

SAMSUNG

SINGLE Technical Data Book

**SINGLE Duct S for America
(R410A, HP)**



Model : CNH**HDM (AC***MNHDCH/AA)
CXH**ADJ (AC0***JXADCH/AA)

History

Version	Modification	Date	Remark
Ver.1.0	Release SINGLE Duct S for America TDB	'17. 02. 24	
Ver.1.1	Updated the model code including US code	'20. 08. 27	

Nomenclature

US Code

Model Name

C	N	H	18	4	D	N
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Classification

C	CAC
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(2) Product Type

N	Indoor Unit
X	Outdoor Unit

(3) Mode

H	Heat Pump
---	-----------

(4) Capacity

X1,000 Btu/h (2 digits)

(5-1) Product Notation (Indoor Unit)

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

(5-2) Product Notation (Outdoor Unit)

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

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Version

J	2015
K	2016
M	2017
N	2018

Nomenclature

Indoor Unit

Model Name

AC

018

M

N

H

D

C

H

/

AA

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

Buyer

(1) Classification

AC	CAC
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(2) Capacity

kBtu/h (3 digits)

(3) Version

H	2014
J	2015
K	2016
M	2017

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

1	1 Way Cassette
N	4 Way Cassette (600x600)
4	4 Way Cassette, 360 Cassette
H	HSP Duct
M	MSP Duct
C	Ceiling
J	Console
A	A3050 (Wall Mounted)

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

C	1Ø, 208~230V, 60Hz
---	--------------------

(8) Mode

H	Heat Pump
---	-----------

Nomenclature

Outdoor Unit

Model Name

AC	018	J	X	A	D	C	H	/	AA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC
----	-----

(5) Product Notation

A	Inv+Side+General Temp
---	-----------------------

(2) Capacity

kBtu/h (3 digits)

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(3) Version

H	2014
J	2015
K	2016
M	2017

(7) Rating Voltage

C	1Ø, 208~230V, 60Hz
---	--------------------

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(8) Mode

H	Heat Pump
---	-----------

Features & Benefits

Duct S

Overview

Samsung Ducted Type air conditioning units are a smart solution for low-maintenance, consistent cooling and heating performance in any environment. Their compact, slim frame blends seamlessly into ceilings, enhancing the beauty of the interior space and affording users more flexible installation options. Offering a comprehensive lineup, Samsung Ducted Type air conditioning units offer just the right solution for every need--from the office or shop to the restaurant kitchen.

Experience performance and convenient comfort for any weather condition

Samsung Duct S delivers unparalleled cooling and heating and flexible management with customizable comfort settings in any climate—all year round. Plus, it boasts a slim, compact size and multiple access points for easy setup exactly where needed.



Smart pressure control

Samsung Ducted Type units feature a smart pressure control system. This system adjusts the fan speed based on the external static pressure (ESP), delivering consistent cooling and heating power, regardless of the surrounding environment.

Convenient installation

The optional lift-up drain pump lifts condensed water up to 27.6 inch, compared to a limit of 29.5 inch on conventional models, for flexible and convenient installation.

The Duct S indoor air conditioning unit delivers smooth, consistent operation and convenience with features such as:

- Efficient operation. Stage the desired atmosphere with energy-efficient performance and customized airflow.
- Smart management. Cool spaces efficiently and manage the air conditioning unit even while away, with features designed for efficiency and control.
- Easy, flexible setup. Install and maintain even multiple units with a compact and easily accessible design.

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1. Line up

1-1. Indoor units

Capacity (Btu/h)	18000	24000	30000	36000	42000	48000
Image						
Model	CNH18HDM (AC018MNHDC/AA)	CNH24HDM (AC024MNHDC/AA)	CNH30HDM (AC030MNHDC/AA)	CNH36HDM (AC036MNHDC/AA)	CNH42HDM (AC042MNHDC/AA)	CNH48HDM (AC048MNHDC/AA)

1-2. Outdoor units

Capacity (Btu/h)	18000	24000	30000	36000	42000	48000
Image						
Model	CXH18ADJ (AC018JXADCH/AA)	CXH24ADJ (AC024JXADCH/AA)	CXH30ADJ (AC030JXADCH/AA)	CXH36ADJ (AC036JXADCH/AA)	CXH42ADJ (AC042JXADCH/AA)	CXH48ADJ (AC048JXADCH/AA)

2. Specification

Duct S

System	Model Name	Indoor Unit		AC018MNHDC/AA	AC024MNHDC/AA	AC030MNHDC/AA	
		Outdoor Unit		AC018JXADCH/AA	AC024JXADCH/AA	AC030JXADCH/AA	
	US Code	Indoor Unit		CNH18HDM	CNH24HDM	CNH30HDM	
		Outdoor Unit		CXH18ADJ	CXH24ADJ	CXH30ADJ	
	Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP
	Performance	Capacity (Min/Std/Max)	Cooling	kW	1.47 / 5.28 / 6.15	2.05 / 7.03 / 7.91	2.73 / 8.79 / 10.26
				Btu/h	5,000 / 18,000 / 21,000	7,000 / 24,000 / 27,000	9,300 / 30,000 / 35,000
				US RT	0.42 / 1.50 / 1.75	0.58 / 2.00 / 2.25	0.78 / 2.50 / 2.92
			Heating	kW	1.11 / 5.86 / 7.33	1.52 / 7.91 / 9.09	2.64 / 9.38 / 11.14
				Btu/h	3,800 / 20,000 / 25,000	5,200 / 27,000 / 31,000	9,000 / 32,000 / 38,000
				US RT	0.32 / 1.67 / 2.08	0.43 / 2.25 / 2.58	0.75 / 2.67 / 3.17
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.37 / 1.92 / 2.30	0.45 / 2.03 / 2.50	0.78 / 3.00 / 4.12
			Heating		0.27 / 1.88 / 2.75	0.38 / 2.29 / 3.50	0.67 / 2.96 / 5.60
		Current Input (Min/Std/Max)	Cooling	A	2.1 / 8.6 / 10.0	2.8 / 9.4 / 12.0	4.2 / 13.2 / 17.5
			Heating		1.7 / 8.4 / 12.0	2.5 / 10.6 / 14.5	3.6 / 13.1 / 21.9
		Current	MCA	A	10	13.5	23
			MOP		15	20	30
	Efficiency	EER	Cooling (US)	(Btu/h)/W	9.38	11.82	10.00
			Cooling	-	-	-	-
		COP	Heating	W/W	3.10	3.44	3.16
			SEER	-	18.6	20.0	18.4
		HSPF	-	10.6	10.6	10.2	
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")
		Gas Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	12.70 (1/2")	15.88 (5/8")	15.88 (5/8")
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
		Piping length (ODU-IDU)	Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
			Max.	m (ft)	30 (98.4)	50 (164)	50 (164)
			Elevation	m (ft)	20 (65.6)	30 (98.4)	30 (98.4)
			Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
	Wiring connections	Communication	Min.	mm²	0.75	0.75	0.75
			Remark	-	F1, F2	F1, F2	F1, F2
		Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit	Both indoor and outdoor unit
	Refrigerant	Type			R410A	R410A	R410A
		Factory Charging		kg	1.30	2.10	2.90
				lbs	2.87	4.63	6.40
	Option Code	Standard		-	01B0EC-1E5411-27343B-374000	01B0EC-1E5407-274750-374020	01B0EC-1E54B8-275A64-376020
		Install		-	020000-120000-200000-300000	020000-120000-200000-300000	020000-120000-200000-300000

2. Specification

Indoor Unit	Model Name	Indoor Unit		AC018MNHDC/AA	AC024MNHDC/AA	AC030MNHDC/AA	
		Outdoor Unit		AC018JXADCH/AA	AC024JXADCH/AA	AC030JXADCH/AA	
	US Code	Indoor Unit		CNH18HDM	CNH24HDM	CNH30HDM	
		Outdoor Unit		CXH18ADJ	CXH24ADJ	CXH30ADJ	
	Power Supply			Ø, #, V, Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	-	-	-
	Fan	Type		-	Sirocco	Sirocco	Sirocco
		Quantity		ea	2	3	3
		Air Flow Rate	H/M/L	m³/min	17 / 13.5 / 10	20 / 17.5 / 15	25 / 22 / 19
				ft³/min	600 / 477 / 353	706 / 618 / 530	883 / 777 / 671
				l/s	283 / 225 / 167	333 / 292 / 250	417 / 367 / 317
		External Static Pressure	Min/Std/Max	mmAq	2.5 / 2.5 / 15	2.5 / 2.5 / 20	3 / 4 / 20
				Pa	25 / 25 / 149	25 / 25 / 199	30 / 40 / 199
				In Wg	0.10 / 0.10 / 0.60	0.10 / 0.10 / 0.80	0.12 / 0.16 / 0.80
	Fan Motor	Type		-	BLDC	BLDC	BLDC
		Output		W x n	153 x 1	153 x 1	153 x 1
	Drain	Drain Pipe		Φ, mm	VP25 (OD32 ID 25)	VP25 (OD32 ID 25)	VP25 (OD32 ID 25)
	Sound	Sound Pressure Level	H/M/L/ (Silent)	dB(A)	34 / 30 / 26	36 / 32 / 28	37 / 33 / 29
		Sound Power Level		dB(A)	56	58	59
	External Dimension	Net Weight		kg (lbs)	31.2 (68.8)	40.5 (89.3)	40.5 (89.3)
		Shipping Weight		kg (lbs)	35.0 (77.2)	45.0 (99.2)	45.0 (99.2)
		Net Dimensions (WxHxD)		mm	850 x 250 x 700	1200 x 250 x 700	1200 x 250 x 700
				inch	33.5 x 9.8 x 27.6	47.2 x 9.8 x 27.6	47.2 x 9.8 x 27.6
		Shipping Dimensions (WxHxD)		mm	1060 x 320 x 784	1429 x 320 x 779	1429 x 320 x 779
				inch	41.9 x 12.6 x 30.9	56.3 x 12.6 x 30.7	56.3 x 12.6 x 30.7
	Casing	Material		-	STEEL	STEEL	STEEL
	Control System	Infrared remote control		-	-	-	-
		Wired remote control		-	-	-	-
	Drain Pump	Drain Pump		-	Built In	Built In	Built In
		Max. lifting Height / Displacement		in / gal/h	29.5 / 6.34	29.5 / 6.34	29.5 / 6.34
	Additional Accessories	Drain Pump	External Model	-	-	-	-
			Internal Model	-	-	-	-
			Max. lifting Height / Displacement	in / gal/h	-	-	-
		Air Filter		-	-	-	-
		Virus Doctor		-	-	-	-

Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat Exchanger	Type		-	FMC	FMC	FMC
		Material	Fin	-	Al	Al	Al
			Tube	-	Al	Al	Al
		Fin Treatment		-	-	-	-
	Compressor	Model Name		-	UG4T150LNBEQ	UG4T200LNFE4	UG8T300LNBJU
		Type		-	Twin BLDC	Twin BLDC	Twin BLDC
		Output		kW	1.42	1.85	2.82
		Oil	Type	-	POE	POE	PVE
			Initial charge	cc (fl oz)	500(16.91)	700(23.67)	1200(40.58)

2. Specification

Outdoor Unit	Model Name	Indoor Unit		AC018MNHDC/AA	AC024MNHDC/AA	AC030MNHDC/AA
		Outdoor Unit		AC018JXADCH/AA	AC024JXADCH/AA	AC030JXADCH/AA
	US Code	Indoor Unit		CNH18HDM	CNH24HDM	CNH30HDM
		Outdoor Unit		CXH18ADJ	CXH24ADJ	CXH30ADJ
	Fan	Type	-	Propellar	Propellar	Propellar
		Discharge direction	-	Front	Front	Front
		Quantity	EA	1	1	1
		Air Flow Rate	m ³ /min	43.9	62.0	62.9
			ft ³ /min	1550	2190	2220
			l/s	731.5	1033.5	1047.7
	Fan Motor	Type	-	BLDC	BLDC	BLDC
		Output	W x n	68 x 1	125 x 1	125 x 1
	Sound	Sound Pressure	Cooling	48	50	50
			Heating	48	50	52
		Sound Power		62	65	65
	External Dimension	Net Weight	kg (lbs)	45.0 (99.2)	64.5 (142.2)	70.0 (154.3)
		Shipping Weight	kg (lbs)	48.0 (105.8)	69.5 (153.2)	74.0 (163.1)
		Net Dimensions (WxHxD)	mm	880 x 638 x 310	940 x 998 x 330	940 x 998 x 330
			inch	34.6 x 25.1 x 12.2	37.0 x 39.3 x 13.0	37.0 x 39.3 x 13.0
		Shipping Dimensions (WxHxD)	mm	1023 x 730 x 413	995 x 1096 x 426	995 x 1096 x 426
			inch	40.3 x 28.7 x 16.3	39.2 x 43.1 x 16.8	39.2 x 43.1 x 16.8
	Casing	Material	Body	-	STEEL	STEEL
	Operating Temp. Range	Cooling	°C (°F)	-18~46 (0~115)	-18~46 (0~115)	-18~46 (0~115)
		Heating	°C (°F)	-20~24 (-4.0~75.2)	-20~24 (-4.0~75.2)	-20~24 (-4.0~75.2)

NOTE

- Specification may be subject to change without prior notice.
- Capacities are based on (Equivalent refrigerant piping : 7.5m(24.6ft), Level differences : 0m(0ft))
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB /
Outdoor temperature : 95°F(35°C) DB, 75°F (23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB /
Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Select wire size based on the value of MCA
 - 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
 - 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
 - These products contain R410A which is fluorinated greenhouse gas.

2. Specification

System	Model Name		Indoor Unit		AC036MNHDC/AA	AC042MNHDC/AA	AC048MNHDC/AA
			Outdoor Unit		AC036JXADCH/AA	AC042JXADCH/AA	AC048JXADCH/AA
	US Code		Indoor Unit		CNH36HDM	CNH42HDM	CNH48HDM
			Outdoor Unit		CXH36ADJ	CXH42ADJ	CXH48ADJ
	Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP
	Performance	Capacity (Min/Std/Max)	Cooling	kW	4.10 / 10.55 / 12.02	4.78 / 12.31 / 13.19	5.45 / 14.07 / 14.07
				Btu/h	14,000 / 36,000 / 41,000	16,300 / 42,000 / 45,000	18,600 / 48,000 / 48,000
				US RT	1.17 / 3.00 / 3.42	1.36 / 3.50 / 3.75	1.55 / 4.00 / 4.00
			Heating	kW	3.37 / 11.72 / 14.07	3.93 / 13.77 / 14.65	4.48 / 15.53 / 16.12
				Btu/h	11,500 / 40,000 / 48,000	13,400 / 47,000 / 50,000	15,300 / 53,000 / 55,000
				US RT	0.96 / 3.33 / 4.00	1.12 / 3.92 / 4.17	1.28 / 4.42 / 4.58
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.95 / 3.13 / 3.65	1.08 / 4.30 / 4.55	1.24 / 5.25 / 5.25
			Heating		0.72 / 3.30 / 5.00	0.85 / 4.08 / 5.40	0.96 / 5.21 / 5.70
		Current Input (Min/Std/Max)	Cooling	A	4.9 / 13.7 / 17.2	5.6 / 18.6 / 20.0	6.4 / 23.0 / 23.0
			Heating		3.7 / 14.0 / 23.0	4.3 / 17.9 / 24.0	5.0 / 22.7 / 25.0
		Current	MCA	A	26.5	26.5	26.5
			MOP		40	40	40
	Efficiency	EER	Cooling (US)	(Btu/h)/W	11.50	9.77	9.14
			Cooling	-	-	-	-
		COP	Heating	W/W	3.54	3.36	2.98
		SEER		-	20.0	19.0	17.8
		HSPF		-	10.2	10.2	9.8
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
		Gas Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
		Piping length (ODU-IDU)	Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
			Max.	m (ft)	75 (246)	75 (246)	75 (246)
			Elevation	m (ft)	30 (98.4)	30 (98.4)	30 (98.4)
			Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)
	Wiring connections	Communication	Min.	mm ²	0.75	0.75	0.75
			Remark	-	F1, F2	F1, F2	F1, F2
		Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit	Both indoor and outdoor unit
	Refrigerant	Type			R410A	R410A	R410A
		Factory Charging		kg	2.80	2.80	2.80
				lbs	6.17	6.17	6.17
	Option Code	Standard		-	01B0EC-1E5403-276470-376045	01B0EC-1E5424-277D8C-377045	01B0EC-1E5468-278CA0-377045
		Install		-	020000-120000-200000-300000	020000-120000-200000-300000	020000-120000-200000-300000

2. Specification

Indoor Unit	Model Name	Indoor Unit		AC036MNHDC/AA	AC042MNHDC/AA	AC048MNHDC/AA	
		Outdoor Unit		AC036JXADCH/AA	AC042JXADCH/AA	AC048JXADCH/AA	
	US Code	Indoor Unit		CNH36HDM	CNH42HDM	CNH48HDM	
		Outdoor Unit		CXH36ADJ	CXH42ADJ	CXH48ADJ	
	Power Supply			Ø, #, V, Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	-	-	-
	Fan	Type		-	Sirocco	Sirocco	Sirocco
		Quantity		ea	3	3	3
		Air Flow Rate	H/M/L	m³/min	33 / 28 / 24	35 / 32 / 29	36 / 33 / 30
				ft³/min	1165 / 989 / 848	1236 / 1130 / 1024	1271 / 1165 / 1059
				l/s	550 / 467 / 400	583 / 533 / 483	600 / 550 / 500
		External Static Pressure	Min/Std/Max	mmAq	3 / 4 / 20	3 / 4 / 20	4 / 5.2 / 20
				Pa	30 / 40 / 199	30 / 40 / 199	40 / 51 / 199
				In Wg	0.12 / 0.16 / 0.80	0.12 / 0.16 / 0.80	0.16 / 0.20 / 0.80
	Fan Motor	Type		-	BLDC	BLDC	BLDC
		Output		W x n	244 x 1	244 x 1	244 x 1
	Drain	Drain Pipe		Φ, mm	VP25 (OD32 ID 25)	VP25 (OD32 ID 25)	VP25 (OD32 ID 25)
	Sound	Sound Pressure Level	H/M/L/ (Silent)	dB(A)	38 / 34 / 30	40 / 37 / 34	43 / 40 / 37
		Sound Power Level		dB(A)	60	62	65
	External Dimension	Net Weight		kg (lbs)	45.2 (99.6)	45.2 (99.6)	45.2 (99.6)
		Shipping Weight		kg (lbs)	50.0 (110.2)	50.0 (110.2)	50.0 (110.2)
		Net Dimensions (WxHxD)		mm	1300 x 700 x 300	1300 x 700 x 300	1300 x 700 x 300
				inch	51.2 x 27.6 x 11.8	51.2 x 27.6 x 11.8	51.2 x 27.6 x 11.8
		Shipping Dimensions (WxHxD)		mm	1529 x 779 x 370	1529 x 779 x 370	1529 x 779 x 370
				inch	60.2 x 30.7 x 14.6	60.2 x 30.7 x 14.6	60.2 x 30.7 x 14.6
	Casing	Material		-	STEEL	STEEL	STEEL
	Control System	Infrared remote control		-	-	-	-
		Wired remote control		-	-	-	-
	Drain Pump	Drain Pump		-	Built In	Built In	Built In
		Max. lifting Height / Displacement		in / gal/h	29.5 / 6.34	29.5 / 6.34	29.5 / 6.34
	Additional Accessories	Drain Pump	External Model	-	-	-	-
			Internal Model	-	-	-	-
			Max. lifting Height / Displacement	in / gal/h	-	-	-
		Air Filter		-	-	-	-
		Virus Doctor		-	-	-	-

Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat Exchanger	Type		-	FMC	FMC	FMC
		Material	Fin	-	Al	Al	Al
			Tube	-	Al	Al	Al
		Fin Treatment		-	-	-	-
	Compressor	Model Name		-	UG5T450FUEJX	UG5T450FUEJX	UG5T450FUEJX
		Type		-	Twin BLDC	Twin BLDC	Twin BLDC
		Output		kW	4.12	4.12	4.12
		Oil	Type	-	PVE	PVE	PVE
			Initial charge	cc (fl oz)	1700(57.48)	1700(57.48)	1700(57.48)

2. Specification

Outdoor Unit	Model Name	Indoor Unit		AC036MNHDCH/AA	AC042MNHDCH/AA	AC048MNHDCH/AA
		Outdoor Unit		AC036JXADCH/AA	AC042JXADCH/AA	AC048JXADCH/AA
	US Code	Indoor Unit		CNH36HDM	CNH42HDM	CNH48HDM
		Outdoor Unit		CXH36ADJ	CXH42ADJ	CXH48ADJ
	Fan	Type	-	Propellar	Propellar	Propellar
		Discharge direction	-	Front	Front	Front
		Quantity	EA	2	2	2
		Air Flow Rate	m ³ /min	86.1	86.1	86.1
			ft ³ /min	3040	3040	3040
			l/s	1434.7	1434.7	1434.7
	Fan Motor	Type	-	BLDC	BLDC	BLDC
		Output	W x n	125 x 2	125 x 2	125 x 2
	Sound	Sound Pressure	Cooling	49	51	53
			Heating	51	53	55
		Sound Power		65	66	67
	External Dimension	Net Weight	kg (lbs)	88.0 (194.0)	88.0 (194.0)	88.0 (194.0)
		Shipping Weight	kg (lbs)	98.0 (216.1)	98.0 (216.1)	98.0 (216.1)
		Net Dimensions (WxHxD)	mm	940 x 1210 x 330	940 x 1210 x 330	940 x 1210 x 330
			inch	37.0 x 47.6 x 13.0	37.0 x 47.6 x 13.0	37.0 x 47.6 x 13.0
		Shipping Dimensions (WxHxD)	mm	995 x 1388 x 426	995 x 1388 x 426	995 x 1388 x 426
			inch	39.2 x 43.1 x 16.8	39.2 x 43.1 x 16.8	39.2 x 43.1 x 16.8
	Casing	Material	Body	-	STEEL	STEEL
	Operating Temp. Range	Cooling	°C (°F)	-18~46 (0~115)	-18~46 (0~115)	-18~46 (0~115)
		Heating	°C (°F)	-20~24 (-4.0~75.2)	-20~24 (-4.0~75.2)	-20~24 (-4.0~75.2)

NOTE

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

3. Summary Table

Performance characteristics

Indoor unit

Model Code	Net Weight kg (lbs)	Capacity			Fan Speed	Airflow (CFM)	Sound Pressure Level (dBA)	Sound Power Level (dBA)
			Cooling (Btu/h)	Heating (Btu/h)				
CNH18HDM (AC018MNHDC/AA)	30.5 (67.2)	Max.	21000	25000	High	600	34	56
		Std.	18000	20000	Mid.	477	30	-
		Min.	5000	3800	Low	353	26	-
CNH24HDM (AC024MNHDC/AA)	39.4 (86.9)	Max.	27000	31000	High	706	36	58
		Std.	24000	27000	Mid.	618	32	-
		Min.	7000	5200	Low	530	28	-
CNH30HDM (AC030MNHDC/AA)	39.4 (86.9)	Max.	35000	38000	High	883	37	59
		Std.	30000	32000	Mid.	777	33	-
		Min.	9300	9000	Low	671	29	-
CNH36HDM (AC036MNHDC/AA)	44.6 (98.3)	Max.	41000	48000	High	1165	38	60
		Std.	36000	40000	Mid.	989	34	-
		Min.	14000	11500	Low	848	30	-
CNH42HDM (AC042MNHDC/AA)	44.6 (98.3)	Max.	45000	50000	High	1236	40	62
		Std.	42000	47000	Mid.	1130	37	-
		Min.	16300	13400	Low	1024	34	-
CNH48HDM (AC048MNHDC/AA)	44.6 (98.3)	Max.	48000	55000	High	1271	43	65
		Std.	48000	53000	Mid.	1165	40	-
		Min.	18600	15300	Low	1059	37	-

 NOTE

- Sound data is based on cooling operation.

