

History

Version	Modification	Date	Remark
Ver.1.0	Released 2021 CAC Wall Mounted Type for North America	21. 09. 10	
Ver.1.1	Modified some data	21. 10. 21	
Ver.1.2	Corrected weight conversion for AC018BNADCH/AA	23.11.27	

Features & Benefits

CAC - World-class energy efficiency

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

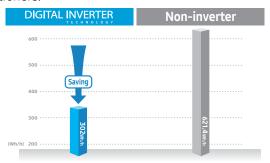
Featuring a suite of energy-optimizing technologies, Samsung CAC Single delivers top-class energy efficiency to support business in saving costs and the environment.

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.



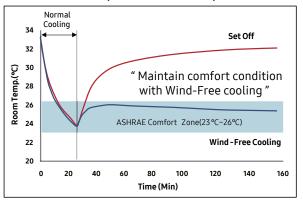
Wind-Free Cooling with Micro holes

- 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



[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

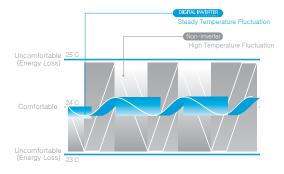
Samsung is dedicated to supporting comfortable living and working environments based on the strength of its technologies. With a single unit, CAC Single delivers reliable comfort and control over multiple areas to ensure a pleasant atmosphere in any climate.

Wide temperature performance

No matter how extreme the temperature, the highperforming CAC Single can handle the conditionwithout 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

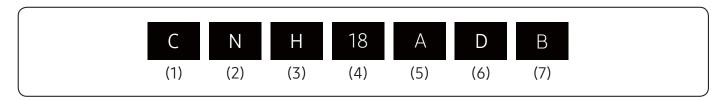
CAC Single outdoor units offer a selection of pipe directions. The internal pipe connection ports allow four different pipe directions, supporting a neater, more organized-looking unit upon installation.



Nomenclature

US Code

Model Name



(1) Classification

С	CAC

(5-2) Feature1 (Outdoor Unit)

Α	Inv+Side+General Temp
S	Inv+Side+Low Temp
Q	Inv+Side+Tropical Temp
F	Inv+Ton+Tronical Temn

(2) Product Type

N	Indoor Unit
X	Outdoor Unit

(6) Feature

F	Flagship	
S	Standard	
D	Deluxe	
Р	Premium	

(3) Mode

Α	Universal
С	Cooling Only
Н	Heat Pump

(4) Capacity

X1,000	Btu/h (2	digits)	

(7) Version

В	2022

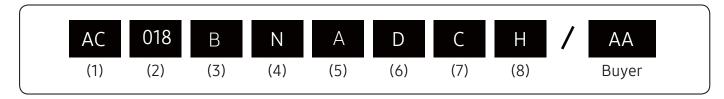
(5-1) Product Notation (Indoor Unit)

1	1 Way Cassette / Wind-Free 1Way Cassette
Ν	(Wind-Free) 4 Way Cassette (600x600)
4	(Wind-Free) 4 Way Cassette
6	360 Cassette
L	LSP Duct
Н	HSP Duct
С	Ceiling
J	Console
Α	AR9500 (Wall Mounted)
Т	MAX4 (Wall Mounted)
Z	Multi-position AHU

Nomenclature

Indoor Unit

Model Name



(1) Classification

AC	CAC
(0) 0	
(2) Capacity	
	X1,000 Btu/h (3 digits)
(3) Version	
В	2022

(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
Н	HSP Duct
С	Ceiling
J	Console
Α	AR9500 (Wall Mounted)
Т	MAX4 (Wall Mounted)
Z	Multi-position AHU

(4) Product Type

N	Indoor Unit
Χ	Outdoor Unit

(6) Feature

F	Flagship			
S	Standard			
D	Deluxe			
Р	Premium			

(7) Rating Voltage

С 1Ф, 208-230V,60Hz

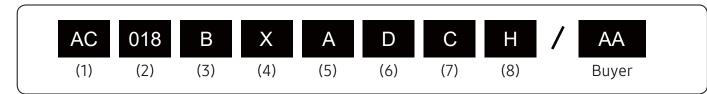
(8) Mode

С	Cooling Only			
Н	Heat Pump			

Nomenclature

Outdoor Unit

Model Name



(1) Classification

AC	CAC

(5) Feature1

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

(2) Capacity

x 1000 Btu/h (3 digits)	

(6) Feature2

F	Flagship			
S	Standard			
D	Deluxe			
P	Premium			

(3) Version

В	2022

(7) Rating Voltage

С	1Ф, 208~230V, 60Hz		
Н	3Ф, 400V, 60Hz		

(4) Product Type

N	Indoor Unit (NASA)			
Х	Outdoor Unit (NASA)			

(8) Mode

Н	Heat Pump(R410A)			
С	Cooling Only(R410A)			
Е	Heat Pump(R22)			
D	Cooling Only(R22)			

Line-up

Indoor unit

Model	Capacity (kBtu/h)			
	18	24	30	36
Wall Mounted Type	=			

Outdoor Unit

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

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Features & Benefits

Wall Mounted Type (Wind-Free™)

Auto clean

Keep the inside of air conditioner clean and hygienic automatically

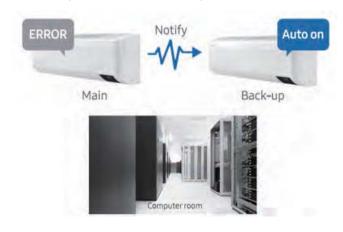




* The Auto clean time may vary depending on the status of the product.

ETO (Emergency Temperature Output)

Protect your computer room safely: Activate a backup system when a unit has stopped due to an error or if room temperature is above the specified threshold



Quiet Operation

Wind-Free air conditioner work much more smoothly and quietly. At its lowest level, it only generates 21dB(A) of sound (*) which is almost as quiet as a whisper



(*) Tested on the AC026TNXDKG/EU model in quiet mode.

7-Segment display

A large numeric display with clear and simple icons makes it much easier to see the room temperature and intuitively check the current status of your air conditioner - even from a distance.

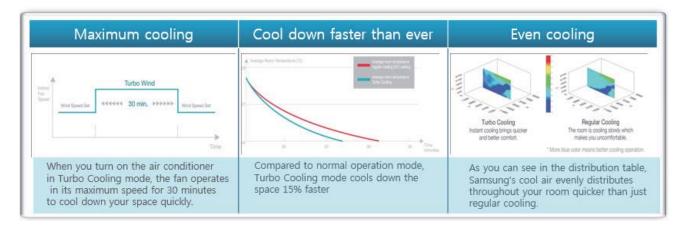


Features & Benefits

Wall Mounted Type

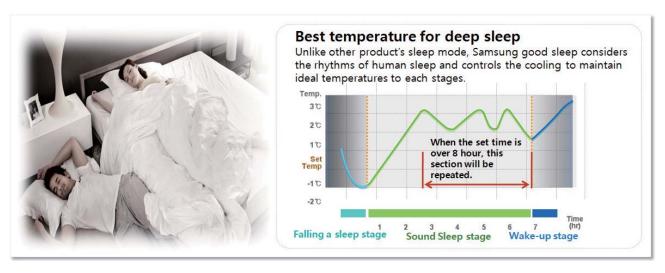
TURBO Cooling mode

Samsung's air conditioner operates in its maximum speed in Turbo Cooling mode to quickly reach the set temperature. Instantly cool down your space with Samsung's Turbo Cooling technology.



Good sleep

The quality of sleep you get directly impacts your physical and mental health. Concerned with your health, Samsung performed extensive experiments to determine the ideal temperatures needed to quickly fall asleep.



Model Na	ıme	Indoor Unit			AC018BNADCH/AA	AC024BNADCH/AA				
		Outdooru Unit			AC018BXADCH/AA	AC024BXADCH/AA				
JS Code		Indoor Unit			CNH18ADB	CNH24ADB				
- Couc		Outdooru Unit			CXH18ADB	CXH24ADB				
	Mode			=	Heat Pump	Heat Pump				
				kW	1.76 / 5.28 / 6.45	2.34 / 7.03 / 7.91				
			Cooling	Btu/h	6,000 / 18,000 / 22,000	8,000 / 24,000 / 27,000				
	Performance	Capacity		US RT	0.50 / 1.50 / 1.83	0.67 / 2.00 / 2.25				
	renormance	(Min/Std/Max)		kW	0.97 / 5.86 / 8.21	2.05 / 7.91 / 11.72				
			Heating	Btu/h	3,300 / 20,000 / 28,000	7,000 / 27,000 / 40,000				
				US RT	0.28 / 1.67 / 2.33	0.58 / 2.25 / 3.33				
		Power Input	Cooling	kW	0.38 / 1.50 / 2.19	0.49 / 2.33 / 2.90				
		(Min/Std/Max)	Heating	K V V	0.30 / 1.83 / 4.55	0.38 / 2.73 / 5.30				
	Power	Current Input	Cooling	А	2.1 / 6.9 / 9.7	2.5 / 10.6 / 12.9				
	rowei	(Min/Std/Max)	Heating	A	1.8 / 8.3 / 20.0	2.0 / 12.4 / 23.5				
		Current	MCA	А	18.4	22.4				
		Current	MOP	А	25	30				
		EED	Cooling	-	3.52	3.02				
		EER	Cooling(US)	(Btu/h)/W	12.00	10.30				
	Efficiency	COP	Heating	W/W	3.20	2.90				
		SEER	,	-	19.1	18.9				
stem		HSPF		-	10	10.8				
				Туре	Flare	Flare				
		Liquid Pipe		Φ, mm(inch)	6.35 (1/4)	6.35 (1/4)				
				Type	Flare	Flare				
		Gas Pipe		Φ, mm(inch)	12.7 (1/2)	15.88 (5/8)				
	Pipe	Heat Insulation			Both liquid and gas pipes	Both liquid and gas pipes				
	Connections	Treat modification	Standard	m (ft)	7.5 (24.6)	7.5 (24.6)				
		Pipe Length	Max.	m (ft)	50 (164.0)	50 (164.0)				
		(ODU-IDU)	Elevation	m (ft)	30 (98.4)	30 (194.0)				
		(000 100)	Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)				
	Wiring		Min.		0.75	0.75				
	Connections	Communication		mm ²						
	Connections	Tuno	Remark	-	F1,F2	F1,F2				
	D. (Туре		-	R410A	R410A				
	Refrigerant	Factory Charging		kg	2.0	2.6				
		Charles		lbs	4.41	5.73				
	Option Code	Standard		-	0112FF-19542B-2A343B-371440	0112FF-19345E-27484F-371540				
	D C 1	Install		-	020010-100011-200000-300000	020010-100041-200000-300000				
	Power Supply	I-		Φ,#,V,Hz	1,2,208-230,60	1,2,208-230,60				
		Туре	T	-	F&T	F&T				
	Heat	Material	Fin	-	Al	Al				
	Exchanger		Tube	-	Cu	Cu				
		Fin Treatment		-	Green Hydrophile	Green Hydrophile				
		Туре		-	Cross Flow	Cross Flow				
		Quantity		EA	1	1				
	Гар			m³/min	17.4/15.3/12.5	17.8/15.2/13.2				
	Fan	Air Flow Rate	H/M/L	ft³/min	615/540/441	629/537/466				
				l/s	290/255/208	297/253/220				
1000		External Static	Min/Std/Max	In Wg	-	_				
loor 		Pressue Type		-	PLDC	PLDC				
it	Fan Motor	Output			BLDC	BLDC				
	Drain	Drain Pipe		W x n	27 x 1	27 x 1				
	Drain	'		Φ, mm	ID18	ID18				
	Cound	Sound Pressure	H/M/L/Silent	dB(A)	42/37/32/29	44/39/35/30				
	Sound	Level		4D(A)	/0					
		Sound Power Leve	et	dB(A)	60	61				
		Net Weight		kg(lbs)	11.7 (25.8) 12.7 (28					
	E 1	Gross Weight		kg(lbs)	13.5 (29.8) 14.7 (32					
	External	Net Dimensions (WxHxD)	mm	1,055 x 215 x 299	1,055 x 215 x 299				
	Dimension			inch	41.54 x 8.46 x 11.77	41.54 x 8.46 x 11.77				
		Gross Dimensions	(WxHxD)	mm	1,115 x 290 x 375	1,115 x 290 x 375				
				inch	43.90 x 11.42 x 14.76	43.90 x 11.42 x 14.76				

