SINGLE
Technical Data Book

HSP Duct for America (R410A, 60Hz, H/P)

SAMSUNG

Version	Modification	Date	Remark
Ver.1.0	Release VRF MSP/HSP Duct for America(R410A, 60Hz, HP) TDB	15.03.06	-
Ver.1.1	Modify Cycle diagram error	15.03.19	
Ver.1.2	Modify PQ Curve : CMM -> CFM, mmAq -> InWg	15.04.03	
Ver.1.3	Modify Specification : Add(MCA,MOP), Modify(Air Flow Rate)	15.05.20	
Ver.1.4	Modified MCA	16.03.08	
Ver.1.5	Modified Specifcation for MCA, Compressor oil type, Capacity Table, Cycle diagram	16.09.24	
Ver.1.6	Modify the Recommended operation range (PQ curve)	17.01.16	

Index

1 Nomenclature

Indoor Units

Model Names

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

(1) Classification

AC	SINGLE
AM	VRF

(2) Capacity

x 1000 Btu/h (3 digits)

(3) Version

F	2013
H	2014
J	2015

(4) Product Type

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

(5) Feature1

1	1Way Cassette
4	4Way Cassette S
A	Wall-Mounted
C	Ceiling
J	Console
L	LSP Duct
M	MSP Duct
H	HSP Duct
N	4Way Cassette S (600 x 600)

(6) Feature2

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

C	1Φ, 208~230V, 60Hz
H	3Φ, 400V, 60Hz

(8) Mode

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

1 Nomenclature

Outdoor Units

Model Names

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

(1) Classification

AC	SINGLE
AM	VRF

(2) Capacity

x 1000 Btu/h (3 digits)

(3) Version

F	2013
H	2014
J	2015

(4) Product Type

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

(5) Feature1

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

(6) Feature2

F	Flagship
P	Premium
D	Deluxe
S	Standard

(7) Rating Voltage

C	1Φ, 208~230V, 60Hz
H	3Φ, 400V, 60Hz

(8) Mode

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

2 Specifications

HSP Duct

Type						HSP Duct	HSP Duct	HSP Duct
Model Name		Indoor Unit				AC018JNHDCH/AA	AC024JNHDCH/AA	AC030JNHDCH/AA
		Outdoor Unit				AC018JXADCH/AA	AC024JXADCH/AA	AC030JXADCH/AA
System	Mode				-	Heat Pump	Heat Pump	Heat Pump
	Capacity	Cooling(Min/Std/Max)			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(Min/Std/Max)			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 (Nominal)	Cooling(Min/Std/Max)		kW	0.35 / 1.61 / 2.20	0.45 / 1.99 / 2.50	0.70 / 2.70 / 4.00
			Heating(Min/Std/Max)			0.26 / 1.73 / 2.70	0.38 / 2.35 / 3.50	0.65 / 2.66 / 5.50
		Current Input (Nominal)	Cooling(Min/Std/Max)		A	2.10 / 7.40 / 10.00	2.80 / 9.20 / 12.00	4.00 / 12.00 / 17.00
			Heating(Min/Std/Max)			1.70 / 8.00 / 12.00	2.50 / 10.80 / 14.50	3.40 / 12.00 / 21.80
		MCA			A	8.60	12.58	23.16
		MOP			A	15.00	20.00	35.00
	Energy Efficiency	EER (Nominal Cooling)			-	3.28	3.53	3.26
		EER (Nominal Cooling, US)			Btu/Wh	11.20	12.10	11.10
		COP (Nominal Heating)			-	3.39	3.37	3.53
		Energy Grade			Energy	HSPF 10.3	HSPF 10.5	HSPF 10
					Energy	SEER 19.6	SEER 20	SEER 19.1
	Piping Connections	Liquid Pipe			Ø, mm	6.35	6.35	9.52
					Ø, inch	1/4"	1/4"	3/8"
		Gas Pipe			Ø, mm	12.70	15.88	15.88
					Ø, inch	1/2"	5/8"	5/8"
		Installation Limitation	Max. Length		m	30	50	50
					ft	98	164	164
			Max. Height		m	20	30	30
					ft	66	98	98
	Field Wiring	Power Source Wire			Ø, mm	-	-	-
		Transmission Cable			AWG	15 ~ 20	15 ~ 20	15 ~ 20
	Refrigerant	Type			-	R410A	R410A	R410A
		Control Method			-	-	-	-
		Factory Charging			kg	1.30	2.10	2.60
					lbs	2.87	4.63	5.73
Indoor Unit	Power Supply				Ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Fan	Type			-	Sirocco	Sirocco	Sirocco
		Motor		Output	W	183 x 1	183 x 1	183 x 2
		Air Flow Rate		High/Mid/Low	CFM	640.00 / 520.00 / 420.00	820.00 / 670.00 / 530.00	1,050.00 / 900.00 / 750.00
		External Static Pressure		Min/Std/Max	Pa	0 / 30 / 149	0 / 30 / 149	30 / 40 / 199
					In Wg	0.00 / 0.12 / 0.60	0.00 / 0.12 / 0.60	0.12 / 0.16 / 0.80
	Drain	Drain Pipe			Ø, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
	Sound	Pressure	High/Mid/Low		dB(A)	34 / 30 / 26	36 / 32 / 28	37 / 33 / 29
		Power	Cooling			56.0	58.0	59.0
	External Dimension	Net Weight			kg	43.00	43.00	58.00
					lbs	94.80	94.80	127.90
		Shipping Weight			kg	48.00	48.00	66.00
					lbs	105.80	105.80	145.50
		Net Dimensions (WxHxD)			mm	1,150 x 320 x 480	1,150 x 320 x 480	1,200 x 360 x 650
					inch	45.28 x 12.60 x 18.90	45.28 x 12.60 x 18.90	47.24 x 14.17 x 25.59
		Shipping Dimensions (WxHxD)			mm	1,419 x 400 x 594	1,419 x 400 x 594	1,456 x 440 x 778
					inch	55.87 x 15.75 x 23.39	55.87 x 15.75 x 23.39	57.32 x 17.32 x 30.63
	Panel Size	Panel Model			-	-	-	-
		Panel Net Weight			kg	-	-	-
					lbs	-	-	-
		Shipping Weight			kg	-	-	-
					lbs	-	-	-
		Net Dimensions (WxHxD)			mm	-	-	-
					inch	-	-	-
		Shipping Dimensions (WxHxD)			mm	-	-	-
					inch	-	-	-
	Additional Accessories	Drain pump	Drain pump		-	Built-in	Built-in	Buit-in
			Max. Lifting		mm/liter/h	-	-	-
		Air Filter			-	-	-	-
Outdoor Unit	Power Supply				Ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Compressor	Type			-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
		Model			-	UG4T150LNBEQ	UG4T200LNFE4	UG8T300LNBJU
		Output			kW	1.42	1.85	2.82
		Oil	Type		-	POE	POE	POE
	Fan	Air Flow Rate	Cooling		CFM	1,550	2,190	2,220
	Sound	Pressure	Cooling/Heating		dB(A)	48 / 48	50 / 50	50 / 52
		Power	Cooling			62	65	65
	External Dimension	Net Weight			kg	45.00	64.50	70.00
					lbs	99.21	142.20	154.32
		Shipping Weight			kg	48.00	69.50	74.00
					lbs	105.82	153.22	163.14
		Net Dimensions (WxHxD)			mm	880 x 638 x 310	940 x 998 x 330	940 x 998 x 330
					inch	34.65 x 25.12 x 12.20	37.01 x 39.29 x 12.99	37.01 x 39.29 x 12.99
		Shipping Dimensions (WxHxD)			mm	1,023 x 750 x 413	995 x 1,096 x 426	995 x 1,096 x 426
					inch	40.28 x 29.53 x 16.26	39.17 x 43.15 x 16.77	39.17 x 43.15 x 16.77
	Operating Temp.	Cooling			ºF	-0.4 ~ 114.8	-0.4 ~ 114.8	-0.4 ~ 114.8
		Heating			ºF	-4.0 ~ 75.2	-4.0 ~ 75.2	-4.0 ~ 75.2

