

SAMSUNG

SINGLE

Technical

Data Book

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



Model : AC***MN**KH/EU (Indoor Unit), AC***MXAD**H/EU (Outdoor Unit)

History

Version	Modification	Date	Remark
Ver.1.0	Released CAC Wind-Free 4Way Cassette for Europe (R410A, HP)	'17.12.14	
Ver.1.1	Revised some errors of panel Weight/Shipping Dimensions and Temperature and air flow distribution of 4Way Cassette.	'18.05.04	

Features & Benefits

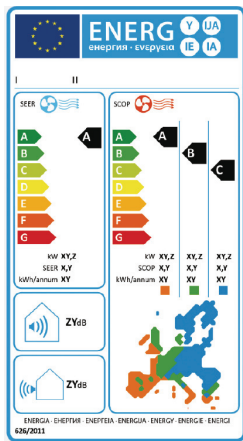
CAC - World-class energy efficiency

Maintain optimal comfort and control with energy and cost-efficient technologies

Featuring a suite of energy-optimizing technologies, Samsung CAC Single delivers top-class energy efficiency to support business in saving costs and the environment. Plus, CAC Single with its smart technologies fully complies with new European Union (EU) regulations for more efficient performance.

Small package, big performance

The Samsung Ceiling Type air conditioner boasts a slim, compact design—half the size of conventional products—with cooling power comparable to larger units.



New Energy Label

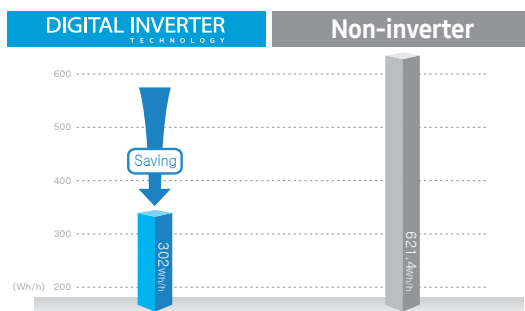
*Table 1: Introduction of revised energy consumption labelling for air conditioners as per EU Directive 2011/626/EU

Quick, efficient heating and cooling

Smart inverter technology offers powerful, quick cooling and heating with minimal electricity consumption, which means real cost savings and less energy waste. The EU has established new regulations to drastically cut the power consumption of air conditioners. Inefficient units will be gradually withdrawn from the market starting in 2013. To further support this initiative, the EU is introducing an improved energy labeling system to provide consumers a better idea of how much electricity their units consume.

Up to 50 percent less energy use

After reaching changes its operation mode to economical. By avoiding inefficient and frequent switching on and off of the compressor, the digital inverter saves up to 50 percent in energy consumption compared to non-inverter air conditioners.

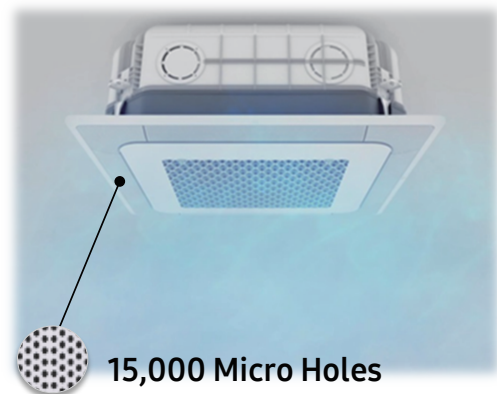


Wind-Free Cooling with Micro holes

- The Wind-Free Air conditioner pushes air out through 13,000 micro holes in the panel, producing a dispersed and gentle flow of air actually defined as “still air” and the key here is all of those holes create a still, cooled air flow that infiltrates the room gently and softly.

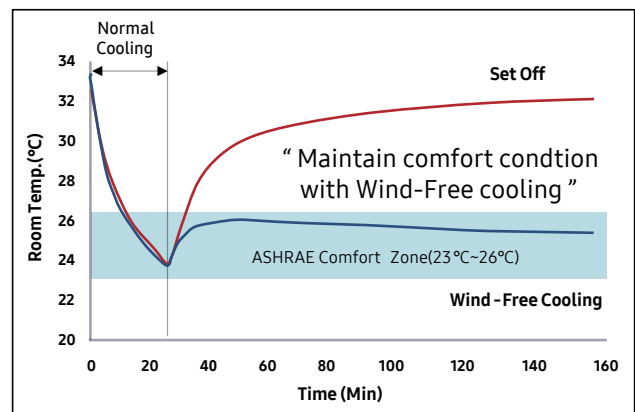
※ Still Air condition : According to ASHRAE, If velocity of wind is lower than 0.15m/s, People can not detect wind. And they define that condition is “Still Air”

No Direct Wind & Cold Draft



※ Wind-Free 4Way(600x600) : 9,000 Micro Holes

[Comparison of Room Temp.]



※ Interanal Test (14.0kW Model @ 122m²)

Features & Benefits

CAC Single - Superior performance

Stabilize the atmosphere with broad temperature allowance and control

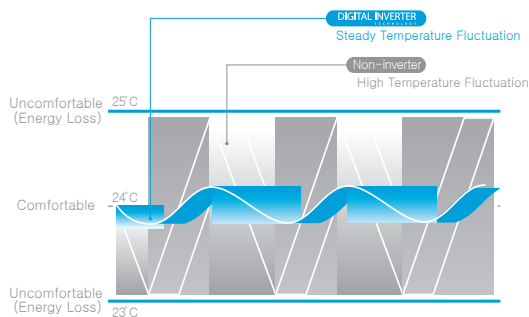
Samsung is dedicated to supporting comfortable living and working environments based on the strength of its technologies. With a single unit, CAC Single delivers reliable comfort and control over multiple areas to ensure a pleasant atmosphere in any climate.

Wide temperature performance

No matter how extreme the temperature, the high-performing CAC Single can handle the condition—without the need for an additional unit. Featuring a wide temperature allowance, it can cool in heat of up to 50 and provide warmth in the freezing cold of -20°C to ensure a constant and comfortable home environment.

Ideal comfort in minutes

The CAC Single digital inverter air conditioner works at maximum capacity at startup. As soon as the temperature reaches the desired or set temperature, CAC Single performs fine adjustments to cope with any changes. This means less temperature fluctuation and ideal comfort in a matter of minutes.



Versatile piping installation

CAC Single outdoor units offer a selection of pipe directions. The internal pipe connection ports allow four different pipe directions, supporting a neater, more organized-looking unit upon installation.



Nomenclature

Indoor Unit

Model Name

AC	026	N	N	N	D	K	H	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC
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(2) Capacity

x 1/10 kW (3 digits)

(3) Version

H	2014
J	2015
K	2016
M	2017
N	2018

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

1	1 Way Cassette
N	4 Way Cassette (600x600) Wind-Free 4 Way Cassette (600x600)
4	4 Way Cassette, 360 Cassette Wind-Free 4 Way Cassette
L	LSP Duct
M	MSP Duct
C	Ceiling
J	Console
A	A3050 (Wall Mounted)

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

K	1Φ, 220~240V, 50/60Hz
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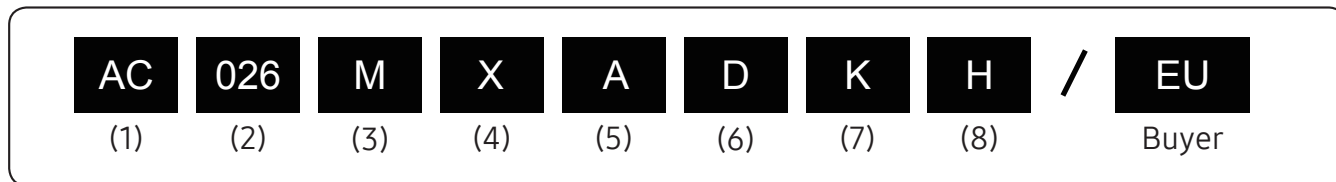
(8) Mode

H	Heat Pump
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Nomenclature

Outdoor Unit

Model Name



(1) Classification

AC	CAC
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(5) Product Notation

A	Inv+Side+General Temp
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(2) Capacity

X 1/10 kW (3 digits)

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(3) Version

H	2014
J	2015
K	2016
M	2017

(7) Rating Voltage

K	1Φ, 220~240V, 50/60Hz
N	3Φ, 380~415V, 50/60Hz

(4) Product Type













N	Indoor Unit
X	Outdoor Unit

(8) Mode















H	Heat Pump
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Line-up

Indoor unit

Model	Capacity (kW)									
	2.6	3.5	5.2	6.0	7.1	9.0	10.0	12.0	14.0	
Wind-Free 4Way CST (600x600)										
Wind-Free 4Way CST										

Outdoor Unit

Model	Capacity (kW)									
	2.6	3.5	5.2	6.0	7.1	9.0	10.0	12.0	14.0	
1Phase										
3Phase										

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Wind-Free 4Way Cassette (600x600)

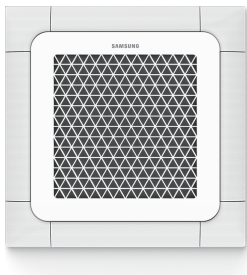
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Features & Benefits

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.

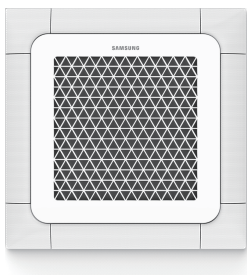
Wind-Free 4Way Cassette (600 x 600) - Tasteful design, Compact, Lightweight build

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.

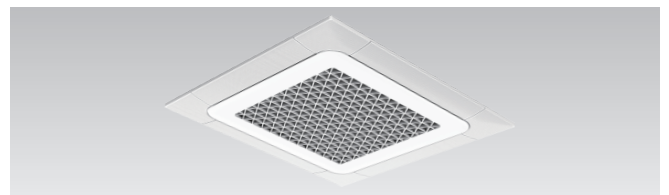
Attractive panel and display

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.



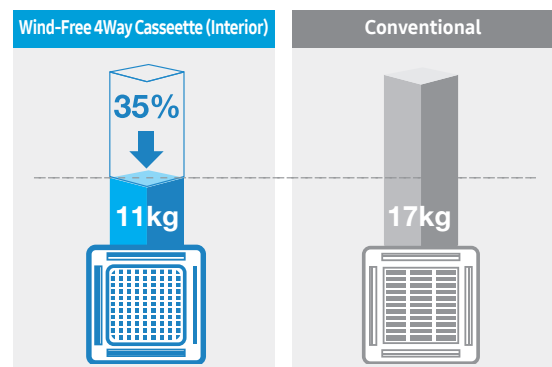
Ultra-compact size

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 11kg. It is the lightest indoor unit in the industry, about 35 percent lighter than our conventional products.



*Based on 3.5kW

1. Specification

Wind-Free 4Way Cassette (600x600)

Model Name	Indoor Unit		AC026NNNDKH/EU	AC035NNNDKH/EU	AC052NNNDKH/EU	
	Outdoor Unit		AC026MXADKH/EU	AC035MXADKH/EU	AC052MXADKH/EU	
Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling (Min/Std/Max)	kW	1.00 / 2.60 / 3.40	1.00 / 3.50 / 4.00	1.30 / 5.00 / 5.90
			Btu/h	3,400 / 8,900 / 11,600	3,400 / 11,900 / 13,600	4,400 / 17,100 / 20,100
		Heating (Min/Std/Max)	kW	0.98 / 3.40 / 4.10	1.00 / 4.00 / 4.80	1.30 / 5.50 / 7.50
			Btu/h	3,300 / 11,600 / 14,000	3,400 / 13,600 / 16,400	4,400 / 18,800 / 25,600
Power	Power Input	Cooling (Min/Std/Max)	kW	0.24 / 0.68 / 1.20	0.24 / 1.09 / 1.50	0.31 / 1.53 / 2.10
		Heating (Min/Std/Max)	kW	0.20 / 0.90 / 1.45	0.19 / 1.20 / 1.80	0.35 / 1.52 / 2.40
	Current Input	Cooling (Min/Std/Max)	A	1.60 / 3.80 / 5.50	1.60 / 5.60 / 7.50	2.60 / 6.90 / 9.50
		Heating (Min/Std/Max)	A	1.30 / 4.80 / 7.00	1.30 / 5.80 / 10.50	2.90 / 6.90 / 11.00
	Current	MCA	A	11	11	21
		MFA	A	12.5	12.5	25
Efficiency	EER	Cooling	W/W	3.82	3.21	3.27
	COP	Heating	W/W	3.78	3.33	3.62
	SEER (Cooling Energy Grade)		W/W	6.9 (A++)	6.8 (A++)	6.5 (A++)
	SCOP (Heating Energy Grade)		W/W	4.3 (A+)	4.3 (A+)	4.1 (A+)
	Pdesignh		kW	2.1	2.1	2.6
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		9.52	9.52	12.7
		Φ, inch		3/8	3/8	1/2
	Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
	Piping length (ODU-IDU)	Standard	m	5	5	5
			Max.	20	20	30
			Elevation	15	15	20
Chargeless			20	20	5	
Wiring connections	Power Source Wire		mm ²	-	-	-
	Transmission Cable		mm ²	Min. 0.75	Min. 0.75	Min. 0.75
	Remark		-	F1, F2	F1, F2	F1, F2
	Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit	Both indoor and outdoor unit
Refrigerant	Type		-	R410A	R410A	R410A
	Factory Charging		kg / tCO ₂ e	1.05 / 2.19	1.05 / 2.19	1.3 / 2.71

1. Specification

Wind-Free 4Way Cassette (600x600)

Indoor Unit	Model Name		Indoor Unit	AC026NNNDKH/EU	AC035NNNDKH/EU	AC052NNNDKH/EU	
			Outdoor Unit	AC026MXADKH/EU	AC035MXADKH/EU	AC052MXADKH/EU	
	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
	Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan
		Quantity		EA	1	1	1
		Air Flow Rate	High/Mid/Low	CMM	8.0 / 7.0 / 6.0	9.2 / 8.0 / 6.4	10.5 / 9.5 / 8.5
				l/s	133.3 / 116.7 / 100.0	153.3 / 133.3 / 106.7	175.0 / 158.3 / 141.7
		External Static Pressure	Min/Std/Max	mmAq	-	-	-
	Pa			-	-	-	
	Fan Motor	Output		W x n	65 x 1	65 x 1	65 x 1
	Drain	Drain Pipe		Φ, mm	VP-25(OD32, ID25)	VP-25(OD32, ID25)	VP-25(OD32, ID25)
	Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)	31 / 28 / 25	34 / 30 / 25	39 / 34 / 29
		Sound Power Level		dB(A)	48	50	56
	External Dimension	Net Weight		kg	11.4	11.4	11.6
		Shipping Weight		kg	13.7	13.7	14
		Net Dimensions (WxHxD)		mm	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575
		Shipping Dimensions (WxHxD)		mm	623 x 298 x 653	623 x 298 x 653	623 x 298 x 653
	Casing	Material		-	Polypropylene	Polypropylene	Polypropylene
	Panel	Model Name		-	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN
		Type		-	Wind-Free Type	Wind-Free Type	Wind-Free Type
		Material		-	HIPS	HIPS	HIPS
		Color		-	DA White	DA White	DA White
		Net Weight		kg	2.7	2.7	2.7
		Shipping Weight		kg	3.9	3.9	3.9
		Net Dimensions (WxHxD)		mm	620 x 57 x 620	620 x 57 x 620	620 x 57 x 620
		Shipping Dimensions (WxHxD)		mm	670 x 120 x 655	670 x 120 x 655	670 x 120 x 655
	Control System	Infrared remote control		-	AR-EH03E	AR-EH03E	AR-EH03E
	Control System	Wired remote control		-	MWR-WE13N	MWR-WE13N	MWR-WE13N
	Drain Pump	Drain Pump		-	Included	Included	Included
Max. lifting Height / Displacement		mm / Liter/h	750/24	750/24	750/24		
Additional Accessories	Drain Pump	External Model	-	-	-	-	
		Internal Model	-	-	-	-	
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-	
	Air Filter		-	Removable / Washable	Removable / Washable	Removable / Washable	
	Virus Doctor		-	Option	Option	Option	

1. Specification

Wind-Free 4Way Cassette (600x600)

Model Name	Indoor Unit			AC026NNNDKH/EU	AC035NNNDKH/EU	AC052NNNDKH/EU	
	Outdoor Unit			AC026MXADKH/EU	AC035MXADKH/EU	AC052MXADKH/EU	
Power Supply				Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	1, 2, 220-240, 50
Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	FMC
	Material	Fin		-	Al	Al	Al
		Tube		-	Cu	Cu	Al
	Fin Treatment			-	Anti-Corrosion	Anti-Corrosion	Hybrid Coating
Compressor	Model Name				UG9AJ3090FER	UG9AJ3090FER	UG9TK3150FE4
	Output			kW	0.83	0.83	1.42
	Oil	Type		-	POE	POE	POE
		Initial charge		cc	320	320	500
Fan	Type			-	Propeller	Propeller	Propeller
	Discharge direction			-	Front	Front	Front
	Quantity			EA	1	1	1
	Air Flow Rate			CMM	29	30	40
l/s				483	500	667	
Fan Motor	Type			-	BLDC Motor	BLDC Motor	BLDC Motor
	Output			W x n	68 x 1	68 x 1	125 x 1
Sound	Sound Pressure Level	Cooling		dB(A)	46	48	48
		Heating		dB(A)	47	48	48
	Sound Power Level			dB(A)	59	61	62
External Dimension	Net Weight			kg	32.8	32.8	43.8
	Shipping Weight			kg	35.8	35.8	47.5
	Net Dimensions (WxHxD)			mm	790 x 548 x 285	790 x 548 x 285	880 x 638 x 310
	Shipping Dimensions (WxHxD)			mm	926 x 640 x 384	926 x 640 x 384	1023 x 730 x 413
Casing	Material	Body		-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate
		Operating Temp. Range			°C	-15 ~ 50	-15 ~ 50
Heating			°C	-20 ~ 24	-20 ~ 24	-20 ~ 24	

NOTE

- Specification may be subject to change without prior notice. Specification comply with EN14511.
 - 1) Capacities are based on (Equivalent refrigerant piping 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
 - 2) Sound power level is an absolute value that a sound source generates.
 - Sound power level is based on cooling operation.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound values are obtained in an anechoic room.
 - Sound values of multi combination are theoretical values based on sound results of individual installed units.
 - 3) These products contain R410A(GWP=2,088) which is fluorinated greenhouse gas.
- In case you want to know more information regarding capacity and correction, please refer to capacity table TDB on pvi.samsung.com site.

1. Specification

Wind-Free 4Way Cassette (600x600)

Model Name	Indoor Unit			AC060NNNDKH/EU	AC071NNNDKH/EU
	Outdoor Unit			AC060MXADKH/EU	AC071MXADKH/EU
Mode				-	HEAT PUMP
Performance	Capacity	Cooling (Min/Std/Max)	kW	1.80 / 5.80 / 6.50	2.20 / 6.80 / 8.00
			Btu/h	6,100 / 19,800 / 22,200	7,500 / 23,200 / 27,300
		Heating (Min/Std/Max)	kW	1.60 / 7.00 / 9.00	1.90 / 7.50 / 9.00
			Btu/h	5,500 / 23,900 / 30,700	6,500 / 25,600 / 30,700
Power	Power Input	Cooling (Min/Std/Max)	kW	0.38 / 2.15 / 2.60	0.35 / 2.72 / 3.95
		Heating (Min/Std/Max)	kW	0.35 / 2.32 / 3.60	0.35 / 2.80 / 3.95
	Current Input	Cooling (Min/Std/Max)	A	1.90 / 9.30 / 11.50	2.00 / 11.80 / 17.00
		Heating (Min/Std/Max)	A	1.70 / 10.00 / 17.30	2.00 / 12.30 / 17.00
	Current	MCA	A	21	21
		MFA	A	25	25
Efficiency	EER	Cooling	W/W	2.70	2.50
	COP	Heating	W/W	3.02	2.68
	SEER (Cooling Energy Grade)		W/W	6.2 (A++)	6.0 (A+)
	SCOP (Heating Energy Grade)		W/W	4.0 (A+)	3.8 (A)
	Pdesignh		kW	2.6	4
Piping Connections	Liquid Pipe	Type		Flare connection	Flare connection
		Φ, mm		6.35	6.35
		Φ, inch		1/4	1/4
	Gas Pipe	Type		Flare connection	Flare connection
		Φ, mm		12.7	15.88
		Φ, inch		1/2	5/8
	Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes
	Piping length (ODU-IDU)	Standard	m	5	5
		Max.	m	30	50
		Elevation	m	20	30
Chargeless		m	5	5	
Wiring connections	Power Source Wire		mm ²	-	-
	Transmission Cable		mm ²	Min. 0.75	Min. 0.75
	Remark		-	F1, F2	F1, F2
	Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit
Refrigerant	Type		-	R410A	R410A
	Factory Charging		kg / tCO ₂ e	1.3 / 2.71	1.5 / 3.13

1. Specification

Wind-Free 4Way Cassette (600x600)

Model Name	Indoor Unit		AC060NNNDKH/EU	AC071NNNDKH/EU
	Outdoor Unit		AC060MXADKH/EU	AC071MXADKH/EU
Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50
Heat Exchanger	Type		-	Fin & Tube
	Material	Fin	-	Al
		Tube	-	Cu
Fan	Type		-	Turbo Fan
	Quantity		EA	1
	Air Flow Rate	High/Mid/Low	CMM	11.0 / 10.0 / 9.0
			l/s	183.3 / 166.7 / 150.0
	External Static Pressure	Min/Std/Max	mmAq	-
Pa			-	
Fan Motor	Output		W x n	65 x 1
Drain	Drain Pipe		Φ, mm	VP-25(OD32, ID25)
Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)	41 / 37 / 32
	Sound Power Level		dB(A)	56
External Dimension	Net Weight		kg	11.6
	Shipping Weight		kg	14
	Net Dimensions (WxHxD)		mm	575 x 250 x 575
	Shipping Dimensions (WxHxD)		mm	623 x 298 x 653
Casing	Material		-	Polypropylene
Panel	Model Name		-	PC4SUFMAN
	Type		-	Wind-Free Type
	Material		-	HIPS
	Color		-	DA White
	Net Weight		kg	2.7
	Shipping Weight		kg	3.5
	Net Dimensions (WxHxD)		mm	620 x 57 x 620
	Shipping Dimensions (WxHxD)		mm	670 x 120 x 655
Control System	Infrared remote control		-	AR-EH03E
Control System	Wired remote control		-	MWR-WE13N
Drain Pump	Drain Pump		-	Included
	Max. lifting Height / Displacement		mm / Liter/h	750/24
Additional Accessories	Drain Pump	External Model	-	-
		Internal Model	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-
	Air Filter		-	Removable / Washable
Virus Doctor		-	Option	

1. Specification

Wind-Free 4Way Cassette (600x600)

	Model Name		Indoor Unit	AC060NNNDKH/EU	AC071NNNDKH/EU	
			Outdoor Unit	AC060MXADKH/EU	AC071MXADKH/EU	
Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	FMC	FMC
		Material	Fin	-	Al	Al
			Tube	-	Al	Al
		Fin Treatment		-	Hybrid Coating	Hybrid Coating
	Compressor	Model Name			UG9TK3150FE4	UG4T200FUAE4
		Output		kW	1.42	1.79
		Oil	Type	-	POE	POE
			Initial charge	cc	500	650
	Fan	Type		-	Propeller	Propeller
		Discharge direction		-	Front	Front
		Quantity		EA	1	1
		Air Flow Rate			CMM	40
			l/s	667	850	
	Fan Motor	Type		-	BLDC Motor	BLDC Motor
		Output		W x n	125 x 1	125 x 1
	Sound	Sound Pressure Level	Cooling	dB(A)	49	49
			Heating	dB(A)	49	51
		Sound Power Level		dB(A)	62	65
	External Dimension	Net Weight		kg	43.8	53
		Shipping Weight		kg	47.5	57.2
		Net Dimensions (WxHxD)		mm	880 x 638 x 310	880 x 798 x 310
Shipping Dimensions (WxHxD)		mm	1023 x 730 x 413	1023 x 911 x 413		
Casing	Material	Body	-	EGI Steel Plate	EGI Steel Plate	
Operating Temp. Range	Cooling		°C	-15 ~ 50	-15 ~ 50	
	Heating		°C	-20 ~ 24	-20 ~ 24	

NOTE

- Specification may be subject to change without prior notice. Specification comply with EN14511.
 - 1) Capacities are based on (Equivalent refrigerant piping 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
 - 2) Sound power level is an absolute value that a sound source generates.
 - Sound power level is based on cooling operation.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound values are obtained in an anechoic room.
 - Sound values of multi combination are theoretical values based on sound results of individual installed units.
 - 3) These products contain R410A(GWP=2,088) which is fluorinated greenhouse gas.
- In case you want to know more information regarding capacity and correction, please refer to capacity table TDB on pvi.samsung.com site.

2. Summary Table

Wind-Free 4Way Cassette (600x600)

Performance Characteristics

Model Code	Net Weight (kg)	Capacity		Fan Speed	Airflow (Cooling/Heating) (CMM)	Sound Pressure Level (dBA)	Sound Power Level (dBA)	
		Cooling (kW)	Heating (kW)					
AC026NNNDKH/EU	11.4	Max.	3.4	4.1	High	8.0 / 10.0	31	48
		Std.	2.6	3.4	Mid	7.0 / 9.0	28	-
		Min.	1.0	0.98	Low	6.0 / 8.0	25	-
AC035NNNDKH/EU	11.4	Max.	4.0	4.8	High	9.2 / 10.4	34	50
		Std.	3.5	4.0	Mid	8.0 / 9.0	30	-
		Min.	1.0	1.0	Low	6.4 / 7.8	25	-
AC052NNNDKH/EU	11.6	Max.	5.9	7.5	High	10.5 / 10.5	39	56
		Std.	5.0	5.5	Mid	9.5 / 9.5	34	-
		Min.	1.3	1.3	Low	8.5 / 8.5	29	-
AC060NNNDKH/EU	11.6	Max.	6.5	9.0	High	11.0 / 11.0	41	56
		Std.	5.8	7.0	Mid	10.0 / 10.0	37	-
		Min.	1.8	1.6	Low	9.0 / 9.0	32	-
AC071NNNDKH/EU	11.8	Max.	8.0	9.0	High	11.5 / 11.5	42	58
		Std.	6.8	7.5	Mid	10.5 / 10.5	39	-
		Min.	2.2	1.9	Low	9.5 / 9.5	36	-

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

Model		Outdoor Unit				Input Current (Amperes)			Power Supply		
Indoor Unit	Outdoor Unit	Rated Hz	Voltage range			Outdoor Unit		Indoor Unit	Total	MCA(A)	MFA(A)
			Volts	Min.	Max.	Cooling	Heating				
AC026NNNDKH/EU	AC026MXADKH/EU	50	220 to 240	198	264	10	10	1	11	11	12.5
AC035NNNDKH/EU	AC035MXADKH/EU	50	220 to 240	198	264	10	10	1	11	11	12.5
AC052NNNDKH/EU	AC052MXADKH/EU	50	220 to 240	198	264	20	20	1	21	21	25
AC060NNNDKH/EU	AC060MXADKH/EU	50	220 to 240	198	264	20	20	1	21	21	25
AC071NNNDKH/EU	AC071MXADKH/EU	50	220 to 240	198	264	20	20	1	21	21	25

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

(1) AC026NNNDKH/EU + AC026MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	2.54	2.15	0.49	2.67	2.21	0.50	2.78	2.28	0.51	2.87	2.35	0.52	2.92	2.33	0.52	3.07	2.30	0.53	3.22	2.26	0.54
21	2.42	2.04	0.51	2.54	2.11	0.52	2.65	2.17	0.53	2.73	2.24	0.54	2.78	2.22	0.55	2.92	2.19	0.55	3.07	2.15	0.57
35	2.30	1.95	0.64	2.42	2.01	0.65	2.52	2.07	0.67	2.60	2.13	0.68	2.65	2.11	0.69	2.78	2.09	0.69	2.92	2.05	0.71
46	1.96	1.80	0.58	2.06	1.86	0.59	2.14	1.92	0.60	2.21	1.97	0.61	2.25	1.95	0.62	2.37	1.93	0.62	2.49	1.90	0.64
50	1.50	1.42	0.51	1.57	1.46	0.52	1.64	1.51	0.53	1.69	1.55	0.54	1.72	1.54	0.55	1.81	1.52	0.55	1.90	1.49	0.57

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	2.39	1.19	2.37	1.18	2.35	1.17	2.32	1.16	2.30	1.15	2.28	1.14
-15	3.02	1.38	2.99	1.36	2.96	1.35	2.93	1.34	2.90	1.32	2.87	1.31
-5	3.40	1.29	3.37	1.27	3.33	1.26	3.30	1.25	3.27	1.23	3.23	1.22
0	3.54	1.10	3.50	1.09	3.47	1.08	3.43	1.07	3.40	1.06	3.36	1.05
7	3.47	0.92	3.43	0.91	3.40	0.90	3.37	0.89	3.33	0.88	3.30	0.87
24	4.51	1.06	4.46	1.05	4.42	1.04	4.38	1.02	4.33	1.01	4.29	1.00

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

(2) AC035NNNDKH/EU+ AC035MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	3.41	2.68	0.78	3.59	2.76	0.80	3.74	2.84	0.81	3.86	2.93	0.83	3.94	2.90	0.84	4.13	2.87	0.84	4.34	2.82	0.86
21	3.25	2.55	0.82	3.42	2.63	0.84	3.56	2.71	0.85	3.68	2.79	0.87	3.75	2.77	0.88	3.94	2.74	0.89	4.13	2.68	0.91
35	3.10	2.43	1.03	3.26	2.50	1.05	3.40	2.58	1.07	3.50	2.66	1.09	3.57	2.63	1.10	3.75	2.61	1.11	3.94	2.55	1.13
46	2.63	2.26	0.92	2.77	2.33	0.94	2.89	2.40	0.96	2.98	2.48	0.98	3.03	2.45	0.99	3.19	2.43	1.00	3.35	2.38	1.02
50	2.01	1.79	0.82	2.12	1.84	0.84	2.21	1.90	0.85	2.28	1.96	0.87	2.32	1.94	0.88	2.44	1.92	0.89	2.56	1.88	0.91

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	2.82	1.59	2.79	1.58	2.76	1.56	2.73	1.54	2.71	1.53	2.68	1.51
-15	3.55	1.84	3.51	1.82	3.48	1.80	3.45	1.78	3.41	1.76	3.38	1.75
-5	4.00	1.71	3.96	1.70	3.92	1.68	3.88	1.66	3.84	1.65	3.80	1.63
0	4.16	1.47	4.12	1.45	4.08	1.44	4.04	1.43	4.00	1.41	3.96	1.40
7	4.08	1.22	4.04	1.21	4.00	1.20	3.96	1.19	3.92	1.18	3.88	1.16
24	5.30	1.41	5.25	1.39	5.20	1.38	5.15	1.37	5.10	1.35	5.05	1.34

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

(3) AC052NNNDKH/EU + AC052MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	4.88	3.72	1.09	5.13	3.84	1.12	5.35	3.96	1.14	5.51	4.08	1.16	5.62	4.04	1.17	5.90	4.00	1.19	6.20	3.92	1.21
21	4.64	3.55	1.15	4.89	3.66	1.18	5.09	3.77	1.20	5.25	3.89	1.22	5.36	3.85	1.24	5.62	3.81	1.25	5.90	3.73	1.27
35	4.42	3.38	1.44	4.66	3.48	1.47	4.85	3.59	1.50	5.00	3.70	1.53	5.10	3.66	1.55	5.36	3.63	1.56	5.62	3.55	1.59
46	3.76	3.15	1.30	3.96	3.25	1.32	4.12	3.35	1.35	4.25	3.46	1.38	4.34	3.42	1.39	4.55	3.39	1.40	4.78	3.32	1.43
50	2.88	2.49	1.15	3.03	2.57	1.18	3.15	2.65	1.20	3.25	2.73	1.22	3.32	2.70	1.24	3.48	2.68	1.25	3.65	2.62	1.27

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	3.87	2.02	3.83	2.00	3.80	1.98	3.76	1.96	3.72	1.94	3.68	1.92
-15	4.88	2.33	4.83	2.30	4.79	2.28	4.74	2.26	4.69	2.23	4.64	2.21
-5	5.50	2.17	5.44	2.15	5.39	2.13	5.34	2.11	5.28	2.09	5.23	2.06
0	5.72	1.86	5.67	1.84	5.61	1.82	5.55	1.81	5.50	1.79	5.44	1.77
7	5.61	1.55	5.56	1.54	5.50	1.52	5.45	1.50	5.39	1.49	5.34	1.47
24	7.29	1.78	7.22	1.77	7.15	1.75	7.08	1.73	7.01	1.71	6.94	1.70

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

(4) AC060NNNDKH/EU+ AC060MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	5.66	4.09	1.54	5.95	4.21	1.57	6.20	4.34	1.60	6.39	4.48	1.63	6.52	4.43	1.65	6.85	4.39	1.67	7.19	4.30	1.70
21	5.39	3.89	1.62	5.67	4.01	1.65	5.91	4.14	1.69	6.09	4.26	1.72	6.21	4.22	1.74	6.52	4.18	1.75	6.85	4.09	1.79
35	5.13	3.71	2.02	5.40	3.82	2.06	5.63	3.94	2.11	5.80	4.06	2.15	5.92	4.02	2.17	6.21	3.98	2.19	6.52	3.90	2.24
46	4.36	3.61	1.82	4.59	3.72	1.86	4.78	3.84	1.90	4.93	3.96	1.94	5.03	3.92	1.95	5.28	3.88	1.97	5.54	3.80	2.01
50	3.34	2.89	1.62	3.51	2.98	1.65	3.66	3.07	1.69	3.77	3.17	1.72	3.85	3.14	1.74	4.04	3.10	1.75	4.24	3.04	1.79

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	4.93	3.08	4.88	3.05	4.83	3.02	4.78	2.99	4.73	2.96	4.69	2.93
-15	6.21	3.55	6.15	3.51	6.09	3.48	6.03	3.45	5.97	3.41	5.91	3.38
-5	7.00	3.31	6.93	3.28	6.86	3.25	6.79	3.22	6.72	3.18	6.66	3.15
0	7.28	2.84	7.21	2.81	7.14	2.78	7.07	2.76	7.00	2.73	6.93	2.70
7	7.14	2.37	7.07	2.34	7.00	2.32	6.93	2.30	6.86	2.27	6.79	2.25
24	9.28	2.72	9.19	2.69	9.10	2.67	9.01	2.64	8.92	2.61	8.83	2.59

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette (600x600)

(5) AC071NNNDKH/EU + AC071MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	6.63	4.58	1.95	6.98	4.73	1.99	7.27	4.87	2.03	7.50	5.02	2.07	7.65	4.97	2.09	8.03	4.92	2.11	8.43	4.82	2.15
21	6.32	4.37	2.05	6.65	4.50	2.09	6.93	4.64	2.13	7.14	4.78	2.18	7.28	4.74	2.20	7.65	4.69	2.22	8.03	4.59	2.26
35	6.02	4.16	2.56	6.33	4.29	2.61	6.60	4.42	2.67	6.80	4.56	2.72	6.94	4.51	2.75	7.28	4.47	2.77	7.65	4.38	2.83
46	5.11	3.92	2.30	5.38	4.04	2.35	5.61	4.17	2.40	5.78	4.30	2.45	5.90	4.25	2.47	6.19	4.21	2.50	6.50	4.13	2.55
50	3.91	3.11	2.05	4.12	3.20	2.09	4.29	3.30	2.13	4.42	3.40	2.18	4.51	3.37	2.20	4.73	3.34	2.22	4.97	3.27	2.26

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)													
	16		18		20		21		22		24			
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
-20	5.28	3.71	5.23	3.68	5.18	3.64	5.12	3.60	5.07	3.57	5.02	3.53		
-15	6.66	4.28	6.59	4.24	6.53	4.20	6.46	4.16	6.40	4.12	6.33	4.08		
-5	7.50	4.00	7.42	3.96	7.35	3.92	7.28	3.88	7.20	3.84	7.13	3.80		
0	7.80	3.43	7.73	3.39	7.65	3.36	7.57	3.33	7.50	3.29	7.42	3.26		
7	7.65	2.86	7.58	2.83	7.50	2.80	7.43	2.77	7.35	2.74	7.28	2.72		
24	9.95	3.28	9.85	3.25	9.75	3.22	9.65	3.19	9.56	3.16	9.46	3.12		

NOTE

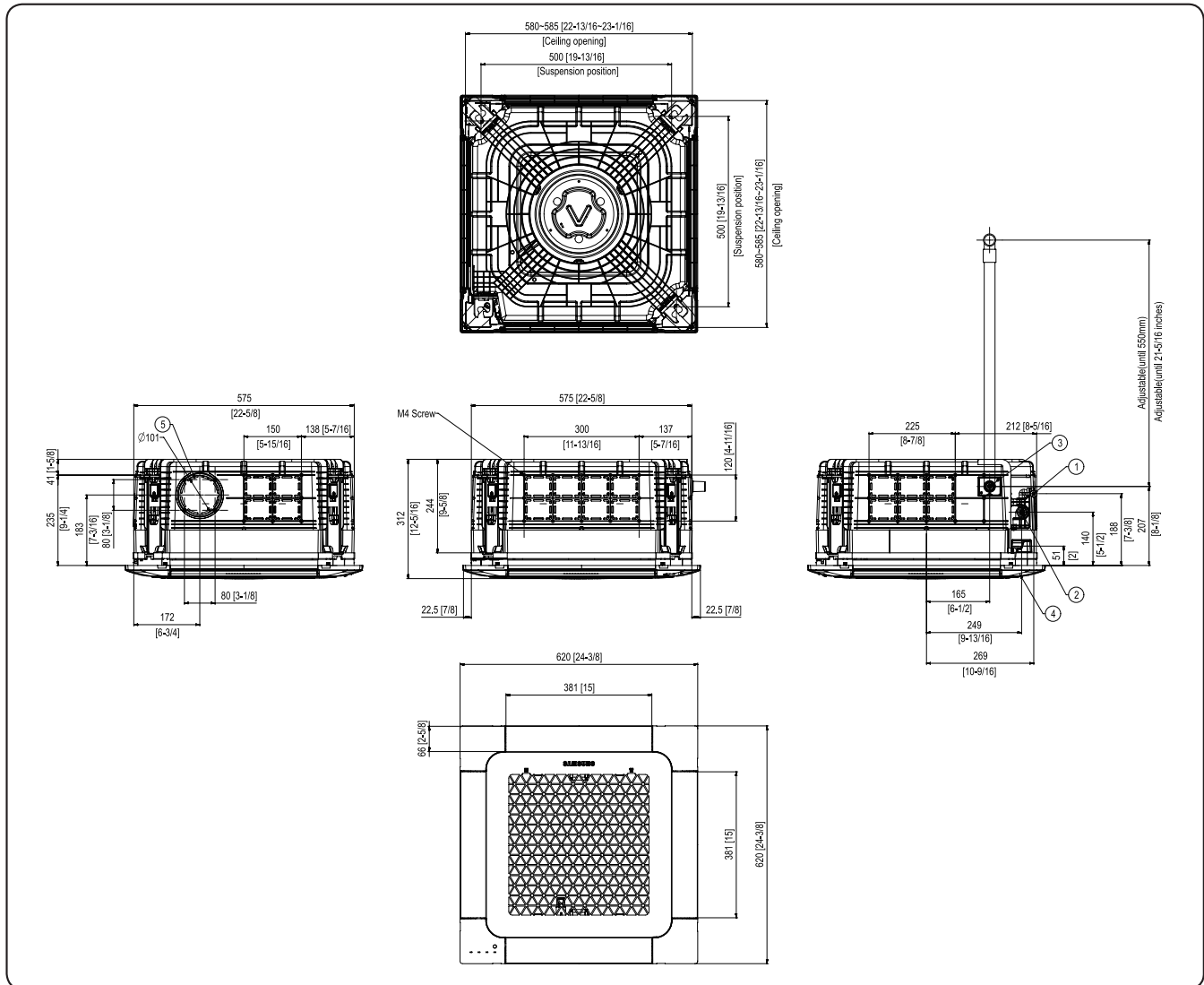
- The performance table shows the average value of each conditions.

