SAMSUNG

SINGLE Technical Data Book

360 Cassette for America

(R410A, HP)

Model : CNH**6DB (AC***BN6DCH/AA), CXH**ADB (AC***BXADCH/AA)

History

Version	Modification	Date	Remark
Ver.1.0	Released 2021 CAC 360 Cassette for North America	21. 08. 31	
Ver.1.1	Modified some data	21. 10. 21	
Ver.1.2	Modified some error	22. 01. 07	
Ver.1.3	Updated the drain pipe spec	22. 02. 22	
Ver.1.4	Modified the some data in specification page.	22. 12. 12	

Features & Benefits

CAC - World-class energy efficiency

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

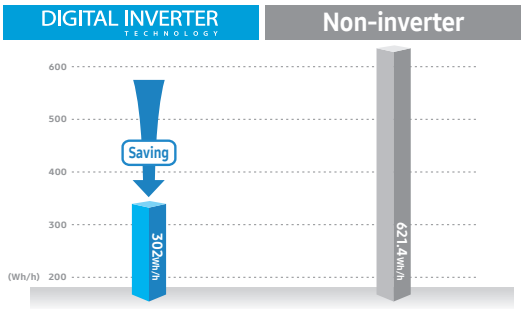
Featuring a suite of energy-optimizing technologies, Samsung CAC Single delivers top-class energy efficiency to support business in saving costs and the environment.

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.

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.

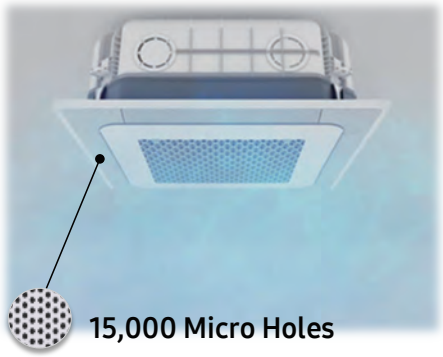


Wind-Free Cooling with Micro holes

- The Wind-Free Air conditioner pushes air out through 15,000 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.

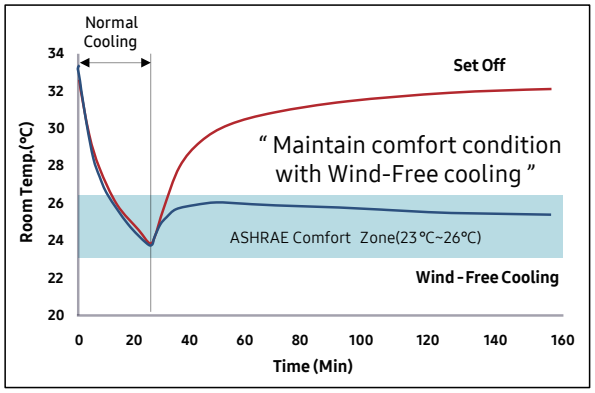
※ Still Air condition : According to ASHRAE, If velocity of wind is lower than 0.15m/s, People can not detect wind. And they define that condition is “Still Air”

No Direct Wind & Cold Draft



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

[Comparison of Room Temp.]



※ Internal Test (14.0kW Model @ 122m²)

Features & Benefits

CAC Single - Superior performance

Stabilize the atmosphere with broad temperature allowance and control

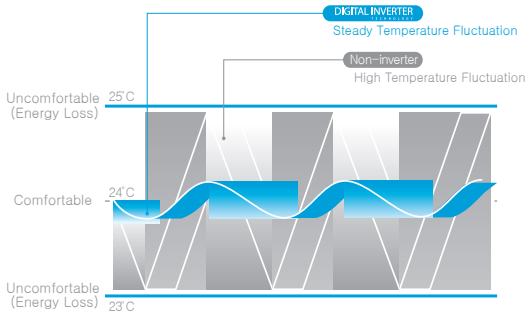
Samsung is dedicated to supporting comfortable living and working environments based on the strength of its technologies. With a single unit, CAC Single delivers reliable comfort and control over multiple areas to ensure a pleasant atmosphere in any climate.

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

US Code

Model Name

C	N	H	48	6	D	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Classification

C	CAC

(2) Product Type

N	Indoor Unit
X	Outdoor Unit

(3) Mode

A	Universal
C	Cooling Only
H	Heat Pump

(4) Capacity

X1,000 Btu/h (2 digits)

(5-1) Product Notation (Indoor Unit)

1	1 Way Cassette / Wind-Free 1Way Cassette
N	(Wind-Free) 4 Way Cassette (600x600)
4	(Wind-Free) 4 Way Cassette
6	360 Cassette
L	LSP Duct
H	HSP Duct
C	Ceiling
J	Console
A	AR9500 (Wall Mounted)
T	MAX4 (Wall Mounted)
Z	Multi-position AHU

(5-2) Feature1 (Outdoor Unit)

A	Inv+Side+General Temp
S	Inv+Side+Low Temp
Q	Inv+Side+Tropical Temp
F	Inv+Top+Tropical Temp

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Version

B	2022

Nomenclature

Indoor Unit

Model Name

AC	048	B	N	6	D	C	H	/	AA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC

(2) Capacity

X1,000 Btu/h (3 digits)

(3) Version

B	2022

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

1	1 Way Cassette / Wind-Free 1Way Cassette
N	(Wind-Free) 4 Way Cassette (600x600)
4	(Wind-Free) 4 Way Cassette
6	360 Cassette
L	LSP Duct
H	HSP Duct
C	Ceiling
J	Console
A	AR9500 (Wall Mounted)
T	MAX4 (Wall Mounted)
Z	Multi-position AHU

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

C	1Φ, 208-230V,60Hz

(8) Mode

C	Cooling Only
H	Heat Pump

Nomenclature

Outdoor Unit

Model Name

AC	048	B	X	A	D	C	H	/	AA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC

(2) Capacity

x 1000 Btu/h (3 digits)

(3) Version

B	2022

(4) Product Type

N	Indoor Unit (NASA)
X	Outdoor Unit (NASA)

(5) Feature1

A	Inv+Side+General Temp
S	Inv+Side+Low Temp
Q	Inv+Side+Tropical Temp
F	Inv+Top+Tropical Temp

(6) Feature2

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

C	1Φ, 208~230V, 60Hz
H	3Φ, 400V, 60Hz

(8) Mode

H	Heat Pump(R410A)
C	Cooling Only(R410A)
E	Heat Pump(R22)
D	Cooling Only(R22)

Line-up

Indoor unit

Model	Capacity (kBtu/h)					
	18	24	30	36	42	48
Wind-Free 4Way Cassette						

Outdoor Unit

Model	Capacity (kBtu/h)					
	18	24	30	36	42	48
1Phase						

Contents

360 **Cassette**

Features & Benefits

360 Cassette

All round cooling and comfort

The Samsung 360 Cassette air conditioner offers a brand new way of staying comfortably cool in every corner of the room. Its innovative circular design not only means it perfectly fits in everywhere, adding a sophisticated look to many different sites, but it also blows cool air in all directions, so that the whole room is the same temperature*. And its bladeless outlet ensures that cool air is gently dispersed, without creating a cold draft**, and doesn't block the air flow, even at low angles, so it expels 25% more air* and spreads it farther.

EVENLY CIRCULATES & COOLS EVERY CORNER

Unike 4-way, cassette type air conditioners that create areas of uneven airflow where cool air can't reach*, a circular outlet blows cool air in all directions, so every corner of a room is the same temperature**.

* Samsung testing compared to a general 4 way cassette type air conditioner.

** Within an 9.3m radius the temperature difference is less than 0.6°C.

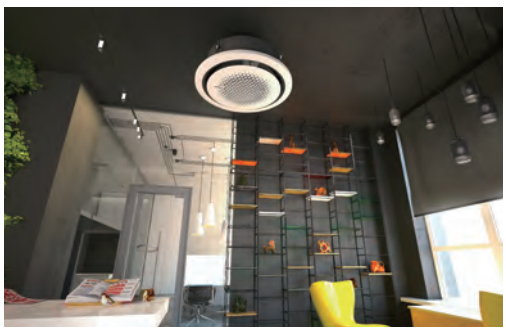
Comfortably cool, not cold

A bladeless design softly disperses cool air across the room, making you comfortably cool without feeling a cold draft**. With no blades to block the air flow, it also expels 25% more air* and spreads it farther.

* Within a 5m radius, no cold draft between 0~1.5m in height (with 14.0kw).

Circular to perfectly fit in everywhere

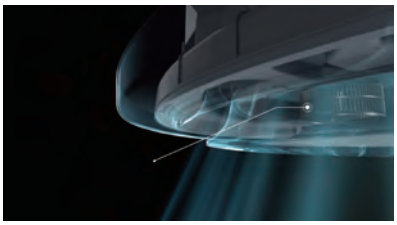
Its innovative circular design can match a multitude of interior designs, so it perfectly fits in everywhere. Its minimalist modern styling creates a sophisticated look and its circular shape stands out beautifully.



* Within an 9.3m radius the temperature difference is less than 0.6°C.

Spreads more air in more ways

An innovative Booster Fan enables cool air to be expelled at much lower angles. It creates a low pressure area around the outlet, so that cool air comes out parallel to the ceiling and disperses across a wider area.



All round simpler & intuitive control

Intuitively control its performance and see where the air is going. The Wireless Remote Controller's* Jog shuttle and button offer a fun way to adjust the air flow and a Circular LED Display shows its direction.

*Optional

1. Specification

360 Cassette

Model Name		Indoor Unit			AC018BN6DCH/AA	AC024BN6DCH/AA	AC030BN6DCH/AA
		Outdoor Unit			AC018BXADCH/AA	AC024BXADCH/AA	AC030BXADCH/AA
US Code		Indoor Unit			CNH186DB	CNH246DB	CNH306DB
		Outdoor Unit			CXH18ADB	CXH24ADB	CXH30ADB
System	Mode			-	Heat Pump	Heat Pump	Heat Pump
	Performance	Capacity (Min/Std/Max)	Cooling	kW	1.76 / 5.28 / 7.33	2.34 / 7.03 / 9.38	2.64 / 8.79 / 10.26
				Btu/h	6,000 / 18,000 / 25,000	8,000 / 24,000 / 32,000	9,000 / 30,000 / 35,000
				US RT	0.50 / 1.50 / 2.08	0.67 / 2.00 / 2.67	0.75 / 2.50 / 2.92
			Heating	kW	1.44 / 5.86 / 8.21	2.05 / 7.91 / 11.72	2.20 / 9.38 / 12.60
				Btu/h	4,900 / 20,000 / 28,000	7,000 / 27,000 / 40,000	7,500 / 32,000 / 43,000
				US RT	0.41 / 1.67 / 2.33	0.58 / 2.25 / 3.33	0.63 / 2.67 / 3.58
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.45 / 1.46 / 2.42	0.44 / 1.89 / 3.15	0.61 / 2.73 / 4.25
			Heating		0.34 / 1.72 / 4.24	0.35 / 2.47 / 5.33	0.39 / 2.76 / 5.40
		Current Input (Min/Std/Max)	Cooling	A	2.3 / 6.7 / 10.7	2.3 / 8.6 / 14.0	3.8 / 12.4 / 18.9
			Heating		1.9 / 7.9 / 18.8	2.4 / 11.1 / 23.6	2.4 / 12.4 / 24.0
		Current	MCA	A	20.1	24.1	24.0
			MOP	A	25	30	30
	Efficiency	EER2	Cooling	-	3.60	3.72	3.22
			Cooling(US)	(Btu/h)/W	12.30	12.70	11.00
		COP2	Heating	W/W	3.40	3.20	3.40
		SEER2		-	21.5	21.5	20.7
		HSPF2		-	8.7	8.9	8.7
	Pipe Connections	Liquid Pipe		Type	Flare	Flare	Flare
				Φ, mm(inch)	6.35 (1/4)	6.35 (1/4)	9.52 (3/8)
		Gas Pipe		Type	Flare	Flare	Flare
				Φ, mm(inch)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
		Pipe Length (ODU-IDU)	Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
			Max.	m (ft)	50 (164.0)	50 (164)	50 (164)
			Elevation	m (ft)	30 (98.4)	30 (98.4)	30 (98.4)
			Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
	Wiring Connections	Communication	Min.	mm^2	0.75	0.75	0.75
			Remark	-	F1,F2	F1,F2	F1,F2
	Refrigerant	Type		-	R-410A	R-410A	R-410A
		Factory Charging		kg	2.0	2.6	2.6
				lbs	4.41	5.73	5.73
	Option Code	Standard		-	0103FF-1950D8-2A343B-370000	0103FF-1950D8-27484F-370040	0103FF-19541A-275A5E-370040
		Install		-	020010-100000-200000-300000	020010-100000-200000-300000	020010-100000-200000-300000
Indoor Unit	Power Supply			Φ,#,V,Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Green Hydrophile	Green Hydrophile	Green Hydrophile
	Fan	Type		-	Turbo	Turbo	Turbo
		Quantity		EA	1	1	1
		Air Flow Rate	H/M/L	m^3/min	18.3/15.5/13.6	21.1/17.9/14.9	25.6/21.1/17.9
				ft^3/min	646/547/480	745/632/526	904/745/632
				l/s	305/258/227	352/298/248	427/352/298
		External Static Pressure	Min/Std/Max	In Wg	-	-	-
	Fan Motor	Type		-	BLDC	BLDC	BLDC
		Output		W x n	65 x 1	97 x 1	97 x 1
	Drain	Drain Pipe		Φ, mm	OD26.67	OD26.67	OD26.67
	Sound	Sound Pressure Level	H/M/L(Silent)	dB(A)	35/32/29	36/33/29	38/35/31
		Sound Power Level		dB(A)	52	52	55
	External Dimension	Net Weight		kg(lbs)	20.0 (44.1)	23.3 (51.4)	23.3 (51.4)
		Gross Weight		kg(lbs)	24.9 (54.9)	28.0 (61.7)	28.0 (61.7)
		Net Dimensions (WxHxD)		mm	947 x 281 x 947	947 x 365 x 947	947 x 365 x 947
				inch	37.28 x 11.06 x 37.28	37.28 x 14.37 x 37.28	37.28 x 14.37 x 37.28
		Gross Dimensions (WxHxD)		mm	990 x 330 x 990	990 x 414 x 990	990 x 414 x 990
				inch	38.98 x 12.99 x 38.98	38.98 x 16.30 x 38.98	38.98 x 16.30 x 38.98

1. Specification

360 Cassette

Model Name		Indoor Unit			AC018BN6DCH/AA	AC024BN6DCH/AA	AC030BN6DCH/AA
		Outdoor Unit			AC018BXADCH/AA	AC024BXADCH/AA	AC030BXADCH/AA
US Code		Indoor Unit			CNH186DB	CNH246DB	CNH306DB
		Outdoor Unit			CXH18ADB	CXH24ADB	CXH30ADB
Indoor Unit	Casing	Material		-	HIPS	HIPS	HIPS
	Panel1	Model Name		-	PC4NUDMUN	PC4NUDMUN	PC4NUDMUN
		Type		-	Ceiling Type(Square)	Ceiling Type(Square)	Ceiling Type(Square)
		Material		-	HIPS	HIPS	HIPS
		Color		-	White	White	White
		Net Weight		kg(lbs)	3.60 (7.94)	3.60 (7.94)	3.60 (7.94)
		Gross Weight		kg(lbs)	6.3 (13.89)	6.3 (13.89)	6.3 (13.89)
		Net Dimensions (WxHxD)		mm	1,000 x 66 x 1,000	1,000 x 66 x 1,000	1,000 x 66 x 1,000
				inch	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37
		Gross Dimensions (WxHxD)		mm	1,093 x 85 x 1,083	1,093 x 85 x 1,083	1,093 x 85 x 1,083
				inch	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64
	Panel2	Model Name		-	PC4NUNMUN	PC4NUNMUN	PC4NUNMUN
		Type		-	Ceiling Type(Circle)	Ceiling Type(Circle)	Ceiling Type(Circle)
		Material		-	HIPS	HIPS	HIPS
		Color		-	White	White	White
		Net Weight		kg(lbs)	2.7 (5.9)	2.7 (5.9)	2.7 (5.9)
		Gross Weight		kg(lbs)	5.3 (11.69)	5.3 (11.69)	5.3 (11.69)
		Net Dimensions (WxHxD)		mm	1,050 x 66 x 1,050	1,050 x 66 x 1,050	1,050 x 66 x 1,050
				inch	41.34 x 2.60 x 41.34	41.34 x 2.60 x 41.34	41.34 x 2.60 x 41.34
		Gross Dimensions (WxHxD)		mm	1,093 x 85 x 1,093	1,093 x 85 x 1,093	1,093 x 85 x 1,093
				inch	43.03 x 3.35 x 43.03	43.03 x 3.35 x 43.03	43.03 x 3.35 x 43.03
	Control System	Infrared remote control		-	AR-KH04U	AR-KH04U	AR-KH04U
		Wired remote control		-	MWR-WG00UN / MWR-SH11UN	MWR-WG00UN / MWR-SH11UN	MWR-WG00UN / MWR-SH11UN
	Drain Pump	Drain Pump		-	included	included	included
		Max.lifting Height / Displacement		in / gal/h	29.53 / 6.34	29.53 / 6.34	29.53 / 6.34
	Additional Accessories	Air Filter		-	Removable / Washable	Removable / Washable	Removable / Washable
Outdoor Unit	Power Supply			Φ,#,V,Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Anti-Corrosion	Anti-Corrosion	Anti-Corrosion
	Compressor	Model		-	UG8T265FXAEW	UG8T300FUBJUSG	UG8T300FUBJUSG
		Type		-	Twin BLDC	Twin BLDC	Twin BLDC
		Output		kW	2.32	2.82	2.82
		Oil	Type	-	POE	POE	POE
			Initial Charge	cc (fl oz)	700	1200	1200
	Fan	Type		-	Propeller	Propellar	Propellar
		Discharge direction		-	Front	Front	Front
		Quantity		EA	1	1	1
		Air Flow Rate	H/M/L	m^3/min	61	76	76
				ft^3/min	2,154	2,684	2,684
				l/s	1,017	1,267	1,267
	Fan Motor	Type		-	BLDC	BLDC	BLDC
		Output		W x n	125 x 1	125 x 1	125 x 1
	Sound	Sound Pressure Level	Cooling	dB(A)	48	50	50
			Heating	dB(A)	48	52	52
		Sound Power Level		dB(A)	62	65	67
	External Dimension	Net Weight		kg(lbs)	53.7(118.4)	72.0 (158.7)	72.0 (158.7)
		Gross Weight		kg(lbs)	57.7(127.2)	77.0 (169.8)	77.0 (169.8)
		Net Dimensions (WxHxD)		mm	880 x 798 x 310	940 x 998 x 330	940 x 998 x 330
				inch	34.65 x 31.42 x 12.20	37.01 x 39.29 x 12.99	37.01 x 39.29 x 12.99
		Gross Dimensions (WxHxD)		mm	1023 x 881 x 413	995 x 1096 x 426	995 x 1096 x 426
				inch	40.28 x 34.69 x 16.26	39.17 x 43.15 x 16.77	39.17 x 43.15 x 16.77
	Casing	Material	Body	-	Steel	Steel	Steel
	Operating Temp.	Cooling		℃ (℉)	-18~50 (0~122)	-18~50 (0~122)	-18~50 (0~122)
		Heating		℃ (℉)	-25~24 (-13~75)	-25~24 (-13~75)	-20~24 (-4~75)

1. Specification

360 Cassette

NOTE

- Specification may be subject to change without prior notice.
  1) Performances are based on the following test conditions.
     - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
     - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
     - Equivalent refrigerant piping length 7.5m(24.6ft), Level differences : 0m(0ft))
  2) Select wire size based on the value of MCA
  3) Sound pressure level is obtained in an anechoic room.
     - Sound pressure level is a relative value, depending on the distance and acoustic environment.
     - Sound pressure level may differ depending on operation condition.
     - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
  4) Sound power level is an absolute value that a sound source generates.
     - dBA = A-weighted sound power level
     - Reference power : 1pW / Measured according to ISO 3741
  5) These products contain R410A which is fluorinated greenhouse gas.

1. Specification

360 Cassette

Model Name		Indoor Unit			AC036BN6DCH/AA	AC042BN6DCH/AA	AC048BN6DCH/AA
		Outdoor Unit			AC036BXADCH/AA	AC042BXADCH/AA	AC048BXADCH/AA
US Code		Indoor Unit			CNH366DB	CNH426DB	CNH486DB
		Outdoor Unit			CXH36ADB	CXH42ADB	CXH48ADB
System	Mode			-	Heat Pump	Heat Pump	Heat Pump
	Performance	Capacity (Min/Std/Max)	Cooling	kW	3.22 / 10.55 / 12.60	3.37 / 12.31 / 13.77	3.52 / 14.07 / 15.24
				Btu/h	11,000 / 36,000 / 43,000	11,500 / 42,000 / 47,000	12,000 / 48,000 / 52,000
				US RT	0.92 / 3.00 /3.58	0.96 / 3.50 / 3.92	1.00 / 4.00 / 4.33
			Heating	kW	3.66 / 11.72 / 15.24	3.66 / 13.77 / 17.00	3.81 / 15.83 / 17.58
				Btu/h	12,500 / 40,000 / 52,000	12,500 / 47,000 / 58,000	13,000 / 54,000 / 60,000
				US RT	1.04 / 3.33 / 4.33	1.04 / 3.92 / 4.83	1.08 / 4.50 / 5.00
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.90 / 3.13 / 4.31	0.91 / 4.20 / 5.68	0.95 / 5.78 / 6.50
			Heating		0.67 / 3.26 / 5.50	0.68 / 4.17 / 7.39	0.70 / 5.46 / 7.39
		Current Input (Min/Std/Max)	Cooling	A	4.6 / 13.9 / 19.1	4.7 / 18.6 / 25.2	4.9 / 25.6 / 28.8
			Heating		3.6 / 14.5 / 24.0	3.5 / 18.5 / 32.0	3.6 / 24.7 / 32.0
		Current	MCA	A	24.5	32.2	32.8
			MOP	A	35	40	40
	Efficiency	EER2	Cooling	-	3.37	2.93	2.43
			Cooling(US)	(Btu/h)/W	11.50	10.00	8.30
		COP2	Heating	W/W	3.60	3.30	2.90
		SEER2		-	20.4	18.9	17.8
		HSPF2		-	8.5	8.7	8.7
	Pipe Connections	Liquid Pipe		Type	Flare	Flare	Flare
				Φ, mm(inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
		Gas Pipe		Type	Flare	Flare	Flare
				Φ, mm(inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
		Pipe Length (ODU-IDU)	Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
			Max.	m (ft)	75 (246.0)	75 (246.0)	75 (246.0)
			Elevation	m (ft)	30 (98.4)	30 (98.4)	30 (98.4)
			Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
	Wiring Connections	Communication	Min.	mm^2	0.75	0.75	0.75
			Remark	-	F1,F2	F1,F2	F1,F2
	Refrigerant	Type		-	R-410A	R-410A	R-410A
		Factory Charging		kg	2.9	3.4	3.4
				lbs	6.39	7.50	7.50
	Option Code	Standard		-	0113FF-19548C-276975-370040	0113FF-19549D-277D8A-370040	0113FF-1954AF-278C9B-370040
		Install		-	020010-100000-200000-300000	020010-100000-200000-300000	020010-100000-200000-300000
Indoor Unit	Power Supply			Φ,#,V,Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Green Hydrophile	Green Hydrophile	Green Hydrophile
	Fan	Type		-	Turbo	Turbo	Turbo
		Quantity		EA	1	1	1
		Air Flow Rate	H/M/L	m^3/min	33.4/26.7/20.1	34.5/27.8/21.1	35.6/29.0/23.3
				ft^3/min	1180/943/710	1218/982/745	1257/1024/823
				l/s	557/445/335	575/463/352	593/483/388
		External Static Pressure	Min/Std/Max	In Wg	-	-	-
	Fan Motor	Type		-	BLDC	BLDC	BLDC
		Output		W x n	97 x 1	97 x 1	97 x 1
	Drain	Drain Pipe		Φ, mm	OD26.67	OD26.67	OD26.67
	Sound	Sound Pressure Level	H/M/L(Silent)	dB(A)	43 / 38 / 32	44 / 40 / 34	45 / 40 / 35
		Sound Power Level		dB(A)	59	60	61
	External Dimension	Net Weight		kg(lbs)	25.2 (55.6)	25.2 (55.6)	25.2 (55.6)
		Gross Weight		kg(lbs)	30.2 (66.6)	30.2 (66.6)	30.2 (66.6)
		Net Dimensions (WxHxD)		mm	947 x 365 x 947	947 x 365 x 947	947 x 365 x 947
				inch	37.28 x 14.37 x 37.28	37.28 x 14.37 x 37.28	37.28 x 14.37 x 37.28
		Gross Dimensions (WxHxD)		mm	990 x 414 x 990	990 x 414 x 990	990 x 414 x 990
				inch	38.98 x 16.30 x 38.98	38.98 x 16.30 x 38.98	38.98 x 16.30 x 38.98

1. Specification

360 Cassette

Model Name		Indoor Unit			AC036BN6DCH/AA	AC042BN6DCH/AA	AC048BN6DCH/AA
		Outdoor Unit			AC036BXADCH/AA	AC042BXADCH/AA	AC048BXADCH/AA
US Code		Indoor Unit			CNH366DB	CNH426DB	CNH486DB
		Outdoor Unit			CXH36ADB	CXH42ADB	CXH48ADB
Indoor Unit	Casing	Material		-	HIPS	HIPS	HIPS
	Panel1	Model Name		-	PC4NUDMUN	PC4NUDMUN	PC4NUDMUN
		Type		-	Ceiling Type(Square)	Ceiling Type(Square)	Ceiling Type(Square)
		Material		-	HIPS	HIPS	HIPS
		Color		-	White	White	White
		Net Weight		kg(lbs)	3.60 (7.94)	3.60 (7.94)	3.60 (7.94)
		Gross Weight		kg(lbs)	6.3 (13.89)	6.3 (13.89)	6.3 (13.89)
		Net Dimensions (WxHxD)		mm	1,000 x 66 x 1,000	1,000 x 66 x 1,000	1,000 x 66 x 1,000
				inch	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37	39.37 x 2.60 x 39.37
		Gross Dimensions (WxHxD)		mm	1,093 x 85 x 1,083	1,093 x 85 x 1,083	1,093 x 85 x 1,083
				inch	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64	43.03 x 3.35 x 42.64
	Panel2	Model Name		-	PC4NUNMUN	PC4NUNMUN	PC4NUNMUN
		Type		-	Ceiling Type(Circle)	Ceiling Type(Circle)	Ceiling Type(Circle)
		Material		-	HIPS	HIPS	HIPS
		Color		-	White	White	White
		Net Weight		kg(lbs)	2.7 (5.9)	2.7 (5.9)	2.7 (5.9)
		Gross Weight		kg(lbs)	5.3 (11.69)	5.3 (11.69)	5.3 (11.69)
		Net Dimensions (WxHxD)		mm	1,050 x 66 x 1,050	1,050 x 66 x 1,050	1,050 x 66 x 1,050
				inch	41.34 x 2.60 x 41.34	41.34 x 2.60 x 41.34	41.34 x 2.60 x 41.34
		Gross Dimensions (WxHxD)		mm	1,093 x 85 x 1,093	1,093 x 85 x 1,093	1,093 x 85 x 1,093
				inch	43.03 x 3.35 x 43.03	43.03 x 3.35 x 43.03	43.03 x 3.35 x 43.03
	Control System	Infrared remote control		-	AR-KH04U	AR-KH04U	AR-KH04U
		Wired remote control		-	MWR-WG00UN / MWR-SH11UN	MWR-WG00UN / MWR-SH11UN	MWR-WG00UN / MWR-SH11UN
	Drain Pump	Drain Pump		-	included	included	included
		Max.lifting Height / Displacement		in / gal/h	29.53 / 6.34	29.53 / 6.34	29.53 / 6.34
	Additional Accessories	Air Filter		-	Removable / Washable	Removable / Washable	Removable / Washable
Outdoor Unit	Power Supply			Φ,#,V,Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Anti-Corrosion	Anti-Corrosion	Anti-Corrosion
	Compressor	Model		-	UG5TK1450FJXSG	UG5TK1450FJXSG	UG5TK1450FJXSG
		Type		-	Twin BLDC	Twin BLDC	Twin BLDC
		Output		kW	4.19	4.19	4.19
		Oil	Type	-	PVE	PVE	PVE
			Initial Charge	cc (fl oz)	1700	1700	1700
	Fan	Type		-	Propellar	Propellar	Propellar
		Discharge direction		-	Front	Front	Front
		Quantity		EA	2	2	2
		Air Flow Rate	H/M/L	m^3/min	100	100	100
				ft³/min	3,532	3,532	3,532
				l/s	1,667	1,667	1,667
	Fan Motor	Type		-	BLDC	BLDC	BLDC
		Output		W x n	125 x 2	125 x 2	125 x 2
	Sound	Sound Pressure Level	Cooling	dB(A)	52	53	56
			Heating	dB(A)	54	55	58
		Sound Power Level		dB(A)	69	70	72
	External Dimension	Net Weight		kg(lbs)	86.0 (189.6)	88.5 (195.1)	88.5 (195.1)
		Gross Weight		kg(lbs)	95.5 (210.5)	98.0 (216.1)	98.0 (216.1)
		Net Dimensions (WxHxD)		mm	940 x 1210 x 330	940 x 1210 x 330	940 x 1210 x 330
				inch	37.01 x 47.64 x 12.99	37.01 x 47.64 x 12.99	37.01 x 47.64 x 12.99
		Gross Dimensions (WxHxD)		mm	995 x 1388 x 426	995 x 1388 x 426	995 x 1388 x 426
				inch	39.17 x 54.65 x 16.77	39.17 x 54.65 x 16.77	39.17 x 54.65 x 16.77
	Casing	Material	Body	-	Steel	Steel	Steel
	Operating Temp.	Cooling		℃ (℉)	-18~50 (0~122)	-18~50 (0~122)	-18~50 (0~122)
		Heating		℃ (℉)	-20~24 (-4~75)	-20~24 (-4~75)	-20~24 (-4~75)

1. Specification

360 Cassette

NOTE

- Specification may be subject to change without prior notice.
  1) Performances are based on the following test conditions.
     - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
     - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
     - Equivalent refrigerant piping length 7.5m(24.6ft), Level differences : 0m(0ft))
  2) Select wire size based on the value of MCA
  3) Sound pressure level is obtained in an anechoic room.
     - Sound pressure level is a relative value, depending on the distance and acoustic environment.
     - Sound pressure level may differ depending on operation condition.
     - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
  4) Sound power level is an absolute value that a sound source generates.
     - dBA = A-weighted sound power level
     - Reference power : 1pW / Measured according to ISO 3741
  5) These products contain R410A which is fluorinated greenhouse gas.