Model Na	mo	Indoor Unit			AC018BNADCH/AA	AC024BNADCH/AA				
Model INa	iiie	Outdooru Unit			AC018BXADCH/AA	AC024BXADCH/AA				
IC Codo	Casing Control System Drain Pump Additional Accessories Power Supply Heat Exchanger Compressor	Indoor Unit			CNH18ADB	CNH24ADB				
2 Code		Outdooru Unit			CXH18ADB	CXH24ADB				
	Casing	Material		-	Plastic	Plastic				
	Control	Infrared remote of	ontrol	-	DB96-24901P	DB96-24901P				
door	System	Wired remote cor	ntrol	-	MWR-WG00UN / MWR-SH11UN	MWR-WG00UN / MWR-SH11UN				
	Dania Duana	Drain Pump		-	=	=				
IIL	Drain Pump	Max.lifting Height / D	isplacement	in / gal/h	=	=				
		Air Filter		-	Washable	Washable				
	Power Supply	·		Ф,#,V,Hz	1,2,208-230,60	1,2,208-230,60				
		Туре		-	Fin & Tube	Fin & Tube				
	Heat	Material	Fin	-	Al	Al				
	Exchanger	Mareilar	Tube	-	Cu	Cu				
		Fin Treatment		-	Anti-Corrosion	Anti-Corrosion				
	Compressor	Model		-	UG8T265FXAEW	UG8T300FUBJUSG				
	·	Туре		-	Twin BLDC	Twin BLDC				
		Output		kW	2.32	2.82				
		Oil	Туре	-	POE	POE				
			Initial Charge	cc (fl oz)	700	1200				
		Туре	•	-	Propeller	Propellar				
		Discharge directi	on	-	Front	Front				
	_	Quantity		EA	1	1				
	Fan			m³/min	61	76				
utdoor		Air Flow Rate	H/M/L	ft³/min	2,154	2,684				
nit				l/s	1,017	1,267				
	- M.	Туре		-	BLDC	BLDC				
	Fan Motor	Output		Wxn	125 x 1	125 x 1				
		Sound Pressure	Cooling	dB(A)	48	50				
	Sound	Level	Heating	dB(A)	48	52				
		Sound Power Lev	el	dB(A)	62	65				
		Net Weight		kg(lbs)	53.7 (118.4)	72.0 (158.7)				
		Gross Weight		kg(lbs)	57.7 (127.2)	77.0 (169.8)				
	External	Net Dimensions (WyllyD)	mm	880 x 798 x 310	940 x 998 x 330				
	Dimension	iver Diffiensions (vvxHxD)	inch	34.65 x 31.42 x 12.20	37.01 x 39.29 x 12.99				
		Cross Dimonaia	s (WVLIVD)	mm	1,023 x 881 x 413	995 x 1,096 x 426				
		Gross Dimensions (WxHxD)		inch	40.28 x 34.69 x 16.26	39.17 x 43.15 x 16.77				
	Casing	Material	Body	-	Steel Stee					
	Operating	Cooling	1	°C (°F)	°F) -18~50 (0~122) -18~50 (0~122)					
	Temp. Range	Heating		°C (°F)						



- Specification may be subject to change without prior notice.
 1) Performances are based on the following test conditions.

 Cooling: Indoortemperature: 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoortemperature: 95°F(35°C) DB, 75°F(23.9°C) WB
 Heating: Indoortemperature: 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoortemperature: 47°F(8.3°C) DB, 43°F(6.1°C) WB
 Equivalent refrigerant piping length 5m(16.4ft), 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

 M) These products contain R410A which is fluorinated greenhouse gas.

Power Efficiency System Pipe Connectio Wiring	ame	Indoor Unit			AC030BNTDCH/AA	AC036BNTDCH/AA				
Modeling	ille	Outdooru Unit			AC030BXADCH/AA	AC036BXADCH/AA				
IIS Code		Indoor Unit			CNH30TDB	CNH36TDB				
05 Code		Outdooru Unit			CXH30ADB	CXH36ADB				
	Mode	Heat Pump	Heat Pump							
				kW	2.49 / 8.79 / 9.67	3.22 / 10.55 / 11.43				
			Cooling	Btu/h	8,500 / 30,000 / 33,000	11,000 / 36,000 / 39,000				
	Performance	' '		US RT	0.71 / 2.50 / 2.75	0.92 / 3.00 / 3.25				
	1 crrormance	(Min/Std/Max)		kW	2.11 / 9.38 / 12.31	2.78 / 11.72 / 13.77				
			Heating	Btu/h	7,200 / 32,000 / 42,000	9,500 / 40,000 / 47,000				
				US RT	0.60 / 2.67 / 3.50	0.79 / 3.33 / 3.92				
		Power Input	Cooling	kW	0.50 / 3.03 / 3.85	0.90 / 3.79 / 4.30				
		(Min/Std/Max)	Heating	1000	0.41 / 3.35 / 5.40	0.56 / 4.51 / 5.82				
	Power	Current Input	Cooling	Α	2.5 / 13.6 / 17.1	5.0 / 16.8 / 19.1				
		(Min/Std/Max)	Heating		2.1 / 15.0 / 24.0	3.0 / 20.0 / 24.0				
		Current	MCA	А	22.1	21.4				
			MOP	Α	30	35				
		EER	Cooling	-	2.90	2.78				
			Cooling(US)	(Btu/h)/W	9.90	9.50				
	Efficiency	СОР	Heating	W/W	2.80	2.60				
System		SEER		-	19.5	18.6				
,		HSPF		-	9.7	10.1				
		Liquid Pipe		Туре	Flare	Flare				
		1 - 1 -		Φ, mm(inch)	9.52 (3/8)	9.52 (3/8)				
		Gas Pipe		Туре	Flare	Flare				
	Pipe	·		Φ, mm(inch)	15.88 (5/8)	15.88 (5/8)				
	Connections	Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes				
			Standard	m (ft)	7.5 (24.6)	7.5 (24.6)				
		Pipe Length	Max.	m (ft)	50 (164.0)	75 (246.0)				
		(ODU-IDU)	Elevation	m (ft)	30 (98.4)	30 (98.4)				
			Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)				
		Communication	Min.	mm ²	0.75	0.75				
	Connections	Communication	Remark	-	F1,F2	F1,F2				
		Туре		-	R410A	R-410A				
	Refrigerant	Factory Charging		kg	2.6	2.9				
				lbs	5.73	6.39				
	Option Code	Standard		=	0113FF-193572-275A5E-371700	0113FF-194593-276975-371700				
		Install		-	020010-100000-200000-300000	020010-100000-200000-300000				
	Power Supply			Ф,#,V,Hz	1,2,208-230,60	1,2,208-230,60				
		Туре		-	F&T	F&T				
	Heat	Material	Fin	-	Al	Al				
	Exchanger		Tube	-	Cu	Cu				
		Fin Treatment		-	Green Hydrophile	Green Hydrophile				
		Туре		-	Sirocco	Sirocco				
		Quantity	1	EA	2	2				
	Fan			m³/min	22.0/20.5/19.0	23.5/21.3/19.8				
	Fan	Air Flow Rate	H/M/L	ft³/min	777/724/671	830/752/699				
				l/s	367/342/317	392/355/330				
ndoor		External Static	Min/Std/Max	In Wg	-	-				
ndoor Jnit		Pressue Type		_	BLDC	BLDC				
JIIIL	Fan Motor	Output		Wxn	58 x 1	58 x 1				
	Drain	Drain Pipe		Φ, mm	ID18	ID18				
	Druill	Sound Pressure		·						
	Sound	Level	H/M/L/Silent	dB(A)	49/47/45/37	51/48/46/38				
		Sound Power Lev	el	dB(A)	63	65				
		Net Weight		kg(lbs)	18.5 (40.8)	18.5 (40.8)				
		Gross Weight		kg(lbs)	22.0 (48.5)	22.0 (48.5)				
	External	Net Dimensions (WxHxD)	mm	1,280 x 253 x 345	1,280 x 253 x 345				
	Dimension	· · · · · · · · · · · · · · · · · · ·	,	inch	50.39 x 9.96 x 13.58	50.39 x 9.96 x 13.58				
		Gross Dimensions (WxHxD)		mm	1,352 x 326 x 420	1,352 x 326 x 420				
		2.000 2.111011010112		inch	53.23 x 12.83 x 16.54	53.23 x 12.83 x 16.54				

Model Na	mo	Indoor Unit			AC030BNTDCH/AA	AC036BNTDCH/AA				
iouet iva	ille	Outdooru Unit			AC030BXADCH/AA	AC036BXADCH/AA				
S Code		Indoor Unit			CNH30TDB	CNH36TDB				
2 Code		Outdooru Unit			CXH30ADB	CXH36ADB				
	Casing	Material		-	Plastic	Plastic				
	Control	Infrared remote of	control	-	DB96-24901P	DB96-24901P				
	System	Wired remote cor	ntrol	-	MWR-WG00UN / MWR-SH11UN	MWR-WG00UN / MWR-SH11UN				
door	D'. D	Drain Pump		-	-	-				
iit	Drain Pump	Max.lifting Height / D	isplacement	in / gal/h	-	-				
	Additional Accessories	Air Filter		-	Washable	Washable				
	Power Supply			Ф,#,V,Hz	1,2,208-230,60	1,2,208-230,60				
	1,199	Туре		-	Fin & Tube	Fin & Tube				
	Heat		Fin	-	Al	Al				
	Exchanger	Material	Tube	-	Cu	Cu				
	. 5	Fin Treatment		-	Anti-Corrosion	Anti-Corrosion				
	Compressor	Model		_	UG8T300FUBJUSG	UG5TK1450FJXSG				
		Type		_	Twin BLDC	Twin BLDC				
		Output		kW	2.82	4.19				
		Oil	Туре	-	POE	PVE				
			Initial Charge	cc (fl oz)	1200	1700				
		Type		-	Propellar	Propellar				
		Discharge directi	on	-	Front	Front				
		Quantity		EA	1	2				
	Fan			m³/min	76	100				
ıtdoor		Air Flow Rate	H/M/L	ft³/min	2,684	3,532				
it			.,,,,_	l/s	1,267	1,667				
		Туре		-	BLDC	BLDC				
	Fan Motor	Output		Wxn	125 x 1	125 x 2				
		Sound Pressure	Cooling	dB(A)	50	52				
	Sound	Level	Heating	dB(A)	52	54				
	Souria	Sound Power Lev	,	dB(A)	67	69				
		Net Weight		kg(lbs)	72.0 (158.7)	86.0 (189.6)				
		Gross Weight		kg(lbs)	77.0 (169.8)	95.5 (210.5)				
	External			mm	940 x 998 x 330	940 x 1,210 x 330				
	Dimension	Net Dimensions (WxHxD)	inch	37.01 x 39.29 x 12.99	37.00 x 47.64 x 12.99				
	5			mm	995 x 1,096 x 426	995 x 1,388 x 426				
		Gross Dimension:	s (WxHxD)	inch	39.17 x 43.15 x 16.77 39.17 x 54.65 x					
	Casing	Material	Body	-	39.17 x 43.15 x 16.77 39.17 x 54.61 Steel Steel					
	Operating	Cooling	Бойу	°C (°F)						
	Temp. Range			°C (°F)						
	renip. Kange	rieating		C (1F)	-20~24 (-4~75)	-20~24 (-4~/3)				



- Specification may be subject to change without prior notice.
 1) Performances are based on the following test conditions.

 Cooling: Indoortemperature: 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoortemperature: 95°F(35°C) DB, 75°F(23.9°C) WB
 Heating: Indoortemperature: 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoortemperature: 47°F(8.3°C) DB, 43°F(6.1°C) WB
 Equivalent refrigerant piping length 5m(16.4ft), 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 powerlevel
 Reference power: 1pW / Measured according to ISO 3741

 M) These products contain R410A which is fluorinated greenhouse gas.

2. Summary Table

Wall Mounted Type

Performance Characteristics

	Net		Capac	ity		Airflow	Cound Draggura Lavel	Cound Dower Lovel
Model Code	Weight (lbs)		Cooling (Btu/h)	Heating (Btu/h)	Fan Speed	(Cooling/Heating) (CFM)	Sound Pressure Level (dBA)	(dBA)
		Max.	22,000	28,000	High	614 / 614	42	60
CNH18ADB (AC018BNADCH/AA)	27.8	Std.	18,000	20,000	Mid	540 / 540	37	-
(ACO IODINADCI I/AA)		Min.	6,000	3,300	Low	441 / 441	32	-
		Max.	27,000	40,000	High	629 / 629	44	61
CNH24ADB (AC024BNADCH/AA)	28.0	Std.	24,000	27,000	Mid	537 / 537	39	-
(ACUZ4BINADCI I/ AA)		Min.	8,000	7,000	Low	466 / 466	35	-
		Max.	33,000	42,000	High	777 / 777	49	63
CNH30TDB (AC030BNTDCH/AA)	40.8	Std.	30,000	32,000	Mid	724 / 724	47	-
(ACOSOBINIDCII/AA)		Min.	8,500	7,200	Low	671 / 671	45	-
		Max.	39,000	47,000	High	830 / 830	51	65
CNH36TDB (AC036BNTDCH/AA)	40.8	Std.	36,000	40,000	Mid	752 / 752	48	-
(ACOJOBNIDCH/AA)		Min.	11,000	9,500	Low	699 / 699	46	-



• Sound data is based on cooling operation.