[Note]

- Nominal Cooling : Indoor temperature 26.7DB/19.4WB(80DB/67WB), Outdoor temperature 35DB/23.9WB(90DB/75WB), Refrigerant pipe length 5m(16.4ft), Level difference 0m(0ft).
- Nominal Heating : Indoor temperature 21.1DB/15.6WB(70DB/60WB), Outdoor temperature 8.3DB/6.1WB(47DB/43WB), Refrigerant pipe length 5m(16.4ft), Level difference 0m.(0ft)
- Sound pressuer level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- Specifications may be subject to change without prior notice.

2 Specifications

HSP Duct

Type					HSP Duct	HSP Duct	HSP Duct
Model Name		Indoor Unit			AC036JNHDCH/AA	AC042JNHDCH/AA	AC048JNHDCH/AA
		Outdoor Unit			AC036JXADCH/AA	AC042JXADCH/AA	AC048JXADCH/AA
System	Mode			-	Heat Pump	Heat Pump	Heat Pump
	Capacity	Cooling(Min/Std/Max)		kW	4.10 / 10.55 / 12.02	4.78 / 12.31 / 13.19	5.45 / 14.07 / 14.95
				Btu/h	14,000 / 36,000 / 41,000	16,300 / 42,000 / 45,000	18,600 / 48,000 / 51,000
				US RT	1.17 / 3.00 / 3.42	1.36 / 3.50 / 3.75	1.55 / 4.00 / 4.25
		Heating(Min/Std/Max)		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 (Nominal)	Cooling(Min/Std/Max)	kW	0.93 / 3.00 / 3.60	1.08 / 4.00 / 4.50	1.24 / 4.95 / 5.00
			Heating(Min/Std/Max)		0.72 / 3.30 / 5.00	0.84 / 3.98 / 5.40	0.96 / 5.05 / 5.70
		Current Input (Nominal)	Cooling(Min/Std/Max)	A	4.80 / 13.30 / 17.00	5.60 / 16.40 / 21.00	6.40 / 21.50 / 23.00
			Heating(Min/Std/Max)		3.70 / 14.30 / 23.00	4.30 / 17.30 / 25.00	5.00 / 20.00 / 28.00
		MCA		A	25.53	25.53	25.53
		MOP		A	40.00	40.00	40.00
	Energy Efficiency	EER (Nominal Cooling)		-	3.52	3.08	2.84
		EER (Nominal Cooling, US)		Btu/Wh	12.00	10.50	9.70
		COP (Nominal Heating)		-	3.55	3.46	3.08
		Energy Grade		Energy	HSPF 10	HSPF 10	HSPF 9.6
				Energy	SEER 20	SEER 19	SEER 18.1
	Piping Connections	Liquid Pipe		Ø, mm	9.52	9.52	9.52
				Ø, inch	3/8"	3/8"	3/8"
		Gas Pipe		Ø, mm	15.88	15.88	15.88
				Ø, inch	5/8"	5/8"	5/8"
		Installation Limitation	Max. Length	m	75	75	75
				ft	246	246	246
			Max. Height	m	30	30	30
				ft	98	98	98
	Field Wiring	Power Source Wire		Ø, mm	-	-	-
		Transmission Cable		AWG	15 ~ 20	15 ~ 20	15 ~ 20
	Refrigerant	Type		-	R410A	R410A	R410A
		Control Method		-	-	-	-
		Factory Charging		kg	2.80	2.80	2.80
				lbs	6.17	6.17	6.17
Indoor Unit	Power Supply			Ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Fan	Type		-	Sirocco	Sirocco	Sirocco
		Motor	Output	W	183 x 2	183 x 2	183 x 2
		Air Flow Rate	High/Mid/Low	CFM	1,200 / 960.00 / 760.00	1,460 / 1,280 / 1,150	1,620 / 1,400 / 1,190
		External Static Pressure	Min/Std/Max	Pa	30 / 40 / 199	40 / 50 / 199	40 / 50 / 199
				In Wg	0.12 / 0.16 / 0.80	0.16 / 0.20 / 0.80	0.16 / 0.20 / 0.80
	Drain	Drain Pipe		Ø, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
	Sound	Pressure	High/Mid/Low	dB(A)	38 / 34 / 30	40 / 37 / 34	43 / 40 / 37
		Power	Cooling		60.0	62.0	65.0
	External Dimension	Net Weight		kg	58.00	58.00	58.00
				lbs	127.90	127.90	127.90
		Shipping Weight		kg	66.00	66.00	66.00
				lbs	145.50	145.50	145.50
		Net Dimensions (WxHxD)		mm	1,200 x 360 x 650	1,200 x 360 x 650	1,200 x 360 x 650
				inch	47.24 x 14.17 x 25.59	47.24 x 14.17 x 25.59	47.24 x 14.17 x 25.59
		Shipping Dimensions (WxHxD)		mm	1,456 x 440 x 778	1,456 x 440 x 778	1,456 x 440 x 778
				inch	57.32 x 17.32 x 30.63	57.32 x 17.32 x 30.63	57.32 x 17.32 x 30.63
	Panel Size	Panel Model		-	-	-	-
		Panel Net Weight		kg	-	-	-
				lbs	-	-	-
		Shipping Weight		kg	-	-	-
				lbs	-	-	-
		Net Dimensions (WxHxD)		mm	-	-	-
				inch	-	-	-
		Shipping Dimensions (WxHxD)		mm	-	-	-
				inch	-	-	-
	Additional Accessories	Drain pump	Drain pump	-	Buit-in	Buit-in	Buit-in
			Max. Lifting	mm/liter/h	-	-	-
		Air Filter		-	-	-	-
Outdoor Unit	Power Supply			Ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Compressor	Type		-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
		Model		-	UG5T450FUEJX	UG5T450FUEJX	UG5T450FUEJX
		Output		kW	4.12	4.12	4.12
		Oil	Type	-	POE	POE	POE
	Fan	Air Flow Rate	Cooling	CFM	3,040	3,040	3,040
	Sound	Pressure	Cooling/Heating	dB(A)	49 / 51	51 / 53	53 / 55
		Power	Cooling		65	66	67
	External Dimension	Net Weight		kg	88.00	88.00	88.00
				lbs	194.01	194.01	194.01
		Shipping Weight		kg	98.00	98.00	98.00
				lbs	216.05	216.05	216.05
		Net Dimensions (WxHxD)		mm	940 x 1,210 x 330	940 x 1,210 x 330	940 x 1,210 x 330
				inch	37.01 x 47.64 x 12.99	37.01 x 47.64 x 12.99	37.01 x 47.64 x 12.99
		Shipping Dimensions (WxHxD)		mm	995 x 1,388 x 426	995 x 1,388 x 426	995 x 1,388 x 426
				inch	39.17 x 54.65 x 16.77	39.17 x 54.65 x 16.77	39.17 x 54.65 x 16.77
	Operating Temp.	Cooling		ºF	-0.4 ~ 114.8	-0.4 ~ 114.8	-0.4 ~ 114.8
		Heating		ºF	-4.0 ~ 75.2	-4.0 ~ 75.2	-4.0 ~ 75.2

[Note]

- Nominal Cooling : Indoor temperature 26.7DB/19.4WB(80DB/67WB), Outdoor temperature 35DB/23.9WB(90DB/75WB), Refrigerant pipe length 5m(16.4ft), Level difference 0m(0ft).
- Nominal Heating : Indoor temperature 21.1DB/15.6WB(70DB/60WB), Outdoor temperature 8.3DB/6.1WB(47DB/43WB), Refrigerant pipe length 5m, Level difference 0m.
- Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- Specifications may be subject to change without prior notice.