2. Summary Table

360 Cassette

Performance Characteristics

Model Code	Net Weight (lbs)		Capacity		Fan Speed	Airflow (Cooling/Heating) (CFM)	Sound Pressure Level (dBA)	Sound Power Level (dBA)
			Cooling (Btu/h)	Heating (Btu/h)				
CNH186DB (AC018BN6DCH/AA)	44.1	Max.	25,000	28,000	High	646 / 646	35	52
		Std.	18,000	20,000	Mid	547 / 547	32	-
		Min.	6,000	4,900	Low	480 / 480	29	-
CNH246DB (AC024BN6DCH/AA)	51.4	Max.	32,000	40,000	High	745 / 745	36	52
		Std.	24,000	27,000	Mid	632 / 632	33	-
		Min.	8,000	7,000	Low	526 / 526	29	-
CNH306DB (AC030BN6DCH/AA)	51.4	Max.	35,000	43,000	High	904 / 904	38	55
		Std.	30,000	32,000	Mid	745 / 745	35	-
		Min.	9,000	7,500	Low	632 / 632	31	-
CNH366DB (AC036BN6DCH/AA)	55.6	Max.	43,000	52,000	High	1,180 / 1,180	43	59
		Std.	36,000	40,000	Mid	943 / 943	38	-
		Min.	11,000	12,500	Low	710 / 7710	32	-
CNH426DB (AC042BN6DCH/AA)	55.6	Max.	47,000	58,000	High	1,218 / 1,218	44	60
		Std.	42,000	47,000	Mid	982 / 982	40	-
		Min.	11,500	12,500	Low	745 / 745	34	-
CNH486DB (AC048BN6DCH/AA)	55.6	Max.	52,000	60,000	High	1,257 / 1,257	45	61
		Std.	48,000	54,000	Mid	1,024 / 1,024	40	-
		Min.	12,000	13,000	Low	823 / 823	35	-

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

Model		Outdoor Unit				Input Current (Amperes)				Power Supply	
Indoor Unit	Outdoor Unit	Rated	Voltage range			Outdoor Unit		Indoor Unit	Total	MCA(A)	MOP(A)
		Hz	Voltz	Min.	Max	Cooling	Heating				
CNH186DB (AC018BN6DCH/AA)	CXH18ADB (AC018BXADCH/AA)	60	208 to 230	187	253	17.94	17.94	0.79	18.73	20.1	25
CNH246DB (AC024BN6DCH/AA)	CXH24ADB (AC024BXADCH/AA)	60	208 to 230	187	253	21.94	21.94	0.79	22.73	24.1	30
CNH306DB (AC030BN6DCH/AA)	CXH30ADB (AC030BXADCH/AA)	60	208 to 230	187	253	21.50	21.50	0.79	22.29	24.0	30
CNH366DB (AC036BN6DCH/AA)	CXH36ADB (AC036BXADCH/AA)	60	208 to 230	187	253	20.88	20.88	0.79	21.67	24.5	35
CNH426DB (AC042BN6DCH/AA)	CXH42ADB (AC042BXADCH/AA)	60	208 to 230	187	253	28.63	28.63	0.79	29.42	32.2	40
CNH486DB (AC048BN6DCH/AA)	CXH48ADB(AC048BXADCH/AA)	60	208 to 230	187	253	28.63	28.63	0.79	29.42	32.8	40

NOTE

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

3. Capacity Table

360 Cassette

(1) CNH186DB(AC018BN6DCH/AA) + CXH18ADB (AC018BXADCH/AA)

Cooling

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

Outdoor Temp. (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	15.9	11.5	1.03	16.8	11.9	1.05	17.5	12.2	1.07	18.0	12.6	1.10	18.4	12.5	1.11	19.3	12.3	1.12	20.2	12.1	1.14
70	19.9	14.4	1.10	21.0	14.8	1.12	21.8	15.3	1.14	22.5	15.8	1.17	23.0	15.6	1.18	24.1	15.4	1.19	25.3	15.1	1.22
95	15.9	11.5	1.37	16.8	11.9	1.40	17.5	12.2	1.43	18.0	12.6	1.46	18.4	12.5	1.47	19.3	12.3	1.49	20.2	12.1	1.52
115	16.2	12.1	2.27	17.1	12.4	2.31	17.8	12.8	2.36	18.4	13.2	2.41	18.7	13.1	2.43	19.7	13.0	2.46	20.6	12.7	2.51
122	14.3	11.8	2.20	15.1	12.2	2.24	15.7	12.6	2.29	16.2	13.0	2.34	16.5	12.8	2.36	17.4	12.7	2.38	18.2	12.4	2.43

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-13	14.4	2.30	14.3	2.28	14.1	2.26	14.0	2.24	13.9	2.21	13.7	2.19
-4	20.6	3.42	20.4	3.39	20.2	3.35	20.0	3.32	19.8	3.29	19.6	3.25
14	25.8	4.08	25.5	4.04	25.3	4.00	25.0	3.96	24.8	3.92	24.5	3.88
32	23.7	2.75	23.5	2.72	23.2	2.69	23.0	2.67	22.8	2.64	22.5	2.61
47	20.6	1.77	20.4	1.75	20.2	1.74	20.0	1.72	19.8	1.70	19.6	1.69
75.2	26.8	2.04	26.5	2.02	26.3	2.00	26.0	1.98	25.7	1.96	25.5	1.94

NOTE

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

3. Capacity Table

360 Cassette

(2) CNH246DB(AC024BN6DCH/AA) + CXH24ADB (AC024BXADCH/AA)

Cooling

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

Outdoor Temp. (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	26.5	19.2	1.07	27.9	19.8	1.09	29.1	20.4	1.11	30.0	21.0	1.13	30.6	20.8	1.15	32.1	20.6	1.16	33.7	20.2	1.18
70	23.8	17.2	1.33	25.0	17.7	1.36	26.1	18.3	1.39	26.9	18.8	1.42	27.4	18.6	1.43	28.8	18.4	1.45	30.2	18.1	1.47
95	21.2	15.3	1.78	22.3	15.8	1.82	23.3	16.3	1.85	24.0	16.8	1.89	24.5	16.6	1.91	25.7	16.5	1.93	27.0	16.1	1.97
115	22.3	18.4	3.11	23.5	19.0	3.18	24.4	19.6	3.24	25.2	20.2	3.31	25.7	20.0	3.34	27.0	19.8	3.37	28.3	19.4	3.44
122	19.1	16.8	2.76	20.1	17.3	2.81	21.0	17.8	2.87	21.6	18.4	2.93	22.0	18.2	2.96	23.1	18.0	2.99	24.3	17.6	3.05

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-13	16.7	2.29	16.5	2.27	16.4	2.25	16.2	2.22	16.0	2.20	15.9	2.18
-4	27.8	4.89	27.5	4.85	27.3	4.80	27.0	4.75	26.7	4.70	26.5	4.66
14	27.8	4.45	27.5	4.41	27.3	4.37	27.0	4.32	26.7	4.28	26.5	4.24
32	30.6	3.31	30.3	3.28	30.0	3.24	29.7	3.21	29.4	3.18	29.1	3.15
47	27.8	2.54	27.5	2.52	27.3	2.49	27.0	2.47	26.7	2.45	26.5	2.42
75.2	37.6	3.18	37.2	3.15	36.8	3.12	36.5	3.09	36.1	3.06	35.7	3.03

NOTE

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

3. Capacity Table

360 Cassette

(3) CNH306DB(AC030BN6DCH/AA) + CXH30ADB (AC030BXADCH/AA)

Cooling

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

Outdoor Temp. (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	33.2	24.0	1.54	34.9	24.7	1.57	36.4	25.5	1.61	37.5	26.3	1.64	38.3	26.0	1.65	40.2	25.7	1.67	42.2	25.2	1.70
70	29.7	21.5	1.93	31.3	22.1	1.97	32.6	22.8	2.01	33.6	23.5	2.05	34.3	23.3	2.07	36.0	23.1	2.09	37.8	22.6	2.13
95	26.5	19.2	2.57	27.9	19.8	2.62	29.1	20.4	2.68	30.0	21.0	2.73	30.6	20.8	2.76	32.1	20.6	2.78	33.7	20.2	2.84
115	23.9	19.7	3.34	25.1	20.3	3.41	26.2	21.0	3.48	27.0	21.6	3.55	27.5	21.4	3.58	28.9	21.2	3.62	30.4	20.7	3.69
122	19.9	17.5	2.95	21.0	18.0	3.02	21.8	18.6	3.08	22.5	19.1	3.14	23.0	18.9	3.17	24.1	18.7	3.20	25.3	18.4	3.27

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	28.0	4.58	27.7	4.54	27.5	4.49	27.2	4.45	26.9	4.41	26.7	4.36
14	33.0	4.98	32.6	4.93	32.3	4.88	32.0	4.83	31.7	4.78	31.4	4.73
32	36.3	3.70	35.9	3.66	35.6	3.62	35.2	3.59	34.8	3.55	34.5	3.52
47	33.0	2.84	32.6	2.82	32.3	2.79	32.0	2.76	31.7	2.73	31.4	2.71
75.2	44.5	3.55	44.1	3.52	43.6	3.48	43.2	3.45	42.8	3.42	42.3	3.38

NOTE

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

3. Capacity Table

360 Cassette

(4) CNH366DB(AC036BN6DCH/AA) + CXH36ADB (AC036BXADCH/AA)

Cooling

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

Outdoor Temp. (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	36.6	26.4	2.95	38.6	27.3	3.01	40.2	28.1	3.07	41.4	29.0	3.13	42.2	28.7	3.16	44.3	28.4	3.19	46.6	27.8	3.26
70	38.2	27.6	2.65	40.2	28.5	2.71	41.9	29.3	2.76	43.2	30.2	2.82	44.1	29.9	2.85	46.3	29.6	2.87	48.6	29.0	2.93
95	31.8	23.0	2.95	33.5	23.7	3.01	34.9	24.4	3.07	36.0	25.2	3.13	36.7	24.9	3.16	38.6	24.7	3.19	40.5	24.2	3.26
115	28.7	23.7	3.54	30.2	24.4	3.61	31.4	25.1	3.68	32.4	25.9	3.76	33.0	25.7	3.79	34.7	25.4	3.83	36.4	24.9	3.91
122	23.9	20.9	2.65	25.1	21.6	2.71	26.2	22.3	2.76	27.0	23.0	2.82	27.5	22.7	2.85	28.9	22.5	2.87	30.4	22.0	2.93

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	34.0	4.95	33.7	4.90	33.3	4.85	33.0	4.80	32.7	4.75	32.3	4.70
14	37.1	4.37	36.7	4.32	36.4	4.28	36.0	4.24	35.6	4.20	35.3	4.15
32	47.4	4.20	46.9	4.16	46.5	4.12	46.0	4.08	45.5	4.03	45.1	3.99
47	41.2	3.36	40.8	3.33	40.4	3.29	40.0	3.26	39.6	3.23	39.2	3.20
75.2	47.4	3.02	46.9	2.99	46.5	2.96	46.0	2.93	45.5	2.90	45.1	2.88

NOTE

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

3. Capacity Table

360 Cassette

(5) CNH426DB(AC042BN6DCH/AA) + CXH42ADB (AC042BXADCH/AA)

Cooling

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

Outdoor Temp. (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	42.7	30.9	3.95	45.0	31.8	4.03	46.9	32.8	4.12	48.3	33.8	4.20	49.3	33.5	4.24	51.7	33.1	4.28	54.3	32.5	4.37
70	44.6	32.2	3.56	46.9	33.2	3.63	48.9	34.2	3.70	50.4	35.3	3.78	51.4	34.9	3.82	54.0	34.6	3.86	56.7	33.9	3.93
95	37.2	26.8	3.95	39.1	27.7	4.03	40.7	28.5	4.12	42.0	29.4	4.20	42.8	29.1	4.24	45.0	28.8	4.28	47.2	28.2	4.37
115	31.6	26.1	4.35	33.2	26.9	4.44	34.6	27.7	4.53	35.7	28.6	4.62	36.4	28.3	4.67	38.2	28.0	4.71	40.1	27.4	4.81
122	26.0	22.8	3.36	27.4	23.5	3.43	28.5	24.2	3.50	29.4	25.0	3.57	30.0	24.7	3.61	31.5	24.5	3.64	33.1	24.0	3.71

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	41.6	6.35	41.2	6.28	40.8	6.22	40.4	6.16	40.0	6.10	39.6	6.04
14	46.0	5.80	45.5	5.74	45.1	5.69	44.7	5.63	44.2	5.57	43.8	5.52
32	55.7	5.37	55.1	5.32	54.6	5.26	54.1	5.21	53.5	5.16	53.0	5.11
47	48.4	4.30	47.9	4.25	47.5	4.21	47.0	4.17	46.5	4.13	46.1	4.09
75.2	55.7	3.87	55.1	3.83	54.6	3.79	54.1	3.75	53.5	3.72	53.0	3.68

NOTE

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

3. Capacity Table

360 Cassette

(6) CNH486DB(AC048BN6DCH/AA) + CXH48ADB (AC048BXADCH/AA)

Cooling

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

Outdoor Temp. (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	48.8	35.3	5.44	51.4	36.4	5.55	53.5	37.5	5.66	55.2	38.6	5.78	56.3	38.3	5.84	59.1	37.9	5.90	62.1	37.1	6.01
70	51.0	36.8	4.90	53.6	37.9	5.00	55.9	39.1	5.10	57.6	40.3	5.20	58.8	39.9	5.25	61.7	39.5	5.31	64.8	38.7	5.41
95	42.5	30.7	5.44	44.7	31.6	5.55	46.6	32.6	5.66	48.0	33.6	5.78	49.0	33.3	5.84	51.4	32.9	5.90	54.0	32.3	6.01
115	34.0	28.0	5.17	35.8	28.9	5.27	37.2	29.8	5.38	38.4	30.7	5.49	39.2	30.4	5.55	41.1	30.1	5.60	43.2	29.5	5.71
122	27.6	24.2	4.35	29.1	25.0	4.44	30.3	25.7	4.53	31.2	26.5	4.62	31.8	26.3	4.67	33.4	26.0	4.72	35.1	25.5	4.81

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	41.8	6.44	41.4	6.38	41.0	6.31	40.6	6.25	40.2	6.19	39.8	6.13
14	50.1	7.31	49.6	7.24	49.1	7.17	48.6	7.10	48.1	7.03	47.6	6.96
32	64.0	7.03	63.3	6.96	62.7	6.89	62.1	6.83	61.5	6.76	60.9	6.69
47	55.6	5.63	55.1	5.57	54.5	5.51	54.0	5.46	53.5	5.41	52.9	5.35
75.2	64.0	5.06	63.3	5.01	62.7	4.96	62.1	4.91	61.5	4.86	60.9	4.82

NOTE

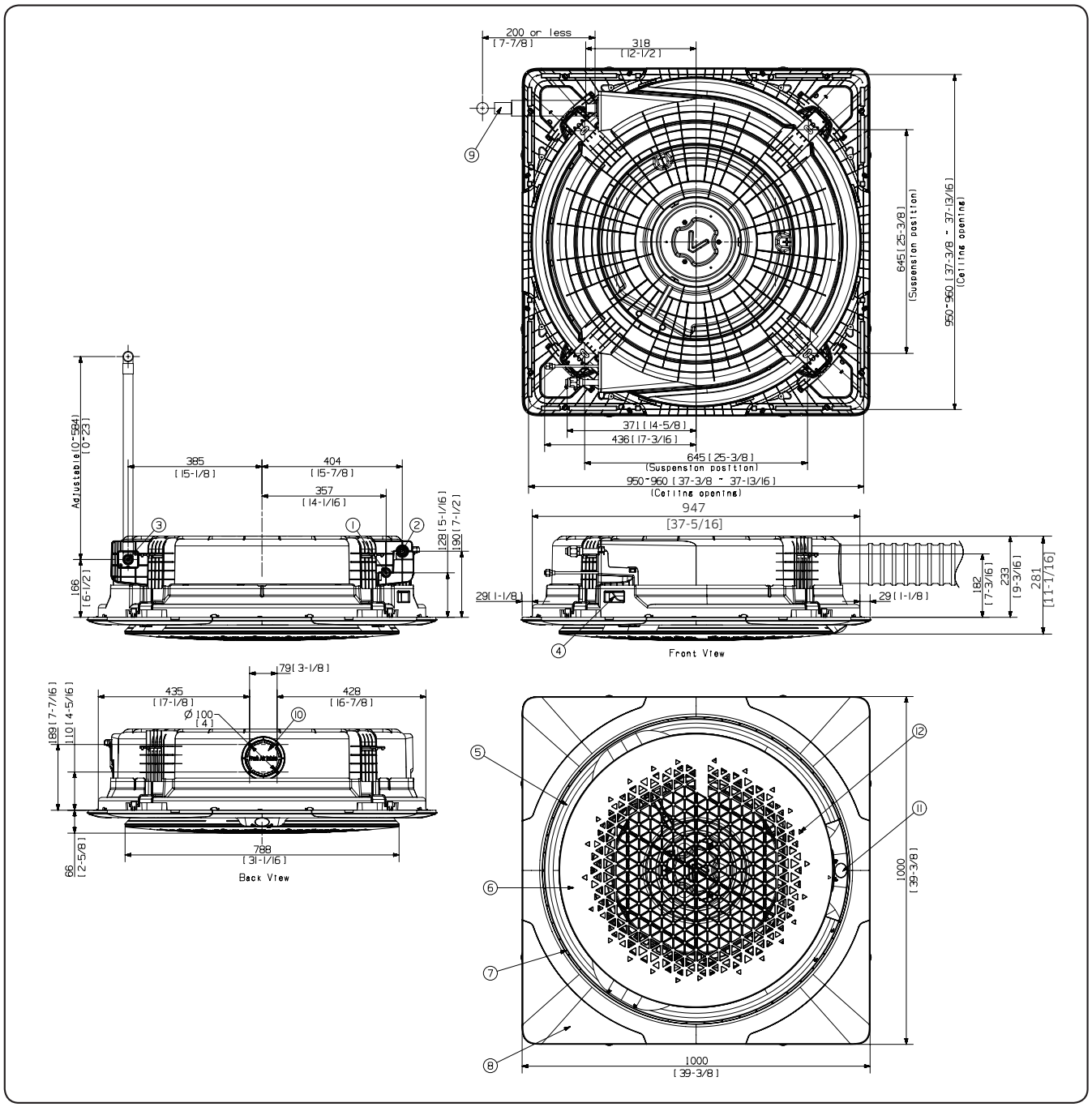
- The performance table shows the average value of each conditions.

4. Dimensional Drawing

360 Cassette

CNH186DB (AC018BN6DCH/AA)

Units : mm [inches]



4. Dimensional Drawing

360 Cassette

No.	Name	Description	No.	Name	Description
1	Liquid pipe connection	Φ 6.35mm(1/4")	7	Suction rim for Booster fan	
2	Gas pipe connection	Φ 15.88mm(5/8")	8	Decoration cover	
3	Drain pipe connection	3/4 " [OD 26.67 (1.05")]	9	Drain hose(Accessory)	
4	Power supply & Communication wiring conduit		10	Fresh air intake knockout hole	Use M4 Screw
5	Air Discharge opening		11	Display window	
6	Air suction grille		12	Remote controller receiver	

NOTE

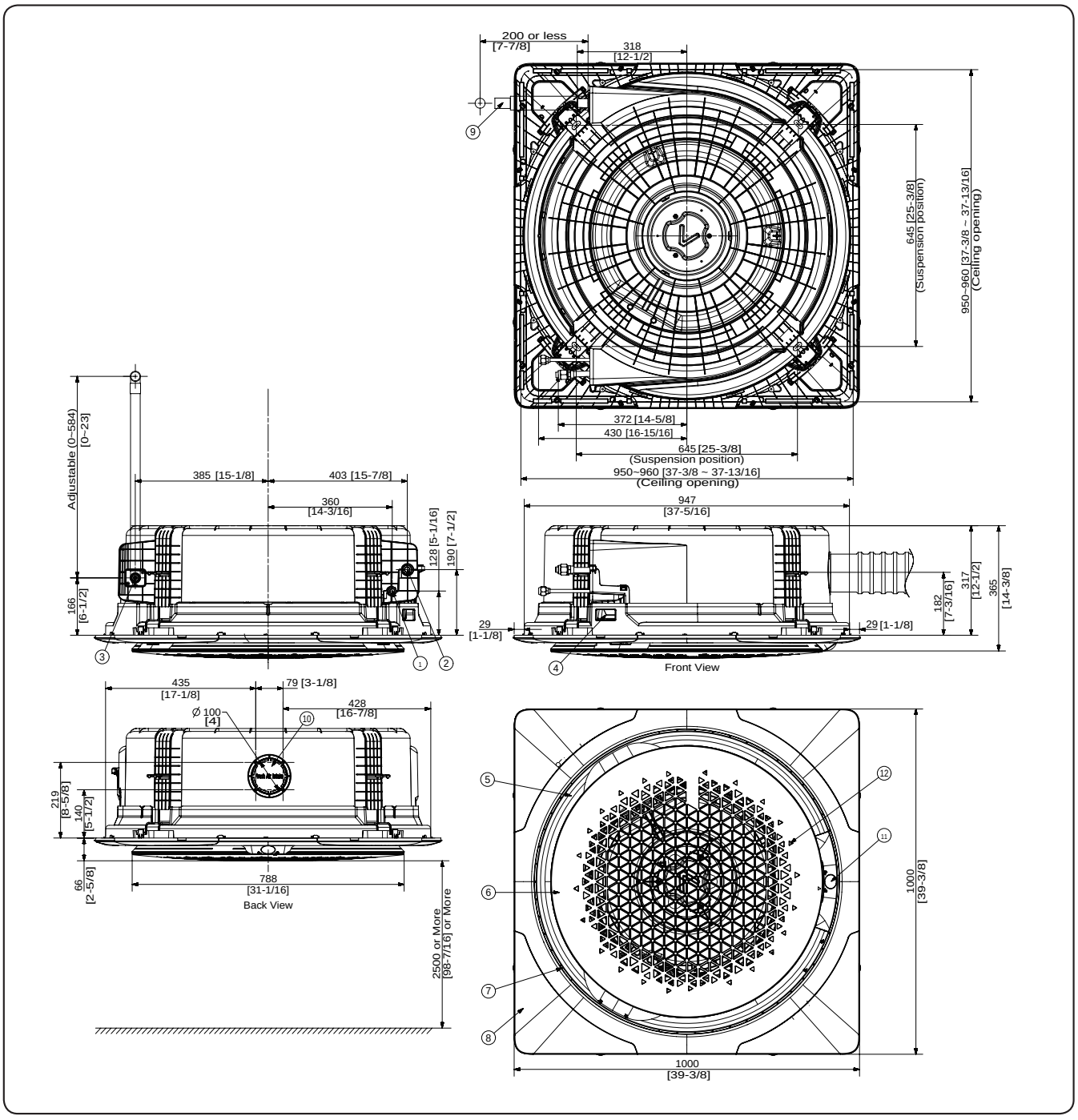
- As for suspension bolt, please use M8 ~ M10. (Procured at local site)
- Make sure the spacing between the ceiling and the cassette is no more than 29mm[1-1/4].
  Max ceiling opening : 960mm[36-13/16].
- When the condition exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, and additional insulation is required (polyethylene foam , thickness 10mm[3/8] or more)

4. Dimensional Drawing

360 Cassette

CNH246DB (AC024BN6DCH/AA), CNH306DB (AC030BN6DCH/AA),CNH366DB (AC036BN6DCH/AA),
CNH426DB (AC042BN6DCH/AA), CNH486DB (AC048BN6DCH/AA)

Units : mm [inches]



4. Dimensional Drawing

360 Cassette

No.	Name	Description	No.	Name	Description
1	Liquid pipe connection	Φ 9.52mm(3/8")	7	Suction rim for Booster fan	
2	Gas pipe connection	Φ 15.88mm(5/8")	8	Decoration cover	
3	Drain hose	3/4 " [OD 26.67 (1.05")]	9	Drain hose(Accessory)	
4	Power & Communication wiring conduits		10	Fresh air intake knockout hole	
5	Air discharge opening		11	Display window	
6	Air suction grille		12	Remote controller receiver	