Electric Characteristics

Мо	del		Outdoor U	nit		Inp	ut Curren	Power Supply				
Indoor Unit	Outdoor Unit	Rated	Voltage	e rang	e	Outdo	or Unit	Indoor	Total	MCA(A)	MOD(A)	
ilidoor Offit	Outdoor Offic	Hz	Voltz	Min.	Max	Cooling	Heating	Unit	TOLAL	MCA(A)	MOP(A)	
CNH18ADB (AC018BNADCH/AA)	CXH18ADB (AC018 B XADCH/AA)	60	208 to 230	187	253	17.94	17.94	0.42	18.36	18.4	25	
CNH24ADB (AC024BNADCH/AA)	CXH24ADB (AC024BXADCH/AA)	60	208 to 230	187	253	21.94	21.94	0.42	22.36	22.4	30	
CNH30TDB (AC030BNTDCH/AA)	CXH30ADB (AC030BXADCH/AA)	60	208 to 230	187	253	21.50	21.50	0.51	22.01	22.1	30	
CNH36TDB (AC036BNTDCH/AA)	CXH36ADB (AC036BXADCH/AA)	60	208 to 230	187	253	20.88	20.88	0.51	21.39	21.4	35	



• MCA: Minimum circuit amperes

• MOA: Maximum Overcurrent Protective Device

• Select wire size based on the value of MCA

Wall Mounted Type

(1) CNH18ADB(AC018BNADCH/AA) + CXH18ADB (AC018BXADCH/AA)

Cooling

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

Outdoor								I	ndoor '	Tempei	rature (°F, DB	/ WB)								
Temp.		68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72		90 / 75		
(°F, DB)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
(F, DB)	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	1.06	16.8	11.9	1.08	17.5	12.2	1.10	18.0	12.6	1.13	18.4	12.5	1.14	19.3	12.3	1.15	20.2	12.1	1.17
70	19.9	14.4	1.20	21.0	14.8	1.22	21.8	15.3	1.25	22.5	15.8	1.28	23.0	15.6	1.29	24.1	15.4	1.30	25.3	15.1	1.33
95	15.9	11.5	1.41	16.8	11.9	1.44	17.5	12.2	1.47	18.0	12.6	1.50	18.4	12.5	1.52	19.3	12.3	1.53	20.2	12.1	1.56
115	17.5	13.9	2.82	18.4	14.3	2.88	19.2	14.8	2.94	19.8	15.2	3.00	20.2	15.1	3.03	21.2	14.9	3.06	22.3	14.6	3.12
122	14.3	11.8	2.47	15.1	12.2	2.52	15.7	12.6	2.57	16.2	13.0	2.63	16.5	12.8	2.65	17.4	12.7	2.68	18.2	12.4	2.73

Heating

TC : Total Capacity, PI : Power Input

Outdoor		Indoor Temperature (°F, DB)														
Temperature	6	51	64		6	8	7	0	2	22	24					
(°F, DB)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI				
(۲, ۷۵)	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW				
-13	14.4	2.45	14.3	2.43	14.1	2.40	14.0	2.38	13.9	2.36	13.7	2.33				
-4	20.6 3.51		20.4	3.48	20.2	3.44	20.0	3.41	19.8	3.38	19.6	3.34				
14	24.7	4.34	24.5	4.29	24.2	4.25	24.0	4.21	23.8	4.17	23.5	4.13				
32	23.7	2.92	23.5	2.89	23.2	2.86	23.0	2.84	22.8	2.81	22.5	2.78				
47	20.6	1.89	20.4	1.87	20.2	1.85	20.0	1.83	19.8	1.81	19.6	1.79				
75.2	26.8	2.17	26.5	2.15	26.3	2.13	26.0	2.10	25.7	2.08	25.5	2.06				



Wall Mounted Type

(2) CNH24ADB(AC024BNADCH/AA) + CXH24ADB (AC024BXADCH/AA)

Cooling

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

Outdoor								I	ndoor '	Tempei	ature (°F, DB	/WB)								
Temp.		68 / 57		72 / 61			77 / 64				80 / 67			82 / 70			86 / 72		90 / 75		
(°F, DB)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
(F, DB)	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	25.5	17.1	1.21	26.8	17.6	1.23	27.9	18.2	1.26	28.8	18.7	1.28	29.4	18.5	1.29	30.8	18.3	1.31	32.4	18.0	1.33
70	23.4	16.9	1.64	24.6	17.4	1.68	25.6	17.9	1.71	26.4	18.5	1.75	26.9	18.3	1.76	28.3	18.1	1.78	29.7	17.8	1.82
95	21.2	15.3	2.19	22.3	15.8	2.24	23.3	16.3	2.28	24.0	16.8	2.33	24.5	16.6	2.35	25.7	16.5	2.38	27.0	16.1	2.42
115	21.2	16.4	3.18	22.3	16.9	3.24	23.3	17.5	3.31	24.0	18.0	3.38	24.5	17.8	3.41	25.7	17.6	3.45	27.0	17.3	3.51
122	18.0	14.9	2.85	19.0	15.4	2.91	19.8	15.8	2.97	20.4	16.3	3.03	20.8	16.2	3.06	21.8	16.0	3.09	22.9	15.7	3.15

Heating

TC : Total Capacity, PI : Power Input

Outdoor	Indoor Temperature (°F, DB)											
Temperature	6	61		64		68		70		.2	24	
'	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
(°F, DB)	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-13	15.3	2.53	15.1	2.51	15.0	2.48	14.9	2.46	14.7	2.43	14.6	2.41
-4	27.8	5.85	27.5	5.79	27.3	5.74	27.0	5.68	26.7	5.62	26.5	5.57
14	29.2	4.50	28.9	4.46	28.6	4.41	28.4	4.37	28.1	4.32	27.8	4.28
32	30.6	3.94	30.3	3.90	30.0	3.86	29.7	3.82	29.4	3.78	29.1	3.75
47	27.8	2.81	27.5	2.78	27.3	2.76	27.0	2.73	26.7	2.70	26.5	2.68
75.2	34.8	2.95	34.4	2.92	34.1	2.90	33.8	2.87	33.4	2.84	33.1	2.81

NOTE

Wall Mounted Type

(3) CNH30TDB(AC030BNTDCH/AA) + CXH30ADB (AC030BXADCH/AA)

Cooling

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

Outdoor								I	ndoor	Tempe	rature	°F, DB	/WB)								
Temp.		68 / 57	,		72 / 61			77 / 64			80 / 67	'		82 / 70			86 / 72			90 / 75	
(°F, DB)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
(F, DD)	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	31.8	21.4	1.57	33.5	22.0	1.60	34.9	22.7	1.63	36.0	23.4	1.67	36.7	23.2	1.68	38.6	22.9	1.70	40.5	22.5	1.73
70	29.2	21.1	2.14	30.7	21.7	2.18	32.0	22.4	2.23	33.0	23.1	2.27	33.7	22.9	2.30	35.3	22.6	2.32	37.1	22.2	2.36
95	26.5	19.2	2.85	27.9	19.8	2.91	29.1	20.4	2.97	30.0	21.0	3.03	30.6	20.8	3.06	32.1	20.6	3.09	33.7	20.2	3.15
115	23.9	18.5	3.56	25.1	19.1	3.64	26.2	19.6	3.71	27.0	20.3	3.79	27.5	20.0	3.83	28.9	19.8	3.86	30.4	19.5	3.94
122	19.9	16.4	3.28	21.0	16.9	3.35	21.8	17.5	3.41	22.5	18.0	3.48	23.0	17.8	3.52	24.1	17.6	3.55	25.3	17.3	3.63

Heating

TC : Total Capacity, PI : Power Input

Outdoor	Indoor Temperature (°F, DB)														
Temperature	61		64		68		70		22		24				
(°F, DB)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI			
(F, DD)	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW			
-4	27.8	5.42	27.5	5.37	27.3	5.31	27.0	5.26	26.7	5.21	26.5	5.16			
14	34.6	5.52	34.3	5.47	33.9	5.41	33.6	5.36	33.3	5.31	32.9	5.25			
32	36.3	4.83	35.9	4.78	35.6	4.74	35.2	4.69	34.8	4.64	34.5	4.60			
47	33.0	3.45	32.6	3.42	32.3	3.38	32.0	3.35	31.7	3.32	31.4	3.28			
75.2	41.2	3.62	40.8	3.59	40.4	3.55	40.0	3.52	39.6	3.48	39.2	3.45			

NOTE

Wall Mounted Type

(4) CNH36TDB(AC036BNTDCH/AA) + CXH36ADB (AC036BXADCH/AA)

Cooling

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

Outdoor									ndoor	Temper	ature (°F, DB	/ WB)								
Temp.		68 / 57			72 / 61			77 / 64			80 / 67	'		82 / 70			86 / 72			90 / 75	
(°F, DB)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
(F, DB)	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	32.5	23.5	2.32	34.2	24.2	2.37	35.6	24.9	2.41	36.7	25.7	2.46	37.5	25.4	2.49	39.3	25.2	2.51	41.3	24.7	2.56
70	33.4	24.1	1.96	35.2	24.9	2.00	36.7	25.7	2.04	37.8	26.5	2.08	38.6	26.2	2.11	40.5	25.9	2.13	42.5	25.4	2.17
95	31.8	23.0	3.57	33.5	23.7	3.64	34.9	24.4	3.71	36.0	25.2	3.79	36.7	24.9	3.83	38.6	24.7	3.87	40.5	24.2	3.94
115	27.1	20.9	3.92	28.5	21.6	4.00	29.7	22.3	4.09	30.6	23.0	4.17	31.2	22.7	4.21	32.8	22.5	4.25	34.4	22.0	4.34
122	22.3	18.4	3.28	23.5	19.0	3.35	24.4	19.6	3.42	25.2	20.2	3.49	25.7	20.0	3.52	27.0	19.8	3.56	28.3	19.4	3.63

Heating

TC : Total Capacity, PI : Power Input

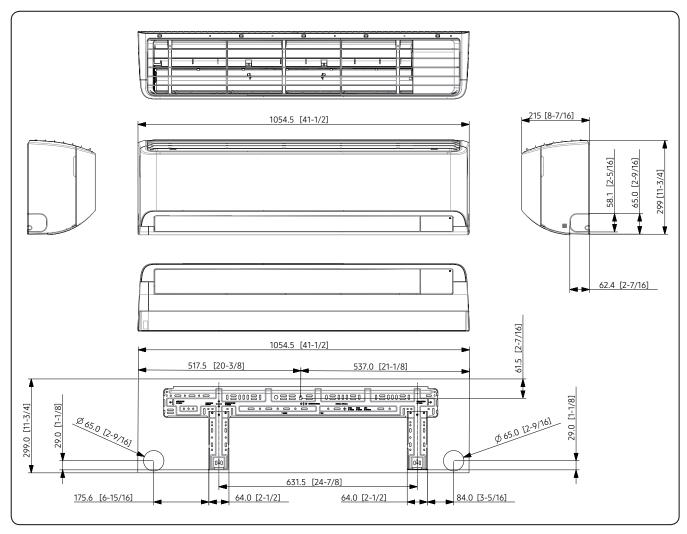
Outdoor	Indoor Temperature (°F, DB)											
Temperature	61		64		68		70		22		24	
•	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
(°F, DB)	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	31.9	5.44	31.6	5.39	31.3	5.33	31.0	5.28	30.7	5.23	30.4	5.17
14	37.1	5.58	36.7	5.52	36.4	5.47	36.0	5.41	35.6	5.36	35.3	5.30
32	41.2	5.34	40.8	5.29	40.4	5.24	40.0	5.19	39.6	5.13	39.2	5.08
47	41.2	4.65	40.8	4.60	40.4	4.56	40.0	4.51	39.6	4.46	39.2	4.42
75.2	47.4	4.27	46.9	4.23	46.5	4.19	46.0	4.15	45.5	4.11	45.1	4.07

NOTE

4. Dimensional Drawing

Wall Mounted Type

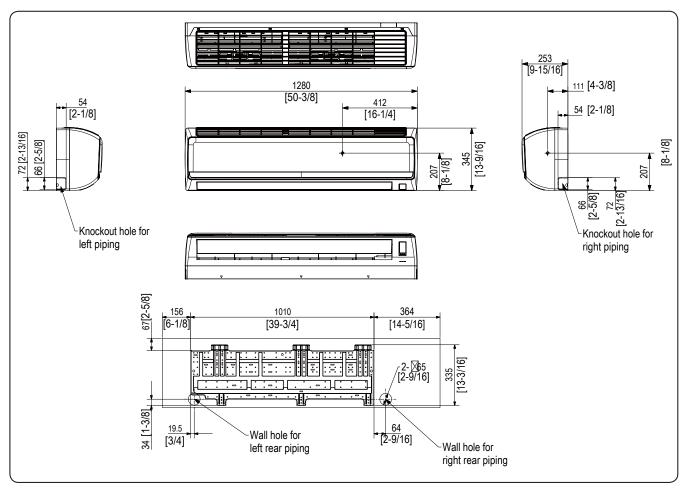
CNH18ADB (ACO18BNADCH/AA), CNH24ADB (ACO24BNADCH/AA)



4. Dimensional Drawing

Wall Mounted Type

CNH30TDB (AC030BNTDCH/AA), CNH36TDB (AC036BNTDCH/AA)

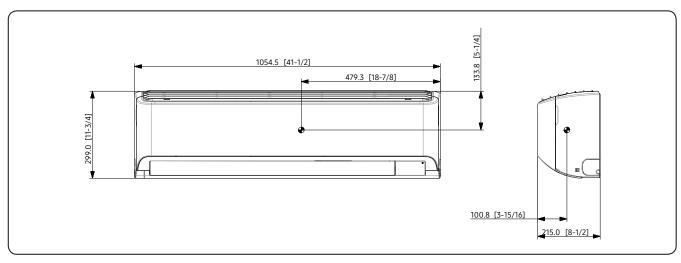


5. Center of Gravity

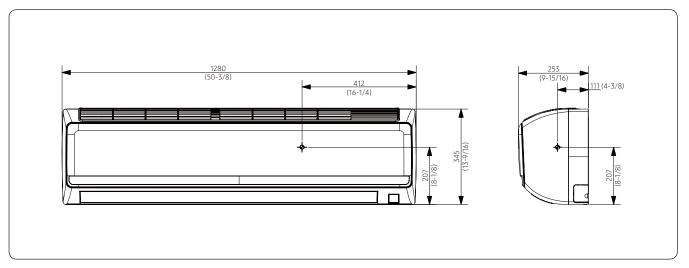
Wall Mounted Type

CNH18ADB (AC018BNADCH/AA), CNH24ADB (AC024BNADCH/AA)