Outdoor unit

Capacity (Btu/h)	Model Code	Net Size (WxHxD , inch)	Net Weight kg (lbs)	Airflow (CFM)	Sound Pressure Level (dBA)		Sound Power Level (dBA)
					Cooling	Heating	
18000	CXH18ADJ (AC018JXADCH/AA)	34.6 x 25.1 x 12.2	45.0 (99.2)	1550	48	48	62
24000	CXH24ADJ (AC024JXADCH/AA)	37.0 x 39.3 x 13.0	64.5 (142.2)	2190	50	50	65
30000	CXH30ADJ (AC030JXADCH/AA)	37.0 x 39.3 x 13.0	70.00 (154.3)	2220	50	52	65
36000	CXH36ADJ (AC036JXADCH/AA)	37.0 x 47.6 x 13.0	88.00 (194.0)	3040	49	51	65
42000	CXH42ADJ (AC042JXADCH/AA)	37.0 x 47.6 x 13.0	88.00 (194.0)	3040	51	53	66
48000	CXH48ADJ (AC048JXADCH/AA)	37.0 x 47.6 x 13.0	88.00 (194.0)	3040	53	55	67

3. Summary Table

Electrical Characteristics

Model Code		Outdoor Unit				Input Current(Amperes)				Power Supply	
Indoor Unit	Outdoor Unit	Rated	Voltage range			Outdoor Unit		Indoor Unit	Total	MCA (A)	MOP (A)
		Hz	Volts	Min.	Max.	Cooling	Heating				
CNH18HDM (AC018MNHDC/AA)	CXH18ADJ (AC018JXADCH/AA)	60	208~230	187	253	8.9	8.9	1.1	10	10	15
CNH24HDM (AC024MNHDC/AA)	CXH24ADJ (AC024JXADCH/AA)	60	208~230	187	253	12.5	12.5	1.5	14.0	14	20
CNH30HDM (AC030MNHDC/AA)	CXH30ADJ (AC030JXADCH/AA)	60	208~230	187	253	20.0	20.0	3.0	23.0	23	30
CNH36HDM (AC036MNHDC/AA)	CXH36ADJ (AC036JXADCH/AA)	60	208~230	187	253	22.0	22.5	4.0	26.0	26.5	40
CNH42HDM (AC042MNHDC/AA)	CXH42ADJ (AC042JXADCH/AA)	60	208~230	187	253	22.0	22.5	4.0	26.0	26.5	40
CNH48HDM (AC048MNHDC/AA)	CXH48ADJ (AC048JXADCH/AA)	60	208~230	187	253	22.0	22.5	4.0	26.0	26.5	40



NOTE

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

4. Capacity Table

Duct S

CNH18HDM(AC018MNHDC/AA)+CXH18ADJ(AC018JXADCH/AA)

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	19.4	15.5	1.1	19.9	15.9	1.1	20.4	16.3	1.2	20.9	16.7	1.18	21.1	16.9	1.2	21.6	17.3	1.2	21.9	17.6	1.2
70	20.9	16.7	1.2	21.4	17.1	1.2	22.0	17.6	1.3	22.5	18.0	1.30	22.7	18.2	1.3	23.3	18.6	1.3	23.6	18.9	1.4
95	16.7	13.4	1.8	17.1	13.7	1.8	17.6	14.1	1.9	18.0	14.4	1.92	18.2	14.5	1.9	18.6	14.9	2.0	18.9	15.1	2.0
115	14.4	11.5	2.1	14.8	11.8	2.2	15.1	12.1	2.2	15.5	12.4	2.28	15.7	12.5	2.3	16.0	12.8	2.4	16.3	13.0	2.4

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	10.6	1.7	10.5	1.7	10.4	1.6	10.3	1.62	10.1	1.6	10.0	1.6
14	16.4	2.1	16.2	2.1	16.1	2.1	15.9	2.05	15.7	2.0	15.6	2.0
32	19.8	1.8	19.6	1.8	19.4	1.8	19.3	1.78	19.1	1.8	18.9	1.7
47	20.6	1.9	20.4	1.9	20.2	1.9	20.0	1.88	19.8	1.9	19.6	1.8
75.2	24.0	1.7	23.7	1.6	23.5	1.6	23.3	1.61	23.0	1.6	22.8	1.6

NOTE

- Capacities are based on following conditions; Refrigerant pipe length : 7.5m (24.6ft) / Level difference : 0m (0ft).

4. Capacity Table

CNH24HDM(AC024MNHDCH/AA)+CXH24ADJ(AC024JXADCH/AA)

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	25.0	20.0	1.0	25.6	20.5	1.0	26.3	21.0	1.1	26.9	21.5	1.08	27.2	21.7	1.1	27.8	22.3	1.1	28.2	22.6	1.1
70	25.8	20.7	1.3	26.5	21.2	1.4	27.1	21.7	1.4	27.8	22.2	1.43	28.1	22.5	1.4	28.8	23.0	1.5	29.2	23.3	1.5
95	22.3	17.9	1.9	22.9	18.3	1.9	23.4	18.7	2.0	24.0	19.2	2.03	24.2	19.4	2.1	24.8	19.9	2.1	25.2	20.2	2.1
115	21.3	17.0	2.4	21.8	17.5	2.5	22.4	17.9	2.5	22.9	18.3	2.60	23.1	18.5	2.6	23.7	18.9	2.7	24.0	19.2	2.7

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	15.6	2.2	15.4	2.2	15.3	2.2	15.1	2.15	14.9	2.1	14.8	2.1
14	21.1	2.9	20.9	2.9	20.7	2.9	20.5	2.84	20.3	2.8	20.1	2.8
32	28.6	2.8	28.4	2.8	28.1	2.8	27.8	2.74	27.5	2.7	27.2	2.7
47	27.8	2.4	27.5	2.3	27.3	2.3	27.0	2.29	26.7	2.3	26.5	2.2
75.2	35.5	2.5	35.2	2.5	34.8	2.5	34.5	2.43	34.2	2.4	33.8	2.4

CNH30HDM(AC030MNHDCH/AA)+CXH30ADJ(AC030JXADCH/AA)

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	32.3	25.8	1.1	33.1	26.4	1.2	33.9	27.1	1.2	34.7	27.8	1.21	35.0	28.0	1.2	35.9	28.7	1.3	36.4	29.1	1.3
70	32.1	25.7	1.8	32.9	26.3	1.9	33.7	26.9	1.9	34.5	27.6	1.98	34.8	27.9	2.0	35.7	28.5	2.0	36.2	29.0	2.1
95	27.9	22.3	2.8	28.6	22.9	2.9	29.3	23.4	2.9	30.0	24.0	3.00	30.3	24.2	3.0	31.0	24.8	3.1	31.5	25.2	3.1
115	22.6	18.1	2.9	23.1	18.5	2.9	23.7	19.0	3.0	24.3	19.4	3.09	24.5	19.6	3.1	25.1	20.1	3.2	25.5	20.4	3.2

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	19.9	2.8	19.7	2.8	19.5	2.8	19.3	2.75	19.1	2.7	18.9	2.7
14	35.2	4.5	34.8	4.4	34.5	4.4	34.1	4.33	33.8	4.3	33.5	4.2
32	37.0	4.1	36.6	4.1	36.2	4.0	35.9	4.00	35.5	4.0	35.2	3.9
47	33.0	3.0	32.6	3.0	32.3	3.0	32.0	2.96	31.7	2.9	31.4	2.9
75.2	43.3	3.0	42.8	3.0	42.4	3.0	42.0	2.94	41.6	2.9	41.2	2.9

NOTE

- Capacities are based on following conditions; Refrigerant pipe length : 7.5m (24.6ft) / Level difference : 0m (0ft).

4. Capacity Table

CNH36HDM(AC036MNHDC/AA)+CXH36ADJ(AC036JXADCH/AA)

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	36.2	28.9	2.4	37.1	29.6	2.4	38.0	30.4	2.5	38.9	31.1	2.56	39.3	31.4	2.6	40.2	32.2	2.6	40.8	32.7	2.7
70	35.8	28.6	2.4	36.7	29.3	2.4	37.6	30.1	2.5	38.5	30.8	2.54	38.9	31.1	2.6	39.8	31.9	2.6	40.4	32.3	2.7
95	33.5	26.8	2.9	34.3	27.4	3.0	35.1	28.1	3.1	36.0	28.8	3.13	36.4	29.1	3.2	37.2	29.8	3.2	37.8	30.2	3.3
115	23.1	18.5	2.5	23.7	19.0	2.6	24.3	19.4	2.7	24.9	19.9	2.72	25.1	20.1	2.7	25.8	20.6	2.8	26.1	20.9	2.9

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	31.0	4.5	30.7	4.4	30.4	4.4	30.1	4.35	29.8	4.3	29.5	4.3
14	38.6	4.9	38.3	4.9	37.9	4.8	37.5	4.78	37.1	4.7	36.8	4.7
32	38.3	4.7	37.9	4.7	37.5	4.7	37.2	4.61	36.8	4.6	36.4	4.5
47	41.2	3.4	40.8	3.4	40.4	3.3	40.0	3.30	39.6	3.3	39.2	3.2
75.2	47.9	3.4	47.4	3.3	47.0	3.3	46.5	3.28	46.0	3.2	45.6	3.2

CNH42HDM(AC042MNHDC/AA)+CXH42ADJ(AC042JXADCH/AA)

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	41.6	33.2	3.0	42.6	34.1	3.1	43.6	34.9	3.2	44.7	35.8	3.28	45.1	36.1	3.3	46.2	37.0	3.4	46.9	37.5	3.4
70	41.1	32.9	3.1	42.1	33.7	3.2	43.1	34.5	3.3	44.2	35.4	3.38	44.6	35.7	3.4	45.7	36.6	3.5	46.4	37.1	3.5
95	39.0	31.2	4.0	40.0	32.0	4.1	41.0	32.8	4.2	42.0	33.6	4.30	42.4	33.9	4.3	43.4	34.8	4.4	44.1	35.3	4.5
115	29.6	23.7	3.0	30.3	24.2	3.0	31.0	24.8	3.1	31.8	25.4	3.18	32.1	25.7	3.2	32.9	26.3	3.3	33.4	26.7	3.3

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	27.0	4.5	26.8	4.5	26.5	4.5	26.3	4.41	26.0	4.4	25.7	4.3
14	41.7	5.2	41.3	5.2	40.9	5.1	40.5	5.05	40.1	5.0	39.7	4.9
32	45.1	4.8	44.7	4.7	44.2	4.7	43.8	4.65	43.4	4.6	42.9	4.6
47	48.4	4.2	47.9	4.2	47.5	4.1	47.0	4.08	46.5	4.0	46.1	4.0
75.2	53.7	4.1	53.1	4.0	52.6	4.0	52.1	3.95	51.6	3.9	51.1	3.9

NOTE

- Capacities are based on following conditions; Refrigerant pipe length : 7.5m (24.6ft) / Level difference : 0m (0ft).

4. Capacity Table

CNH48HDM(AC048MNHDC/AA)+CXH48ADJ(AC048JXADCH/AA)

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	49.1	39.3	3.5	50.3	40.2	3.6	51.5	41.2	3.7	52.8	42.2	3.77	53.3	42.7	3.8	54.6	43.7	3.9	55.4	44.3	4.0
70	48.3	38.6	3.6	49.4	39.6	3.7	50.7	40.5	3.8	51.9	41.5	3.85	52.4	41.9	3.9	53.7	42.9	4.0	54.5	43.6	4.0
95	44.6	35.7	4.9	45.7	36.6	5.0	46.8	37.5	5.1	48.0	38.4	5.25	48.5	38.8	5.3	49.6	39.7	5.4	50.4	40.3	5.5
115	30.5	24.4	3.6	31.2	25.0	3.7	32.0	25.6	3.8	32.8	26.2	3.87	33.1	26.5	3.9	33.9	27.1	4.0	34.4	27.5	4.1

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	30.7	4.8	30.4	4.7	30.1	4.7	29.8	4.62	29.5	4.6	29.2	4.5
14	41.7	5.2	41.3	5.2	40.9	5.1	40.5	5.08	40.1	5.0	39.7	5.0
32	49.2	5.5	48.8	5.4	48.3	5.4	47.8	5.34	47.3	5.3	46.8	5.2
47	54.6	5.4	54.1	5.3	53.5	5.3	53.0	5.21	52.5	5.2	51.9	5.1
75.2	60.7	4.6	60.1	4.6	59.5	4.6	58.9	4.51	58.3	4.5	57.7	4.4

NOTE

- Capacities are based on following conditions; Refrigerant pipe length : 7.5m (24.6ft) / Level difference : 0m (0ft).

5. Capacity Correction

CNH18HDM(AC018MNHDC/AA)+CXH18ADJ(AC018JXADCH/AA)

Cooling



		Pipe Length (ft)					
		16.4	32.8	49.2	65.6	82.0	98.4
Level Difference (ft)	65.6	-	-	-	0.96	0.94	0.93
	49.2	-	-	0.97	0.96	0.94	0.93
	32.8	-	0.99	0.97	0.96	0.94	0.93
	16.4	1	0.99	0.97	0.96	0.94	0.93
	0.0	1	0.99	0.97	0.96	0.94	0.93
	-16.4	1	0.98	0.97	0.95	0.94	0.93
	-32.8	-	0.97	0.96	0.95	0.93	0.92
	-49.2	-	-	0.96	0.94	0.93	0.92
	-65.6	-	-	-	0.94	0.93	0.91

Heating



		Pipe Length (ft)					
		16.4	32.8	49.2	65.6	82.0	98.4
Level Difference (ft)	65.6	-	-	-	0.94	0.92	0.90
	49.2	-	-	0.96	0.94	0.92	0.90
	32.8	-	0.98	0.96	0.94	0.92	0.90
	16.4	1	0.98	0.96	0.94	0.92	0.90
	0.0	1	0.98	0.96	0.94	0.92	0.90
	-16.4	1	0.98	0.96	0.94	0.92	0.90
	-32.8	-	0.98	0.96	0.94	0.92	0.90
	-49.2	-	-	0.96	0.94	0.92	0.90
	-65.6	-	-	-	0.94	0.92	0.90

5. Capacity Correction

CNH24HDM(AC024MNHDC/AA)+CXH24ADJ(AC024JXADCH/AA), CNH30HDM(AC030MNHDC/AA)+CXH30ADJ(AC030JXADCH/AA)

Cooling



		Pipe Length (ft)									
		16.4	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
Level Difference (ft)	98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90
	82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
	65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	16.4	1	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	0.0	1	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-16.4	1	0.98	0.97	0.96	0.95	0.94	0.92	0.91	0.90	0.88
	-32.8	-	0.98	0.97	0.96	0.95	0.94	0.92	0.90	0.89	0.86
	-49.2	-	-	0.97	0.96	0.94	0.93	0.91	0.90	0.88	0.85
	-65.6	-	-	-	0.95	0.94	0.93	0.91	0.89	0.87	0.83
	-82.0	-	-	-	-	0.94	0.92	0.90	0.88	0.86	0.81
	-98.4	-	-	-	-	-	0.92	0.90	0.88	0.85	0.80

Heating



		Pipe Length (ft)									
		16.4	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
Level Difference (ft)	98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90
	82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
	65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	16.4	1	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	0.0	1	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-16.4	1	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
	-82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
	-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90

5. Capacity Correction

CNH36HDM(AC036MNHDC/AA)+CXH36ADJ(AC036JXADCH/AA), CNH42HDM(AC042MNHDC/AA)+CXH42ADJ(AC042JXADCH/AA),
CNH48HDM(AC048MNHDC/AA)+CXH48ADJ(AC048JXADCH/AA)

Cooling



		Pipe Length (ft)														
		16.4	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0	180.4	196.9	213.3	229.7	246.1
Level Difference (ft)	98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	16.4	1	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	0.0	1	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
	-16.4	1	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
	-32.8	-	0.98	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.87	0.85
	-49.2	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84
	-65.6	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.91	0.89	0.88	0.86	0.83
	-82.0	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.92	0.88	0.87	0.85	0.81
	-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84	0.80

Heating



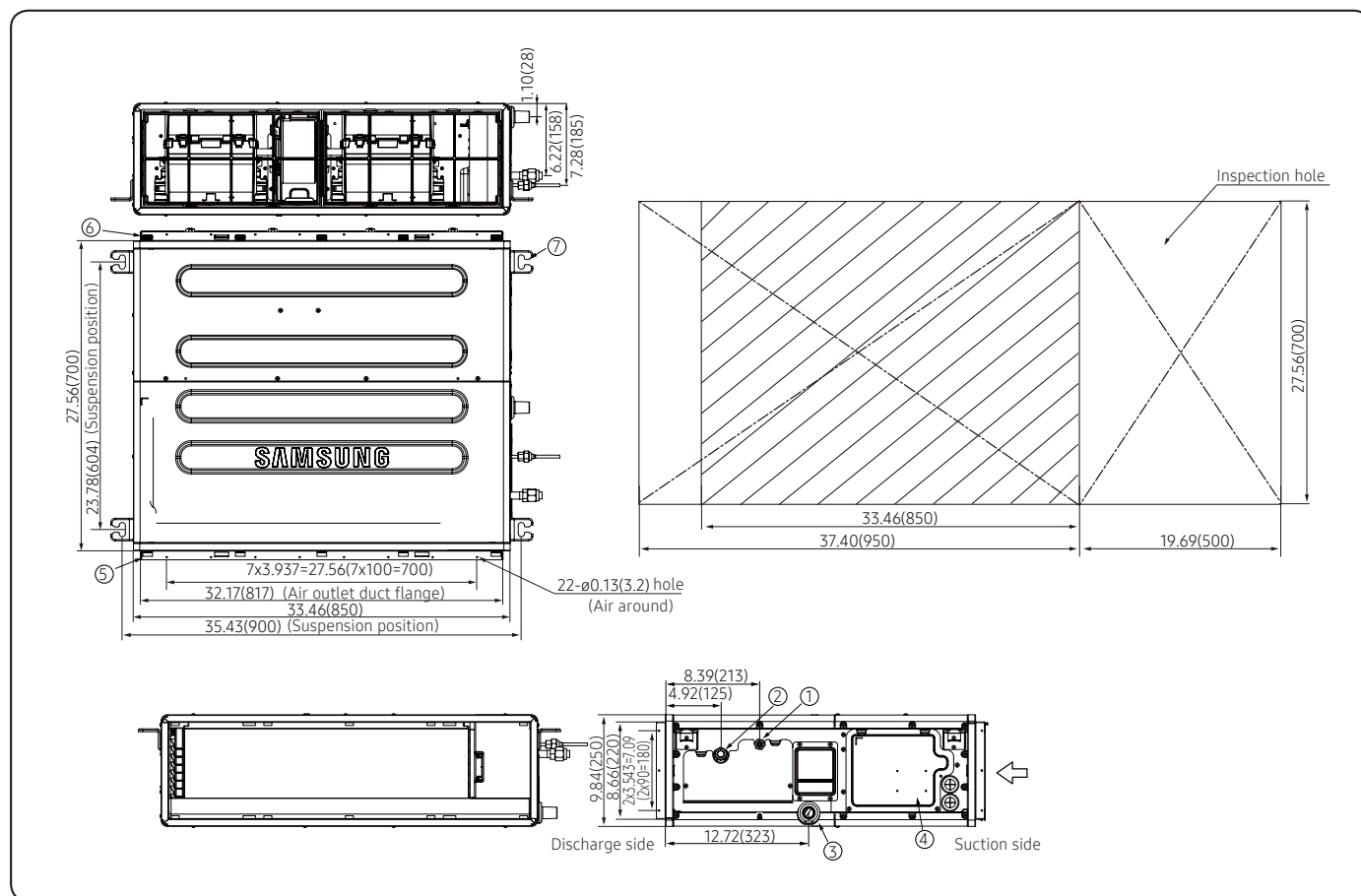
		Pipe Length (ft)														
		16.4	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0	180.4	196.9	213.3	229.7	246.1
Level Difference (ft)	98.4	-	-	-	-	-	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	82.0	-	-	-	-	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	65.6	-	-	-	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	49.2	-	-	0.98	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	32.8	-	0.99	0.98	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	16.4	1	0.99	0.98	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	0.0	1	0.99	0.98	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	-16.4	1	0.99	0.98	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	-32.8	-	0.99	0.98	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	-49.2	-	-	0.98	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	-65.6	-	-	-	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	-82.0	-	-	-	-	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
	-98.4	-	-	-	-	-	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88