4. Dimensional Drawing

Wind-Free 4Way Cassette (600x600)

AC026/035/052/060/071NNNDKH/EU

Units : mm [inches]



No.	Name	Description		
		AC026NNNDKH/EU	AC052NNNDKH/EU	AC071NNNDKH/EU
1	Liquid pipe connection	$\phi 6.35(1/4)$		
2	Gas pipe connection	$\phi 9.52(3/8)$	$\phi 12.7(1/2)$	$\phi 15.88(3/8)$
3	Drain pipe connection	VP-25(OD32, ID25)		
4	Power supply & Communication wiring conduit			
5	Fresh air intake knockout hole	$\phi 10[4]$, Use M4 Screw		

NOTE

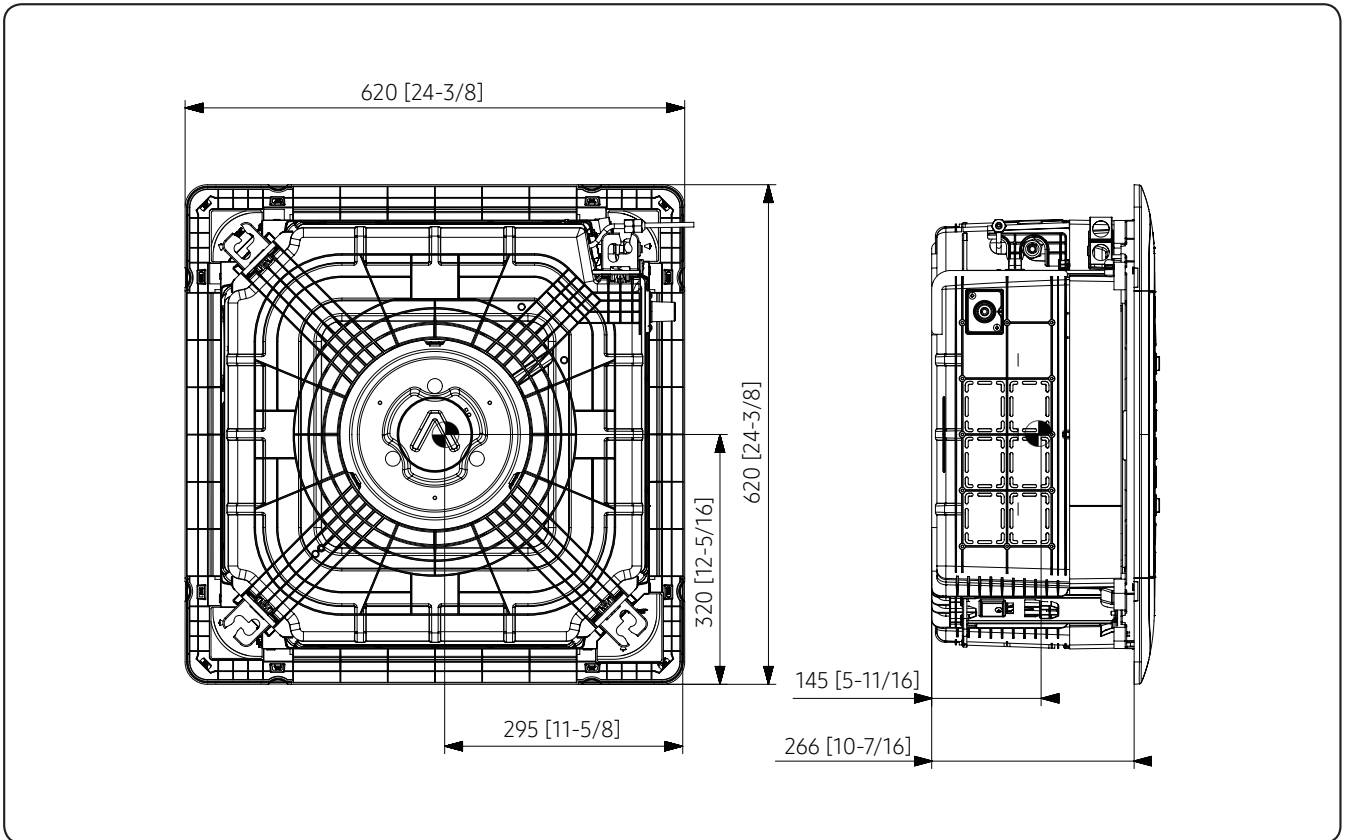
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

5. Center of Gravity

Wind-Free 4Way Cassette (600x600)

AC026/035/052/060/071NNNDKH/EU

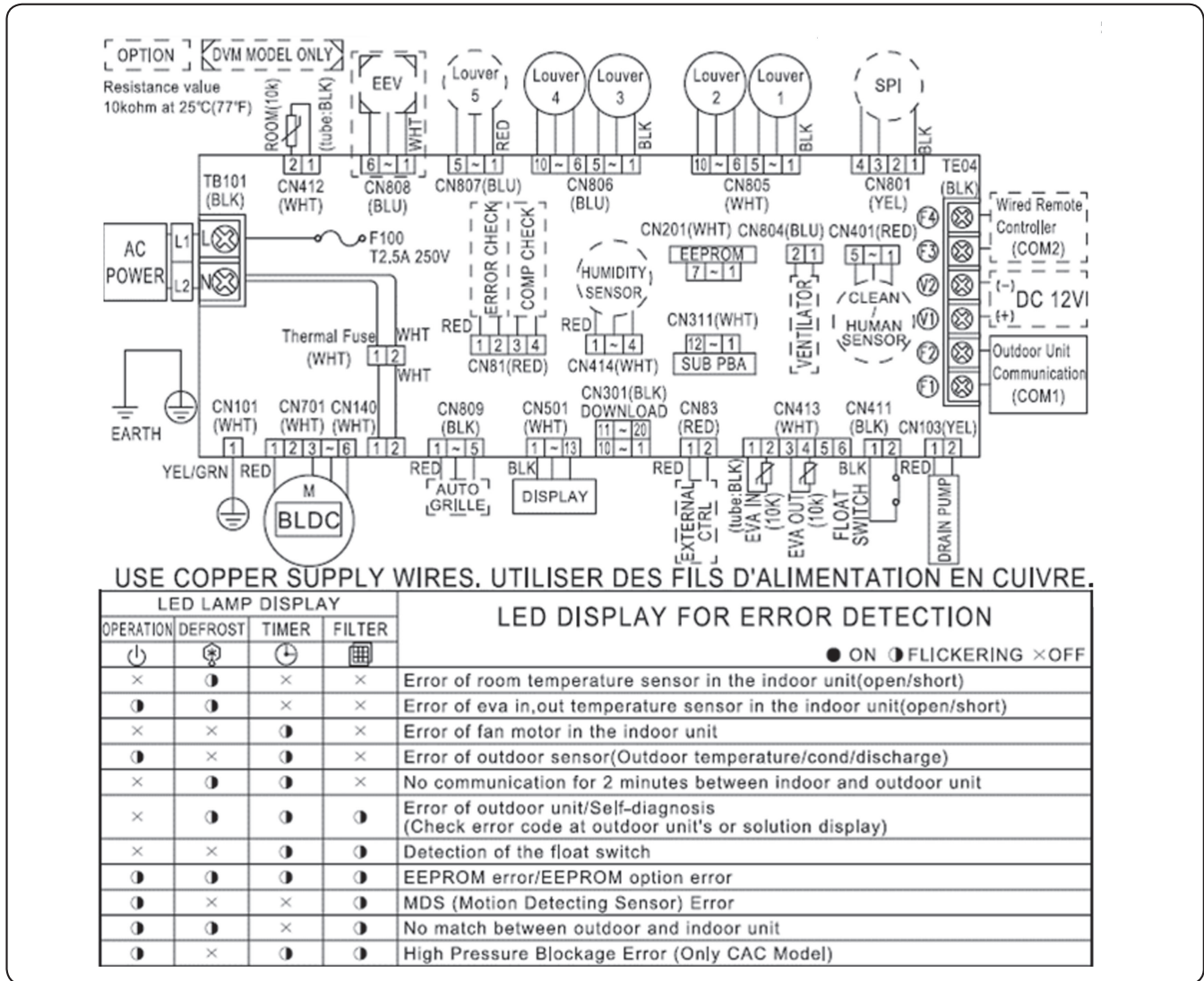
Units : mm [inches]



6. Electrical Wiring Diagram

Wind-Free 4Way Cassette (600x600)

AC026/035/052/060/071NNNDKH/EU



SUB PBA	Printed Circuit Board(SUB)	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

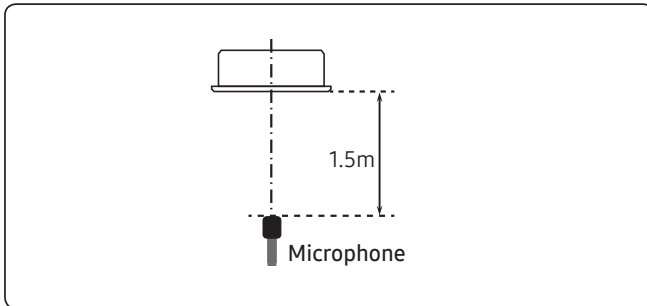
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⊕ Protective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

7. Sound Data

Wind-Free 4Way Cassette (600x600)

Sound Pressure level

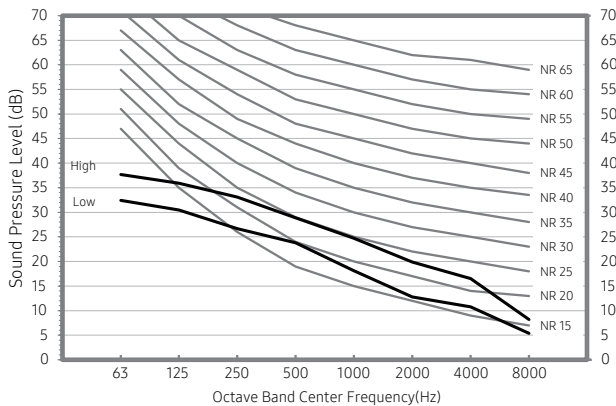
Unit: dB(A)



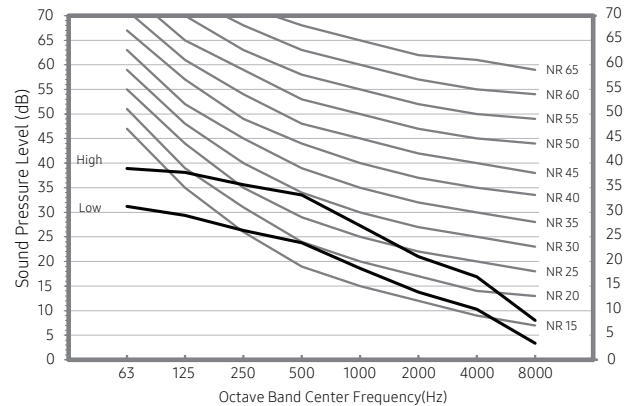
Model	High	MID	LOW
AC026NNNDKH/EU	31	28	25
AC035NNNDKH/EU	34	30	25
AC052NNNDKH/EU	39	34	29
AC060NNNDKH/EU	41	37	32

• NR Curve

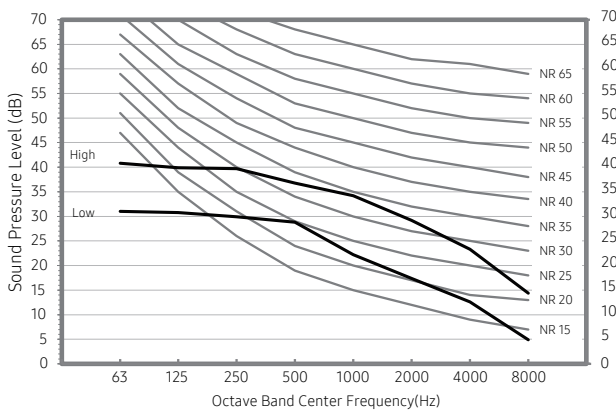
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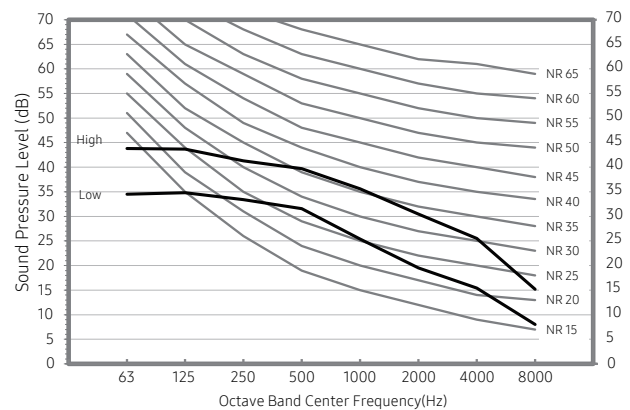
2) AC035NNNDKH/EU



3) AC052NNNDKH/EU



4) AC060NNNDKH/EU



NOTE

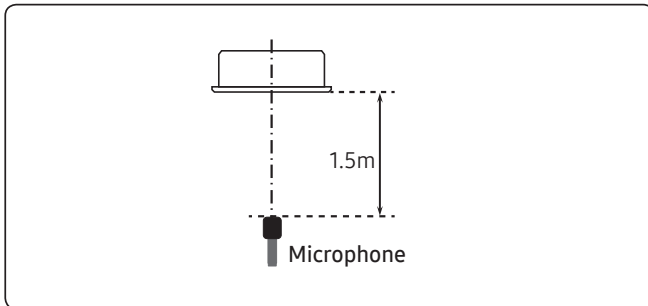
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

7. Sound Data

Wind-Free 4Way Cassette (600x600)

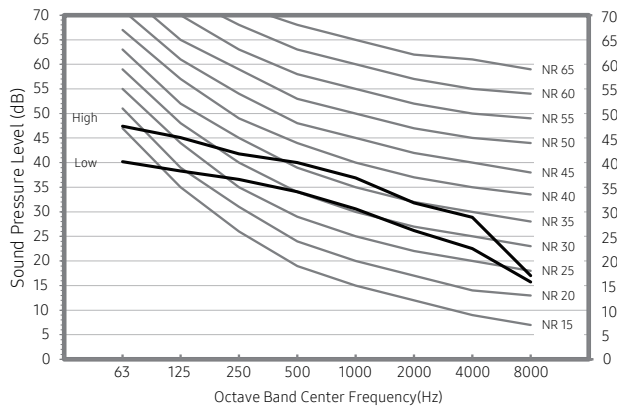
Sound Pressure level

Unit: dB(A)



Model	High	MID	LOW
AC071NNNDKH/EU	42	39	36

- NR Curve
5) AC071NNNDKH/EU



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 (600x600)

Sound Power level

NOTE

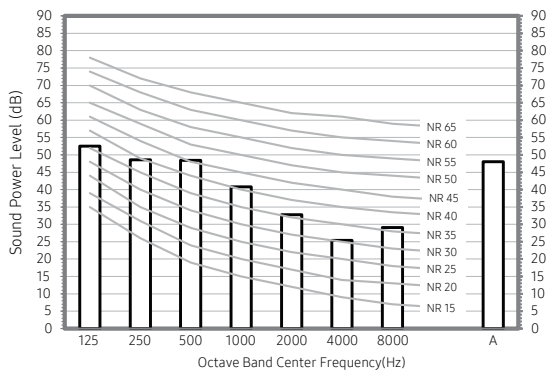
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

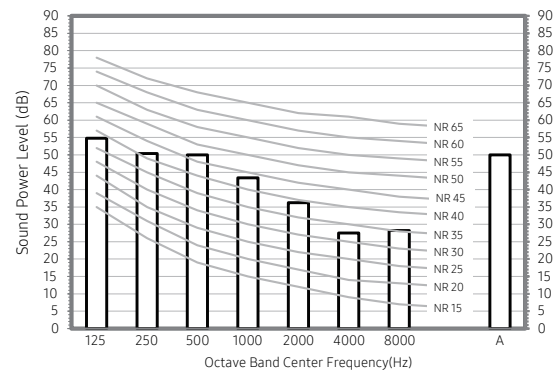
Model	Power
AC026NNNDKH/EU	48
AC035NNNDKH/EU	50
AC052NNNDKH/EU	56
AC060NNNDKH/EU	56
AC071NNNDKH/EU	58

• NR Curve

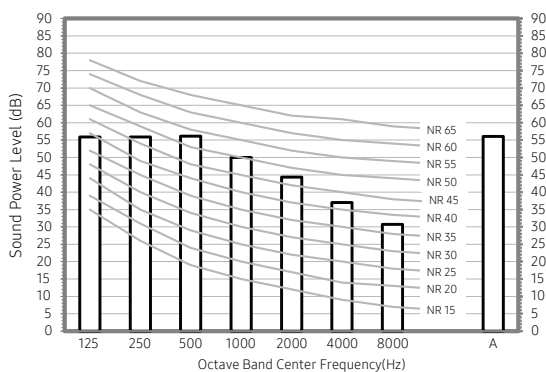
1) AC026NNNDKH/EU



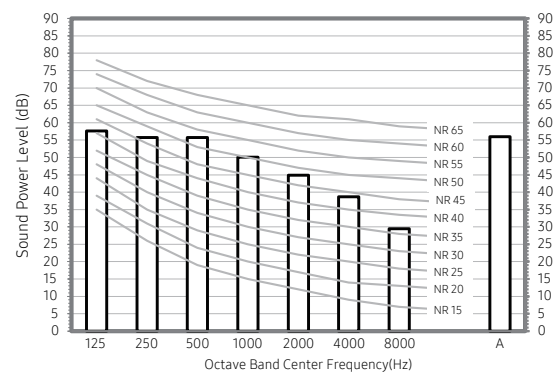
2) AC035NNNDKH/EU



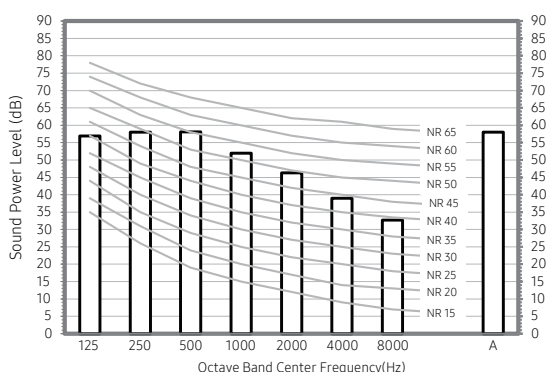
3) AC052NNNDKH/EU



4) AC060NNNDKH/EU



5) AC071NNNDKH/EU



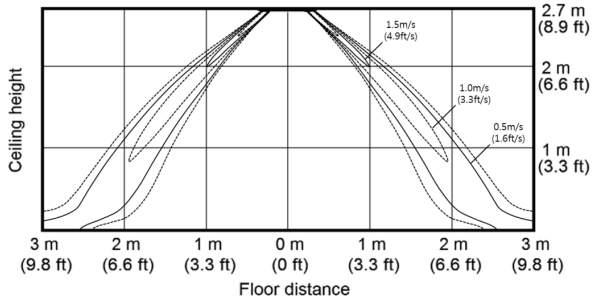
8. Temperature and air flow distribution

Wind-Free 4Way Cassette (600x600)

AC026NNNDKH/EU

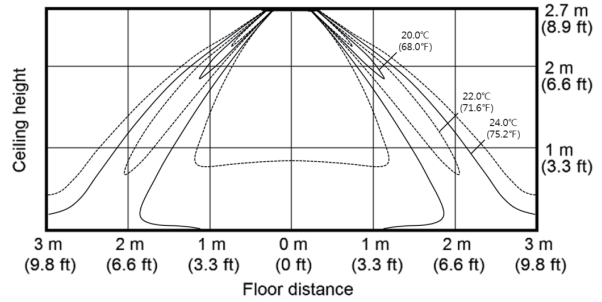
- Cooling Air Velocity distribution

(Discharge angle : 41 degree)



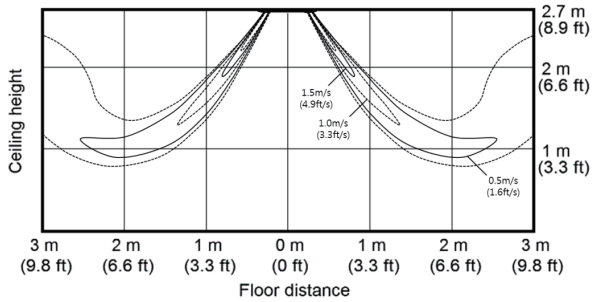
- Cooling temperature distribution

(Discharge angle : 41 degree)



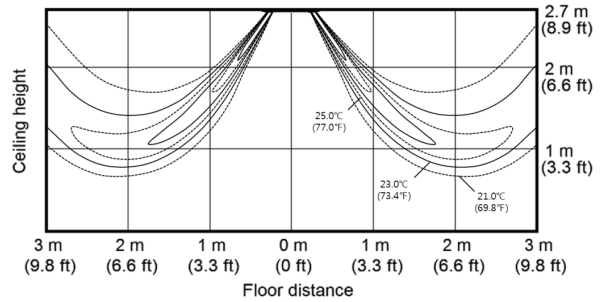
- Heating Air Velocity distribution

(Discharge angle : 56 degree)



- Heating temperature distribution

(Discharge angle : 56 degree)



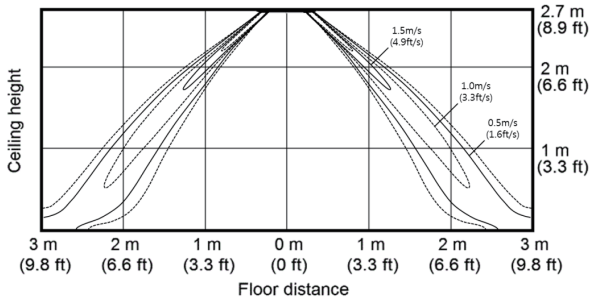
8. Temperature and air flow distribution

Wind-Free 4Way Cassette (600x600)

AC035NNNDKH/EU

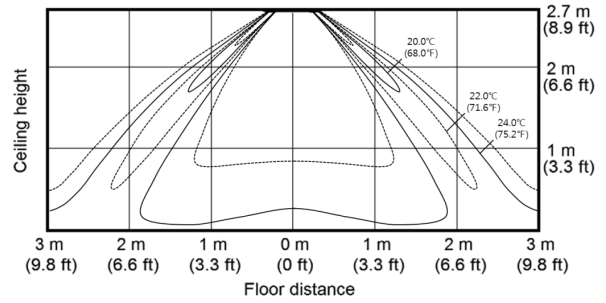
- Cooling Air Velocity distribution

(Discharge angle : 41 degree)



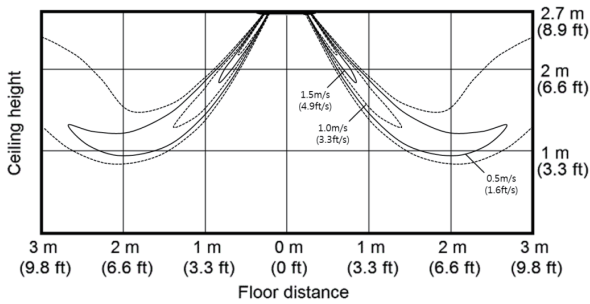
- Cooling temperature distribution

(Discharge angle : 41 degree)



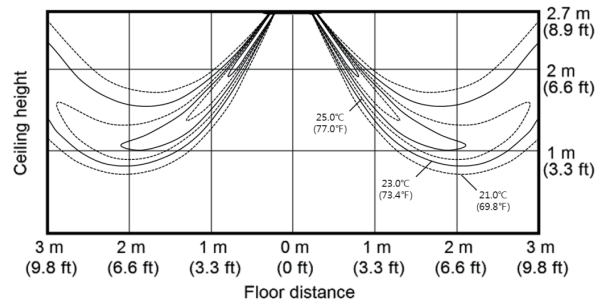
- Heating Air Velocity distribution

(Discharge angle : 56 degree)



- Heating temperature distribution

(Discharge angle : 56 degree)



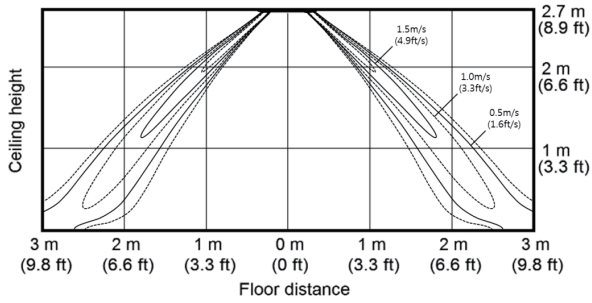
8. Temperature and air flow distribution

Wind-Free 4Way Cassette (600x600)

AC052NNNDKH/EU

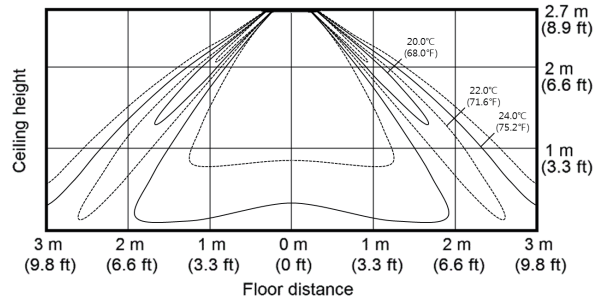
- Cooling Air Velocity distribution

(Discharge angle : 41 degree)



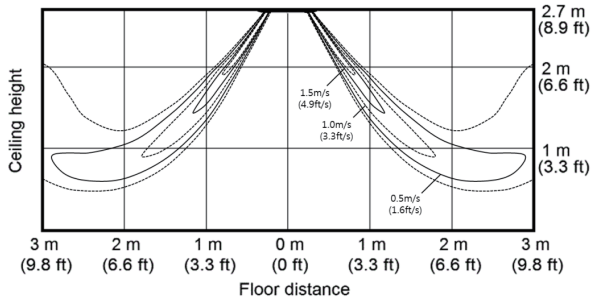
- Cooling temperature distribution

(Discharge angle : 41 degree)



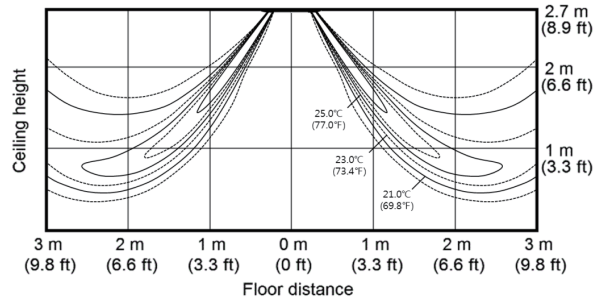
- Heating Air Velocity distribution

(Discharge angle : 56 degree)



- Heating temperature distribution

(Discharge angle : 56 degree)



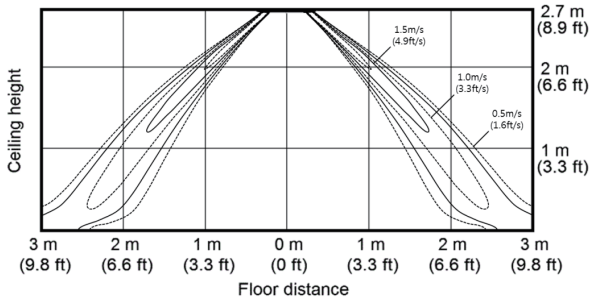
8. Temperature and air flow distribution

Wind-Free 4Way Cassette (600x600)

AC060NNNDKH/EU

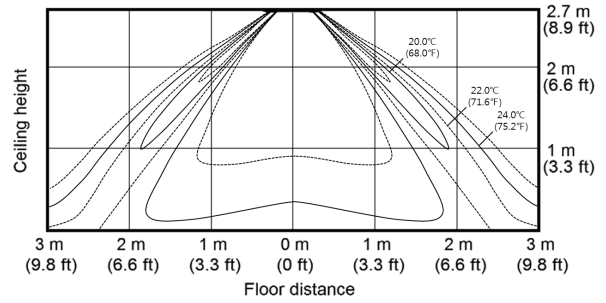
- Cooling Air Velocity distribution

(Discharge angle : 41 degree)



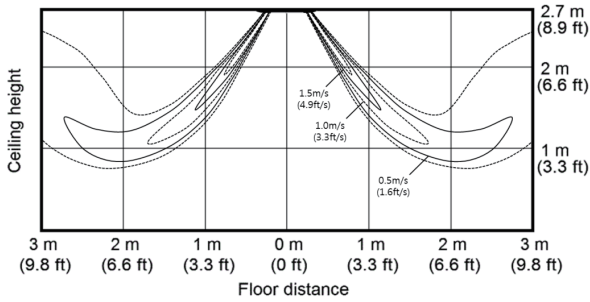
- Cooling temperature distribution

(Discharge angle : 41 degree)



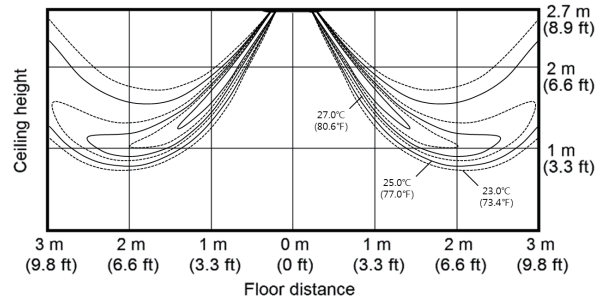
- Heating Air Velocity distribution

(Discharge angle : 56 degree)



- Heating temperature distribution

(Discharge angle : 56 degree)



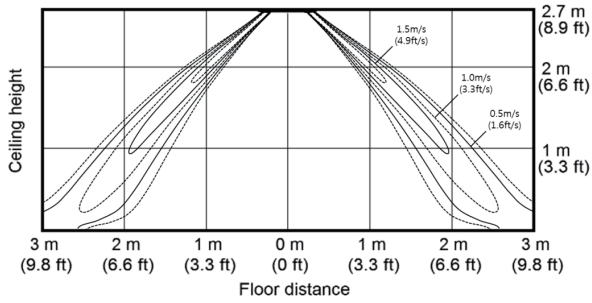
8. Temperature and air flow distribution

Wind-Free 4Way Cassette (600x600)

AC071NNNDKH/EU

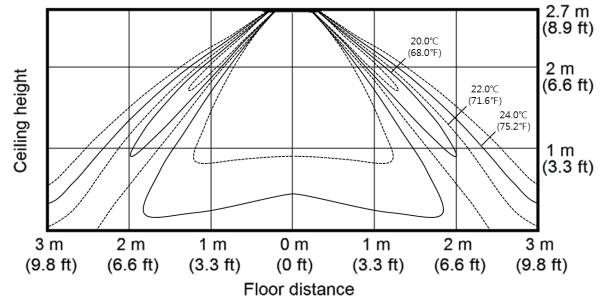
- Cooling Air Velocity distribution

(Discharge angle : 41 degree)



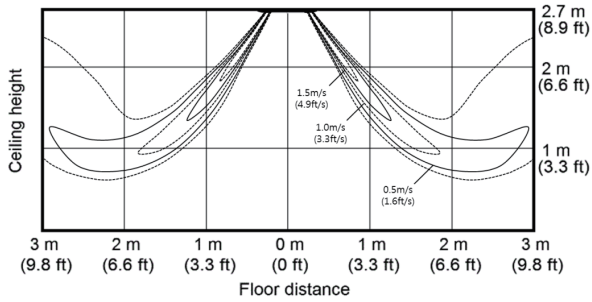
- Cooling temperature distribution

(Discharge angle : 41 degree)



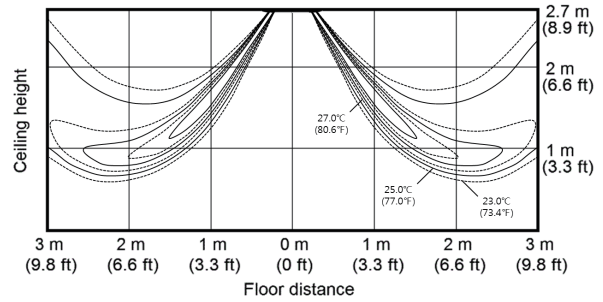
- Heating Air Velocity distribution

(Discharge angle : 56 degree)



- Heating temperature distribution

(Discharge angle : 56 degree)



Wind-Free 4Way Cassette

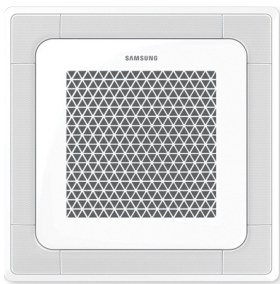
1. Specification	36
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Features & Benefits

Wind-Free 4Way Cassette

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:

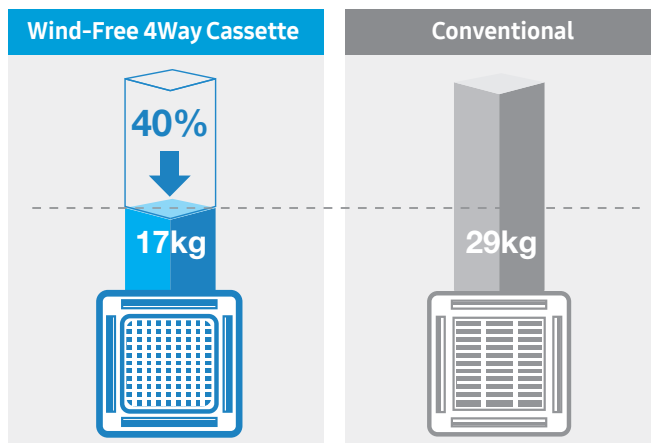
- **Stylishly clean design.** Add panache to interior spaces with a choice of clean, streamlined panel patterns in a lightweight build.
- **Robust operation.** Control the atmosphere perfectly with an advanced design for superior air flow and cooling/heating performance.
- **Low maintenance and simple 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 17 kg. It is one of the lightest indoor units in the industry, about 40 percent lighter than conventional products.



*Based on 10kW

1. Specification

Wind-Free 4Way Cassette

Model Name	Indoor Unit			AC052NN4DKH/EU	AC071NN4DKH/EU	AC090NN4DKH/EU	
	Outdoor Unit			AC052MXADKH/EU	AC071MXADKH/EU	AC090MXADKH/EU	
Mode				-	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling (Min/Std/Max)	kW	1.00 / 5.00 / 6.00	2.20 / 7.10 / 8.00	3.00 / 9.00 / 11.30	
			Btu/h	3,400 / 17,100 / 20,500	7,500 / 24,200 / 27,300	10,200 / 30,700 / 38,600	
		Heating (Min/Std/Max)	kW	1.00 / 6.00 / 7.00	1.90 / 8.00 / 9.00	2.20 / 10.00 / 13.90	
			Btu/h	3,400 / 20,500 / 23,900	6,500 / 27,300 / 30,700	7,500 / 34,100 / 47,400	
Power	Power Input	Cooling (Min/Std/Max)	kW	0.33 / 1.44 / 2.10	0.35 / 2.53 / 3.95	0.60 / 2.75 / 4.46	
		Heating (Min/Std/Max)	kW	0.25 / 1.49 / 1.90	0.35 / 2.40 / 3.95	0.46 / 2.70 / 5.20	
	Current Input	Cooling (Min/Std/Max)	A	1.50 / 6.50 / 9.50	2.00 / 11.20 / 17.00	3.00 / 12.00 / 19.40	
		Heating (Min/Std/Max)	A	1.50 / 6.80 / 8.60	2.00 / 10.70 / 17.00	2.50 / 11.60 / 22.70	
	Current	MCA	A	21	21	25	
		MFA	A	25	25	30	
Efficiency	EER	Cooling	W/W	3.47	2.81	3.27	
	COP	Heating	W/W	4.03	3.33	3.70	
	SEER (Cooling Energy Grade)		W/W	6.9 (A++)	6.2 (A++)	6.8 (A++)	
	SCOP (Heating Energy Grade)		W/W	4.3 (A+)	4.1 (A+)	4.3 (A+)	
	Pdesignh		kW	2.6	4.5	6.3	
Piping Connections	Liquid Pipe	Type		Flare connection	Flare connection	Flare connection	
		Φ, mm		6.35	6.35	9.52	
		Φ, inch		1/4	1/4	3/8	
	Gas Pipe	Type		Flare connection	Flare connection	Flare connection	
		Φ, mm		12.7	15.88	15.88	
		Φ, inch		1/2	5/8	5/8	
	Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes	
	Piping length (ODU-IDU)	Standard	m	5	5	5	
		Max.	m	30	50	50	
		Elevation	m	20	30	30	
Chargeless		m	5	5	30		
Wiring connections	Power Source Wire		mm ²	-	-	-	
	Transmission Cable		mm ²	Min. 0.75	Min. 0.75	Min. 0.75	
	Remark		-	F1, F2	F1, F2	F1, F2	
	Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit	Both indoor and outdoor unit	
Refrigerant	Type		-	R410A	R410A	R410A	
	Factory Charging		kg / tCO ₂ e	1.3 / 2.71	1.5 / 3.13	3.0 / 6.26	

1. Specification

Wind-Free 4Way Cassette

Model Name	Indoor Unit			AC052NN4DKH/EU	AC071NN4DKH/EU	AC090NN4DKH/EU
	Outdoor Unit			AC052MXADKH/EU	AC071MXADKH/EU	AC090MXADKH/EU
Power Supply	Ø, #, V, Hz			1, 2, 220-240, 50	1, 2, 220-240, 50	1, 2, 220-240, 50
Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al	Al
		Tube	-	Cu	Cu	Cu
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan
	Quantity		EA	1	1	1
	Air Flow Rate	High/Mid/Low	CMM	15.0 / 14.0 / 13.0	19.5 / 16.5 / 14.5	30.0 / 24.0 / 18.0
			l/s	250.0 / 233.3 / 216.7	325.0 / 275.0 / 241.7	500.0 / 400.0 / 300.0
	External Static Pressure	Min/Std/Max	mmAq	-	-	-
Pa			-	-	-	
Fan Motor	Output		W x n	65 x 1	65 x 1	97 x 1
Drain	Drain Pipe		Φ, mm	VP-25(OD32, ID25)	VP-25(OD32, ID25)	VP-25(OD32, ID25)
Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)	33 / 31 / 29	36 / 33 / 29	43 / 38 / 33
	Sound Power Level		dB(A)	49	53	60
External Dimension	Net Weight		kg	15	15	18
	Shipping Weight		kg	18	18	22
	Net Dimensions (WxHxD)		mm	840 x 204 x 840	840 x 204 x 840	840 x 288 x 840
	Shipping Dimensions (WxHxD)		mm	898 x 275 x 898	898 x 275 x 898	898 x 357 x 898
Casing	Material		-	Polypropylene	Polypropylene	Polypropylene
Panel	Model Name		-	PC4NUFMAN	PC4NUFMAN	PC4NUFMAN
	Type		-	Wind-Free Type	Wind-Free Type	Wind-Free Type
	Material		-	HIPS	HIPS	HIPS
	Color		-	DA White	DA White	DA White
	Net Weight		kg	6.3	6.3	6.3
	Shipping Weight		kg	8.7	8.7	8.7
	Net Dimensions (WxHxD)		mm	950 x 64 x 950	950 x 64 x 950	950 x 64 x 950
	Shipping Dimensions (WxHxD)		mm	1,010 x 117 x 1,000	1,010 x 117 x 1,000	1,010 x 117 x 1,000
Control System	Infrared remote control		-	AR-EH03E	AR-EH03E	AR-EH03E
Control System	Wired remote control		-	MWR-WE13N	MWR-WE13N	MWR-WE13N
Drain Pump	Drain Pump		-	Included	Included	Included
	Max. lifting Height / Displacement		mm / Liter/h	750/24	750/24	750/24
Additional Accessories	Drain Pump	External Model	-	-	-	-
		Internal Model	-	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-
	Air Filter		-	Removable / Washable	Removable / Washable	Removable / Washable
Virus Doctor		-	Option	Option	Option	

1. Specification

Wind-Free 4Way Cassette

Outdoor Unit	Model Name		Indoor Unit	AC052NN4DKH/EU	AC071NN4DKH/EU	AC090NN4DKH/EU			
			Outdoor Unit	AC052MXADKH/EU	AC071MXADKH/EU	AC090MXADKH/EU			
	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	1, 2, 220-240, 50		
	Heat Exchanger		Type		-	FMC	FMC	Fin & Tube	
			Material		Fin	-	Al	Al	Al
					Tube	-	Al	Al	Cu
			Fin Treatment		-	Hybrid Coating	Hybrid Coating	Green Hydrophile	
	Compressor		Model Name			UG9TK3150FE4	UG4T200FUAE4	UG8T300FUBJU	
			Output		kW	1.42	1.79	2.82	
			Oil		Type	-	POE	POE	PVE
					Initial charge	cc	500	650	1200
	Fan		Type		-	Propeller	Propeller	Propeller	
			Discharge direction		-	Front	Front	Front	
			Quantity		EA	1	1	1	
			Air Flow Rate		CMM	40	51	78	
					l/s	667	850	1300	
	Fan Motor		Type		-	BLDC Motor	BLDC Motor	BLDC Motor	
			Output		W x n	125 x 1	125 x 1	125 x 1	
	Sound		Sound Pressure Level		Cooling	dB(A)	48	49	52
					Heating	dB(A)	48	51	53
			Sound Power Level		dB(A)	62	65	68	
	External Dimension		Net Weight		kg	43.8	53	72	
			Shipping Weight		kg	47.5	57.2	77	
			Net Dimensions (WxHxD)		mm	880 x 638 x 310	880 x 798 x 310	940 x 998 x 330	
			Shipping Dimensions (WxHxD)		mm	1023 x 730 x 413	1023 x 911 x 413	995 x 1096 x 426	
	Casing		Material		-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate	
Body			-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate			
Operating Temp. Range		Cooling		°C	-15 ~ 50	-15 ~ 50	-15 ~ 50		
		Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24		

NOTE

- Specification may be subject to change without prior notice. Specification comply with EN14511.
 - 1) Capacities are based on (Equivalent refrigerant piping 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
 - 2) Sound power level is an absolute value that a sound source generates.
 - Sound power level is based on cooling operation.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound values are obtained in an anechoic room.
 - Sound values of multi combination are theoretical values based on sound results of individual installed units.
 - 3) These products contain R410A(GWP=2,088) which is fluorinated greenhouse gas.
- In case you want to know more information regarding capacity and correction, please refer to capacity table TDB on pvi.samsung.com site.