NOTE

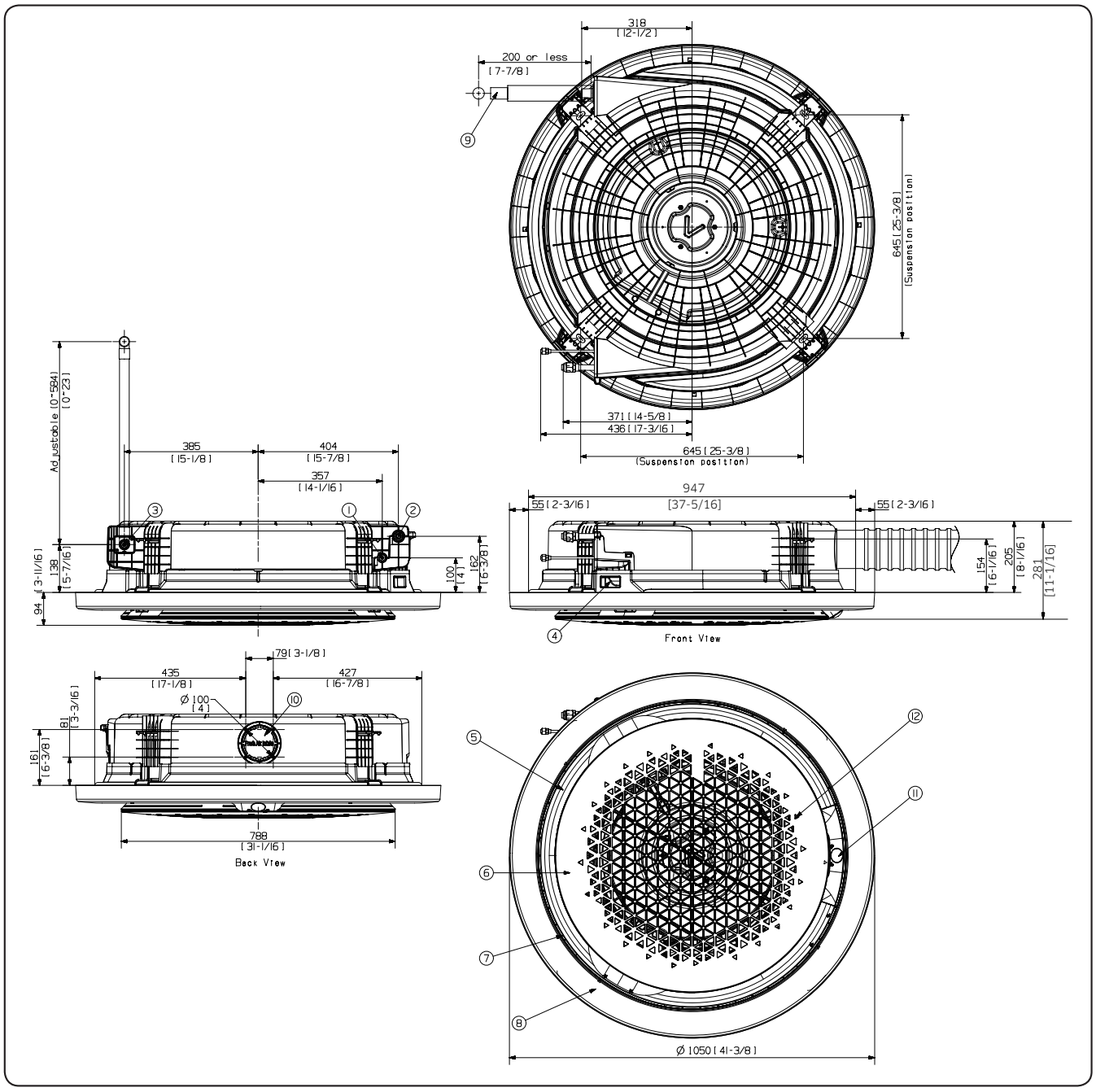
- As for suspension bolt, please use M8 ~ M10. (Procured at local site)
- Make sure the spacing between the ceiling and the cassette is no more than 29mm[1-1/4].
  Max ceiling opening : 960mm[36-13/16].
- When the condition exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, and additional insulation is required (polyethylene foam , thickness 10mm[3/8] or more)

4. Dimensional Drawing

360 Cassette

CNH186DB (AC018BN6DCH/AA)

Units : mm [inches]



4. Dimensional Drawing

360 Cassette

No.	Name	Description	No.	Name	Description
1	Liquid pipe connection	Φ 6.35mm(1/4")	7	Suction rim for Booster fan	
2	Gas pipe connection	Φ 15.88mm(5/8")	8	Decoration cover	
3	Drain pipe connection	3/4 " [OD 26.67 (1.05")]	9	Drain hose(Accessory)	
4	Power supply & Communication wiring conduit		10	Fresh air intake knockout hole	Use M4 Screw
5	Air Discharge opening		11	Display window	
6	Air suction grille		12	Remote controller receiver	

NOTE

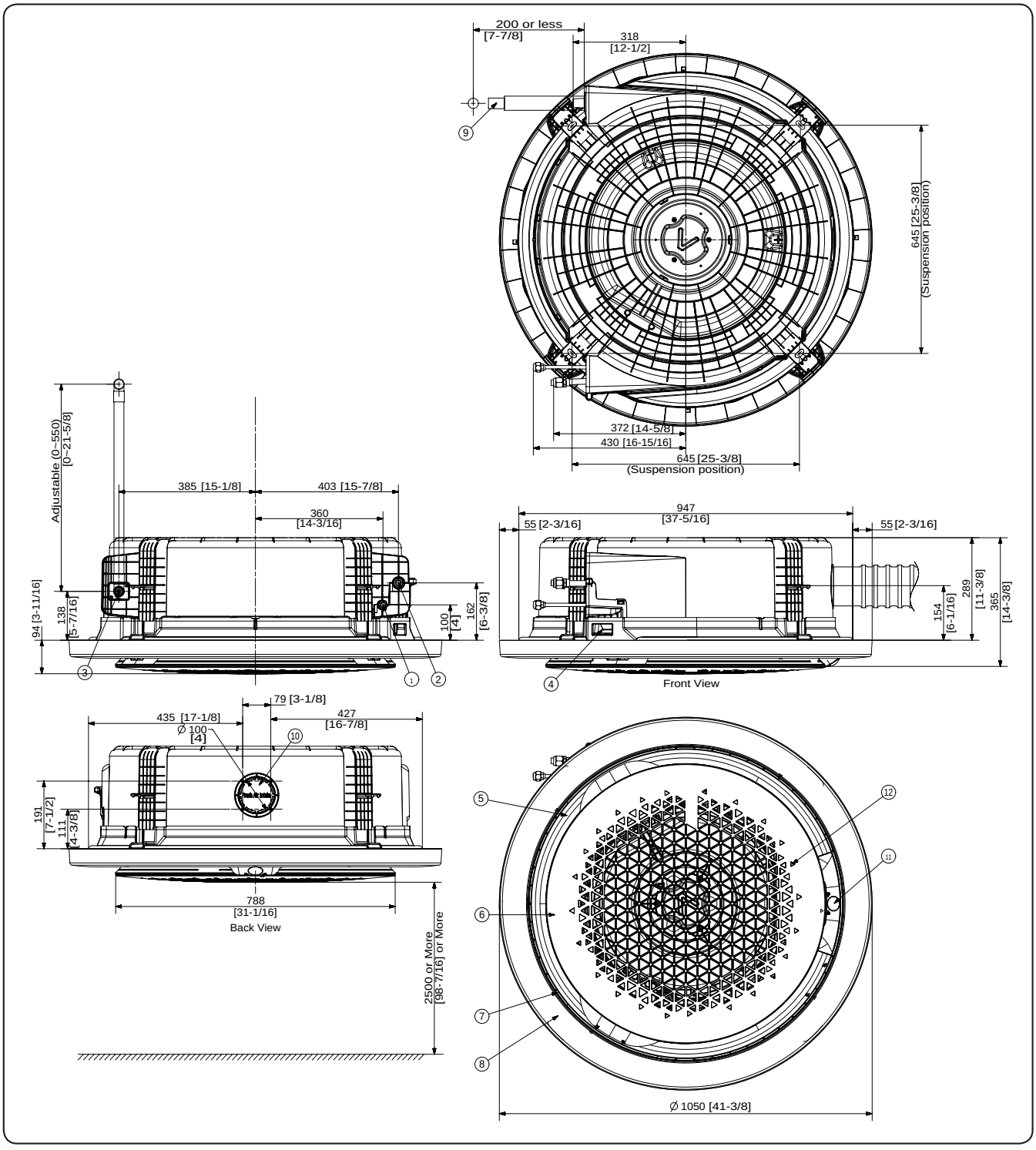
- As for suspension bolt, please use M8 ~ M10. (Procured at local site)
- Make sure the spacing between the ceiling and the cassette is no more than 29mm[1-1/4].
  Max ceiling opening : 960mm[36-13/16].
- When the condition exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling,
  and additional insulation is required (polyethylene foam , thickness 10mm[3/8] or more)
- The circular panel is by default available in exposed installation.
  Make inspection holes on the ceiling for easier installation and maintenance, as shown in the following table.
  (The size of an inspection hole must be at least 450 mm x 450 mm.)
- A suspended ceiling structure can substitute for the inspection holes.

4. Dimensional Drawing

360 Cassette

CNH246DB (AC024BN6DCH/AA), CNH306DB (AC030BN6DCH/AA),CNH366DB (AC036BN6DCH/AA),
CNH426DB (AC042BN6DCH/AA), CNH486DB (AC048BN6DCH/AA)

Units : mm [inches]



4. Dimensional Drawing

360 Cassette

No.	Name	Description	No.	Name	Description
1	Liquid pipe connection	Φ 9.52mm(3/8")	7	Suction rim for Booster fan	
2	Gas pipe connection	Φ 15.88mm(5/8")	8	Decoration cover	
3	Drain hose	3/4 " [OD 26.67 (1.05")]	9	Drain hose(Accessory)	
4	Power & Communication wiring conduits		10	Fresh air intake knockout hole	
5	Air discharge opening		11	Display window	
6	Air suction grille		12	Remote controller receiver	

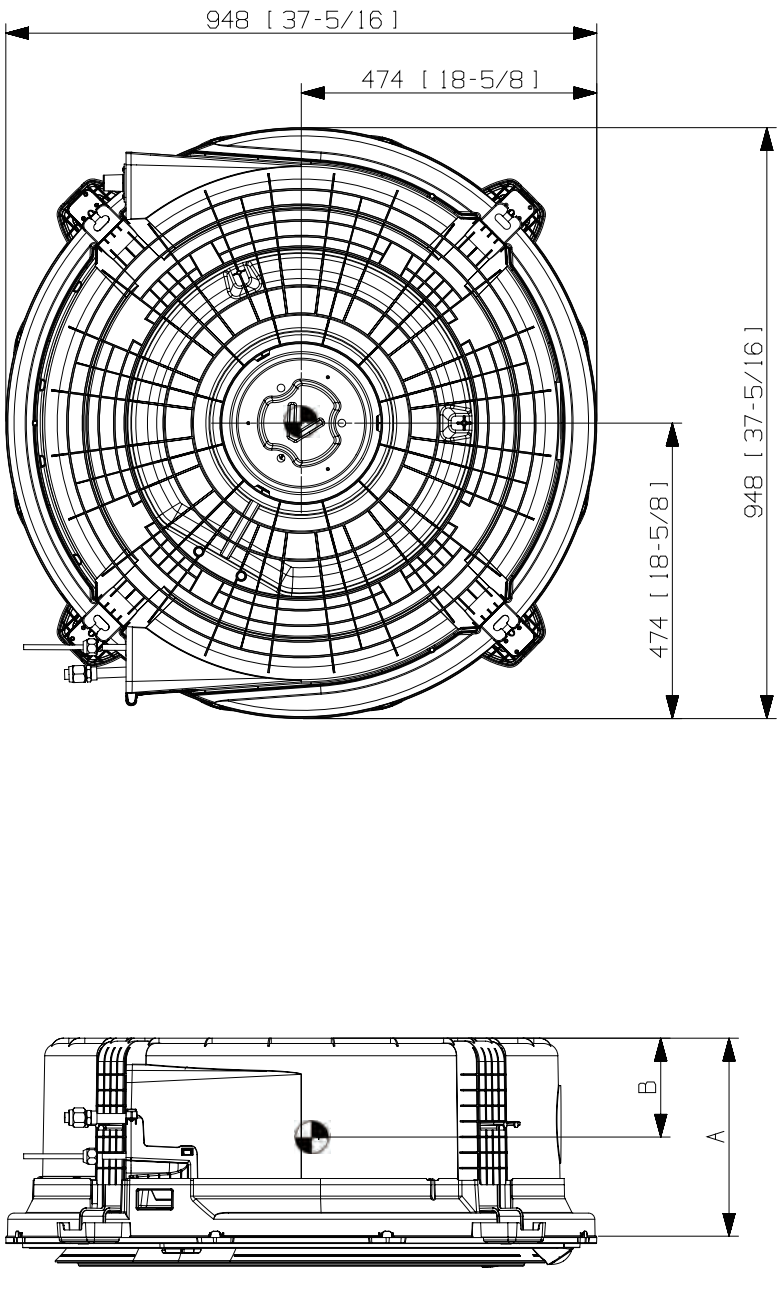
NOTE

- As for suspension bolt, please use M8 ~ M10. (Procured at local site)
- Make sure the spacing between the ceiling and the cassette is no more than 29mm[1-1/4].
  Max ceiling opening : 960mm[36-13/16].
- When the condition exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling,
  and additional insulation is required (polyethylene foam , thickness 10mm[3/8] or more)
- The circular panel is by default available in exposed installation.
  Make inspection holes on the ceiling for easier installation and maintenance, as shown in the following table.
  (The size of an inspection hole must be at least 450 mm x 450 mm.)
- A suspended ceiling structure can substitute for the inspection holes.

5. Center of Gravity

360 Cassette

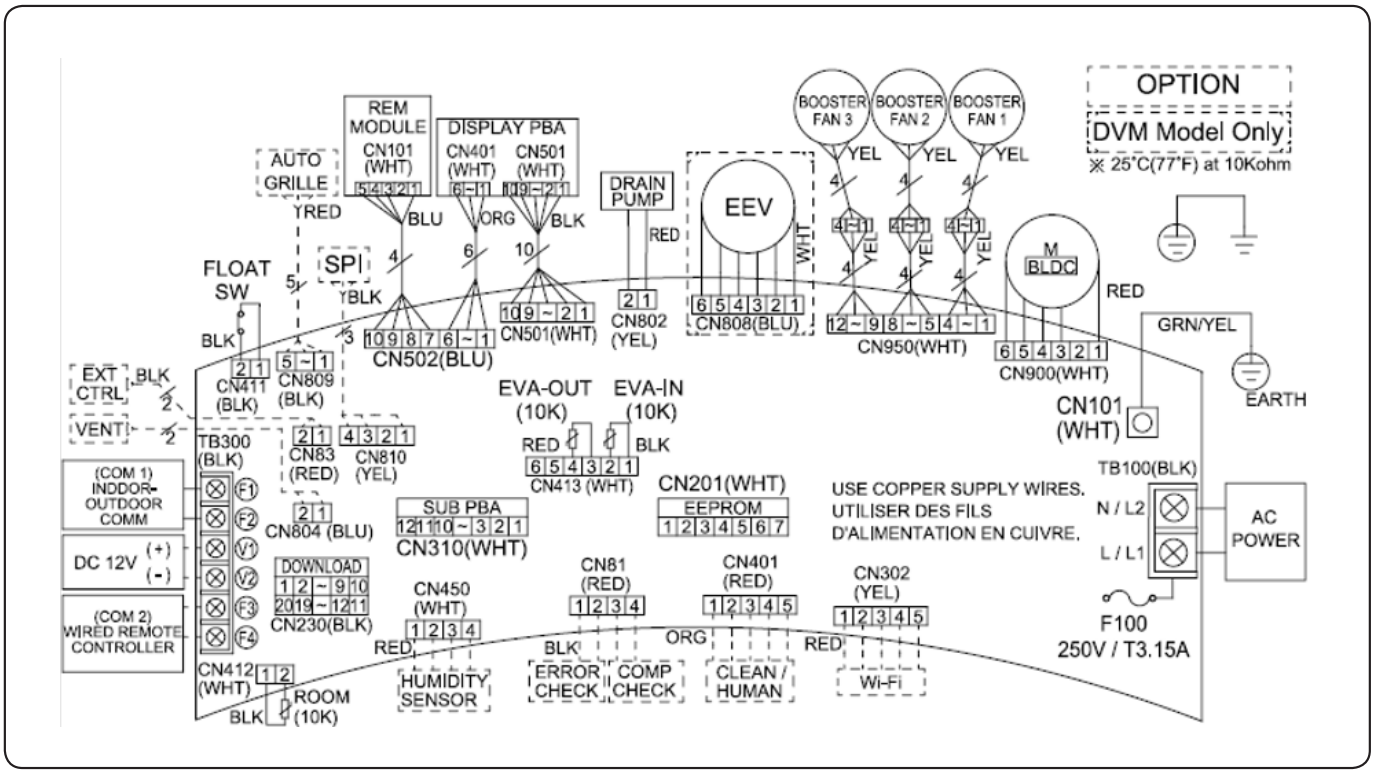
Units : mm [inches]



	A	B
18kBtu/h	233 [9-3/16]	165 [6-1/2]
24~48kBtu/h	317 [12-1/2]	220 [8-5/8]

6. Electrical Wiring Diagram

360 Cassette



M BLDC	BLDC Motor	F100	MAIN FUSE, 250V/T3, 15A
SPI	S-Plasma ion	WiFi	Option WiFi Module
EEV	Electronic Expansion Valve	EVA-IN	Thermistor EVA IN(10K)
ROOM	Thermistor ROOM in (10K)	EVA-OUT	Thermistor EVA OUT(10K)
F1/F2	Out To Indoor Communication		

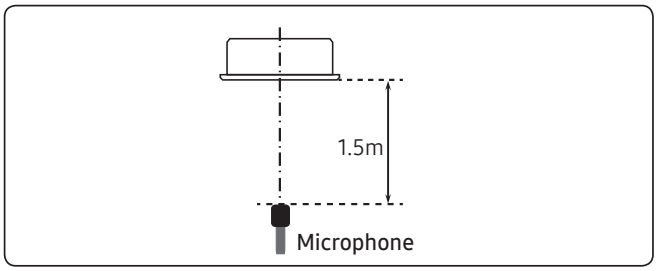
NOTE

- This wiring diagram applies only to the outdoor Unit.
- Colors blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue
- For connection wiring indoor-outdoor transmission F1-F2
- ⏚ Protective earth(screw), ▭▭▭ : connector, N : The wire quantity

7. Sound Data

360 Cassette

Sound Pressure level

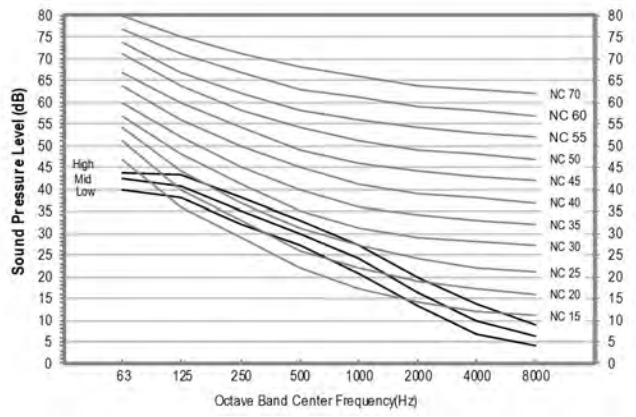


Unit: dB(A)

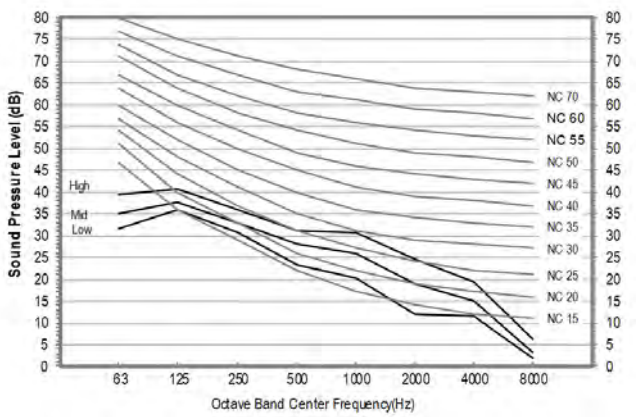
Model	High	Mid	Low
CNH186DB (AC018BN6DCH/AA)	35	32	29
CNH246DB (AC024BN6DCH/AA)	36	33	29
CNH306DB (AC030BN6DCH/AA)	38	35	31
CNH366DB (AC036BN6DCH/AA)	43	38	32

- NC Curve

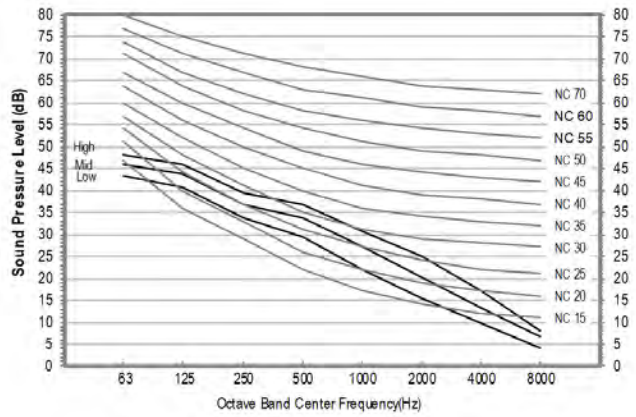
1) CNH186DB (AC018BN6DCH/AA)



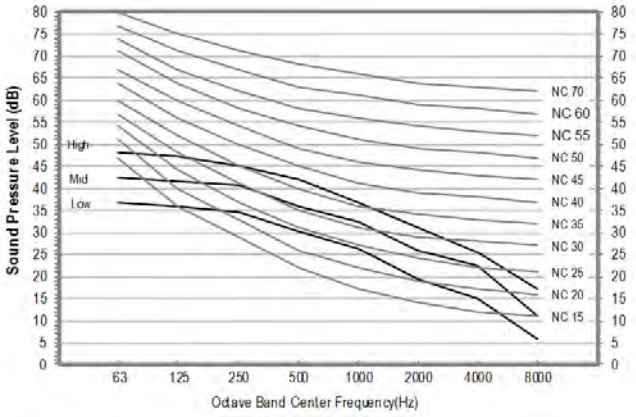
2) CNH246DB (AC024BN6DCH/AA)



3) CNH306DB (AC030BN6DCH/AA)



4) CNH366DB (AC036BN6DCH/AA)



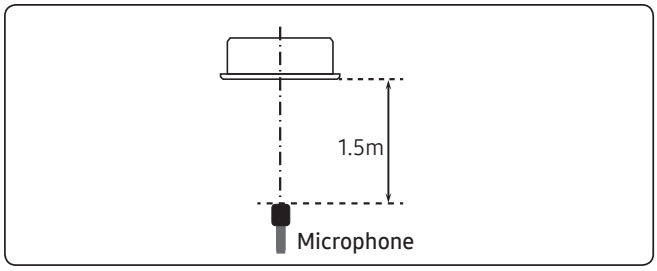
NOTE

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

7. Sound Data

360 Cassette

Sound Pressure level

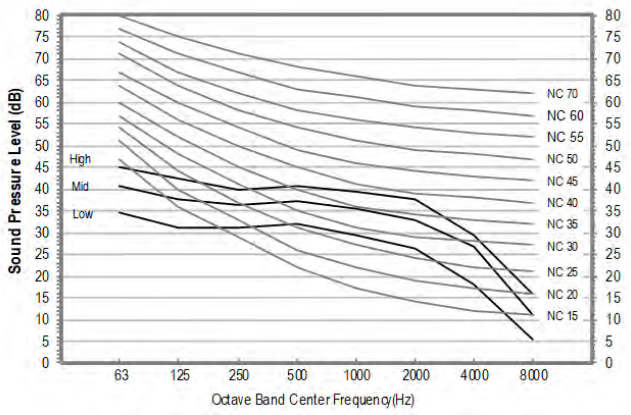


Unit: dB(A)

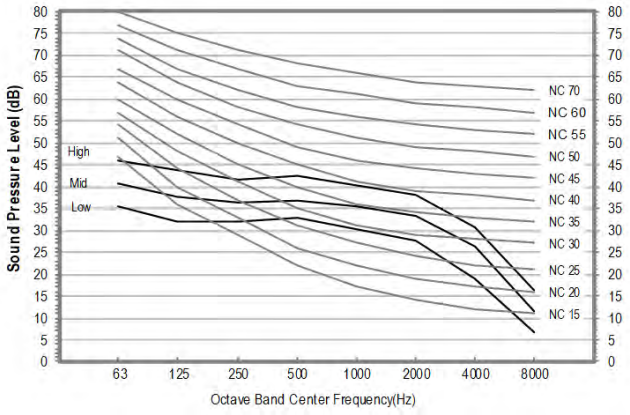
Model	High	Mid	Low
CNH426DB (AC042BN6DCH/AA)	44	40	34
CNH486DB (AC048BN6DCH/AA)	45	40	35

- NC Curve

5) CNH426DB (AC042BN6DCH/AA)



6) CNH486DB (AC048BN6DCH/AA)



NOTE

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

7. Sound Data

360 Cassette

Sound Power level

NOTE

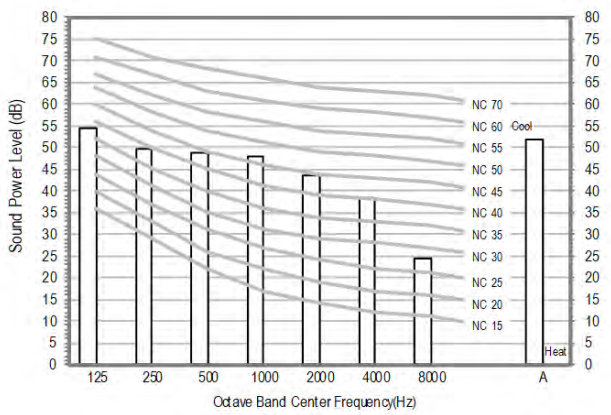
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

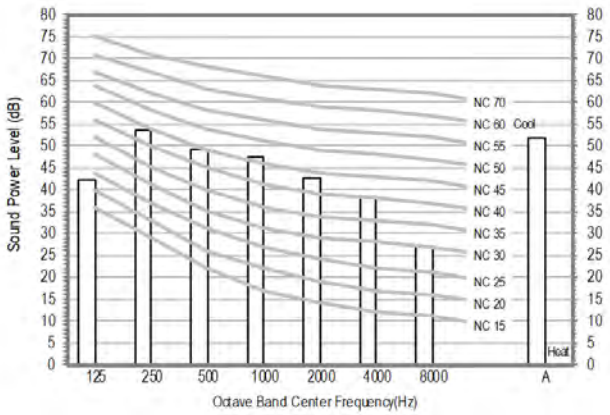
Model	Cooling
CNH186DB (AC018BN6DCH/AA)	52
CNH246DB (AC024BN6DCH/AA)	52
CNH306DB (AC030BN6DCH/AA)	55
CNH366DB (AC036BN6DCH/AA)	59

- NC Curve

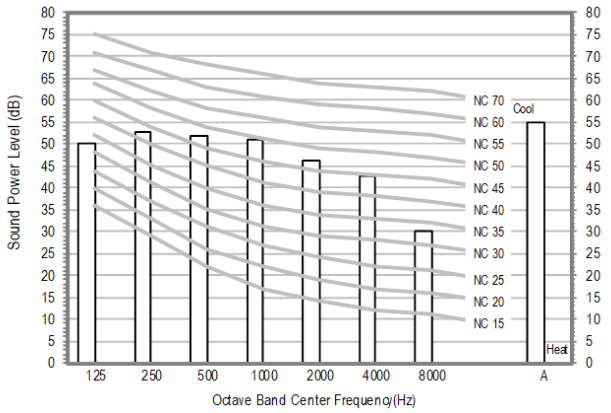
1) CNH186DB (AC018BN6DCH/AA)