6. Dimensional Drawing

Indoor unit

CNH18HDM(AC018MNHDC/AA)

Units : inches [mm]



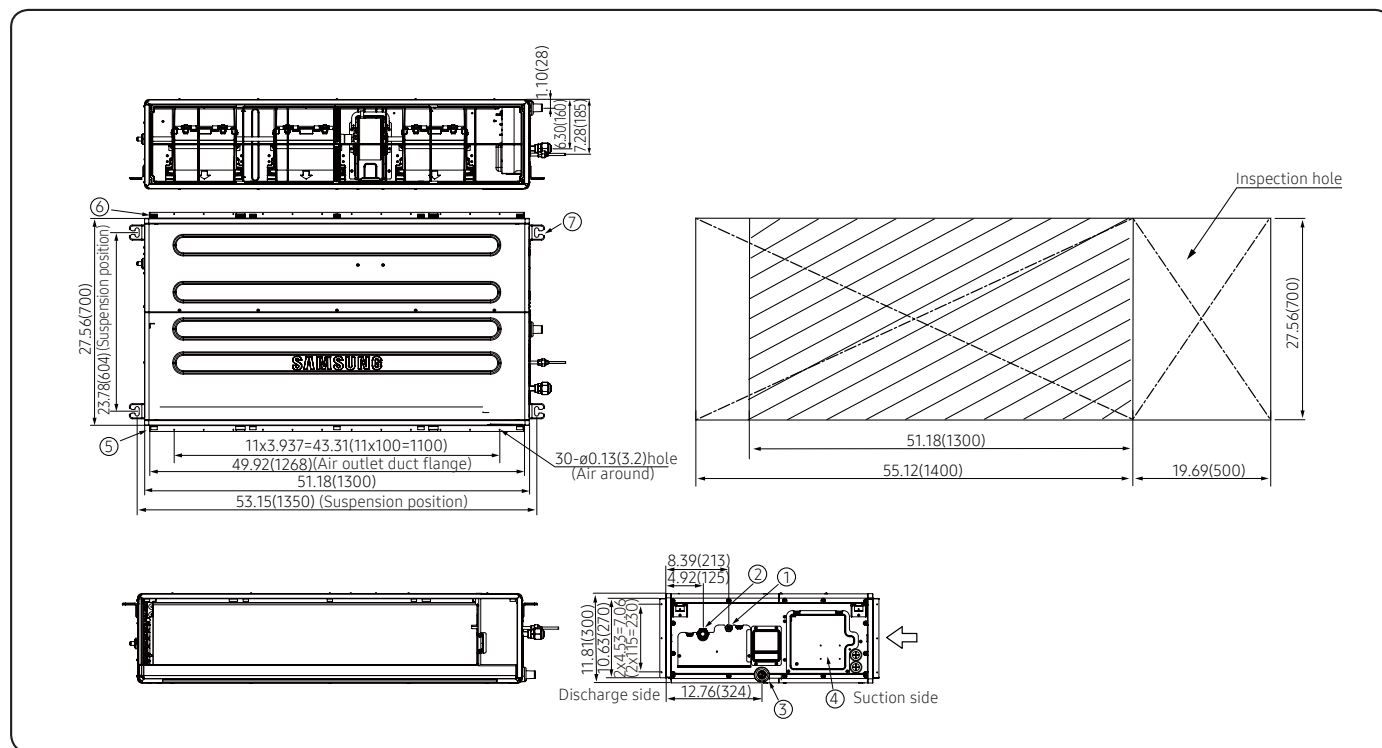
NO	Name	Description
1	Liquid pipe connection	Ø1/4"(6.35)
2	Gas pipe connection	Ø1/2"(12.70)
3	Drain pipe connection	ODØ1.26"(32) IDØ0.98"(25)
4	Power supply connection	-
5	Air discharge flange	-
6	Air filter	-
7	Hook	M8~M10

6. Dimensional Drawing

Indoor unit

CNH36HDM(AC036MNHDC/AA), CNH42HDM(AC042MNHDC/AA), CNH48HDM(AC048MNHDC/AA)

Units : inches [mm]



NO	Name	Description
1	Liquid pipe connection	Ø3/8"(9.52)
2	Gas pipe connection	Ø5/8"(15.88)
3	Drain pipe connection	ODØ1.26"(32) IDØ0.98"(25)
4	Power supply connection	-
5	Air discharge flange	-
6	Air filter	-
7	Hook	M8~M10

6. Dimensional Drawing

Outdoor unit

CXH18ADJ(AC018JXADCH/AA)

Units : mm [inches]

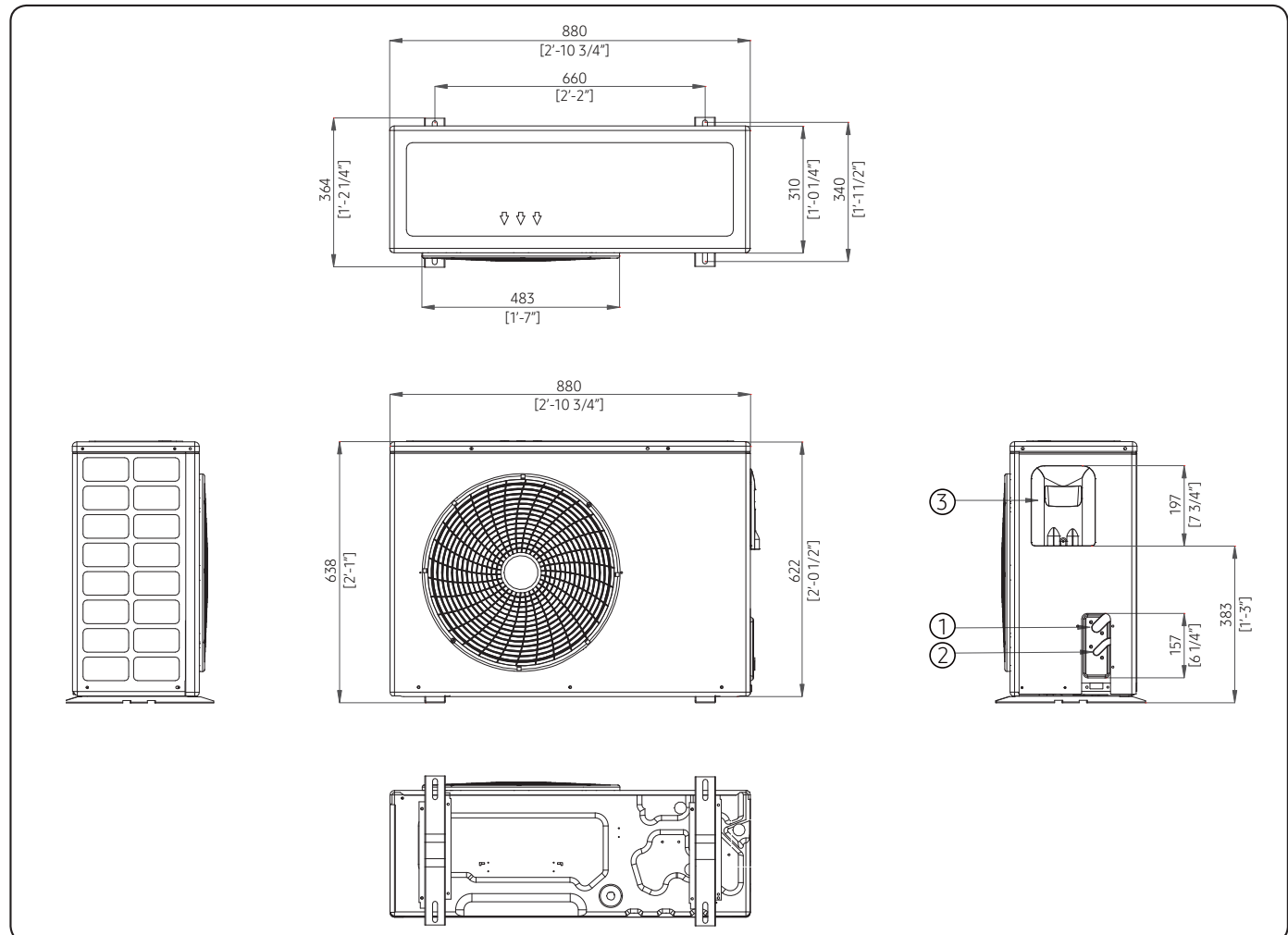


Table of descriptions

1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Power & Comm. wiring conduits	9	
4		10	
5		11	
6		12	

6. Dimensional Drawing

Outdoor unit

CXH24ADJ(AC024JXADCH/AA), CXH30ADJ(AC030JXADCH/AA)

Units : mm [inches]

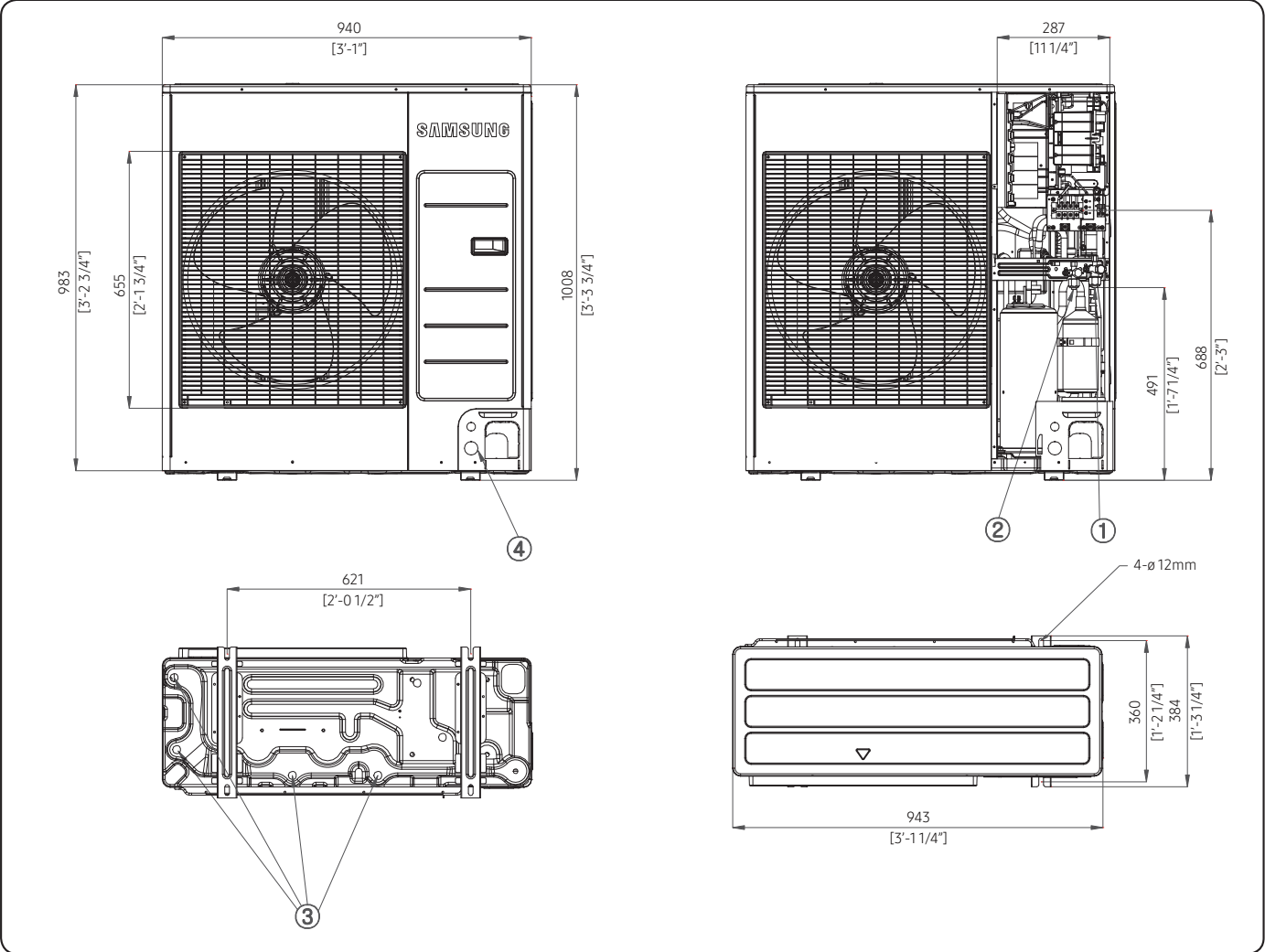


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Drain Hole	9	
4	Power & Comm. wiring conduits	10	
5		11	
6		12	

6. Dimensional Drawing

CXH36ADJ(AC036JXADCH/AA), CXH42ADJ(AC042JXADCH/AA), CXH48ADJ(AC048JXADCH/AA)

Units : mm [inches]

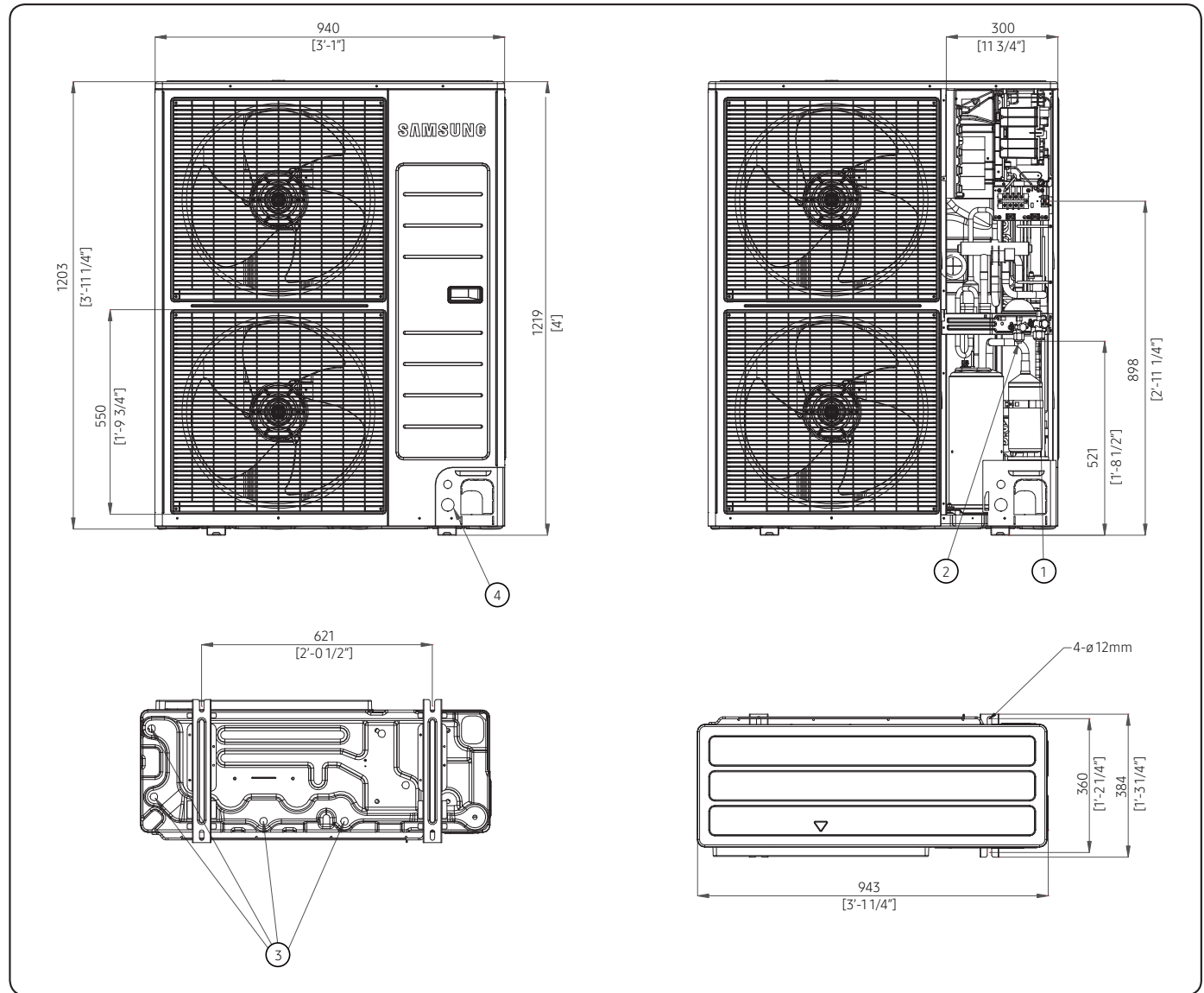


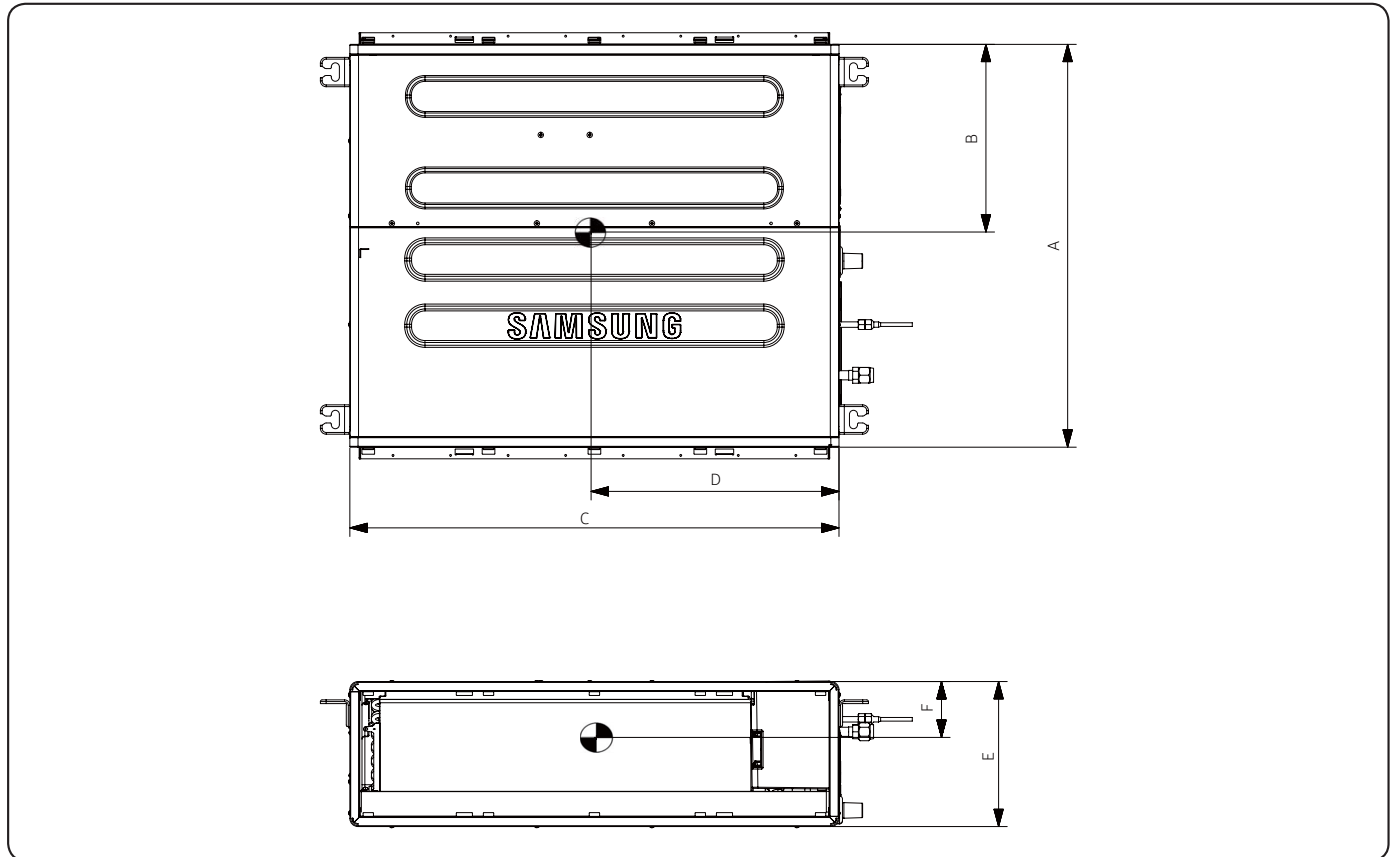
Table of descriptions

1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Drain Hole	9	
4	Power & Comm. wiring conduits	10	
5		11	
6		12	

7. Center of Gravity

Indoor unit

Units : mm [inches]