1. Specification

Wind-Free 4Way Cassette

Model Name	Indoor Unit			AC100NN4DKH/EU	AC100NN4DKH/EU	AC120NN4DKH/EU	
	Outdoor Unit			AC100MXADKH/EU	AC100MXADNH/EU	AC120MXADKH/EU	
Mode				-	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling (Min/Std/Max)	kW	3.00 / 10.00 / 12.00	3.00 / 10.00 / 12.00	3.50 / 12.00 / 13.50	
			Btu/h	10,200 / 34,100 / 40,900	10,200 / 34,100 / 40,900	11,900 / 40,900 / 46,100	
		Heating (Min/Std/Max)	kW	2.20 / 11.20 / 15.50	2.20 / 11.20 / 15.50	3.50 / 13.00 / 15.50	
			Btu/h	7,500 / 38,200 / 52,900	7,500 / 38,200 / 52,900	11,900 / 44,400 / 52,900	
Power	Power Input	Cooling (Min/Std/Max)	kW	0.60 / 3.12 / 4.70	0.60 / 3.12 / 4.70	0.90 / 4.70 / 5.30	
		Heating (Min/Std/Max)	kW	0.46 / 3.10 / 5.40	0.46 / 3.10 / 5.40	0.75 / 3.80 / 5.50	
	Current Input	Cooling (Min/Std/Max)	A	3.00 / 13.60 / 20.40	1.50 / 4.80 / 7.10	4.30 / 21.10 / 23.00	
		Heating (Min/Std/Max)	A	2.50 / 13.60 / 23.00	1.20 / 4.80 / 8.40	3.70 / 17.10 / 24.00	
	Current	MCA	A	25	17.1	25	
		MFA	A	30	17.1	30	
Efficiency	EER	Cooling	W/W	3.21	3.21	2.55	
	COP	Heating	W/W	3.61	3.61	3.42	
	SEER (Cooling Energy Grade)		W/W	6.8 (A++)	6.8 (A++)	5.7 (A+)	
	SCOP (Heating Energy Grade)		W/W	4.3 (A+)	4.3 (A+)	4.1 (A+)	
	Pdesignh		kW	6.3	6.3	7.4	
System	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 and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes	
	Piping length (ODU-IDU)	Standard	m		5	5	5
			Max.		50	50	50
			Elevation		30	30	30
Chargeless			30	30	30		
Wiring connections	Power Source Wire		mm ²	-	-	-	
	Transmission Cable		mm ²	Min. 0.75	Min. 0.75	Min. 0.75	
	Remark		-	F1, F2	F1, F2	F1, F2	
	Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit	Both indoor and outdoor unit	
Refrigerant	Type		-	R410A	R410A	R410A	
	Factory Charging		kg / tCO ₂ e	3.0 / 6.26	3.0 / 6.26	3.0 / 6.26	

1. Specification

Wind-Free 4Way Cassette

Indoor Unit	Model Name		Indoor Unit	AC100NN4DKH/EU	AC100NN4DKH/EU	AC120NN4DKH/EU	
			Outdoor Unit	AC100MXADKH/EU	AC100MXADNH/EU	AC120MXADKH/EU	
	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
	Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan
		Quantity		EA	1	1	1
		Air Flow Rate	High/Mid/Low	CMM	31.0 / 25.0 / 19.0	31.0 / 25.0 / 19.0	32.0 / 26.0 / 20.0
				l/s	516.7 / 416.7 / 316.7	516.7 / 416.7 / 316.7	533.3 / 433.3 / 333.3
		External Static Pressure	Min/Std/Max	mmAq	-	-	-
	Pa			-	-	-	
	Fan Motor	Output		W x n	97 x 1	97 x 1	97 x 1
	Drain	Drain Pipe		Φ, mm	VP-25(OD32, ID25)	VP-25(OD32, ID25)	VP-25(OD32, ID25)
	Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)	44 / 39 / 33	44 / 39 / 33	45 / 40 / 35
		Sound Power Level		dB(A)	61	61	61
	External Dimension	Net Weight		kg	18	18	18
		Shipping Weight		kg	22	22	22
		Net Dimensions (WxHxD)		mm	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
		Shipping Dimensions (WxHxD)		mm	898 x 357 x 898	898 x 357 x 898	898 x 357 x 898
	Casing	Material		-	Polypropylene	Polypropylene	Polypropylene
	Panel	Model Name		-	PC4NUFMAN	PC4NUFMAN	PC4NUFMAN
		Type		-	Wind-Free Type	Wind-Free Type	Wind-Free Type
		Material		-	HIPS	HIPS	HIPS
		Color		-	DA White	DA White	DA White
		Net Weight		kg	6.3	6.3	6.3
		Shipping Weight		kg	8.7	8.7	8.7
		Net Dimensions (WxHxD)		mm	950 x 64 x 950	950 x 64 x 950	950 x 64 x 950
		Shipping Dimensions (WxHxD)		mm	1,010 x 117 x 1,000	1,010 x 117 x 1,000	1,010 x 117 x 1,000
	Control System	Infrared remote control		-	AR-EH03E	AR-EH03E	AR-EH03E
	Control System	Wired remote control		-	MWR-WE13N	MWR-WE13N	MWR-WE13N
	Drain Pump	Drain Pump		-	Included	Included	Included
Max. lifting Height / Displacement		mm / Liter/h	750/24	750/24	750/24		
Additional Accessories	Drain Pump	External Model	-	-	-	-	
		Internal Model	-	-	-	-	
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-	
	Air Filter		-	Removable / Washable	Removable / Washable	Removable / Washable	
	Virus Doctor		-	Option	Option	Option	

1. Specification

Wind-Free 4Way Cassette

Model Name	Indoor Unit			AC100NN4DKH/EU	AC100NN4DKH/EU	AC120NN4DKH/EU	
	Outdoor Unit			AC100MXADKH/EU	AC100MXADNH/EU	AC120MXADKH/EU	
Power Supply				Ø, #, V, Hz	1, 2, 220-240, 50	3, 4, 380-415, 50	1, 2, 220-240, 50
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
Compressor	Model Name				UG8T300FUBJU	UG8T300FUCJU	UG5TK1450FJX
	Output			kW	2.82	2.82	4.19
	Oil	Type		-	PVE	PVE	PVE
		Initial charge		cc	1200	1200	1700
Fan	Type			-	Propeller	Propeller	Propeller
	Discharge direction			-	Front	Front	Front
	Quantity			EA	1	1	1
	Air Flow Rate			CMM	78	78	78
l/s				1300	1300	1300	
Fan Motor	Type			-	BLDC Motor	BLDC Motor	BLDC Motor
	Output			W x n	125 x 1	125 x 1	125 x 1
Sound	Sound Pressure Level	Cooling		dB(A)	52	52	54
		Heating		dB(A)	54	54	56
	Sound Power Level			dB(A)	69	69	70
External Dimension	Net Weight			kg	72	72	77
	Shipping Weight			kg	77	77	82
	Net Dimensions (WxHxD)			mm	940 x 998 x 330	940 x 998 x 330	940 x 998 x 330
	Shipping Dimensions (WxHxD)			mm	995 x 1096 x 426	995 x 1096 x 426	995 x 1096 x 426
Casing	Material	Body		-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate
		Operating Temp. Range			°C	-15 ~ 50	-15 ~ 50
Heating			°C	-20 ~ 24	-20 ~ 24	-20 ~ 24	

NOTE

- Specification may be subject to change without prior notice. Specification comply with EN14511.
 - 1) Capacities are based on (Equivalent refrigerant piping 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
 - 2) Sound power level is an absolute value that a sound source generates.
 - Sound power level is based on cooling operation.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound values are obtained in an anechoic room.
 - Sound values of multi combination are theoretical values based on sound results of individual installed units.
 - 3) These products contain R410A(GWP=2,088) which is fluorinated greenhouse gas.
- In case you want to know more information regarding capacity and correction, please refer to capacity table TDB on pvi.samsung.com site.

1. Specification

Wind-Free 4Way Cassette

Model Name	Indoor Unit			AC120NN4DKH/EU	AC140NN4DKH/EU	AC140NN4DKH/EU	
	Outdoor Unit			AC120MXADNH/EU	AC140MXADKH/EU	AC140MXADNH/EU	
Mode				-	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling (Min/Std/Max)	kW	3.50 / 12.00 / 13.50	3.50 / 13.40 / 15.50	3.50 / 13.40 / 15.50	
			Btu/h	11,900 / 40,900 / 46,100	11,900 / 45,700 / 52,900	11,900 / 45,700 / 52,900	
		Heating (Min/Std/Max)	kW	3.50 / 13.00 / 15.50	3.50 / 15.50 / 18.00	3.50 / 15.50 / 18.00	
			Btu/h	11,900 / 44,400 / 52,900	11,900 / 52,900 / 61,400	11,900 / 52,900 / 61,400	
Power	Power Input	Cooling (Min/Std/Max)	kW	0.90 / 4.70 / 7.90	0.80 / 4.45 / 6.44	0.80 / 4.45 / 7.90	
		Heating (Min/Std/Max)	kW	0.75 / 3.80 / 7.90	0.70 / 4.54 / 7.36	0.70 / 4.54 / 7.90	
	Current Input	Cooling (Min/Std/Max)	A	2.10 / 7.30 / 12.00	3.70 / 20.00 / 28.00	2.10 / 7.00 / 12.00	
		Heating (Min/Std/Max)	A	2.10 / 5.90 / 12.00	3.50 / 19.50 / 32.00	1.90 / 7.00 / 12.00	
	Current	MCA	A	17.1	33	17.1	
		MFA	A	17.1	40	17.1	
Efficiency	EER	Cooling	W/W	2.55	3.01	3.01	
	COP	Heating	W/W	3.42	3.41	3.41	
	SEER (Cooling Energy Grade)		W/W	5.7 (A+)	5.8 (A+)	5.8 (A+)	
	SCOP (Heating Energy Grade)		W/W	4.1 (A+)	4.0 (A+)	4.0 (A+)	
	Pdesignh		kW	7.4	8.4	8.4	
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 and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes	
	Piping length (ODU-IDU)	Standard	m	5	5	5	
		Max.	m	50	75	75	
		Elevation	m	30	30	30	
Chargeless		m	30	30	30		
Wiring connections	Power Source Wire		mm ²	-	-	-	
	Transmission Cable		mm ²	Min. 0.75	Min. 0.75	Min. 0.75	
	Remark		-	F1, F2	F1, F2	F1, F2	
	Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit	Both indoor and outdoor unit	
Refrigerant	Type		-	R410A	R410A	R410A	
	Factory Charging		kg / tCO ₂ e	3.0 / 6.26	3.4 / 7.10	3.4 / 7.10	

1. Specification

Wind-Free 4Way Cassette

Model Name	Indoor Unit			AC120NN4DKH/EU	AC140NN4DKH/EU	AC140NN4DKH/EU
	Outdoor Unit			AC120MXADNH/EU	AC140MXADKH/EU	AC140MXADNH/EU
Power Supply	Ø, #, V, Hz			1, 2, 220-240, 50	1, 2, 220-240, 50	1, 2, 220-240, 50
Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al	Al
		Tube	-	Cu	Cu	Cu
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan
	Quantity		EA	1	1	1
	Air Flow Rate	High/Mid/Low	CMM	32.0 / 26.0 / 20.0	32.0 / 27.0 / 22.0	32.0 / 27.0 / 22.0
			l/s	533.3 / 433.3 / 333.3	533.3 / 450.0 / 366.6	533.3 / 450.0 / 366.6
	External Static Pressure	Min/Std/Max	mmAq	-	-	-
Pa			-	-	-	
Fan Motor	Output		W x n	97 x 1	97 x 1	97 x 1
Drain	Drain Pipe		Φ, mm	VP-25(OD32, ID25)	VP-25(OD32, ID25)	VP-25(OD32, ID25)
Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)	45 / 40 / 35	45 / 41 / 37	45 / 41 / 37
	Sound Power Level		dB(A)	61	61	61
External Dimension	Net Weight		kg	18	20	20
	Shipping Weight		kg	22	24	24
	Net Dimensions (WxHxD)		mm	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
	Shipping Dimensions (WxHxD)		mm	898 x 357 x 898	898 x 357 x 898	898 x 357 x 898
Casing	Material		-	Polypropylene	Polypropylene	Polypropylene
Panel	Model Name		-	PC4NUFMAN	PC4NUFMAN	PC4NUFMAN
	Type		-	Wind-Free Type	Wind-Free Type	Wind-Free Type
	Material		-	HIPS	HIPS	HIPS
	Color		-	DA White	DA White	DA White
	Net Weight		kg	6.5	6.5	6.5
	Shipping Weight		kg	8.8	8.8	8.8
	Net Dimensions (WxHxD)		mm	950 x 64 x 950	950 x 64 x 950	950 x 64 x 950
	Shipping Dimensions (WxHxD)		mm	1,010 x 117 x 1,000	1,010 x 117 x 1,000	1,010 x 117 x 1,000
Control System	Infrared remote control		-	AR-EH03E	AR-EH03E	AR-EH03E
Control System	Wired remote control		-	MWR-WE13N	MWR-WE13N	MWR-WE13N
Drain Pump	Drain Pump		-	Included	Included	Included
	Max. lifting Height / Displacement		mm / Liter/h	750/24	750/24	750/24
Additional Accessories	Drain Pump	External Model	-	-	-	-
		Internal Model	-	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-
	Air Filter		-	Removable / Washable	Removable / Washable	Removable / Washable
Virus Doctor		-	Option	Option	Option	

1. Specification

Wind-Free 4Way Cassette

	Model Name		Indoor Unit	AC120NN4DKH/EU	AC140NN4DKH/EU	AC140NN4DKH/EU
			Outdoor Unit	AC120MXADNH/EU	AC140MXADKH/EU	AC140MXADNH/EU
	Power Supply		Ø, #, V, Hz	3, 4, 380-415, 50	1, 2, 220-240, 50	3, 4, 380-415, 50
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
Compressor	Model Name			UG5TK1450FJX	UG5TK1450FJX	UG5TK1450FJX
	Output		kW	4.19	4.19	4.19
	Oil	Type	-	PVE	PVE	PVE
		Initial charge	cc	1700	1700	1700
Fan	Type		-	Propeller	Propeller	Propeller
	Discharge direction		-	Front	Front	Front
	Quantity		EA	1	2	2
	Air Flow Rate			CMM	78	111
		l/s	1300	1850	1850	
Fan Motor	Type		-	BLDC Motor	BLDC Motor	BLDC Motor
	Output		W x n	125 x 1	125 x 2	125 x 2
Sound	Sound Pressure Level	Cooling	dB(A)	54	53	53
		Heating	dB(A)	56	54	54
	Sound Power Level		dB(A)	70	69	69
External Dimension	Net Weight		kg	77	87	87
	Shipping Weight		kg	82	97	97
	Net Dimensions (WxHxD)		mm	940 x 998 x 330	940 x 1210 x 330	940 x 1210 x 330
	Shipping Dimensions (WxHxD)		mm	995 x 1096 x 426	995 x 1388 x 426	995 x 1388 x 426
Casing	Material	Body	-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate
	Operating Temp. Range					
	Cooling		°C	-15 ~ 50	-15 ~ 50	-15 ~ 50
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

NOTE

- Specification may be subject to change without prior notice. Specification comply with EN14511.
 - 1) Capacities are based on (Equivalent refrigerant piping 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
 - 2) Sound power level is an absolute value that a sound source generates.
 - Sound power level is based on cooling operation.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound values are obtained in an anechoic room.
 - Sound values of multi combination are theoretical values based on sound results of individual installed units.
 - 3) These products contain R410A(GWP=2,088) which is fluorinated greenhouse gas.
- In case you want to know more information regarding capacity and correction, please refer to capacity table TDB on pvi.samsung.com site.

2. Summary Table

Wind-Free 4Way Cassette

Performance Characteristics

Model Code	Net Weight (kg)	Capacity		Fan Speed	Airflow (Cooling/Heating) (CMM)	Sound Pressure Level (dBA)	Sound Power Level (dBA)	
		Cooling (kW)	Heating (kW)					
AC052NN4DKH/EU	15	Max.	6.0	7.0	High	15.0 / 15.0	33	49
		Std.	5.0	6.0	Mid	14.0 / 14.0	31	-
		Min.	1.0	1.0	Low	13.0 / 13.0	29	-
AC071NN4DKH/EU	15	Max.	8.0	9.0	High	19.5 / 19.5	36	53
		Std.	7.1	8.0	Mid	16.5 / 16.5	33	-
		Min.	2.2	1.9	Low	14.5 / 14.5	29	-
AC090NN4DKH/EU	18	Max.	11.3	13.9	High	30.0 / 30.0	43	60
		Std.	9.0	10.0	Mid	24.0 / 24.0	38	-
		Min.	3.0	2.2	Low	18.0 / 18.0	33	-
AC100NN4DKH/EU	18	Max.	12.0	15.5	High	31.0 / 31.0	44	61
		Std.	10.0	11.2	Mid	25.0 / 25.0	39	-
		Min.	3.0	2.2	Low	19.0 / 19.0	33	-
AC120NN4DKH/EU	18	Max.	13.5	15.5	High	32.0 / 32.0	45	61
		Std.	12.0	13.0	Mid	26.0 / 26.0	40	-
		Min.	3.5	3.5	Low	22.0 / 22.0	35	-
AC140NN4DKH/EU	20	Max.	15.5	18.0	High	34.0 / 34.0	45	61
		Std.	13.4	15.5	Mid	27.0 / 27.0	41	-
		Min.	3.5	3.5	Low	23.0 / 23.0	37	-

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

Model		Outdoor Unit				Input Current (Amperes)				Power Supply	
Indoor Unit	Outdoor Unit	Rated Hz	Voltage range		Outdoor Unit		Indoor Unit	Total	MCA(A)	MFA(A)	
			Volts	Min.	Max.	Cooling					Heating
AC052NN4DKH/EU	AC052MXADKH/EU	50	220 to 240	198	264	20	20	1	21	21	25
AC071NN4DKH/EU	AC071MXADKH/EU	50	220 to 240	198	264	20	20	1	21	21	25
AC090NN4DKH/EU	AC090MXADKH/EU	50	220 to 240	198	264	24	24	1	25	25	30
AC100NN4DKH/EU	AC100MXADKH/EU	50	220 to 240	198	264	24	24	1	25	25	30
AC100NN4DKH/EU	AC100MXADNH/EU	50	380 to 415	342	456.5	16.1	16.1	1	17.1	17.1	17.1
AC120NN4DKH/EU	AC120MXADKH/EU	50	220 to 240	198	264	24	24	1	25	25	30
AC120NN4DKH/EU	AC120MXADNH/EU	50	380 to 415	342	456.5	16.1	16.1	1	17.1	17.1	17.1
AC140NN4DKH/EU	AC140MXADKH/EU	50	220 to 240	198	264	32	32	1	33	33	40
AC140NN4DKH/EU	AC140MXADNH/EU	50	380 to 415	342	456.5	16.1	16.1	1	17.1	17.1	17.1

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(1) AC052NN4DKH/EU + AC052MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
kW																					
-15	4.88	4.13	1.03	5.13	4.25	1.05	5.35	4.38	1.07	5.51	4.52	1.09	5.62	4.48	1.11	5.90	4.43	1.12	6.20	4.34	1.14
21	4.64	3.93	1.08	4.89	4.05	1.11	5.09	4.18	1.13	5.25	4.31	1.15	5.36	4.26	1.16	5.62	4.22	1.18	5.90	4.13	1.20
35	4.42	3.74	1.36	4.66	3.86	1.38	4.85	3.98	1.41	5.00	4.10	1.44	5.10	4.06	1.45	5.36	4.02	1.47	5.62	3.94	1.50
46	3.76	3.47	1.22	3.96	3.57	1.24	4.12	3.68	1.27	4.25	3.80	1.30	4.34	3.76	1.31	4.55	3.72	1.32	4.78	3.65	1.35
50	2.88	2.73	1.08	3.03	2.81	1.11	3.15	2.90	1.13	3.25	2.99	1.15	3.32	2.96	1.16	3.48	2.93	1.18	3.65	2.87	1.20

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
kW												
-20	4.22	1.98	4.18	1.96	4.14	1.94	4.10	1.92	4.06	1.90	4.02	1.88
-15	5.32	2.28	5.27	2.26	5.22	2.24	5.17	2.21	5.12	2.19	5.06	2.17
-5	6.00	2.13	5.94	2.11	5.88	2.09	5.82	2.07	5.76	2.04	5.71	2.02
0	6.24	1.82	6.18	1.81	6.12	1.79	6.06	1.77	6.00	1.75	5.94	1.73
7	6.12	1.52	6.06	1.50	6.00	1.49	5.94	1.48	5.88	1.46	5.82	1.45
24	7.96	1.75	7.88	1.73	7.80	1.71	7.72	1.70	7.64	1.68	7.57	1.66

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(2) AC071NN4DKH/EU + AC071MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	6.92	5.29	1.81	7.29	5.45	1.85	7.59	5.62	1.88	7.83	5.79	1.92	7.98	5.73	1.94	8.38	5.68	1.96	8.80	5.56	2.00
21	6.59	5.03	1.90	6.94	5.19	1.94	7.23	5.35	1.98	7.46	5.52	2.02	7.60	5.46	2.04	7.98	5.41	2.06	8.38	5.30	2.11
35	6.28	4.80	2.38	6.61	4.94	2.43	6.89	5.10	2.48	7.10	5.25	2.53	7.24	5.20	2.56	7.60	5.15	2.58	7.98	5.05	2.63
46	5.34	4.48	2.14	5.62	4.62	2.19	5.85	4.76	2.23	6.04	4.91	2.28	6.16	4.86	2.30	6.46	4.81	2.32	6.79	4.71	2.37
50	4.08	3.54	1.90	4.30	3.65	1.94	4.48	3.76	1.98	4.62	3.88	2.02	4.71	3.84	2.04	4.94	3.80	2.06	5.19	3.72	2.11

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	5.63	3.18	5.58	3.15	5.52	3.12	5.46	3.09	5.41	3.06	5.36	3.03
-15	7.10	3.67	7.03	3.64	6.96	3.60	6.89	3.56	6.82	3.53	6.75	3.49
-5	8.00	3.43	7.92	3.39	7.84	3.36	7.76	3.33	7.68	3.29	7.61	3.26
0	8.32	2.94	8.24	2.91	8.16	2.88	8.08	2.85	8.00	2.82	7.92	2.79
7	8.16	2.45	8.08	2.42	8.00	2.40	7.92	2.38	7.84	2.35	7.76	2.33
24	10.61	2.82	10.50	2.79	10.40	2.76	10.30	2.73	10.19	2.71	10.09	2.68

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(3) AC090NN4DKH/EU + AC090MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	8.78	7.43	1.97	9.24	7.66	2.01	9.62	7.89	2.05	9.92	8.14	2.09	10.12	8.06	2.11	10.63	7.97	2.13	11.16	7.82	2.17
21	8.36	7.07	2.07	8.80	7.29	2.11	9.17	7.52	2.16	9.45	7.75	2.20	9.64	7.67	2.22	10.12	7.59	2.24	10.63	7.44	2.29
35	7.96	6.74	2.59	8.38	6.94	2.64	8.73	7.16	2.70	9.00	7.38	2.75	9.18	7.31	2.78	9.64	7.23	2.81	10.12	7.09	2.86
46	6.77	6.24	2.33	7.12	6.43	2.38	7.42	6.63	2.43	7.65	6.83	2.48	7.80	6.77	2.50	8.19	6.70	2.52	8.60	6.56	2.57
50	5.18	4.91	2.07	5.45	5.06	2.11	5.67	5.22	2.16	5.85	5.38	2.20	5.97	5.33	2.22	6.27	5.27	2.24	6.58	5.17	2.29

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	7.04	3.58	6.97	3.55	6.90	3.51	6.83	3.47	6.76	3.44	6.70	3.41
-15	8.87	4.13	8.79	4.09	8.70	4.05	8.61	4.01	8.53	3.97	8.44	3.93
-5	10.00	3.86	9.90	3.82	9.80	3.78	9.70	3.74	9.60	3.70	9.51	3.67
0	10.41	3.31	10.30	3.27	10.20	3.24	10.10	3.21	10.00	3.18	9.90	3.14
7	10.20	2.75	10.10	2.73	10.00	2.70	9.90	2.67	9.80	2.65	9.70	2.62
24	13.26	3.17	13.13	3.14	13.00	3.11	12.87	3.07	12.74	3.04	12.61	3.01

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(4) AC100NN4DKH/EU + AC100MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	9.75	8.05	2.23	10.27	8.30	2.28	10.69	8.56	2.32	11.03	8.82	2.37	11.25	8.73	2.39	11.81	8.64	2.42	12.40	8.47	2.47
21	9.29	7.67	2.35	9.78	7.90	2.40	10.19	8.15	2.45	10.50	8.40	2.50	10.71	8.32	2.52	11.25	8.23	2.55	11.81	8.07	2.60
35	8.85	7.30	2.94	9.31	7.53	3.00	9.70	7.76	3.06	10.00	8.00	3.12	10.20	7.92	3.15	10.71	7.84	3.18	11.25	7.68	3.25
46	7.52	7.06	2.64	7.92	7.28	2.70	8.25	7.50	2.75	8.50	7.74	2.81	8.67	7.66	2.84	9.10	7.58	2.86	9.56	7.43	2.92
50	5.75	5.64	2.35	6.05	5.81	2.40	6.31	5.99	2.45	6.50	6.18	2.50	6.63	6.11	2.52	6.96	6.05	2.55	7.31	5.93	2.60

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	7.88	4.11	7.81	4.07	7.73	4.03	7.65	3.99	7.57	3.95	7.50	3.91
-15	9.94	4.74	9.84	4.70	9.74	4.65	9.65	4.60	9.55	4.56	9.45	4.51
-5	11.20	4.43	11.09	4.38	10.98	4.34	10.87	4.30	10.76	4.25	10.65	4.21
0	11.65	3.79	11.54	3.76	11.42	3.72	11.31	3.68	11.20	3.65	11.08	3.61
7	11.43	3.16	11.31	3.13	11.20	3.10	11.09	3.07	10.98	3.04	10.87	3.01
24	14.85	3.64	14.71	3.60	14.56	3.57	14.41	3.53	14.27	3.49	14.13	3.46

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(5) AC100NN4DKH/EU + AC100MXADNH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	9.75	8.05	2.23	10.27	8.30	2.28	10.69	8.56	2.32	11.03	8.82	2.37	11.25	8.73	2.39	11.81	8.64	2.42	12.40	8.47	2.47
21	9.29	7.67	2.35	9.78	7.90	2.40	10.19	8.15	2.45	10.50	8.40	2.50	10.71	8.32	2.52	11.25	8.23	2.55	11.81	8.07	2.60
35	8.85	7.30	2.94	9.31	7.53	3.00	9.70	7.76	3.06	10.00	8.00	3.12	10.20	7.92	3.15	10.71	7.84	3.18	11.25	7.68	3.25
46	7.52	7.06	2.64	7.92	7.28	2.70	8.25	7.50	2.75	8.50	7.74	2.81	8.67	7.66	2.84	9.10	7.58	2.86	9.56	7.43	2.92
50	5.75	5.64	2.35	6.05	5.81	2.40	6.31	5.99	2.45	6.50	6.18	2.50	6.63	6.11	2.52	6.96	6.05	2.55	7.31	5.93	2.60

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)													
	16		18		20		21		22		24			
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
-20	7.88	4.11	7.81	4.07	7.73	4.03	7.65	3.99	7.57	3.95	7.50	3.91		
-15	9.94	4.74	9.84	4.70	9.74	4.65	9.65	4.60	9.55	4.56	9.45	4.51		
-5	11.20	4.43	11.09	4.38	10.98	4.34	10.87	4.30	10.76	4.25	10.65	4.21		
0	11.65	3.79	11.54	3.76	11.42	3.72	11.31	3.68	11.20	3.65	11.08	3.61		
7	11.43	3.16	11.31	3.13	11.20	3.10	11.09	3.07	10.98	3.04	10.87	3.01		
24	14.85	3.64	14.71	3.60	14.56	3.57	14.41	3.53	14.27	3.49	14.13	3.46		

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(6) AC120NN4DKH/EU + AC120MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	11.70	9.18	3.36	12.32	9.46	3.43	12.83	9.75	3.50	13.23	10.05	3.57	13.49	9.95	3.61	14.17	9.85	3.64	14.88	9.66	3.72
21	11.15	8.74	3.54	11.73	9.01	3.61	12.22	9.29	3.68	12.60	9.58	3.76	12.85	9.48	3.80	13.49	9.39	3.84	14.17	9.20	3.91
35	10.62	8.32	4.42	11.17	8.58	4.51	11.64	8.85	4.61	12.00	9.12	4.70	12.24	9.03	4.75	12.85	8.94	4.79	13.49	8.76	4.89
46	9.02	8.30	3.98	9.50	8.56	4.06	9.89	8.83	4.15	10.20	9.10	4.23	10.40	9.01	4.27	10.92	8.92	4.31	11.47	8.74	4.40
50	6.90	6.69	3.54	7.26	6.90	3.61	7.57	7.11	3.68	7.80	7.33	3.76	7.96	7.26	3.80	8.35	7.19	3.84	8.77	7.04	3.91

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	9.15	5.04	9.06	4.99	8.97	4.94	8.88	4.89	8.79	4.84	8.70	4.79
-15	11.54	5.81	11.42	5.76	11.31	5.70	11.20	5.64	11.08	5.59	10.97	5.53
-5	13.00	5.43	12.87	5.37	12.74	5.32	12.61	5.27	12.49	5.21	12.36	5.16
0	13.53	4.65	13.39	4.61	13.26	4.56	13.13	4.51	13.00	4.47	12.87	4.42
7	13.26	3.88	13.13	3.84	13.00	3.80	12.87	3.76	12.74	3.72	12.61	3.69
24	17.24	4.46	17.07	4.41	16.90	4.37	16.73	4.33	16.56	4.28	16.40	4.24

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(7) AC120NN4DKH/EU + AC120MXADNH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	11.70	9.18	3.36	12.32	9.46	3.43	12.83	9.75	3.50	13.23	10.05	3.57	13.49	9.95	3.61	14.17	9.85	3.64	14.88	9.66	3.72
21	11.15	8.74	3.54	11.73	9.01	3.61	12.22	9.29	3.68	12.60	9.58	3.76	12.85	9.48	3.80	13.49	9.39	3.84	14.17	9.20	3.91
35	10.62	8.32	4.42	11.17	8.58	4.51	11.64	8.85	4.61	12.00	9.12	4.70	12.24	9.03	4.75	12.85	8.94	4.79	13.49	8.76	4.89
46	9.02	8.30	3.98	9.50	8.56	4.06	9.89	8.83	4.15	10.20	9.10	4.23	10.40	9.01	4.27	10.92	8.92	4.31	11.47	8.74	4.40
50	6.90	6.69	3.54	7.26	6.90	3.61	7.57	7.11	3.68	7.80	7.33	3.76	7.96	7.26	3.80	8.35	7.19	3.84	8.77	7.04	3.91

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	9.15	5.04	9.06	4.99	8.97	4.94	8.88	4.89	8.79	4.84	8.70	4.79
-15	11.54	5.81	11.42	5.76	11.31	5.70	11.20	5.64	11.08	5.59	10.97	5.53
-5	13.00	5.43	12.87	5.37	12.74	5.32	12.61	5.27	12.49	5.21	12.36	5.16
0	13.53	4.65	13.39	4.61	13.26	4.56	13.13	4.51	13.00	4.47	12.87	4.42
7	13.26	3.88	13.13	3.84	13.00	3.80	12.87	3.76	12.74	3.72	12.61	3.69
24	17.24	4.46	17.07	4.41	16.90	4.37	16.73	4.33	16.56	4.28	16.40	4.24

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(8) AC140NN4DKH/EU + AC140MXADKH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	13.07	9.84	3.18	13.76	10.15	3.25	14.33	10.46	3.31	14.77	10.78	3.38	15.07	10.68	3.42	15.82	10.57	3.45	16.61	10.36	3.52
21	12.45	9.37	3.35	13.10	9.66	3.42	13.65	9.96	3.49	14.07	10.27	3.56	14.35	10.17	3.60	15.07	10.07	3.63	15.82	9.87	3.70
35	11.85	8.93	4.19	12.48	9.20	4.27	13.00	9.49	4.36	13.40	9.78	4.45	13.67	9.68	4.49	14.35	9.59	4.54	15.07	9.40	4.63
46	10.08	8.73	3.77	10.61	9.00	3.85	11.05	9.28	3.92	11.39	9.57	4.01	11.62	9.47	4.05	12.20	9.38	4.09	12.81	9.19	4.17
50	7.71	7.00	3.35	8.11	7.21	3.42	8.45	7.43	3.49	8.71	7.66	3.56	8.88	7.59	3.60	9.33	7.51	3.63	9.79	7.36	3.70

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	10.91	6.02	10.80	5.96	10.70	5.90	10.59	5.84	10.48	5.78	10.38	5.73
-15	13.76	6.95	13.62	6.88	13.49	6.81	13.35	6.74	13.22	6.67	13.08	6.61
-5	15.50	6.48	15.34	6.42	15.19	6.36	15.04	6.29	14.89	6.23	14.74	6.17
0	16.13	5.56	15.97	5.50	15.81	5.45	15.65	5.39	15.50	5.34	15.34	5.29
7	15.81	4.63	15.66	4.59	15.50	4.54	15.35	4.49	15.19	4.45	15.04	4.41
24	20.56	5.33	20.35	5.27	20.15	5.22	19.95	5.17	19.75	5.12	19.55	5.07

NOTE

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

3. Capacity Table

Wind-Free 4Way Cassette

(9) AC140NN4DKH/EU + AC140MXADNH/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
-15	13.07	9.84	3.18	13.76	10.15	3.25	14.33	10.46	3.31	14.77	10.78	3.38	15.07	10.68	3.42	15.82	10.57	3.45	16.61	10.36	3.52
21	12.45	9.37	3.35	13.10	9.66	3.42	13.65	9.96	3.49	14.07	10.27	3.56	14.35	10.17	3.60	15.07	10.07	3.63	15.82	9.87	3.70
35	11.85	8.93	4.19	12.48	9.20	4.27	13.00	9.49	4.36	13.40	9.78	4.45	13.67	9.68	4.49	14.35	9.59	4.54	15.07	9.40	4.63
46	10.08	8.73	3.77	10.61	9.00	3.85	11.05	9.28	3.92	11.39	9.57	4.01	11.62	9.47	4.05	12.20	9.38	4.09	12.81	9.19	4.17
50	7.71	7.00	3.35	8.11	7.21	3.42	8.45	7.43	3.49	8.71	7.66	3.56	8.88	7.59	3.60	9.33	7.51	3.63	9.79	7.36	3.70

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	10.91	6.02	10.80	5.96	10.70	5.90	10.59	5.84	10.48	5.78	10.38	5.73
-15	13.76	6.95	13.62	6.88	13.49	6.81	13.35	6.74	13.22	6.67	13.08	6.61
-5	15.50	6.48	15.34	6.42	15.19	6.36	15.04	6.29	14.89	6.23	14.74	6.17
0	16.13	5.56	15.97	5.50	15.81	5.45	15.65	5.39	15.50	5.34	15.34	5.29
7	15.81	4.63	15.66	4.59	15.50	4.54	15.35	4.49	15.19	4.45	15.04	4.41
24	20.56	5.33	20.35	5.27	20.15	5.22	19.95	5.17	19.75	5.12	19.55	5.07

NOTE

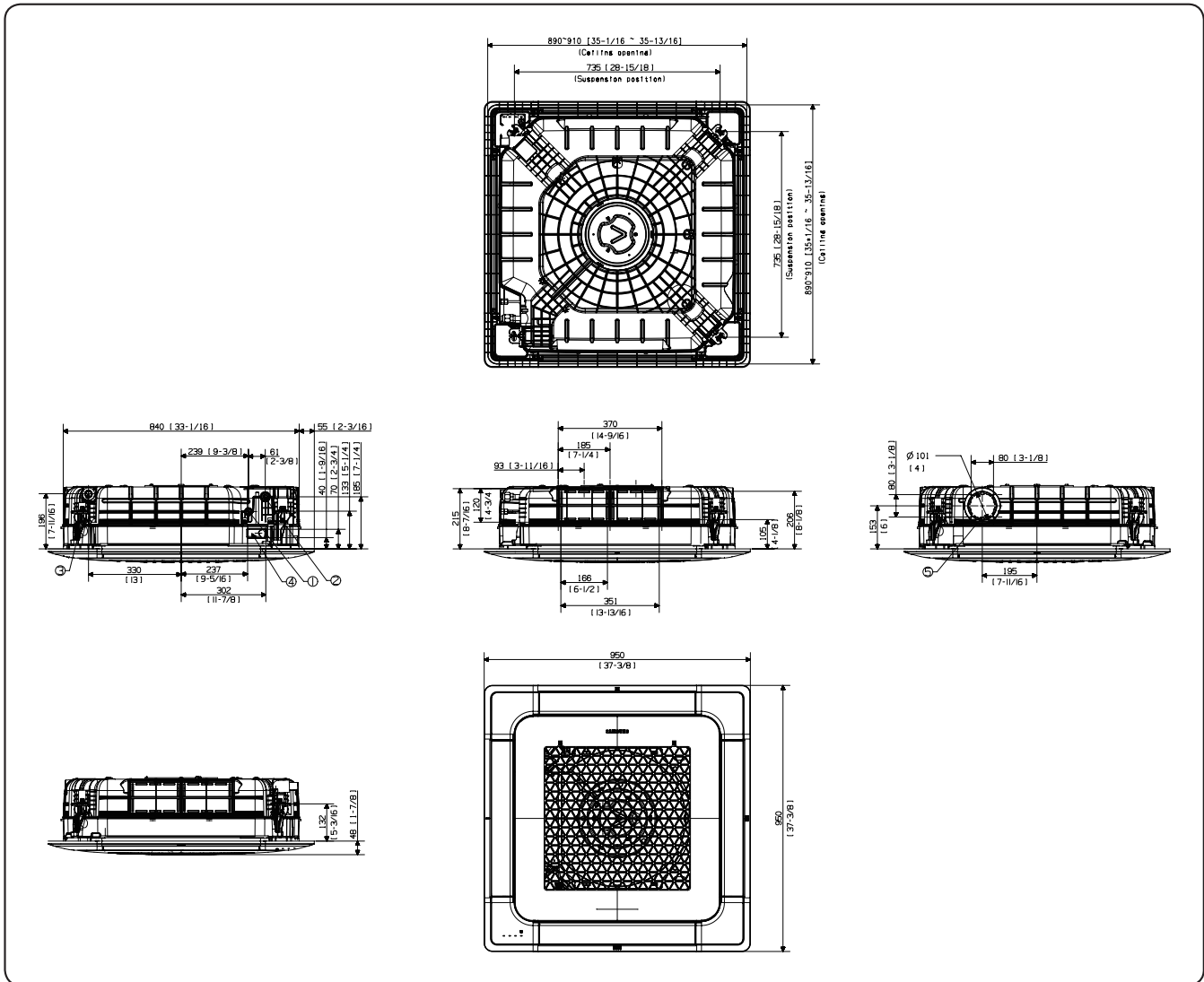
- The performance table shows the average value of each conditions.