3 Capacity table

HSP Duct

AC018JNHDCH/AA + AC018JXADCH/AA

Cooling

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (℉, DB)	Indoor Temperature (℉, 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
-0.4	19.6	15.7	1.1	20.1	16.1	1.1	20.6	16.5	1.2	21.1	16.9	1.2	21.3	17.0	1.2	21.8	17.5	1.2	22.1	17.7	1.3
70	21.1	16.9	1.2	21.6	17.3	1.2	22.2	17.7	1.3	22.7	18.2	1.3	22.9	18.3	1.3	23.5	18.8	1.4	23.8	19.1	1.4
95	16.7	13.4	1.5	17.1	13.7	1.5	17.6	14.1	1.6	18.0	14.4	1.6	18.2	14.5	1.6	18.6	14.9	1.7	18.9	15.1	1.7
114.8	14.4	11.5	2.0	14.8	11.8	2.1	15.1	12.1	2.1	15.5	12.4	2.2	15.7	12.5	2.2	16.0	12.8	2.3	16.3	13.0	2.3

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (℉, DB)	Indoor temperature (℉, DB)											
	61.0		64.0		68.0		70.0		72.0		75.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	9.90	1.44	9.80	1.43	9.70	1.41	9.60	1.40	9.50	1.39	9.40	1.37
14.0	16.60	2.03	16.40	2.01	16.30	1.99	16.10	1.97	15.90	1.95	15.80	1.93
32.0	20.10	1.85	19.90	1.84	19.70	1.82	19.50	1.80	19.30	1.78	19.10	1.76
47.0	20.60	1.78	20.40	1.76	20.20	1.74	20.00	1.73	19.80	1.71	19.60	1.69
75.2	25.30	1.83	25.10	1.82	24.80	1.80	24.60	1.78	24.40	1.76	24.10	1.74

AC024JNHDCH/AA + AC024JXADCH/AA

Cooling

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (℉, DB)	Indoor Temperature (℉, 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
-0.4	25.2	20.2	1.0	25.8	20.7	1.0	26.4	21.2	1.1	27.1	21.7	1.1	27.4	21.9	1.1	28.0	22.4	1.1	28.4	22.8	1.2
70	25.5	20.4	1.3	26.2	20.9	1.4	26.8	21.4	1.4	27.5	22.0	1.4	27.7	22.2	1.4	28.4	22.7	1.5	28.8	23.1	1.5
95	22.3	17.9	1.8	22.9	18.3	1.9	23.4	18.7	1.9	24.0	19.2	2.0	24.2	19.4	2.0	24.8	19.9	2.1	25.2	20.2	2.1
114.8	20.9	16.7	2.4	21.4	17.1	2.5	22.0	17.6	2.6	22.5	18.0	2.6	22.7	18.2	2.6	23.3	18.6	2.7	23.6	18.9	2.8

Heating

TC : Total Capacity PI: Power Input

Outdoor temperature (℉, DB)	Indoor temperature (℉, DB)											
	61.0		64.0		68.0		70.0		72.0		75.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	14.90	2.14	14.80	2.12	14.60	2.10	14.50	2.08	14.40	2.06	14.20	2.04
14.0	20.70	2.78	20.50	2.75	20.30	2.73	20.10	2.70	19.90	2.67	19.70	2.65
32.0	28.00	2.68	27.70	2.65	27.50	2.63	27.20	2.60	26.90	2.57	26.70	2.55
47.0	27.80	2.42	27.50	2.40	27.30	2.37	27.00	2.35	26.70	2.33	26.50	2.30
75.2	36.40	2.58	36.10	2.55	35.70	2.53	35.40	2.50	35.00	2.48	34.60	2.45

- Capacities are based on following conditions;

  . Cooling mode indoor air temperature (, DB/WB) : 68/57, 72/61, 77/64, 80/67, 82/70, 86/72, 90/75

  . Heating mode outdoor air : 85%RH. However, the condition rated capacity is 47 DB / 43 WB.

  . Refrigerant piping length : 5m (16.4ft)

  . Level difference : 0m.

3 Capacity table

HSP Duct

AC030JNHDCH/AA + AC030JXADCH/AA

Cooling

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (℉, DB)	Indoor Temperature (℉, 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
-0.4	32.4	25.9	1.1	33.1	26.5	1.1	34.0	27.2	1.2	34.8	27.8	1.2	35.1	28.1	1.2	36.0	28.8	1.2	36.5	29.2	1.3
70	32.0	25.6	1.8	32.7	26.2	1.9	33.5	26.8	1.9	34.4	27.5	1.9	34.7	27.8	2.0	35.5	28.4	2.0	36.1	28.9	2.0
95	27.9	22.3	2.5	28.6	22.9	2.6	29.3	23.4	2.6	30.0	24.0	2.7	30.3	24.2	2.7	31.0	24.8	2.8	31.5	25.2	2.8
114.8	23.0	18.4	2.8	23.6	18.9	2.9	24.2	19.4	3.0	24.8	19.8	3.1	25.0	20.0	3.1	25.6	20.5	3.2	26.0	20.8	3.2

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (℉, DB)	Indoor temperature (℉, DB)											
	61.0		64.0		68.0		70.0		72.0		75.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	19.80	2.83	19.60	2.81	19.40	2.78	19.20	2.75	19.00	2.72	18.90	2.70
14.0	35.20	4.46	34.80	4.42	34.50	4.37	34.10	4.33	33.80	4.29	33.50	4.24
32.0	37.00	4.12	36.60	4.08	36.20	4.04	35.90	4.00	35.50	3.96	35.20	3.92
47.0	33.00	2.74	32.60	2.71	32.30	2.69	32.00	2.66	31.70	2.63	31.40	2.61
75.2	43.30	3.02	42.80	2.99	42.40	2.96	42.00	2.94	41.60	2.91	41.20	2.88

AC036JNHDCH/AA + AC036JXADCH/AA

Cooling

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoo Temperature (℉, DB)	Indoor Temperature (℉, 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
-0.4	36.0	28.8	2.4	36.9	29.5	2.4	37.8	30.2	2.5	38.7	31.0	2.6	39.1	31.3	2.6	40.1	32.1	2.6	40.7	32.5	2.7
70	35.7	28.6	2.4	36.6	29.3	2.4	37.5	30.0	2.5	38.4	30.7	2.5	38.8	31.0	2.6	39.7	31.8	2.6	40.3	32.3	2.7
95	33.5	26.8	2.8	34.3	27.4	2.9	35.1	28.1	2.9	36.0	28.8	3.0	36.4	29.1	3.0	37.2	29.8	3.1	37.8	30.2	3.1
114.8	22.6	18.1	2.5	23.2	18.6	2.6	23.8	19.0	2.6	24.4	19.5	2.7	24.6	19.7	2.7	25.2	20.1	2.8	25.6	20.4	2.8