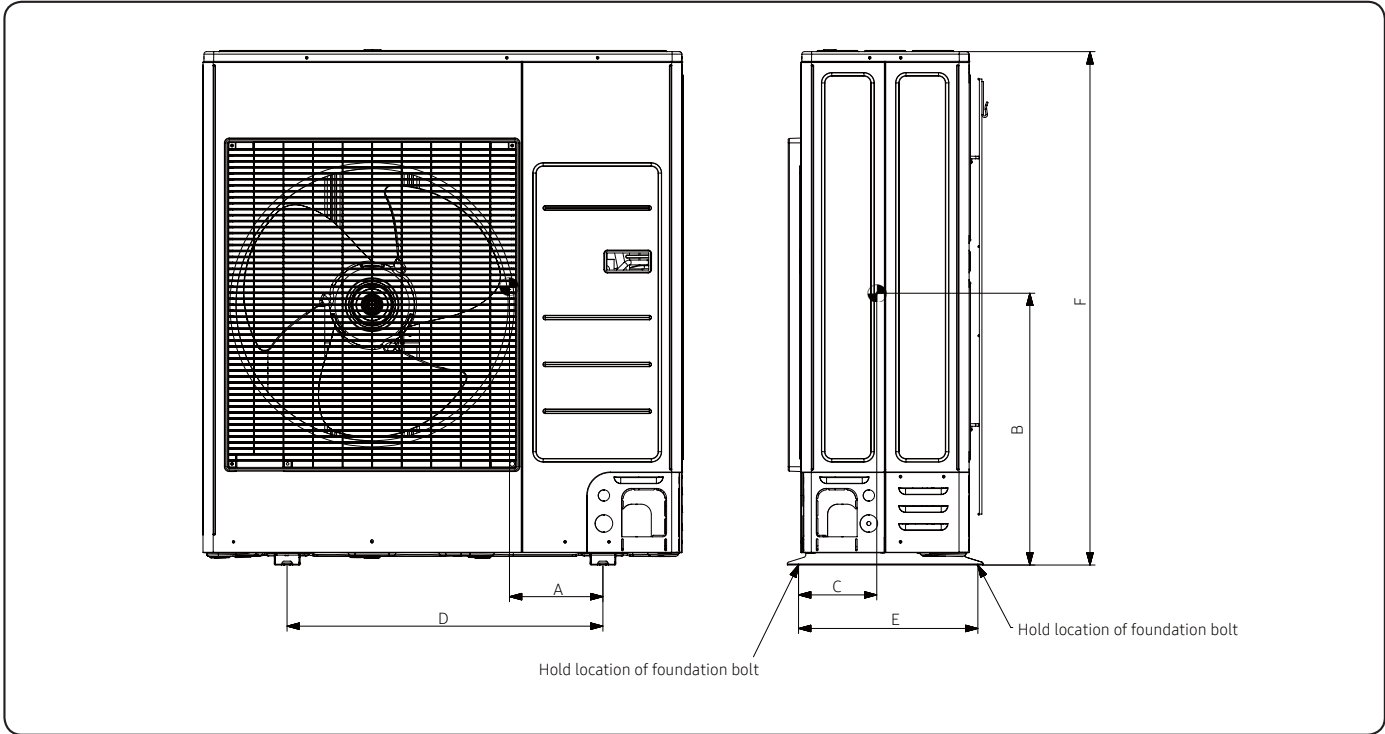


Model	A	B	C	D	E	F
CNH18HDM(AC018MNHDCH/AA)	700 [27-9/16]	335 [14]	900 [35-7/16]	405 [15-15/16]	252 [9-15/16]	125 [4-15/16]
CNH24HDM(AC024MNHDCH/AA)	700 [27-9/16]	265 [10-7/16]	1250 [49-3/16]	565 [18-5/16]	252 [9-15/16]	125 [4-15/16]
CNH30HDM(AC030MNHDCH/AA)	700 [27-9/16]	265 [10-7/16]	1350 [53-1/8]	650 [25-5/8]	301 [11-13/16]	150 [5-15/16]
CNH36HDM(AC036MNHDCH/AA)						
CNH42HDM(AC042MNHDCH/AA)						
CNH48HDM(AC048MNHDCH/AA)						

7. Center of Gravity

Outdoor unit

Units : mm [inches]

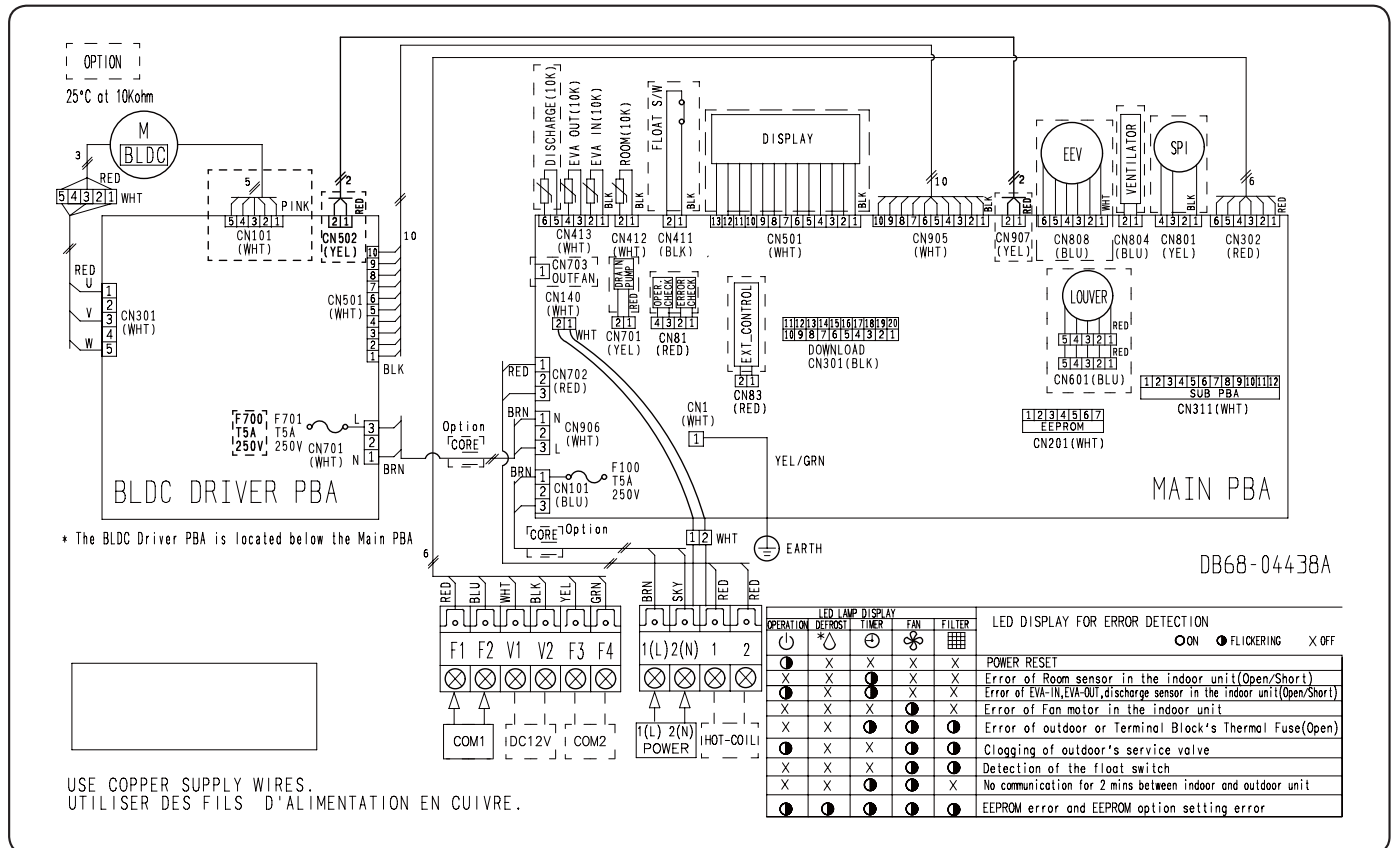


Model	A	B	C	D	E	F
CXH18ADJ(AC018JXADCH/AA)	220 [8-5/8]	290 [11-7/16]	150 [5-7/8]	660 [26]	336 [13-1/4]	638 [25-1/8]
CXH24ADJ(AC024JXADCH/AA)	205	445	160	620	328	998
CXH30ADJ(AC030JXADCH/AA)	[8-1/8]	[17-1/2]	[6-5/16]	[24-3/8]	[12-7/8]	[39-5/16]
CXH36ADJ(AC036JXADCH/AA)	210	530	160	620	328	1210
CXH42ADJ(AC042JXADCH/AA)	[8-1/4]	[20-7/8]	[6-5/16]	[24-3/8]	[12-7/8]	[47-5/8]
CXH48ADJ(AC048JXADCH/AA)						

8. Electrical Wiring Diagram

Indoor unit

CNH18HDM(AC018MNHDC/AA), CNH24HDM(AC024MNHDC/AA), CNH30HDM(AC030MNHDC/AA), CNH36HDM(AC036MNHDC/AA), CNH42HDM(AC042MNHDC/AA), CNH48HDM(AC048MNHDC/AA)



MAIN PBA	Printed Circuit Board(MAIN)	SPI	S-Plasma ion	ROOM(10K)	Thermistor ROOM OUT(10K)
BLDC DRIVER PBA	Printed Circuit Board(BLDC DRIVER)	EEV	Electronic Expansion Valve	EVA-IN(10K)	Thermistor EVA IN(10K)
SUB PBA	Printed Circuit Board(SUB)	EXT_CONTROL	EXTERNAL_CONTROL	EVA-OUT(10K)	Thermistor EVA OUT(10K)
M-BLDC	BLDC Motor			DISCHARGE(10K)	Thermistor DISCHARGE(10K)

NOTE

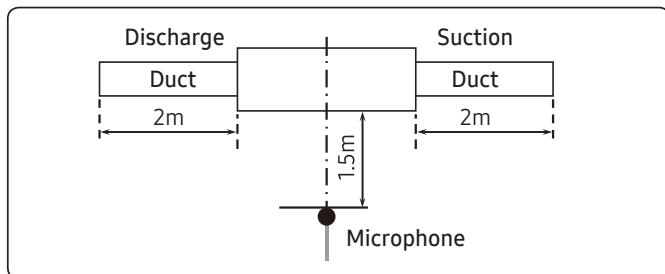
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow : blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- Protective earth(SCREW)

9. Sound Data

Sound Pressure level

Indoor unit

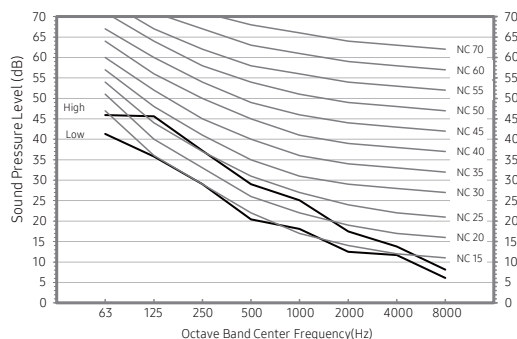
Unit: dB(A)



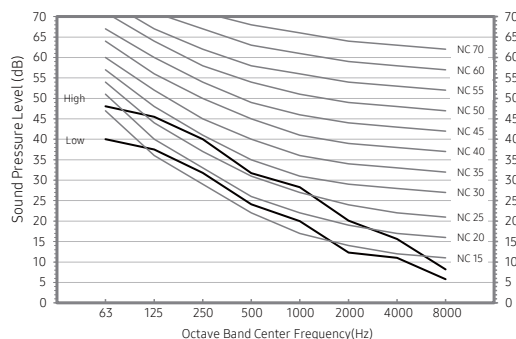
Model	High	Mid	Low
CNH18HDM(AC018MNHDCH/AA)	34	30	26
CNH24HDM(AC024MNHDCH/AA)	36	32	28
CNH30HDM(AC030MNHDCH/AA)	37	33	29
CNH36HDM(AC036MNHDCH/AA)	38	34	30

• NC Curve

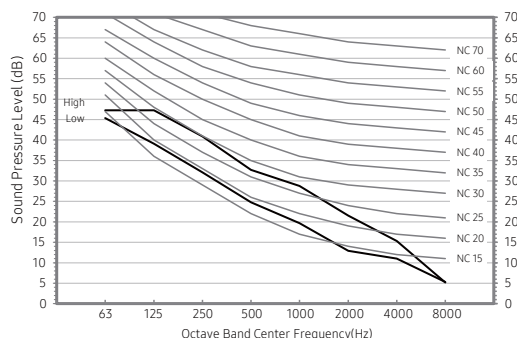
1) CNH18HDM(AC018MNHDCH/AA)



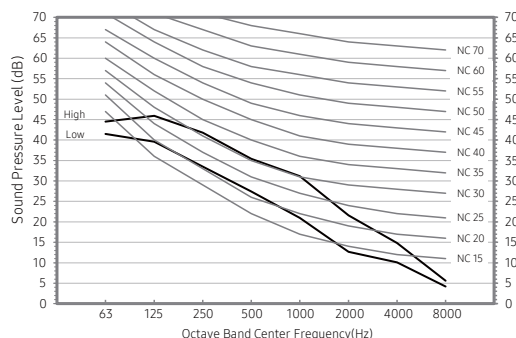
2) CNH24HDM(AC024MNHDCH/AA)



3) CNH30HDM(AC030MNHDCH/AA)



4) CNH36HDM(AC036MNHDCH/AA)



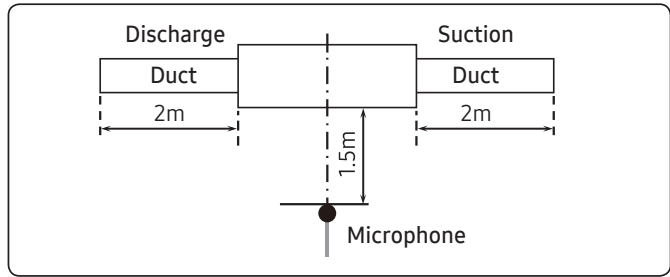
NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - 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

9. Sound Data

Indoor unit

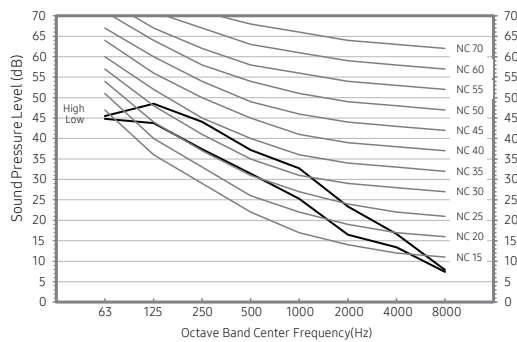
Unit: dB(A)



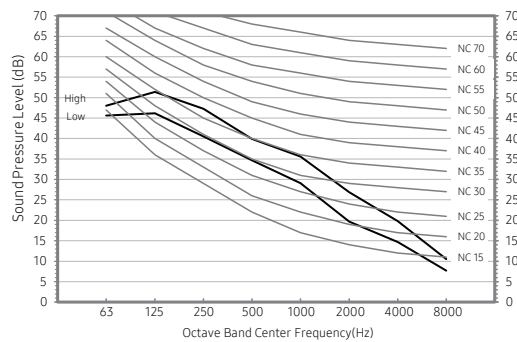
Model	High	Mid	Low
CNH42HDM(AC042MNHDCH/AA)	40	37	34
CNH48HDM(AC048MNHDCH/AA)	43	40	37

- NC Curve

5) CNH42HDM(AC042MNHDCH/AA)



6) CNH48HDM(AC048MNHDCH/AA)



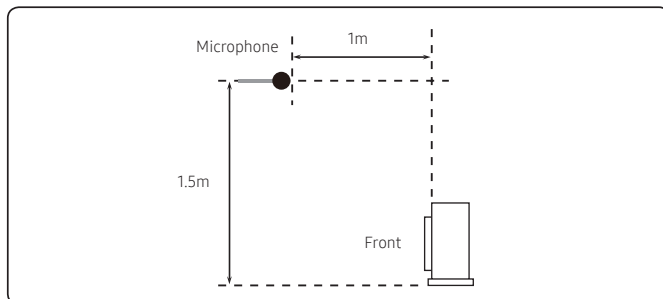
NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - 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

9. Sound Data

Outdoor unit

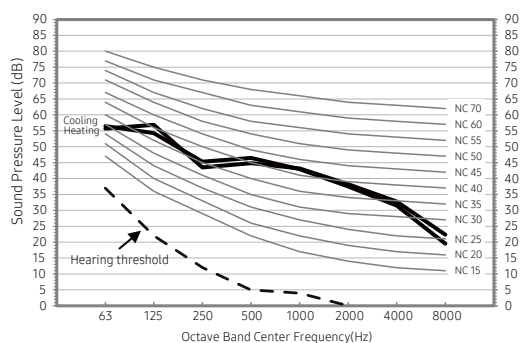
Unit: dB(A)



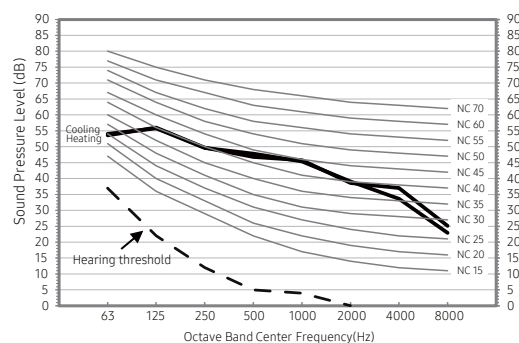
Model	High	Mid
CXH18ADJ(AC018JXADCH/AA)	48	48
CXH24ADJ(AC024JXADCH/AA)	50	50
CXH30ADJ(AC030JXADCH/AA)	50	52

NC Curve

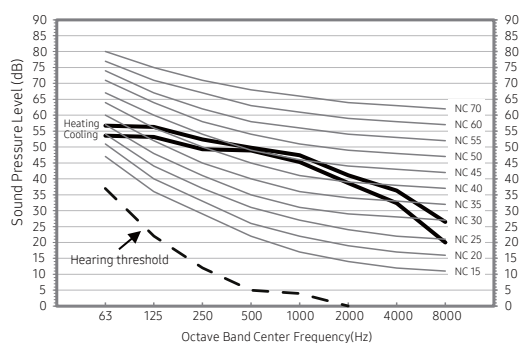
1) CXH18ADJ(AC018JXADCH/AA)



2) CXH24ADJ(AC024JXADCH/AA)



3) CXH30ADJ(AC030JXADCH/AA)



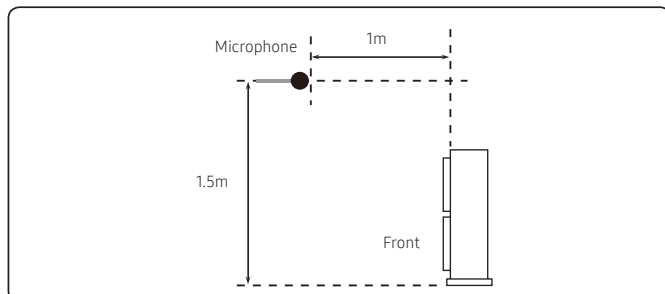
NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - 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

9. Sound Data

Outdoor unit

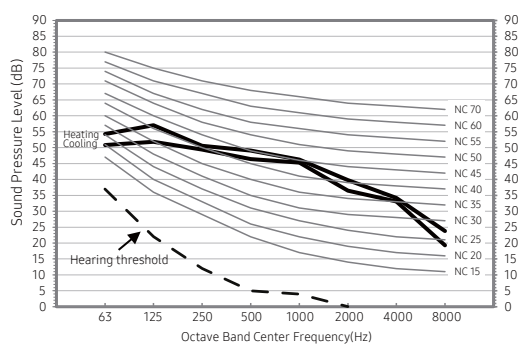
Unit: dB(A)



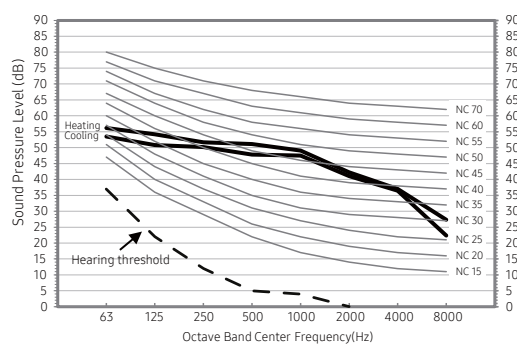
Model	High	Mid
CXH36ADJ(AC036JXADCH/AA)	49	51
CXH42ADJ(AC042JXADCH/AA)	51	53
CXH48ADJ(AC048JXADCH/AA)	53	55

• NC Curve

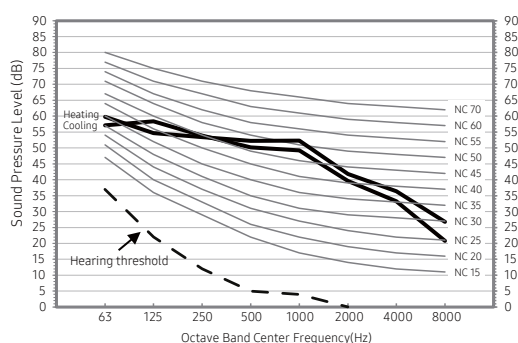
4) CXH36ADJ(AC036JXADCH/AA)



5) CXH42ADJ(AC042JXADCH/AA)



6) CXH48ADJ(AC048JXADCH/AA)



NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - 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

9. Sound Data

Sound Power level

Indoor unit

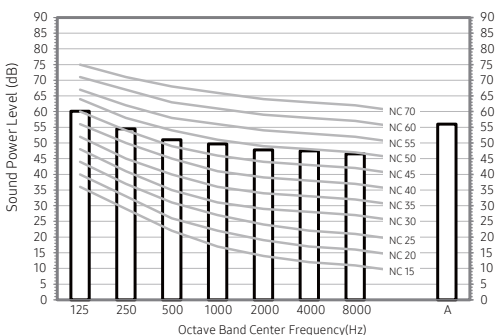
Unit: dB(A)

NOTE

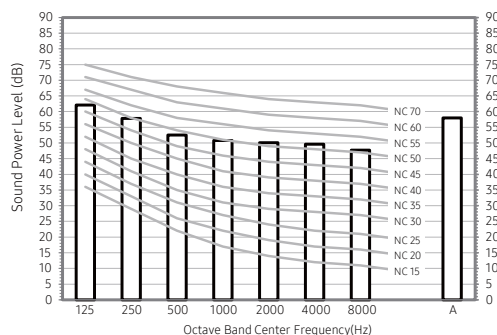
- Specifications may be subject to change without prior notice
- Sound Power Level
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Model	Power
CNH18HDM(AC018MNHDCH/AA)	56
CNH24HDM(AC024MNHDCH/AA)	58
CNH30HDM(AC030MNHDCH/AA)	59
CNH36HDM(AC036MNHDCH/AA)	60
CNH42HDM(AC042MNHDCH/AA)	62
CNH48HDM(AC048MNHDCH/AA)	65