4. Dimensional Drawing

Wind-Free 4Way Cassette

AC052/071MN4DKH/EU

Units : mm [inches]



No.	Name	Description	
		AC052NN4DKH/EU	AC071NN4DKH/EU
1	Liquid pipe connection	Φ6.35(1/4)	
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

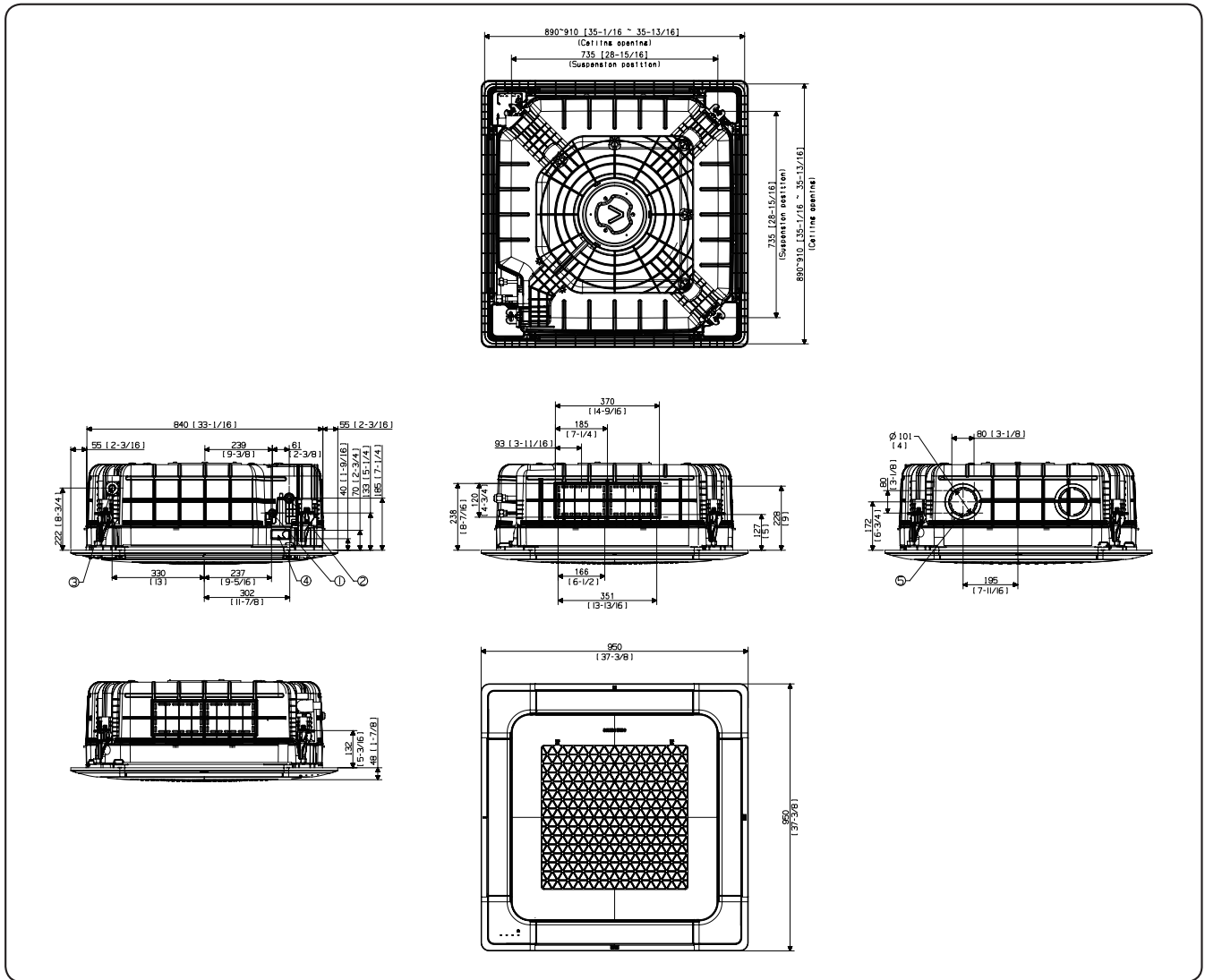
- As for suspension bolt, please use M8 ~ M10. (Procured at local site)

4. Dimensional Drawing

Wind-Free 4Way Cassette

AC090/100/120/140MN4DKH/EU

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

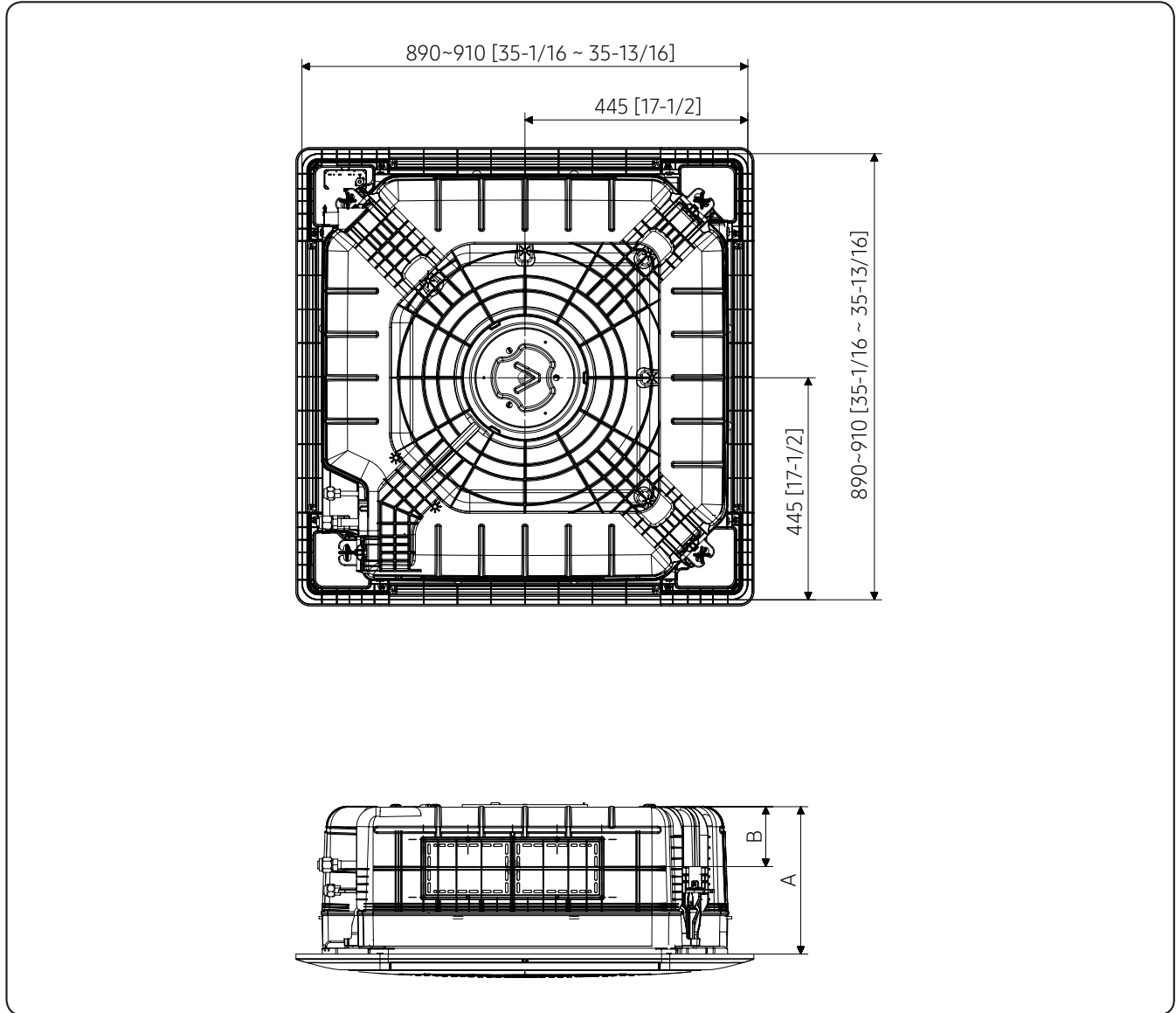
NOTE

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

5. Center of Gravity

Wind-Free 4Way Cassette

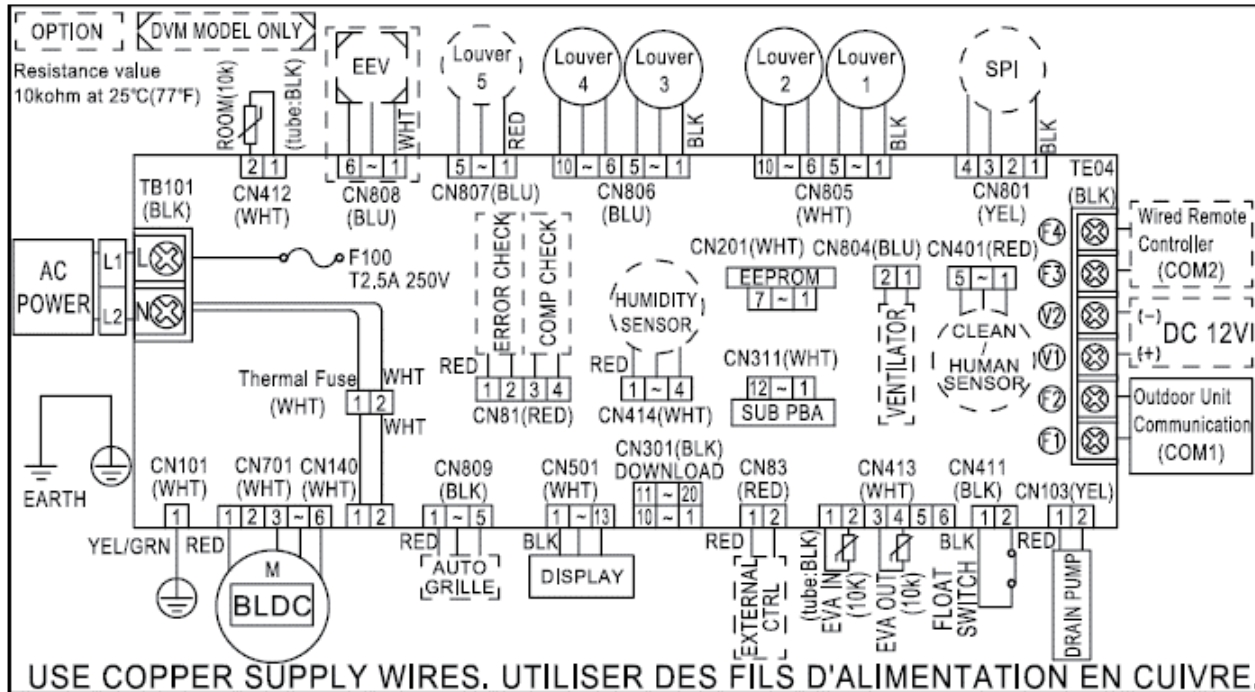
Units : mm [inches]



	A	B
~ 7.1kW	221 [8-11/16]	70 [2-3/4]
9kW ~ 14kW	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)

SUB PBA	Printed Circuit Board(SUB)	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

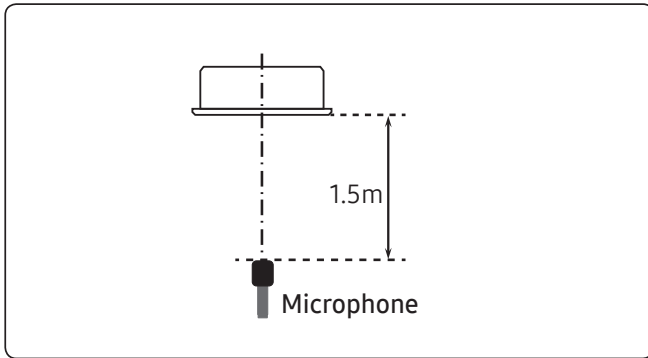
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⚡ Protective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

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

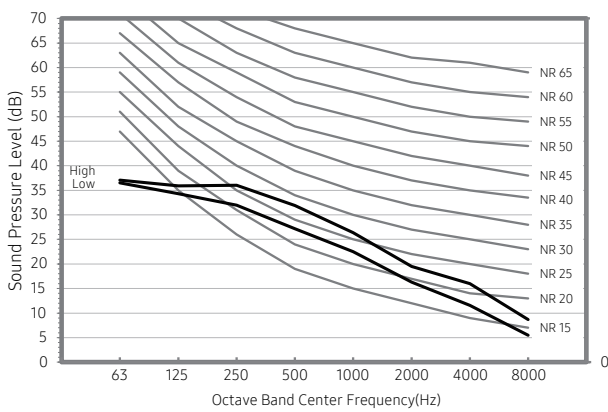
Unit: dB(A)



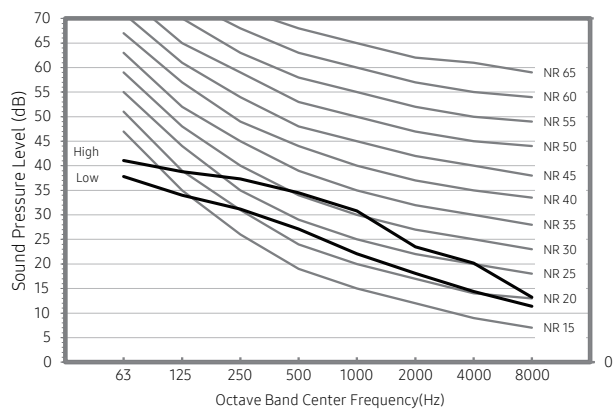
Model	High	MID	LOW
AC052NN4DKH/EU	33	31	29
AC071NN4DKH/EU	36	33	29
AC090NN4DKH/EU	43	38	33
AC100NN4DKH/EU	44	39	33

- NR Curve

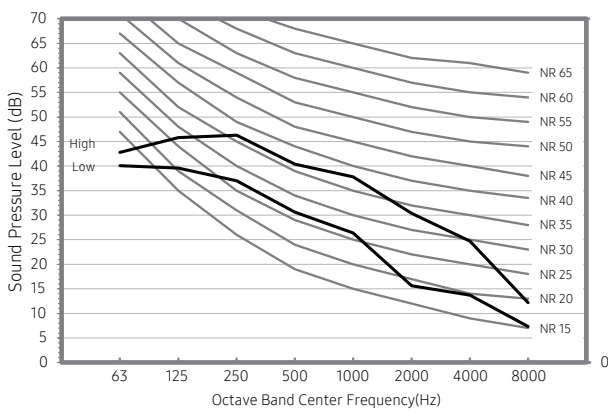
1) AC052NN4DKH/EU



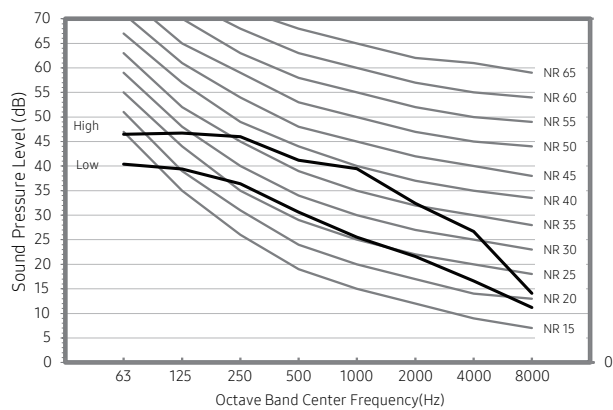
2) AC071NN4DKH/EU



3) AC090NN4DKH/EU



4) AC100NN4DKH/EU



NOTE

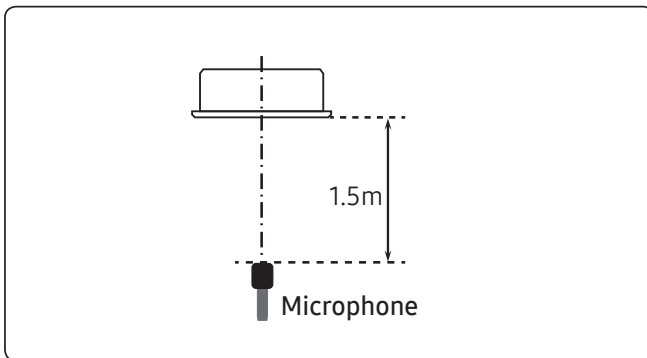
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A weighted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

7. Sound Data

Wind-Free 4Way Cassette

Sound Pressure level

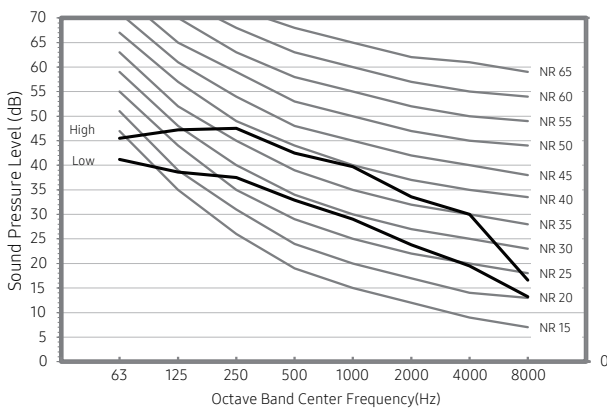
Unit: dB(A)



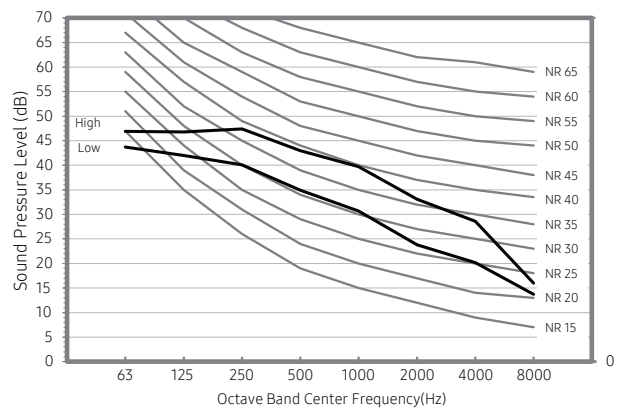
Model	High	MID	LOW
AC120NN4DKH/EU	45	40	35
AC140NN4DKH/EU	45	41	37

- NR Curve

5) AC120NN4DKH/EU



6) AC140NN4DKH/EU



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

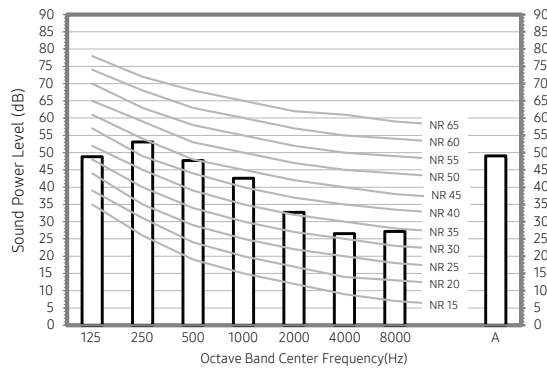
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

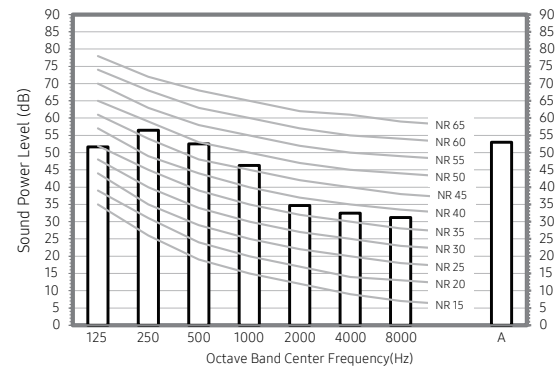
Model	Power
AC052NN4DKH/EU	49
AC071NN4DKH/EU	53
AC090NN4DKH/EU	60
AC100NN4DKH/EU	61
AC120NN4DKH/EU	61
AC140NN4DKH/EU	61

NR Curve

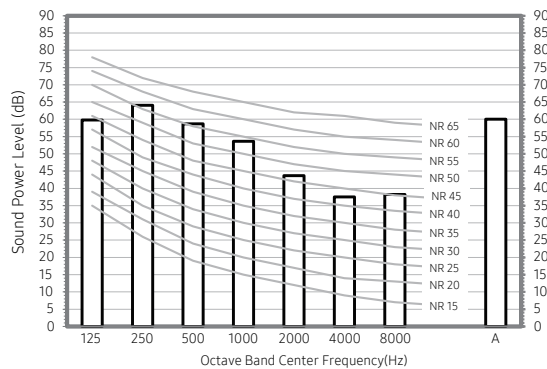
1) AC052NN4DKH/EU



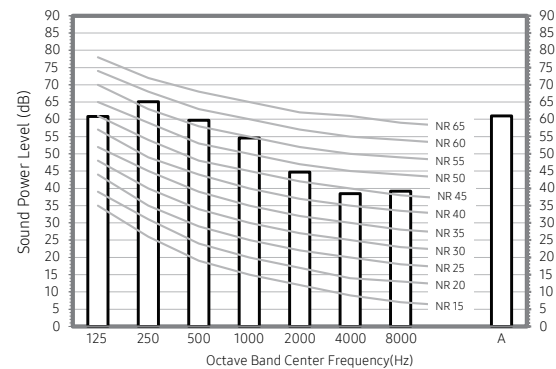
2) AC071NN4DKH/EU



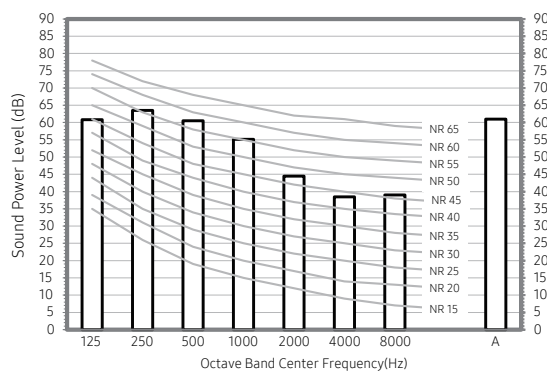
3) AC090NN4DKH/EU



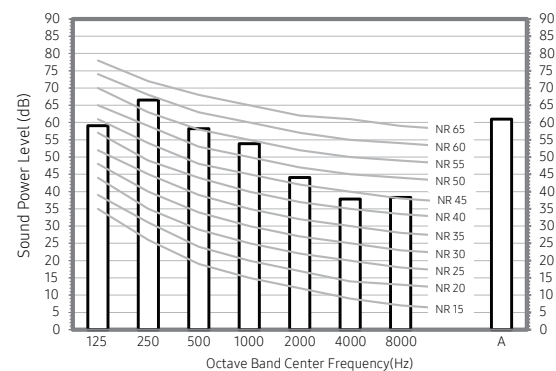
4) AC100NN4DKH/EU



5) AC120NN4DKH/EU



6) AC140NN4DKH/EU



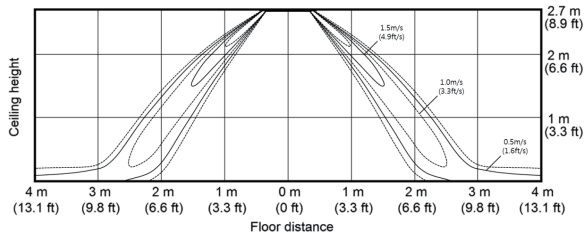
8. Temperature and air flow distribution

Wind-Free 4Way Cassette

AC052NN4DKH/EU

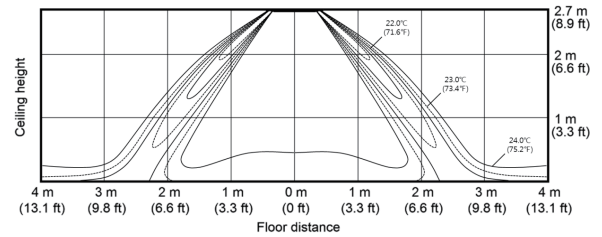
- Cooling Air Velocity distribution

(Discharge angle : 45 degree)



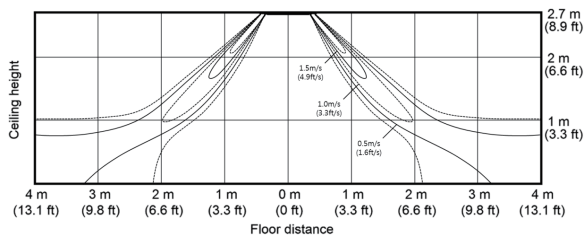
- Cooling temperature distribution

(Discharge angle : 45 degree)



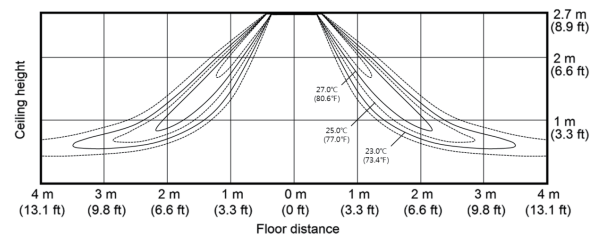
- Heating Air Velocity distribution

(Discharge angle : 52 degree)



- Heating temperature distribution

(Discharge angle : 52 degree)



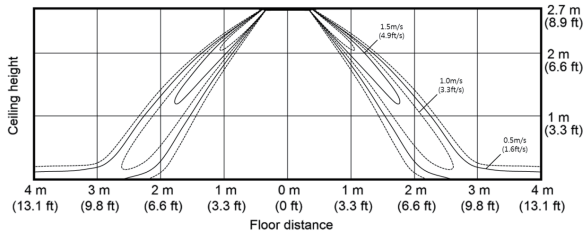
8. Temperature and air flow distribution

Wind-Free 4Way Cassette

AC071NN4DKH/EU

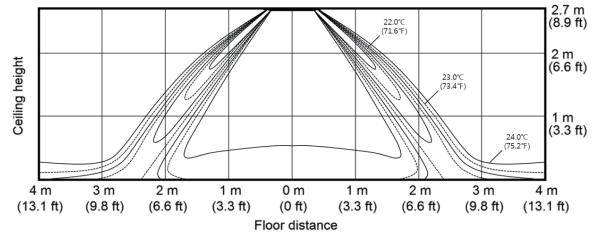
- Cooling Air Velocity distribution

(Discharge angle : 45 degree)



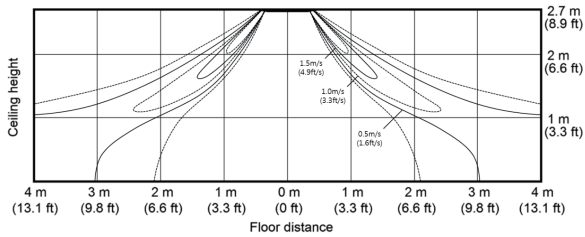
- Cooling temperature distribution

(Discharge angle : 45 degree)



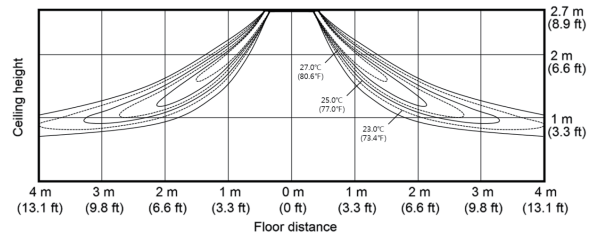
- Heating Air Velocity distribution

(Discharge angle : 52 degree)



- Heating temperature distribution

(Discharge angle : 52 degree)



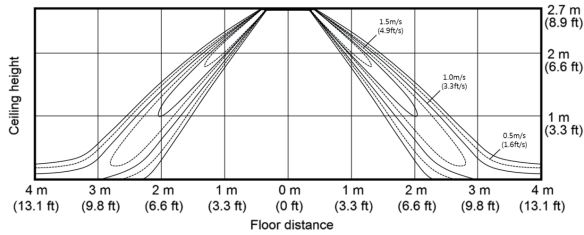
8. Temperature and air flow distribution

Wind-Free 4Way Cassette

AC090NN4DKH/EU

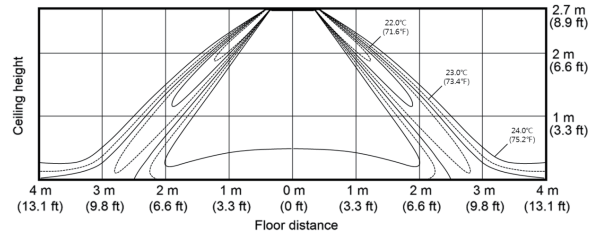
- Cooling Air Velocity distribution

(Discharge angle : 45 degree)



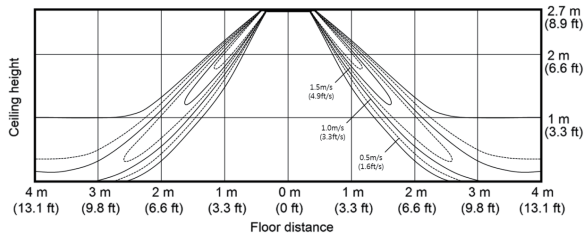
- Cooling temperature distribution

(Discharge angle : 45 degree)



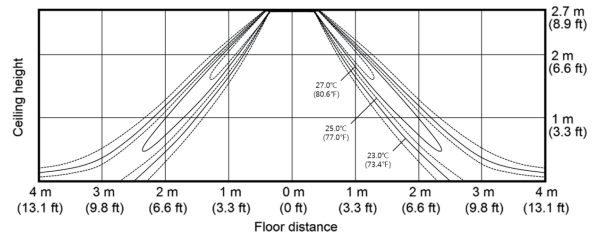
- Heating Air Velocity distribution

(Discharge angle : 52 degree)



- Heating temperature distribution

(Discharge angle : 52 degree)



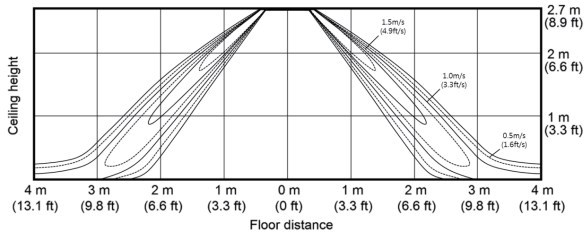
8. Temperature and air flow distribution

Wind-Free 4Way Cassette

AC100NN4DKH/EU

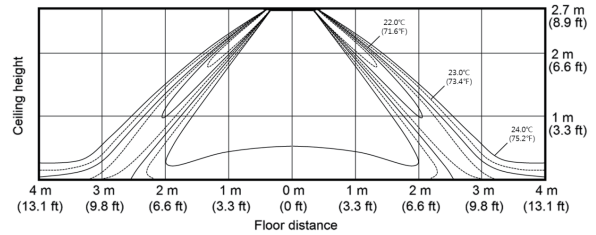
- Cooling Air Velocity distribution

(Discharge angle : 45 degree)



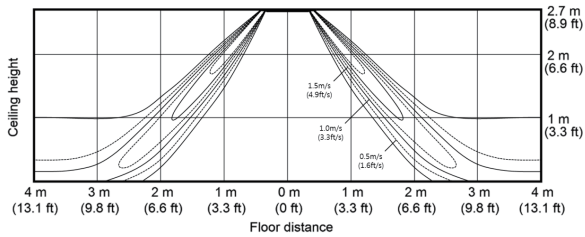
- Cooling temperature distribution

(Discharge angle : 45 degree)



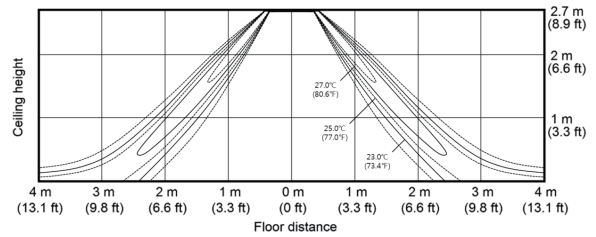
- Heating Air Velocity distribution

(Discharge angle : 52 degree)



- Heating temperature distribution

(Discharge angle : 52 degree)



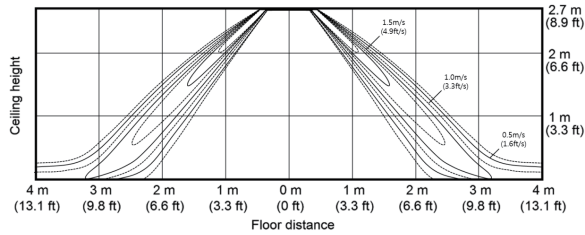
8. Temperature and air flow distribution

Wind-Free 4Way Cassette

AC120NN4DKH/EU

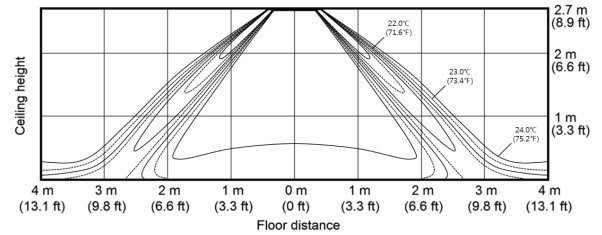
- Cooling Air Velocity distribution

(Discharge angle : 45 degree)



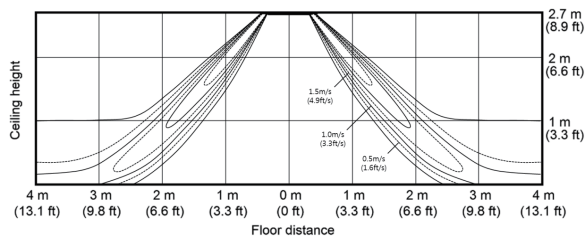
- Cooling temperature distribution

(Discharge angle : 45 degree)



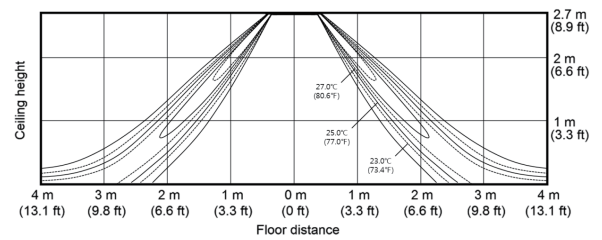
- Heating Air Velocity distribution

(Discharge angle : 52 degree)



- Heating temperature distribution

(Discharge angle : 52 degree)



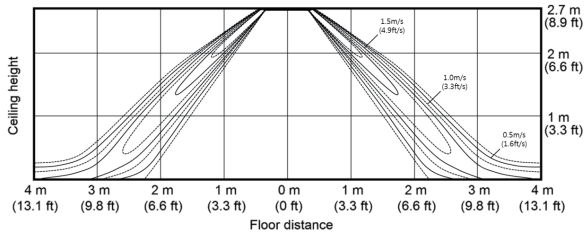
8. Temperature and air flow distribution

Wind-Free 4Way Cassette

AC140NN4DKH/EU

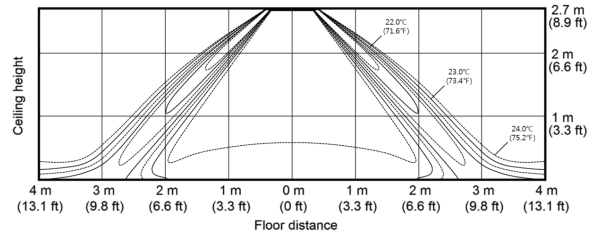
- Cooling Air Velocity distribution

(Discharge angle : 45 degree)



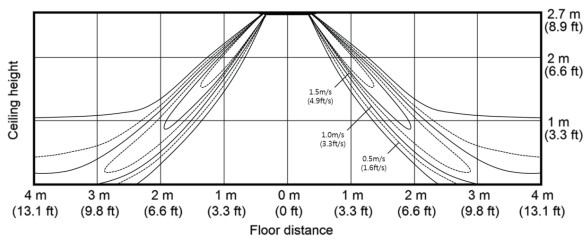
- Cooling temperature distribution

(Discharge angle : 45 degree)



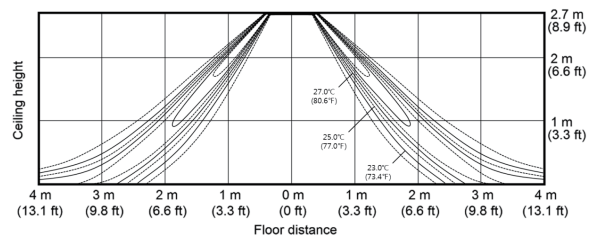
- Heating Air Velocity distribution

(Discharge angle : 52 degree)



- Heating temperature distribution

(Discharge angle : 52 degree)



Outdoor Units

1. Summary Table	69
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8. Piping Diagram	94

1. Summary Table

Outdoor Units

Performance Characteristics

Capacity/ kW	Model Code	Net Size (WxHxD mm)	Net Weight (kg)	Airflow (CMM)	Sound Pressure Level (dBA)		Sound Power Level (dBA)
					Cooling	Heating	
2.6	AC026MXADKH	790 x 548 x 285	32.8	29	46	47	59
3.5	AC035MXADKH	790 x 548 x 285	32.8	30	48	48	61
5.2	AC052MXADKH	880 x 638 x 310	43.8	40	48	48	62
6	AC060MXADKH	880 x 638 x 310	43.8	40	49	49	62
7.1	AC071MXADKH	880 x 798 x 310	53	51	49	51	65
9	AC090MXADKH	940 x 998 x 330	72	78	52	53	68
10	AC100MXADKH	940 x 998 x 330	72	78	52	54	69
10	AC100MXADNH	940 x 998 x 330	72	78	52	54	69
12	AC120MXADKH	940 x 998 x 330	77	78	54	56	70
12	AC120MXADNH	940 x 998 x 330	77	78	54	56	70
14	AC140MXADKH	940 x 1210 x 330	80	111	53	54	69
14	AC140MXADNH	940 x 1210 x 330	80	111	53	54	69

NOTE

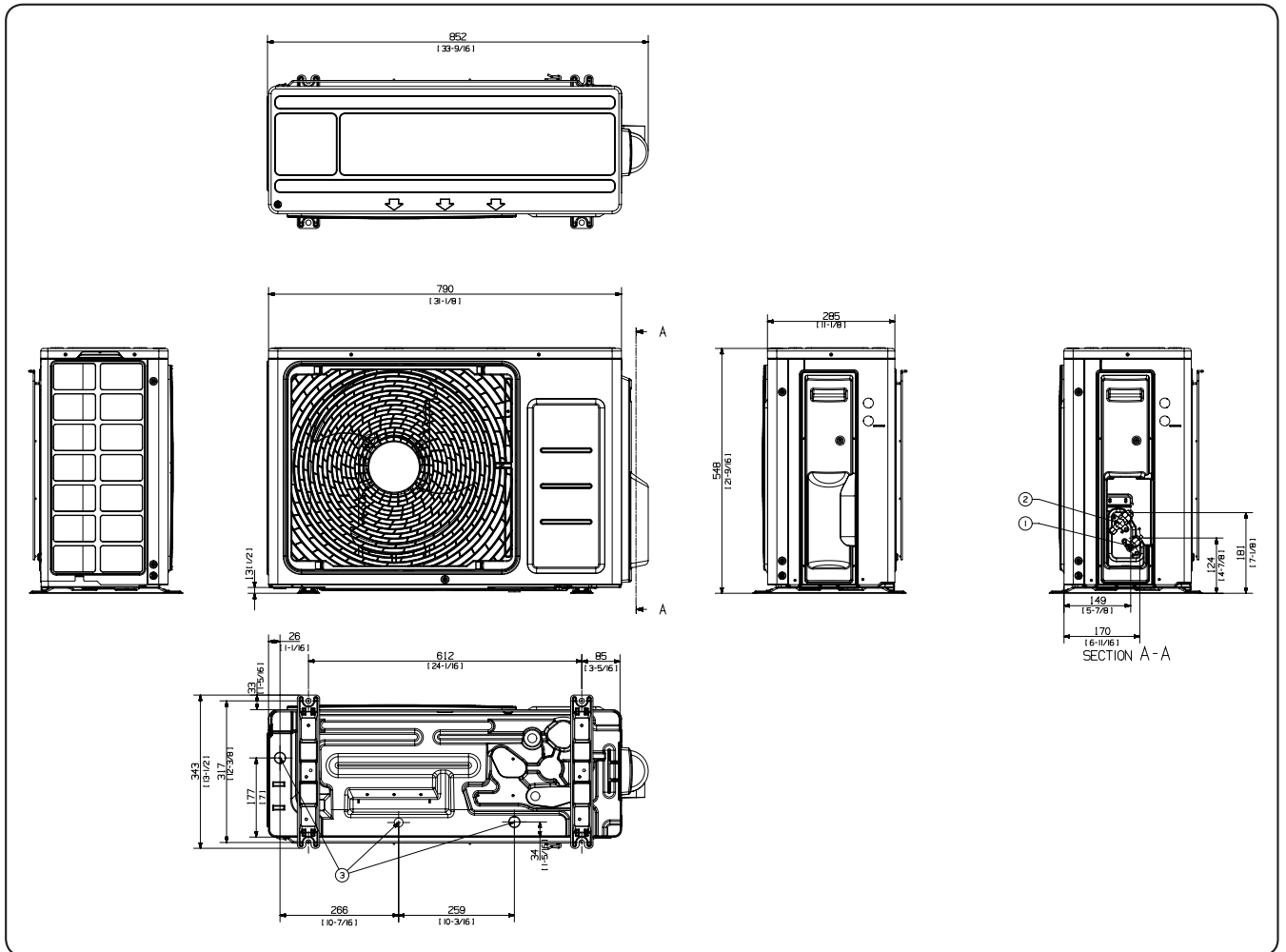
- Sound power level is based on cooling operation.