Heating

TC : Total Capacity PI: Power Input

Outdoor temperature (℉, DB)	Indoor temperature (℉, DB)											
	61.0		64.0		68.0		70.0		72.0		75.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	30.50	4.43	30.20	4.39	29.90	4.34	29.60	4.30	29.30	4.26	29.00	4.21
14.0	37.90	4.86	37.50	4.81	37.20	4.77	36.80	4.72	36.40	4.67	36.10	4.63
32.0	38.30	4.72	37.90	4.67	37.50	4.63	37.20	4.58	36.80	4.53	36.40	4.49
47.0	41.20	3.40	40.80	3.37	40.40	3.33	40.00	3.30	39.60	3.27	39.20	3.23
75.2	49.30	3.22	48.80	3.19	48.30	3.15	47.80	3.12	47.30	3.09	46.90	3.06

- Capacities are based on following conditions;

. Cooling mode indoor air temperature (, DB/WB) : 68/57, 72/61, 77/64, 80/67, 82/70, 86/72, 90/75

. Heating mode outdoor air : 85%RH. However, the condition rated capacity is 47 DB / 43 WB.

. Refrigerant piping length : 5m (16.4ft)

. Level difference : 0m.

3 Capacity table

HSP Duct

AC042JNHDCH/AA + 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
-0.4	41.9	33.5	3.0	43.0	34.4	3.1	44.0	35.2	3.1	45.1	36.1	3.2	45.6	36.4	3.2	46.6	37.3	3.3	47.3	37.9	3.4
70	40.9	32.7	3.1	41.9	33.5	3.2	42.9	34.4	3.3	44.0	35.2	3.3	44.4	35.6	3.4	45.5	36.4	3.5	46.2	37.0	3.5
95	39.0	31.2	3.7	40.0	32.0	3.8	41.0	32.8	3.9	42.0	33.6	4.0	42.4	33.9	4.0	43.4	34.8	4.1	44.1	35.3	4.2
114.8	28.4	22.7	2.8	29.1	23.2	2.9	29.8	23.8	2.9	30.5	24.4	3.0	30.8	24.6	3.0	31.5	25.2	3.1	32.0	25.6	3.1

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (°F, DB)	Indoor temperature (°F, DB)											
	61.0		64.0		68.0		70.0		72.0		75.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	26.90	4.48	26.60	4.44	26.40	4.39	26.10	4.35	25.80	4.31	25.60	4.26
14.0	41.00	5.10	40.60	5.05	40.20	5.00	39.80	4.95	39.40	4.90	39.00	4.85
32.0	45.60	4.84	45.10	4.79	44.70	4.75	44.30	4.70	43.80	4.65	43.40	4.61
47.0	48.40	4.48	47.90	4.44	47.50	4.39	47.00	4.35	46.50	4.31	46.10	4.26
75.2	53.40	4.02	52.80	3.98	52.30	3.94	51.80	3.90	51.30	3.86	50.80	3.82

AC048JNHDCH/AA + 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
-0.4	50.0	40.0	3.4	51.2	41.0	3.5	52.5	42.0	3.6	53.8	43.0	3.6	54.3	43.5	3.7	55.6	44.5	3.8	56.5	45.2	3.8
70	49.1	39.3	3.5	50.3	40.2	3.6	51.5	41.2	3.7	52.8	42.2	3.8	53.3	42.7	3.8	54.6	43.7	3.9	55.4	44.3	4.0
95	44.6	35.7	4.6	45.7	36.6	4.7	46.8	37.5	4.8	48.0	38.4	5.0	48.5	38.8	5.0	49.6	39.7	5.1	50.4	40.3	5.2
114.8	29.0	23.2	3.6	29.7	23.8	3.7	30.5	24.4	3.8	31.2	25.0	3.9	31.5	25.2	3.9	32.3	25.8	4.0	32.8	26.2	4.1

Heating

TC : Total Capacity PI: Power Input

Outdoor temperature (°F, DB)	Indoor temperature (°F, DB)											
	61.0		64.0		68.0		70.0		72.0		75.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	29.00	4.66	28.70	4.61	28.40	4.57	28.20	4.52	27.90	4.47	27.60	4.43
14.0	43.60	5.62	43.10	5.56	42.70	5.50	42.30	5.45	41.80	5.40	41.40	5.34
32.0	46.50	5.41	46.10	5.36	45.60	5.30	45.20	5.25	44.70	5.20	44.30	5.15
47.0	54.60	5.20	54.10	5.15	53.50	5.10	53.00	5.05	52.50	5.00	51.90	4.95
75.2	62.80	4.51	62.20	4.47	61.60	4.42	61.00	4.38	60.40	4.34	59.80	4.29

- Capacities are based on following conditions;
  . Cooling mode indoor air temperature (, DB/WB) : 68/57, 72/61, 77/64, 80/67, 82/70, 86/72, 90/75
  . Heating mode outdoor air : 85%RH. However, the condition rated capacity is 47 DB / 43 WB.
  . Refrigerant piping length : 5m (16.4ft)
  . Level difference : 0m.