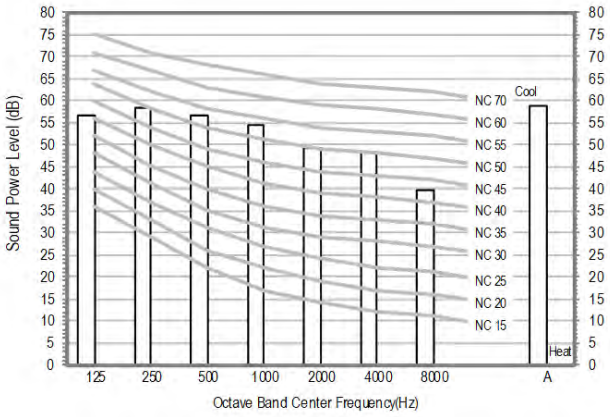
2) CNH246DB (AC024BN6DCH/AA)



3) CNH306DB (AC030BN6DCH/AA)



4) CNH366DB (AC036BN6DCH/AA)



7. Sound Data

360 Cassette

Sound Power level

NOTE

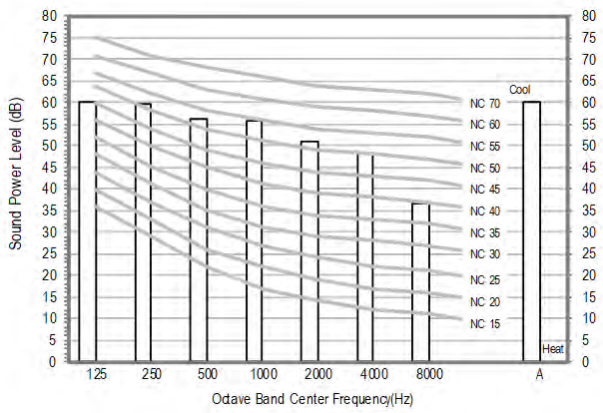
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

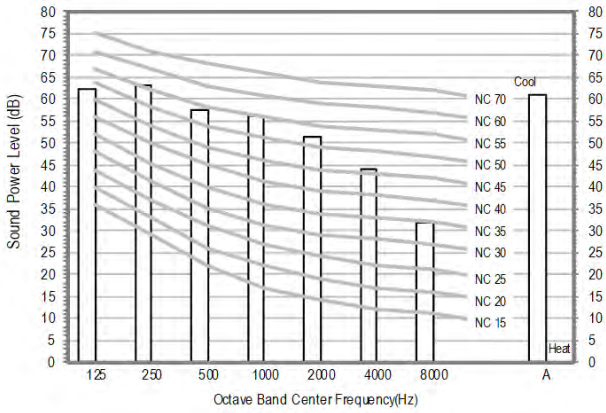
Model	Cooling
CNH426DB (AC042BN6DCH/AA)	60
CNH486DB (AC048BN6DCH/AA)	61

- NC Curve

5) CNH426DB (AC042BN6DCH/AA)



6) CNH486DB (AC048BN6DCH/AA)



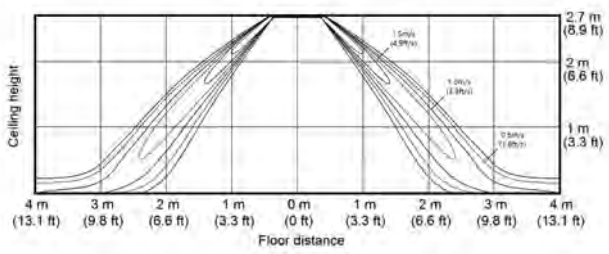
8. Temperature and air flow distribution

360 Cassette

CNH186DB (AC018BN6DCH/AA)

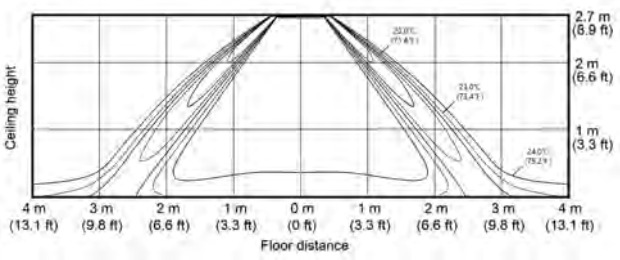
- Cooling Air Velocity distribution

  (Discharge angle : 60 degree)



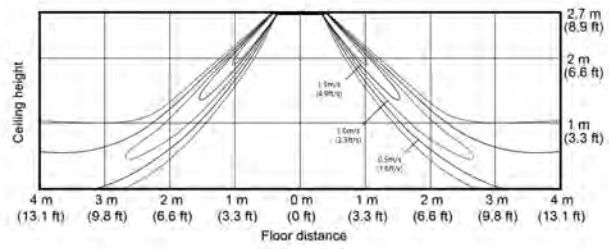
- Cooling temperature distribution

  (Discharge angle : 60 degree)



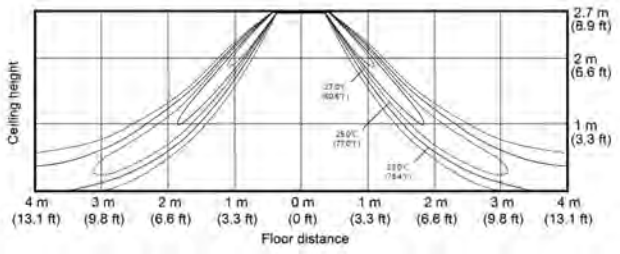
- Heating Air Velocity distribution

  (Discharge angle : 60 degree)



- Heating temperature distribution

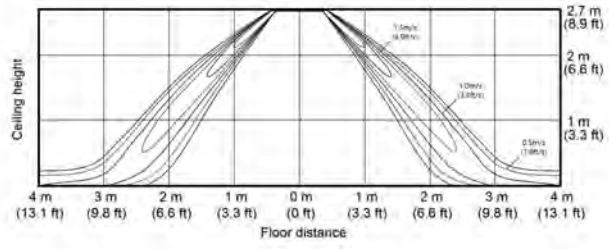
  (Discharge angle : 60 degree)



CNH246DB (AC024BN6DCH/AA)

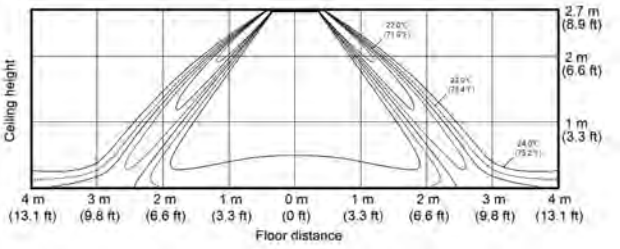
- Cooling Air Velocity distribution

  (Discharge angle : 60 degree)



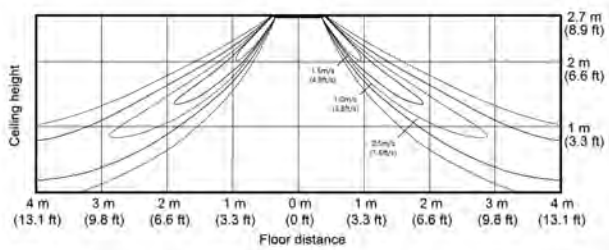
- Cooling temperature distribution

  (Discharge angle : 60 degree)



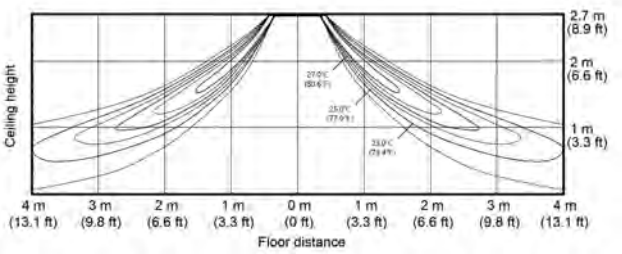
- Heating Air Velocity distribution

  (Discharge angle : 60 degree)



- Heating temperature distribution

  (Discharge angle : 60 degree)

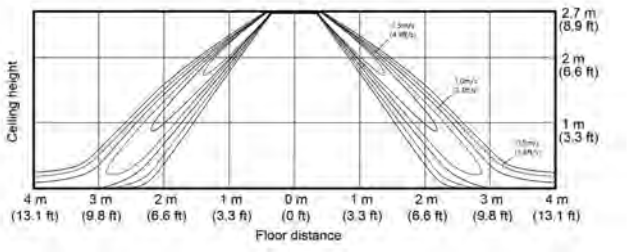


8. Temperature and air flow distribution

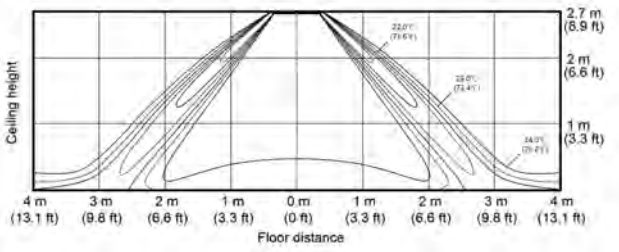
360 Cassette

CNH306DB (AC030BN6DCH/AA)

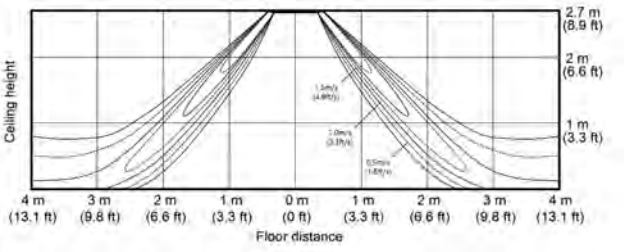
- Cooling Air Velocity distribution
  (Discharge angle : 60 degree)



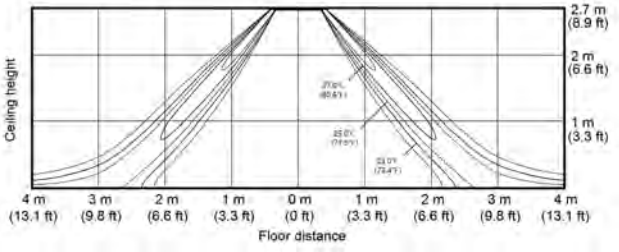
- Cooling temperature distribution
  (Discharge angle : 60 degree)



- Heating Air Velocity distribution
  (Discharge angle : 60 degree)

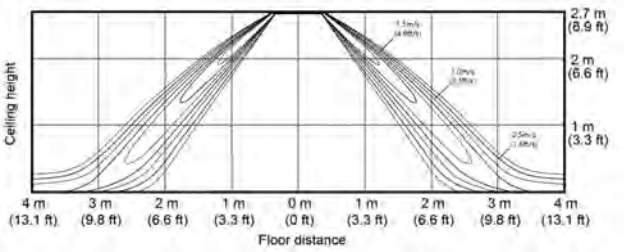


- Heating temperature distribution
  (Discharge angle : 60 degree)

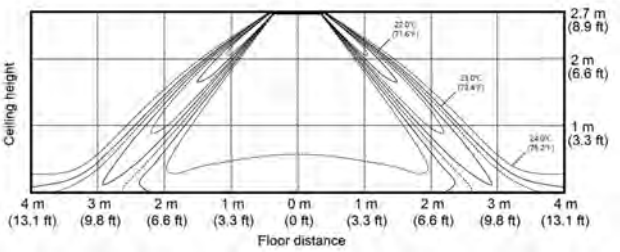


CNH366DB (AC036BN6DCH/AA)

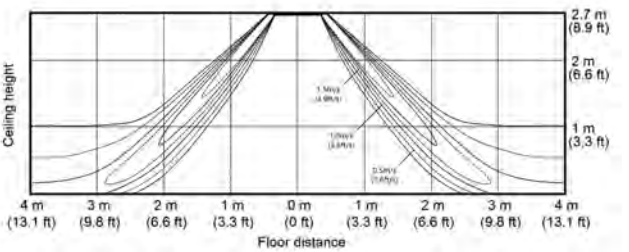
- Cooling Air Velocity distribution
  (Discharge angle : 60 degree)



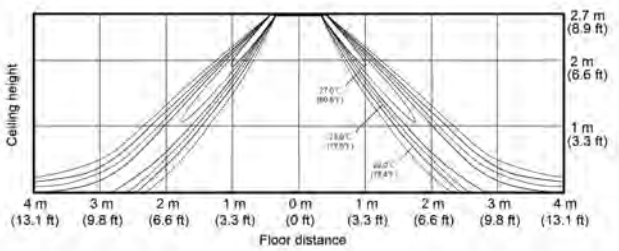
- Cooling temperature distribution
  (Discharge angle : 60 degree)



- Heating Air Velocity distribution
  (Discharge angle : 60 degree)



- Heating temperature distribution
  (Discharge angle : 60 degree)

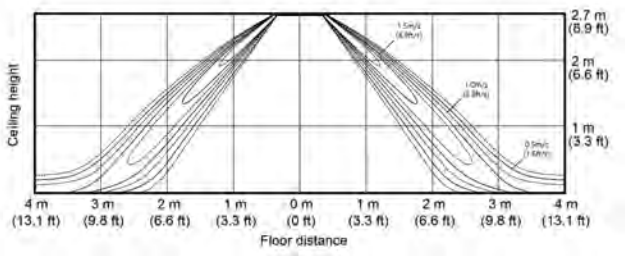


8. Temperature and air flow distribution

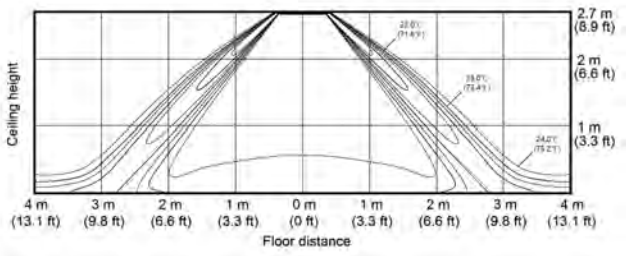
360 Cassette

CNH426DB (AC042BN6DCH/AA)

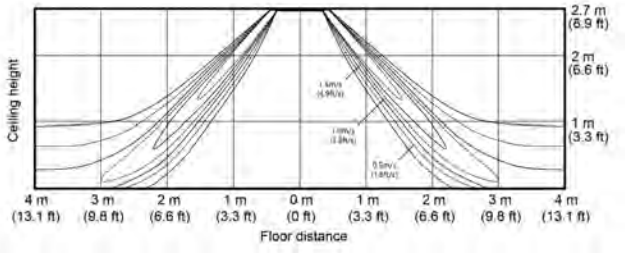
- Cooling Air Velocity distribution
  (Discharge angle : 60 degree)



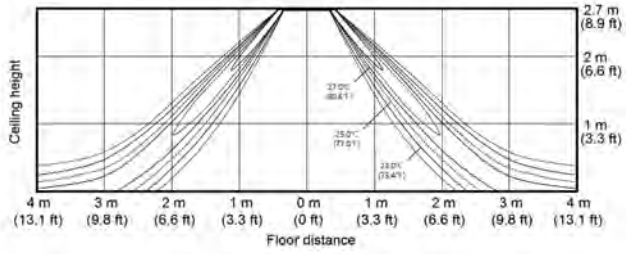
- Cooling temperature distribution
  (Discharge angle : 60 degree)



- Heating Air Velocity distribution
  (Discharge angle : 60 degree)

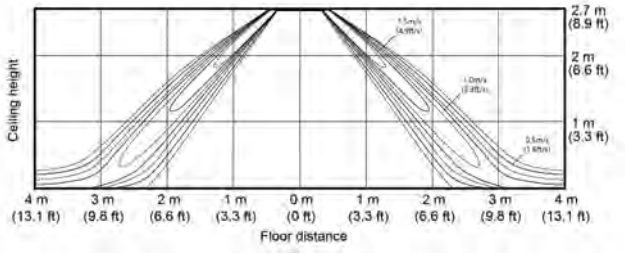


- Heating temperature distribution
  (Discharge angle : 60 degree)

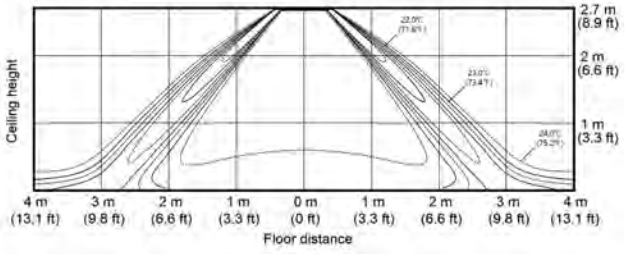


CNH486DB (AC048BN6DCH/AA)

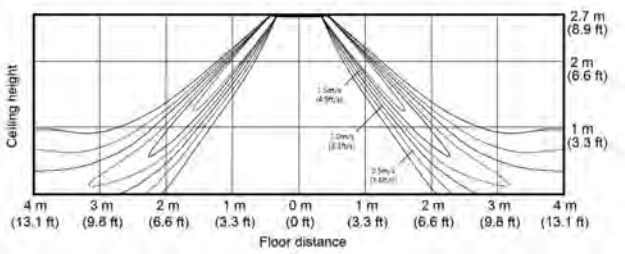
- Cooling Air Velocity distribution
  (Discharge angle : 60 degree)



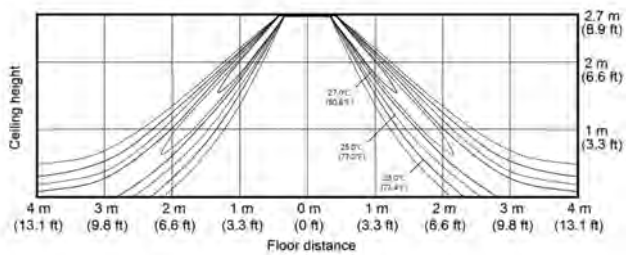
- Cooling temperature distribution
  (Discharge angle : 60 degree)



- Heating Air Velocity distribution
  (Discharge angle : 60 degree)



- Heating temperature distribution
  (Discharge angle : 60 degree)



Outdoor Units

1. Summary Table

Outdoor Units

Performance Characteristics

Capacity/ Btu/hh	Model Code	Net Size (WxHxD inch)	Net Weight (lbs)	Airflow (CFM)	Sound Pressure Level (dBA)		Sound Power Level (dBA)
					Cooling	Heating	
18,000	CXH18ADB (AC018BXADCH/AA)	34.65 x 31.42 x 12.20	118.4	2,154	48	48	62
24,000	CXH24ADB (AC024BXADCH/AA)	37.01 x 39.29 x 12.99	158.7	2,684	50	52	65
30,000	CXH30ADB (AC030BXADCH/AA)	37.01 x 39.29 x 12.99	158.7	2,684	50	52	67
36,000	CXH36ADB (AC036BXADCH/AA)	37.01 x 47.64 x 12.99	189.6	3,532	52	54	69
42,000	CXH42ADB (AC042BXADCH/AA)	37.01 x 47.64 x 12.99	195.1	3,532	53	55	70
48,000	CXH48ADB (AC048BXADCH/AA)	37.01 x 47.64 x 12.99	195.1	3,532	56	58	72

NOTE

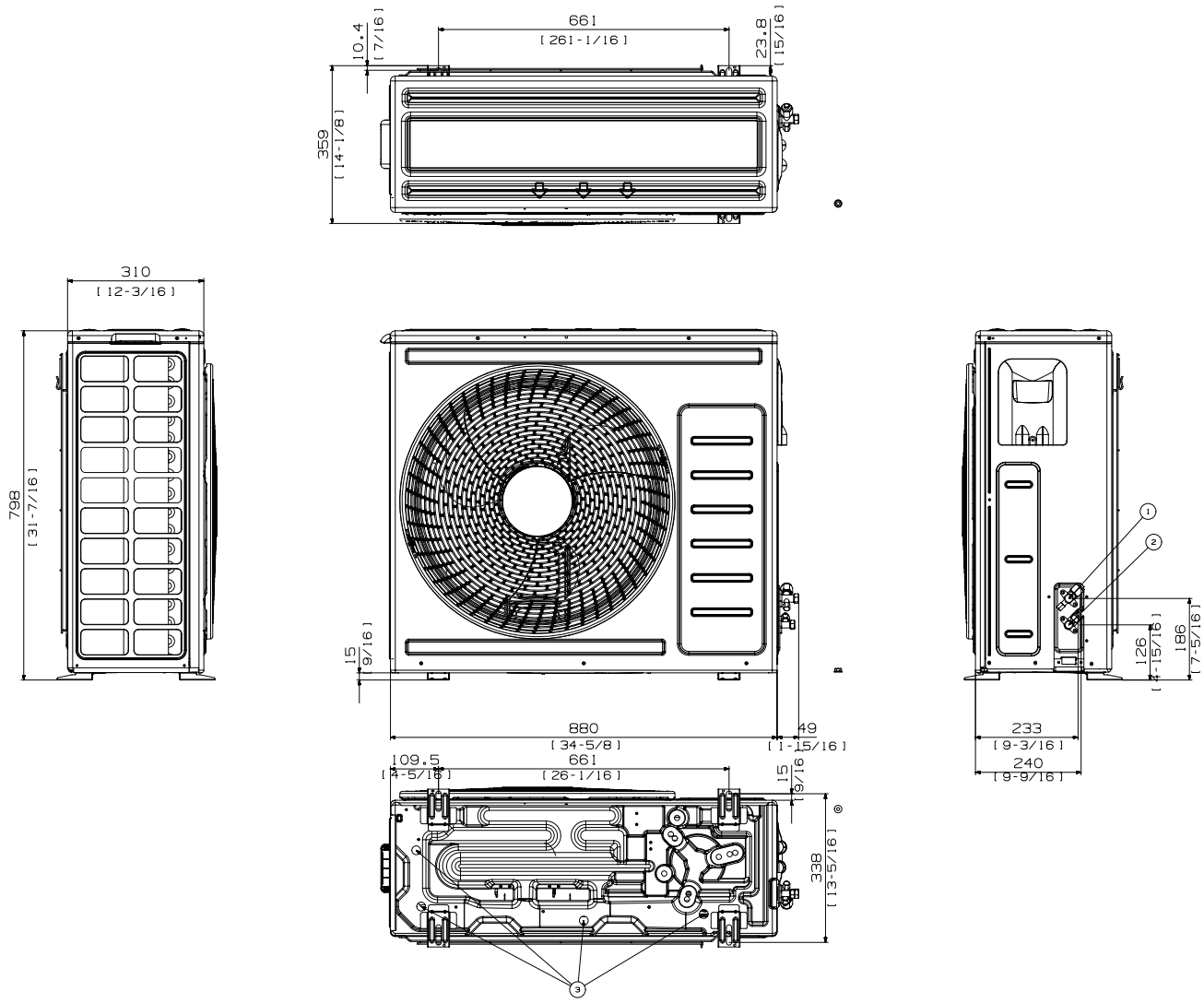
- Sound power level is based on cooling operation.

2. Dimensional Drawing

Outdoor Units

CXH18ADB (AC018BXADCH/AA)

Units : mm [inches]



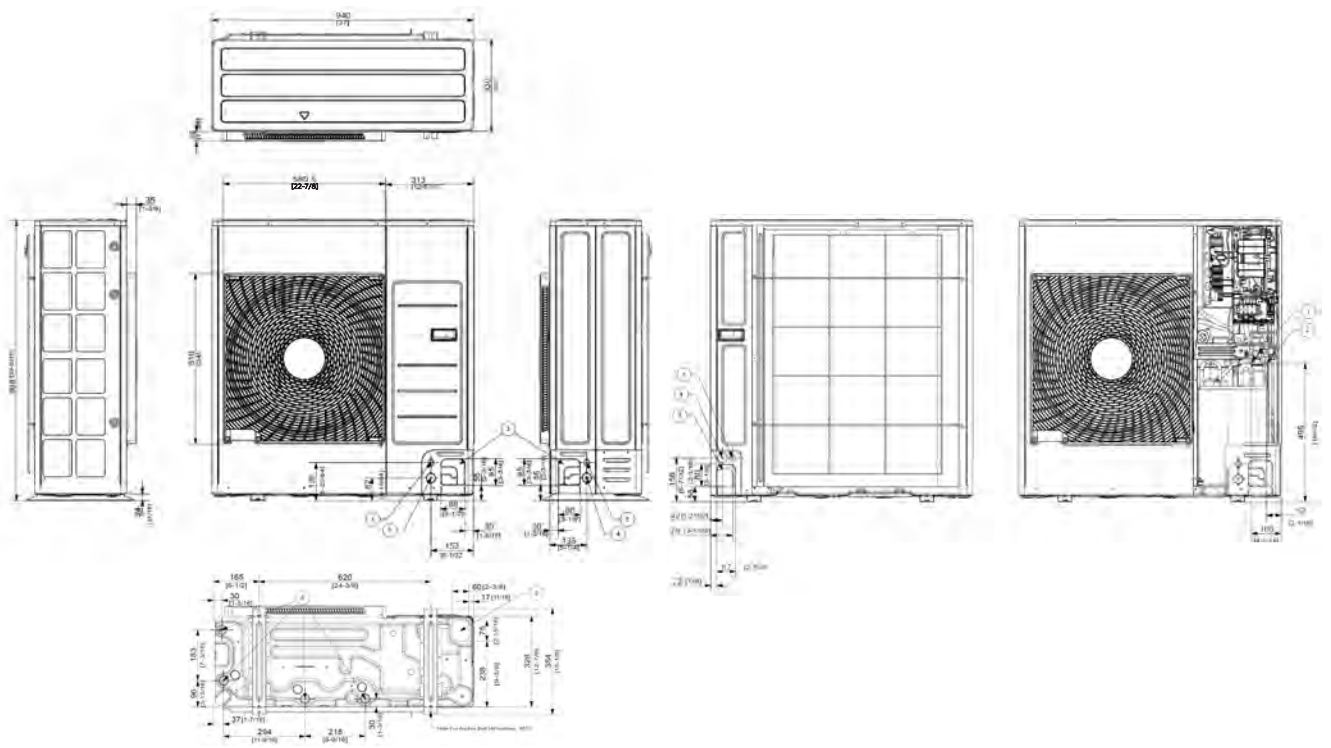
No.	Name	Description
1	Refrigerant liquid pipe	Φ 12.7mm(1/2")
2	Refrigerant gas pipe	Φ 6.35mm(1/4")
3	Drain hole	-

2. Dimensional Drawing

Outdoor Units

CXH24ADB (AC024BXADCH/AA), CXH30ADB (AC030BXADCH/AA)

Units : mm [inches]