2. Dimensional Drawing

Outdoor Units

AC026/035MXADKH

Units : mm [inches]



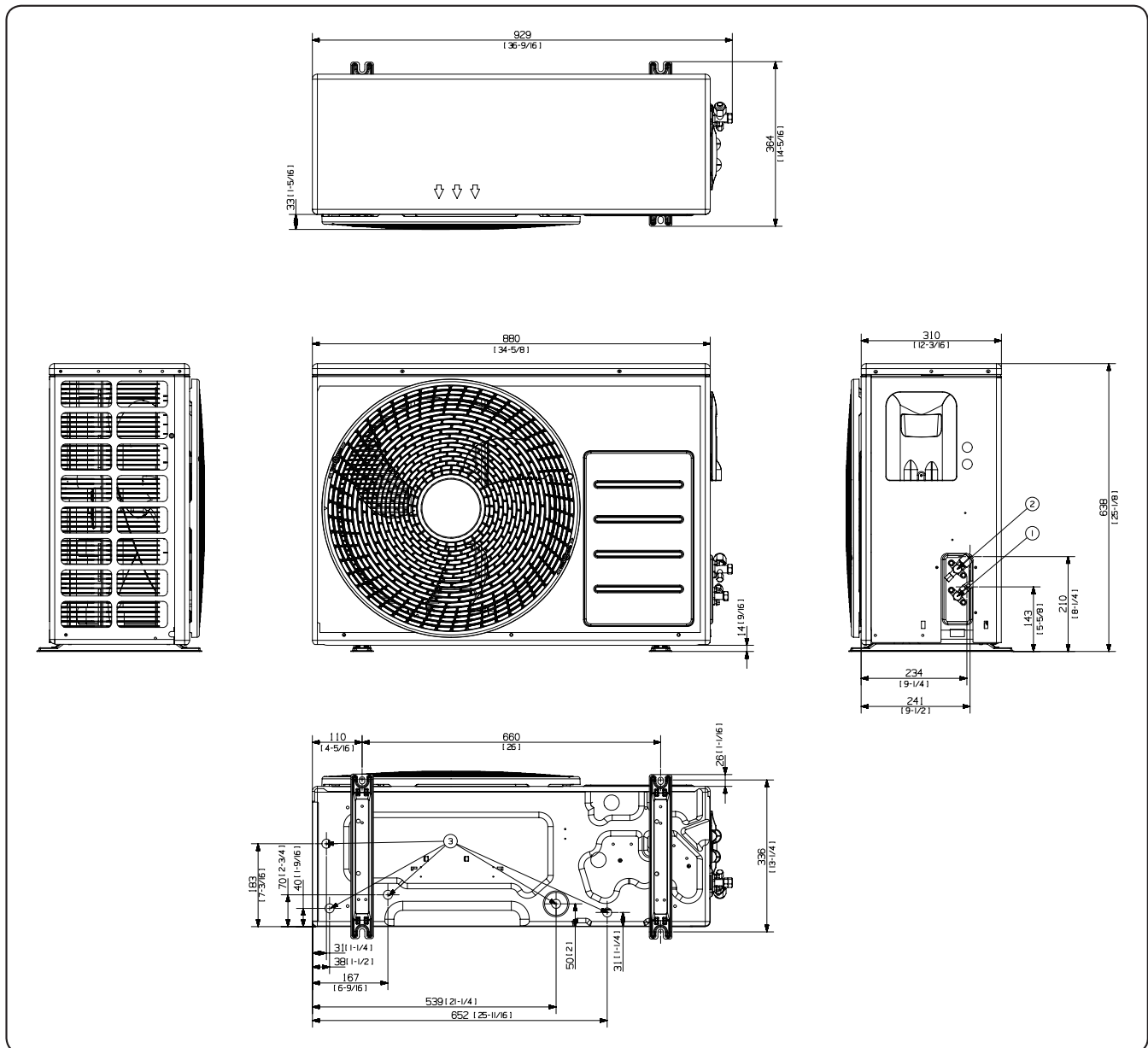
No.	Name	Description
1	Refrigerant liquid pipe	Φ6.35(1/4)
2	Refrigerant gas pipe	Φ9.52(3/8)
3	Drain Hole	

2. Dimensional Drawing

Outdoor Units

AC052/060MXADKH

Units : mm [inches]



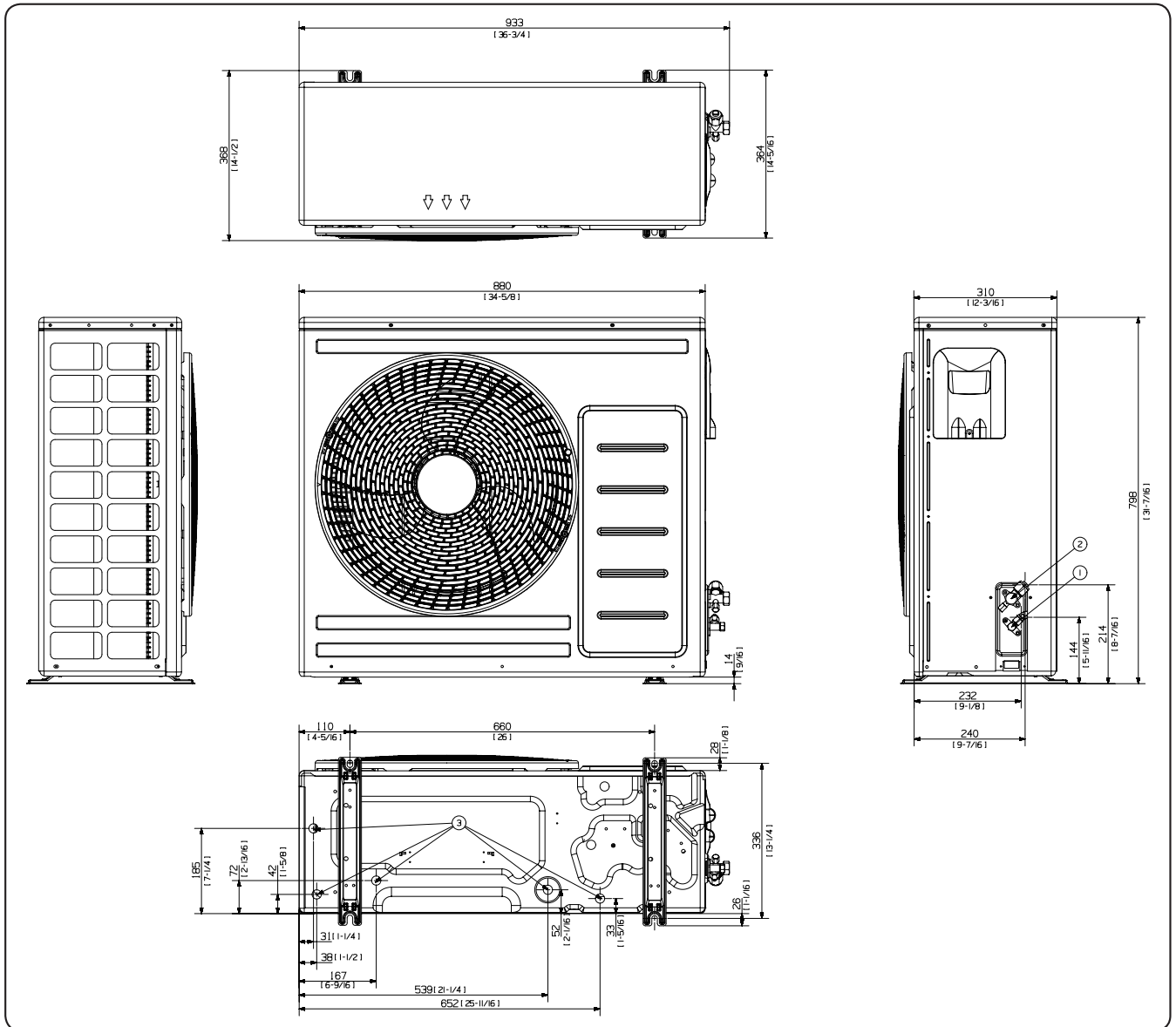
No.	Name	Description
1	Refrigerant liquid pipe	Φ6.35(1/4)
2	Refrigerant gas pipe	Φ12.7(1/2)
3	Drain Hole	

2. Dimensional Drawing

Outdoor Units

AC071MXADKH

Units : mm [inches]



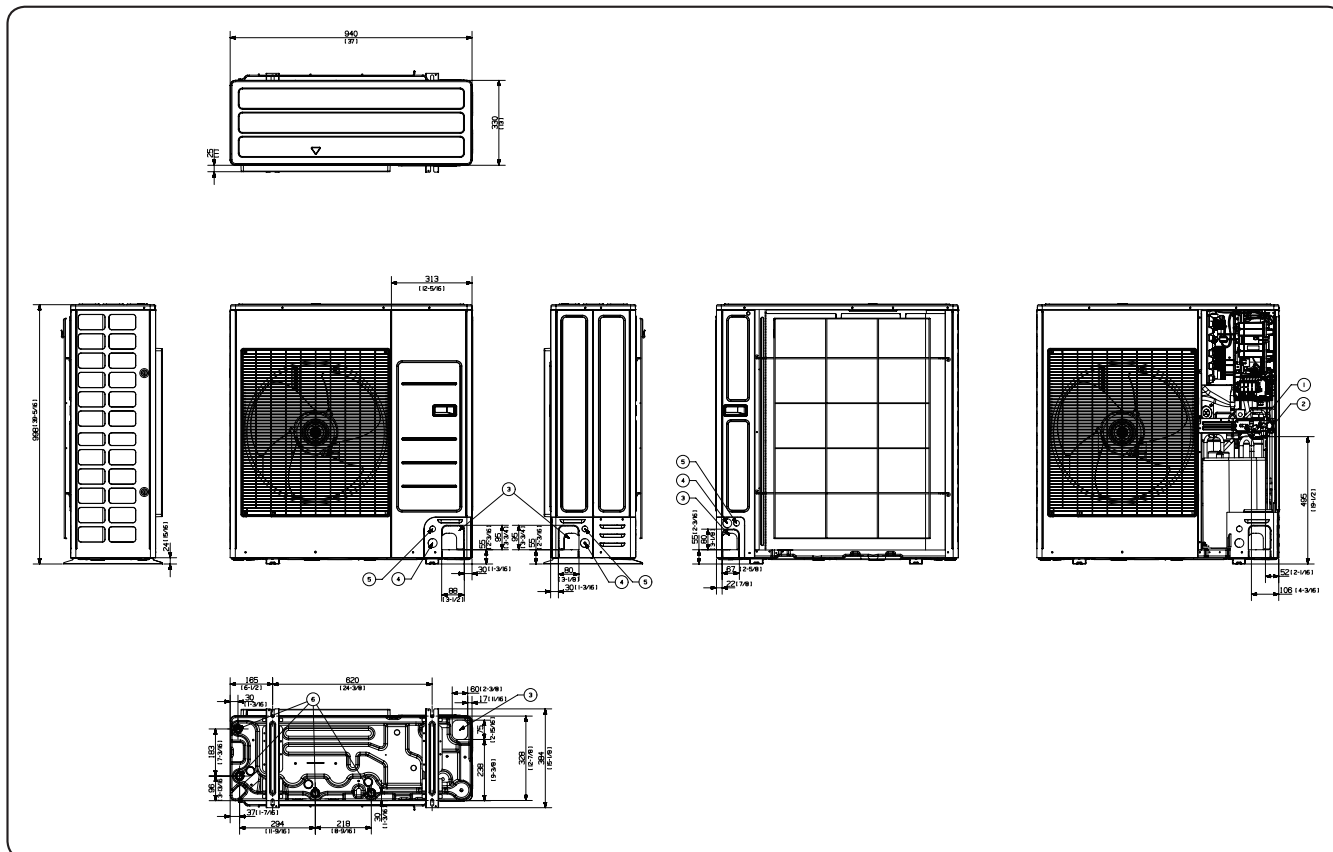
No.	Name	Description
1	Refrigerant liquid pipe	Φ6.35(1/4)
2	Refrigerant gas pipe	Φ15.88(5/8)
3	Drain Hole	

2. Dimensional Drawing

Outdoor Units

AC090/100/120MXAD*H

Units : mm [inches]



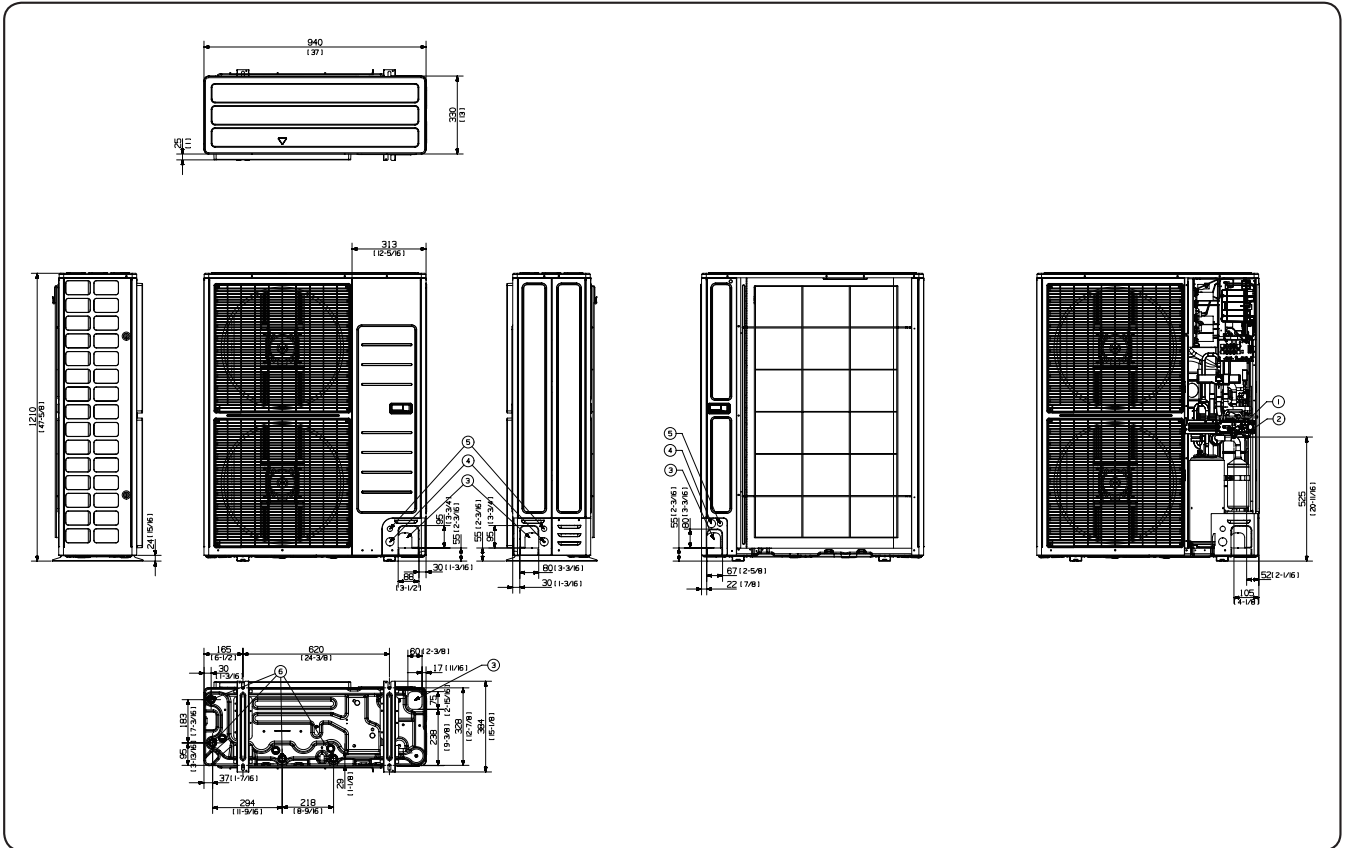
No.	Name	Description
1	Refrigerant liquid pipe	Φ9.52(3/8)
2	Refrigerant gas pipe	Φ15.88(5/8)
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear, Φ34 [1-3/8]
5	Communication wiring conduit	Front / Side / Rear, Φ22 [7/8]
6	Drain Hole	Connect with the provided drain plug

2. Dimensional Drawing

Outdoor Units

AC140MXAD*H

Units : mm [inches]



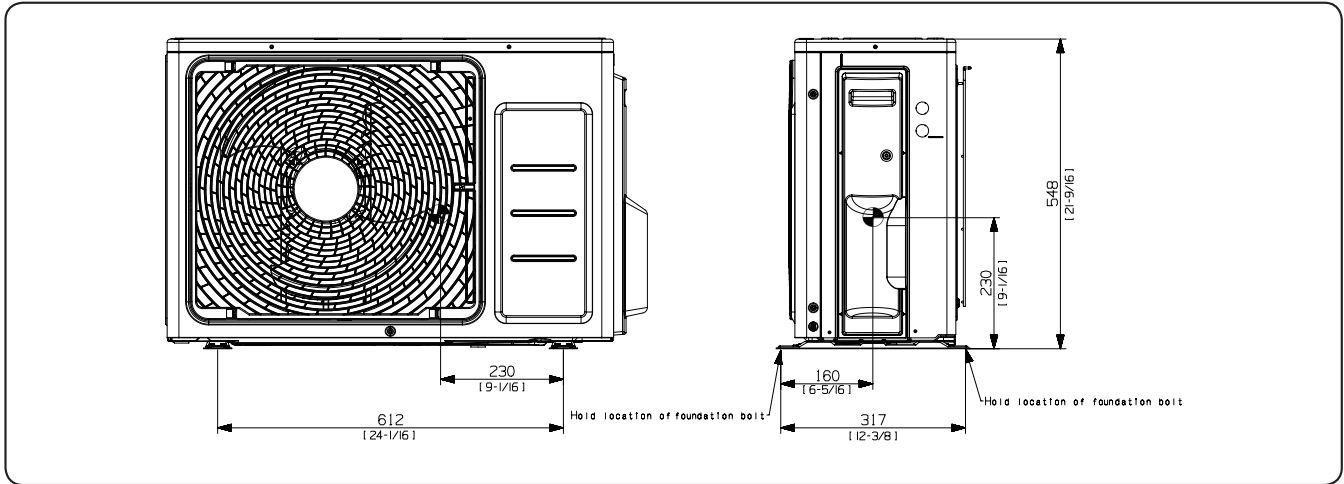
No.	Name	Description
1	Refrigerant liquid pipe	Φ9.52(3/8)
2	Refrigerant gas pipe	Φ15.88(5/8)
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear, Φ34 [1-3/8]
5	Communication wiring conduit	Front / Side / Rear, Φ22 [7/8]
6	Drain Hole	Connect with the provided drain plug

3. Center of Gravity

Outdoor Units

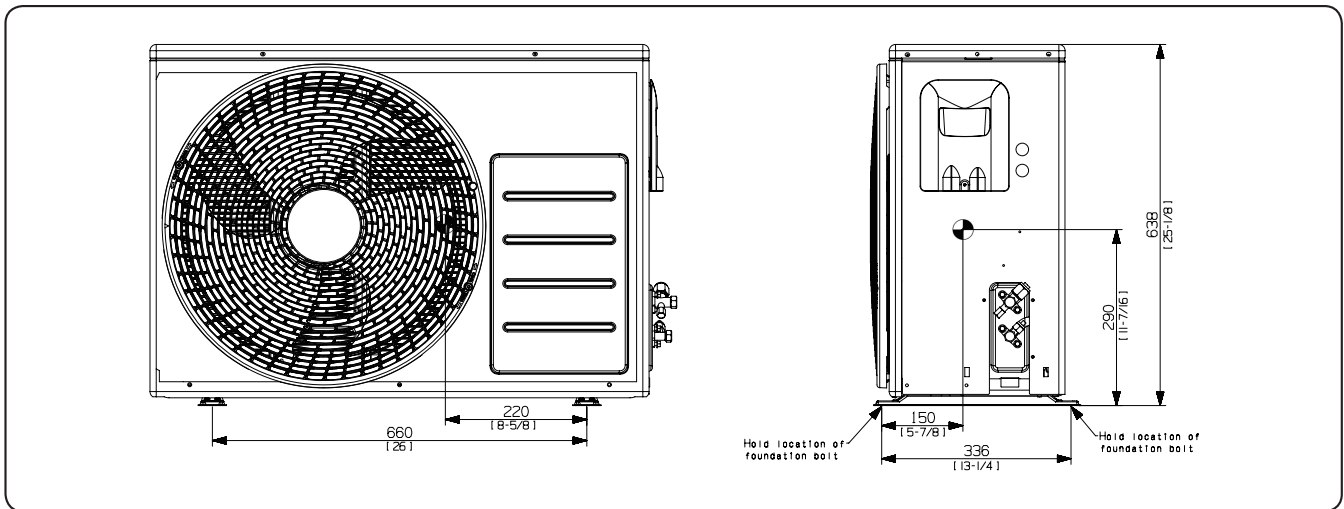
AC026/035MXADKH

Units : mm [inches]



AC052/060MXADKH

Units : mm [inches]

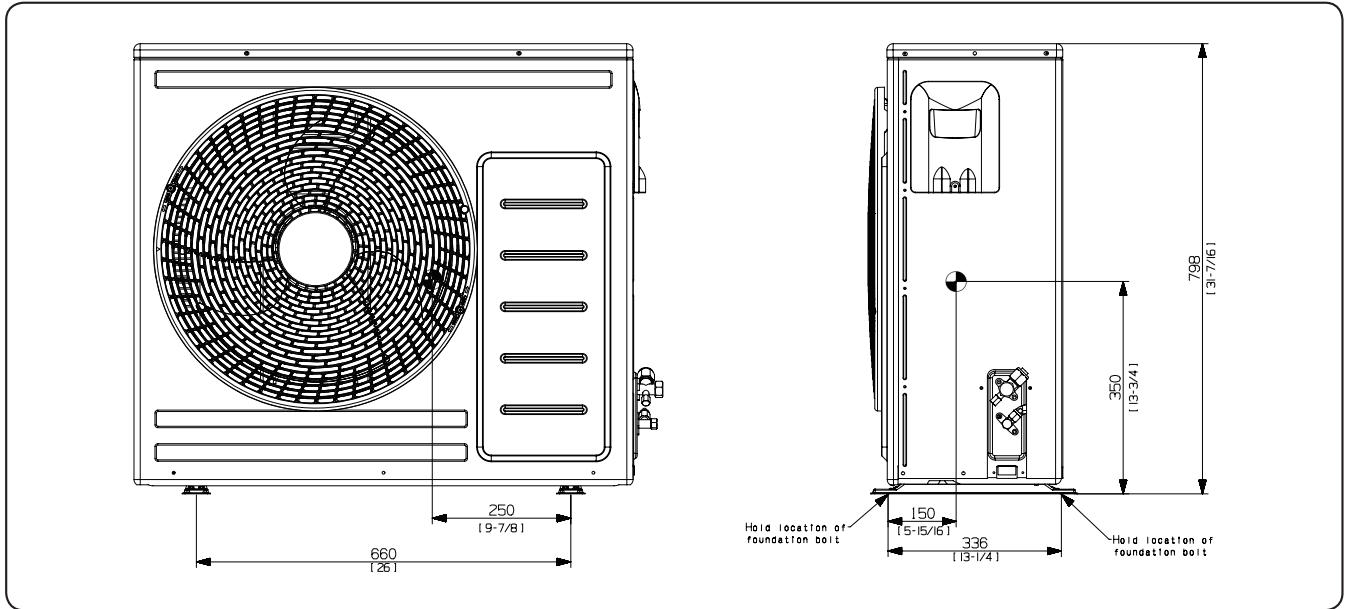


3. Center of Gravity

Outdoor Units

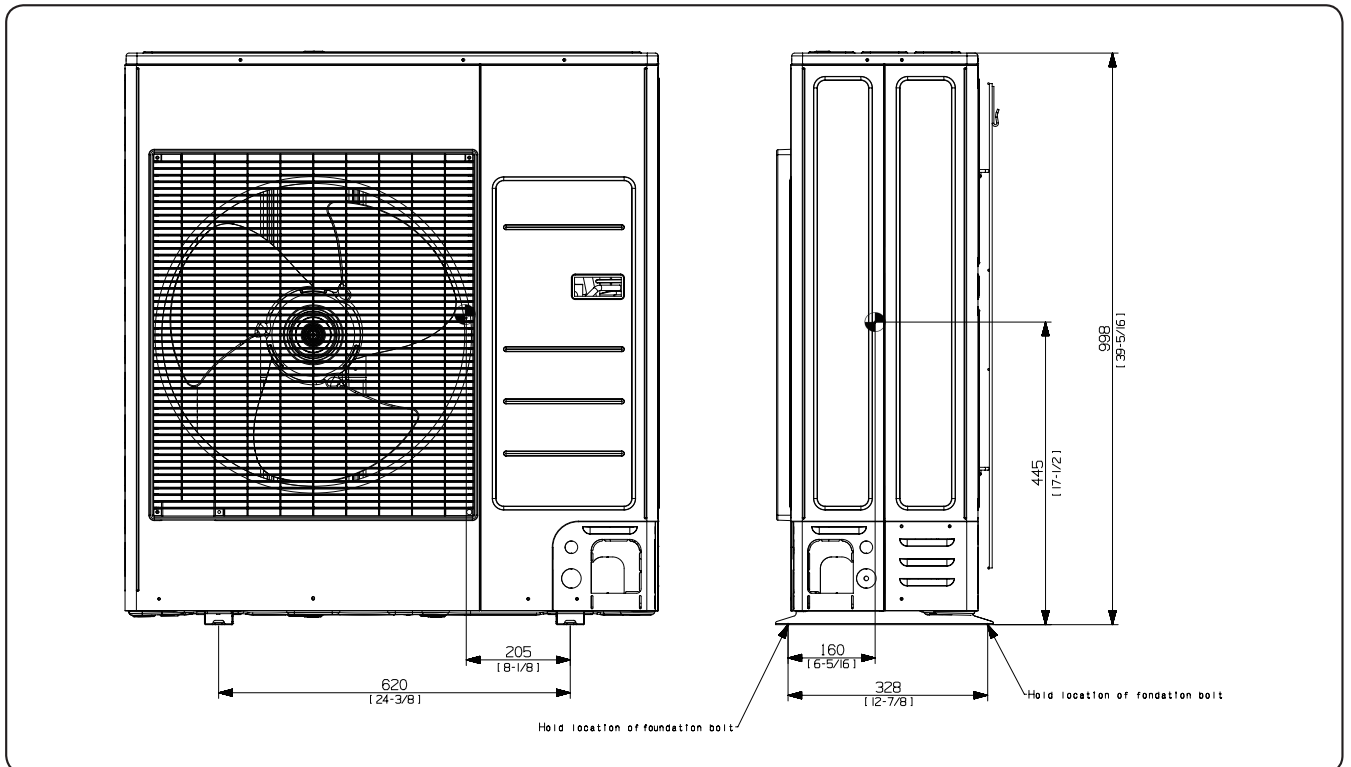
AC071MXADKH

Units : mm [inches]



AC090/100/120MXAD*H

Units : mm [inches]

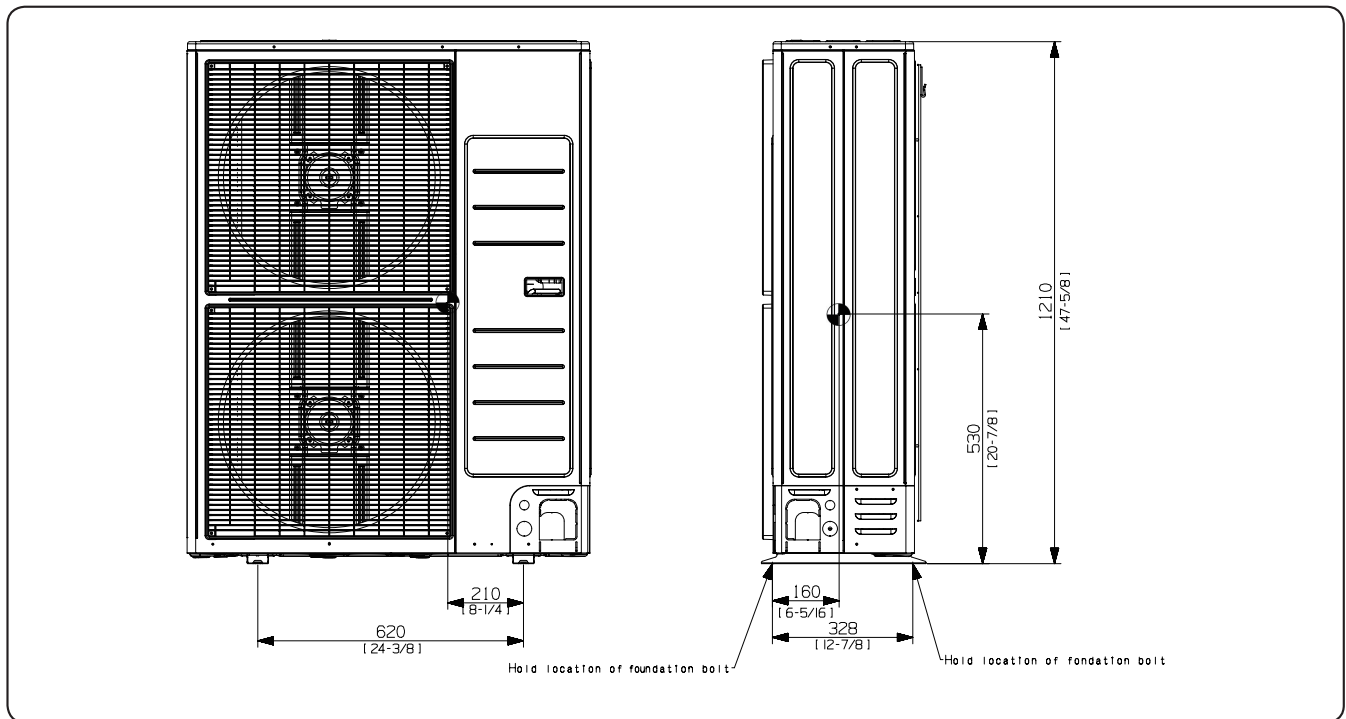


3. Center of Gravity

Outdoor Units

AC140MXAD*H

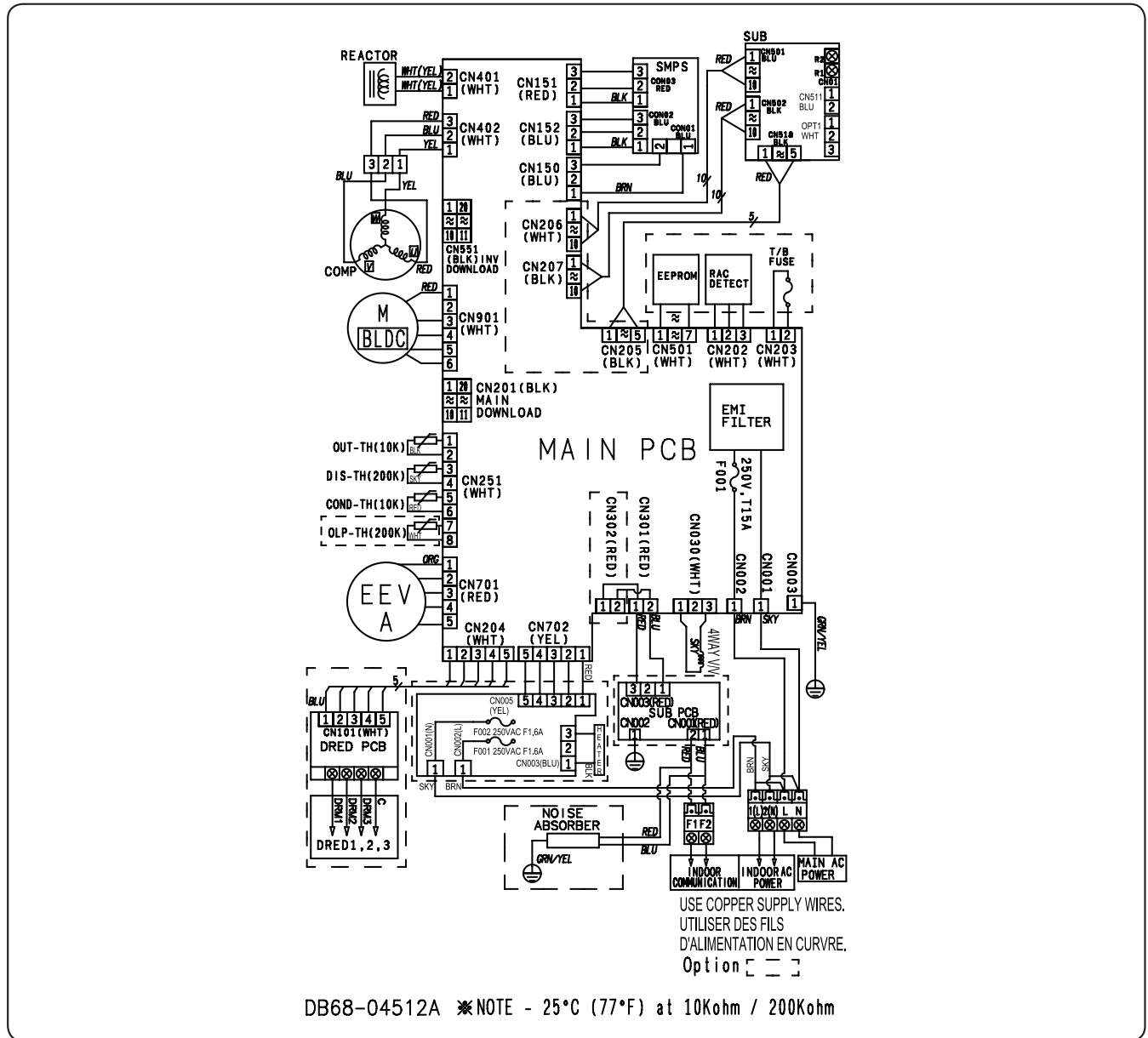
Units : mm [inches]