4 Dimensional drawing

HSP Duct

AC018JNHDCH/AA, AC024JNHDCH/AA

Units : mm / inches

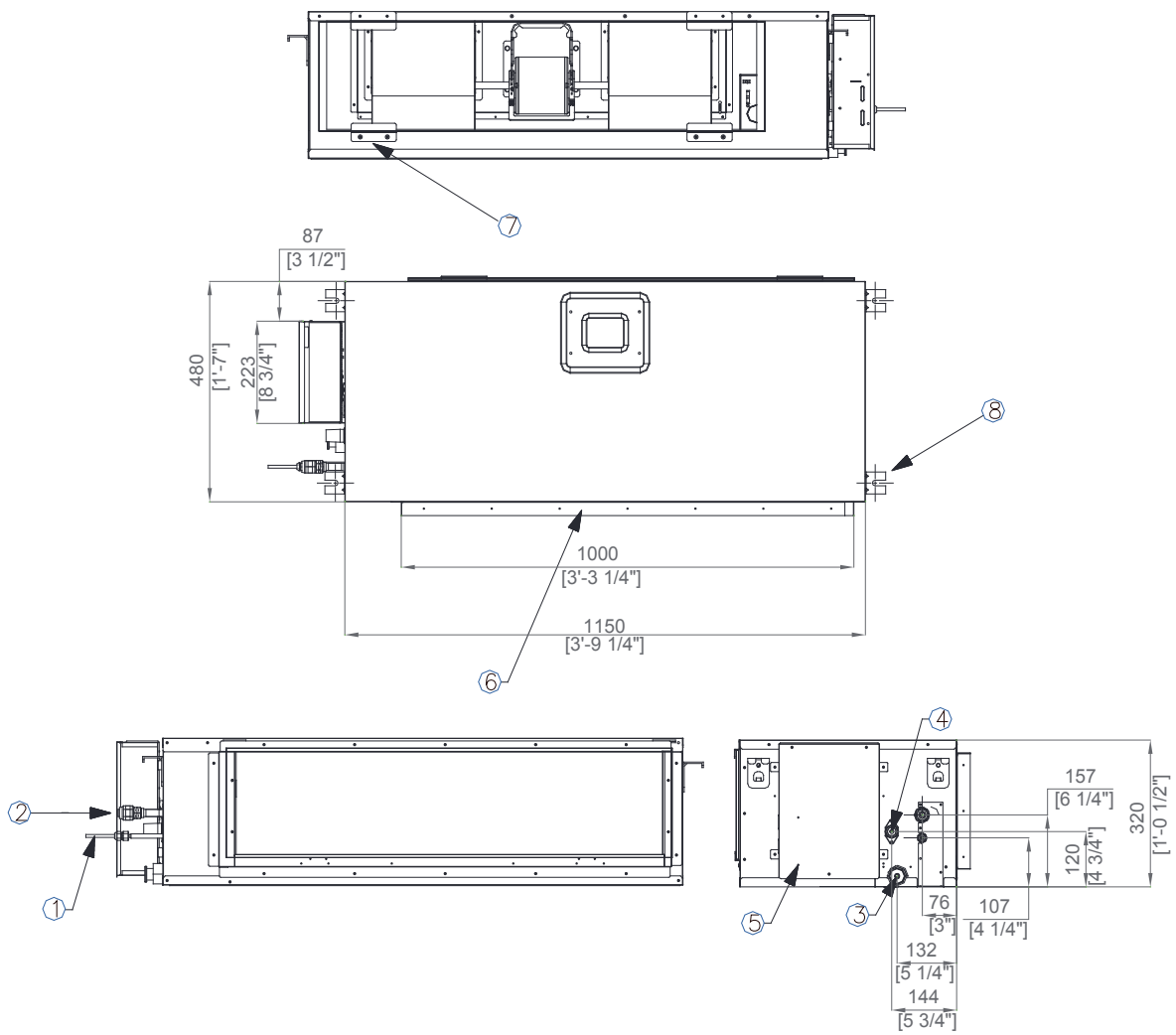


Table of descriptions			
1	Refrigerant liquid pipe	7	Air filter
2	Refrigerant gas pipe	8	Hook
3	Drain Pipe Connection (Optional)	9	
4	Drain Pipe Connection (Using dain pump)	10	
5	Power supply connection	11	
6	Air discharge flange	12	

4 Dimensional drawing

HSP Duct

AC030JNHDCH/AA, AC036JNHDCH/AA, AC042JNHDCH/AA, AC048JNHDCH/AA

Units : mm / inches

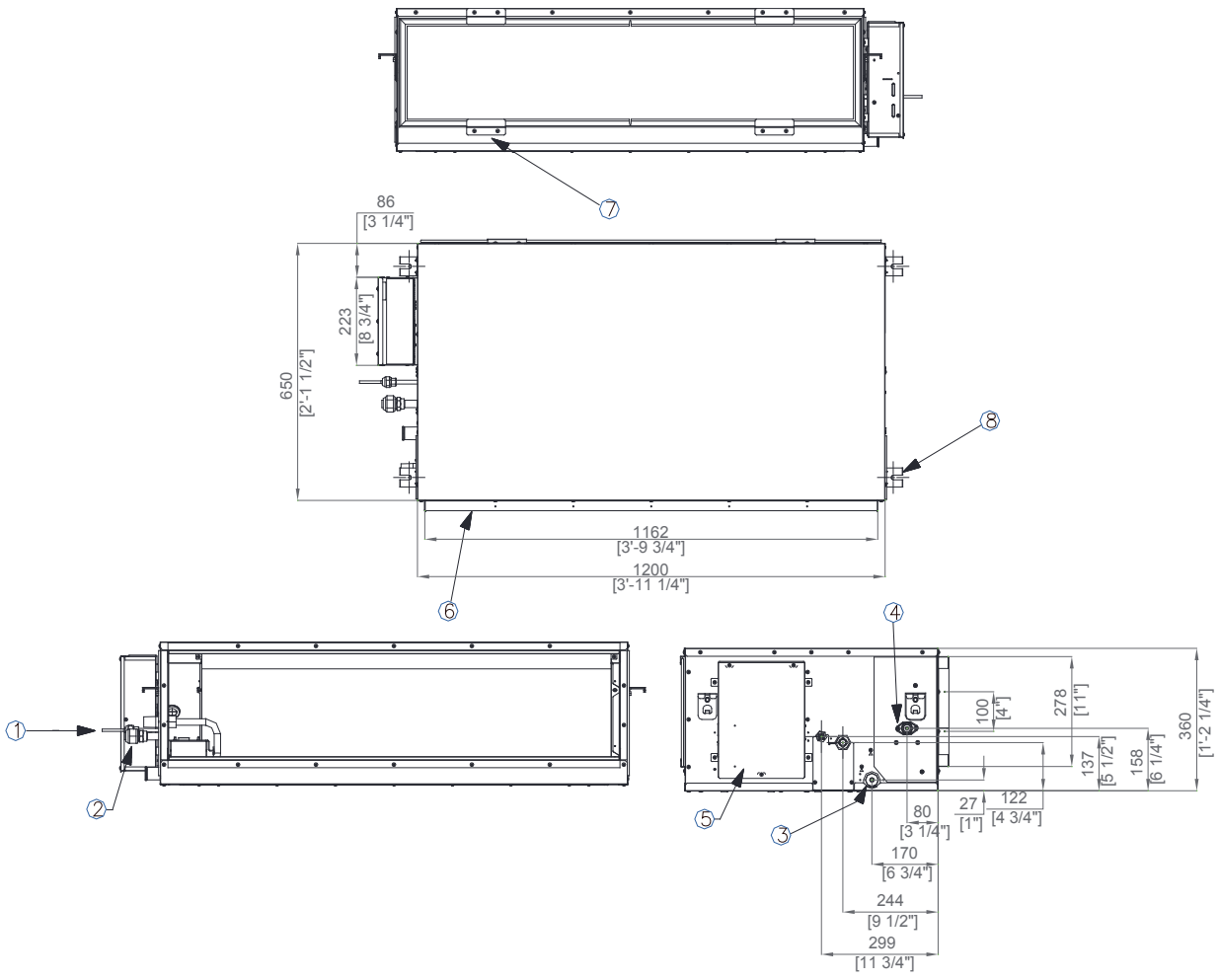
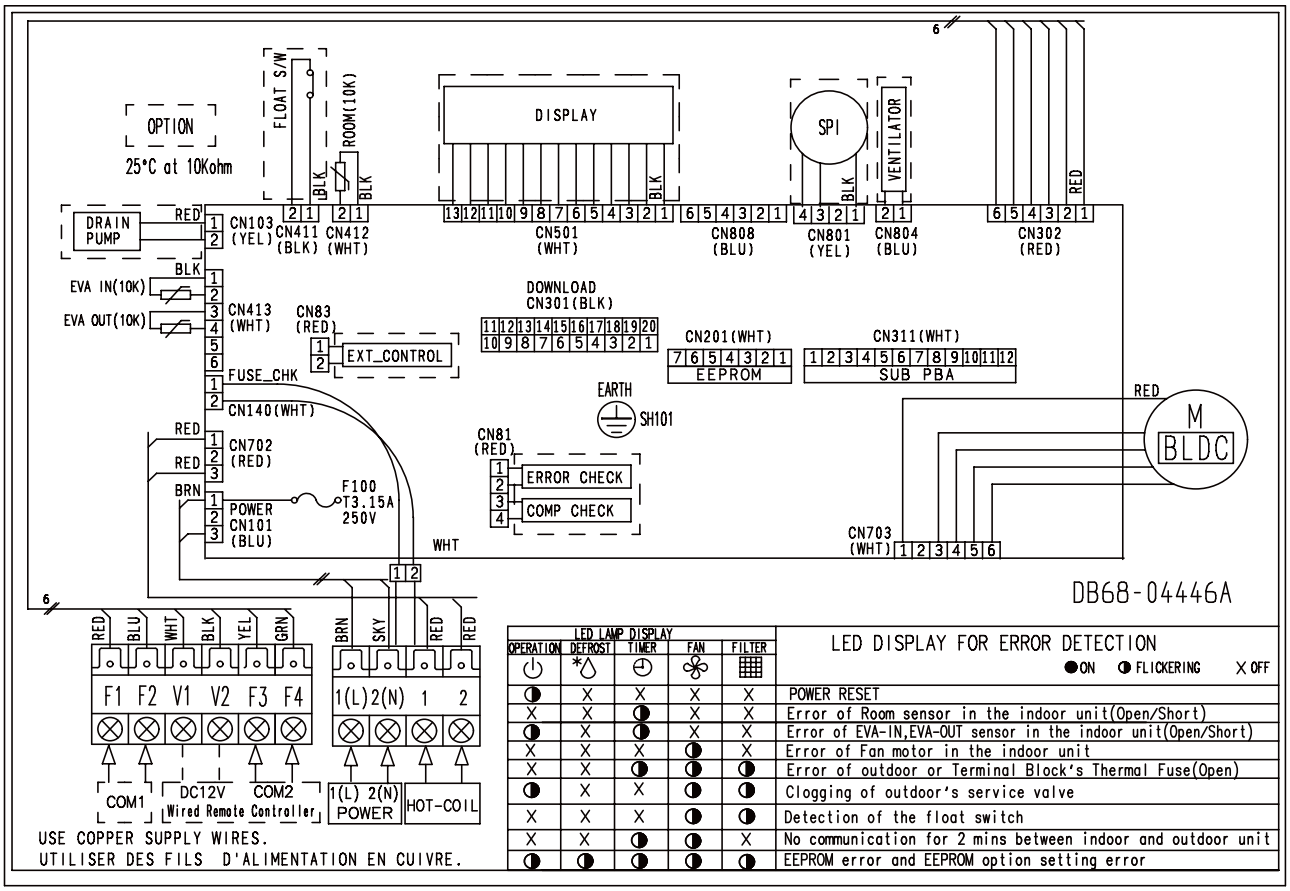