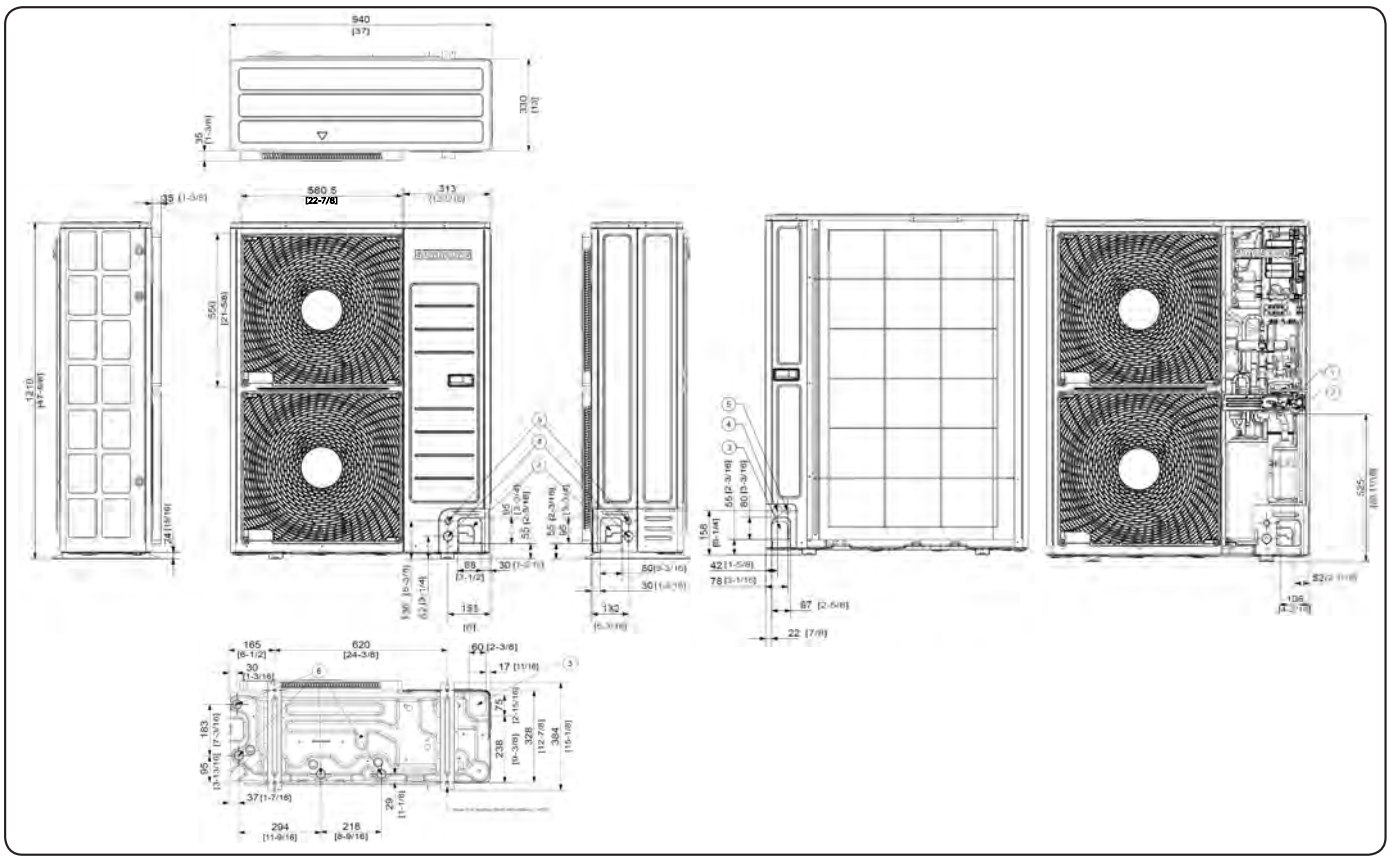
No.	Name	Description	
		CXH24ADB (AC024BXADCH/AA)	CXH30ADB (AC030BXADCH/AA)
1	Refrigerant liquid pipe	Φ 6.35mm(1/4")	Φ 9.52mm(3/8")
2	Refrigerant gas pipe	Φ 15.88mm(5/8")	
3	Piping intake knockout hole	Front / Side / Rear / Bottom	
4	Power wiring conduit	Front / Side / Rear , Φ 34mm(1-3/8")	
5	Communication wiring conduit	Front / Side / Rear , Φ 22mm(7/8")	
6	Drain Hole	-	Connect with the provided drain plug

2. Dimensional Drawing

Outdoor Units

CXH36ADB (AC036BXADCH/AA), CXH42ADB (AC042BXADCH/AA), CXH48ADB (AC048BXADCH/AA)

Units : mm [inches]



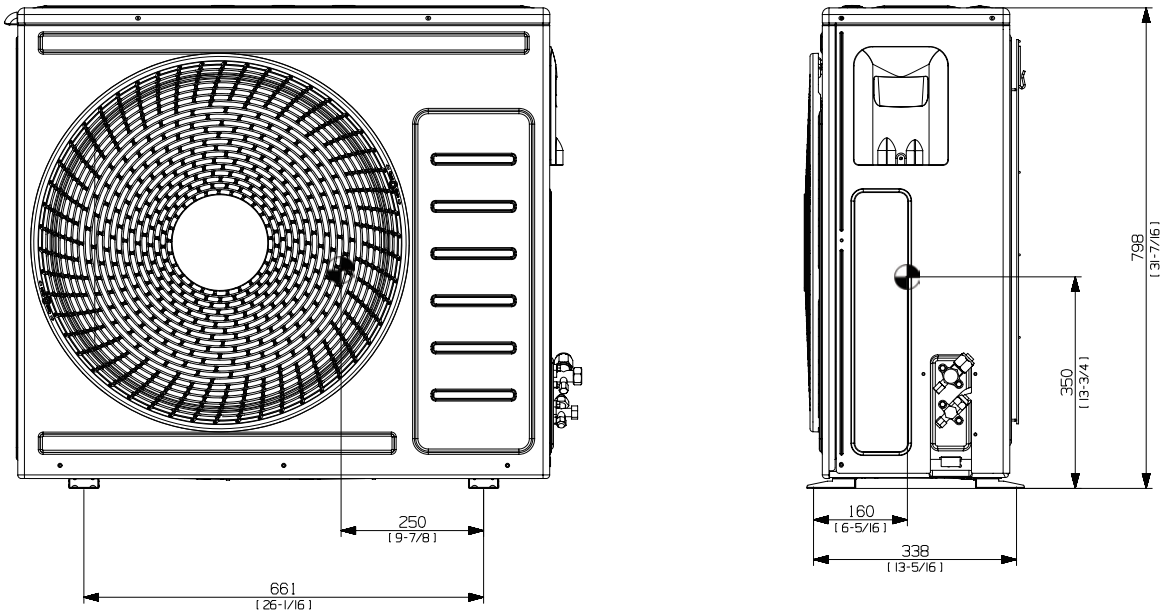
No.	Name	Description
1	Refrigerant liquid pipe	Φ 9.52mm(3/8")
2	Refrigerant gas pipe	Φ 15.88mm(5/8")
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear , Φ 34mm(1-3/8")
5	Communication wiring conduit	Front / Side / Rear , Φ 22mm(7/8")
6	Drain Hole	Connect with the provided drain plug

3. Center of Gravity

Outdoor Units

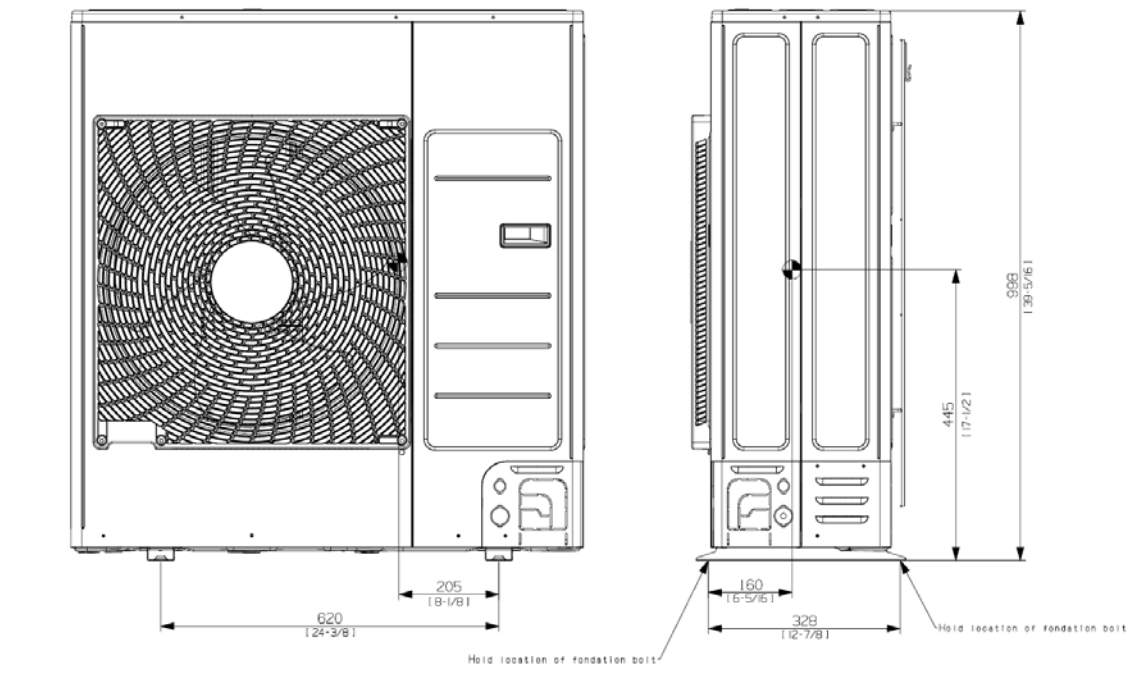
CXH18ADB (AC018BXADCH/AA)

Units : mm [inches]



CXH24ADB (AC024BXADCH/AA), CXH30ADB (AC030BXADCH/AA)

Units : mm [inches]

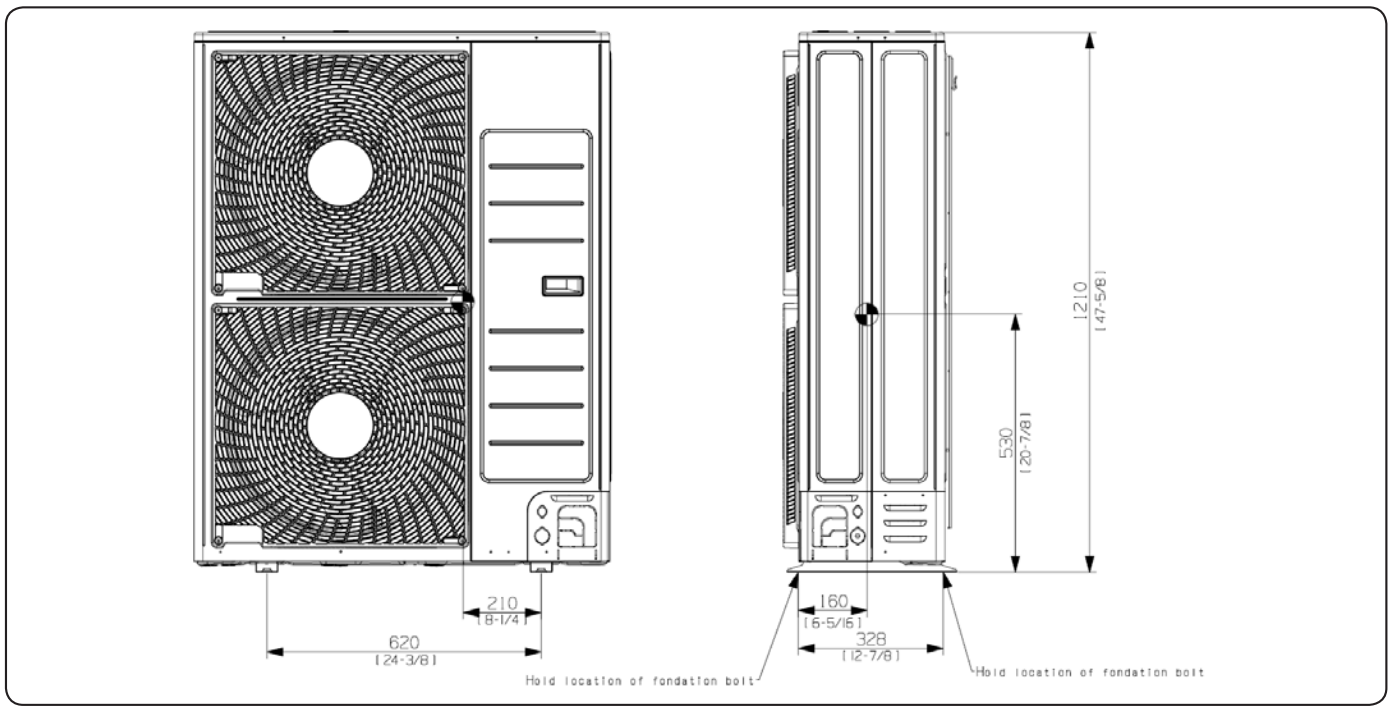


3. Center of Gravity

Outdoor Units

CXH36ADB (AC036BXADCH/AA), CXH42ADB (AC042BXADCH/AA), CXH48ADB (AC048BXADCH/AA)

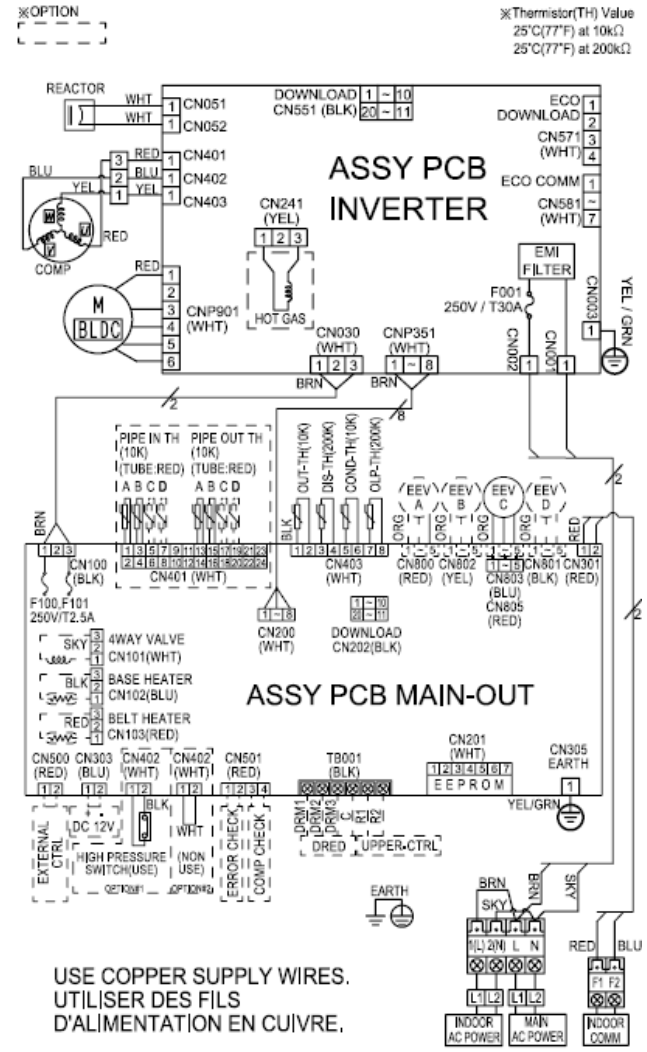
Units : mm [inches]



4. Electrical Wiring Diagram

Outdoor Units

CXH18ADB (AC018BXADCH/AA)



MAIN PCB	Printed circuit board(MAIN)	EEV	Electronic Expansion Valve
INVERTER PCB	Printed circuit board(INVERTER)	M-BLDC	BLDC Motor
EMI PCB	Printed circuit board(EMI)	OLP-TEMP	Thermistor OLP

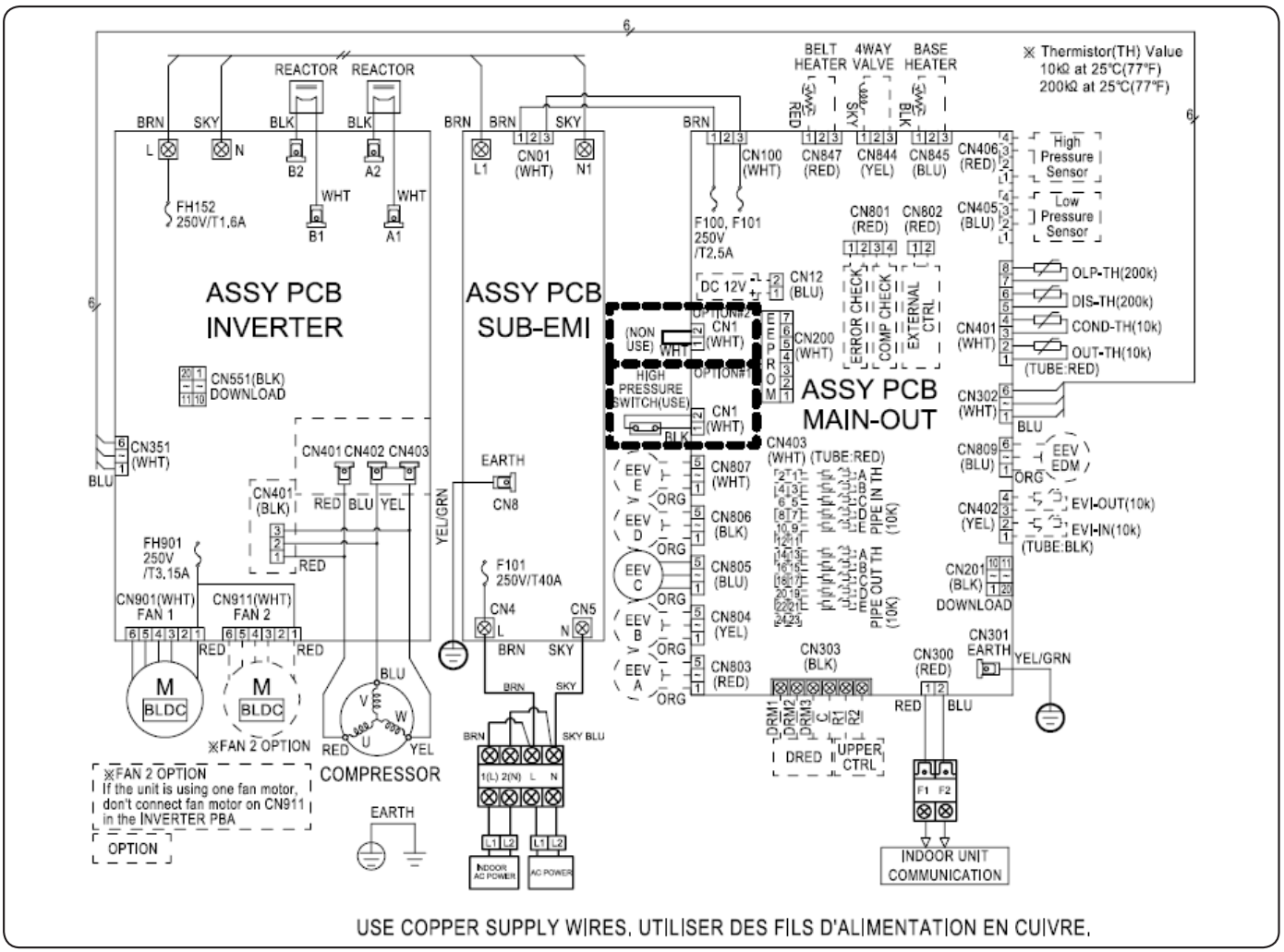
NOTE

- 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 short circuit 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, ⫽N : The wire quantity

4. Electrical Wiring Diagram

Outdoor Units

CXH24ADB (AC024BXADCH/AA), CXH30ADB (AC030BXADCH/AA), CXH36ADB (AC036BXADCH/AA)
CXH42ADB (AC042BXADCH/AA), CXH48ADB (AC048BXADCH/AA)



BLDC	Brushless DC Motor	COMP CHECK	Outdoor COMP Operating Check
4WAY	4way Valve	ERROR CHECK	Outdoor Error Check

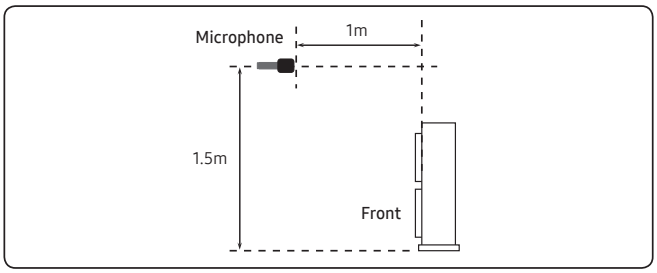
NOTE

- 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, N : The wire quantity

5. Sound Data

Outdoor Units

Sound Pressure level

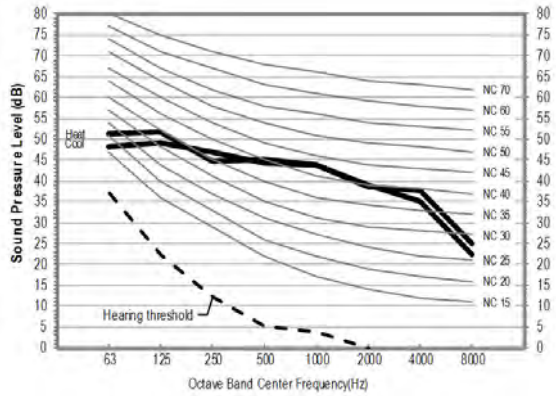


Unit: dB(A)

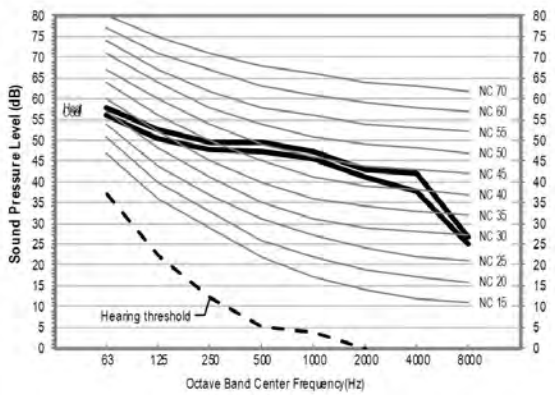
Model	Cooling	Heating
CXH18ADB (AC018BXADCH/AA)	48	48
CXH24ADB (AC024BXADCH/AA)	50	52
CXH30ADB (AC030BXADCH/AA)	50	52
CXH36ADB (AC036BXADCH/AA)	52	54

- NC Curve

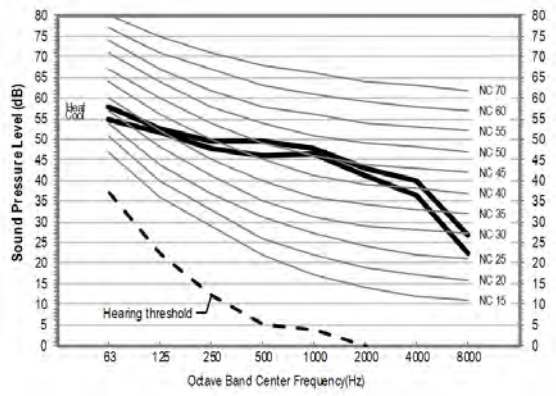
1) CXH18ADB (AC018BXADCH/AA)



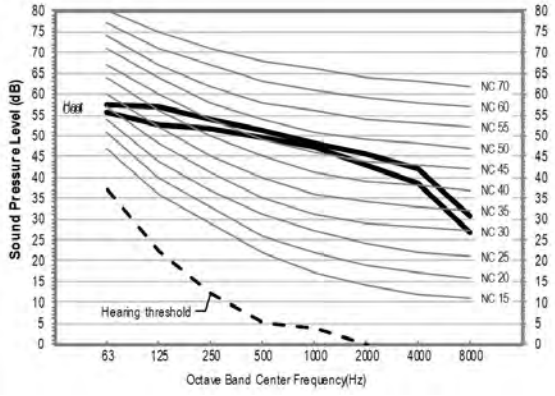
2) CXH24ADB (AC024BXADCH/AA)



3) CXH30ADB (AC030BXADCH/AA)



4) CXH36ADB (AC036BXADCH/AA)



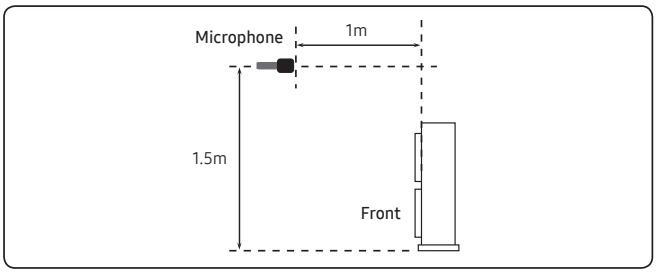
NOTE

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

5. Sound Data

Outdoor Units

Sound Pressure level

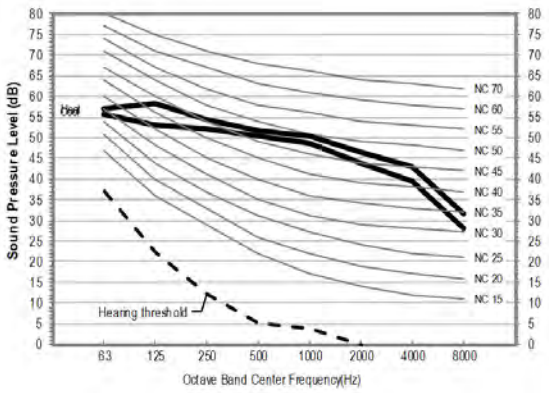


Unit: dB(A)

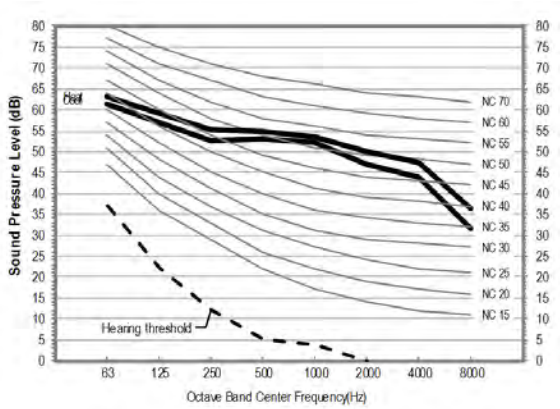
Model	Cooling	Heating
CXH42ADB (AC042BXADCH/AA)	53	55
CXH48ADB (AC048BXADCH/AA)	56	58

- NC Curve

1) CXH42ADB (AC042BXADCH/AA)



2) CXH48ADB (AC048BXADCH/AA)



NOTE

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

5. Sound Data

Outdoor Units

Sound Power level

NOTE

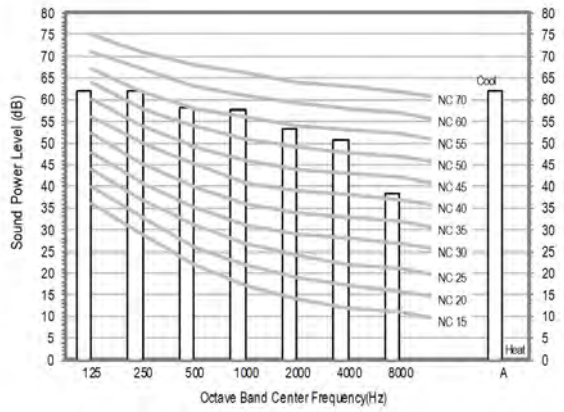
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

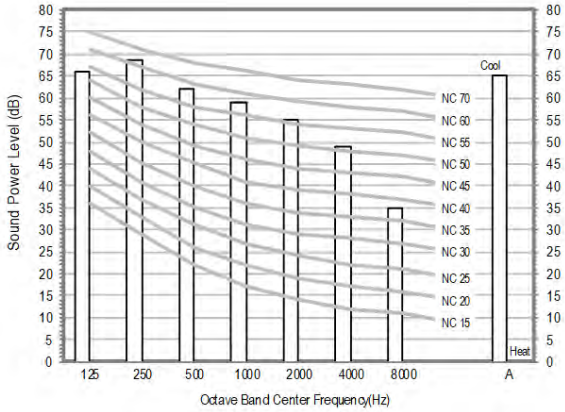
Model	Cooling
CXH18ADB (AC018BXADCH/AA)	62
CXH24ADB (AC024BXADCH/AA)	65
CXH30ADB (AC030BXADCH/AA)	67
CXH36ADB (AC036BXADCH/AA)	69

- NC Curve

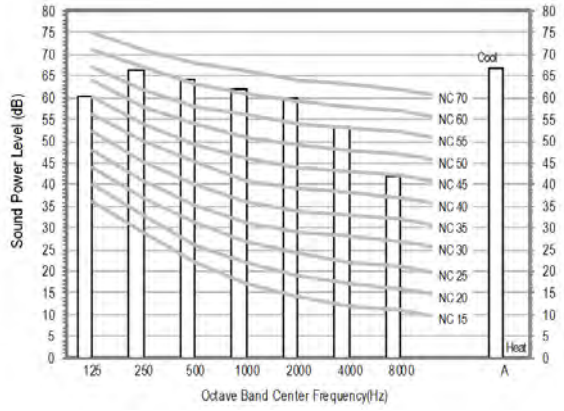
1) CXH18ADB (AC018BXADCH/AA)