4. Electrical Wiring Diagram

Outdoor Units

AC026/035MXADKH

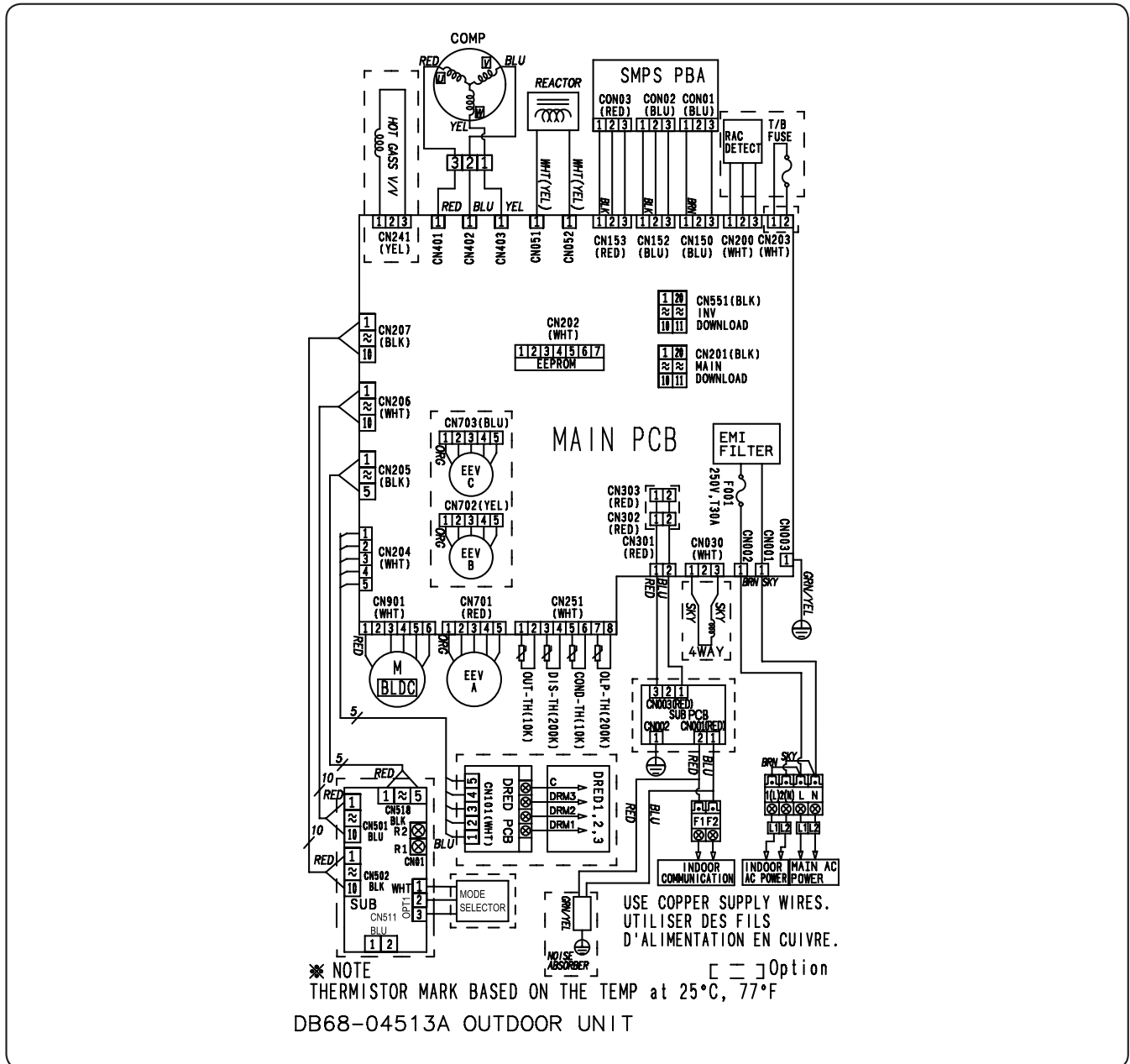


MAIN PCB	Printed circuit board(MAIN)	EEV	Electronic Expansion Valve	DIS-TH(200K)	Thermistor DISCHARGE
DRED PCB	Printed circuit board(DRED)	M-BLDC	BLDC Motor	OUT-TH(10K)	Thermistor AMBIENT
SMPS	Printed circuit board(SMPS)	OLP-TEMP	Thermistor OLP	COND-TH(10K)	Thermistor CONDENSOR
SUB	Printed circuit board(SUB)				

4. Electrical Wiring Diagram

Outdoor Units

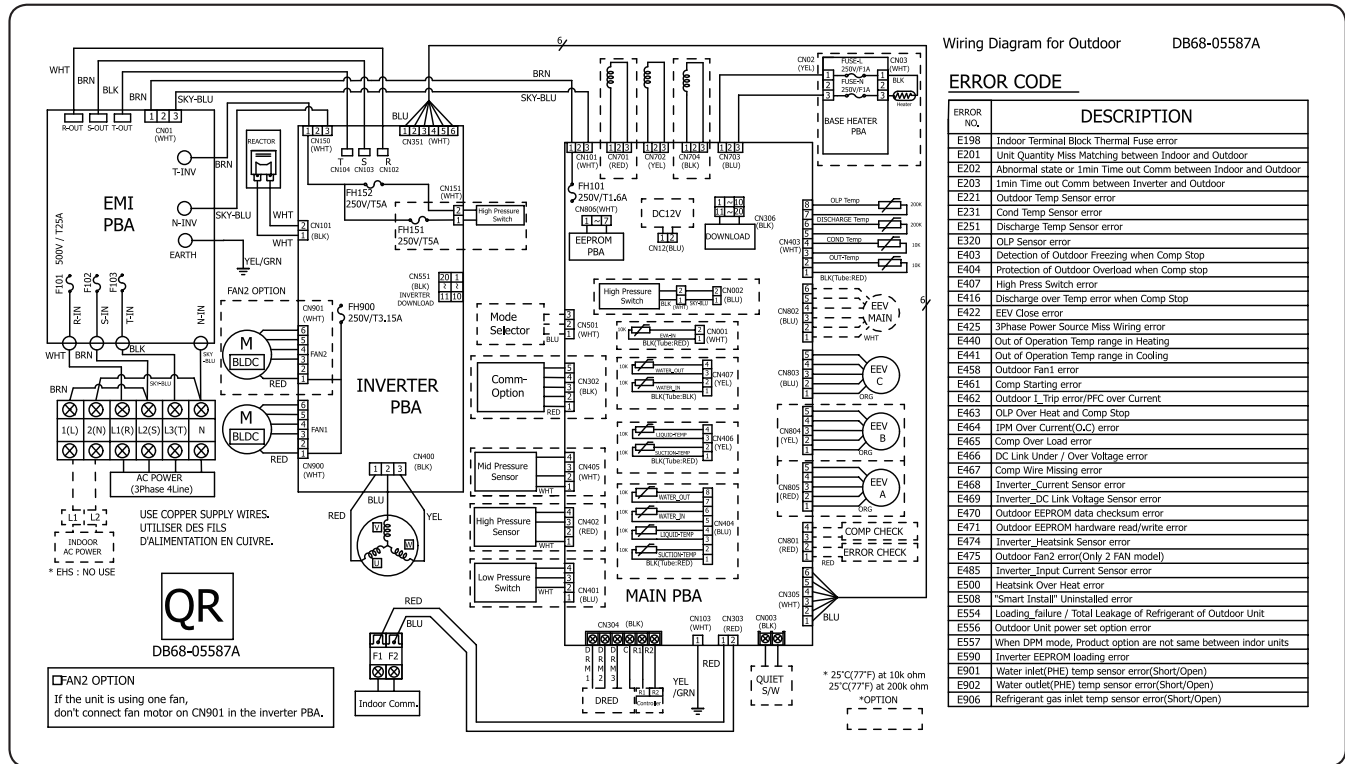
AC052/060/071MXADKH



4. Electrical Wiring Diagram

Outdoor Units

AC100/120/140MXADNH



MAIN PCB	Printed circuit board(MAIN)	EEV	Electronic Expansion Valve	DIS-TEMP	Thermistor DISCHARGE
INVERTER PCB	Printed circuit board(INVERTER)	M-BLDC	BLDC Motor	OUT-TEMP	Thermistor AMBIENT
EMI PCB	Printed circuit board(EMI)	OLP-TEMP	Thermistor OLP	COND-TEMP	Thermistor CONDENSOR

NOTE

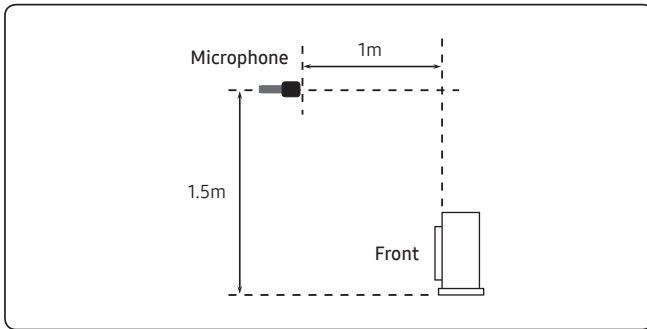
- This wiring diagram applies only to the outdoor unit.
- Colors blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue
- When operating, don't shortcircuit the protection device (High Pressure switch)
- For connection wiring indoor-outdoor transmission F1-F2, outdoor-outdoor transmission OF1-OF2, refer to the installation manual.
- ⊕ Protective earth(screw), □□□□ : connector, $\frac{N}{\times}$: The wire quantity

5. Sound Data

Outdoor Units

Sound Pressure level

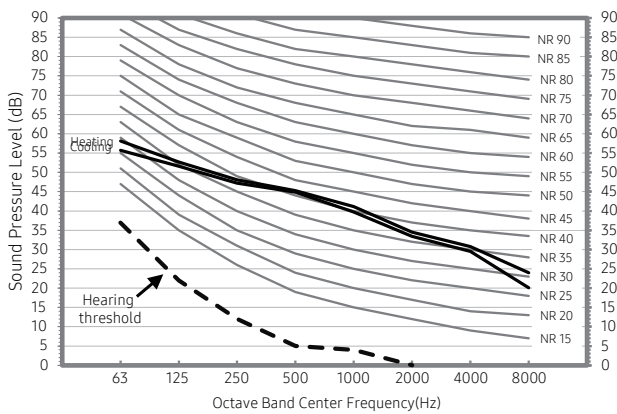
Unit: dB(A)



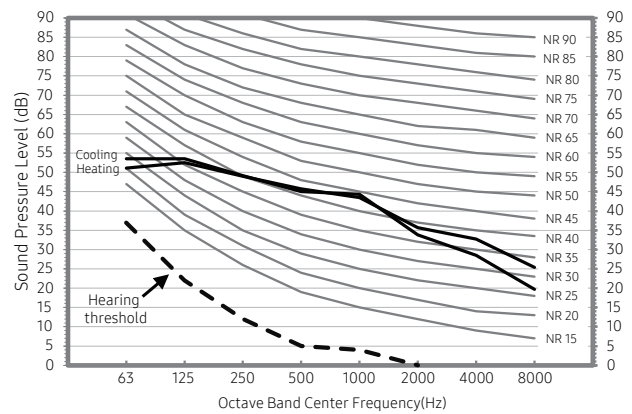
Model	Cooling	Heating
AC026MXADKH	46	47
AC035MXADKH	48	48
AC052MXADKH	48	48
AC060MXADKH	49	49

• NR Curve

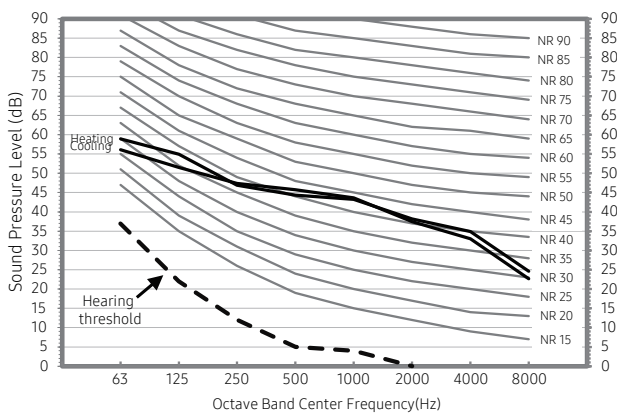
1) AC026MXADKH



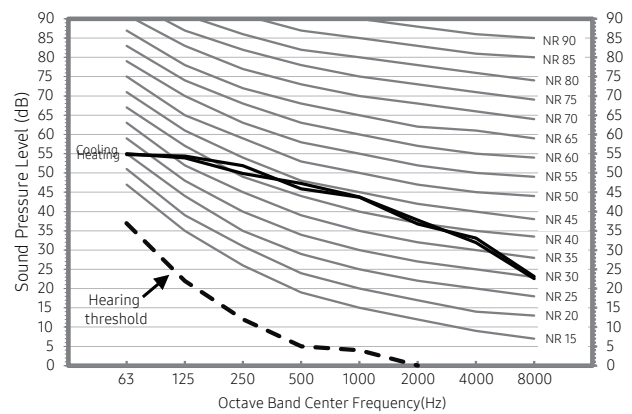
2) AC035MXADKH



3) AC052MXADKH



4) AC060MXADKH



NOTE

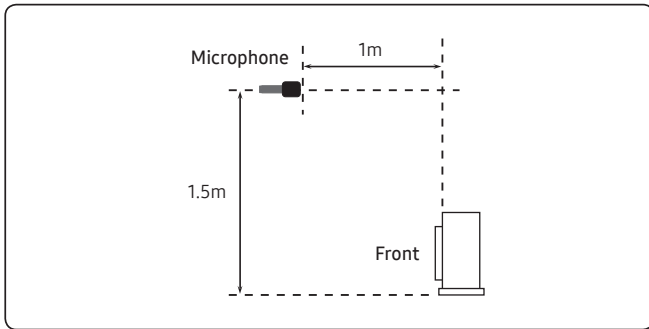
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

5. Sound Data

Outdoor Units

Sound Pressure level

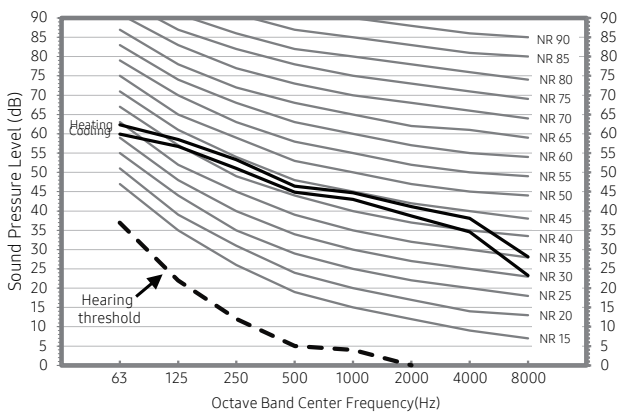
Unit: dB(A)



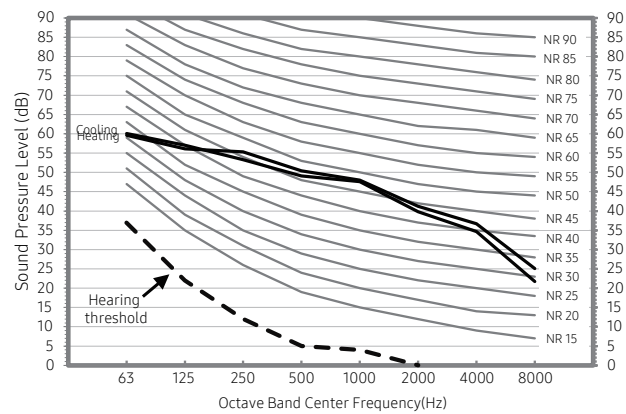
Model	Cooling	Heating
AC071MXADKH	49	51
AC090MXADKH	52	53
AC100MXADKH	52	54

- NR Curve

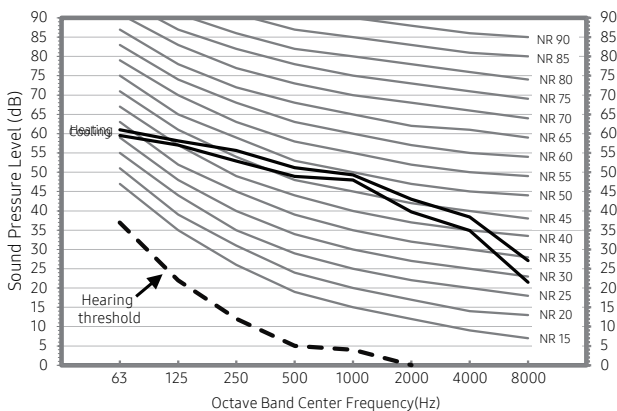
5) AC071MXADKH



6) AC090MXADKH



7) AC100MXADKH



NOTE

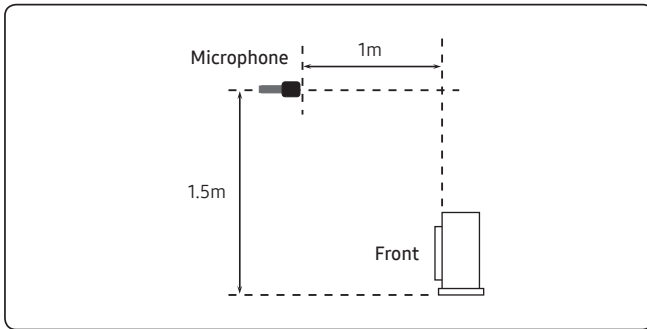
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

5. Sound Data

Outdoor Units

Sound Pressure level

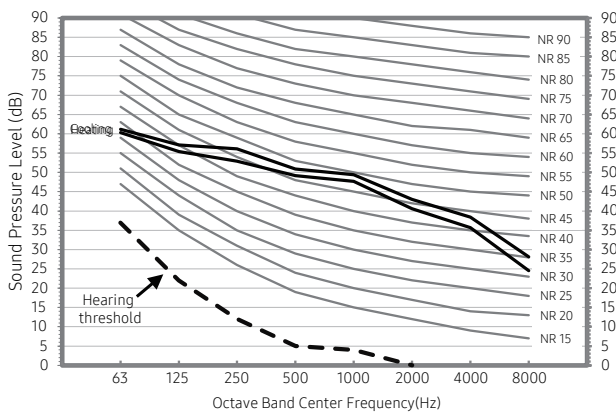
Unit: dB(A)



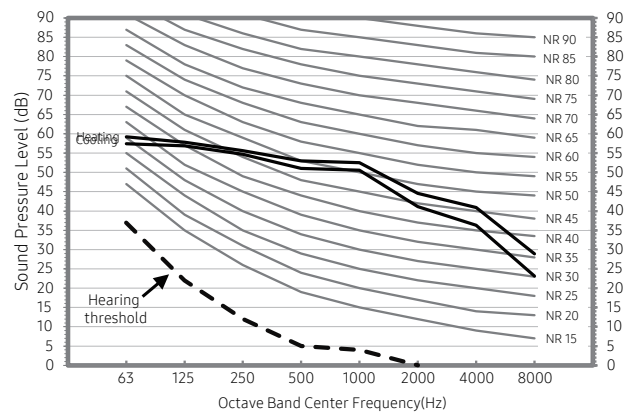
Model	Cooling	Heating
AC100MXADNH	52	54
AC120MXADKH	54	56
AC120MXADNH	54	56

- NR Curve

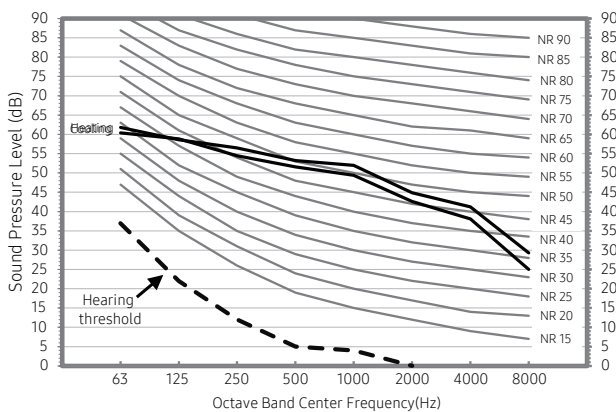
8) AC100MXADNH



9) AC120MXADKH



10) AC120MXADNH



NOTE

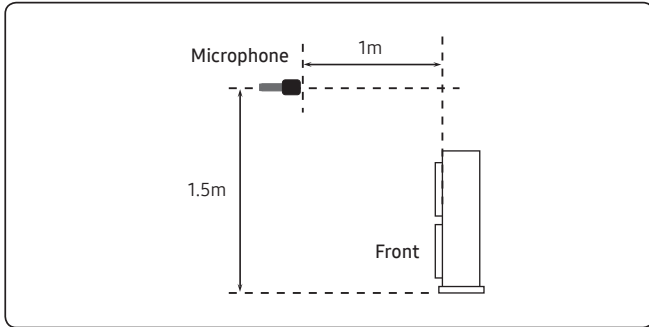
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

5. Sound Data

Outdoor Units

Sound Pressure level

Unit: dB(A)

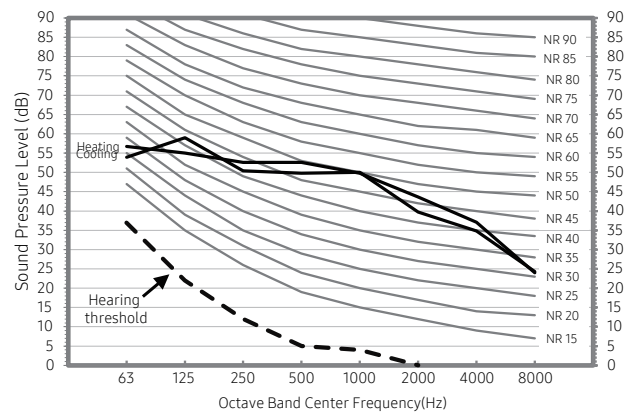
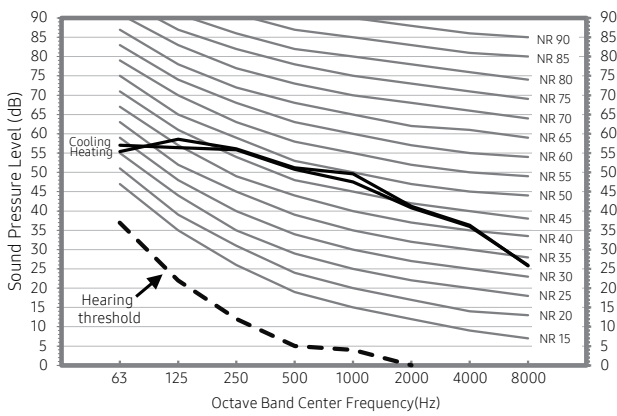


Model	Cooling	Heating
AC140MXADKH	53	54
AC140MXADNH	53	54

- NR Curve

11) AC140MXADKH

12) AC140MXADNH



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

5. Sound Data

Outdoor Units

Sound Power level

NOTE

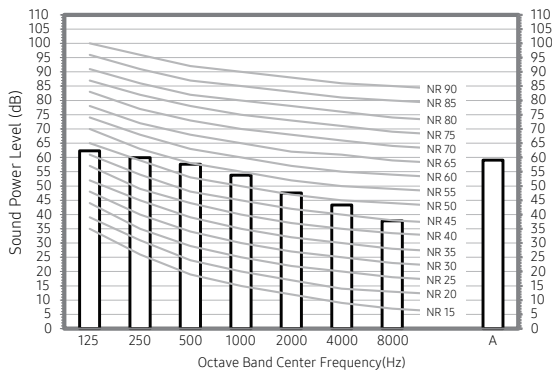
Unit: dB(A)

- 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.

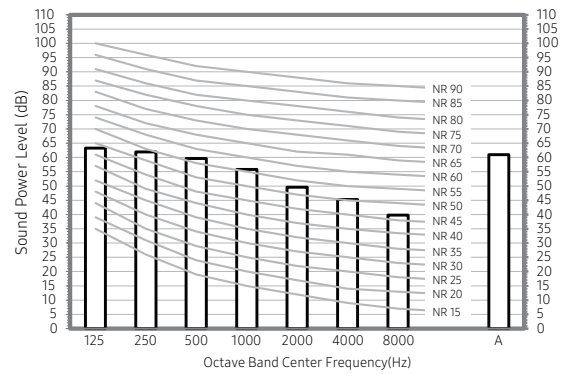
Model	Power
AC026MXADKH	59
AC035MXADKH	61
AC052MXADKH	62
AC060MXADKH	62

• NR Curve

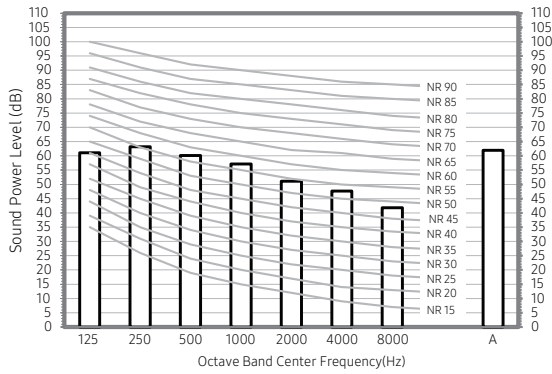
1) AC026MXADKH



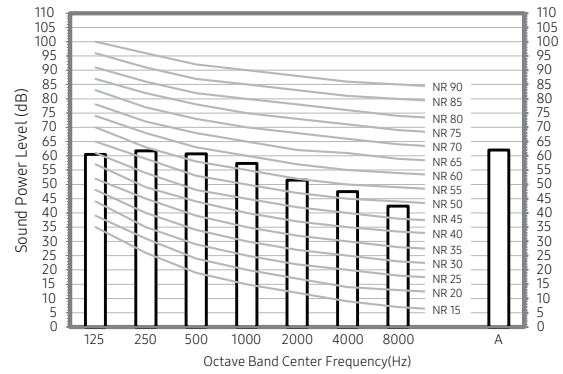
2) AC035MXADKH



3) AC052MXADKH



4) AC060MXADKH



5. Sound Data

Outdoor Units

Sound Power level

NOTE

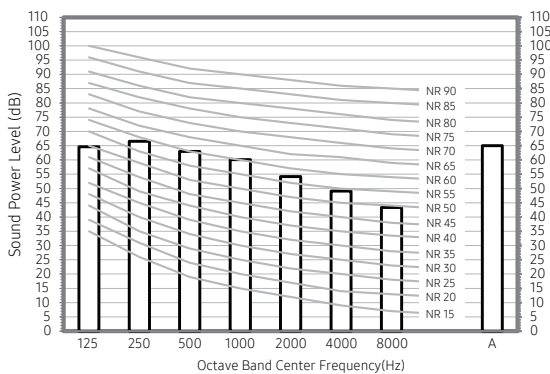
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

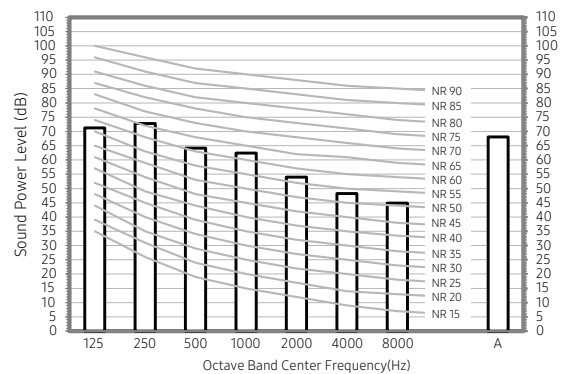
Model	Power
AC071MXADKH	65
AC090MXADKH	68
AC100MXADKH	69
AC100MXADNH	69

- NR Curve

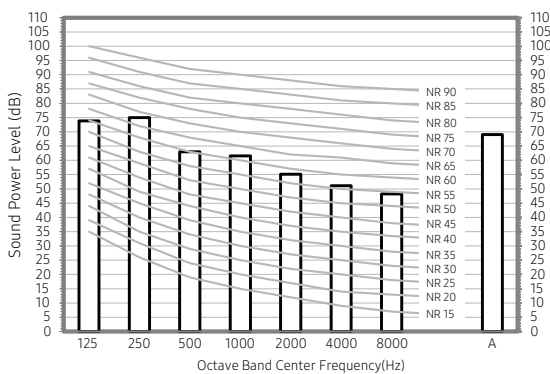
5) AC071MXADKH



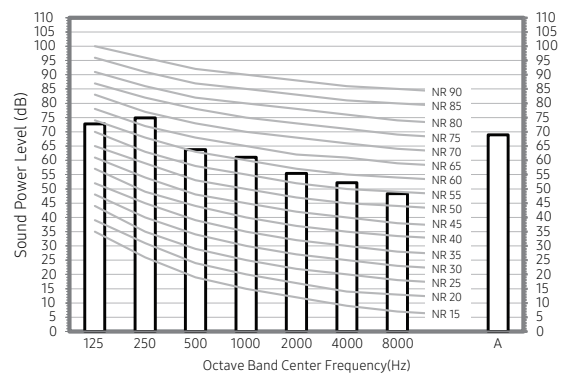
6) AC090MXADKH



7) AC100MXADKH



8) AC100MXADNH



5. Sound Data

Outdoor Units

Sound Power level

NOTE

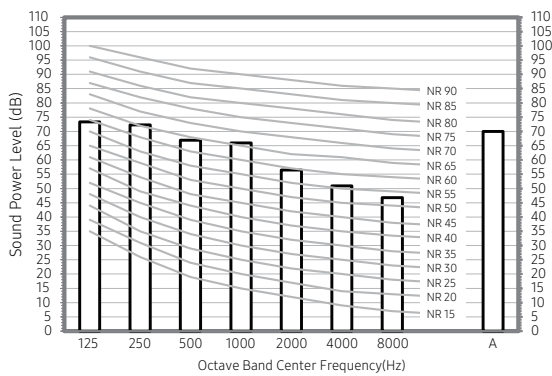
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

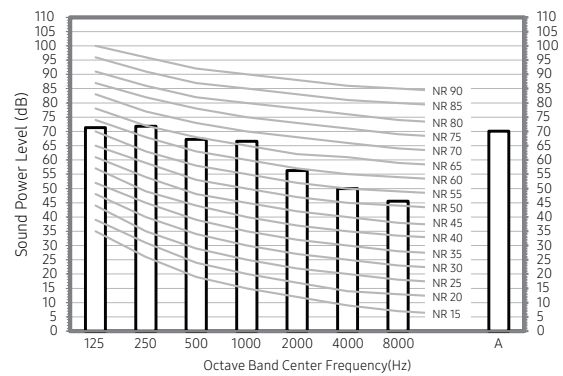
Model	Power
AC120MXADKH	70
AC120MXADNH	70
AC140MXADKH	69
AC140MXADNH	69

• NR Curve

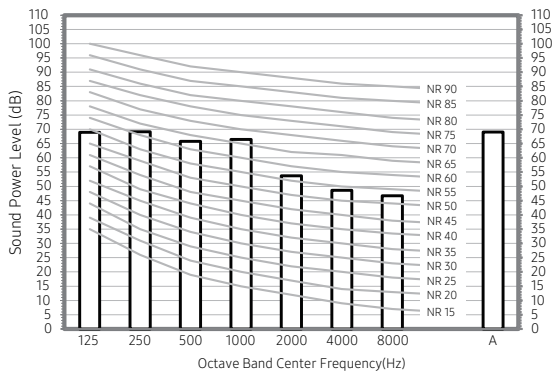
9) AC120MXADKH



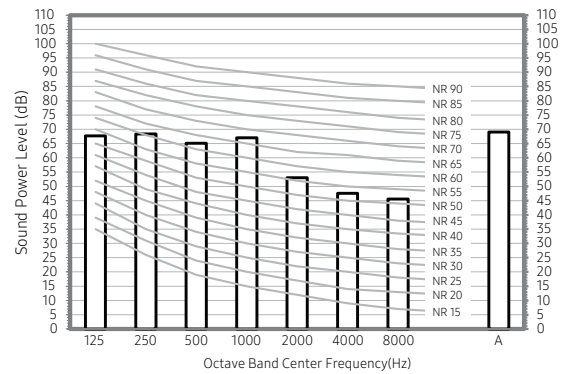
10) AC120MXADNH



11) AC140MXADKH



12) AC140MXADNH




6. Capacity Correction

Outdoor Units


AC026/035MXADKH/EU

Cooling



		Pipe Length (m)			
		5	10	15	20
Level Difference (m)	30	-	-	-	-
	25	-	-	-	-
	20	-	-	-	-
	15	-	-	-	92
	10	-	-	95	92
	5	-	97	95	92
	0	100	97	95	92
	-5	-	96	94	91
	-10	-	-	92	90
	-15	-	-	-	88
	-20	-	-	-	-
	-25	-	-	-	-
	-30	-	-	-	-

Heating




		Pipe Length (m)			
		5	10	15	20
Level Difference (m)	30	-	-	-	-
	25	-	-	-	-
	20	-	-	-	-
	15	-	-	-	92
	10	-	-	95	92
	5	-	97	95	92
	0	100	97	95	92
	-5	-	97	95	92
	-10	-	-	95	92
	-15	-	-	-	92
	-20	-	-	-	-
	-25	-	-	-	-
	-30	-	-	-	-

6. Capacity Correction

Outdoor Units


AC052/060MXADKH/EU

Cooling



		Pipe Length (m)					
		5	10	15	20	25	30
Level Difference (m)	30	-	-	-	-	-	-
	25	-	-	-	-	-	-
	20	-	-	-	-	92	90
	15	-	-	-	94	92	90
	10	-	-	96	94	92	90
	5	-	98	96	94	92	90
	0	100	98	96	94	92	90
	-5	-	97	95	93	91	89
	-10	-	-	94	93	91	89
	-15	-	-	-	92	90	88
	-20	-	-	-	-	89	86
	-25	-	-	-	-	-	-
	-30	-	-	-	-	-	-

Heating




		Pipe Length (m)					
		5	10	15	20	25	30
Level Difference (m)	30	-	-	-	-	-	-
	25	-	-	-	-	-	-
	20	-	-	-	-	94	92
	15	-	-	-	95	94	92
	10	-	-	97	95	94	92
	5	-	98	97	95	94	92
	0	100	98	97	95	94	92
	-5	-	98	97	95	94	92
	-10	-	-	97	95	94	92
	-15	-	-	-	95	94	92
	-20	-	-	-	-	94	92
	-25	-	-	-	-	-	-
	-30	-	-	-	-	-	-

6. Capacity Correction

Outdoor Units


AC071/090/100/120MXAD*H/EU

Cooling



		Pipe Length (m)									
		5	10	15	20	25	30	35	40	45	50
Level Difference (m)	30	-	-	-	-	-	-	93	92	91	90
	25	-	-	-	-	-	94	93	92	91	90
	20	-	-	-	-	96	94	93	92	91	90
	15	-	-	-	97	96	94	93	92	91	90
	10	-	-	98	97	96	94	93	92	91	90
	5	-	99	98	97	96	94	93	92	91	90
	0	100	99	98	97	96	94	93	92	91	90
	-5	-	98	97	96	95	94	93	92	91	89
	-10	-	-	97	96	95	94	92	91	90	88
	-15	-	-	-	95	95	93	92	91	89	88
	-20	-	-	-	-	94	93	92	90	89	87
	-25	-	-	-	-	-	92	91	90	88	86
	-30	-	-	-	-	-	-	91	89	88	85

Heating




		Pipe Length (m)									
		5	10	15	20	25	30	35	40	45	50
Level Difference (m)	30	-	-	-	-	-	-	95	94	93	92
	25	-	-	-	-	-	96	95	94	93	92
	20	-	-	-	-	96	96	95	94	93	92
	15	-	-	-	97	96	96	95	94	93	92
	10	-	-	98	97	96	96	95	94	93	92
	5	-	99	98	97	96	96	95	94	93	92
	0	100	99	98	97	96	96	95	94	93	92
	-5	-	99	98	97	96	96	95	94	93	92
	-10	-	-	98	97	96	96	95	94	93	92
	-15	-	-	-	97	96	96	95	94	93	92
	-20	-	-	-	-	96	96	95	94	93	92
	-25	-	-	-	-	-	96	95	94	93	92
	-30	-	-	-	-	-	-	95	94	93	92

6. Capacity Correction


Outdoor Units

AC140MXAD*H/EU

Cooling

		Pipe Length (m)															
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	
	Level Difference (m)	30	-	-	-	-	-	-	95	94	93	92	91	91	90	89	88
		25	-	-	-	-	-	96	95	94	93	92	91	91	90	89	88
		20	-	-	-	-	97	96	95	94	93	92	91	91	90	89	88
		15	-	-	-	97	97	96	95	94	93	92	91	91	90	89	88
		10	-	-	98	97	97	96	95	94	93	92	91	91	90	89	88
		5	-	99	98	97	97	96	95	94	93	92	91	91	90	89	88
		0	100	99	98	97	97	96	95	94	93	92	91	91	90	89	88
		-5	-	99	98	97	96	95	95	94	93	92	91	90	89	88	87
		-10	-	-	98	97	96	95	94	93	93	92	91	90	89	88	86
		-15	-	-	-	97	96	95	94	93	92	91	90	89	88	87	85
		-20	-	-	-	-	95	95	94	93	92	91	90	89	88	86	84
		-25	-	-	-	-	-	94	93	93	92	91	90	89	87	86	83
		-30	-	-	-	-	-	-	93	92	91	90	89	88	87	85	82

Heating

		Pipe Length (m)															
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	
	Level Difference (m)	30	-	-	-	-	-	-	96	95	94	94	93	92	91	91	90
		25	-	-	-	-	-	96	96	95	94	94	93	92	91	91	90
		20	-	-	-	-	97	96	96	95	94	94	93	92	91	91	90
		15	-	-	-	98	97	96	96	95	94	94	93	92	91	91	90
		10	-	-	99	98	97	96	96	95	94	94	93	92	91	91	90
		5	-	99	99	98	97	96	96	95	94	94	93	92	91	91	90
		0	100	99	99	98	97	96	96	95	94	94	93	92	91	91	90
		-5	-	99	99	98	97	96	96	95	94	94	93	92	91	91	90
		-10	-	-	99	98	97	96	96	95	94	94	93	92	91	91	90
		-15	-	-	-	98	97	96	96	95	94	94	93	92	91	91	90
		-20	-	-	-	-	97	96	96	95	94	94	93	92	91	91	90
		-25	-	-	-	-	-	96	96	95	94	94	93	92	91	91	90
		-30	-	-	-	-	-	-	96	95	94	94	93	92	91	91	90

7. Operation Range

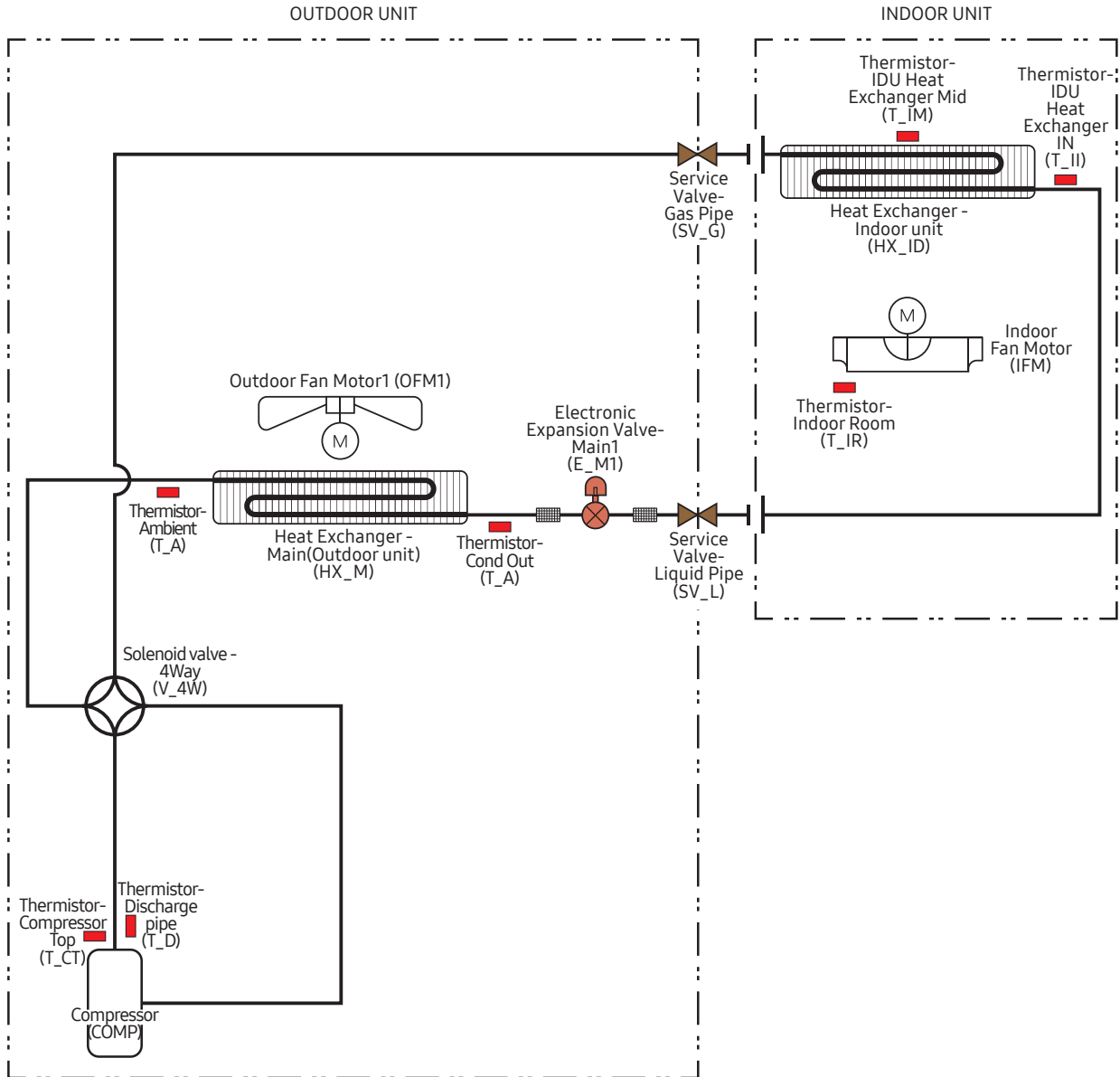
Mode	Outdoor Unit	Indoor Unit	Indoor Unit
	Temperature(DB)	Temperature(DB)	Humidity(RH)
Cooling	-15°C ~ 50°C	18°C ~ 32°C	80% or less
Heating	-20°C ~ 24°C	30°C or less	-
Drying	-15°C ~ 50°C	18°C ~ 32°C	80% or less

NOTE

- The assumed installation conditions are follows
 - The pipe length(including elbow) is 5 m.
 - The level difference is 0 m.