Table of descriptions			
1	Refrigerant liquid pipe	7	Air filter
2	Refrigerant gas pipe	8	Hook
3	Drain Pipe Connection (Optional)	9	
4	Drain Pipe Connection (Using dain pump)	10	
5	Power supply connection	11	
6	Air discharge flange	12	

5 Electrical wiring diagram

HSP Duct

AC018JNHDCH/AA, AC024JNHDCH/AA

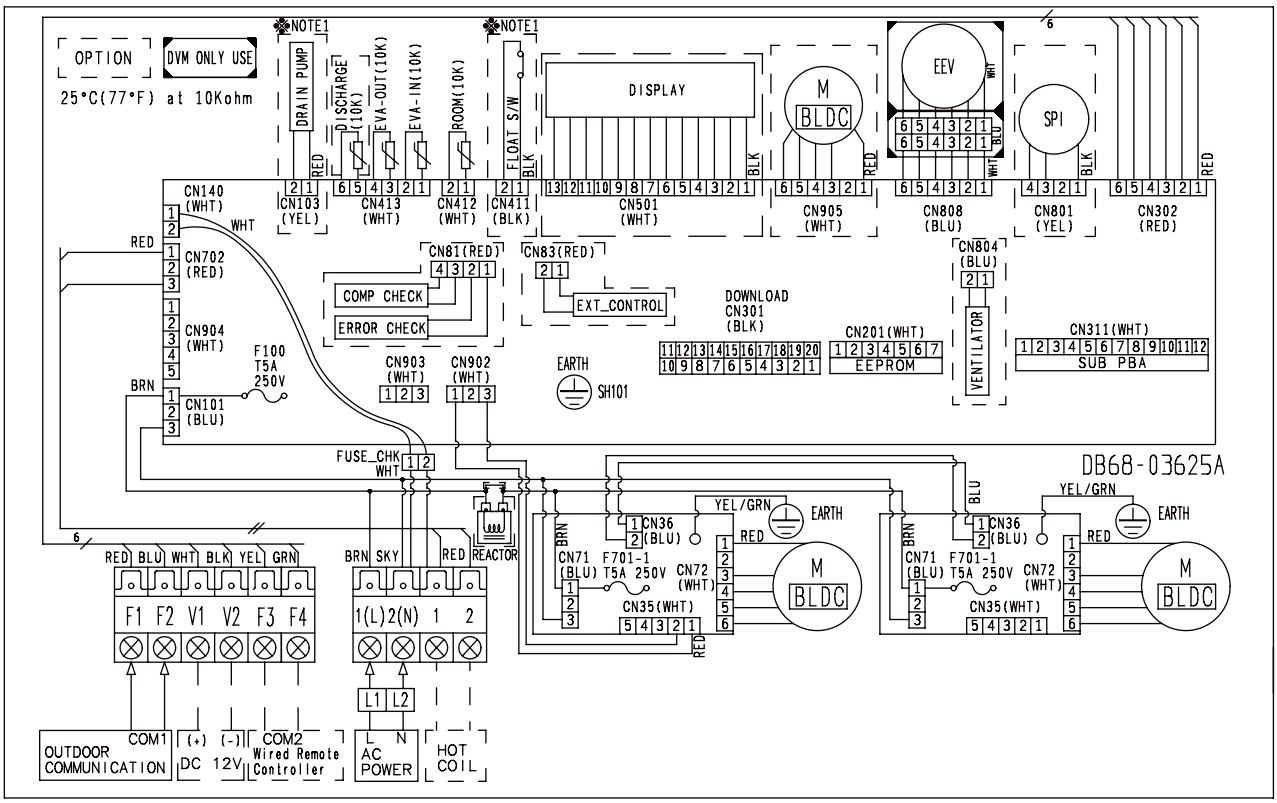


LED LAMP DISPLAY					LED DISPLAY FOR ERROR DETECTION
OPERATION	DEFROST	TIMER	FAN	FILTER	●ON ◑FLICKERING X OFF
◑	X	X	X	X	POWER RESET
X	X	◑	X	X	Error of Room sensor in the indoor unit(Open/Short)
◑	X	◑	X	X	Error of EVA-IN,EVA-OUT sensor in the indoor unit(Open/Short)
X	X	X	◑	X	Error of Fan motor in the indoor unit
X	X	◑	◑	◑	Error of outdoor or Terminal Block's Thermal Fuse(Open)
◑	X	X	◑	◑	Clogging of outdoor's service valve
X	X	X	◑	◑	Detection of the float switch
X	X	◑	◑	X	No communication for 2 mins between indoor and outdoor unit
◑	◑	◑	◑	◑	EEPROM error and EEPROM option setting error