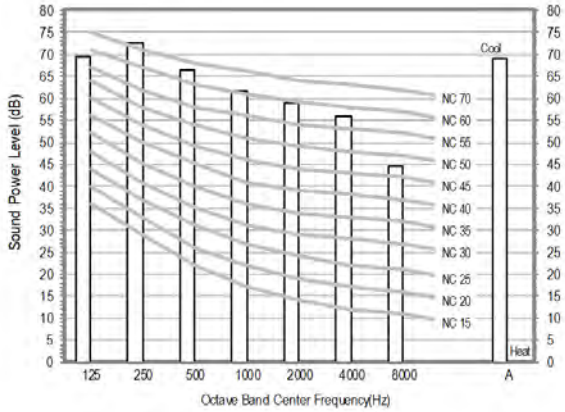
2) CXH24ADB (AC024BXADCH/AA)



3) CXH30ADB (AC030BXADCH/AA)



4) CXH36ADB (AC036BXADCH/AA)



5. Sound Data

Outdoor Units

Sound Power level

NOTE

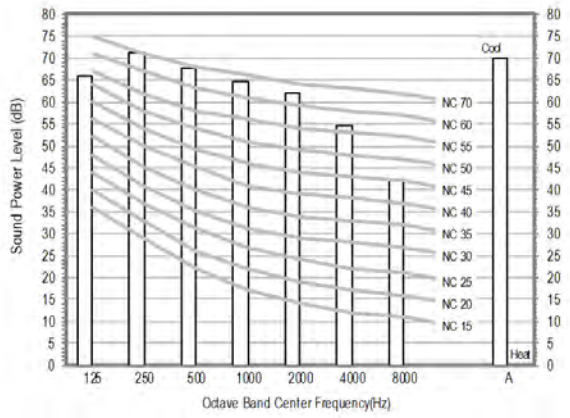
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

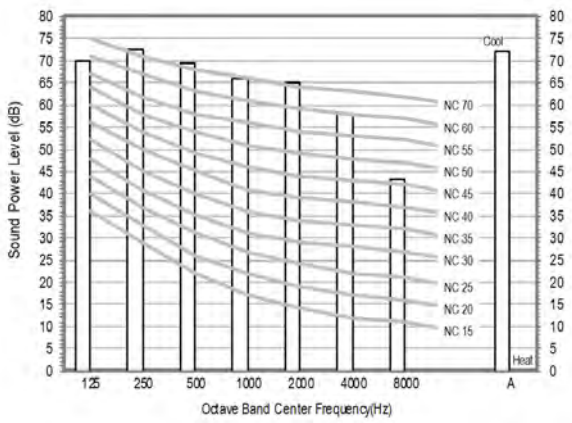
Model	Cooling
CXH42ADB (AC042BXADCH/AA)	70
CXH48ADB (AC048BXADCH/AA)	72

- NC Curve

1) CXH42ADB (AC042BXADCH/AA)



2) CXH48ADB (AC048BXADCH/AA)



6. Capacity Correction

Outdoor Units

CNH186DB(AC018BN6DCH/AA)+CXH18ADB(AC018BXADCH/AA)
CNH246DB(AC024BN6DCH/AA)+CXH24ADB(AC024BXADCH/AA)
CNH306DB(AC030BN6DCH/AA)+CXH30ADB(AC030BXADCH/AA)

Cooling

		Pipe Length (ft)									
		24.6	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
Level Difference (ft)	98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90
	82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
	65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	16.4	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	0.0	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-16.4	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90	0.88
	-32.8	-	0.98	0.97	0.96	0.95	0.94	0.92	0.91	0.89	0.87
	-49.2	-	-	0.97	0.96	0.94	0.93	0.92	0.90	0.88	0.85
	-65.6	-	-	-	0.95	0.94	0.93	0.91	0.89	0.87	0.83
	-82.0	-	-	-	-	0.94	0.92	0.91	0.89	0.86	0.82
	-98.4	-	-	-	-	-	0.92	0.90	0.88	0.85	0.80

Heating

		Pipe Length (ft)									
		24.6	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
Level Difference (ft)	98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90
	82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
	65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	16.4	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	0.0	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-16.4	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
	-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90

6. Capacity Correction

Outdoor Units

CNH366DB(AC036BN6DCH/AA)+CXH36ADB(AC036BXADCH/AA)
CNH426DB(AC042BN6DCH/AA)+CXH42ADB(AC042BXADCH/AA)
CNH486DB(AC048BN6DCH/AA)+CXH48ADB(AC048BXADCH/AA)

Cooling

		Pipe Length (ft)														
		16.4	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0	180.4	196.9	213.3	229.7	246.1
Level Difference (ft)	98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-16.4	1.00	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
	-32.8	-	0.98	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.87	0.85
	-49.2	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84
	-65.6	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.83
	-82.0	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.88	0.87	0.85	0.81
	-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84	0.80

Heating

		Pipe Length (ft)														
		16.4	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0	180.4	196.9	213.3	229.7	246.1
Level Difference (ft)	98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88

7. Operation Range

Outdoor Units

Mode		Indoor temperature	Outdoor temperature	Indoor humidity
Cooling		18°C to 32°C (64°F to 90°F)	-18°C to 50°C (0°F to 122°F)	80% or less
Drying		18°C to 32°C (64°F to 90°F)	-18°C to 50°C (0°F to 122°F)	-
Heating	~ 24kBtu/h	30°C(86°F) or less	-25°C to 24°C (-13°F to 75°F)	-
	30 ~ 48kBtu/h		-20°C to 24°C (-4°F to 75°F)	-

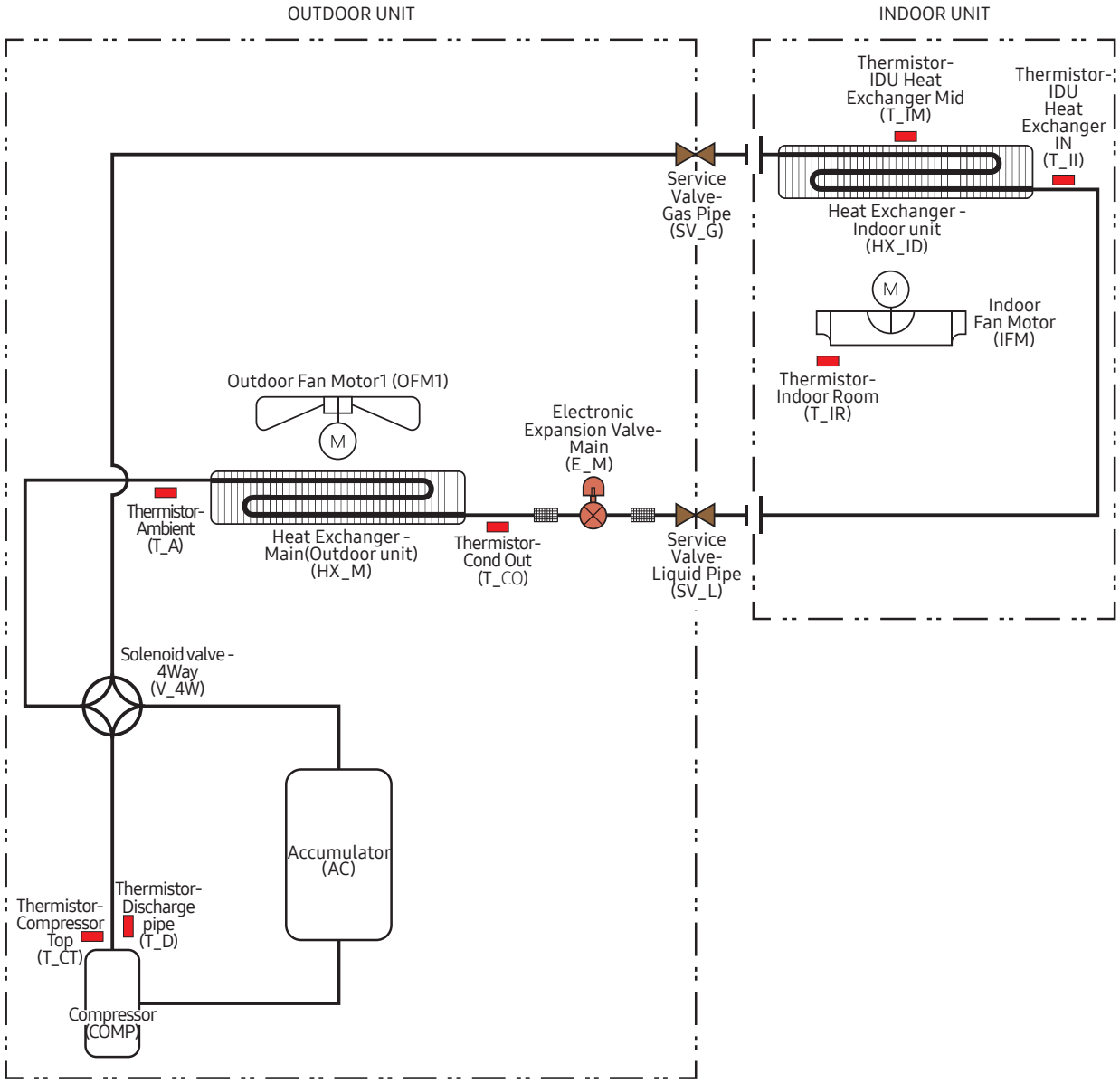
NOTE

- The assumed installation conditions are follows
  - The pipe length(including elbow) is 7.5m(24.6ft).
  - The level difference is 0 m.

8. Piping Diagram

Outdoor Units

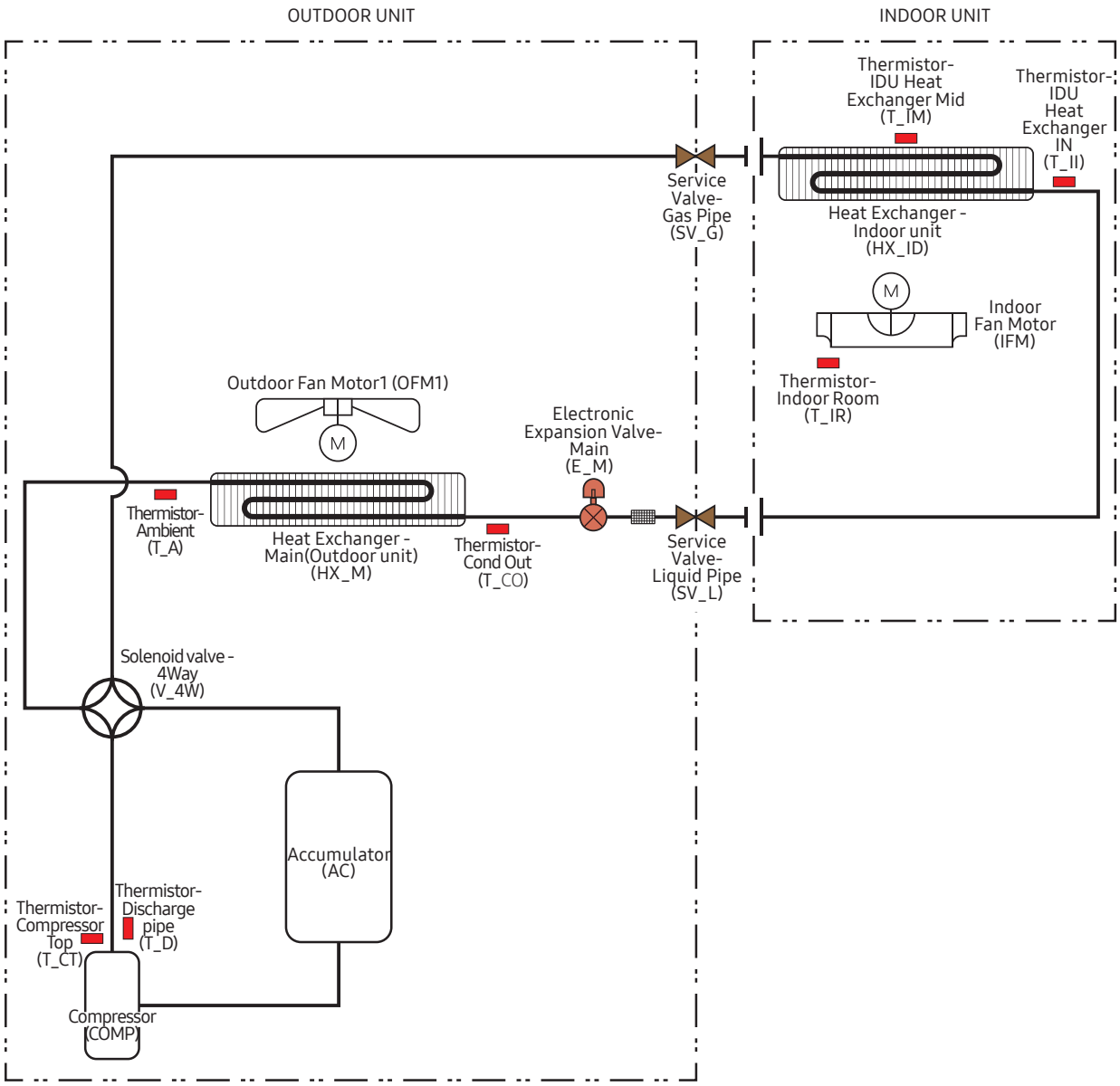
CNH186DB(AC018BN6DCH/AA)+CXH18ADB(AC018BXADCH/AA)



8. Piping Diagram

Outdoor Units

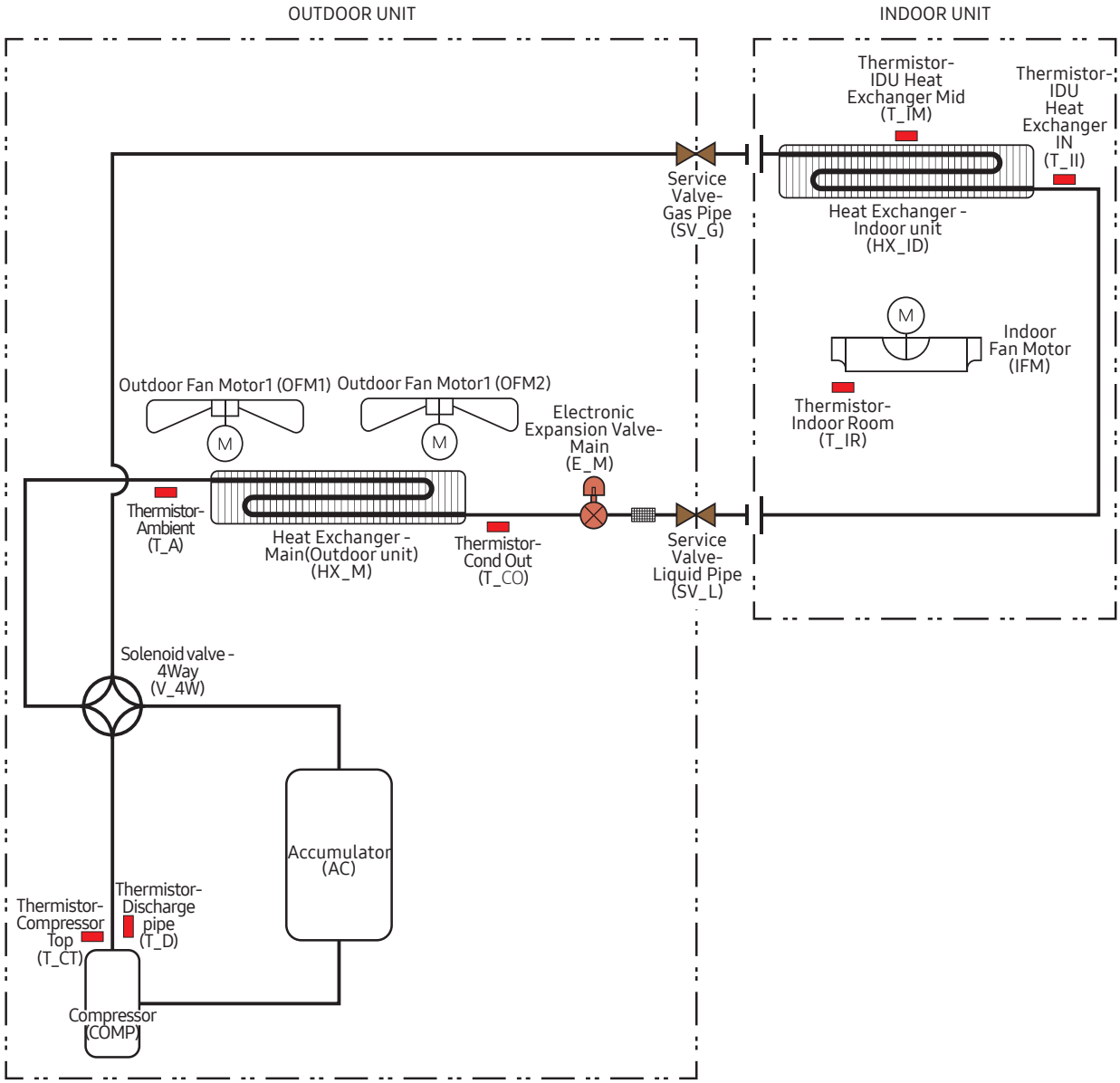
CNH246DB(AC024BN6DCH/AA)+CXH24ADB(AC024BXADCH/AA)
CNH306DB(AC030BN6DCH/AA)+CXH30ADB(AC030BXADCH/AA)



8. Piping Diagram

Outdoor Units

CNH366DB(AC036BN6DCH/AA)+CXH36ADB(AC036BXADCH/AA)
CNH426DB(AC042BN6DCH/AA)+CXH42ADB(AC042BXADCH/AA)
CNH486DB(AC048BN6DCH/AA)+CXH48ADB(AC048BXADCH/AA)



Installation

Indoor Units

Choosing the installation location

Installation location requirements

- There must be no obstacles near the air inlet and outlet.
- Install the indoor unit on a ceiling that can support its weight.
- Maintain sufficient clearance around the indoor unit.
- Before installing the indoor unit, be sure to check whether the chosen location is well-drained.
- The indoor unit must be installed such that it is beyond public access and is not touchable by users.
- A vibration-resistant location that is not inclined (If the indoor unit is installed on a structure that is not sturdy, it may fall and get damaged or cause injury.)
- Where it is not exposed to direct sunshine.
- Where the air filter can be removed and cleaned easily.

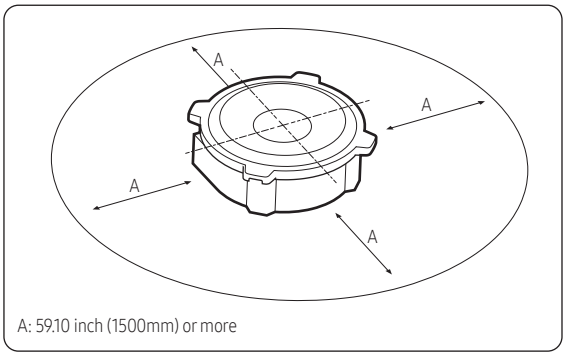
⚠ CAUTION

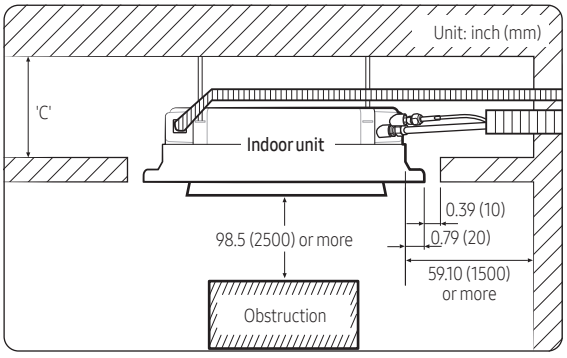
- As a rule, the unit cannot be installed at a height of less that 8.2ft (2.5m).
- If you install a cassette type indoor unit on the ceiling when temperature is over 80.6°F (27°C) and humidity is over 80%, you must apply an extra 0.39inch (10mm) thick polyethylene insulation or a similar type of insulation to the body of the indoor unit.

Do not install the air conditioner in following places.

- A place with exposure to mineral oil, oil vapour or cooking area where there is spray (If oil adheres to the heat exchanger, performance degradation, spray or condensation scattering may occur. If oil adheres to a plastic component, the component may deform or get damaged. Such issues may result in a system failure or refrigerant leak.)
- The place where corrosive gas such as sulphuric acid gas generates from the vent pipe or air outlet.
- The copper pipe or connection pipe may corrode and refrigerant may leak.
- The place where there is a machine that generates electromagnetic waves. The air conditioner may not operate normally due to control system.
- The place where there is a danger of existing combustible gas, carbon fibre or flammable dust.
- The place where thinner or gasoline is handled. Gas may leak and it may cause fire.

Spacing requirements





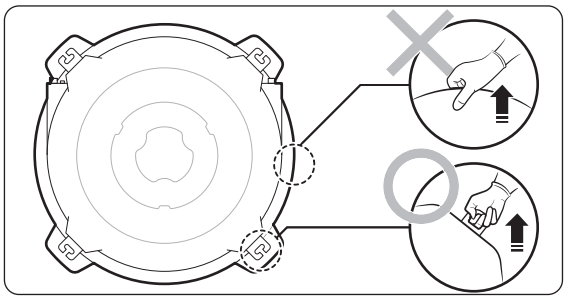
Model		AC018BN6DCH	AC024BN6DCH	AC030BN6DCH	AC036BN6DCH	AC042BN6DCH	AC048BN6DCH
C	inch (mm)	10.27 (261)	13.58 (345)	13.58 (345)	13.58 (345)	13.58 (345)	13.58 (345)

Installation

Indoor Units

⚠ CAUTION

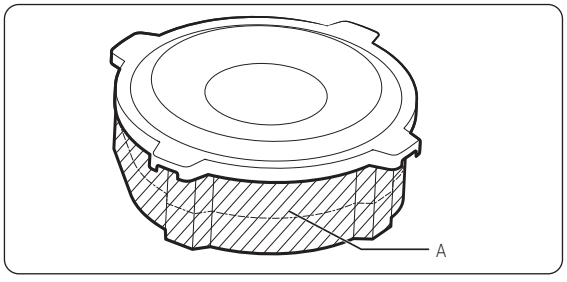
- The indoor unit must be installed according to the specified distances in order to permit accessibility from each side, to guarantee correct operation, maintenance, and repair of the unit.
  The components of the indoor unit must be reachable and removable under safe conditions for people and the unit.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



Optional: Insulating the body of the indoor unit

If you install a cassette type indoor unit on the ceiling when temperature is over 80.6°F (27°C) and humidity is over 80%, you must apply an extra 0.39 inch (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

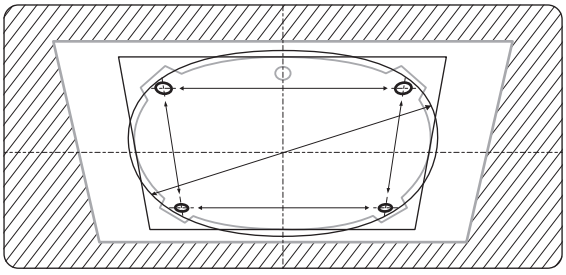
- A: Reference for the outer circumference of the unit (When insulating the body of the indoor unit, use A as the reference for its outer circumference.)

Indoor unit type and models		Dimensions
360 cassette type 37.28 x 37.28 x 11.06 inch (947 x 947 x 281 mm)	AC018BN6DCH	102.76 x 5.12 inch (2610 x 130 mm)
360 cassette type 37.28 x 37.28 x 14.37 inch (947 x 947 x 365 mm)	AC024BN6DCH AC030BN6DCH AC036BN6DCH AC042BN6DCH AC048BN6DCH	102.76 x 8.46 inch (2610 x 215 mm)

Installing the indoor unit

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

1 Determine the positions of the pipe and the drain hose hole as shown in the pattern sheet, and drill the hole with an inner diameter of 0.55 inch (14 mm).



NOTE

- Since the diagram is made of paper, it may shrink or stretch slightly due to temperature or humidity. For this reason, before drilling the holes, be sure to maintain the correct dimensions between the markings.

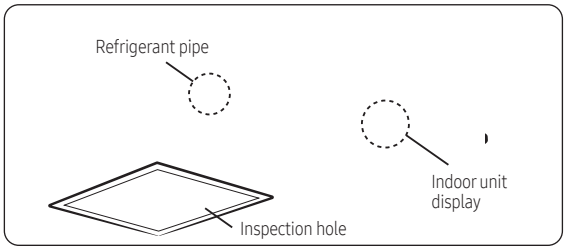
Installation

Indoor Units

2 Perform the following steps to install inspection holes in accordance with the panel type.

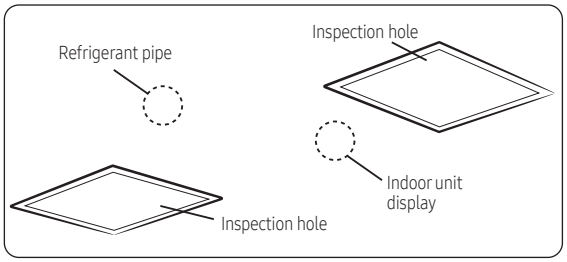
a For the recessed installation of the square panel.

- Install an inspection hole to the direction of connection parts of the refrigerant pipe and the drain hose. (1 point)

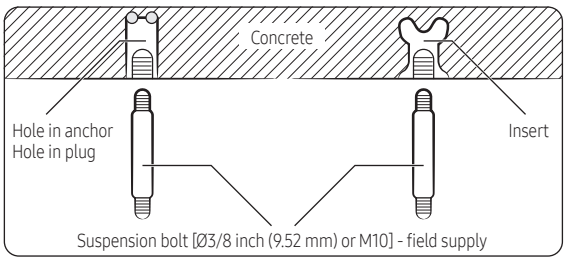


b For recessed installation of the circular panel

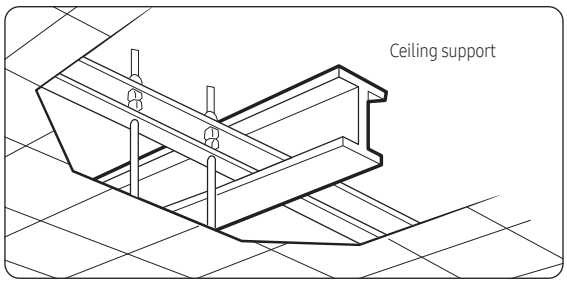
- Install inspection holes to both directions of the connection part of the refrigerant pipe and the drain hose and of the indoor unit display. (2 points)



3 Insert bolt anchors, use existing ceiling supports or construct a suitable support as shown in figure.



4 Install the suspension bolts, depending on the ceiling type.



⚠ CAUTION

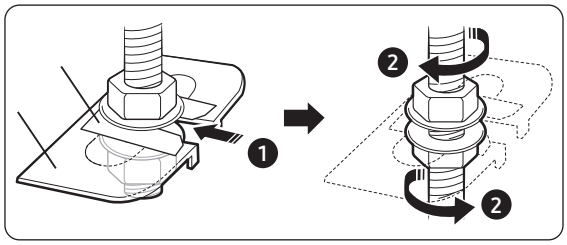
- Make sure that the ceiling is strong enough to support the weight of the indoor unit. Before hanging the unit, test the strength of each attached suspension bolt.
- If the length of the suspension bolt is more than 4.92 ft (1.5 m), you are required to prevent vibration.