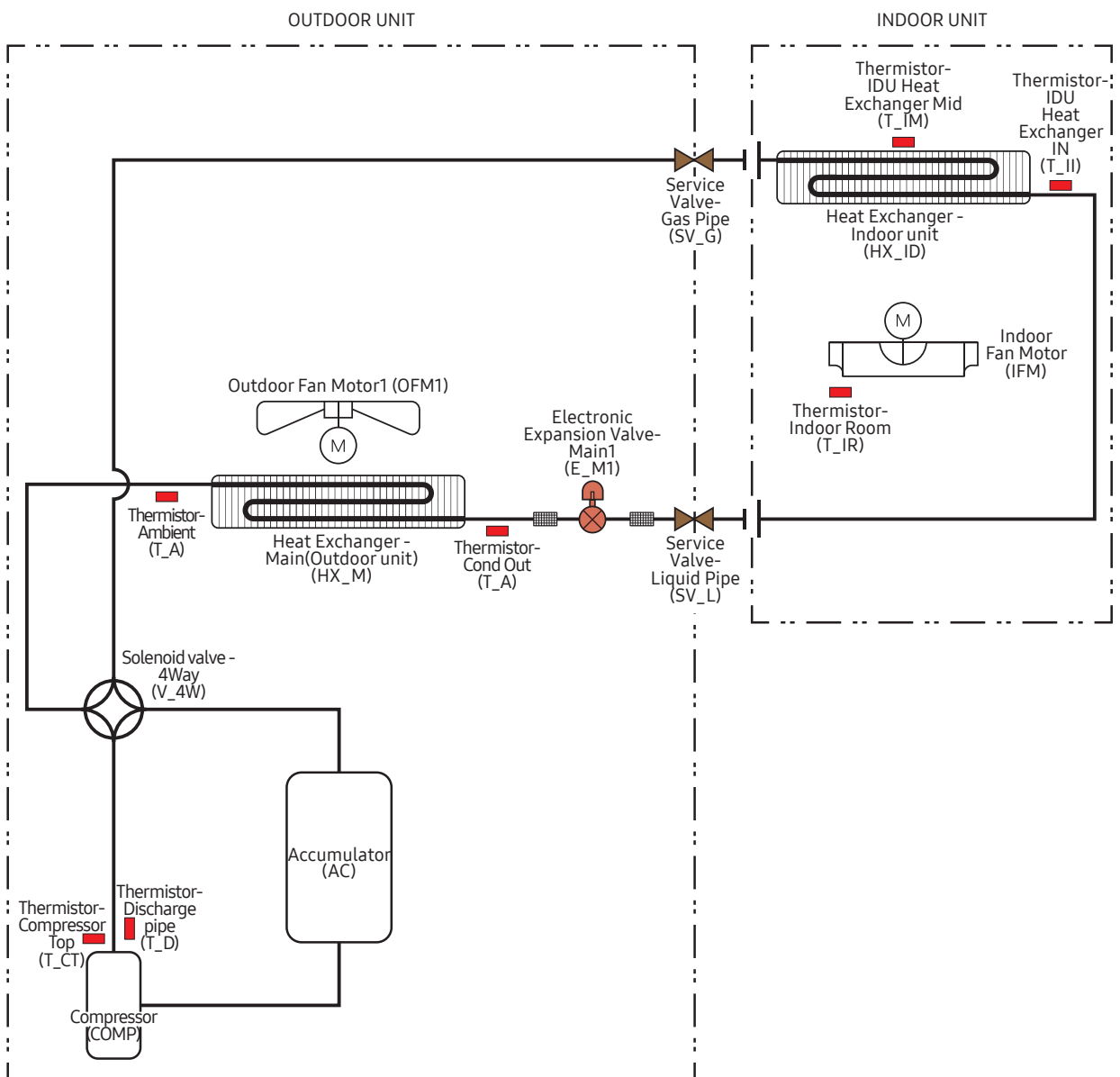
8. Piping Diagram

AC026NNNDKH/EU+AC026MXADKH/EU
 AC035NNNDKH/EU+AC035MXADKH/EU



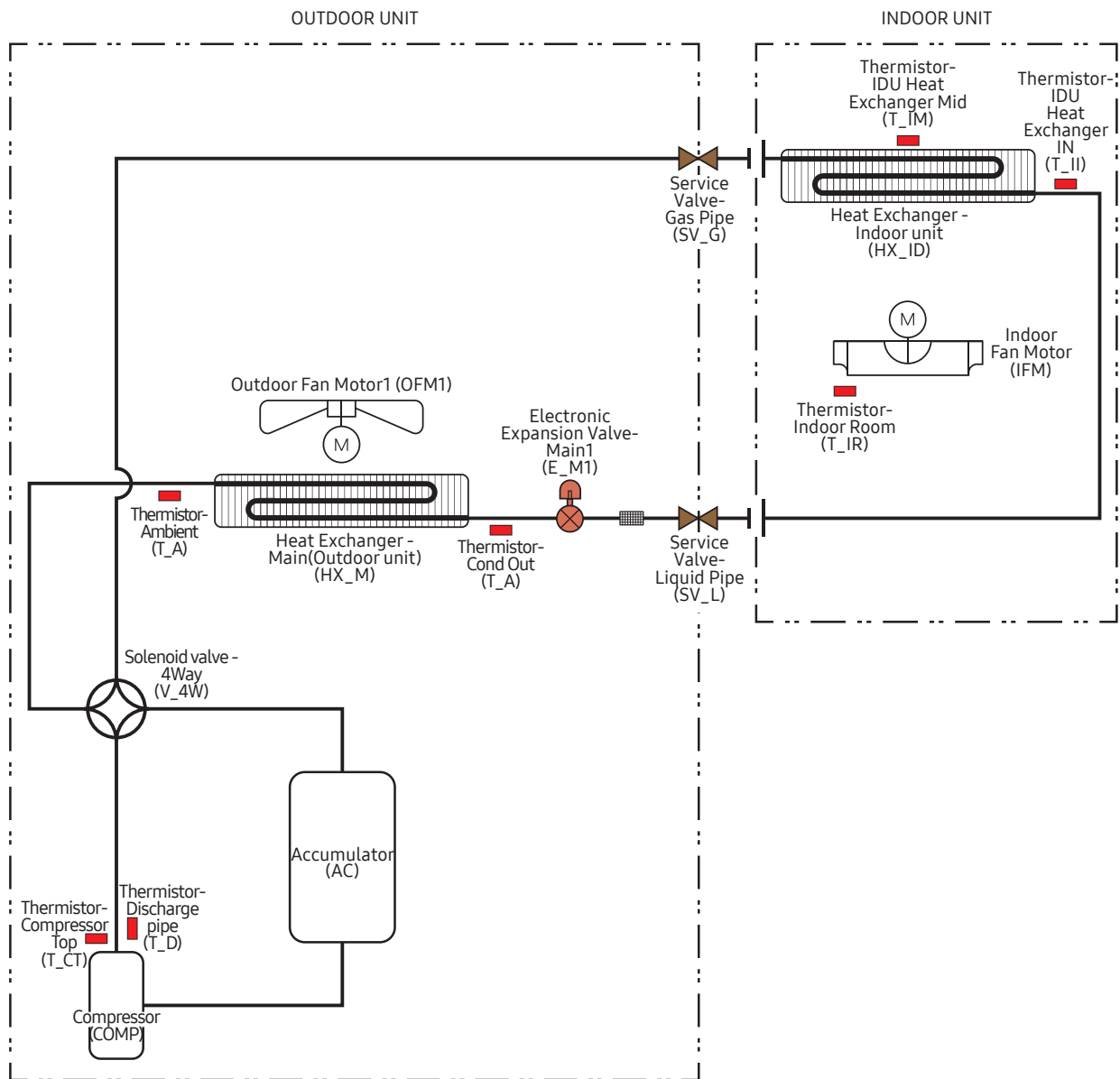
8. Piping Diagram

AC052NNNDKH/EU+AC052MXADKH/EU
 AC052NN4DKH/EU+AC052MXADKH/EU
 AC060NNNDKH/EU+AC060MXADKH/EU
 AC071NNNDKH/EU+AC071MXADKH/EU
 AC071NN4DKH/EU+AC071MXADKH/EU



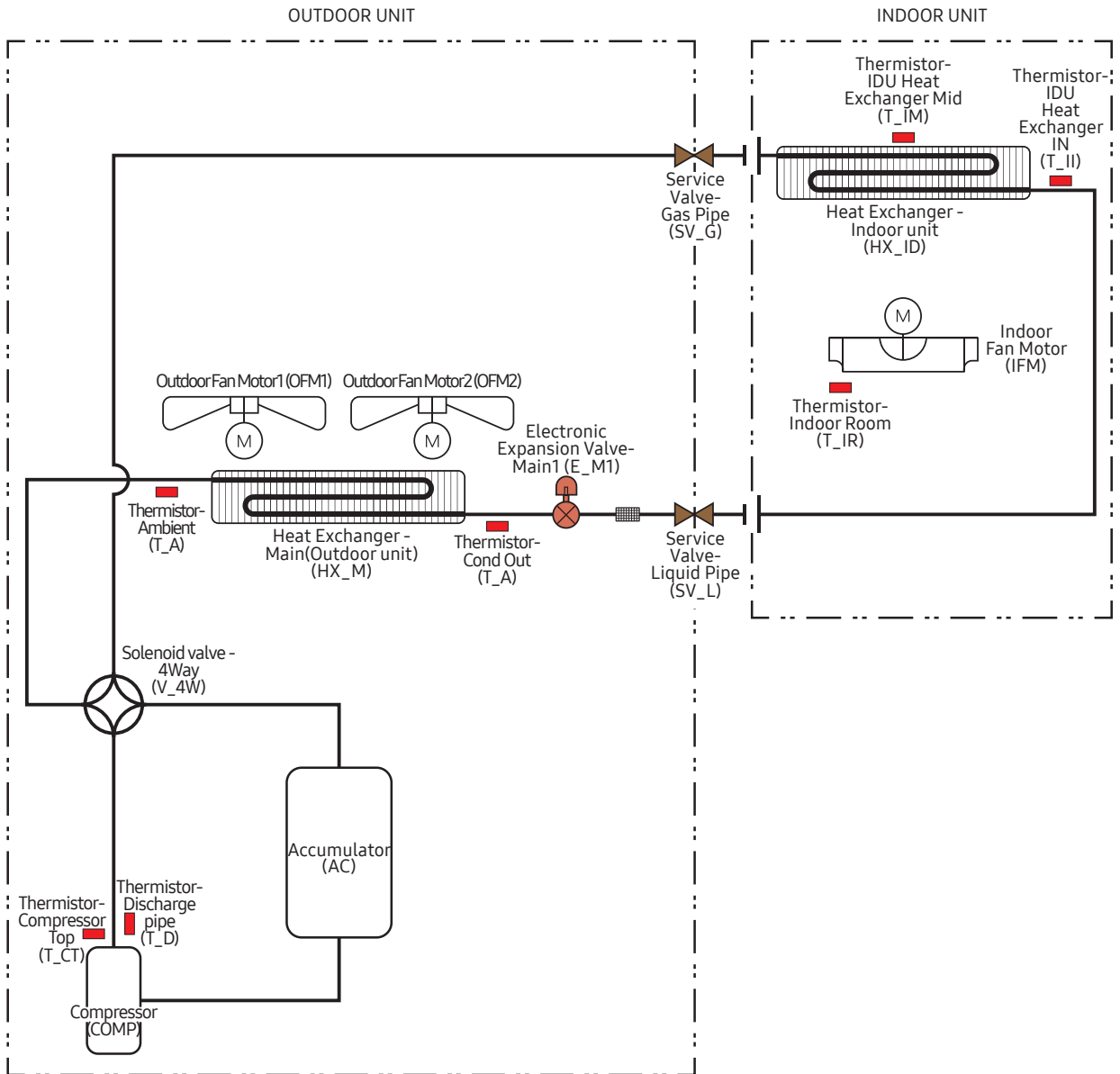
8. Piping Diagram

AC090NN4DKH/EU+AC090MXADKH/EU
 AC100NN4DKH/EU+AC100MXADKH/EU
 AC100NN4DKH/EU+AC100MXADNH/EU
 AC120NN4DKH/EU+AC120MXADKH/EU
 AC120NN4DKH/EU+AC120MXADNH/EU



8. Piping Diagram

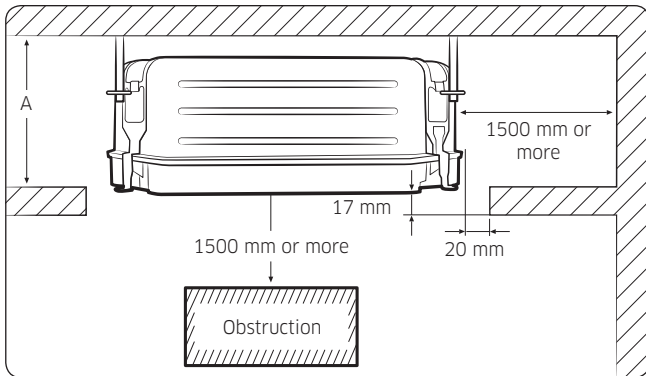
AC140NN4DKH/EU+AC140MXADKH/EU
 AC140NN4DKH/EU+AC140MXADNH/EU



Installation

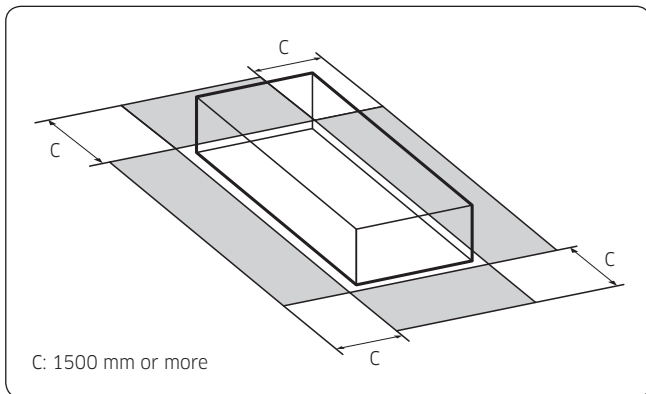
1. Wind-Free 4Way Cassette (600x600)

Spacing requirements



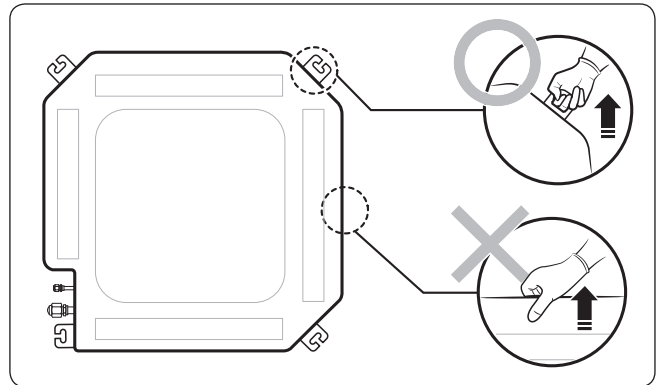
Model	AC026NNNDKH AC035NNNDKH AC052NNNDKH AC060NNNDKH AC071NNNDKH
A	297

(Unit: mm)



⚠ CAUTION

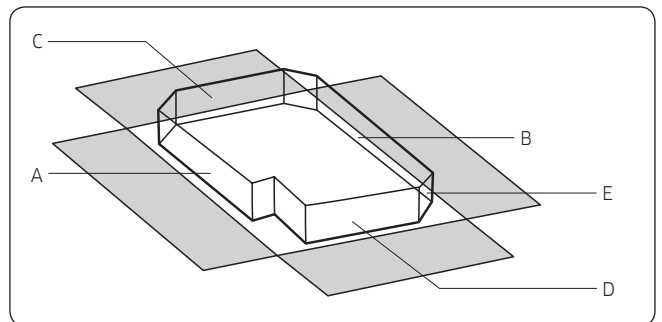
- The indoor unit must be installed according to the specified distances in order to permit accessibility from each side, to guarantee correct operation, maintenance, and repair of the unit. The components of the indoor unit must be reachable and removable under safe conditions for people and the unit.
- Do not hold the discharge while carrying the indoor unit to avoid the possibility of breakage.
- You must hold the hanger plate on the corner and carry the indoor unit.



Step 3 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.

📄 NOTE

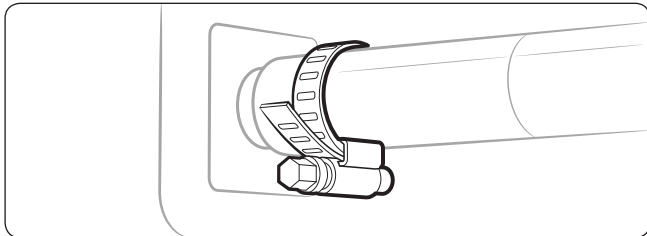
- A: Reference for the outer circumference of the unit
(When insulating the body of the indoor unit, use A as the reference for its outer circumference.)

A	B	C	D	E
400X190	400X190	400X190	400X190	550X550

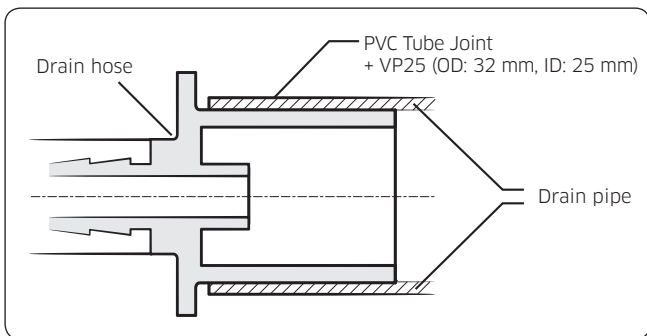
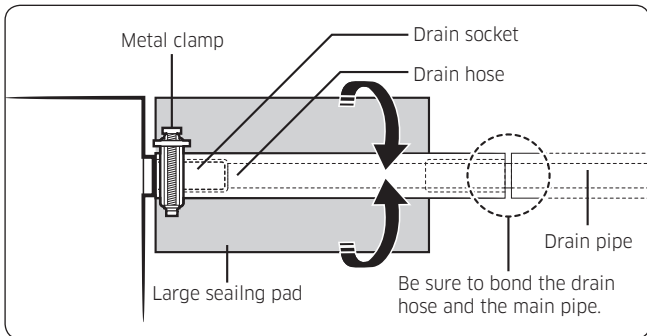
Installation

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.



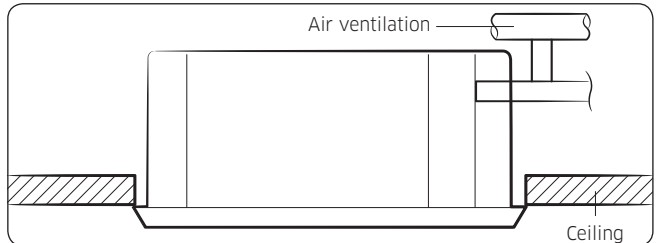
- 3 Wrap the supplied large sealing pad over the metal clamp and drain hose to insulate and fix it with clamps.
- 4 Insulate the complete drain piping inside the building (field supply). If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).
-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



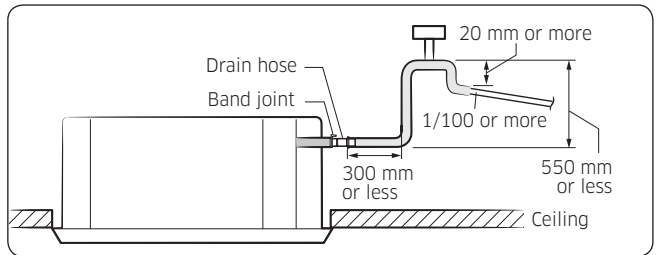
⚠ CAUTION

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

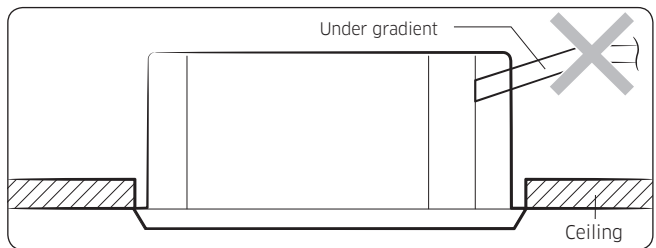
- Install air ventilation to drain condensation smoothly.



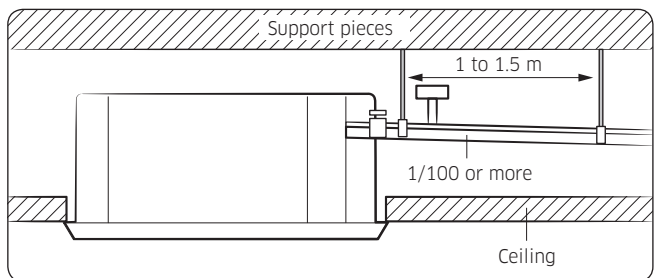
- If it is necessary to increase the height of the drain pipe, install the drain pipe straight within 300 mm from the drain hose port. If it is raised higher than 550 mm, there may be water leaks.



- 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.

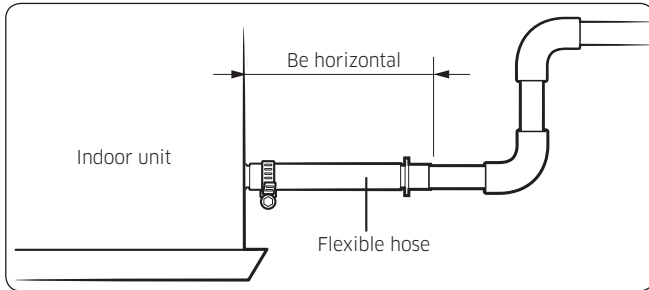


- Do not apply force to the piping on the unit side when connecting the drain hose. The hose should not be allowed to hang loose from its connection to the unit. Fasten the hose to a wall, frame or other support as close to the unit as possible.

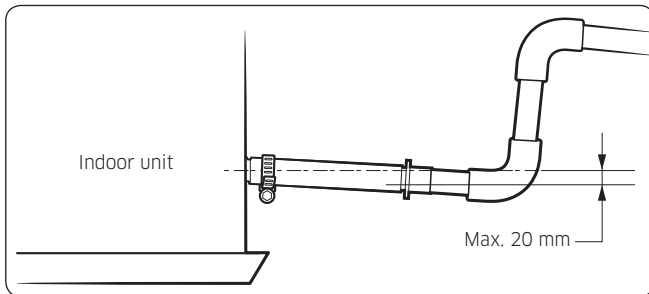


Installation

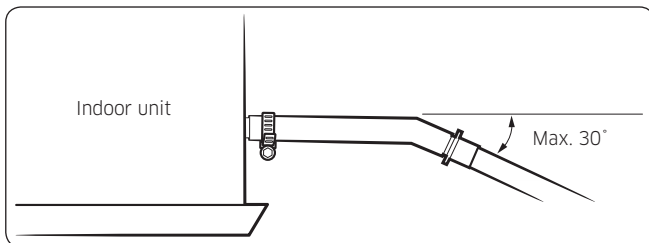
- Install horizontally.



- Max. allowable axis gap.

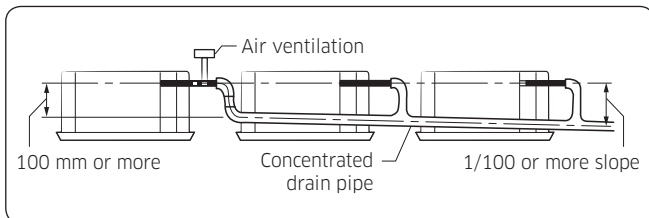


- Max. allowable bending angle.



NOTE

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



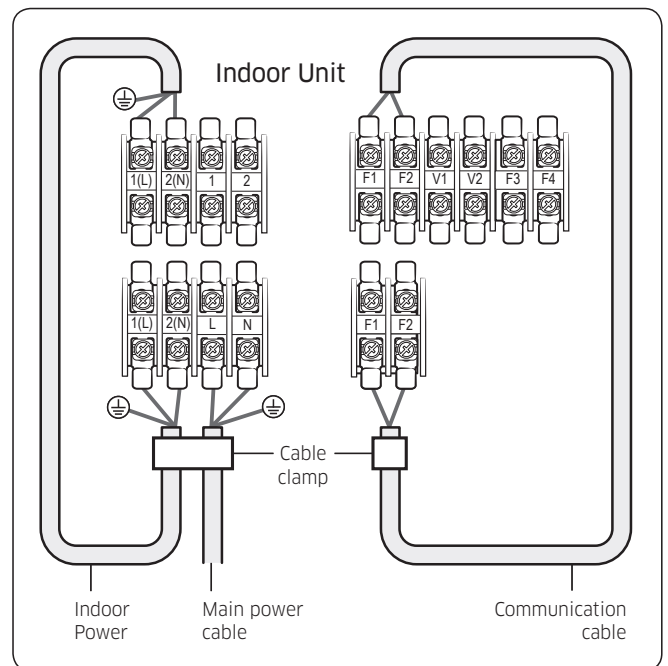
Connecting the power and communication cables

CAUTION

- Always remember to connect the air conditioner to the grounding system before performing the electric connections. Use a crimp ring terminal at the end of each wire.

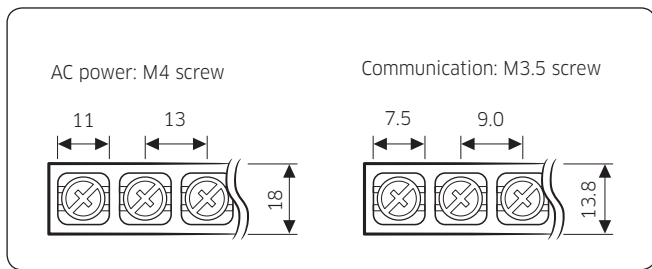
The indoor unit is powered through the outdoor unit by means of a H07 RN-F connection cable (or a more power model), with insulation in synthetic rubber and a jacket in polychloroprene (neoprene), in accordance with the requirements specified in the standard EN 60335-2-40.

- 1 Remove the screw on the electrical component box and remove the cover plate.
- 2 Route the connection cord through the side of the indoor unit and connect the cable to the terminals refer to the figure below.
- 3 Route the other end of the cable to the outdoor unit through the ceiling & the hole on the wall.
- 4 Reassemble the electrical component box cover, carefully tightening the screw.



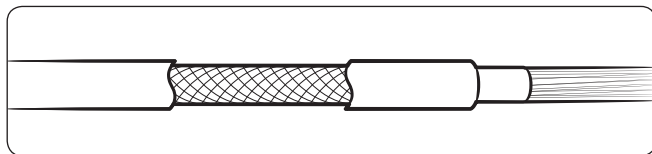
Indoor power supply		
Power supply	Max/Min(V)	Indoor power cable
220 to 240V, 50 Hz	±10%	1.5 mm ² ↑, 3 wires
Communication cable		
0.75 to 1.5 mm ² , 2 wires		

Installation



Tightening torque (kgf • cm)	
M3.5	8.0 to 12.0
M4	12.0 to 18.0

- 1 N-m = 10 kgf-cm
- 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)
- Since it has the external power supply, refer to the outdoor unit installation manual for MAIN POWER.

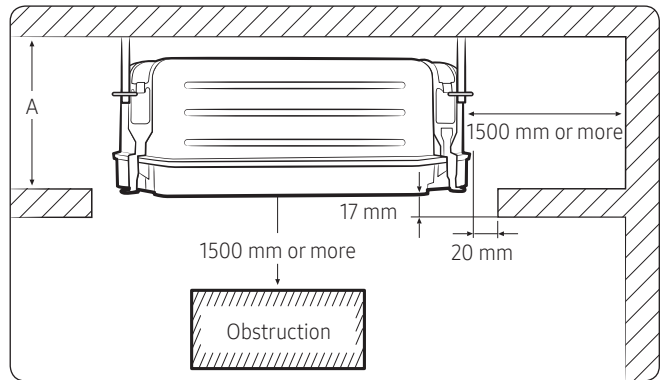


⚠ CAUTION

- When installing the indoor unit in a computer room or network room, use the double shielded communication cable (tape aluminum / polyester braid + copper) of FROHH2R type.

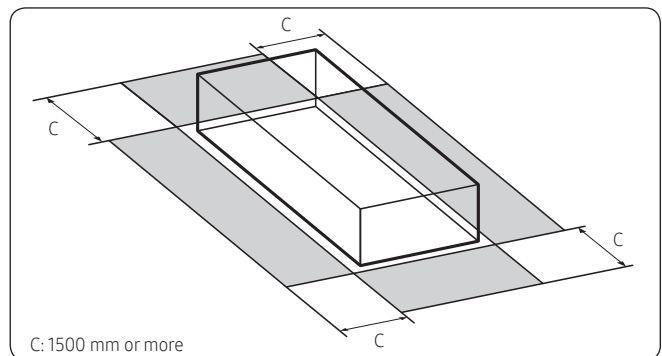
2. Wind-Free 4Way Cassette

Spacing requirements



(Unit: mm)

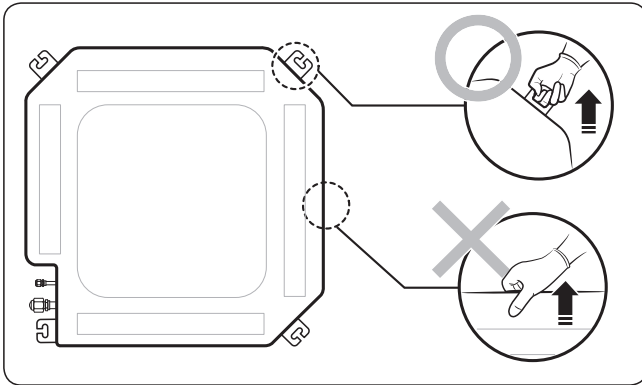
Model	AC052NN4DKH AC071NN4DKH	AC090NN4DKH AC100NN4DKH AC120NN4DKH AC140NN4DKH
A	251	335



⚠ CAUTION

- The indoor unit must be installed according to the specified distances in order to permit accessibility from each side, to guarantee correct operation, maintenance, and repair of the unit. The components of the indoor unit must be reachable and removable under safe conditions for people and the unit.
- Do not hold the discharge while carrying the indoor unit to avoid the possibility of breakage.
- You must hold the hanger plate on the corner and carry the indoor unit.

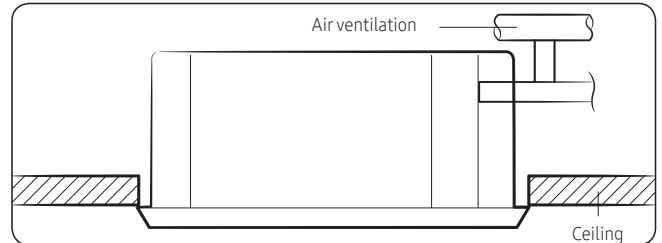
Installation



⚠ CAUTION

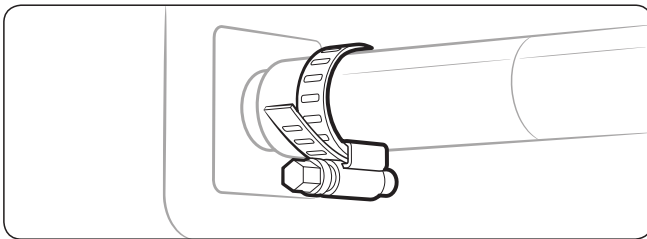
Check that the indoor unit is level with the ceiling by using the leveller.

- Install air ventilation to drain condensation smoothly.

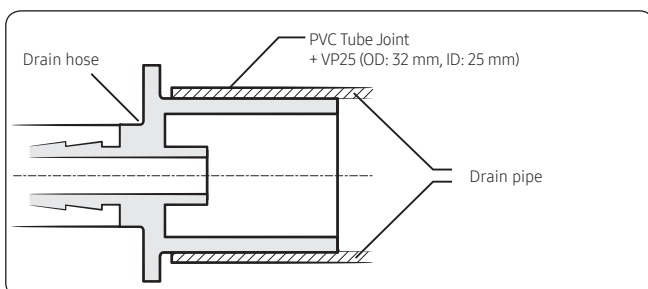
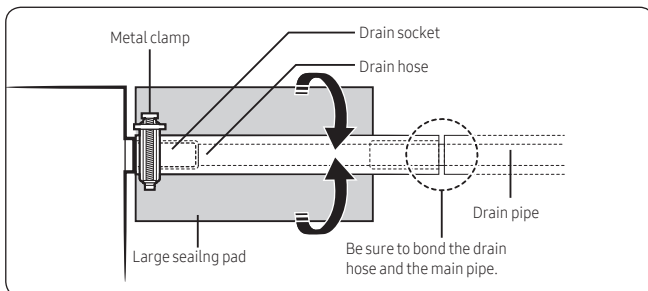


Installing the drain hose and drain pipe

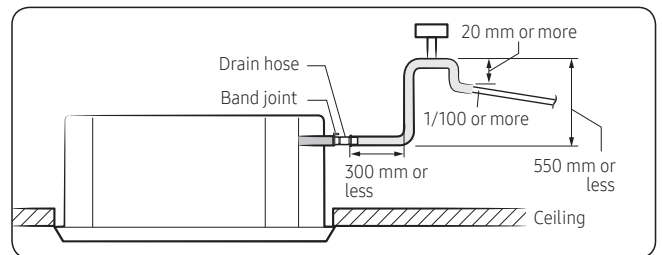
- 1 Push the supplied drain hose as far as possible over the drain socket.
- 2 Tighten the metal clamp as shown in the picture.



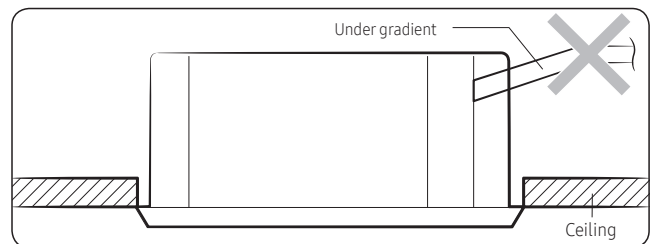
- 3 Wrap the supplied large sealing pad over the metal clamp and drain hose to insulate and fix it with clamps.
- 4 Insulate the complete drain piping inside the building (field supply). If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).
-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



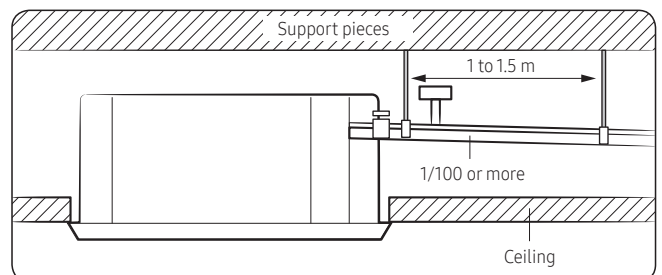
- If it is necessary to increase the height of the drain pipe, install the drain pipe straight within 300 mm from the drain hose port. If it is raised higher than 550 mm, there may be water leaks.



- 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.

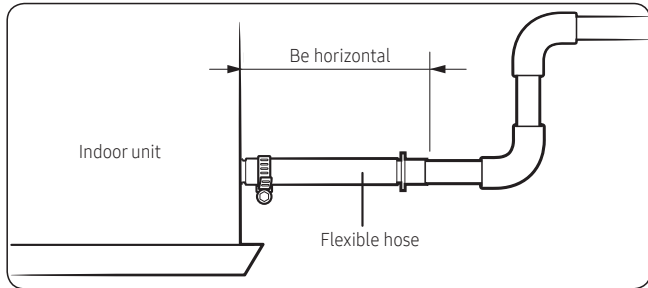


- Do not apply force to the piping on the unit side when connecting the drain hose. The hose should not be allowed to hang loose from its connection to the unit. Fasten the hose to a wall, frame or other support as close to the unit as possible.

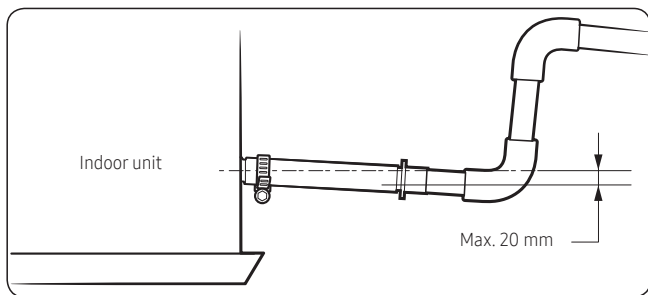


Installation

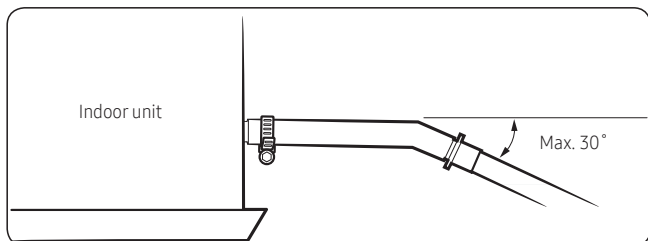
- Install horizontally.