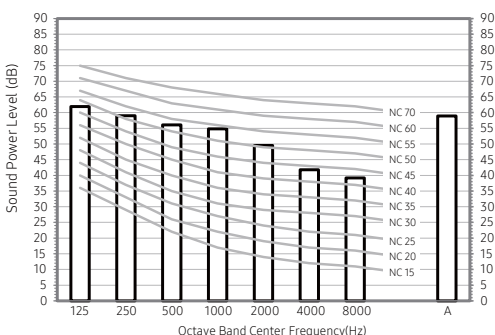
1) CNH18HDM(AC018MNHDCH/AA)



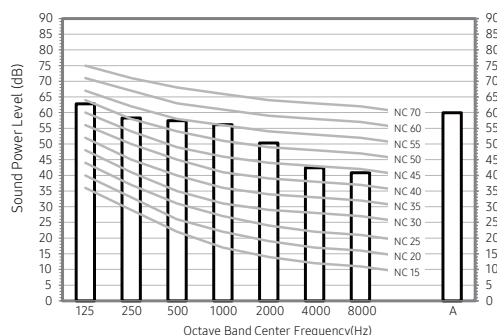
2) CNH24HDM(AC024MNHDCH/AA)



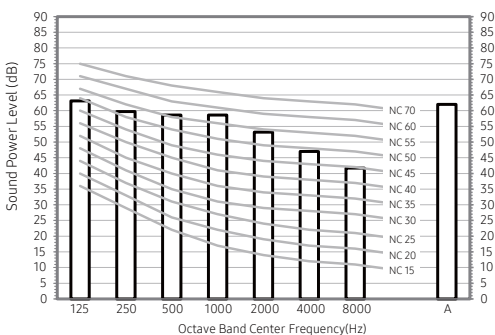
3) CNH30HDM(AC030MNHDCH/AA)



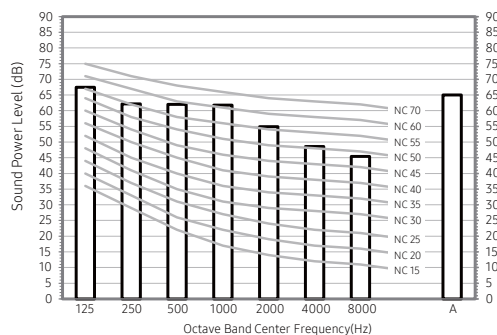
4) CNH36HDM(AC036MNHDCH/AA)



5) CNH42HDM(AC042MNHDCH/AA)



6) CNH48HDM(AC048MNHDCH/AA)



9. Sound Data

Sound Power level

Outdoor unit

Unit: dB(A)

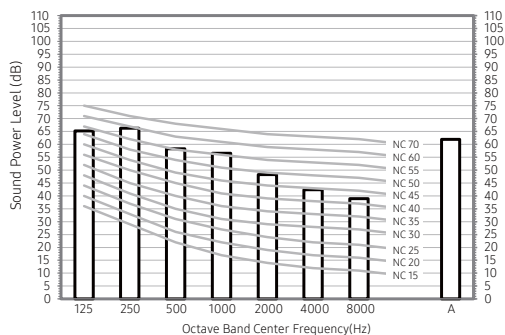


NOTE

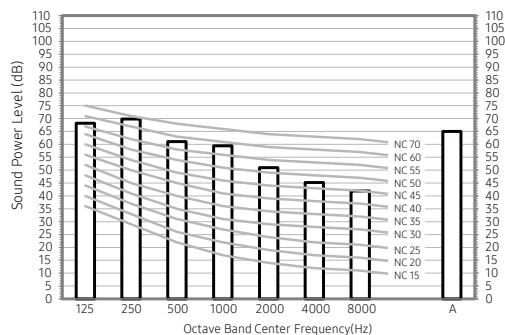
- Specifications may be subject to change without prior notice
- Sound Power Level
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Model	Power
CXH18ADJ(AC018JXADCH/AA)	62
CXH24ADJ(AC024JXADCH/AA)	65
CXH30ADJ(AC030JXADCH/AA)	65
CXH36ADJ(AC036JXADCH/AA)	65
CXH42ADJ(AC042JXADCH/AA)	66
CXH48ADJ(AC048JXADCH/AA)	67

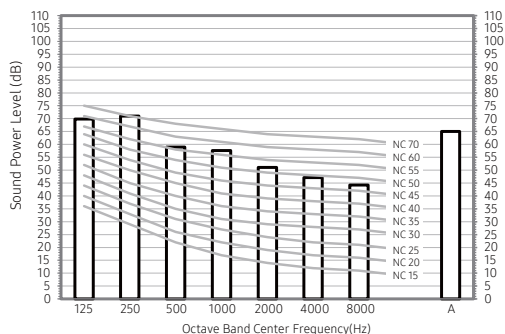
1) CXH18ADJ(AC018JXADCH/AA)



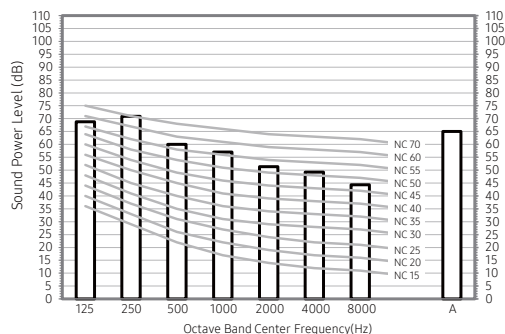
2) CXH24ADJ(AC024JXADCH/AA)



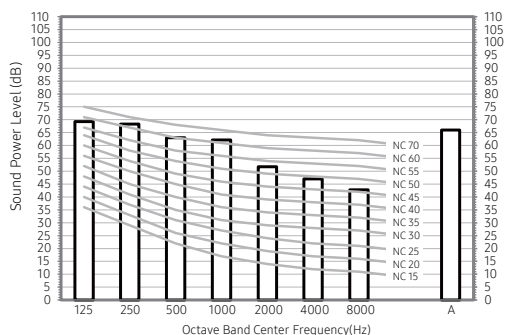
3) CXH30ADJ(AC030JXADCH/AA)



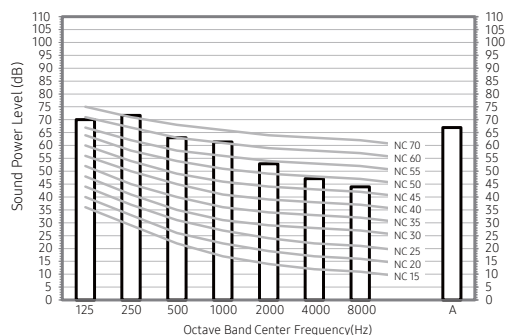
4) CXH36ADJ(AC036JXADCH/AA)



5) CXH42ADJ(AC042JXADCH/AA)



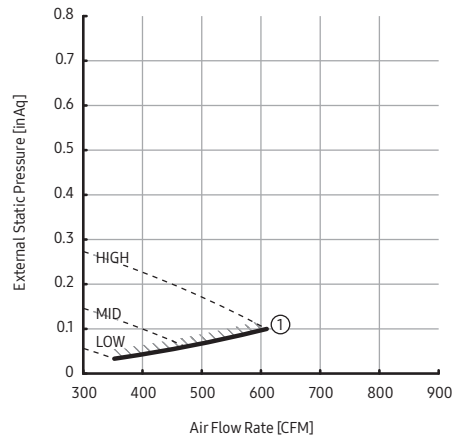
6) CXH48ADJ(AC048JXADCH/AA)



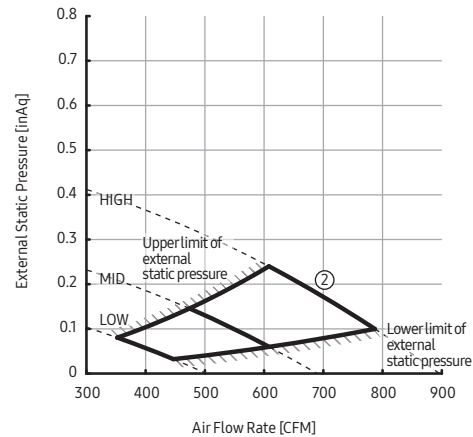
10. Fan characteristics (P-Q Curve)

1) CNH18HDM(AC018MNHDC/AA)

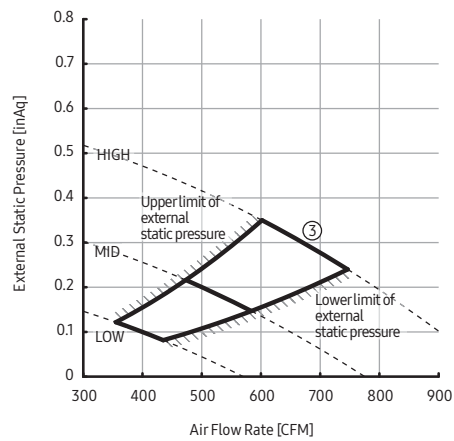
①	External Static Pressure(inAq)	Option Code
	P=0.10(Default)	01B0EC-1E5411-27343B-374000



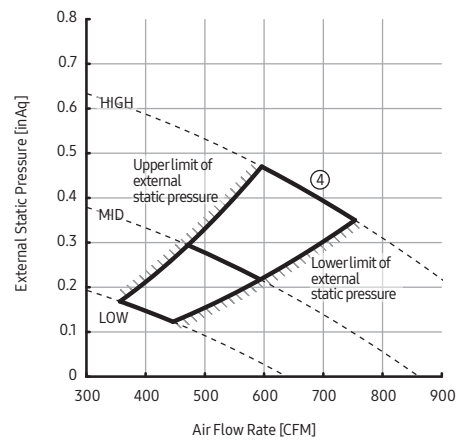
②	External Static Pressure(inAq)	Option Code
	0.10 < P ≤ 0.24	01B0EC-1E54AA-27343B-374000



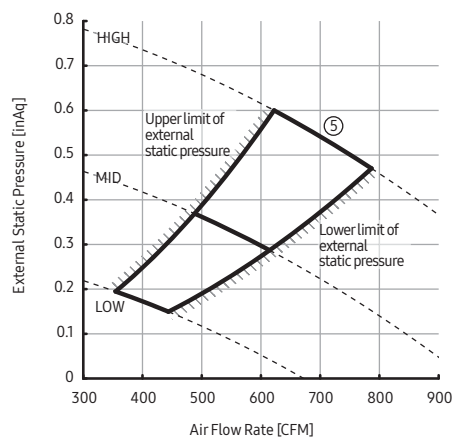
③	External Static Pressure(inAq)	Option Code
	0.24 < P ≤ 0.35	01B0EC-1E5933-27343B-374000



④	External Static Pressure(inAq)	Option Code
	0.35 < P ≤ 0.47	01B0EC-1E59CC-27343B-374000



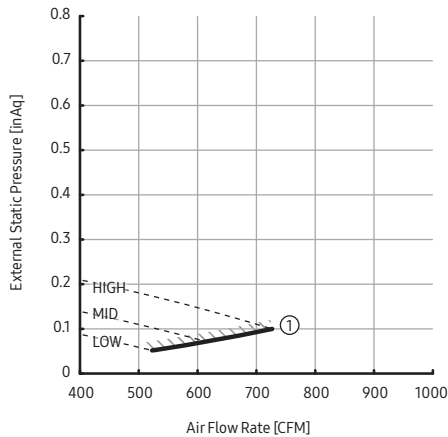
⑤	External Static Pressure(inAq)	Option Code
	0.47 < P ≤ 0.60	01B0EC-1E5E44-27343B-374000



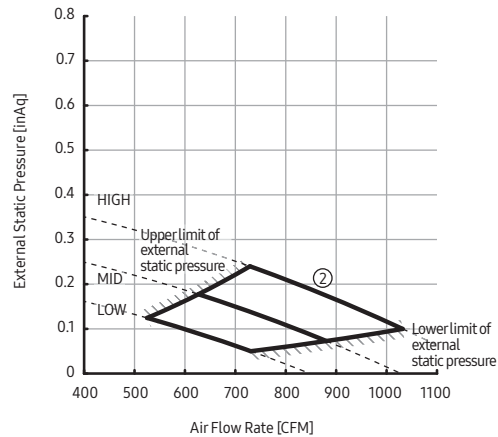
10. Fan characteristics (P-Q Curve)

2) CNH24HDM(AC024MNHDCH/AA)

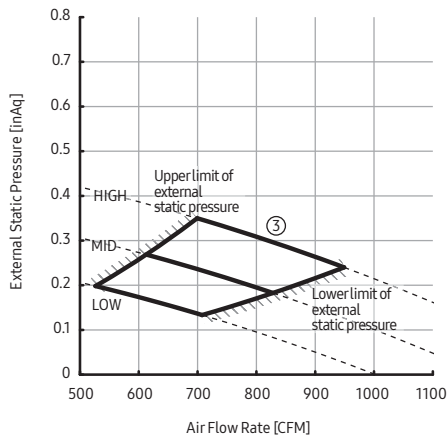
①	External Static Pressure(inAq)	Option Code
	P=0.10(Default)	01B0EC-1E5407-274750-374020



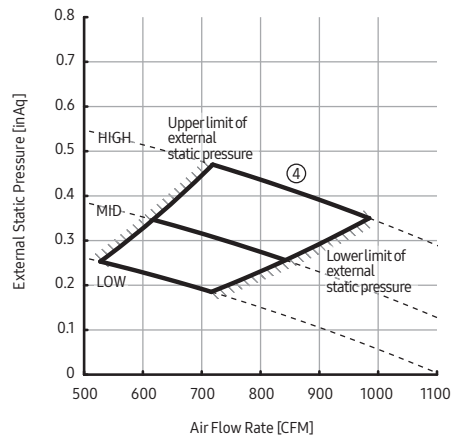
②	External Static Pressure(inAq)	Option Code
	0.10 < P ≤ 0.24	01B0EC-1E547B-274750-374020



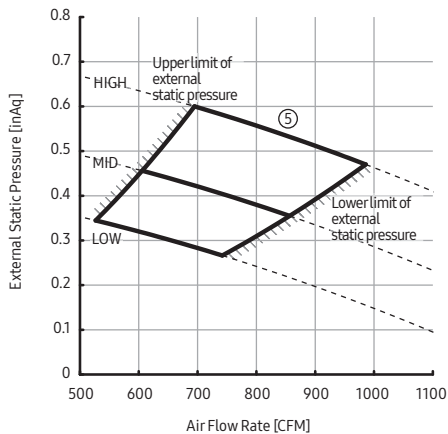
③	External Static Pressure(inAq)	Option Code
	0.24 < P ≤ 0.35	01B0EC-1E55D1-274750-374020



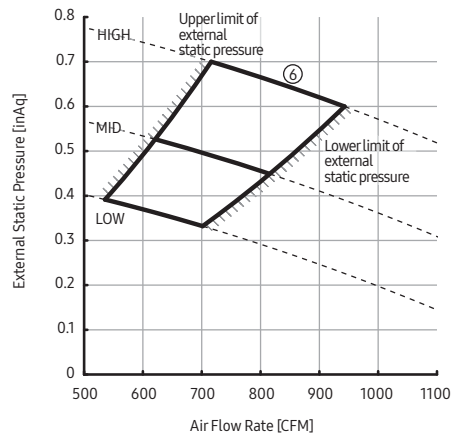
④	External Static Pressure(inAq)	Option Code
	0.35 < P ≤ 0.47	01B0EC-1E5937-274750-374020



⑤	External Static Pressure(inAq)	Option Code
	0.47 < P ≤ 0.60	01B0EC-1E599D-274750-374020



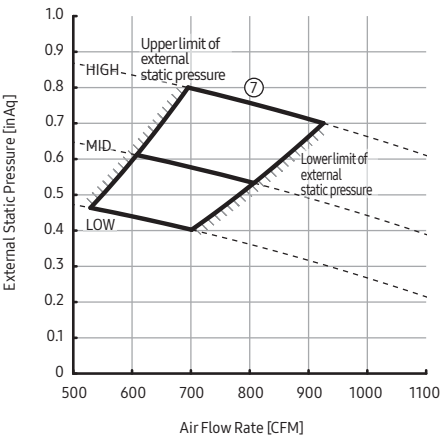
⑥	External Static Pressure(inAq)	Option Code
	0.60 < P ≤ 0.70	01B0EC-1E5AF3-274750-374020



10. Fan characteristics (P-Q Curve)

2) CNH24HDM(AC024MNHDC/AA)

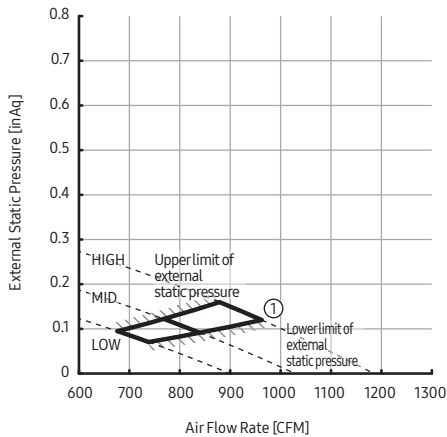
⑦	External Static Pressure(inAq)	Option Code
	0.70 < P≤ 0.80	01B0EC-1E5E59-274750-374020



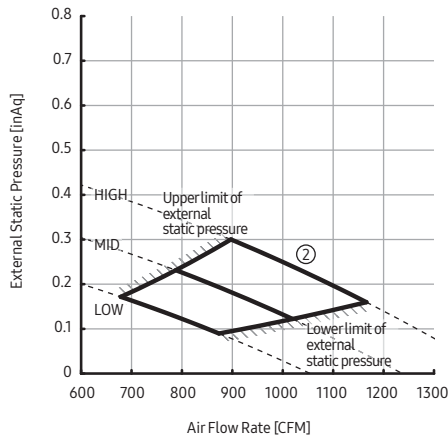
10. Fan characteristics (P-Q Curve)

3) CNH30HDM(AC030MNHDC/AA)

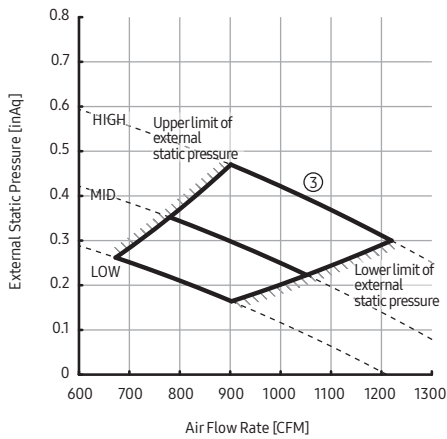
①	External Static Pressure(inAq)	Option Code
	0.12 ≤ P ≤ 0.16	01B0EC-1E54B8-275A64-376020



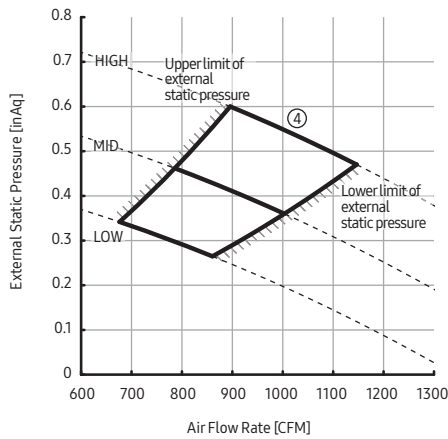
②	External Static Pressure(inAq)	Option Code
	0.16 < P ≤ 0.30	01B0EC-1E5920-275A64-376020



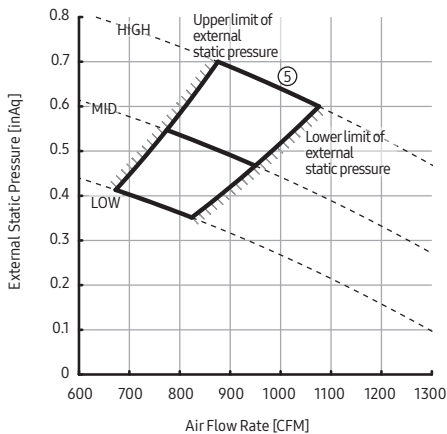
③	External Static Pressure(inAq)	Option Code
	0.30 < P ≤ 0.47	01B0EC-1E5997-275A64-376020



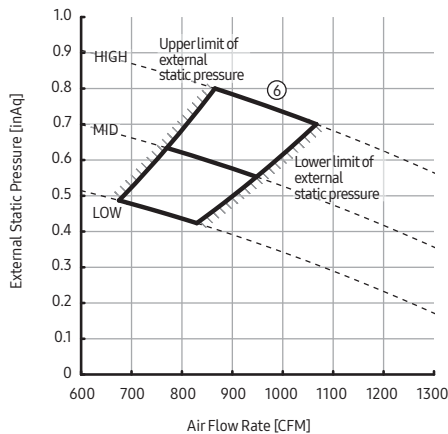
④	External Static Pressure(inAq)	Option Code
	0.47 < P ≤ 0.60	01B0EC-1E5D0E-275A64-376020



⑤	External Static Pressure(inAq)	Option Code
	0.60 < P ≤ 0.70	01B0EC-1E5E64-275A64-376020