5 Screw eight pairs of nuts and washers to the suspension bolts, making space for hanging the indoor unit.

⚠ CAUTION

- You must install all of the suspension rods.
- It is important to leave sufficient space in the false ceiling to allow access for maintenance or repairs to the drainage pipe connection, the refrigerant pipe connection, or to remove the unit if necessary.

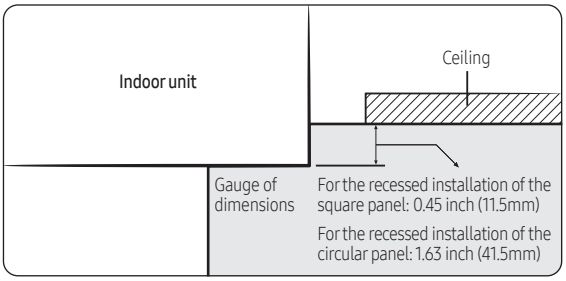
6 Hang the indoor unit to the suspension bolts between two nuts. Screw the nuts to suspend the unit. Cut a pad stopper and place it on the bracket at this time.



Installation

Indoor Units

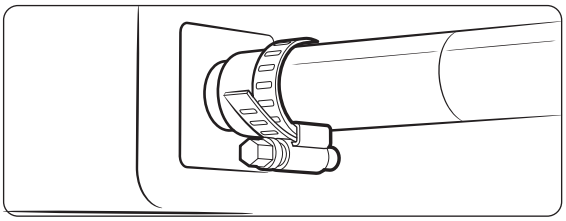
7 Adjust the unit to the appropriate position, taking into account the installation area for the front panel.
- Place the pattern sheet on the indoor unit.
- Adjust the space between the ceiling and the indoor unit by using a dimension gauge.
- Fix the indoor unit securely after adjusting the level of the unit by using a leveller.
- Remove the pattern sheet and install the front panel.



Installing the drain hose and drain pipe

1 Push the supplied drain hose as far as possible over the drain socket.

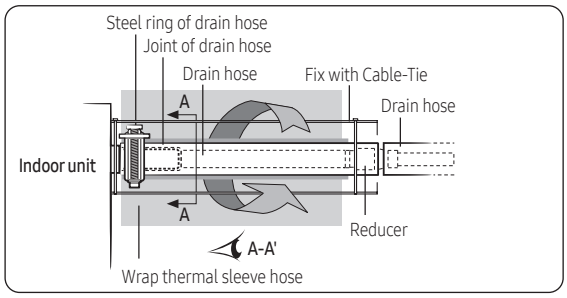
2 Tighten the metal clamp as shown in the picture.

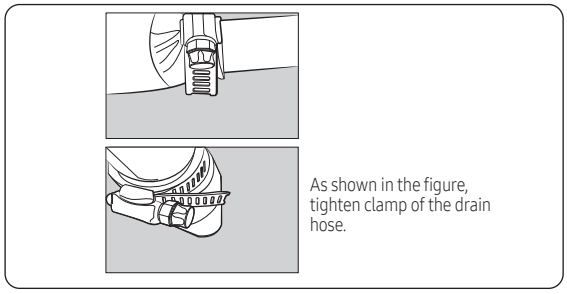


3 Wrap the supplied large sealing pad over the metal clamp and drain hose to insulate and fix it with clamps.

4 Insulate the complete drain piping inside the building (field supply).
If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).

5 Push the drain hose up to insulation when connecting the drain hose to drain socket.

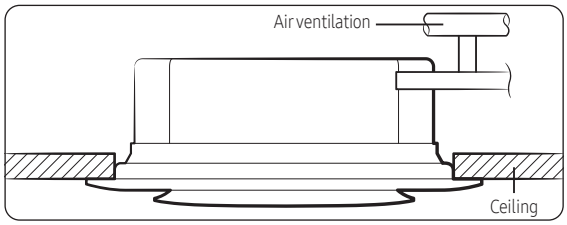




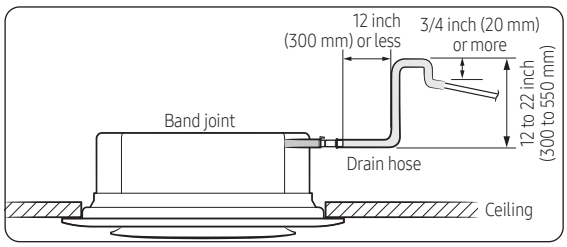
⚠ CAUTION

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

- Install air ventilation to drain condensation smoothly.



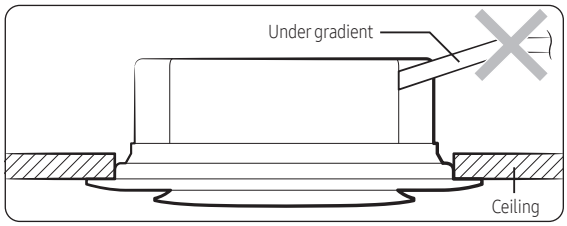
- If it is necessary to increase the height of the drain pipe, install the drain pipe straight within 12 inch (300 mm) from the drain hose port. If it is raised higher than 22 inch (550 mm), there may be water leaks.



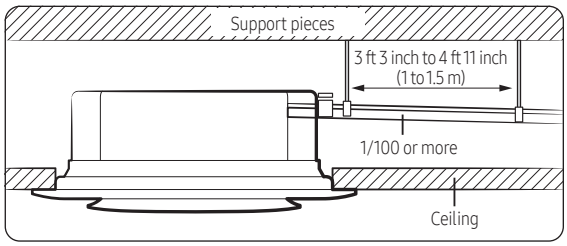
Installation

Indoor Units

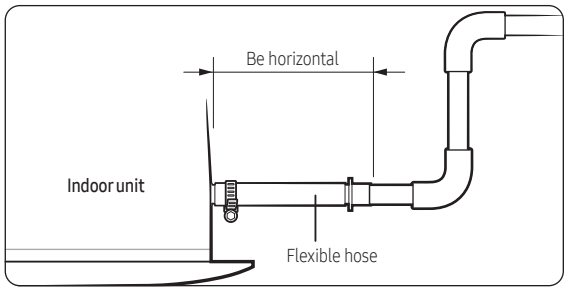
- Do not give the hose an upward gradient beyond the connection port. This will cause water to flow backwards when the unit is stopped, resulting in water leaks.



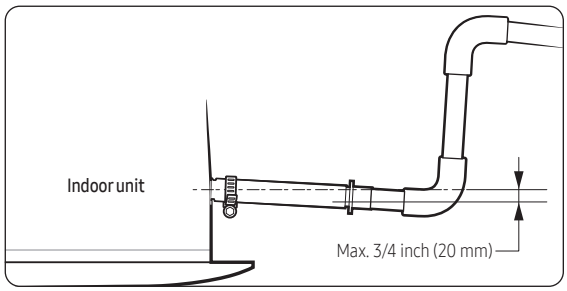
- Do not apply force to the piping on the unit side when connecting the drain hose. The hose should not be allowed to hang loose from its connection to the unit. Fasten the hose to a wall, frame or other support as close to the unit as possible.



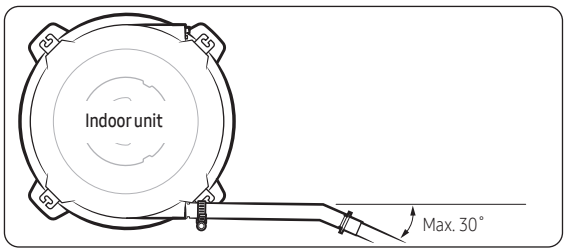
- Install horizontally.



- Max. allowable axis gap.

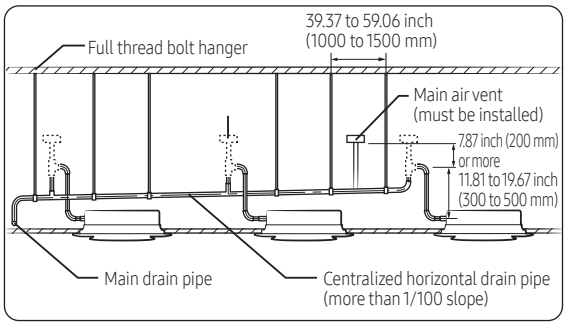


- Max. allowable bending angle.



NOTE

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

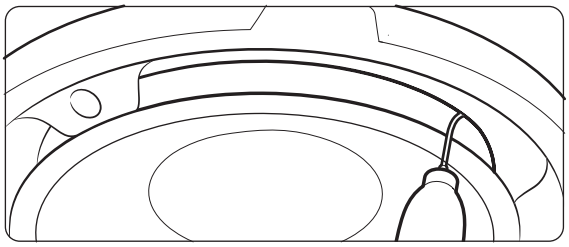


⚠ CAUTION

- The leak test must be performed for at least 24 hours.

2 Check the condensed water drainage:

a Pour about 2 liters (0.54 gal) of water into the indoor unit drain pan as shown in the picture.



b When the electric cable connection is completed

- Turn on the indoor unit and outdoor unit.
- Operate in the Cool mode.

When the electric cable connection has not been completed.

- Remove the control box cover of the indoor unit.
- Connect the power supply (208 to 230V, 60 Hz) to the L and N terminals.
- Reassemble the control box cover and turn on the indoor unit.

⚠ CAUTION

- Only in the Cool mode, you can check the correct operation of the drain pump.

⚠ CAUTION

- When the float switch is not detected due to insufficient water on the drain pan, the drain pump will not work.
- If the power supply is directly connected to the L and N terminals, communication error message might appear.
- After completing the drainage check, turn the unit off and disconnect the power supply.
- Reassemble the control box cover.

c Check whether the drain pump works correctly.

d Check whether the drainage is performing correctly at the end of the drain pipe.

e Check for leakage at the drain pipe and drain pipe connection part.

f When leakage occurs, check whether the indoor unit is level and check the drain hose connection part, drainpipe connection part and drain pump connection.

g When the drainage check is completed and the condensed water remains on the drain pan, remove the water.

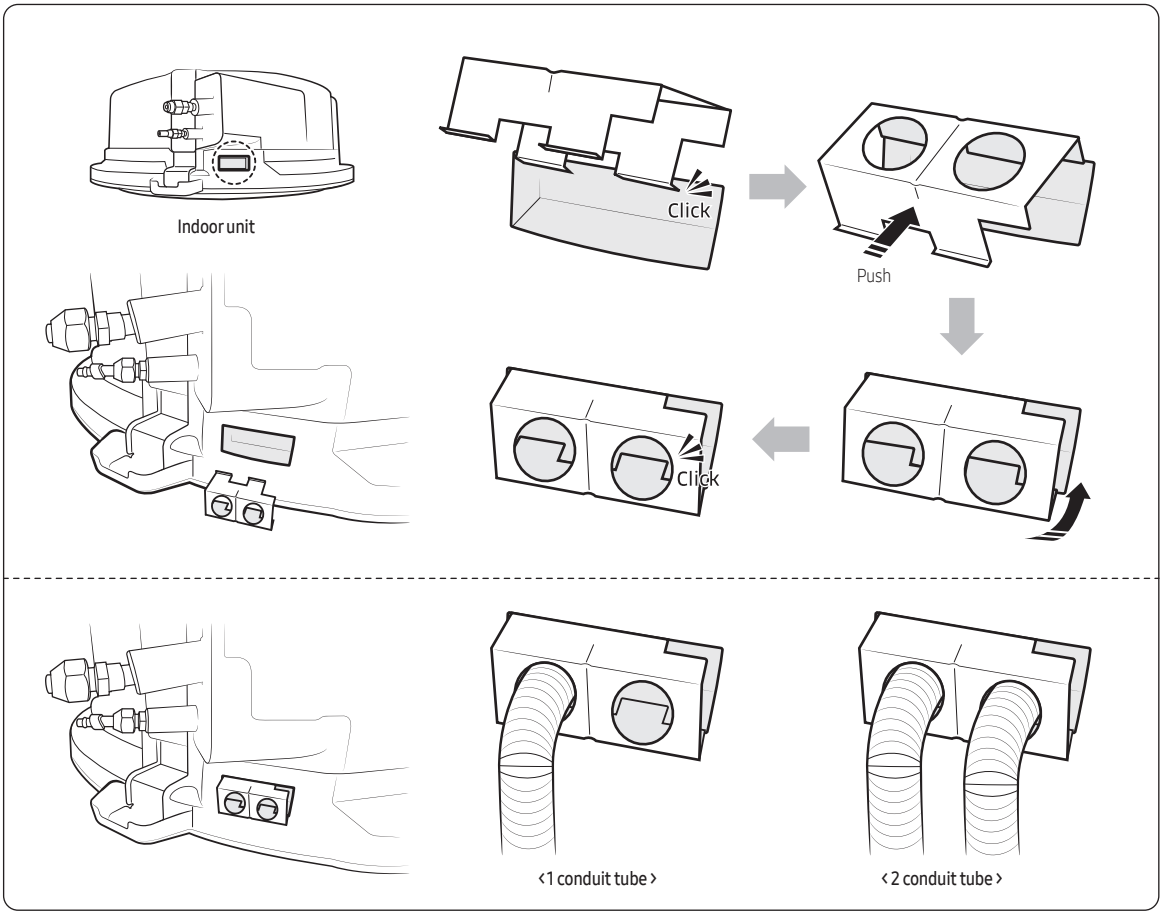
Installation

Indoor Units

Connecting the power and communication cables

Bushing bracket installation

If the condult tube is used, bracket must be installed as shown in the picture to fix the conduit tube.



NOTE

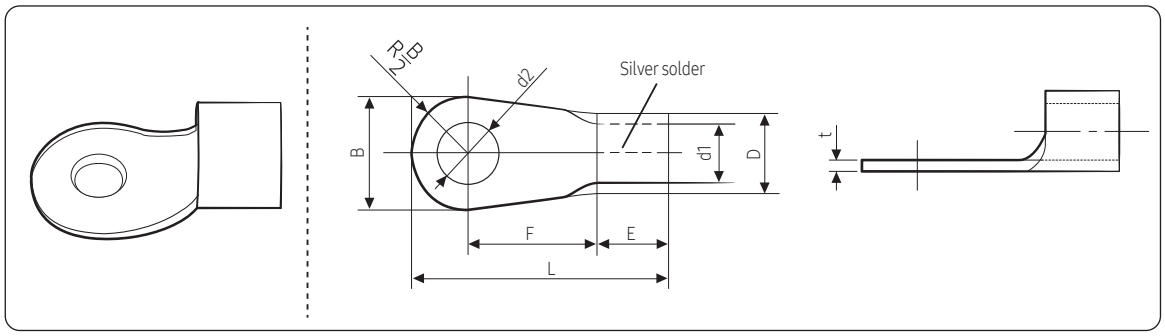
- Please follow national and local electrical codes. Additional electrical connection components may be required.

Installation

Indoor Units

Wiring work

Selecting compressed ring termial



Norminal dimensions for cable [Inch² (mm²)]		0.002 (1.5)		0.003 (2.5)		0.006 (4)
Norminal dimensions for screw [Inch (mm)]		0.15 (4)	0.15 (4)	0.15 (4)	0.15 (4)	0.15 (4)
B	Standard dimension [Inch (mm)]	0.25 (6.6)	0.31 (8.0)	0.25 (6.6)	0.33 (8.5)	0.37 (9.5)
	Allowance [Inch (mm)]	±0.007 (±0.2)		±0.007 (±0.2)		±0.007 (±0.2)
D	Standard dimension [Inch (mm)]	0.13 (3.4)		0.16 (4.2)		0.22 (5.6)
	Allowance [Inch (mm)]	+0.011 (+0.3) -0.007 (-0.2)		+0.011 (+0.3) -0.007 (-0.2)		+0.011 (+0.3) -0.007 (-0.2)
d1	Standard dimension [Inch (mm)]	0.06 (1.7)		0.09 (2.3)		0.13 (3.4)
	Allowance [Inch (mm)]	±0.007 (±0.2)		±0.007 (±0.2)		±0.007 (±0.2)
E	Min. [Inch (mm)]	3/16 (4.1)		1/4 (6)		1/4 (6)
F	Min. [Inch (mm)]	1/4 (6)		1/4 (6)		1/4 (6)
L	Max. [Inch (mm)]	5/8 (16)		3/4 (17.5)		3/4 (20)
d2	Standard dimension [Inch (mm)]	0.16 (4.3)		0.16 (4.3)		0.16 (4.3)
	Allowance [Inch (mm)]	+0.007 (+0.2) 0 (0)		+0.007 (+0.2) 0 (0)		+0.007 (+0.2) 0 (0)
t	Min. [Inch (mm)]	0.02 (0.7)		0.03 (0.8)		0.035 (0.9)

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.

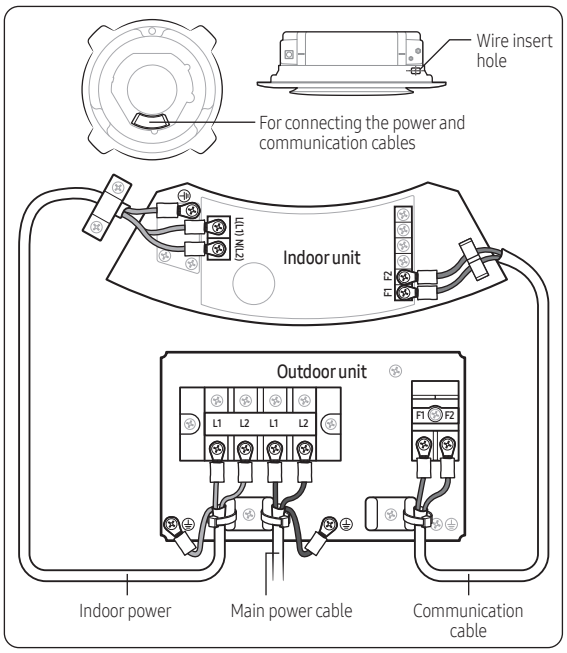
The indoor unit is powered through the outdoor unit by means of a H05RN-F connection cable (or a more power model), with insulation in synthetic rubber and a jacket in polychloroprene (neoprene), in accordance with the requirements specified in the standard EN 60335-2-40.

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.

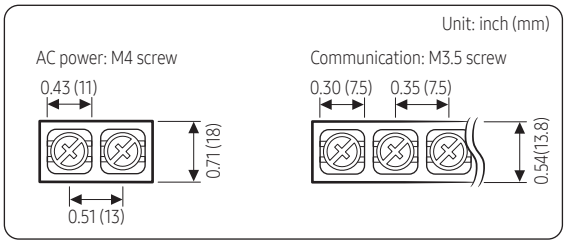
Installation

Indoor Units

1 phase

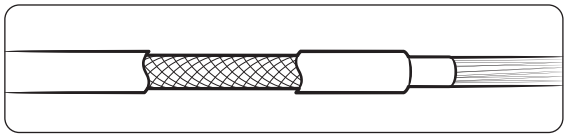


Indoor power supply		
Power supply	Max/Min(V)	Indoor power cable
208 to 230V, 60 Hz	±10%	0.0012 inch² ↑ (0.75mm² ↑), 3 wires
Communication cable		
0.0012 inch² ↑ (0.75mm² ↑), 2 wires		



	Tightening torque	
	N·m	lbf.ft
M3.5	0.8 to 1.2	0.59 to 0.89
M4	1.2 to 1.8	0.89 to 1.1

- Screws on terminal block must not be unscrewed with the torque less than 0.89 lbf.ft.
- Since it has the external power supply, refer to the outdoor unit installation manual for MAIN POWER.



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

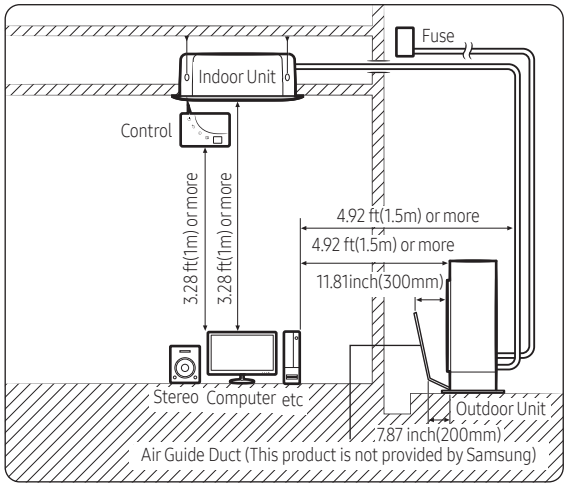
Installation

Outdoor Units

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 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.

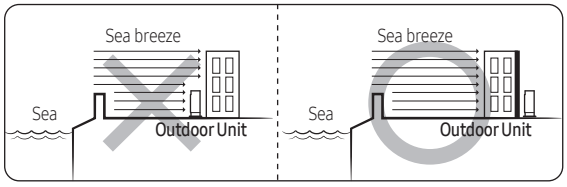


⚠ CAUTION

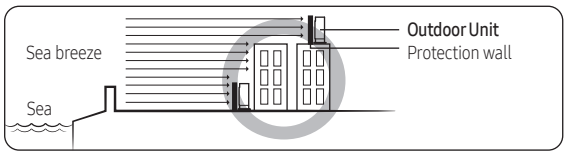
- You have just purchased a system air conditioner and it has been installed by your installation specialist.
- This device must be installed according to the national electrical rules.
- If your outdoor unit exceeds a net weight of 132.2 lb(60 kg), do not install it on a suspended wall, but stand it on a floor.
- The reliability of our product cannot be guaranteed under conditions of “A” or less.

Outdoor Model	"A"
AC018/024BXADCH	-13°F(-25°C)
AC030/036/042/048BXADCH	-4°F(-20°C)

- 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 27.6 inch(700mm) between the protection wall and the outdoor unit for exhausted air to ventilate.



⚠ CAUTION

- Depending on the condition of the power supply, unstable power or voltage may cause malfunction of parts or control system (example: on a boat or places using power supplied from electric generator, etc.).

Installation

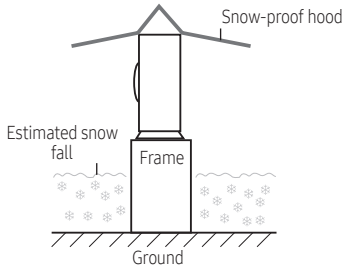
Outdoor Units

- 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.
- Consider that the salinity particles clinging to the external panels should be sufficiently washed out. Be sure to clean sea water and dust from the outdoor unit heat exchanger and apply a corrosion inhibitor on it at least once a year.
- Because the residual water at the bottom of the outdoor unit significantly promotes corrosion, make sure that the slope does not disturb drainage.
  - Keep the floor level so that rain does not accumulate.
  - Be careful not to block the drain hole due to foreign substance.
- Check the condition of the product periodically.
  - Check the installation site every 3 months and perform anti-corrosion treatment such as R-Pro supplied by SAMSUNG (Code : MOK-220SA) or commercial water repellent grease and wax, etc., based on the product condition.
  - When the product is to be shut down for a long period of time, such as off-peak hours, take appropriate measures like covering the product.
- If the product installed within 1640.4 ft of seashore, special anti-corrosion treatment is required.

  ※ Please contact your local SAMSUNG representative for further details.

⚠ CAUTION

- In areas with heavy snow fall, piled snow could block the air intake. To avoid this incident, install a frame that is higher than estimated snow fall. In addition, install a snow-proof hood to avoid snow from piling on the outdoor unit.

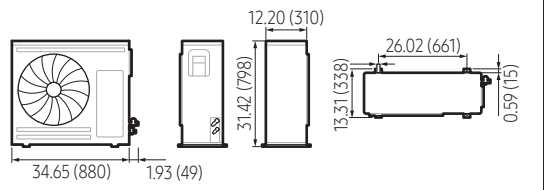


Outdoor unit dimensions

Unit : inch (mm)

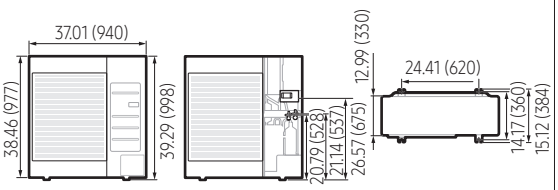
A Type

AC018BXADCH



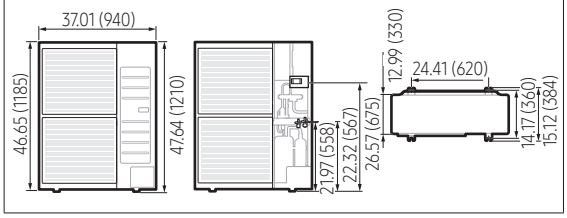
B Type

AC024BXADCH, AC030BXADCH



C Type

AC036BXADCH, AC042BXADCH, AC048BXADCH



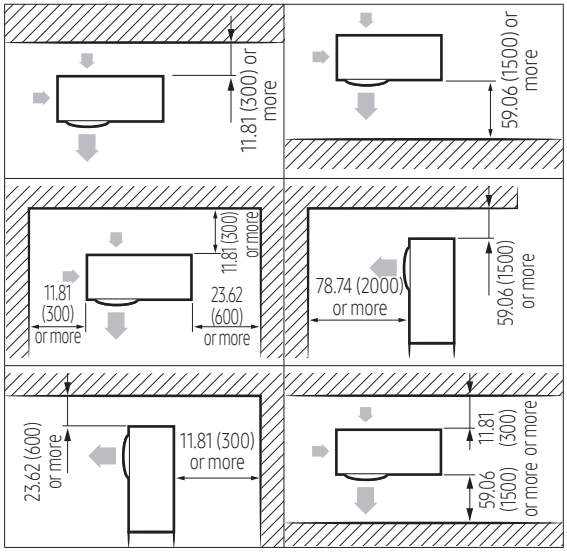
Installation

Outdoor Units

Minimum clearances for the outdoor unit

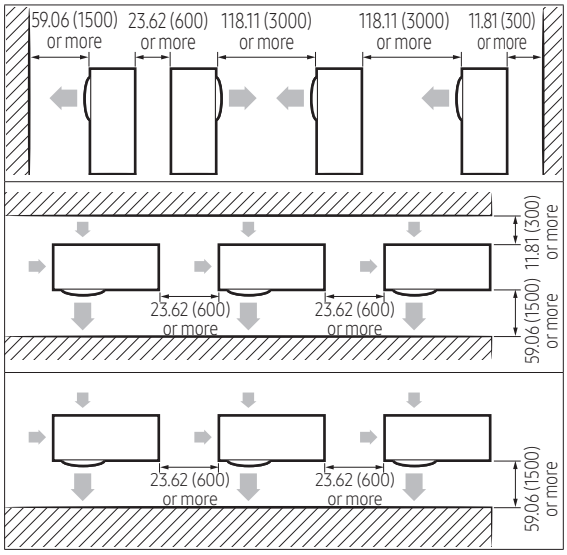
When installing 1 outdoor unit

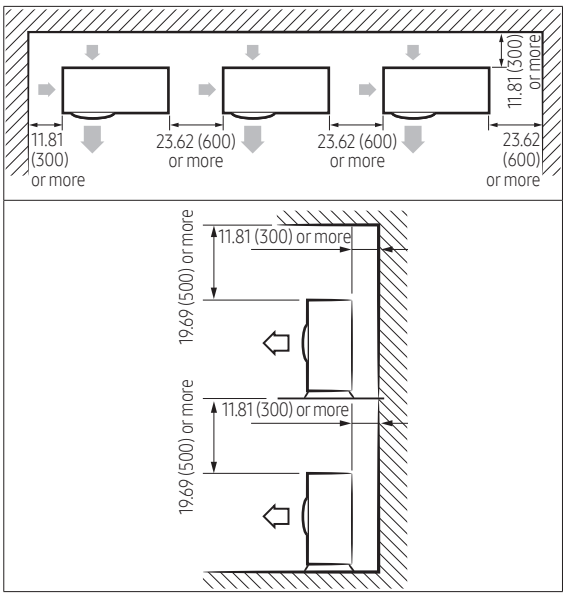
Unit : inch (mm)



When installing more than 1 outdoor unit

Unit : inch (mm)



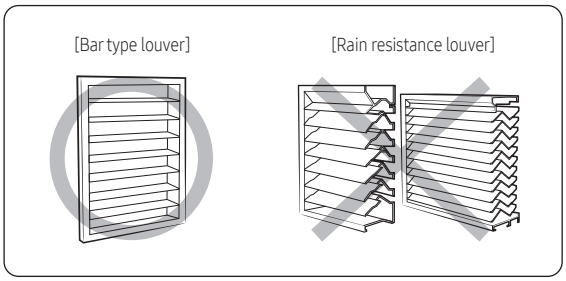


⚠ CAUTION

- 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.