- Max. allowable axis gap.

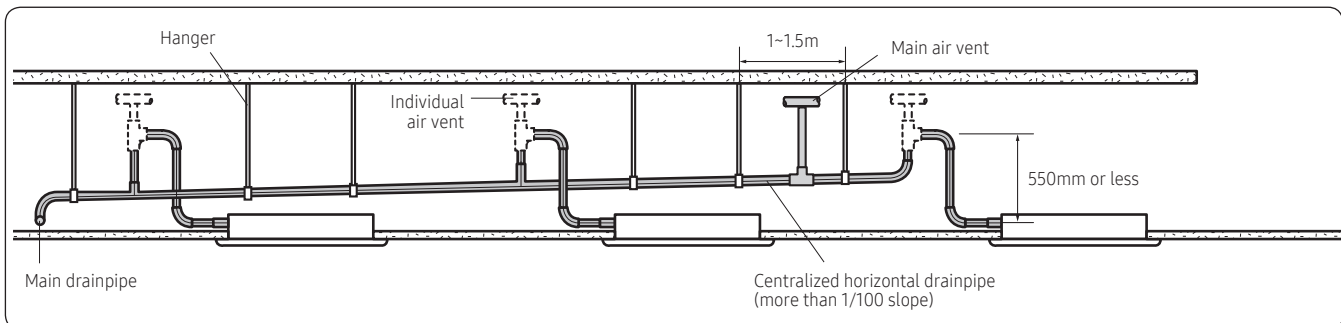


- Max. allowable bending angle.



NOTE

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



Connecting the power and communication cables

CAUTION

- Always remember to connect the refrigerant pipes before performing the electric connections.
When disconnecting the system, always disconnect the electric cables before disconnecting the refrigerant pipes.

CAUTION

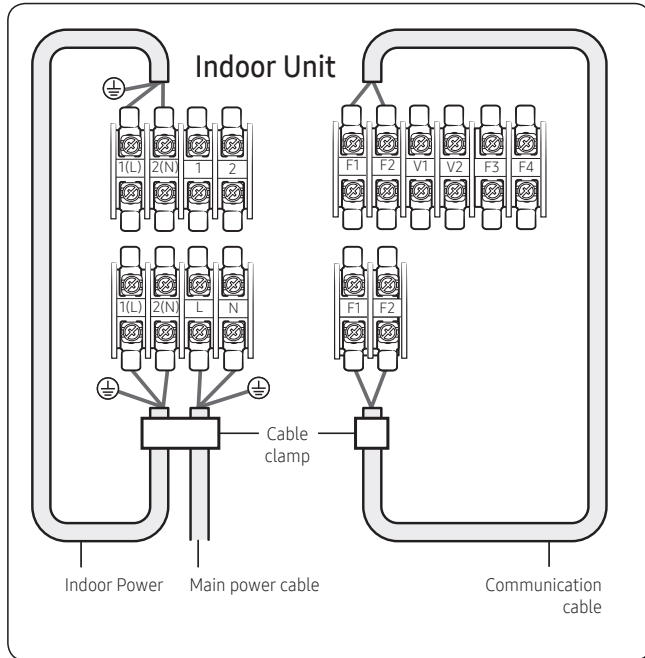
- Always remember to connect the air conditioner to the grounding system before performing the electric connections. Use a crimp ring terminal at the end of each wire.

The indoor unit is powered through the outdoor unit by means of a H07 RN-F connection cable (or a more power model), with insulation in synthetic rubber and a jacket in polychloroprene (neoprene), in accordance with the requirements specified in the standard EN 60335-2-40.

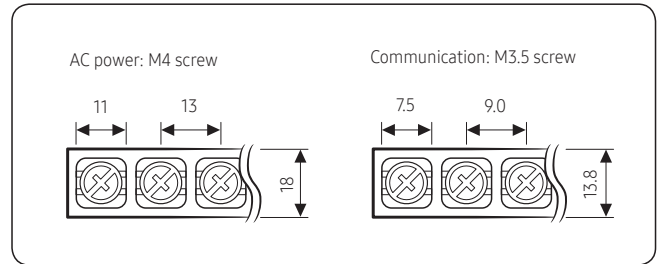
- 1 Remove the screw on the electrical component box and remove the cover plate.
- 2 Route the connection cord through the side of the indoor unit and connect the cable to the terminals refer to the figure below.
- 3 Route the other end of the cable to the outdoor unit through the ceiling & the hole on the wall.
- 4 Reassemble the electrical component box cover, carefully tightening the screw.

Installation

1 phase



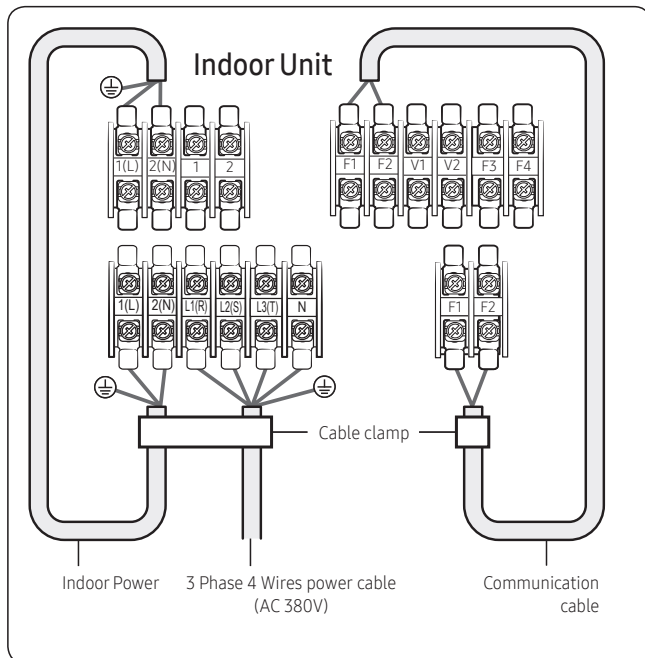
Indoor power supply		
Power supply	Max/Min(V)	Indoor power cable
220 to 240V, 50 Hz	±10%	1.5 mm ² ↑, 3 wires
Communication cable		
0.75 to 1.5 mm ² , 2 wires		



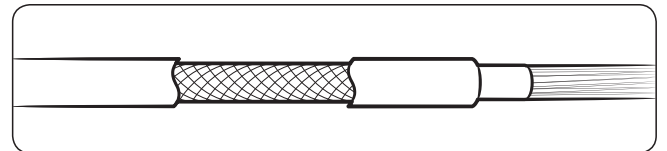
Tightening torque (kgf • cm)	
M3.5	8.0 to 12.0
M4	12.0 to 18.0

- 1 N·m = 10 kgf·cm

3 phase



- 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)
- Since it has the external power supply, refer to the outdoor unit installation manual for MAIN POWER.



⚠ CAUTION

- When installing the indoor unit in a computer room or network room, use the double shielded communication cable (tape aluminum / polyester braid + copper) of FROHH2R type.

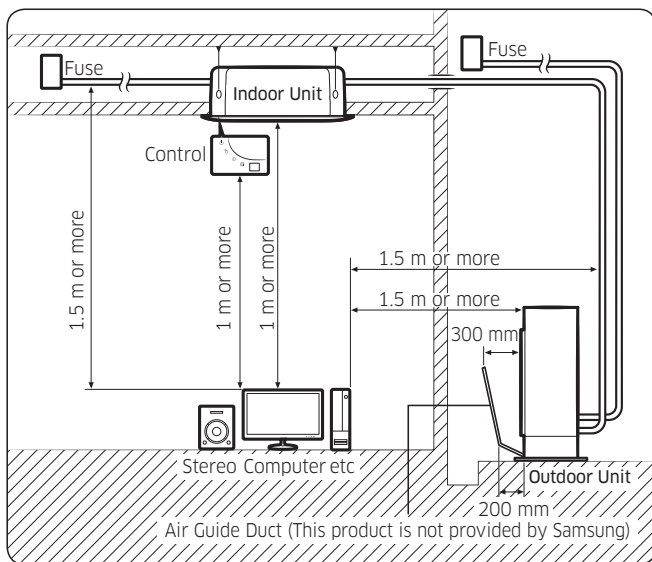
Installation

3. Outdoor Unit

Choosing the installation location

Installation location requirements

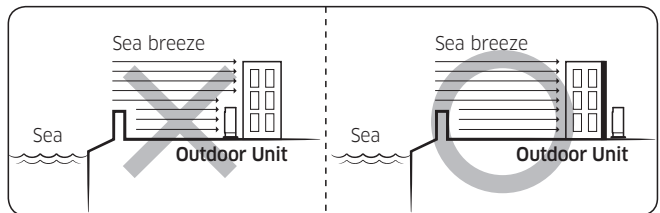
- Do not place the outdoor unit on its side or upside down. Failing to do so may cause the compressor lubrication oil to run into the cooling circuit and lead to a serious damage to the unit.
- Install the unit in a well-ventilated location away from direct sunlight or strong winds.
- Install the unit in a location that would not obstruct any passageways or thoroughfares.
- Install the unit in a location that would not inconvenience or disturb your neighbors, as they could be affected by the noise or the airflow coming from the unit.
- Install the unit in a location where the pipes and the cables can be easily connected to the indoor unit.
- Install the unit on a flat, stable surface that can withstand the weight of the unit. Otherwise, the unit can generate noise and vibration during operation.
- Install the unit so that the air flow is directed towards the open area.
- Maintain sufficient clearance around the outdoor unit, especially from a radio, computer, stereo system, etc.



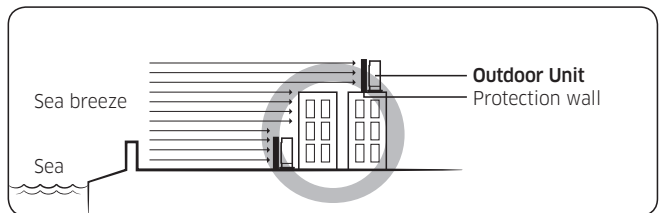
- Install the unit at a height where its base can be firmly fixed in place.
- Make sure that the water dripping from the drain hose runs away correctly and safely.

⚠ CAUTION

- You have just purchased a system air conditioner and it has been installed by your installation specialist.
- This device must be installed according to the national electrical rules.
- If your outdoor unit exceeds a net weight of 60 kg, do not install it on a suspended wall, but stand it on a floor.
- When installing the outdoor unit at the seaside, make sure that it is not directly exposed to sea breeze. If you cannot find an adequate place free from direct sea breeze, construct a protection wall or a protective fence.
 - Install the outdoor unit in a place (such as near buildings etc.) where it can be prevented from sea breeze. Failure to do so may cause a damage to the outdoor unit.



- If you cannot avoid installing the outdoor unit at the seaside, construct a protection wall around to block the sea breeze.
- Construct a protection wall with a solid material such as concrete to block the sea breeze. Make sure that the height and the width of the wall are 1.5 times larger than the size of the outdoor unit. Also, secure a space larger than 700 mm between the protection wall and the outdoor unit for exhausted air to ventilate.



⚠ CAUTION

- Depending on the condition of power supply, unstable power or voltage may cause malfunction of the parts or control system. (At the ship or places using power supply from electric generator...etc)

Installation

- Install the unit in a place where water can drain smoothly.
- If you have any difficulty finding installation location as prescribed above, contact your manufacturer for details.
- Be sure to clean the sea water and the dust on the heat exchanger of the outdoor unit and apply a corrosion inhibitor on it. (At least once in a year.)

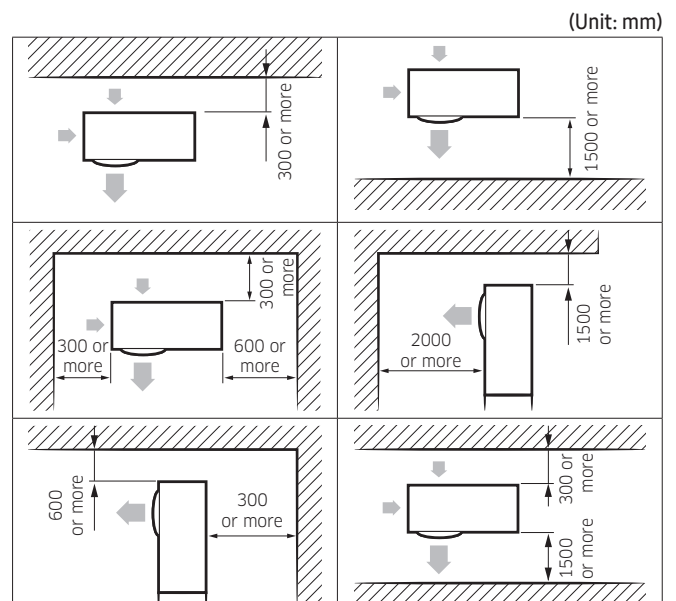
Outdoor unit dimensions

A Type
AC026MXADKH/AC035MXADKH
B Type
AC052MXADKH/AC060MXADKH
C Type
AC071MXADKH

D Type
AC090MXADKH/AC100MXADKH/AC100MXADNH/AC120MXADKH/AC120MXADNH
E Type
AC140MXADKH/AC140MXADNH

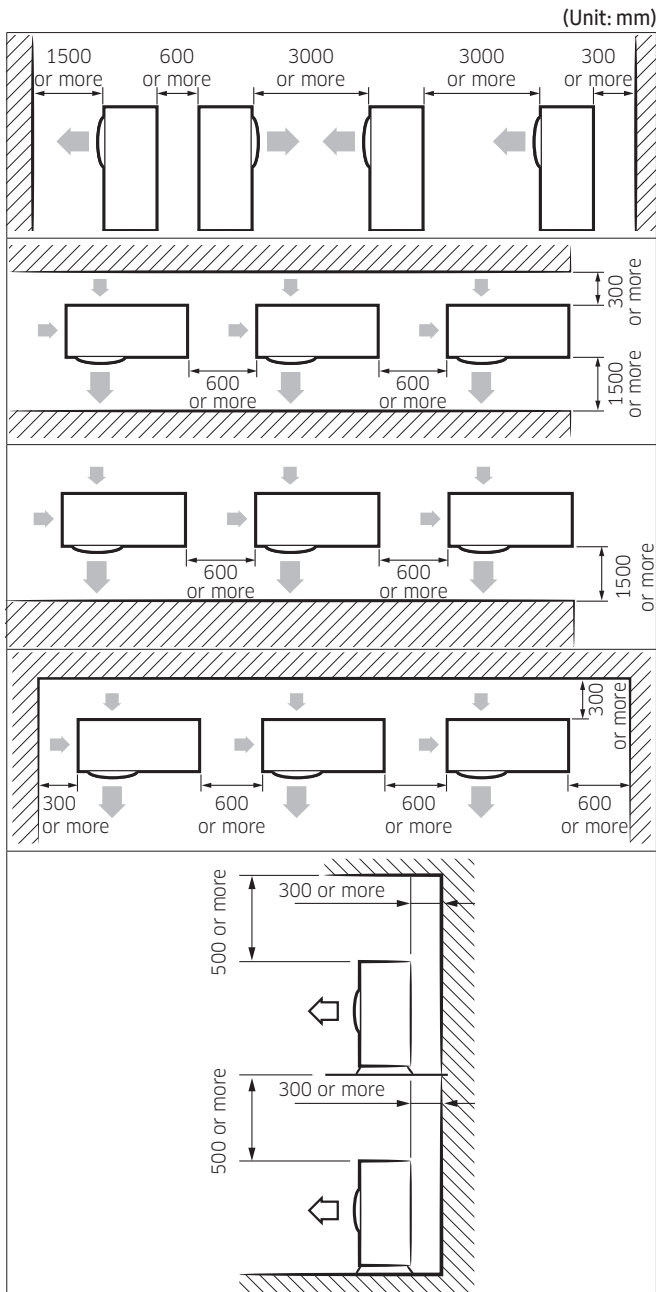
Minimum clearances for the outdoor unit

When installing 1 outdoor unit



Installation

When installing more than 1 outdoor unit

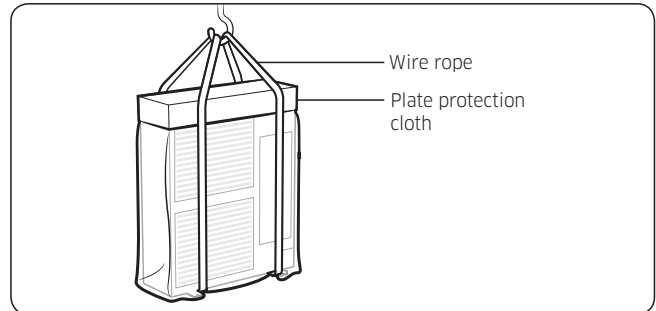


CAUTION

- The outdoor unit must be installed according to the specified distances in order to permit accessibility from each side, to guarantee correct operation, maintenance, and repair of the unit. The components of the outdoor unit must be reachable and removable under safe conditions for people and the unit.

Moving the outdoor unit with wire rope

- Before carrying the outdoor unit, fasten two wire ropes of 8 m or longer, as shown in the figure.
- To prevent damages or scratches effectively, insert a piece of cloth between the outdoor unit and the ropes.
- Move the outdoor unit.



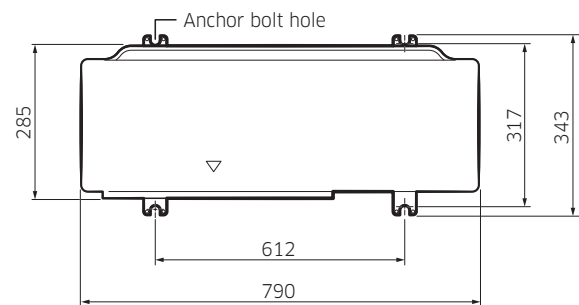
Fixing the outdoor unit in place

Install the outdoor unit on a rigid and stable base to prevent disturbance from any noise caused by vibration. When installing the unit at a height or in a location exposed to strong winds, fix the unit securely to a support (i.e., a wall or a ground).

Fix the outdoor unit with anchor bolts. Make sure that the anchor bolts are 20 mm or higher from the base surface.

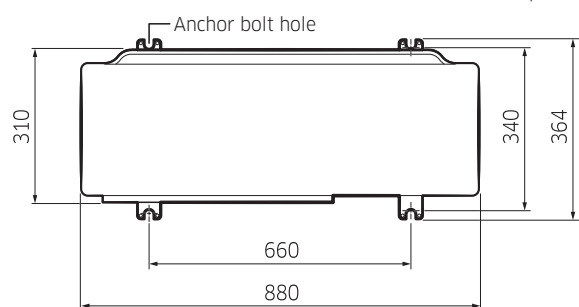
AC026/035MXADKH

(Unit : mm)

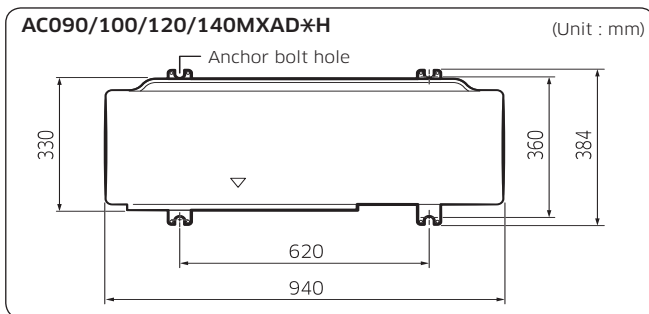


AC052/060/071MXADKH

(Unit : mm)

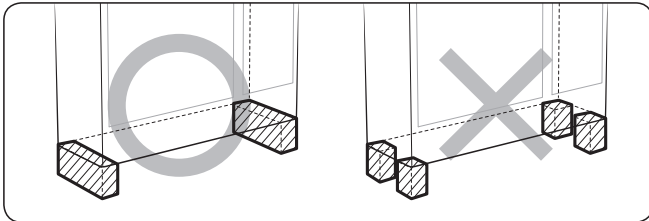


Installation



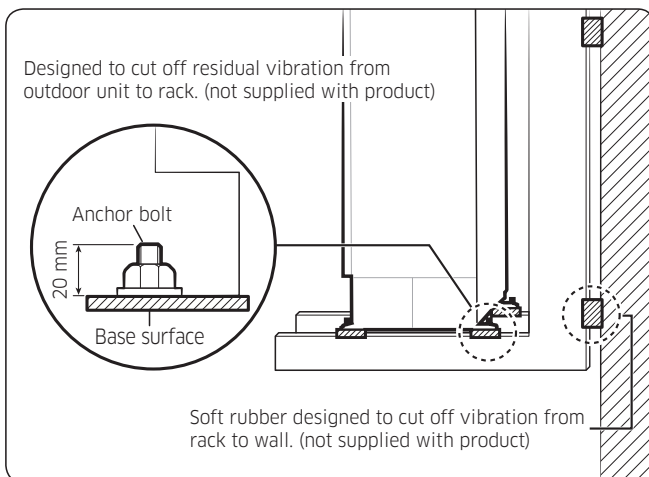
⚠ CAUTION

- Install a drain outlet at the lowest end around the base for outdoor unit drainage
- When installing the outdoor unit on the roof, waterproof the unit and check the ceiling strength.



- Make sure that the wall can support the weights of the rack and the outdoor unit.
- Install the rack close to the column as much as possible.

Optional: Fixing the outdoor unit to a wall with a rack



- Install a proper grommet in order to reduce noise and residual vibration transferred by the outdoor unit towards the wall.

⚠ CAUTION

- When installing an air guide duct, be sure to check the following:
 - The screws do not damage the copper pipe.
 - The air guide duct is fixed firmly on the guard fan.

Connecting the power cables & communication cable, and controllers

You must connect the following three electrical cables to the outdoor unit:

- The main power cable between the auxiliary circuit breaker and the outdoor unit.
- The outdoor-to-indoor power cable between the outdoor unit and the indoor unit.
- The communication cable between the outdoor unit and the indoor unit.

⚠ CAUTION

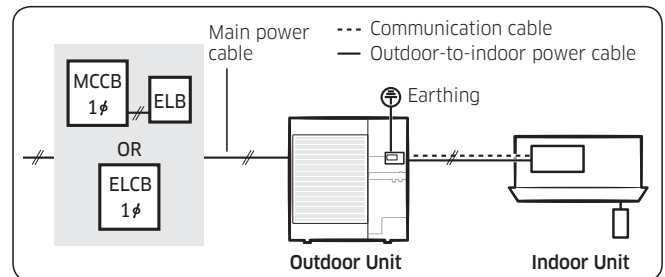
- During installation, make first the refrigerant connections and then the electrical connections. If the unit is uninstalled, first disconnect the electrical cables and then the refrigerant connections.
- Connect the air conditioner to the earthing system before making the electrical connections.

📖 NOTE

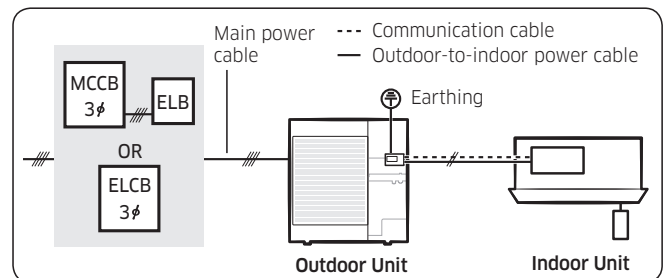
- Especially, if your outdoor unit is the one designed for Russian and European markets, consult the supply authority, if necessary, to estimate and reduce the supply system impedance before installation.

Air conditioning system examples

When using earth leakage circuit breaker (ELCB) for a single phase



When using earth leakage circuit breaker (ELCB) for a 3-phase, 4-wire system (3P4W)

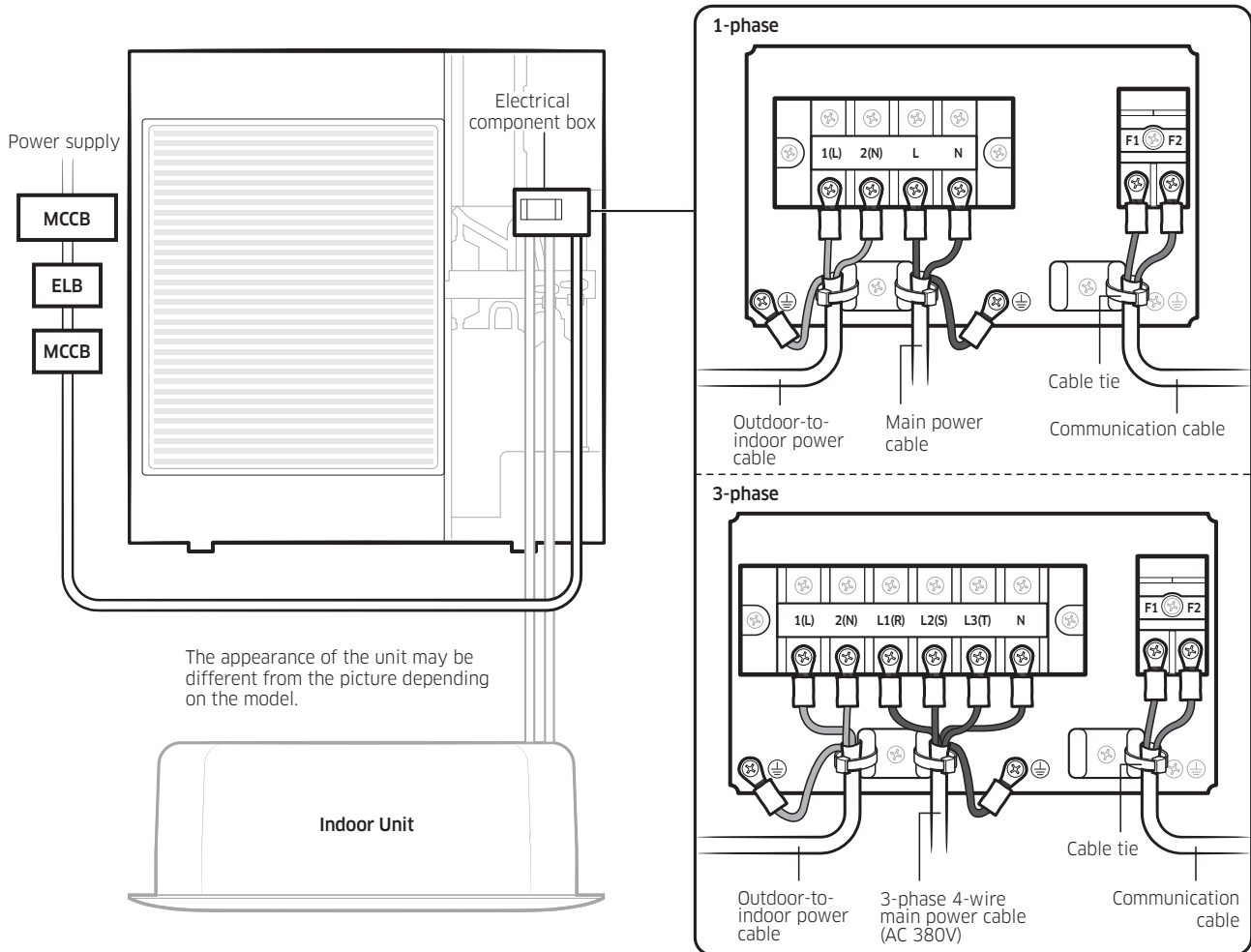


⚠ CAUTION

- If the outdoor unit is installed in a location vulnerable to an electric leak or submergence, make sure to install an ELCB.

Installation

When using ELB for 1 phase and 3 phase



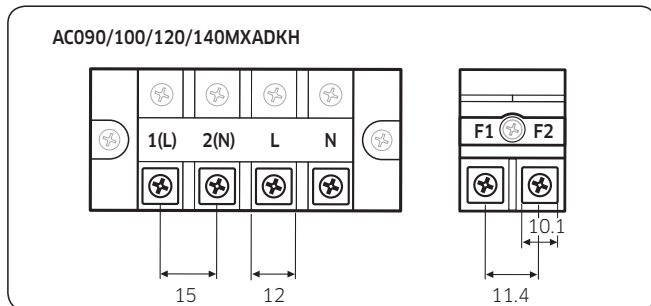
⚠ CAUTION

- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- The unbalanced power must be maintained within 2% of supply rating. If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 4% of supply rating, the indoor unit is protected, stopped and the error mode indicates.
- To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units within ducts. (with appropriate IP rating and material selection for your application)
- Ensure that main supply connection is made through a switch that disconnects all poles, with contact gap of at least 3 mm.
- Devices disconnected from the power supply should be completely disconnected in the condition of overvoltage category.
- Keep distances of 50 mm or more between power cable and communication cable.

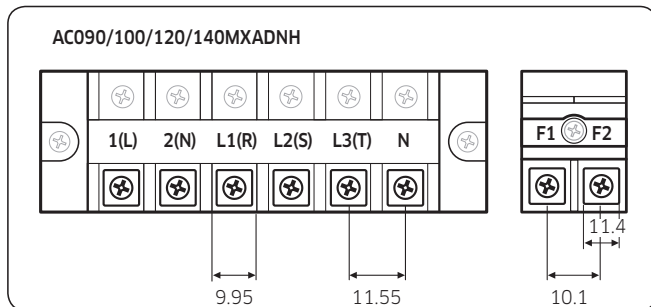
Installation

Main power terminal block specifications

- 1-phase terminal block specifications



- 3-phase terminal block specifications



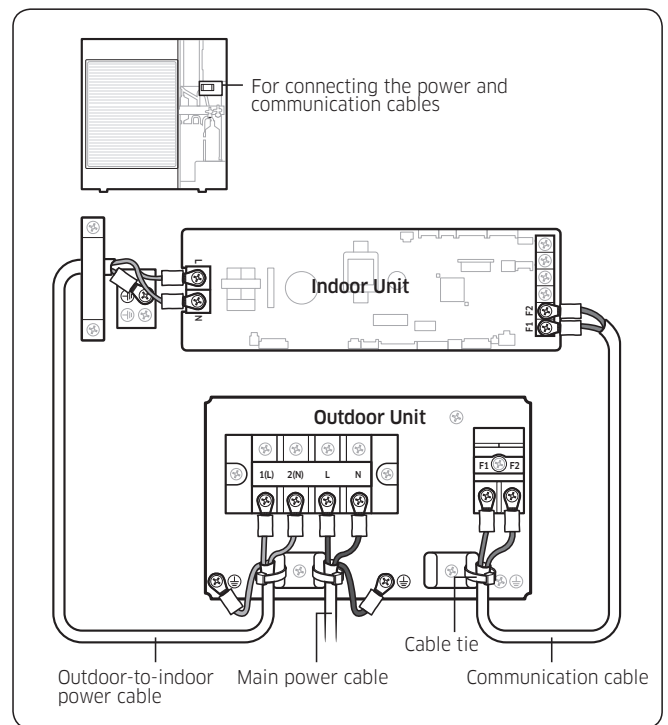
Main power cable specifications

The power cable is not supplied with air conditioner.

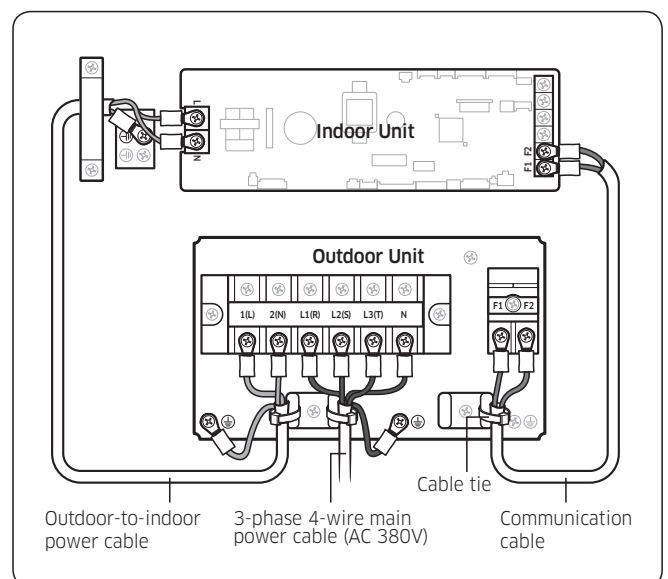
- Select the power supply cable in accordance with relevant local and national regulations.
- Wire size must comply with the applicable local and national code.
- Specifications for local wiring power cord and branch wiring are in compliance with local cord.

Connecting the power cables & communication cable, and controllers

1-phase



3-phase



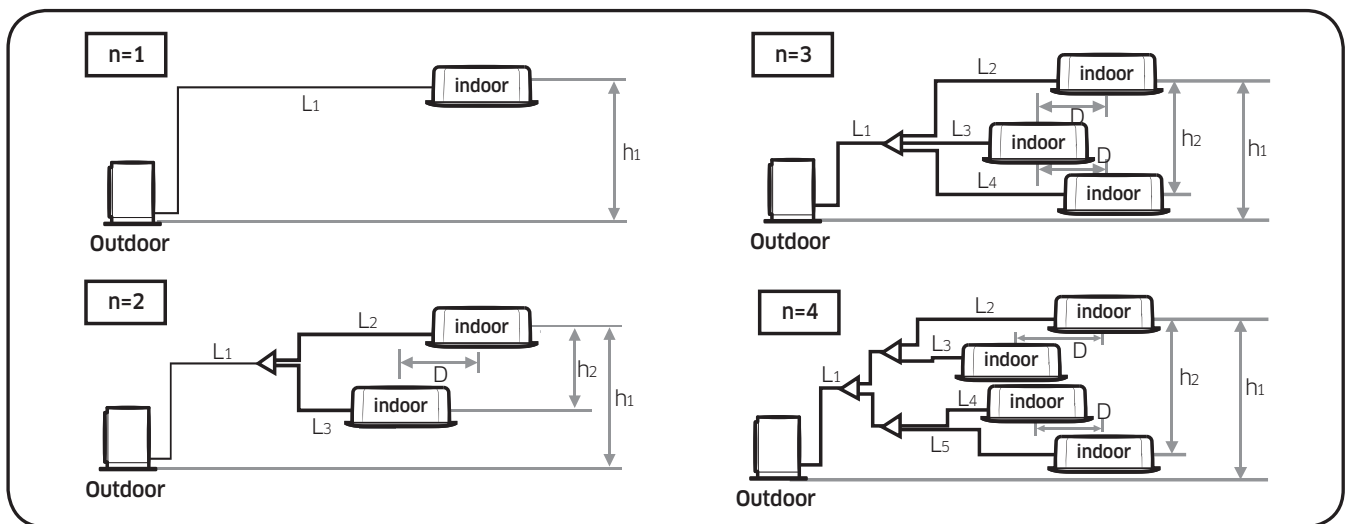
Installation

Connecting the refrigerant pipe

Items	Maximum allowable length				
	Single installation				
Applicable outdoor unit models	AC026MXADKH AC035MXADKH	AC052MXADKH AC060MXADKH	AC071MXADKH	AC090MXAD×H AC100MXAD×H AC120MXAD×H	AC140MXAD×H
Total pipe length ($L_1+L_2+L_3$)	-	-	-	-	-
Main pipe (L_1)	20m	30m	50m	50m	75m
Max. distance among indoor units (D)	-	-	-	-	-
Max. length after branch	-	-	-	-	-
Max. height difference between outdoor and indoor units (h_1)	15m	20m	30m	30m	30m
Max. height difference among indoor units (h_2)	-	-	-	-	-
Max Pipe length difference among indoor units after branch (L_2-L_3)	-	-	-	-	-

Items	Maximum allowable length		
	DPM installation		
Applicable outdoor unit models	AC071MXADKH	AC100MXAD×H AC120MXAD×H	AC140MXAD×H
Total pipe length ($L_1+L_2+L_3$)	50m	50m	75m
Main pipe (L_1)	30m	30m	50m
Max. distance among indoor units (D)	10m	10m	10m
Max. length after branch	15m	15m	15m
Max. height difference between outdoor and indoor units (h_1)	±30m	30m	30m
Max. height difference among indoor units (h_2)	±0.5m	0.5m	0.5m
Max Pipe length difference among indoor units after branch (L_2-L_3)	±5m	5m	5m

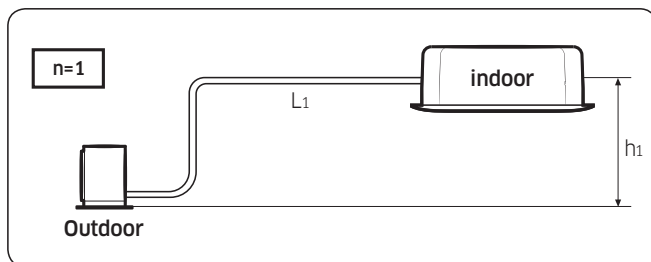
※ “n” means the number of indoor unit connection of DPM.



※ Use a joint kit that is only for DPM.

Installation

Items	Maximum allowable length	
Outdoor unit models	AC090MXADKH AC100MXADKH AC100MXADNH AC120MXADKH AC120MXADNH	AC140MXADKH AC140MXADNH
Main pipe (L1)	50 m	75 m
Max. height difference between outdoor and indoor units (h1)	30 m	30 m

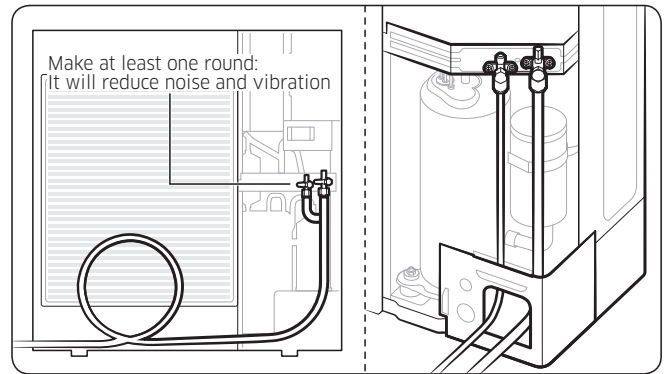


- Temper grade and minimum thickness of the refrigerant pipe

Outer diameter [mm]	Minimum thickness [mm]	Temper grade
ø6.35	0.7	C1220T-O
ø9.52	0.7	
ø12.70	0.8	
ø15.88	1.0	
ø15.88	0.8	C1220T-1/2H OR C1220T-H
ø19.05	0.9	
ø22.23	0.9	

⚠ CAUTION

- Be sure to use C1220T-1/2H (Semi-hard) pipe for more than Ø19.05 mm. If you use C1220T-O (Soft) pipe for Ø19.05 mm, the pipe may be broken, which can result in an injury.
















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

⚠ CAUTION

- After connecting the pipes with knock-out treatment, plug the space around the pipes.
- After connecting the pipes, proceed exactly as directed in the guide to prevent interference with the internal parts.








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.








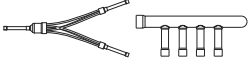
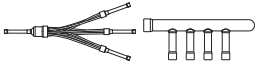

Accessory

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-SMA	4 Way Cassette(600 x 600)
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.

2018.05
Ver.1.1

Samsung Electronics Co., LTD.
B2B PM / SE

Head Office (Suwon Korea) 129, Samsung-Ro, Yeongtong-Gu, Suwon City, Gyeonggi-Do, Korea 16677
Website : www.samsung.com, <http://btsp.samsungsbn.com> Email : airconditioner@samsung.com
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