Units: mm [inches]



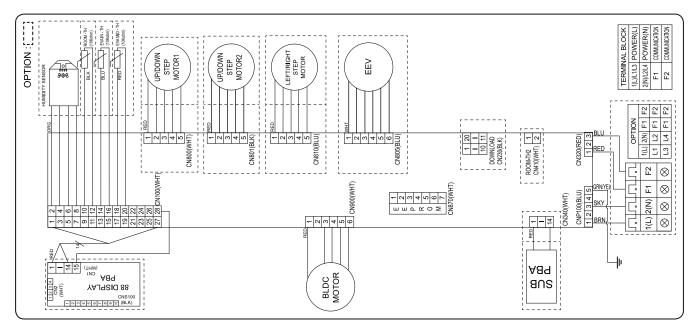
CNH30TDB (AC030BNTDCH/AA), CNH36TDB (AC036BNTDCH/AA)



6. Electrical Wiring Diagram

Wall Mounted Type

CNH18ADB (AC018BNADCH/AA), CNH24ADB (AC024BNADCH/AA)



MAIN PBA	Printed circuit board(MAIN)	ROOM(10K)	Thermistor ROOM
SUB PBA	Printed circuit board(SUB)	EVA-IN(10K)	Thermistor EVA IN
88 DISPLAY PBA	Printed circuit board(DISPLAY)	EVA-MID(10K)	Thermistor EVA OUT
		ROOM2(10K)	External Thermistor ROOM((Option)

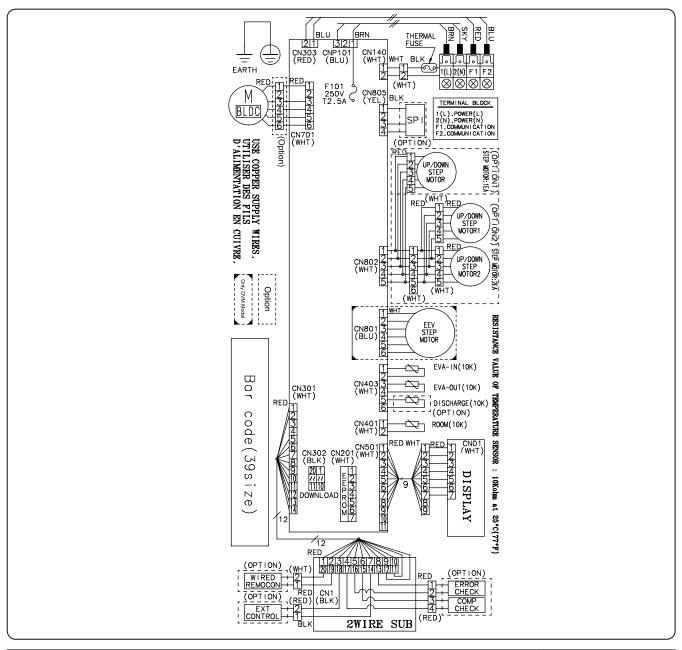
NOTE

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

6. Electrical Wiring Diagram

Wall Mounted Type

CNH30TDB (AC030BNTDCH/AA), CNH36TDB (AC036BNTDCH/AA)



SPI	S-Plasma ion	EEV	Electronic Expansion Valve	ROOM	Thermistor ROOM in (10K)
M-BLDC	BLDC Motor	EVA-IN	Thermistor EVA IN(10K)	EVA-OUT	Thermistor EVA OUT(10K)

NOTE

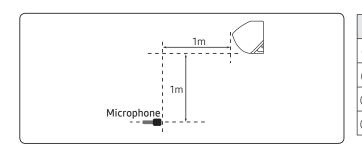
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow: blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remotecontroller transmission F3-F4.
- Protective earth(screw)

7. Sound Data

Wall Mounted Type

Sound Pressure level

Unit: dB(A)

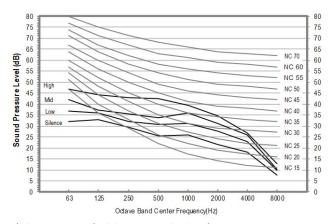


Model	High	Mid	Low	Silence
CNH18ADB (ACO18BNADCH/AA)	42	37	32	29
CNH24ADB (AC024BNADCH/AA)	44	39	35	30
CNH30TDB (AC030BNTDCH/AA)	49	47	45	37
CNH36TDB (AC036BNTDCH/AA)	51	48	46	38

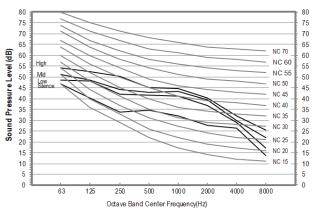
- NC Curve
 - 1) CNH18ADB (AC018BNADCH/AA)

75 70 70 65 65 60 55 Sound Pressure Level (dB) NC 60 50 45 50 NC 50 45 NC 45 40 35 30 25 20 40 NC 40 35 NC 35 30 NC 30 25 NC 25 20 15 15 10 10 1000 500 Octave Band Center Frequency(Hz)

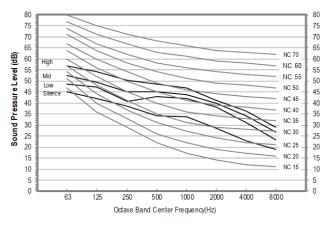




3) CNH30TDB (AC030BNTDCH/AA)



4) CNH36TDB (ACO36BNTDCH/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

Wall Mounted Type

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.

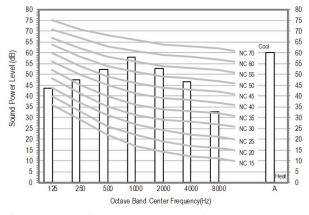
- Measured according to ISO 3741.

Model	Cooling
CNH18ADB (AC018BNADCH/AA)	60
CNH24ADB (AC024BNADCH/AA)	61
CNH30TDB (AC030BNTDCH/AA)	63
CNH36TDB (AC036BNTDCH/AA)	65

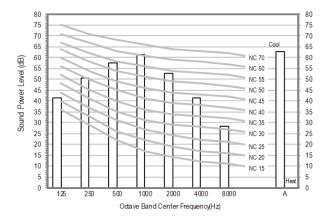
Unit: dB(A)

NC Curve

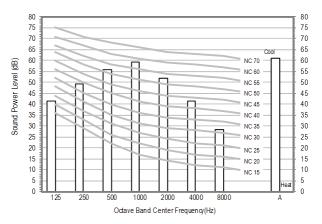
1) CNH18ADB (AC018BNADCH/AA)



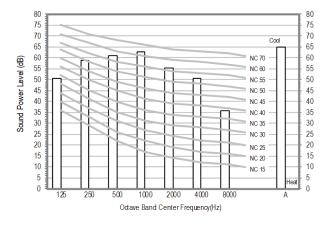
3) CNH30TDB (AC030BNTDCH/AA)



2) CNH24ADB (AC024BNADCH/AA)



4) CNH36TDB (ACO36BNTDCH/AA)

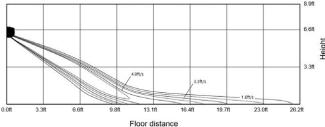


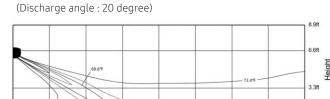
8. Temperature and air flow distribution

Wall Mounted Type

CNH18ADB (AC018BNADCH/AA)

• Cooling Air Velocity distribution (Discharge angle : 20 degree)

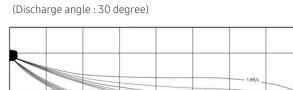


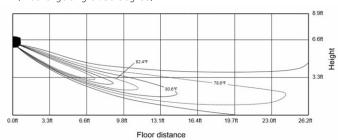


• Heating Air Velocity distribution • Heating temperature distribution

(Discharge angle : 30 degree)

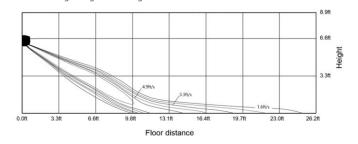
• Cooling temperature distribution





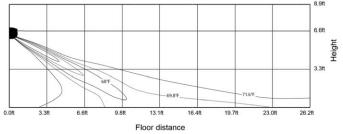
CNH24ADB (AC024BNADCH/AA)

• Cooling Air Velocity distribution (Discharge angle : 20 degree)



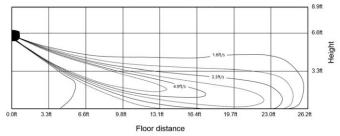
• Cooling temperature distribution

(Discharge angle : 20 degree)



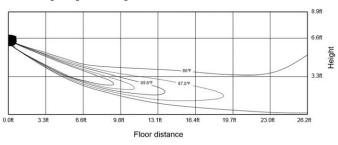
• Heating Air Velocity distribution





• Heating temperature distribution

(Discharge angle: 30 degree)

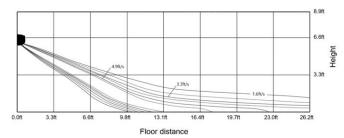


8. Temperature and air flow distribution

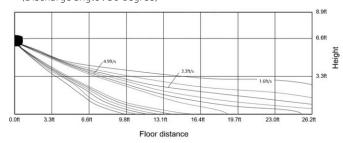
Wall Mounted Type

CNH30TDB (AC030BNTDCH/AA)

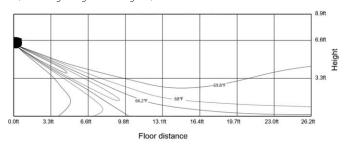
• Cooling Air Velocity distribution (Discharge angle: 20 degree)



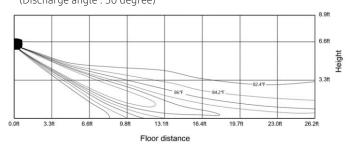
• Heating Air Velocity distribution (Discharge angle: 30 degree)



• Cooling temperature distribution (Discharge angle : 20 degree)

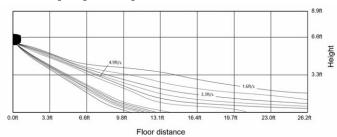


• Heating temperature distribution (Discharge angle: 30 degree)

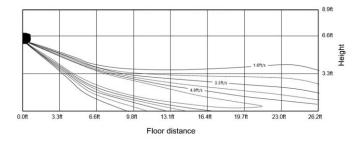


CNH36TDB (AC036BNTDCH/AA)

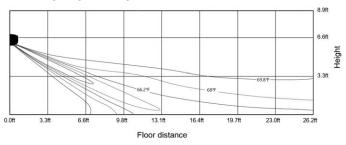
• Cooling Air Velocity distribution (Discharge angle: 20 degree)



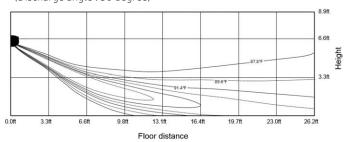
 Heating Air Velocity distribution (Discharge angle: 30 degree)



• Cooling temperature distribution (Discharge angle : 20 degree)



• Heating temperature distribution (Discharge angle : 30 degree)



Outdoor Units

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7. Operation Range	44
8. Piping Diagram	45

1. Summary Table

Outdoor Units

Performance Characteristics

Capacity/	Model Code	Net Size	Net Weight	Airflow	Sound Pressu	re Level (dBA)	Sound Power	
(Btu/h)	Model Code	(WxHxD inch)	(lbs)	(CFM)	Cooling	Heating	Level (dBA)	
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	

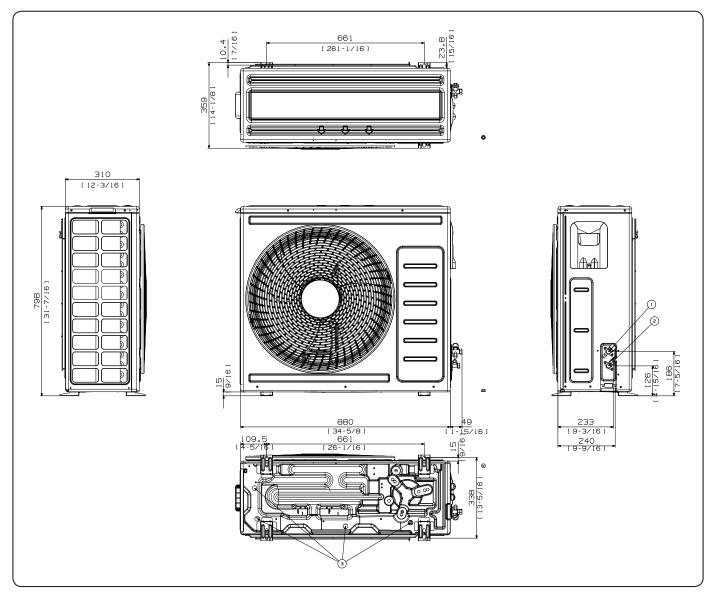


• Sound power level is based on cooling operation.