5 Electrical wiring diagram

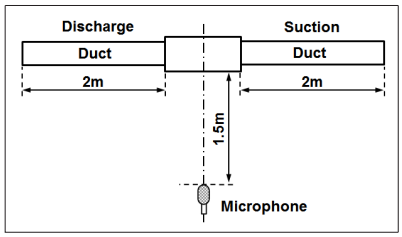
HSP Duct

AC030JNHDCH/AA, AC036JNHDCH/AA, AC042JNHDCH/AA, AC048JNHDCH/AA



6 Sound pressure level

HSP Duct

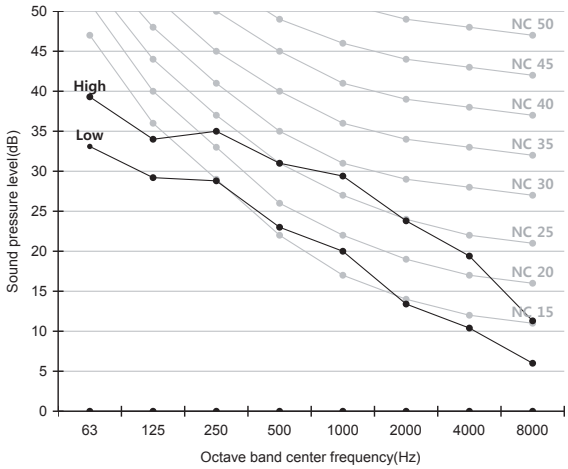


Unit: dB(A)

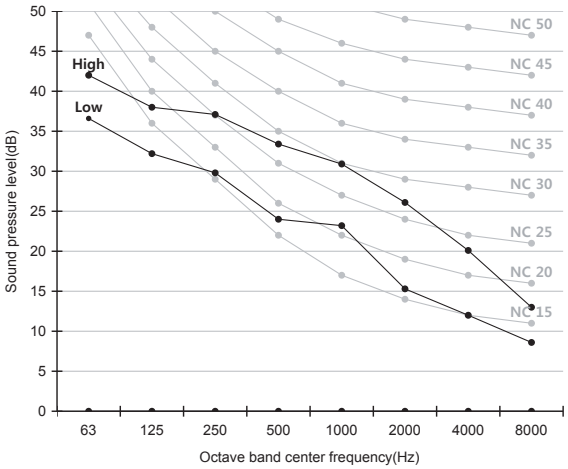
Model	High	Low
AC018JNHDCH/AA (ODU : AC018JXADCH/AA)	34	26
AC024JNHDCH/AA (ODU : AC024JXADCH/AA)	36	28
AC030JNHDCH/AA (ODU : AC030JXADCH/AA)	37	29
AC036JNHDCH/AA (ODU : AC036JXADCH/AA)	38	30

NC curve

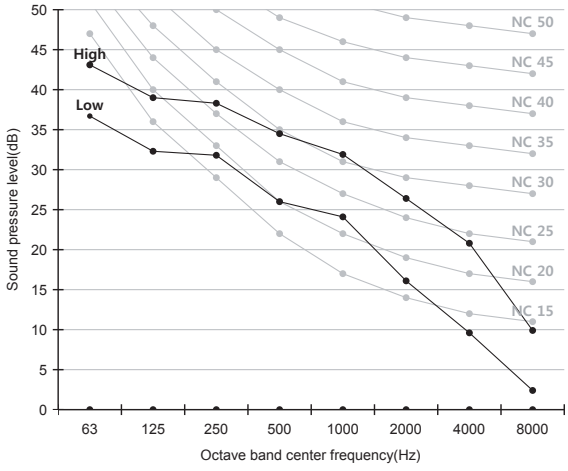
1) AC018JNHDCH/AA (ODU : AC018JXADCH/AA)



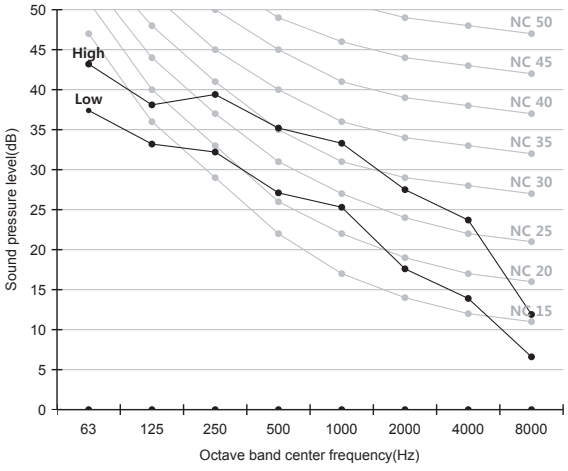
2) AC024JNHDCH/AA (ODU : AC024JXADCH/AA)



3) AC030JNHDCH/AA (ODU : AC030JXADCH/AA)



4) AC036JNHDCH/AA (ODU : AC036JXADCH/AA)

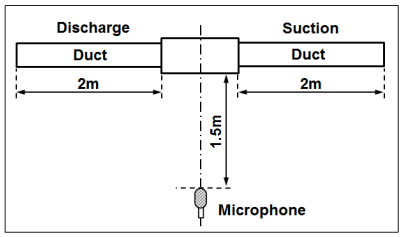


NOTE

- 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

6 Sound pressure level

HSP Duct

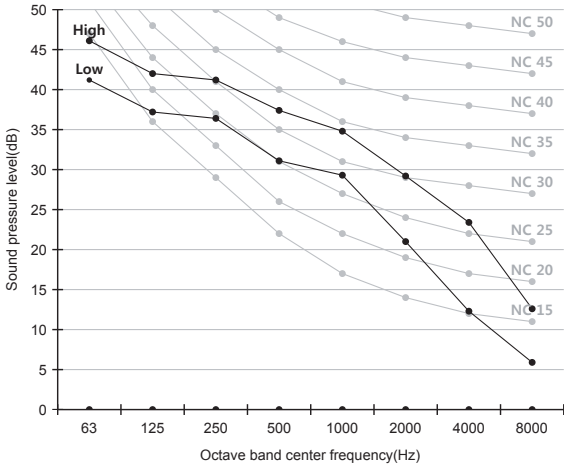


Unit: dB(A)

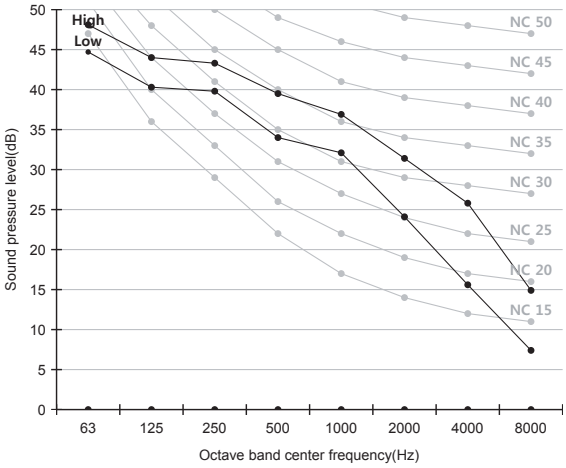
Model	High	Low
AC042JNHDCH/AA (ODU : AC042JXADCH/AA)	40	34
AC048JNHDCH/AA (ODU : AC048JXADCH/AA)	43	37

NC curve

1) AC042JNHDCH/AA (ODU : AC042JXADCH/AA)



2) AC048JNHDCH/AA (ODU : AC048JXADCH/AA)



NOTE

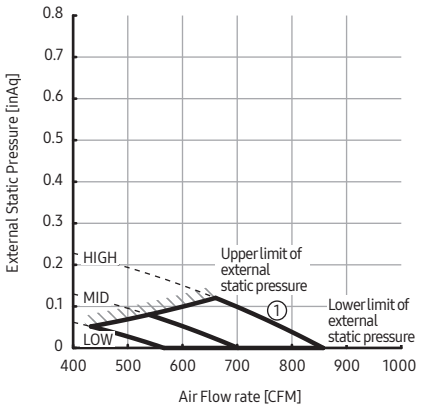
- Specifications may be subject to change without prior notice.
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted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