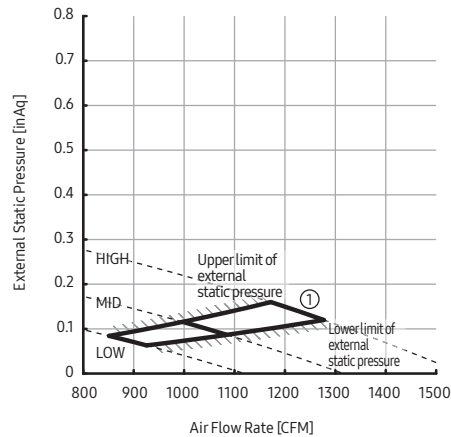
⑥	External Static Pressure(inAq)	Option Code
	0.70 < P ≤ 0.80	01B0EC-1E5ECA-275A64-376020



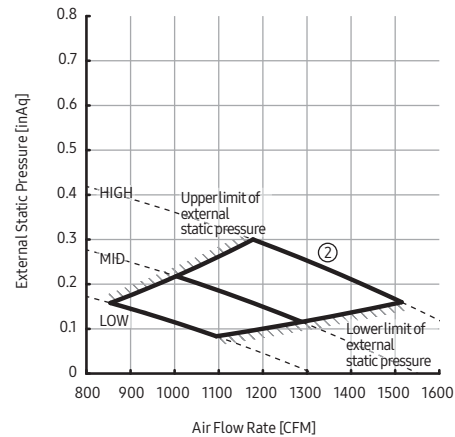
10. Fan characteristics (P-Q Curve)

4) CNH36HDM(AC036MNHDC/AA)

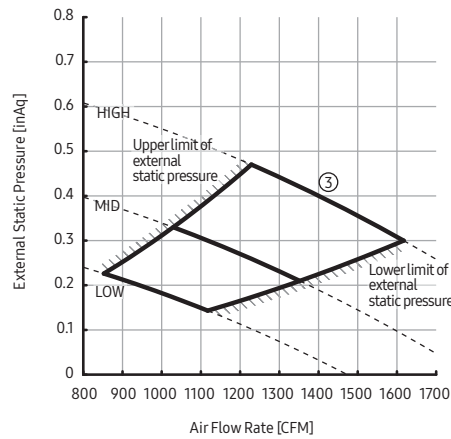
①	External Static Pressure(inAq)	Option Code
	$0.12 \leq P \leq 0.16$	01B0EC-1E5403-276470-376045



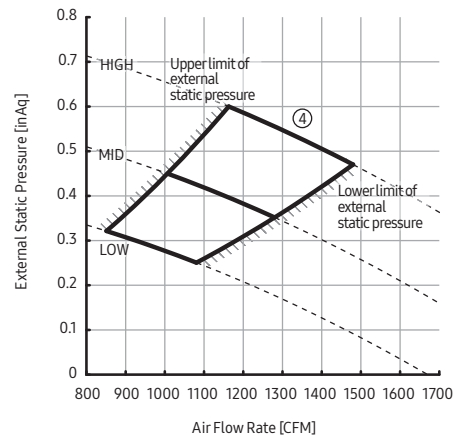
②	External Static Pressure(inAq)	Option Code
	$0.16 < P \leq 0.30$	01B0EC-1E546A-276470-376045



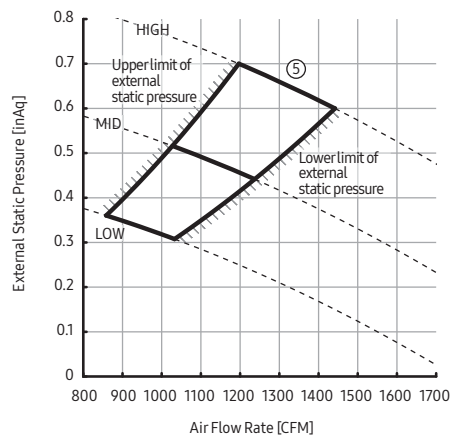
③	External Static Pressure(inAq)	Option Code
	$0.30 < P \leq 0.47$	01B0EC-1E55D1-276470-376045



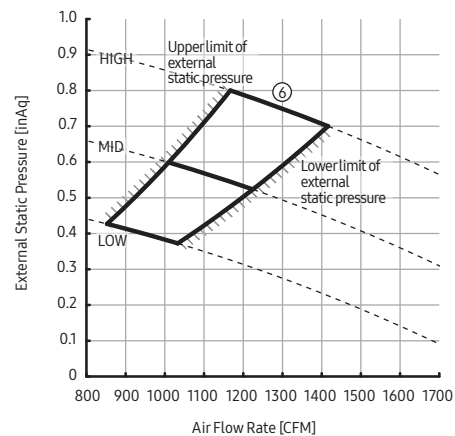
④	External Static Pressure(inAq)	Option Code
	$0.47 < P \leq 0.60$	01B0EC-1E5926-276470-376045



⑤	External Static Pressure(inAq)	Option Code
	$0.60 < P \leq 0.70$	01B0EC-1E5959-276470-376045



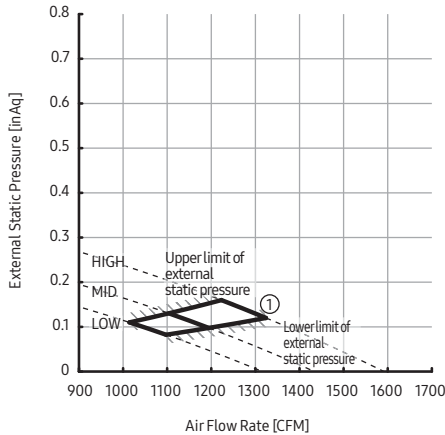
⑥	External Static Pressure(inAq)	Option Code
	$0.70 < P \leq 0.80$	01B0EC-1E597B-276470-376045



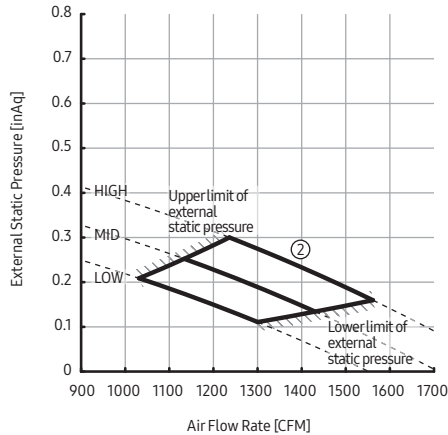
10. Fan characteristics (P-Q Curve)

5) CNH42HDM(AC042MNHDC/AA)

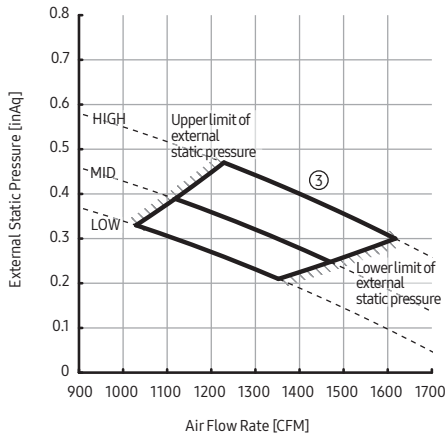
①	External Static Pressure(inAq)	Option Code
	0.12≤P≤0.16	01B0EC-1E547B-277D8C-377045



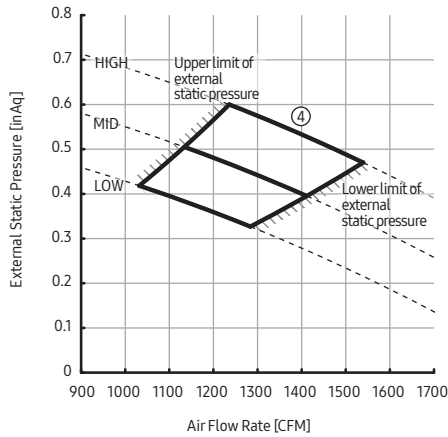
②	External Static Pressure(inAq)	Option Code
	0.16 < P ≤ 0.30	01B0EC-1E55E2-277D8C-377045



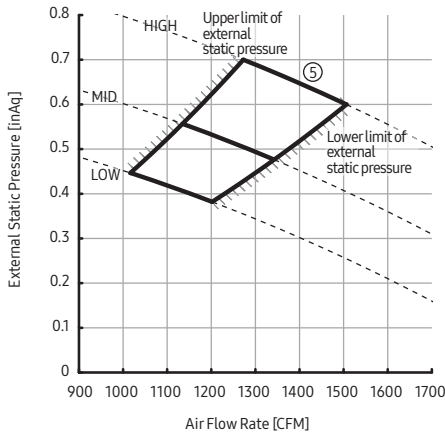
③	External Static Pressure(inAq)	Option Code
	0.30 < P ≤ 0.47	01B0EC-1E55E2-277D8C-377045



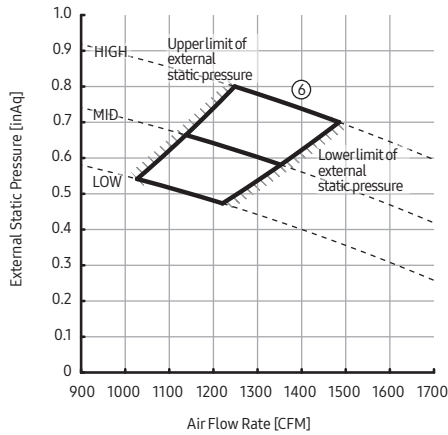
④	External Static Pressure(inAq)	Option Code
	0.47 < P ≤ 0.60	01B0EC-1E5937-277D8C-377045



⑤	External Static Pressure(inAq)	Option Code
	0.60 < P ≤ 0.70	01B0EC-1E596A277D8C-377045



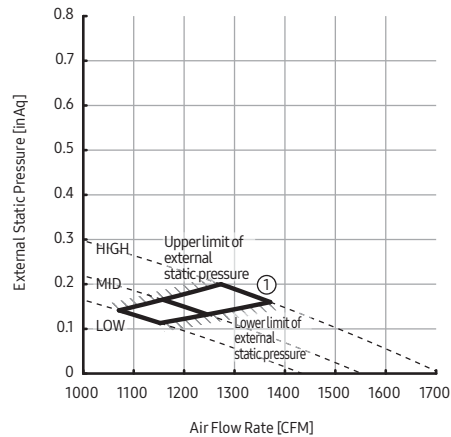
⑥	External Static Pressure(inAq)	Option Code
	0.70 < P ≤ 0.80	01B0EC-1E598C-277D8C-377045



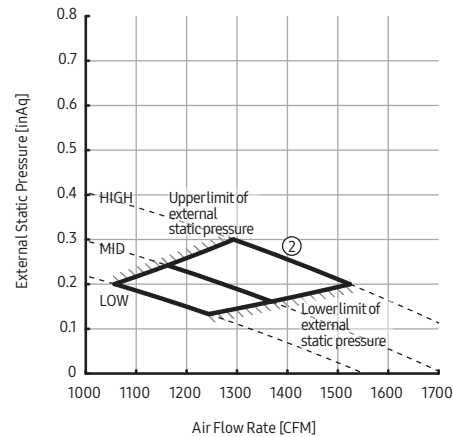
10. Fan characteristics (P-Q Curve)

6) CNH48HDM(AC048MNHDC/AA)

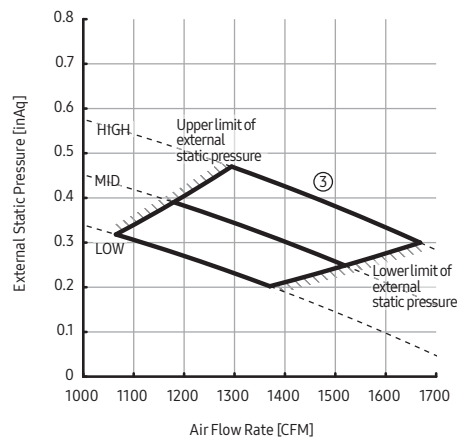
①	External Static Pressure(inAq)	Option Code
	0.16≤P≤0.20	01B0EC-1E5468-278CA0-377045



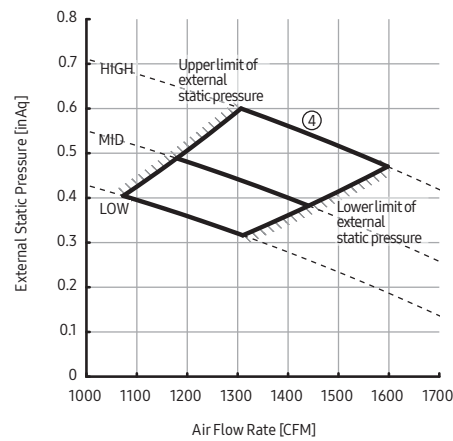
②	External Static Pressure(inAq)	Option Code
	0.20≤P≤0.30	01B0EC-1E54AC-278CA0-377045



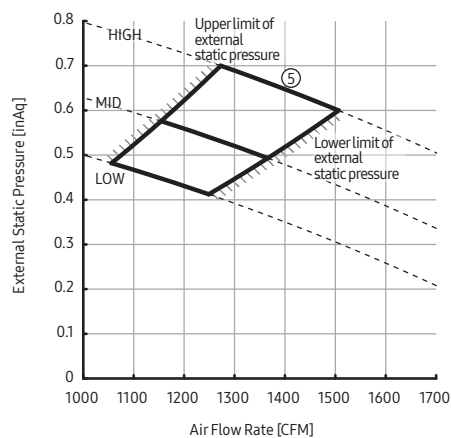
③	External Static Pressure(inAq)	Option Code
	0.30 < P ≤ 0.47	01B0EC-1E5913-278CA0-377045



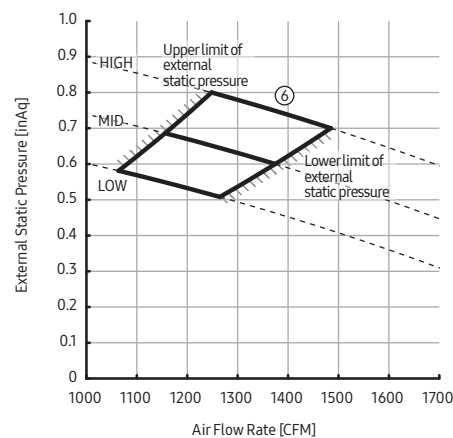
④	External Static Pressure(inAq)	Option Code
	0.47 < P ≤ 0.60	01B0EC-1E5948278CA0-377045



⑤	External Static Pressure(inAq)	Option Code
	0.60 < P ≤ 0.70	01B0EC-1E597B-278CA0-377045



⑥	External Static Pressure(inAq)	Option Code
	0.70 < P ≤ 0.80	01B0EC-1E59AE-278CA0-377045



11. Operation Range

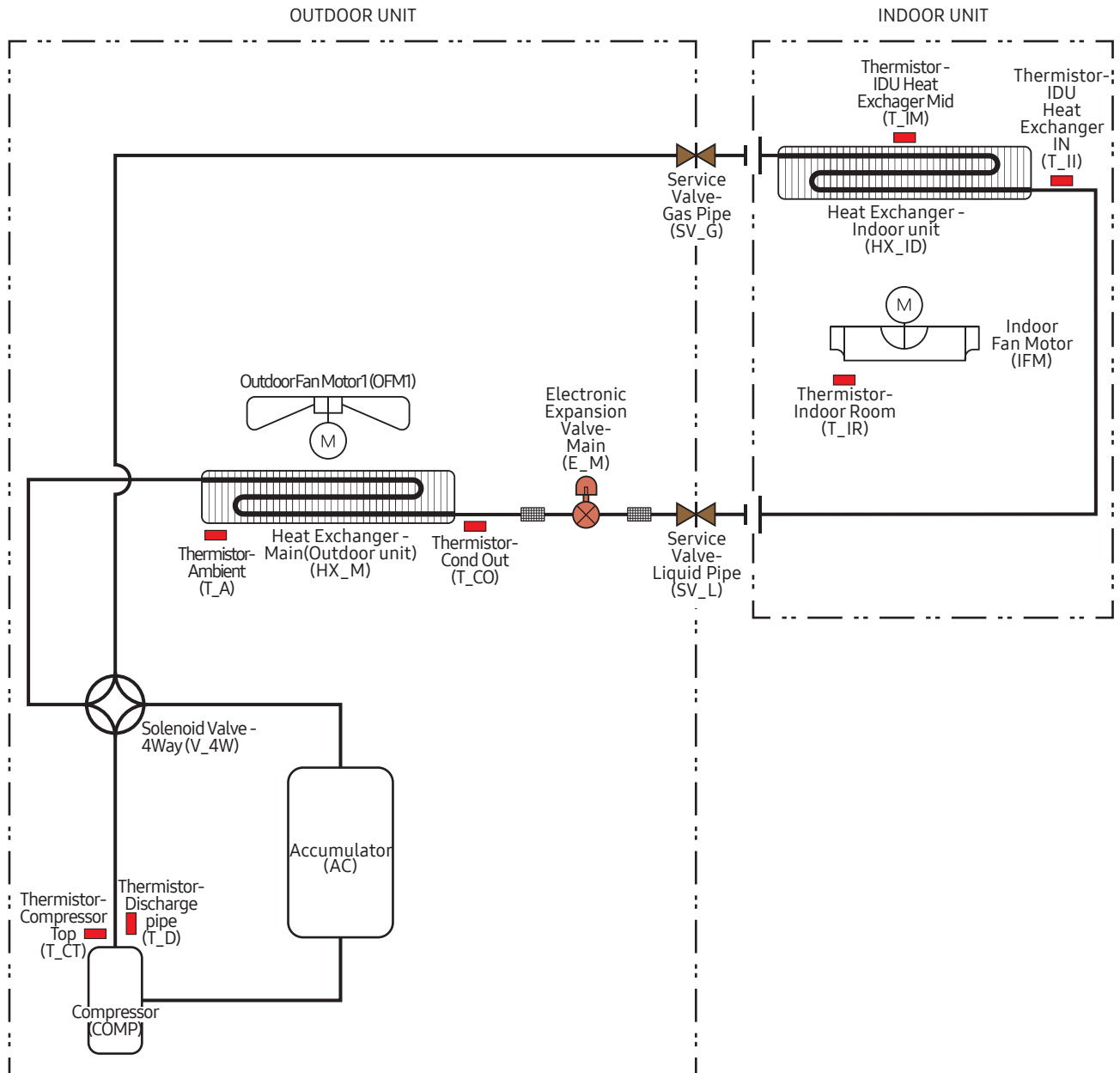
Mode	Outdoor Unit	Indoor Unit	Indoor Unit
	Temperature(DB)	Temperature(DB)	Humidity(RH)
COOL	0°F ~ 115°F	64.4°F ~ 89.6°F	80% or less
HEAT	-4°F ~ 75.2°F	86°F or less	-
DRY	0°F ~ 115°F	64.4°F ~ 89.6°F	80% or less

NOTE

- The assumed installation conditions are follows
 - The pipe length(including elbow) is 16.4 ft.
 - The level difference is 0 ft.

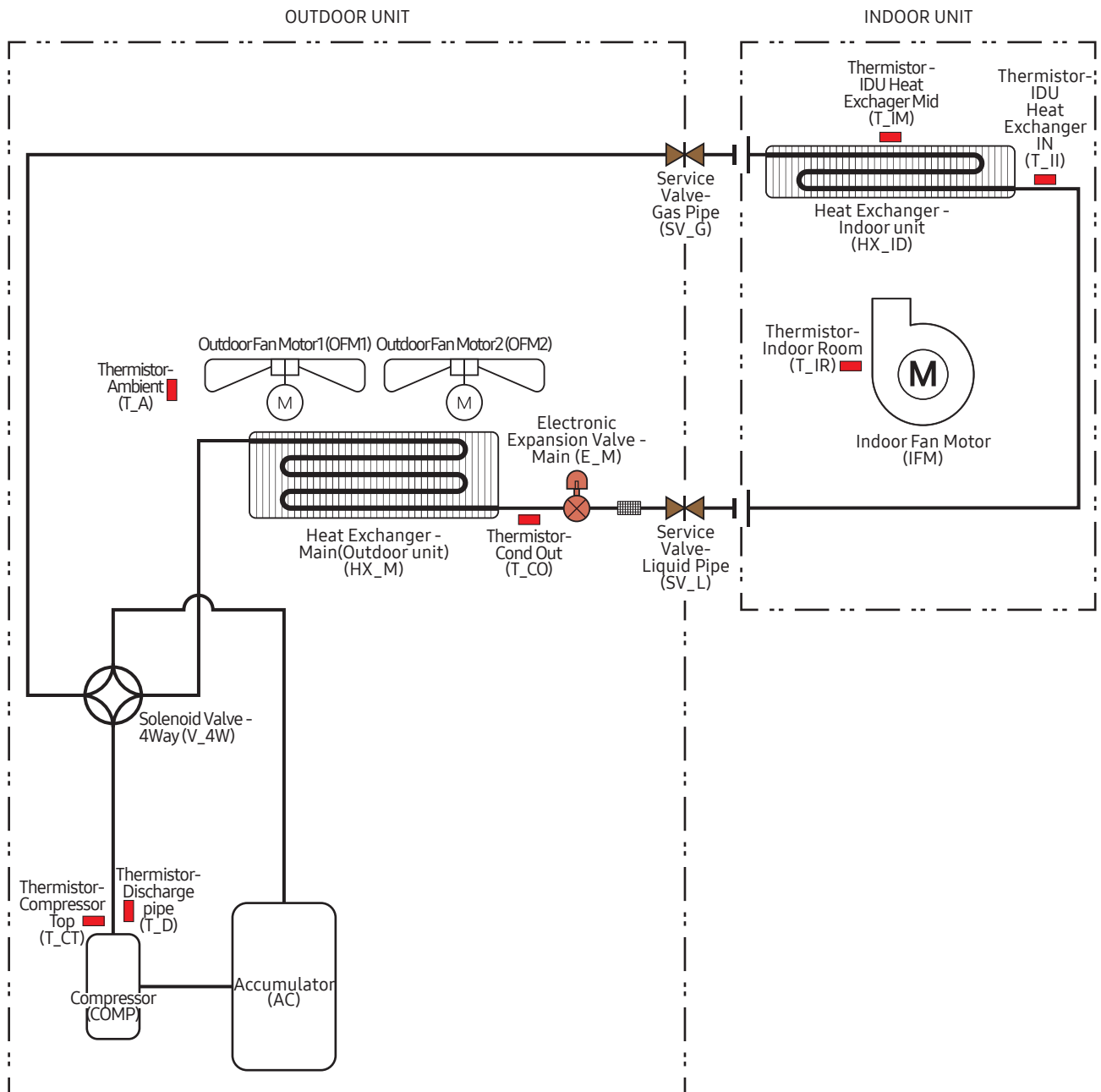
12. Piping Diagram

CXH18ADJ(AC018JXADCH/AA), CXH24ADJ(AC024JXADCH/AA), CXH30ADJ(AC030JXADCH/AA)



12. Piping Diagram

CXH36ADJ(AC036JXADCH/AA), CXH42ADJ(AC042JXADCH/AA), CXH48ADJ(AC048JXADCH/AA)



13. Installation

13-1. Indoor unit

Indoor unit installation

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

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



NOTE

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

- 2 Insert bolt anchors. Use existing ceiling supports or construct a suitable support as shown in figure.