2. Dimensional Drawing

Outdoor Units

CXH18ADB (AC018BXADCH/AA)

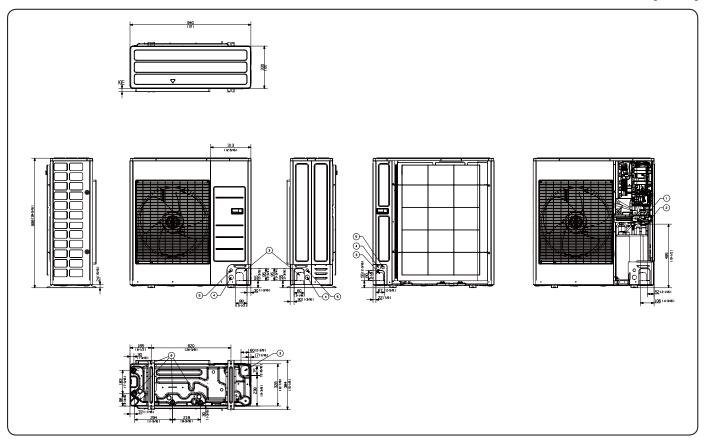


No.	Name	Description
1	Refrigerant liquid pipe	Φ 12.7mm(1/2")
2	Refrigerant gas pipe	Φ 6.35mm(1/4")
3	Drain hole	-

2. Dimensional D awing

Outdoor Units

CXH24ADB (ACO24BXADCH/AA), CXH30ADB (ACO30BXADCH/AA)

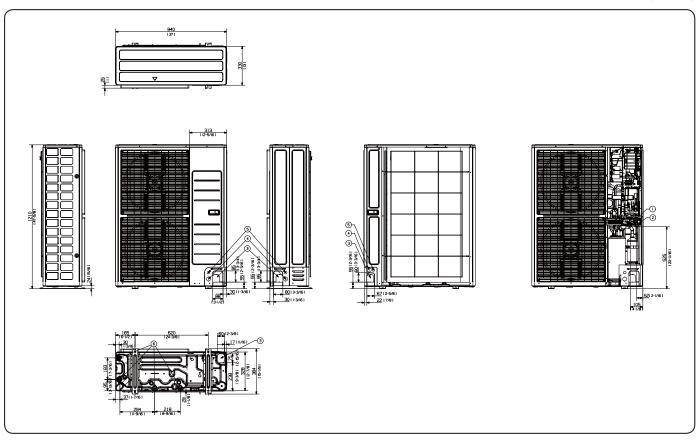


No.	Name	Description	
140.		CXH24ADB (AC024BXADCH/AA)	CXH30ADB(AC030BXADCH/AA)
1	Refrigerant liquid pipe	Φ 6.35mm(1/4")	Φ 9.52mm(3/8")
2	Refrigerant gas pipe	Φ 15.88mm(5/8")	
3	Piping intake knockout hole	Front / Side / Rear / Bottom	
4	Power wiring conduit	Front / Side / Rear , Φ 34mm(1-3/8")	
5	Communication 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)



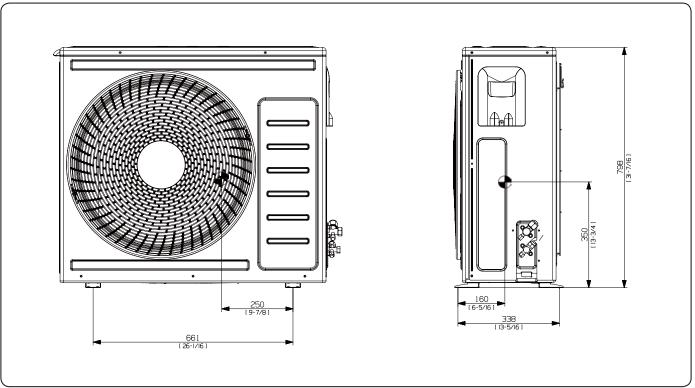
No.	Name	Description	
1	Refrigerant liquid pipe	Φ 9.52mm(3/8")	
2	Refrigerant gas pipe	Φ 15.88mm(5/8")	
3	Piping intake knockout hole	Front / Side / Rear / Bottom	
4	Power wiring conduit	Front / Side / Rear , Φ 34mm(1-3/8")	
5	Communication wiring conduit	Front / Side / Rear , Φ 22mm(7/8")	
6	Drain Hole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

3. Center of Gravity

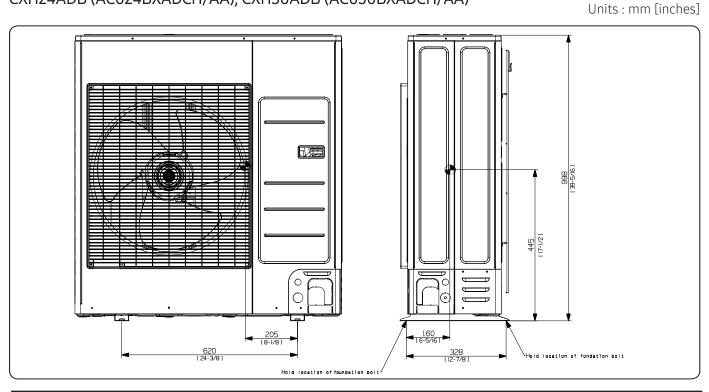
Outdoor Units

CXH18ADB (AC018BXADCH/AA)

Units : mm [inches]



CXH24ADB (ACO24BXADCH/AA), CXH30ADB (ACO30BXADCH/AA)

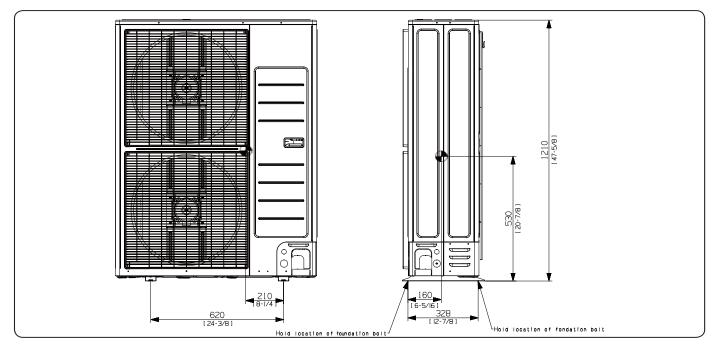


3. Center of Gravity

Outdoor Units

CXH36ADB (AC036BXADCH/AA)

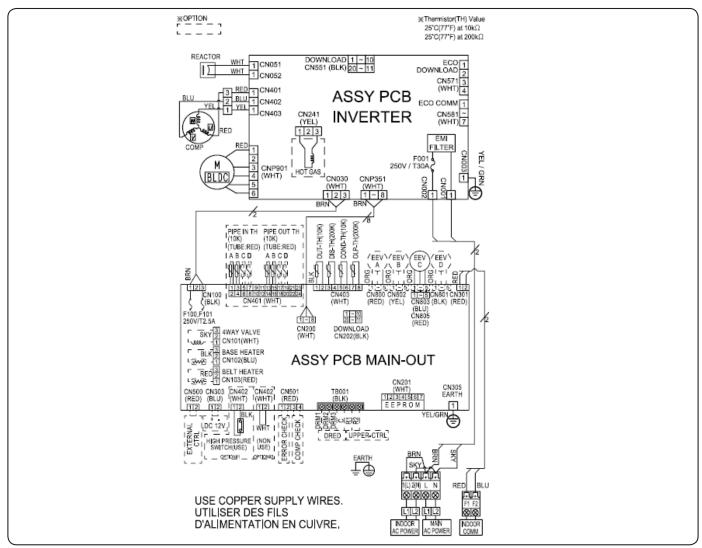
Units: mm [inches]



4. Electrical Wiring Diagram

Outdoor Units

CXH18ADB (AC018BXADCH/AA)



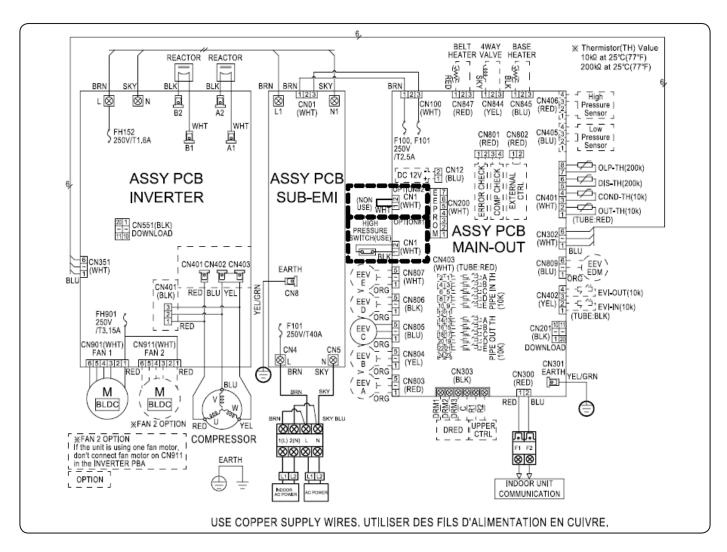
MAIN PCB	Printed circuit board(MAIN)	EEV	Electronic Expansion Valve
INVERTER PCB	Printed circuit board(INVERTER)	M-BLDC	BLDC Motor
EMI PCB	Printed circuit board(EMI)	OLP-TEMP	Thermistor OLP

- 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, ۖ : The wire quantity

4. Electrical Wiring Diagram

Outdoor Units

CXH24ADB (ACO24BXADCH/AA), CXH30ADB (ACO30BXADCH/AA), CXH36ADB (ACO36BXADCH/AA)



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

- 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, ┡ : The wire quantity

5. Sound Data

Outdoor Units

Sound Pressure level

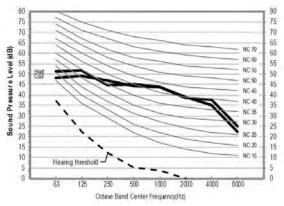
Unit: dB(A)

-,- " 1.5m	
	Front

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

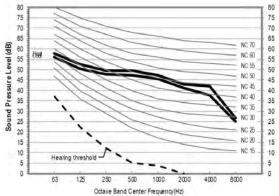
NC Curve

1) CXH18ADB (AC018BXADCH/AA)

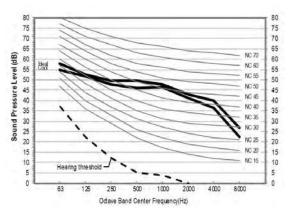




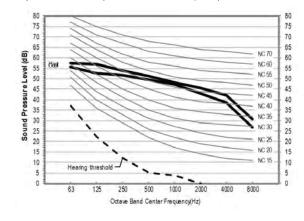
2) CXH24ADB (AC024BXADCH/AA)







4) CXH36ADB (ACO36BXADCH/AA)



- 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



- 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.

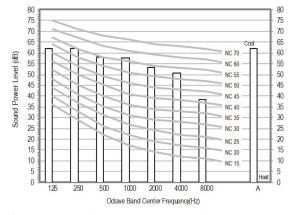
ModelCoolingCXH18ADB (AC018BXADCH/AA)62CXH24ADB (AC024BXADCH/AA)65

Unit: dB(A)

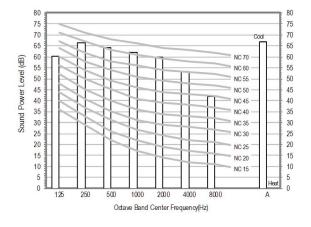
CXH24ADB (AC024BXADCH/AA)	65
CXH30ADB (AC030BXADCH/AA)	67
CXH36ADB (ACO36BXADCH/AA)	69

NC Curve

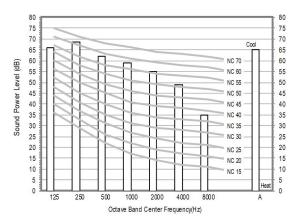
1) CXH18ADB (AC018BXADCH/AA)



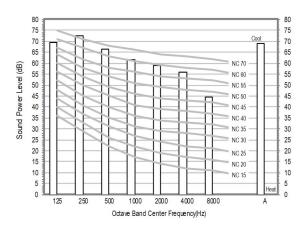
3) CXH30ADB (AC030BXADCH/AA)



2) CXH24ADB (ACO24BXADCH/AA)



4) CXH36ADB (ACO36BXADCH/AA)

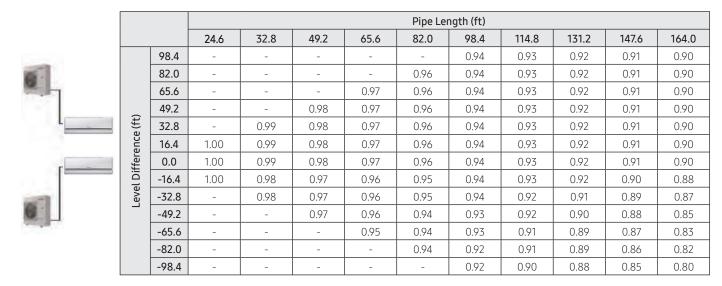


6. Capacity Correction

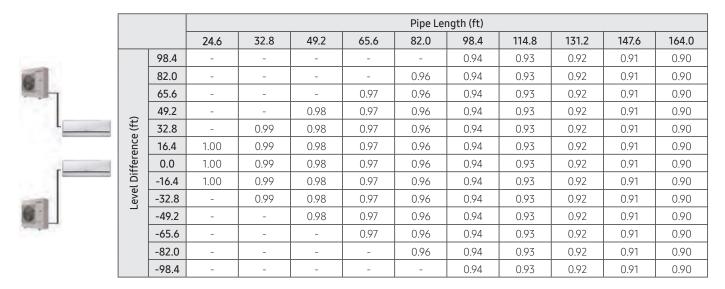
Outdoor Units

CNH18ADB(AC018BNADCH/AA)+CXH18ADB(AC018BXADCH/AA)
CNH24ADB(AC024BNADCH/AA)+CXH24ADB(AC024BXADCH/AA)
CNH30TDB(AC030BNTDCH/AA)+CXH30ADB(AC030BXADCH/AA)

