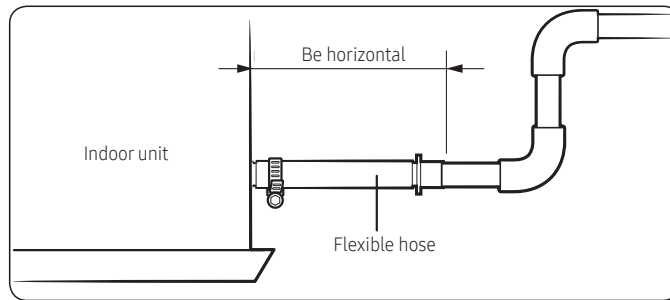


- Do not apply force to the piping on the unit side when connecting the drain hose. The hose should not be allowed to hang loose from its connection to the unit. Fasten the hose to a wall, frame or other support as close to the unit as possible.

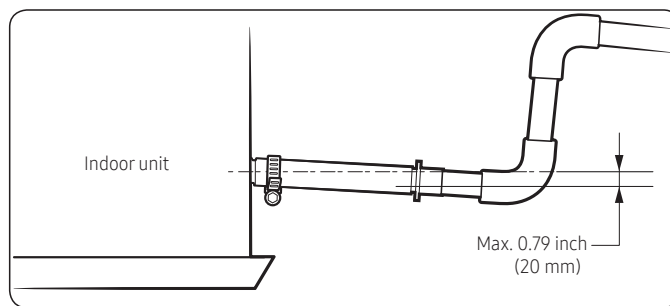


10. Installation

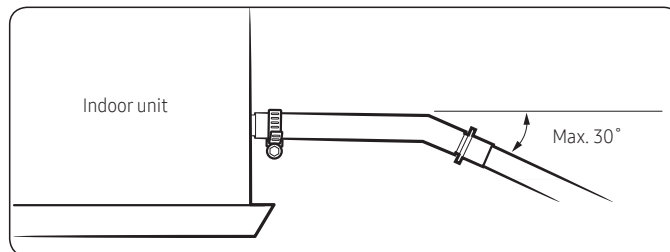
- Install horizontally.



- Max. allowable axis gap.



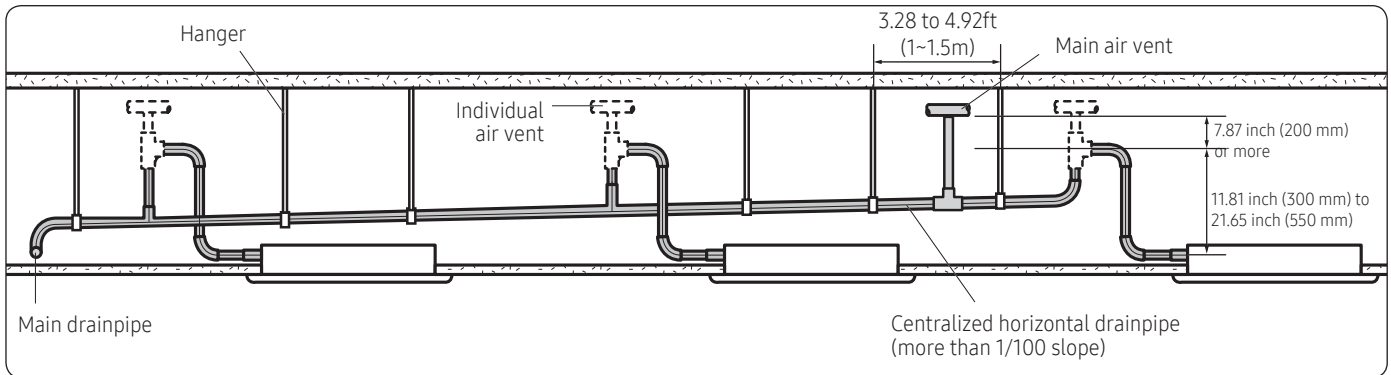
- Max. allowable bending angle.