- 3 Install the suspension bolts depending on the ceiling type.



CAUTION

- Ensure that the ceiling is strong enough to support the weight of the indoor unit. Before hanging the unit, test the strength of each attached suspension bolt.
- If the length of suspension bolt is more than 4.92ft(1.5m), it is required to prevent vibration.
- If this is not possible, create an opening on the false ceiling in order to be able to use it to perform the required operations on the indoor unit.

- 4 Screw eight nuts to the suspension bolts making space for hanging the indoor unit.



NOTE

- You must install all the suspension rods.

- 5 Hang the indoor unit to the suspension bolts between two nuts.



CAUTION

- Piping must be laid and connected inside the ceiling when suspending the unit. If the ceiling is already constructed, lay the piping into position for connection to the unit before placing the unit inside the ceiling.

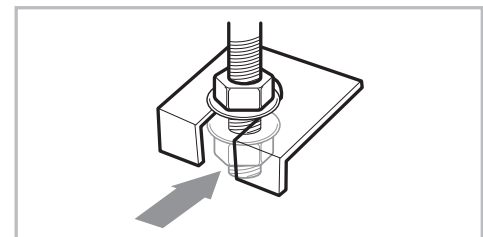
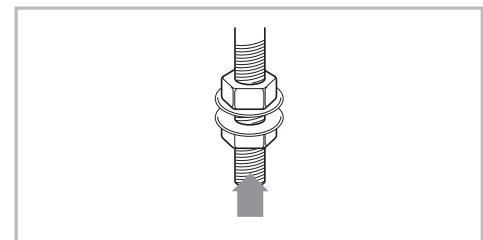
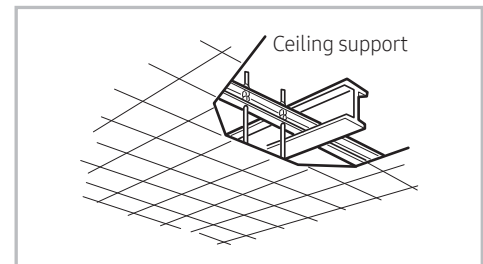
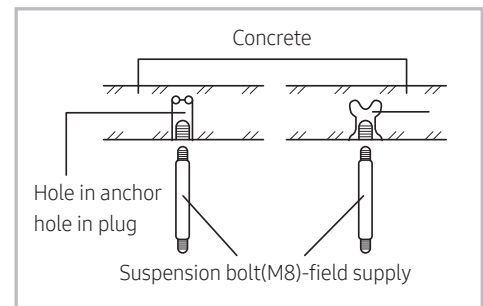
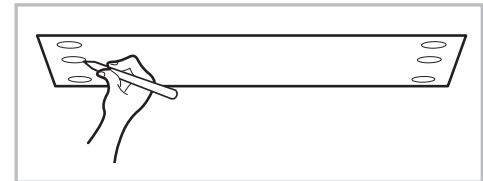
- 6 Screw the nuts to suspend the unit.

- 7 Adjust level of the unit by using measurement plate for all 4 sides.

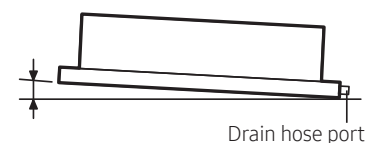


CAUTION

- For proper drainage of condensate, give a 0.118inch(3mm) slant to the left or right side of the unit which will be connected with the drain hose, as shown in the figure. Make a tilt when you wish to install the drain pump, too.



When the drain hose is installed to the right.

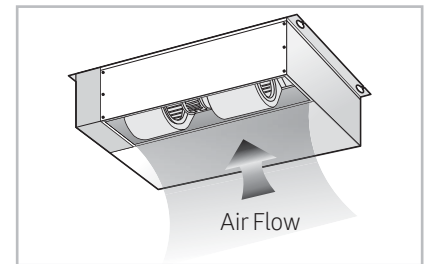


13. Installation

13-1. Indoor unit



- Noise will increase 3~6 dB(A) when the air flow enters from the bottom side (Only for Slim Duct Type product).

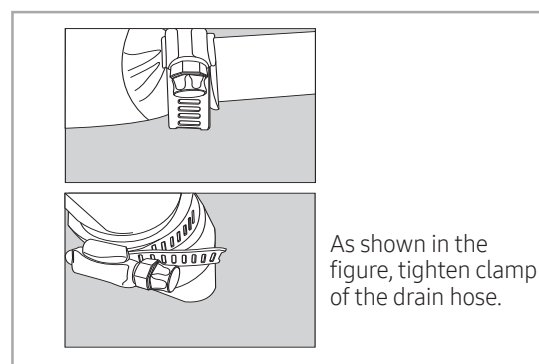
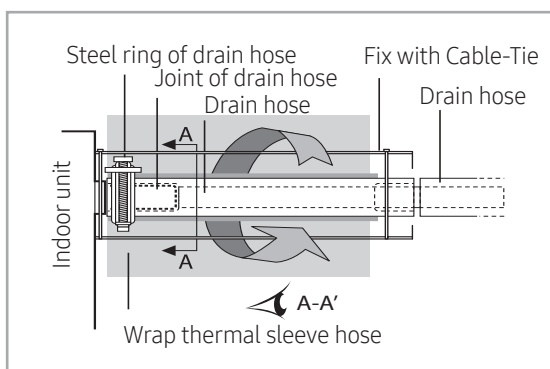


Drainpipe and drain hose installation

Care must be taken when installing the drain hose for the indoor unit to ensure that any condensate water is correctly drained outside.

The drain hose can be installed to the right of the base pan.

- 1 Installing the drain hose should be the shorter, the better.
 - ◆ In order to discharge condensation water, the drain hose should have slope.
 - ◆ Fix the drain hose with Cable-Tie, so that it will not separate from the machine.
 - ◆ While using draining pump, connect the end with draining pump.
- 2 Insulate and fix the drain hose according to the figure.
 - ◆ Insert the drain hose to bottom of the outfall of water basin.
 - ◆ Lock steel ring of the drain hose according to the figure.
 - ◆ Wind and wrap clamp and drain hose fully with thermal insulation sponge; fix both ends of external layer with ribbon for thermal insulation.
 - ◆ After being installed, drain hose must be insulated fully by heat insulating material. (To be provided at site.)



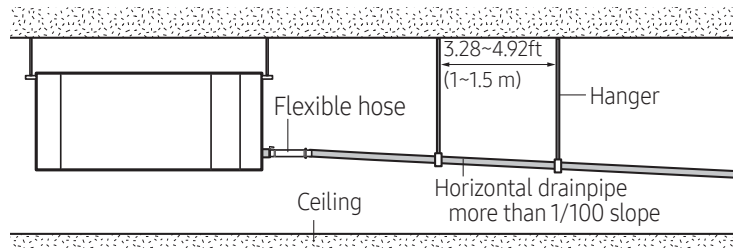
13. Installation

13-1. Indoor unit

Drainpipe Connection

Without the drain pump

1. Install horizontal drainpipe with a slope of 1/100 or more and fix it by hanger space of 3.28~4.92ft (1.0~1.5m).
2. Install U-trap at the end of the drainpipe to prevent a nasty smell to reach the indoor unit.
3. Do not install the drainpipe to upward position. It may cause water flow back to the unit.



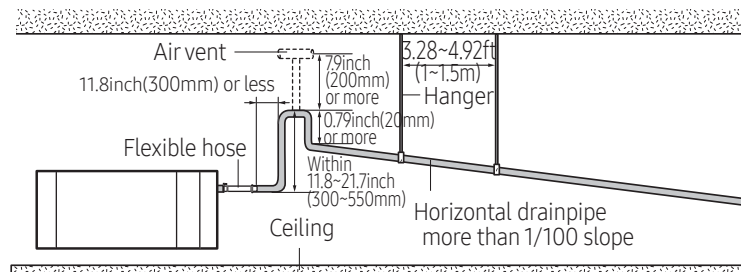
With the drain pump

1. The drain pipe should be installed within 11.8inch(300mm) to 21.7inch(550mm) from the flexible hose and then lift down 0.79inch(20mm) or more.
2. Install horizontal drainpipe with a slope of 1/100 or more and fix it by hanger space of 3.28~4.92ft(1.0~1.5m).
3. Install the air vent in the horizontal drainpipe to prevent water flow back to the indoor unit.



• You may not need to install it if there were proper slope in the horizontal drainpipe.

4. The flexible hose should not be installed upward position, it may cause water flow back to the indoor unit.

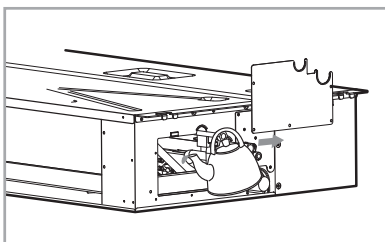


Testing the drainage

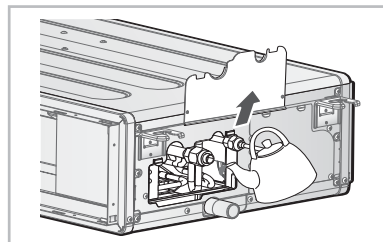
Prepare a little water about 5 liter.

1. Pour water into the base pan in the indoor unit as shown in figure.
2. Confirm that the water flows out through the drain hose.

Slim Duct Type



Global Duct Type



✱ The designs and shape are subject to change according to the model.

13. Installation

13-1. Indoor unit

Connecting the connection cord



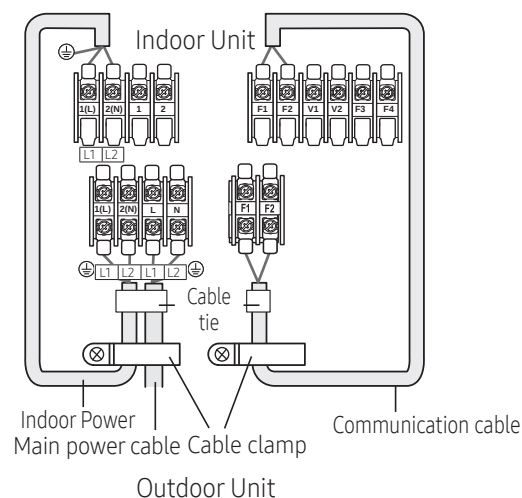
- Always remember to connect the refrigerant pipes before performing the electric connections. When disconnecting the system, always disconnect the electric cables before disconnecting the refrigerant pipes.
- Always remember to connect the air conditioner to the grounding system before performing the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

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

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

Wiring diagram

1 phase



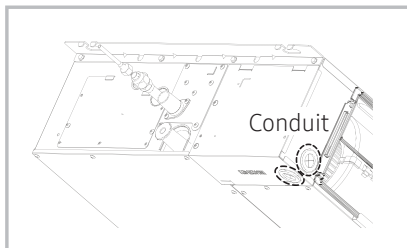
13. Installation

13-1. Indoor unit

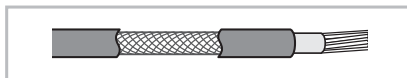
Between Indoor and Outdoor Connection cable Specifications(Common in use)

Indoor Power supply			Communication Cable
Power Supply	Max/Min(V)	Indoor Power cable	
208~230V/60Hz	±10%	0.0039in ² ↑,3wires	0.0011~0.0023in ² ,2wires

- ✖ Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord.
(Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)
- ✖ Screws on terminal block must not be unscrewed with the torque less than 12 kgf•cm.
- ✖ Since it has the external power supply, refer to the outdoor unit installation manual for MAIN POWER.
- ✖ Be sure to run the power supply cable and the communication cable through electrical conduit as seen in the picture.



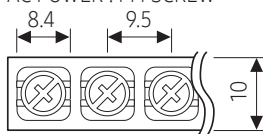
- Be sure not to put your finger into the conduit.



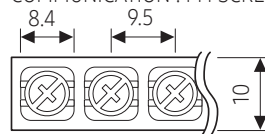
When installing the indoor unit in a computer room, use the double shielded(Tape aluminum / polyester braid + copper)cable of FROHH2R type.

Terminal Block SPEC (Indoor)

AC POWER : M4 SCREW



COMMUNICATION : M4 SCREW



Tightening Torque

M4	12.0~18.0 (kgf•cm)	0.86~1.30 (lbf•ft)

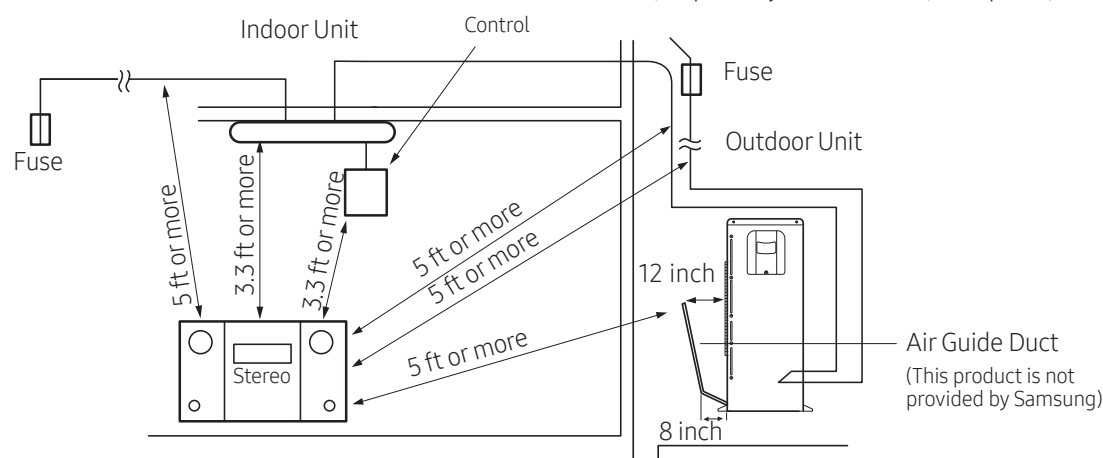
13. Installation

13-2. Outdoor unit

Deciding on where to install the outdoor unit

Outdoor Unit

- ▶ The outdoor unit must not be placed on its side or upside down, as the compressor lubrication oil will run into the cooling circuit and seriously damage the unit.
- ▶ Choose a location that is dry and sunny, but not exposed to direct sunlight or strong winds.
- ▶ Do not block any passageways or thoroughfares.
- ▶ Choose a location where the noise of the air conditioner when running and the discharged air do not disturb any neighbours.
- ▶ Choose a position that enables the pipes and cables to be easily connected to the indoor unit.
- ▶ Install the outdoor unit on a flat, stable surface that can support its weight and does not generate any unnecessary noise and vibration.
- ▶ Position the outdoor 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.



- ▶ If the outdoor unit is installed at a height, ensure that its base is firmly fixed in position.
- ▶ When you install the outdoor unit at wayside, you should install it above 6.6 ft height or make sure that the heat from the outdoor unit shouldn't be in direct contact with passersby.



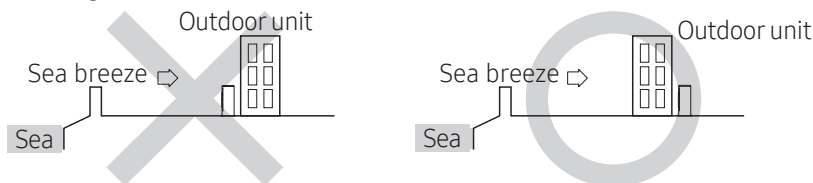
- You have just purchased a system air conditioner and it has been installed by your installation specialist.
- This device must be installed according to the national electrical rules.

13. Installation

13-2. Outdoor unit

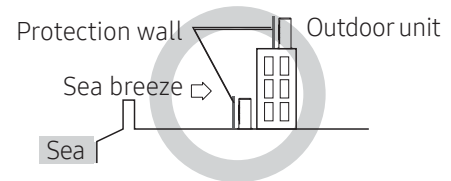
- ▶ When installing the outdoor unit near seashore, make sure it is not directly exposed to sea breeze. If you can not find a adequate place without direct sea breeze, protection wall should be constructed.

- Install the outdoor unit in a place (such as near buildings etc.) where it can be protected from sea breeze which can damage the outdoor unit.



- If you cannot avoid installing the outdoor unit by the seashore, construct a protection wall around to block the sea breeze.

Protection wall should be constructed with a solid material such as concrete to block the sea breeze and the height and the width of the wall should be 1.5 times larger than the size of the outdoor unit. Also, secure over 27.6 inch between the protection wall and the outdoor unit for exhausted air to ventilate.

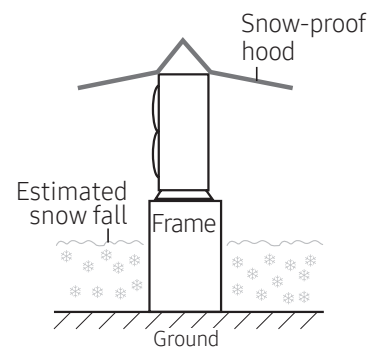


- Install the outdoor unit in a place where water can drain smoothly.

- If you cannot find a place satisfying above conditions, please contact manufacturer. Make sure to clean the sea water and the dust on the outdoor unit heat exchanger and spread corrosion inhibitor on heat exchanger. (At least one time per one year.)



- 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.



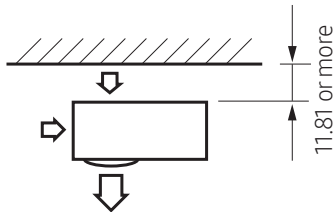
13. Installation

13-2. Outdoor unit

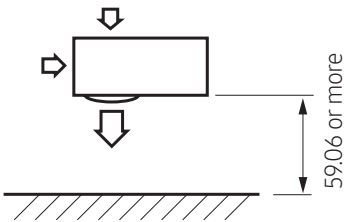
Space Requirements for Outdoor Unit

When installing 1 outdoor unit

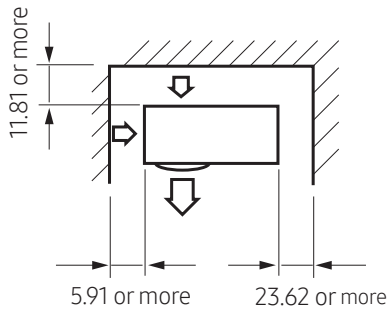
(Unit : inch)



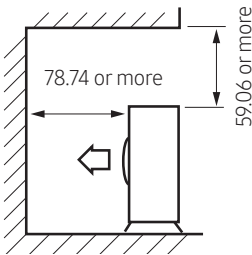
✧ When the air outlet is opposite the wall



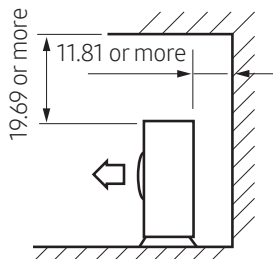
✧ When the air outlet is towards the wall



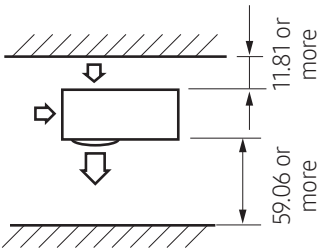
✧ When 3 sides of the outdoor unit are blocked by a wall



✧ The upper part of the outdoor unit and the air outlet is towards the wall



✧ The upper part of the outdoor unit and the air outlet is opposite the wall



✧ When front and rear side of the outdoor unit is towards the wall

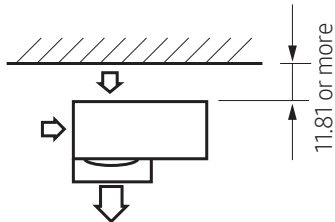
13. Installation

13-2. Outdoor unit

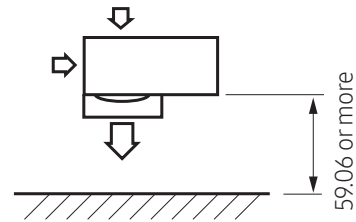
When installing 1 outdoor unit (with wind baffle)

- Wind baffle is not supplied with the product.