Cooling



Heating



6. Capacity Correction

Outdoor Units

CNH36TDB(AC036BNTDCH/AA)+CXH36ADB(AC036BXADCH/AA)

Cooling



								Pipe	Length	ı (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
	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
e (f f)	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
Level Difference	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
ffer	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
١	-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
eve.	-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	-	-	-	1	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	n (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
	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	1	-	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
Level Difference (ft)	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
ence	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
ffer	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
i Di	-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
-eve	-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

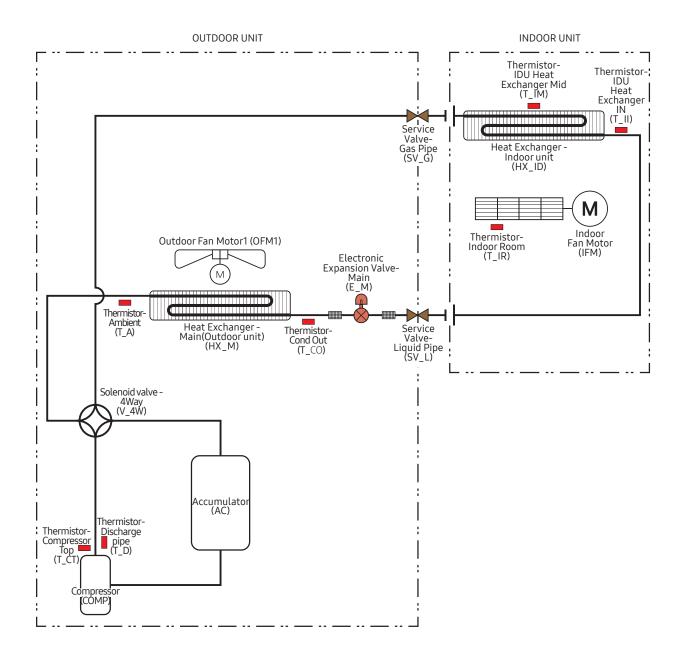
	Mode	Indoor temperature	Outdoor temperature	Indoor humidity
Cooling		18°C to 32°C (64°F to 90°F)	-18°C to 50°C (0°F to 122°F)	80% or less
Drying		18°C to 32°C (64°F to 90°F)	-18°C to 50°C (0°F to 122°F)	-
Heating	~ 24kBtu/h 30°C(86°F) or less		-25°C to 24°C (-13°F to 75°F)	-
Heating	30 ~ 36kBtu/h	30 C(00 1) 01 tess	-20°C to 24°C (-4°F to 75°F)	-

- 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

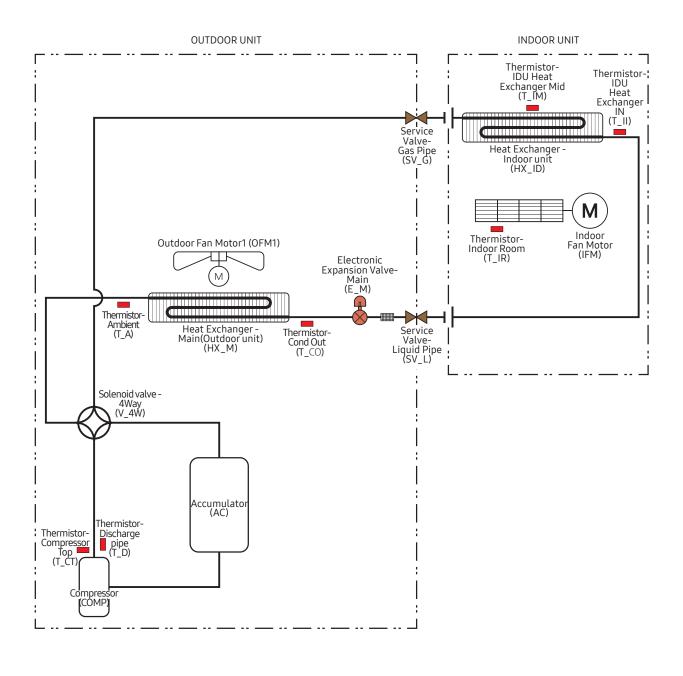
CNH18ADB(AC018BNADCH/AA)+CXH18ADB(AC018BXADCH/AA)



8. Piping Diagram

Outdoor Units

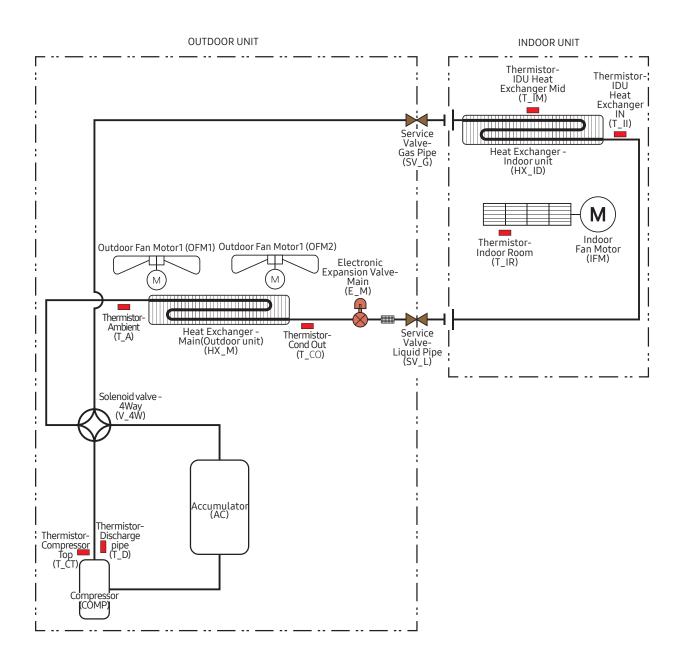
CNH24ADB(AC024BNADCH/AA)+CXH24ADB(AC024BXADCH/AA)
CNH30TDB(AC030BNTDCH/AA)+CXH30ADB(AC030BXADCH/AA)



8. Piping Diagram

Outdoor Units

CNH36TDB(AC036BNTDCH/AA)+CXH36ADB(AC036BXADCH/AA)



Wall Mounted Type CNH18/24ADB(AC018/024BNADCH/AA)

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.



WARNING

- IMPORTANT: it's mandatory to consider either the table 1 or taking into consideration the local law regarding the minimum living space of the premises.
- Minimum installation height of indoor unit is 0.6 m for floor mounted, 1.8 m for wall, 2.2 m for ceiling.

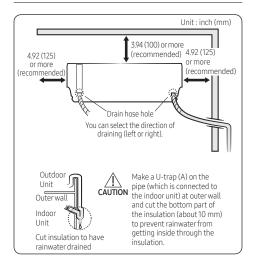


/!\ CAUTION

Do not install the air conditioner in following places.

- The place where there is mineral oil or arsenic acid. Resin parts flame and the accessories may drop or water may leak. The capacity of the heat exchanger may reduce or the air conditioner may be out of order.
- The place where corrosive gas such as sulfurous 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 fiber or flammable dust.
- The place where thinner or gasoline is handled. Gas may leak and it may cause fire.
- The place where animals may urinate on the product. Ammonia may be generated.
- The place where is close to heat sources.

Overview of installation location requirements





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

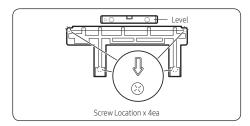
Attaching the mounting bracket to the wall

1 Hold the mounting bracket against the wall at the selected installation position (in Step 2), making sure that the screw holes align with the center of the studs in the wall. If the screw locations do not align with the studs, use wall anchors



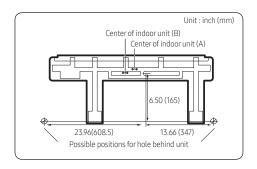
CAUTION

- The recommended best practice is to attach the mounting bracket directly to the studs in the wall. If you did not find a suitable location with studs (in Step 2), or if the wall is concrete, you must use wall anchors of a suitable type and weight capacity, and install them according to the manufacturer's instructions. Failure to do so may cause the material surrounding the joints to crumble over time and the screws to be loosened and stripped. This may result in the unit falling from the wall, which could cause physical injury or equipment damage.
- Using a level, make sure that the mounting bracket is level, then mark the location of the screw holes on the
- If using wall anchors, install them at the screw hole positions, following the manufacturer's instructions.
- Using six field-supplied mounting screws and anchors (if applicable), attach the bracket to the wall.



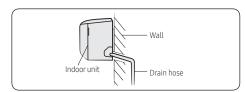
Drilling the wall penetration

- Determine the position of the hole through which the piping bundle (consisting of power and communication cables, refrigerant pipes, and the drain hose) will pass. Consider the following:
 - The hole inner diameter must be 2.56 inch (65mm).
 - The recommended hole location is behind the unit so that the hole and the piping bundle will not be visible in the room. The minimum distances between the hole and the mounting bracket are:

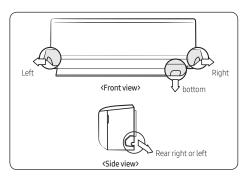


Wall Mounted Type CNH18/24ADB(AC018/024BNADCH/AA)

- If the hole cannot be positioned behind the unit, find a position as close to the unit as possible. The piping bundle that exits the unit and extends to the hole will need to be attached to the wall and will be visible inside the room.
- In relation to the bracket shown above, the unit is shipped with the drain hose connection on the right, the drain hose exits the unit on the left, and the refrigerant pipes are bent to exit on the left. Thus, positioning the hole to the left requires the least effort. If you position the hole to the right or below the unit, you will need to move the drain hose connection to the left and bend the pipes so that the hose and pipes exit to the right or bottom. See the figure in Step 7.
- 2 Use a standard 2.56 inch(65mm) hole saw to drill one hole at the selected location, at a 15° downward angle so that the drain hose will drain properly.



3 Based on the hole location, determine where the piping bundle (drain hose, refrigerant pipes, and cables) will exit the unit.



NOTE

 The left, right, or bottom exit will only be used if the hole is not positioned behind the unit.

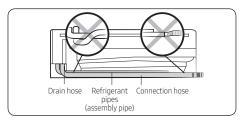
Connecting the refrigerant pipes

Connect indoor and outdoor units with field-supplied copper pipes by means of flare connections. Use insulated seamless refrigeration grade pipe only, (Cu DHP type according to ISO1337), degreased and deoxidized, suitable for operating pressures of at least 4200 kPa and for burst pressure of at least 20700 kPa. Under no circumstances must sanitary type copper pipe be used.

IMPORTANT

 When installing the unit, always connect the refrigerant pipes first, followed by the electrical cables.
 For disassembly, always disassemble the electric cables before the refrigerant pipes. Two short refrigerant pipes are already attached to the air conditioner:

- The smaller-diameter pipe is for the high-pressure, two-phase refrigerant.
- The larger-diameter pipe is for the low-pressure refrigerant vapor.

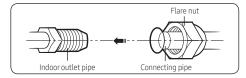


In Step 4 you determined the exit position for the piping bundle. The unit has three knockouts available for the left, right, and bottom exits. When the bundle exits directly from the rear, none of the knockouts are used.

- If the pipes will exit directly from the rear, skip to step 3.
 Otherwise, cut out the appropriate knockout piece (left, right, or bottom).
- 2 Use a razor knife to clean the cut edges (flashing).
- 3 The left exit is the only position that does not require bending the pipes. For other positions, bend the pipes so that they will exit in the selected exit position.
 - The bending radius should be greater than 100 mm.
 - Bend the smaller pipe gradually to prevent kinking.
 The larger pipe has a preinstalled spring bender to prevent kinking.
 - Make sure that the pipes do not protrude from the back of the unit in a way that will make it difficult to attach the unit to the mounting bracket.
 - For right and bottom exits, pull the pipes out through the selected knockout opening. For left exits, the piping connections will be made in the service space behind the indoor unit (under the cover panel).

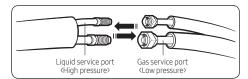
■ NOTE

- If you are using the right rear exit, the pipes should be long enough to extend through the wall without needing to connect the line set first. It may be easier to connect the line set outside of the building, after you have bundled the pipes and cables and passed the bundle through the wall. In this case, do not connect the line set now. Instead, complete Step 9 through Step 12, then go outside and connect the line set as described below.
- 4 Slowly remove the protective caps on the refrigerant pipe connections to relieve the nitrogen holding charge.
- 5 Connect the line set to each pipe.



Wall Mounted Type CNH18/24ADB(AC018/024BNADCH/AA)

Hand-tighten the flare nuts to make sure that they do not become stripped.



Torque the flare connections to the following values:

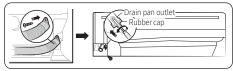
Outer diameter (inch (mm))	Torque (lbf•ft (N•m))	Torque (kgf•cm)
Ø 1/4" (6.35)	10.3 to 13.3 (14 to 18)	140~180
Ø 3/8" (9.52)	25.1 to 31.0 (34 to 42)	350~430
Ø1/2" (12.70)	36.1 to 45.0 (49 to 61)	500~620
Ø 5/8" (15.88)	50.2 to 60.5 (68 to 82)	690~830

∕!\ CAUTION

- Tighten the flare nuts only to the specified torque. If a flare nut is overtightened, the flare face may crack, causing refrigerant leakage.
- Do not box in or cover the pipe connections. Make sure that the connections are accessible for testing later in the installation process and for future servicing.
- Tape over the end of the pipes so that debris will not enter the piping when it is passed through the wall. The pipes will be insulated later in the installation process.