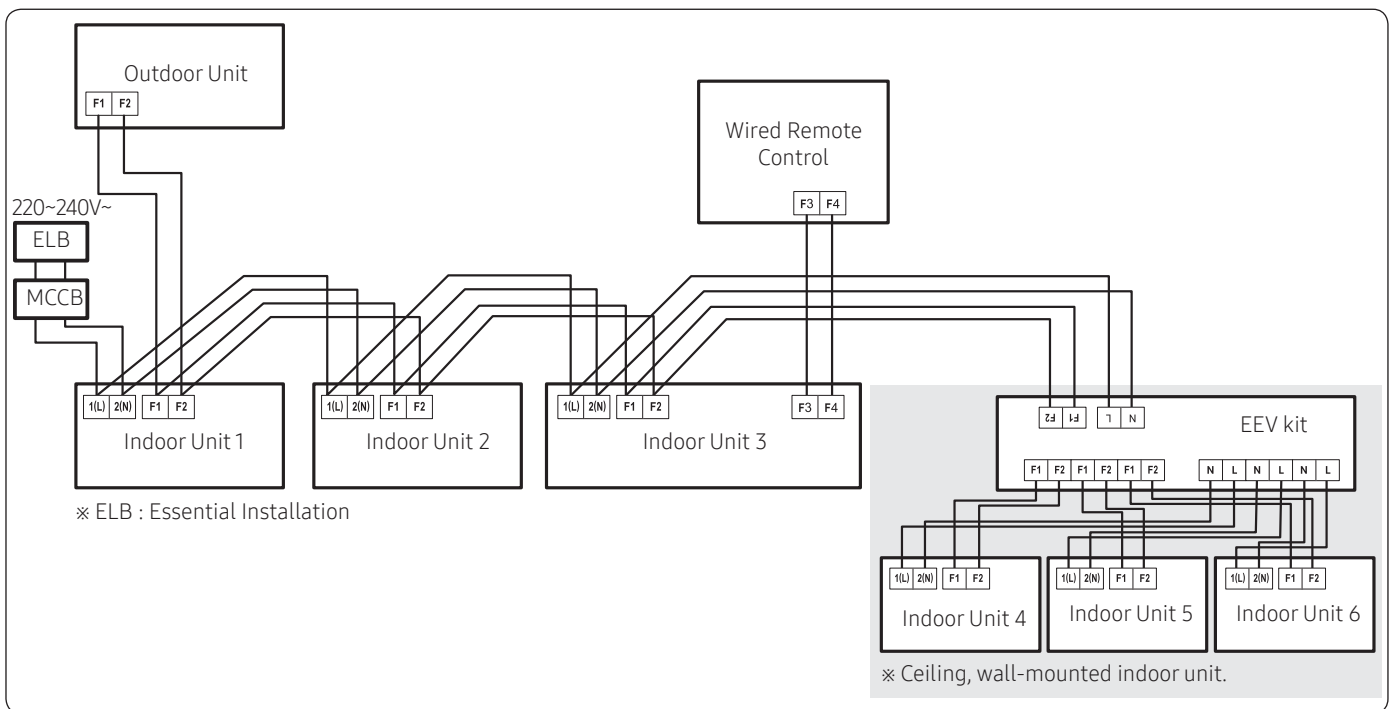
NOTE

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

10. Installation

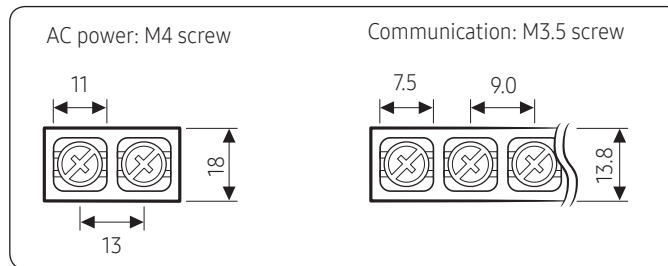


- If 3 or more units are installed, install the main air vent at the front of the farthest indoor unit from the main drain pipe.
- To prevent water from flowing back to indoor units, install an individual air vent at the top of each indoor unit.
 - The air vents should be T or 7 shaped to prevent dust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



10. Installation

Specifications of the terminal blocks



Power supply (single phase)	MCCB	ELB
Min : 187V Max : 253V	XA	XA, 30 mA 0.1 s
Power cable	Earth cable	Communication cable
0.0039 inch ² (2.5 mm ²) or more	0.0039 inch ² (2.5 mm ²)	0.0012 to 0.0023 inch 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.

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

NOTE

- X : The capacity of ELB, MCCB
- ΣA_i : Sum of rating currents of each indoor unit.

Rated currents

Model	Rating current(A)
AM006BN4PCH/AA	0.17
AM009BN4PCH/AA	0.17
AM012BN4PCH/AA	0.17
AM018BN4PCH/AA	0.32
AM024BN4PCH/AA	0.35
AM030BN4PCH/AA	0.90
AM036BN4PCH/AA	0.90
AM048BN4PCH/AA	0.95

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

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

NOTE

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



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Ver.1.0