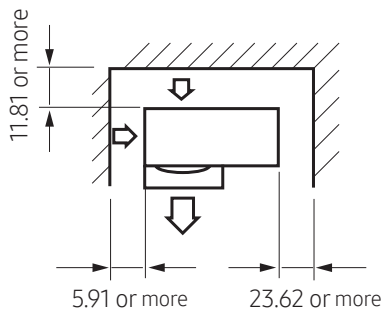
(Unit : inch)



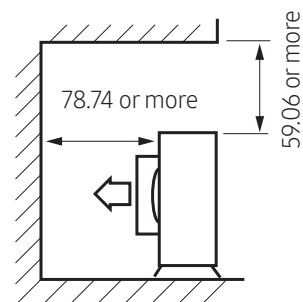
- ✧ When the air outlet is opposite the wall



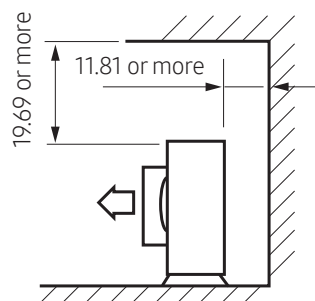
- ✧ When the air outlet is towards the wall



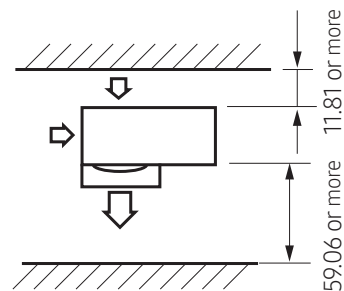
- ✧ When 3 sides of the outdoor unit are blocked by a wall



- ✧ The upper part of the outdoor unit and the air outlet is towards the wall



- ✧ The upper part of the outdoor unit and the air outlet is opposite the wall



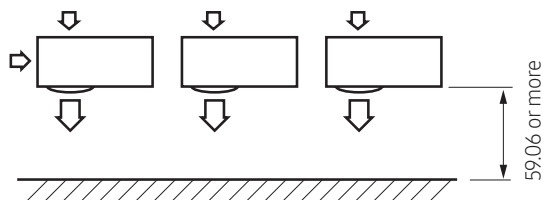
- ✧ When front and rear side of the outdoor unit is towards the wall

13. Installation

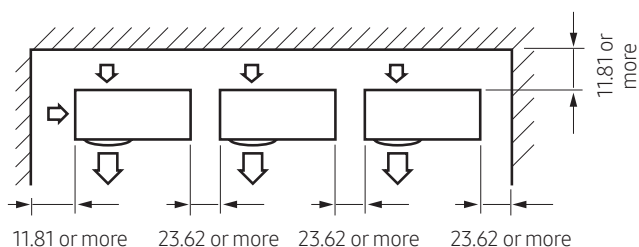
13-2. Outdoor unit

When installing more than 1 outdoor unit

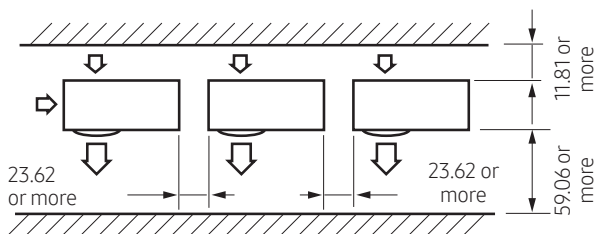
(Unit : inch)



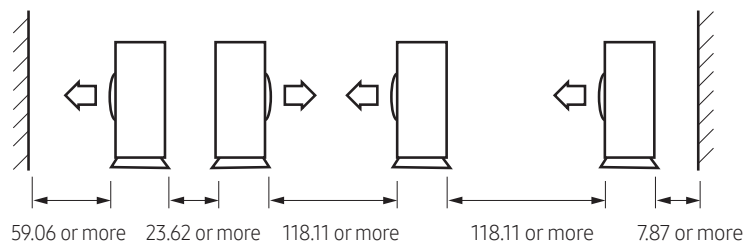
✳ When the air outlet is towards the wall



✳ When 3 sides of the outdoor unit are blocked by a wall



✳ When front and rear side of the outdoor unit is towards a wall



✳ When 3 sides of the outdoor unit are blocked by a wall


CAUTION

• The units must be installed according to the distances specified above in order to permit accessibility from each side to guarantee correct operation and for future maintenance or repair. The unit's parts must be safely accessible and completely removable.

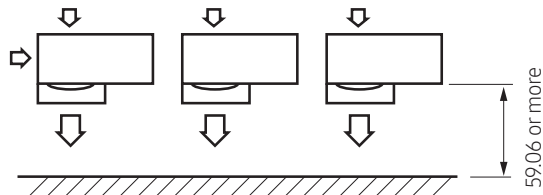
13. Installation

13-2. Outdoor unit

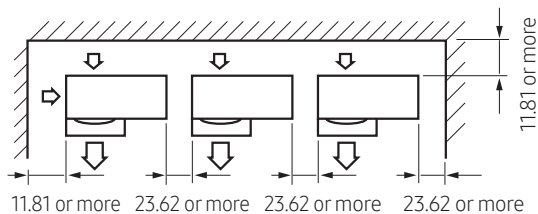
When installing more than 1 outdoor unit (with wind baffle)

- ▶ Wind baffle is not supplied with the product.

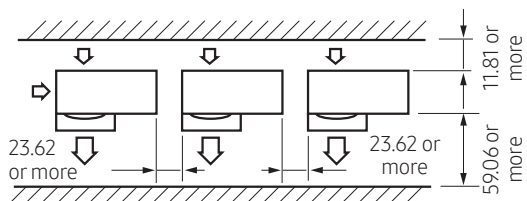
(Unit : inch)



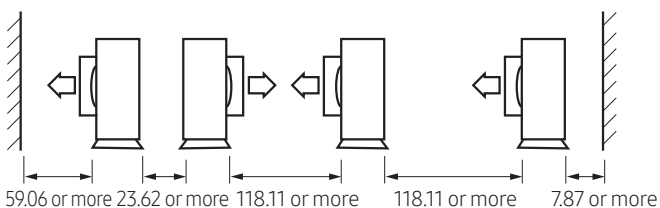
- ✖ When the air outlet is towards a wall



- ✖ When 3 sides of the outdoor unit are blocked by a wall



- ✖ When front and rear side of the outdoor unit is towards a wall



- ✖ When 3 sides of the outdoor unit are blocked by a wall



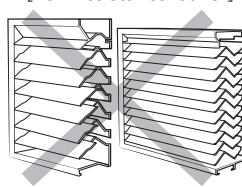
WARNING

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

[Bar type louver]



[Rain resistance louver]



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

13. Installation

13-2. Outdoor unit

Outdoor unit installation

The outdoor unit must be installed on a rigid and stable base to avoid increased noise levels and vibration. If the outdoor unit is to be installed in a location exposed to strong winds or high above the ground, the unit must be fixed to an appropriate support (wall or ground).

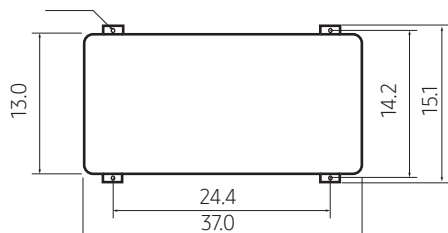
Fix the outdoor unit with anchor bolts.



NOTE

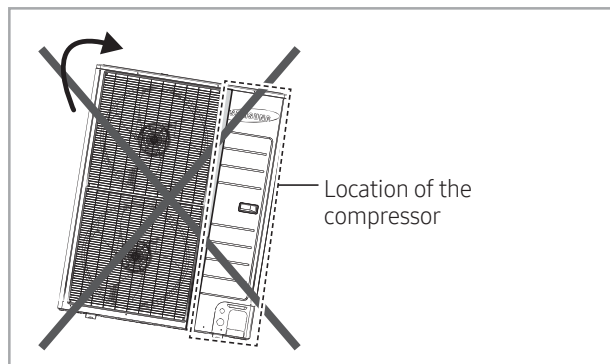
- The anchor bolt must be 0.79 inch or higher from the base surface.

Anchor bolt hole (Unit : inch)



CAUTION

- Make a drain outlet around the base for outdoor unit drainage.
- If the outdoor unit is installed on the roof, you have to check the ceiling strength and waterproof the unit.



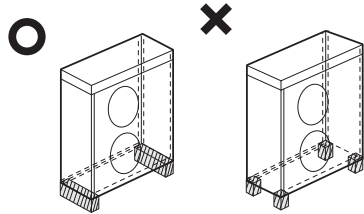
CAUTION

- Make sure that product is level during installation. Especially, product shouldn't be tilted towards the compressor.

13. Installation

13-2. Outdoor unit

Outdoor Unit Support



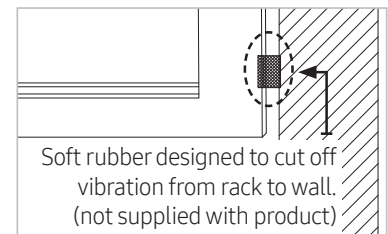
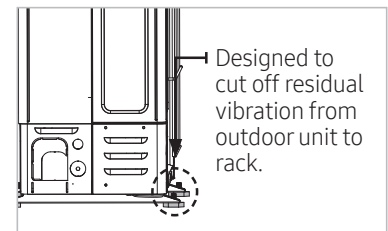
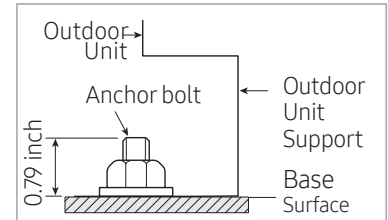
OUTDOOR UNIT INSTALLED ON RISERS/STAND OR WALL INSTALLATION

- ▶ Ensure the wall will be able to support the weight of rack and outdoor unit.
- ▶ Install the rack close to the column as much as possible.
- ▶ Install proper grommet in order to reduce noise and residual vibration transferred by outdoor unit towards wall.



When installing air guide duct

- Check and make sure that screws do not damage the copper pipe.
- Secure air guide duct on guard fan.



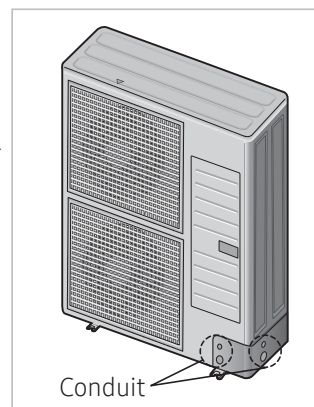
13. Installation

13-2. Outdoor unit

Connecting the cable

Two electronic cables must be connected to the outdoor unit.

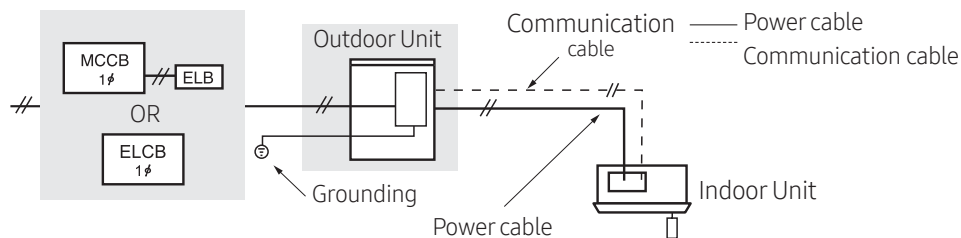
- ▶ The connection cord between indoor unit and outdoor unit.
- ▶ The power cable between outdoor unit and auxiliary circuit breaker.
- ▶ Be sure to run the power supply cable and the communication cable through electrical conduit as seen in the picture.
- ▶ Separately protect the power and communication cable using approved conduit.
 - Conduit is not supplied with the product.
- ▶ Make a knockout hole.
- ▶ After making a knockout hole, apply rust resisting paint around the hole.
- ▶ Secure the cable tube to the outdoor knockout using the CD connector and bushing.



- During unit installation make refrigerant connections first then electrical connections. If removing the unit disconnect electrical cables first, then refrigerant connections.
- Connect the air conditioner to grounding system before performing the electrical connection.
- When installing the unit, you shouldn't use inter connection wire.

Example of Air Conditioner System

- When using ELCB for 1 phase



✱ If an outdoor unit is installed in a place in danger of an electric leak or submergence, you must install the ELCB.



- AC030JXSCCH, AC036JXSCCH
 - ELCB must be installed since this product is equipped with a base heater.

13. Installation

13-2. Outdoor unit

Power Cable Specifications

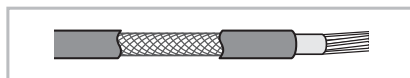
- The power cable is not supplied with air conditioner.
 - Select the power supply cable in accordance with relevant local and national regulations.
 - Wire size must comply with the applicable local and national code.
 - Specifications for local wiring power cord and branch wiring are in compliance with local cord.

Model		Power source	RLA (A)	FLA				MCA	MOP
Outdoor Unit	Indoor Unit			Outdoor Unit		Indoor Unit			
				FAN1 (A)	FAN2 (A)	FAN1 (A)	FAN2 (A)		
CXH18ADJ (AC018JXADCH/AA)	CNH18HDM (AC018MNHDC/AA)	208~230 V / 60 Hz	6.1	0.13	-	1.1	-	10	15
CXH24ADJ (AC024JXADCH/AA)	CNH24HDM (AC024MNHDC/AA)		9.0	0.48	-	1.5	-	13.5	20
CXH30ADJ (AC030JXADCH/AA)	CNH30HDM (AC030MNHDC/AA)		15.1	0.48	-	1.5	1.5	23	35
CXH36ADJ (AC036JXADCH/AA)	CNH36HDM (AC036MNHDC/AA)		17.0	0.48	0.48	2	2	26.5	40
CXH42ADJ (AC042JXADCH/AA)	CNH42HDM (AC042MNHDC/AA)		17.0	0.48	0.48	2	2	26.5	40
CXH48ADJ (AC048JXADCH/AA)	CNH48HDM (AC048MNHDC/AA)		17.0	0.48	0.48	2	2	26.5	40

Between Indoor unit and Outdoor unit Connection Cable Specifications(Common in use)

Power supply			Commuation Cable
Power supply	Max/Min(V)	Indoor Power Cable	
1Φ, 208~230V, 60Hz	±10%	0.0039 in ² ↑, 3wires	0.0011~0.0023 in ² , 2wires

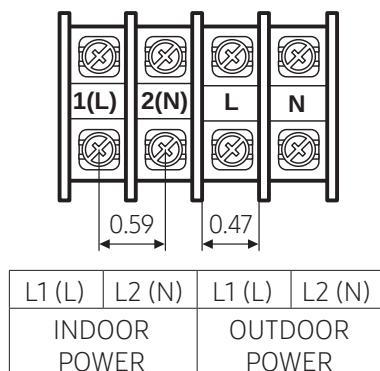
- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)



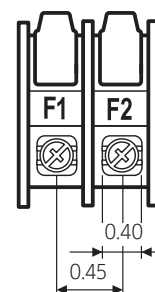
When installing the indoor unit in a computer room or network room, use the double shielded (Tape aluminum / polyester braid + copper) cable of FROHH2R type.

1-phase terminal block spec

AC power : M5 screw



Communication : M4 screw

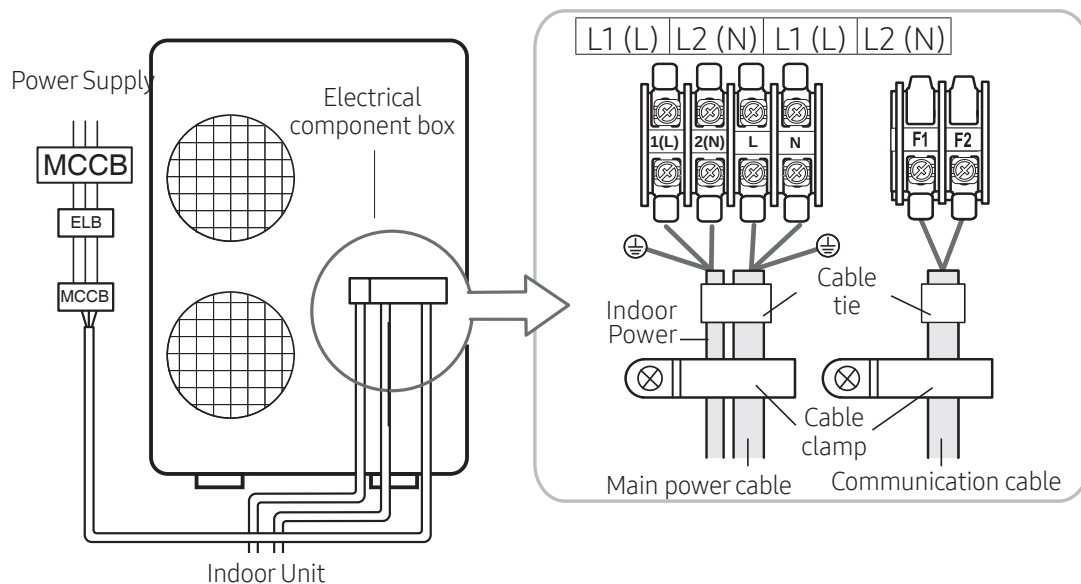


13. Installation

13-2. Outdoor unit

Wiring Diagram of Power Cable

- When using ELB for 1 phase



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



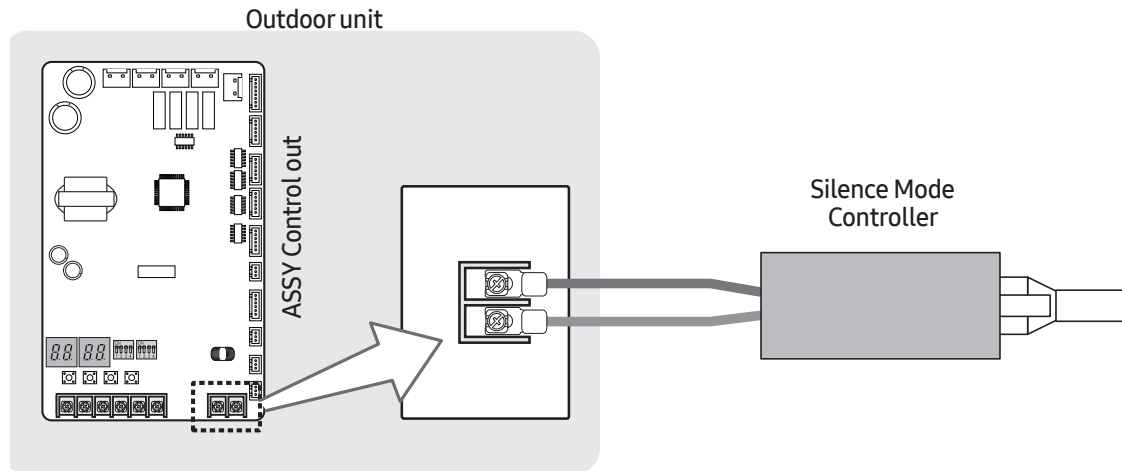
CAUTION

- 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 in.
- Devices disconnected from the power supply should be completely disconnected in the condition of overvoltage category.
- Keep distances of 1.97 in. or more between power cable and communication cable.

13. Installation

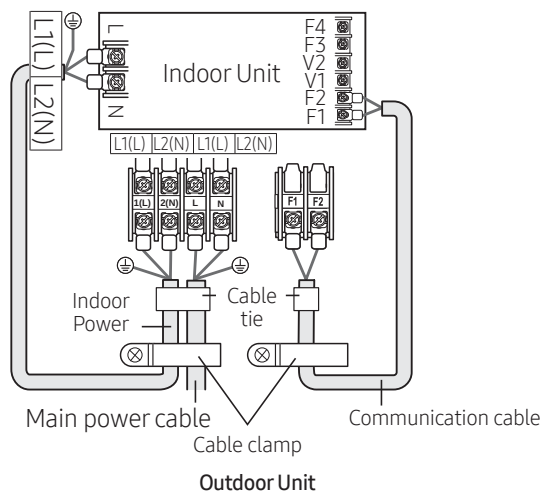
13-2. Outdoor unit

Silence mode controller wiring diagram



Wiring Diagram of Connection Cord

- 1 phase



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).

13. Installation

13-2. Outdoor unit

The outdoor unit is loaded with sufficient refrigerant for standard piping. Thus, refrigerant must be added if the piping is lengthened. This operation can only be performed by a qualified refrigeration specialist. For volume of additional refrigerant, refer to "How to Calculate the Volume of Additional Refrigerant" section.

- 1) Check that the stop valve is closed entirely.
- 2) Charge the refrigerant through the service port of liquid stop valve.

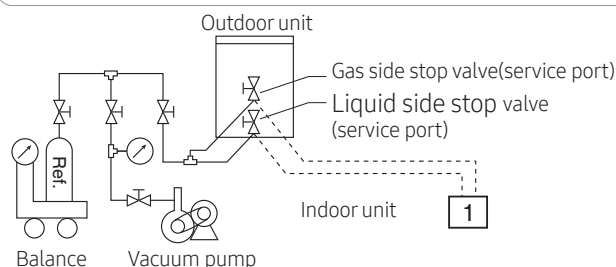


• Do not charge the refrigerant through the gas side service port.

- 3) If you cannot charge the refrigerant according to the steps above, following these :
 - 1) Open both liquid stop valve and gas stop valve.
 - 2) Operate the air conditioner by pressing the K2 key on the outdoor unit PCB.
 - 3) About 30 minutes later, charge the refrigerant through the service port of gas stop valve.



• If necessary, refer to the pressure table classified by outdoor temperature.



How to Calculate the Volume of Additional Refrigerant

The volume of additional refrigerant is variable according to the length of the liquid pipe. Determine the liquid pipe length before adding refrigerant. This operation can only be performed by a qualified refrigeration specialist.

Single installation outdoor unit

Model	Pipe length [ft(m)]	Interconnection pipe length
CXH18ADJ(AC018JXADCH/AA)	24.6 ~ 98.4 (7.5 ~ 30)	+0.108 oz/ft over 24.6 ft (+10 g/m over 7.5 m)
CXH24ADJ(AC024JXADCH/AA)	24.6 ~ 164 (7.5 ~ 50)	+0.108 oz/ft over 24.6 ft (+10 g/m over 7.5 m)
CXH30ADJ(AC030JXADCH/AA)	24.6 ~ 164 (7.5 ~ 50)	+0.237 oz/ft over 24.6 ft (+22 g/m over 7.5 m)
CXH36ADJ(AC036JXADCH/AA) / CXH42ADJ(AC042JXADCH/AA) / CXH48ADJ(AC048JXADCH/AA)	24.6 ~ 246 (7.5 ~ 75)	+0.355 oz/ft over 24.6 ft (+33 g/m over 7.5 m)



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