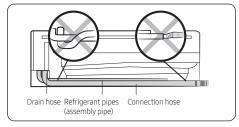
Connecting the drain hose

1 In Step 4 you determined the exit position for the piping bundle. If using the right, bottom, or right rear exit, change the drain hose connection from the right to the left so that the drain hose will lie along the inside of the unit and exit to the right.



CAUTION

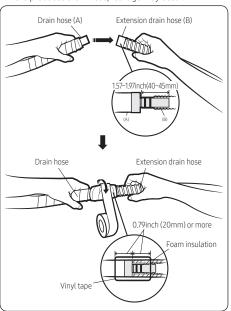
- Be careful not to puncture the plug with the screwdriver when installing it.
- 2 If using the left, right, or bottom exit, pass the drain hose through the selected knockout.



Connect a 0.63inch (15.88mm) ID extension drain hose to the main drain hose.

CAUTION

If the diameter of the connection hose is smaller than the product's drain hose, leakage may occur.



- Do not box in or cover the drain hose connection. It must be accessible for testing later in the installation process and for future servicing.
- If the drain hose is routed inside the room, insulate the hose so that dripping condensation does not damage the furniture or floors.

Connecting the power and communication cables

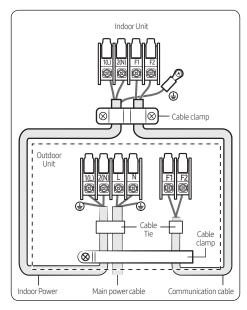
/!\ CAUTION

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

The indoor unit is powered through the outdoor unit by means of a H05 RN-F connection cable (or a more power model), with insulation in synthetic rubber and a jacket in polychloroprene (neoprene), in accordance with the requirements specified in the standard EN 60335-2-40.

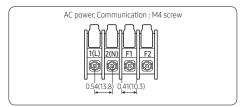
- Remove the screw on the electrical component box and remove the cover plate.
- Route the connection cord through the side of the indoor unit and connect the cable to the terminals refer to the figure below.
- Route the other end of the cable to the outdoor unit through the ceiling & the hole on the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

Wall Mounted Type CNH18/24ADB(AC018/024BNADCH/AA)



Indoor power supply						
Powersupply	Max/ Min(V)	Indoor power cable				
208 to 230V, 60Hz	±10%	0.0012in² ↑(0.75mm²↑), 3 wires				
Communication cable						
0.00	0.0012in² ↑(0.75mm²↑), 2 wires					

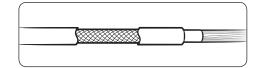




	Tightening torque					
	N⋅m	lbf.ft				
M3.5	0.8 to 1.2	0.59 to 0.89				
M4	1.2 to 1.8	0.89 to 1.1				

(1N·m=10kgf·cm)

- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F)
- 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 or network room, use the double shielded communication cable (tape aluminum / polyester braid + copper) of FROHH2R type.

Wall Mounted Type CNH30/36TDB(AC030/036BNTDCH/AA)

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.



WARNING

Minimum installation height of indoor unit is 0.6 m for floor mounted, 1.8 m for wall, 2.2 m for ceiling.

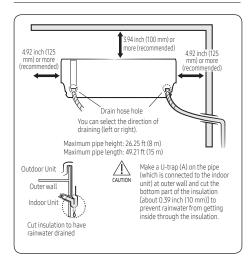


CAUTION

Do not install the air conditioner in following places.

- The place where there is mineral oil or arsenic acid. Resin parts flame and the accessories may drop or water may leak. The capacity of the heat exchanger may reduce or the air conditioner may be out of order.
- The place where corrosive gas such as sulfurous 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 fiber or flammable dust.
- · The place where thinner or gasoline is handled. Gas may leak and it may cause fire.
- The place where animals may urinate on the product. Ammonia may be generated.
- The place where is close to heat sources.

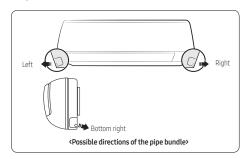
Overview of installation location requirements



Drilling a hole through the wall

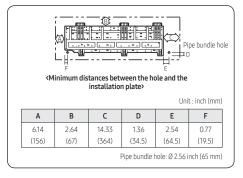
Before fixing the installation plate to a wall and then fixing the indoor unit to the installation plate, a window frame, or a gypsum board, you must determine the position of a hole [with 2.56] inch (65 mm) inner diameter] through which the pipe bundle (consisting of power and communication cables, refrigerant pipes, and drain hose) will pass and then drill that hole.

Determine the position of a 2.56 inch (65 mm) hole in consideration of the possible directions of the pipe bundle and the minimum distances between the hole and the installation plate.





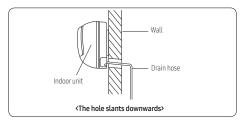
• If changing the pipe direction from left to right, do not drastically bent it but slowly turn it in the opposite direction as shown. Otherwise, the pipe may be damaged in the process.



Drill the hole.



- Be sure to drill only one hole.
- Make sure that the hole slants downwards so that the drain hose slants downwards to drain water well.



Wall Mounted Type CNH30/36TDB(AC030/036BNTDCH/AA)

Fixing the installation plate

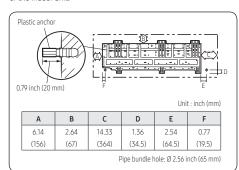
You can install the indoor unit on a wall, window frame, or gypsum board.

<u>∕!</u>\ WARNING

• Make sure that the wall, window frame, or gypsum board can withstand the weight of the indoor unit. If you install the indoor unit in a place where it is not strong enough to withstand the unit's weight, the unit could fall and cause injury.

When fixing the indoor unit on a wall

Fix the installation plate to the wall giving attention to the weight of the indoor unit.



■ NOTE

If you mount the plate to a concrete wall using plastic anchors, make sure that gaps between the wall and the plate, created by projected anchor, is less than 0.79 inch (20 mm).

When fixing the indoor unit on a window frame

- Determine the positions of the wooden uprights to be attached to the window frame
- Attach the wooden uprights to the window frame giving attention to the weight of the indoor unit.
- Attach the installation plate to the wooden upright using tapping screws.

When fixing the indoor unit on a gypsum board

- Use stud finder to find out locations of the studs.
- Fix the plate hanger on two studs.

- If you fix the indoor unit on a gypsum board, use only specified anchor bolts on reference positions. Otherwise, the gypsum surrounding the joints may crumble over time and cause the screws to be loosened and stripped. This may lmead to physical injury or equipment damage.
- · Search for other spots if there are less than two studs, or the distance between the studs are different from the plate
- · Fix the installation plate without inclining to one side.

Connecting the refrigerant pipe

Connect indoor and outdoor units with field-supplied copper pipes by means of flare connections. Use insulated seamless refrigeration grade pipe only, (Cu DHP type according to ISO1337), degreased and deoxidized, suitable for operating pressures of at least 4200 kPa and for burst pressure of at least 20700 kPa. Under no circumstances must sanitary type copper pipe be used.

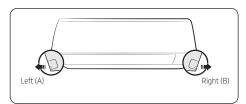
There are 2 refrigerant pipes of different diameters:

- The smaller one is for the liquid refrigerant
- The larger one is for the gas refrigerant

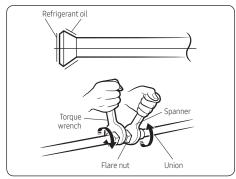
A short pipe is already fitted to the air conditioner. You may need to extend the pipe using the assembly pipe. (optional)

The connection procedure for the refrigerant pipe varies according to the exit position of the pipe when facing the wall:

- Left(A)
- Right(B)
- Rear



- Cut out the appropriate knock-out piece on the rear of the indoor unit unless you connect the pipe directly from the rear.
- Smooth the cut edges.
- Remove the protection caps of the pipes and connect the assembly pipe to each pipe. Tighten the nuts first with your hands, and then with a torque wrench, applying the following



Outer diameter (inch (mm))	Torque (lbf•ft (N•m))	Torque (kgf•cm)		
Ø 1/4 (6.35)	10.3 to 13.3 (14 to 18)	140~180		
Ø 3/8 (9.52)	25.1 to 31.0 (34 to 42)	350~430		
Ø 1/2 (12.70)	36.1 to 45.0 (49 to 61)	500~620		
Ø 5/8 (15.88)	50.2 to 60.5 (68 to 82)	690~830		



If you want to shorten or extend pipes, refer to Step 6 Cutting or flaring the pipes.

Wall Mounted Type CNH30/36TDB(AC030/036BNTDCH/AA)

- 4 Cut off the remaining foam insulation.
- 5 If necessary, bend the pipe to fit along the bottom of the indoor unit. Then pull it out through the appropriate hole.
 - The pipe should not project from the rear of the indoor unit.
 - The bending radius should be 3.94 inch (100 mm) or more
- 6 Pass the pipe through the hole in the wall.
- 7 For further details on how to connect to the outdoor unit and purge the air, refer to Step 4 Purging the unit.

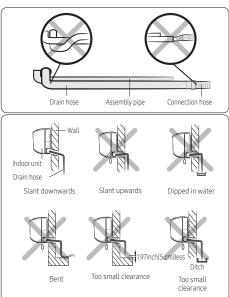
♠ NOTE

- The pipe will be insulated and fixed permanently into position after finishing the installation and the gas leak test; refer to page 10 for further details.
- DO NOT WALL UP THE PIPE CONNECTION!

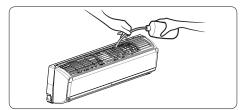
 All refrigerant pipe connection must be easy accessible and serviceable.

Installing and connecting the drain hose

Install the drain hose.



 Pour water into the drain pan. Check whether the hose is well drained.

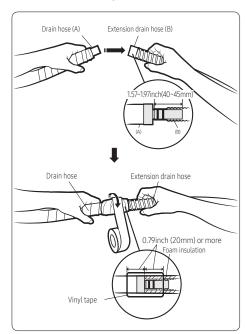


CAUTION

- Make sure that the indoor unit is in upright position when you pour water to check for leakage. Make sure that the water does not overflow onto the electrical part.
- If the diameter of the connection hose is smaller than the product's drain hose, water leakage may occur.

- Inadequate installation may cause water leakage.
- If the drain hose is routed inside the room, insulate the hose so that dripping condensation does not damage the furniture or floors
- Do not box in or cover the drain hose connection.
 Drain hose connection must be easily accessible and serviceable.

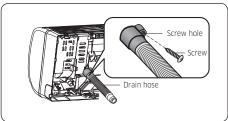
Optional: Extending the drain hose



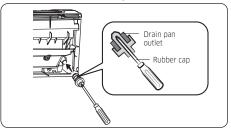
Optional: Changing the direction of the drain hose

Change the direction only when it is necessary.

1 Detach the rubber cap with the flyer.

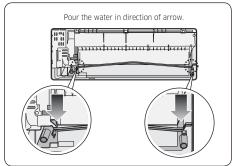


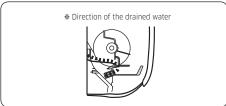
- 2 Detach the drain hose by pulling it and turning to the left.
- 3 Insert the drain hose by fixing it into the groove of the drain hose and the outlet of the drain pan.



Wall Mounted Type CNH30/36TDB(AC030/036BNTDCH/AA)

- Attach the rubber cap with a screwdriver by turning it to the right until it fixes to the end of the groove.
- Check for leakage on both side of the drain outlet.







CAUTION

Make sure that the indoor unit is in upright position when you pour water to check for leakage. Make sure that the water does not overflow onto the electrical part.

Connecting the power and communication



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

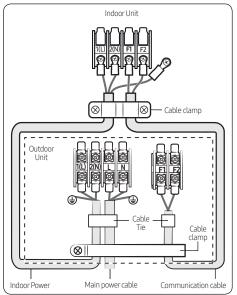
The indoor unit is powered through the outdoor unit by means of a H05 RN-F connection cable (or a more power model), with insulation in synthetic rubber and a jacket in polychloroprene (neoprene), in accordance with the requirements specified in the standard EN 60335-2-40.

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

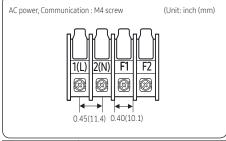


∠!\ CAUTION

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



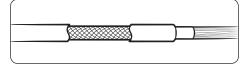
Indoor power supply						
Power supply Max/ Min(V) Indoor power cable						
208 to 230V, 60Hz ±10%		0.0012inch² ↑(0.75mm² ↑), 3 wires				
Communication cable						
0.0012inch² ↑(0.75mm²↑), 2 wires						



	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				

(1N·m=10kgf·cm)

- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F)
- Since it has the external power supply, refer to the outdoor unit installation manual for MAIN POWER.

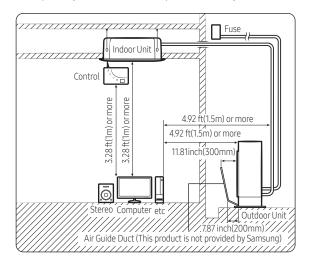


Outdoor Units

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.