⚠ WARNING

- Should adopt bar type louver. Don't use a type of rain resistance louver.



- Louver specifications.
  - Angle criteria : less than 20°
  - Opening ratio criteria : greater than 80%

Installation

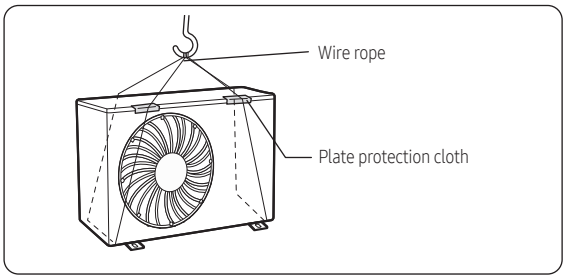
Outdoor Units

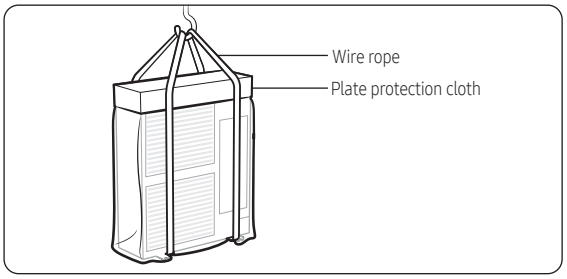
Moving the outdoor unit with wire rope

1 Before carrying the outdoor unit, fasten two wire ropes of 26.25 ft (8m) or longer, as shown in the figure.

2 To prevent damages or scratches effectively, insert a piece of cloth between the outdoor unit and the ropes.

3 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 on tall stands or in a location exposed to strong winds, fix the unit securely to the ground or structure.

1 Position the outdoor unit so that the air flow is directed towards the outside, as indicated by the arrows on the top of the unit.

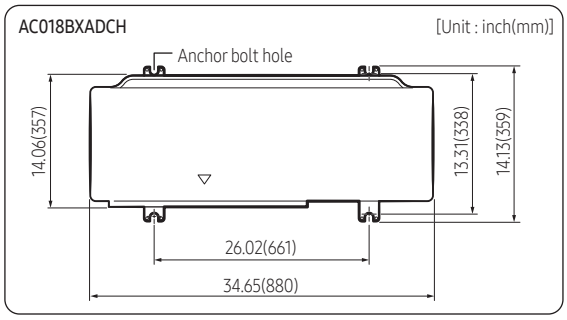
2 Attach the outdoor unit to the appropriate support using anchor bolts.

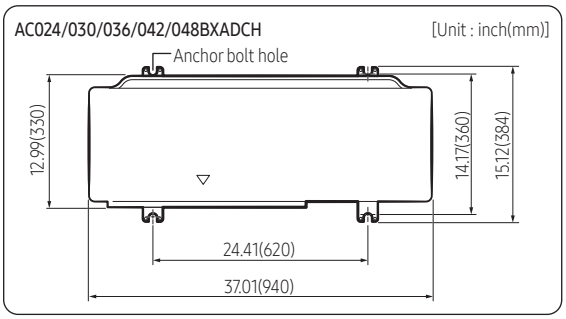
- The ground wire for the telephone line cannot be used to ground the air conditioner.

3 DIf the outdoor unit is exposed to strong winds, install shield plates around the outdoor unit, so that the fan can operate correctly.

NOTE

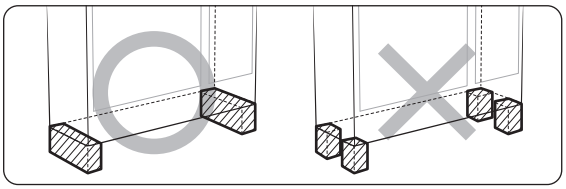
- Install provided rubber legs to prevent vibration and noise.



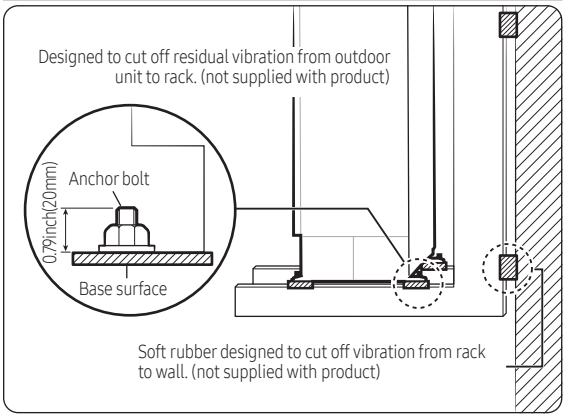


⚠ CAUTION

- 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.



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.

Installation

Outdoor Units

⚠ CAUTION

- 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.
- 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.

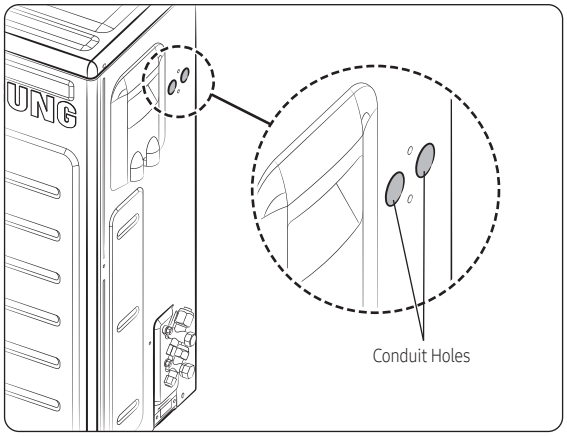
⚠ CAUTION

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

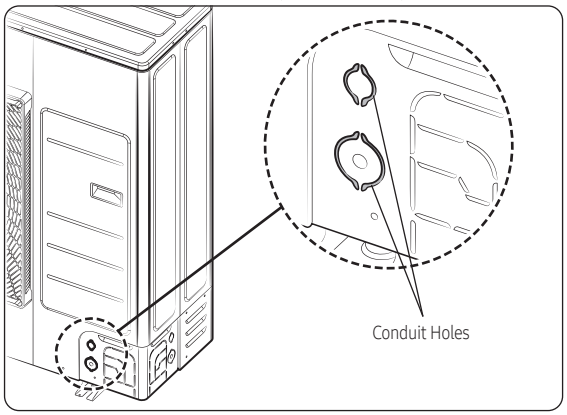
Connecting wire conduits

When connecting cables between the indoor unit and the outdoor unit, use conduits to protect the cables.

1 Drill holes on the conduit plate in accordance with their use and quantity.
   - AC018BXADCH
     - Drill conduit holes on the side cabinet. (knock out holes)

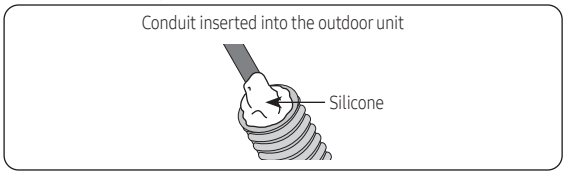


- AC024/030/036/042/048BXADCH
  - Use a nipper to remove conduit holes from the lower part of the cabinet.
    (Do not remove it by hammering.)



2 Insert the cables through the conduits, and then fix the conduits to the conduit plate with the lock nuts.

3 Apply silicone to the end of the hose to prevent rain from entering the hose.

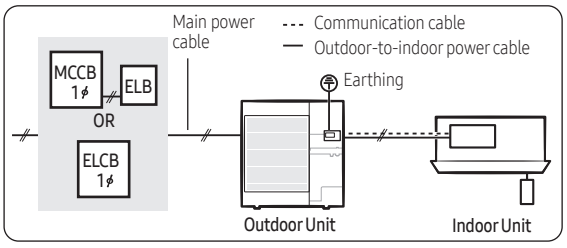


4 Connect the cables to the outdoor units.
For how to connect the cables, refer to the next page.

5 Attach the conduit plate to the product.

Air conditioning system examples

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



※ The appearance of the unit may be different from the picture depending on the model.

⚠ CAUTION

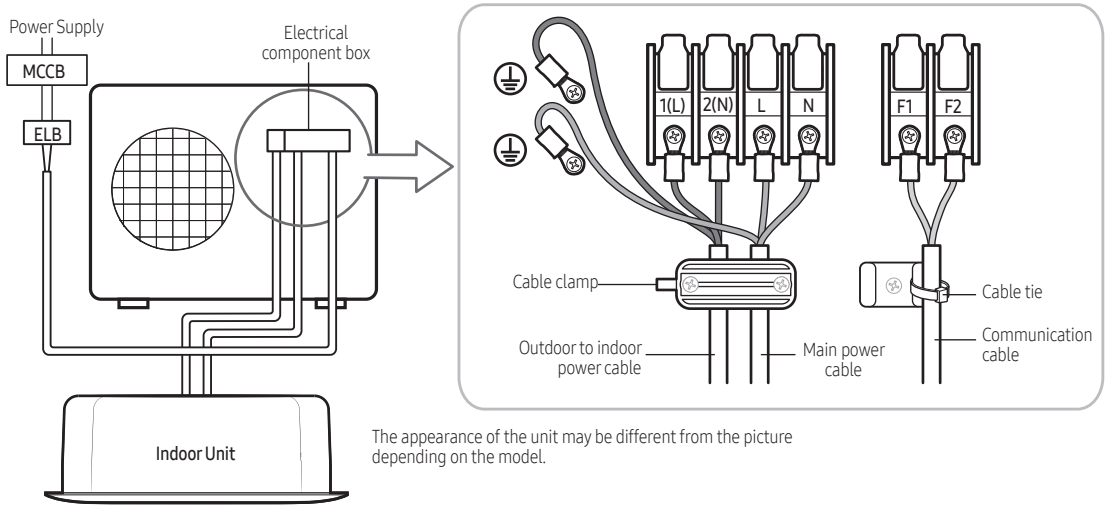
- If the outdoor unit is installed in a location vulnerable to an electric leak or submergence, make sure to install an ELCB.
- AC018BXADCH, AC024BXADCH: ELCB must be installed since this product is equipped with a base heater.

Installation

Outdoor Units

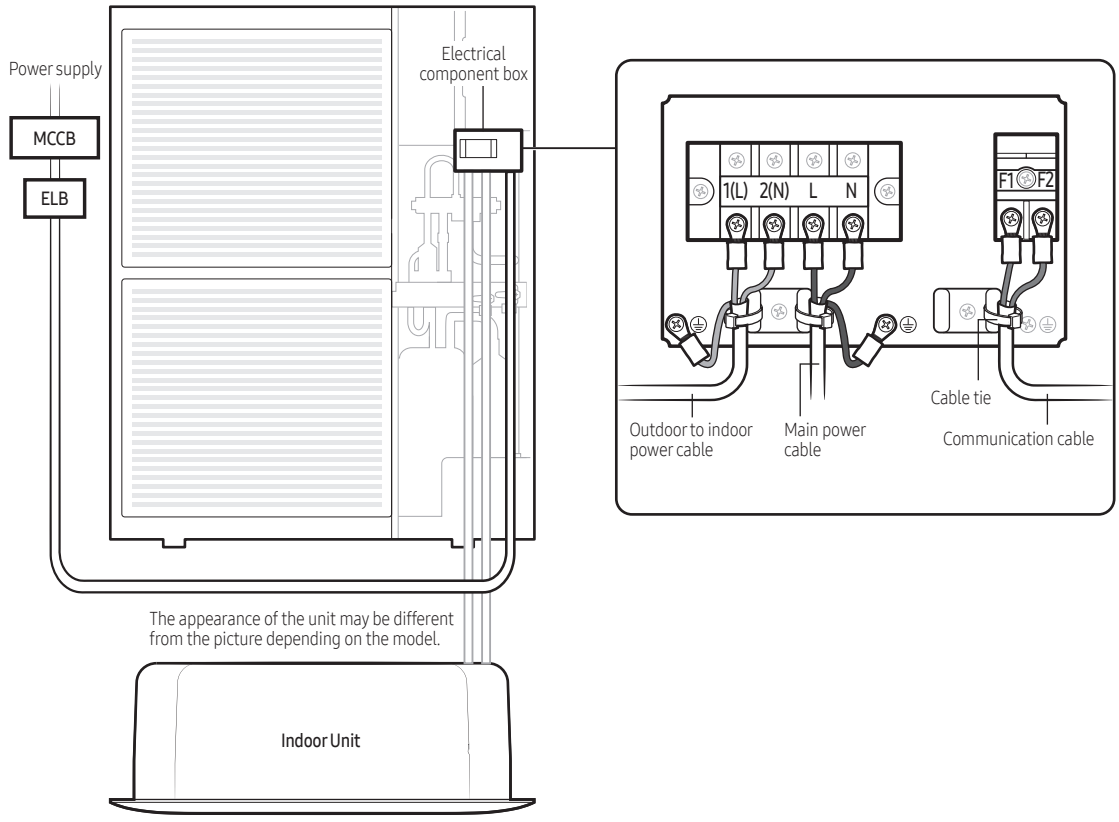
Connecting the main power cable

When using ELB for AC018BXADCH (1-phase)



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

When using ELB for AC024/030/036/042/048BXADCH (1-phase)



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

Installation

Outdoor Units

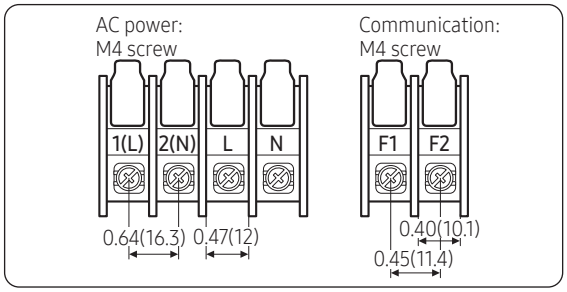
⚠ CAUTION

- 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 a least 0.12 inch(3mm).
- Devices disconnected from the power supply should be completely disconnected in the condition of overvoltage category.
- Keep distances of 1.97 inch(50mm) or more between power cable and communication cable.

Main power terminal block specifications

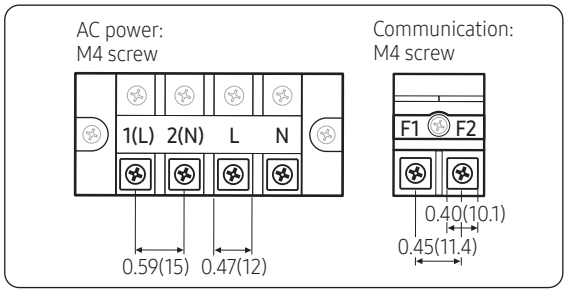
- AC018BXADCH (1-phase)

[Unit : inch(mm)]



- AC024/030/036/042/048BXADCH (1-phase)

[Unit : inch(mm)]



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.

Installation

Outdoor Units

Model		Power Source	RLA (A)	Outdoor		Indoor	MCA (A)	MOP (A)
Outdoor	Indoor			MOC		Rated input current of the power conversion equipment		
				FAN1(A)	FAN2(A)	FAN(A)		
AC018BXADCH	AC018BN1DCH	208~230V/60Hz	12.7	1.25	-	0.42	20.1	25.0
	AC018BN4DCH					0.79		
	AC018BN6DCH					0.79		
	AC018BNADCH					0.42		
	AC018BNHDCH					2.10		
	AC018BNJDCH					0.49		
	AC018BNLDCH					1.06		
	AC018BNNDCH					0.30		
	AC018BNZDCH					1.50		
AC024BXADCH	AC024BN4DCH		15.9	1.25	-	0.79	24.1	30.0
	AC024BN6DCH					0.79		
	AC024BNADCH					0.42		
	AC024BNHDCH					2.10		
	AC024BNZDCH					2.10		
AC030BXADCH	AC030BN4DCH		16.2	1.25	-	0.79	24.0	30.0
	AC030BN6DCH					0.79		
	AC030BNHDCH					2.10		
	AC030BNTDCH					0.51		
	AC030BNZDCH					2.50		
AC036BXADCH	AC036BN4DCH		14.7	1.25	1.25	0.79	24.5	35.0
	AC036BN6DCH					0.79		
	AC036BNHDCH					3.50		
	AC036BNTDCH					0.51		
	AC036BNZDCH					3.60		
AC042BXADCH	AC042BN4DCH		20.9	1.25	1.25	0.79	32.2	40.0
	AC042BN6DCH					0.79		
	AC042BNHDCH					3.50		
	AC042BNZDCH					3.40		
AC048BXADCH	AC048BN4DCH		20.9	1.25	1.25	0.79	32.8	40.0
	AC048BN6DCH					0.79		
	AC048BNHDCH					3.50		
	AC048BNZDCH					4.10		

Installation

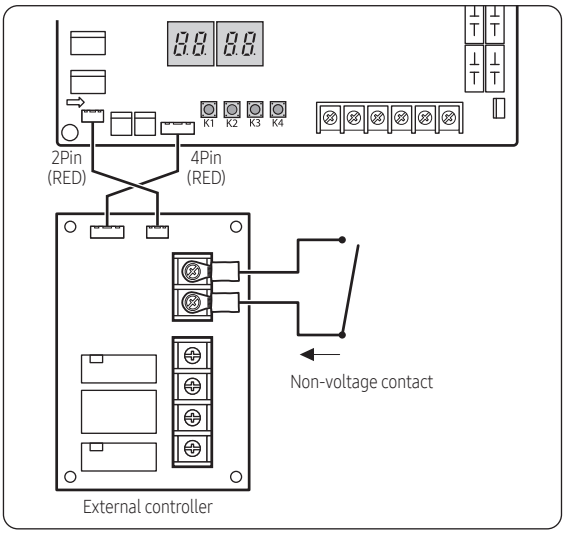
Outdoor Units

NOTE

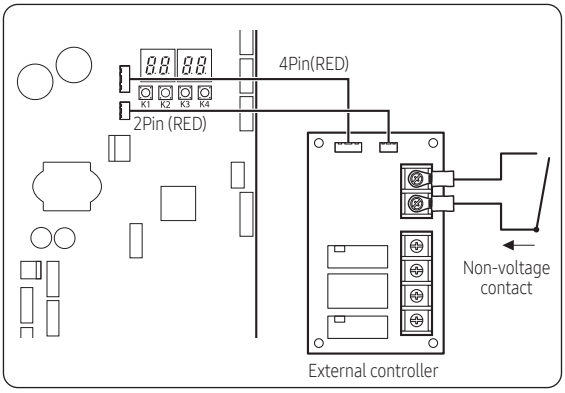
- RLA is based on AHRI 210/240 cooling standard condition [Indoor temp. : 26.7 °C / 80 °F(DB) / 19.46 °C / 67 °F(WB), Outdoor temp. : 35 °C / 95 °F(DB)]
- Voltage tolerance is ± 10 %.
- Maxium allowable voltage between phases is 2 %.
- Symbols
  - RLA: Rated Load Ampere (A)
  - MOC: Maximum Operating Current (A)
  - MCA: Minumum Circuit Ampere (A)
  - MOP: Maximum Overcurrent Protective Device (A)
- Voltage range
  - Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
- Maximum allowable voltage variation between phases is 2%.
- Wire size & type must comply with the applicable local and national code.
  - Wire size: Based on the value of MCA.
  - Wire type:
    1-phase: 60245 IEC57(IEC) or H05RN-F(CENELEC) grade or more

Silence mode controller wiring diagram with External controller

- AC018BXADCH



- AC024/030/036/042/048BXADCH

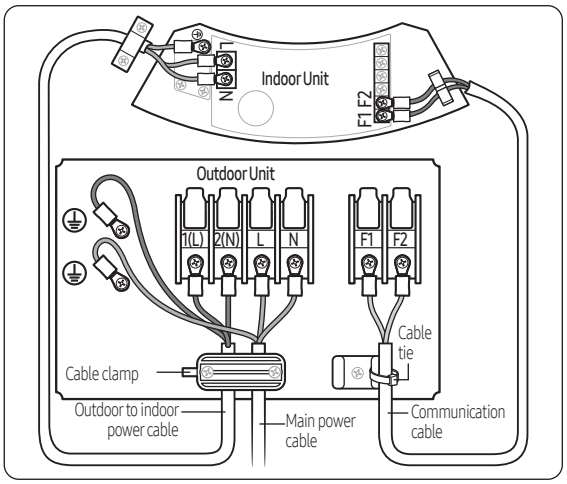


Installation

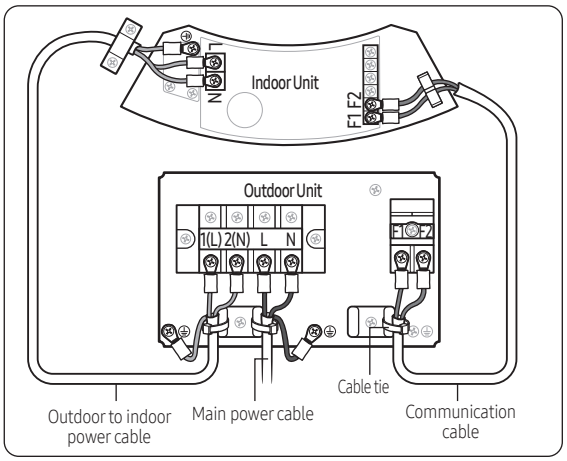
Outdoor Units

Connecting the outdoor-to-indoor power cable and the communication cable

- AC018BXADCH



- AC024/030/036/042/048BXADCH

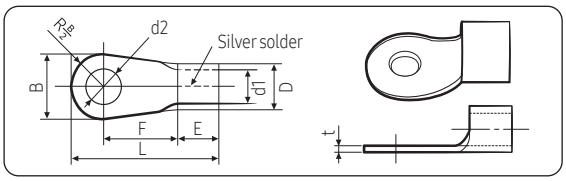


NOTE

- Lay the electrical wiring so that the front cover does not rise up when doing wiring work and attach the front cover securely.
- Ground wire for the indoor unit and outdoor unit connection cable must be clamped to a soft copper tin-plated eyelet terminal with M4 screw hole(NOT SUPPLIED WITH UNIT ACCESSORIES).
- The appearance of the unit may be different from the picture depending on the model.

Outdoor-to-indoor power terminal specifications

- Connect the cables to the terminal board using the compressed ring terminal.
- Cover a solderless ring terminal and a connector part of the power cable and then connect it.



Installation

Outdoor Units

Nominal dimensions for cable [mm2(inch2)]	Nominal dimensions for screw [mm(inch)]	B		D		d1		E	F	L	d2		t
		Standard dimension [mm(inch)]	Allowance [mm(inch)]	Standard dimension [mm(inch)]	Allowance [mm(inch)]	Standard dimension [mm(inch)]	Allowance [mm(inch)]	Min. [mm (inch)]	Min. [mm (inch)]	Max. [mm (inch)]	Standard dimension [mm(inch)]	Allowance [mm(inch)]	Min. [mm (inch)]
4/6 (0.006/ 0.009)	4(3/8)	9.5(3/8)	±0.2 (±0.007)	5.6(1/4)	+0.3(+0.011) -0.2(-0.007)	3.4(1/8)	±0.2 (±0.007)	6 (1/4)	5 (3/16)	20 (3/4)	4.3 (3/16)	+0.2 (+0.007) 0(0)	0.9 (0.03)
	8(3/16)	15(9/16)							9 (3/8)	28.5 (1-1/8)	8.4 (1-3/16)	+0.4 (+0.015) 0(0)	
10(0.01)	8(3/16)	15(9/16)	±0.2 (±0.007)	7.1(1/4)	+0.3(+0.011) -0.2(-0.007)	4.5(3/16)	±0.2 (±0.007)	7.9 (5/16)	9 (3/8)	30 (1-3/16)	8.4 (1-3/16)	+0.4 (+0.015) 0(0)	1.15 (0.04)
16(0.02)	8(3/16)	16(10/16)	±0.2 (±0.007)	9(3/8)	+0.3(+0.011) -0.2(-0.007)	5.8(1/4)	±0.2 (±0.007)	9.5 (5/16)	13 (1/2)	33 (1-5/16)	8.4 (1-3/16)	+0.4 (+0.015) 0(0)	1.45 (0.05)
25(0.03)	8(3/16)	12(1/2)	±0.3 (±0.011)	11.5(7/16)	+0.5(+0.019) -0.2(-0.007)	7.7(5/16)	±0.2 (±0.007)	11 (3/8)	15 (5/8)	34 (1-3/8)	8.4 (1-3/16)	+0.4 (+0.015) 0(0)	1.7 (0.06)
	8(3/16)	16.5(10/16)							13 (1/2)		8.4 (1-3/16)		
35(0.05)	8(3/16)	16(10/16)	±0.3 (±0.011)	13.3(1/2)	+0.5(+0.019) -0.2(-0.007)	9.4(3/8)	±0.2 (±0.007)	12.5 (1/2)	13 (1/2)	38 (1-1/2)	8.4 (1-3/16)	+0.4 (+0.015) 0(0)	1.8 (0.07)
	8(3/16)	22(7/8)							13 (1/2)	43 (1-11/16)	8.4 (1-3/16)		
50(0.07)	8(3/16)	22(7/8)	±0.3 (±0.011)	13.5(1/2)	+0.5(+0.019) -0.2(-0.007)	11.4(7/16)	±0.3 (±0.011)	17.5 (11/16)	14 (9/16)	50 (2)	8.4 (1-3/16)	+ 0.4(+0.015) 0(0)	1.8 (0.07)
70(0.10)	8(3/16)	24(1)	±0.4 (±0.015)	17.5(11/16)	+0.5(+0.019) -0.4(-0.015)	13.3(1/2)	±0.4 (±0.015)	18.5 (3/4)	20 (3/4)	51 (2)	8.4 (1-3/16)	+ 0.4(+0.015) 0(0)	2.0 (0.078)

- Connect the rated cables only.
- Connect using a driver which is able to apply the rated torque to the screws.
- If the terminal is loose, fire may occur caused by arc. If the terminal is connected too firmly, the terminal may be damaged.

	Tightening torque	
	lbf•ft	N•m
M4	0.87 to 1.30	0.8 to 1.2
M5	1.45 to 2.17	2.0 to 3.0

⚠ CAUTION

- When connecting cables, you can connect the cables to the electrical part or connect them through the holes below depending on the spot.
- Connect the communication cable between the indoor and outdoor units through a conduit to protect against external forces, and feed the conduit through the wall together with refrigerant piping.
- Remove all burrs at the edge of the knock-out hole and secure the cable to the outdoor knock-out using lining and bushing with an electrical insulation such as rubber and so on.
- Must keep the cable in a protection tube.
- Keep distances of 1.97 inch(50mm) or more between power cable and communication cable.
- When the cables are connected through the hole, remove the Plate bottom.

Installation

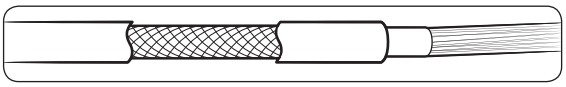
Outdoor Units

Outdoor-to-indoor power and communication cables specifications

- Indoor unit :
  360CST(AC***BN6***)

Indoor power supply		
Power supply	Max/Min (V)	Indoor power cable
1Φ, 208-230V~, 60Hz	±10%	0.0012 inch²↑ (0.75mm² ↑), 3 wires
Communication cable		
0.0012 inch²↑ (0.75mm² ↑), 2 wires		

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



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