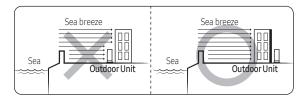


∴ CAUTION

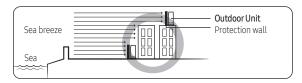
- You have just purchased a system air conditioner and it has been installed by your installation specialist.
- This device must be installed according to the national electrical rules.
- If your outdoor unit exceeds a net weight of 132.2 lb(60 kg), do not install it on a suspended wall, but stand it 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)
AC030/036BXADCH	-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

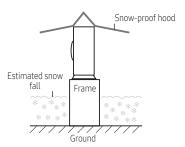
 Depending on the condition of the power supply, unstable power or voltage may cause malfunction of parts or control system (example: on a boat or places using power supplied from electric generator, etc.).

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.

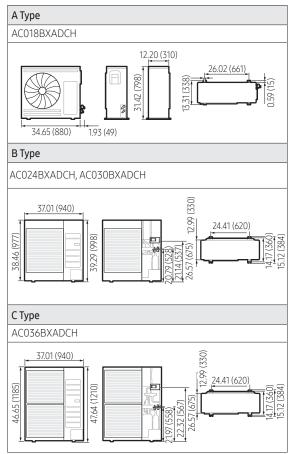
A CAUTION

 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)



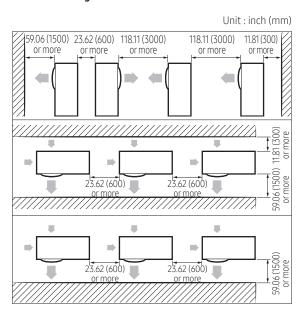
Outdoor Units

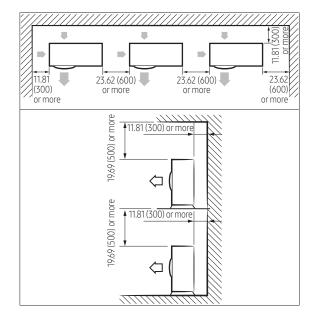
Minimum clearances for the outdoor unit

When installing 1 outdoor unit

Unit: inch (mm) 59.06 (1500) 11.81 (300) or more 11.81 (300) or more 59.06 (1500) or more 11.81 78.74 (2000) 23.62 or more (300)(600)or more or more 23.62 (600) or more 1.81 (300) or more

When installing more than 1 outdoor unit



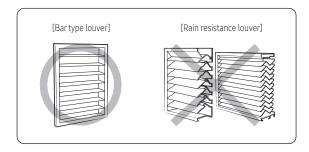


↑ CAUTION

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

⚠ WARNING

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

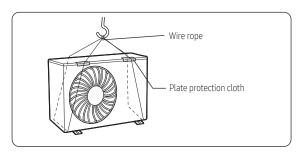


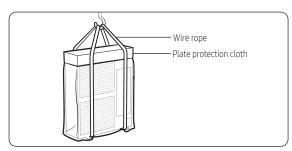
- Louver specifications.
 - Angle criteria : less than 20°
 - Opening ratio criteria: greater than 80%

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.





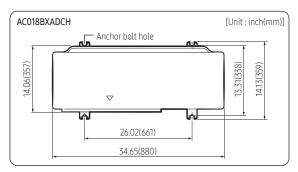
Fixing the outdoor unit in place

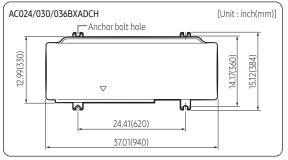
Install the outdoor unit on a rigid and stable base to prevent disturbance from any noise caused by vibration. When installing the unit on tall stands or in a location exposed to strong winds, fix the unit securely to the ground or structure.

- 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.



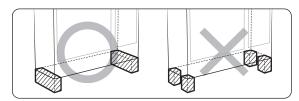
Install provided rubber legs to prevent vibration and noise.



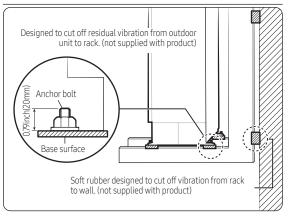


! CAUTION

- 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.

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.

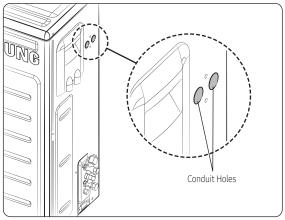
∴ CAUTION

- 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.

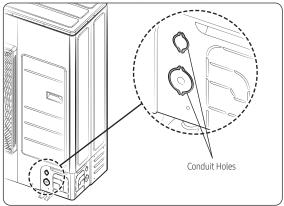
Connecting wire conduits

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.)



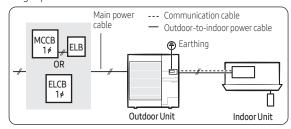
- 2 Insert the cables through the conduits, and then fix the conduits to the conduit plate with the lock nuts.
- **3** Apply silicone to the end of the hose to prevent rain from entering the hose.



- 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.

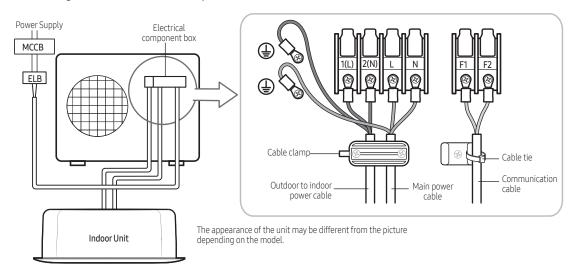
↑ CAUTION

- 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.

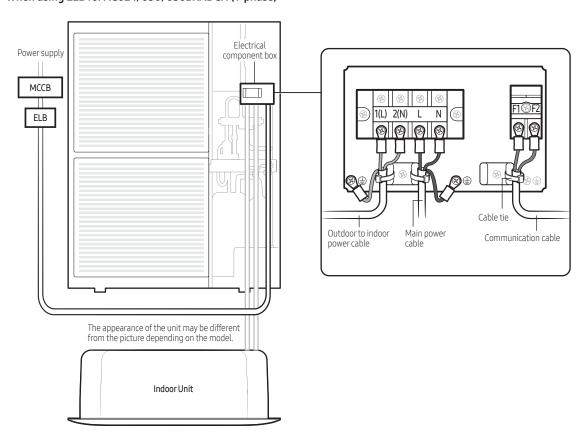
Outdoor Units

Connecting the main power cable

When using ELB for AC018BXADCH (1-phase)



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



Outdoor Units

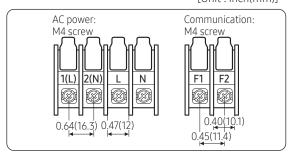
! CAUTION

- 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

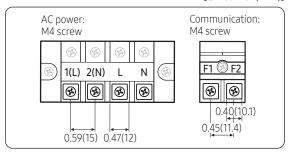
• AC018BXADCH (1-phase)

[Unit:inch(mm)]



AC024/030/036BXADCH (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.

Outdoor Units

Model				Out	door	Indoor		
Outdoor	Indoor	Power Source	RLA (A)	МОС		Rated input current of the power conversion equipment	MCA (A)	MOP (A)
	A COLODNIAD CIT			FAN1(A)	FAN2(A)	FAN(A)	10.4	25.0
	AC018BN1DCH					0.42	18.4	25.0
	AC018BN4DCH					0.79	18.8	25.0
	AC018BN6DCH					0.79	18.8	25.0
ACO10DVADCII	AC018BNADCH		107	1 25		0.42	18.4	25.0
AC018BXADCH	AC018BNHDCH		12.7	1.25	-	2.10	20.1	25.0
	AC018BNJDCH					0.49	18.5	25.0
	AC018BNLDCH					1.06	19.1	25.0
	AC018BNNDCH	208~230V/60Hz				0.30	18.3	25.0
	ACO34BNZDCH					1.50	19.5	25.0
	AC024BN4DCH			1.25	-	0.79	22.8	30.0
ACO24DVADCII	AC024BN6DCH		15.0			0.79	22.8	30.0
AC024BXADCH	AC024BNADCH		15.9			0.42	22.4	30.0
	AC024BNHDCH AC024BNZDCH					2.10	24.1	30.0 30.0
	AC024BN2DCH AC030BN4DCH			1.25	-	0.79	22.3	30.0
			16.2				22.3	
AC030BXADCH	AC030BN6DCH AC030BNHDCH					0.79 2.10	23.6	30.0 30.0
ACOJOBAADCH								
	AC030BNTDCH AC030BNZDCH					0.51 2.50	22.1	30.0 30.0
	AC036BN4DCH		14.7	1.25	1.25	0.79	24.0 21.7	35.0
	AC036BN6DCH					0.79	21.7	35.0
AC036BXADCH	AC036BNHDCH					3.50	24.4	35.0
ACOSOBAADCII	AC036BNTDCH					0.51	21.4	35.0
	AC036BNZDCH					3.60	24.5	35.0
	AC030BN2DCH AC042BN4DCH					0.79	29.5	40.0
AC042BXADCH	AC042BN6DCH				1.25	0.79	29.5	40.0
	AC042BNHDCH		20.9	1.25		3.50	32.2	40.0
	AC042BNZDCH					3.40	32.2	40.0
	AC042BN2DCH				1.25	0.79	29.5	40.0
	AC048BN6DCH		20.9	1.25		0.79	29.5	40.0
AC048BXADCH						3.50	32.2	40.0
	AC048BNHDCH						32.8	
	AC048BNZDCH					4.10	52.8	40.0

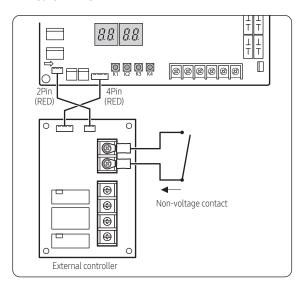
Outdoor Units

NOTE

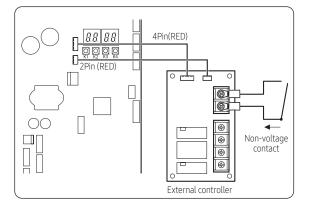
- RLA is based on AHRI 210/240 cooling standard condition [Indoor temp.: 26.7 °C / 80 °F(DB) / 19.46 °C / 67 °F(WB), Outdoor temp.: 35 °C / 95 °F(DB)]
- Voltage tolerance is ± 10 %.
- Maxium allowable voltage between phases is 2 %.
- Symbols
 - RLA: Rated Load Ampere (A)
 - MOC: Maximum Operating Current (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



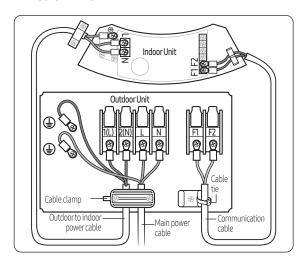
• AC024/030/036BXADCH



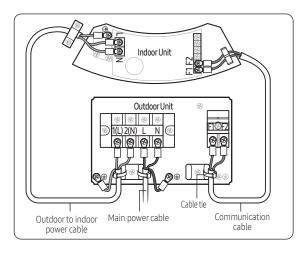
Outdoor Units

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

AC018BXADCH



AC024/030/036BXADCH

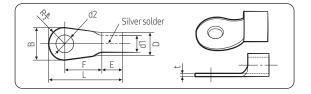


NOTE

- 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.



Outdoor Units

Nominal	Nominal	[В		D	d1		d1		d1		d1		Ε	F	L		d2	t
dimensions for cable [mm2(inch2)]	dimensions for screw [mm(inch)]	dimension	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	4(3/8)	9.5(3/8)	±0.2	E 4/1/A\	+0.3(+0.011)	3.4(1/8)	±0.2	/ /1 /4)	(1/4)	(1/4)	5 (3/16)	20 (3/4)	4.3 (3/16)	+0.2 (+0.007) 0(0)	0.9				
(0.006/ 0.009)	8(3/16)	15(9/16)	(±0.007)	5.6(1/4)	-0.2(-0.007)	3.4(1/8)	(±0.007)			28.5 (1-1/8)	8.4 (1-3/16)	+0.4 (+0.015) 0(0)	(0.03)						
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	11.5(7/16)	+0.5(+0.019)			11 (3/8)_	15 11 (3/8)			15	34 (1-	8.4 (1-3/16)	+0.4 (+0.015)	1.7			
25(0.05)	8(3/16)	16.5(10/16)	(±0.011)	11.5(7/10)	-0.2(-0.007)	7.7(5) 10)	(±0.007)			13 (1/2)	3/8)	8.4 (1-3/16)	0(0)	(0.06)					
75/0.05)	8(3/16)	16(10/16)	±0.3	17.7/1/2) +).3	+0.5(+0.019)	±0.2	0.4(7.(0) ±0.2	±0.2	±0.2 12.5	12.5	13 (1/2)	38 (1-1/2)	8.4 (1-3/16)	+0.4 (+0.015)	1.8			
35(0.05)	8(3/16)	22(7/8)	(±0.011)	13.3(1/2)	-0.2(-0.007)	9.4(3/8)	(±0.007)	(1/2)	(1/2)	13 (1/2)	43 (1- 11/16)	8.4 (1-3/16)	0(0)	(0.07)					
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.

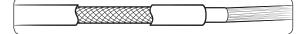
Outdoor Units

Outdoor-to-indoor power and communication cables specifications

• Indoor unit : RAC(AC***BNT***, AC***BNA***)

Indoorpowersupply						
Power supply	Indoor power cable					
1Ф, 208-230V~, 60Hz	±10%	0.0012 inch ² ↑ (0.75mm ² ↑), 3 wires				
Communication cable						
0.0012 inch ² ↑ (0.75mm ² ↑), 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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