7 Recommended operation range

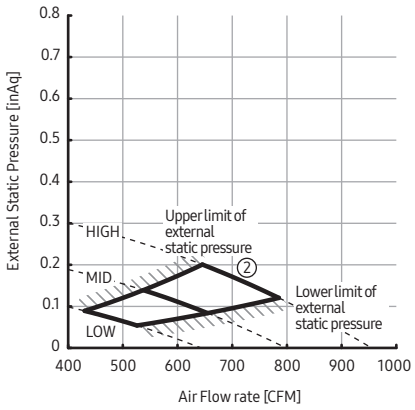
HSP Duct

1) AC018JNHDCH/AA (ODU : AC018JXADCH/AA)

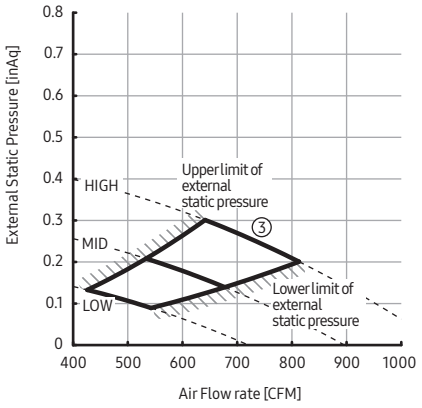
①	External Static Pressure(inAq)	Option Code
	0 ≤ P ≤ 0.12(Default)	01C0EC-1C8424-27343B-370005



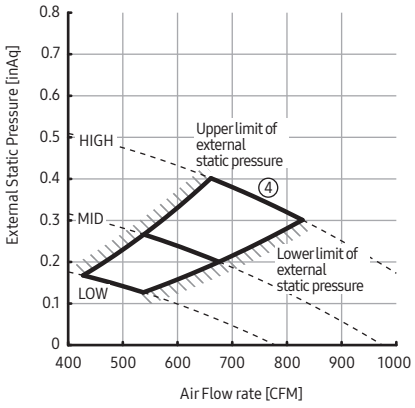
②	External Static Pressure(inAq)	Option Code
	0.12 < P ≤ 0.20	01C0EC-1C5468-27343B-370005



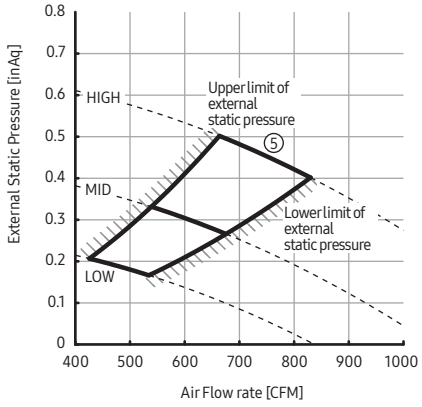
③	External Static Pressure(inAq)	Option Code
	0.20 < P ≤ 0.30	01C0EC-1C54CE-27343B-370005



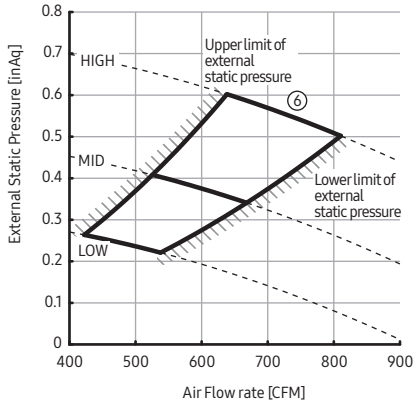
④	External Static Pressure(inAq)	Option Code
	0.30 < P ≤ 0.40	01C0EC-1C5924-27343B-370005



⑤	External Static Pressure(inAq)	Option Code
	0.40 < P ≤ 0.50	01C0EC-1C596A-27343B-370005



⑥	External Static Pressure(inAq)	Option Code
	0.50 < P ≤ 0.60	01C0EC-1C59CE-27343B-370005



Note

Adjust option code according to the actual installation condition (external static pressure).

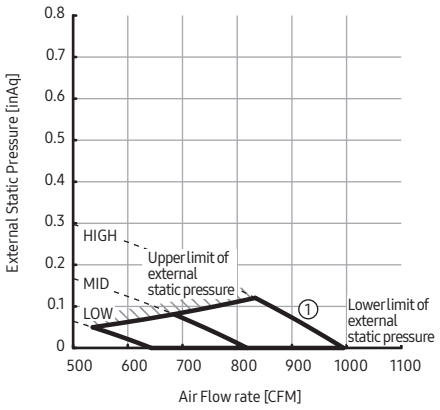
The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

7 Recommended operation range

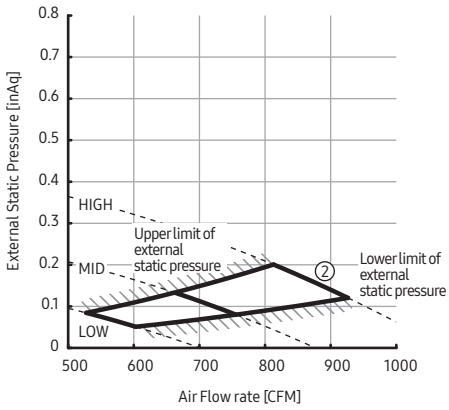
HSP Duct

2) AC024JNHDCH/AA (ODU : AC024JXADCH/AA)

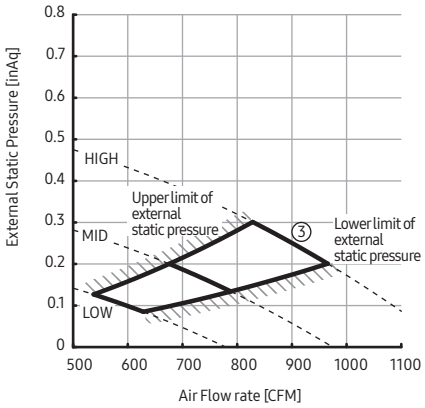
①	External Static Pressure(inAq)	Option Code
	0 ≤ P ≤ 0.12(Default)	01C0EC-1C747C-274750-370005



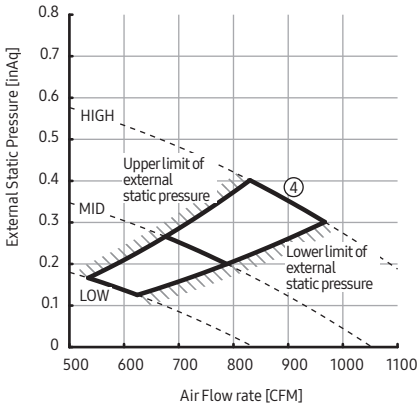
②	External Static Pressure(inAq)	Option Code
	0.12 < P ≤ 0.20	01C0EC-1C54AF-274750-370005



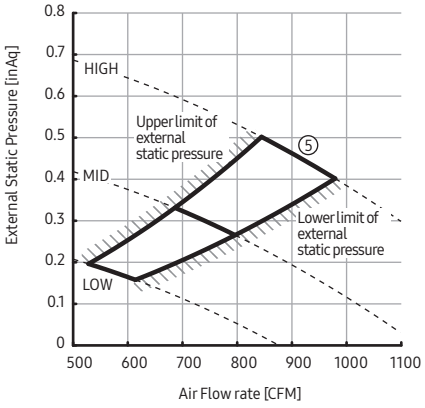
③	External Static Pressure(inAq)	Option Code
	0.20 < P ≤ 0.30	01C0EC-1C55E6-274750-370005



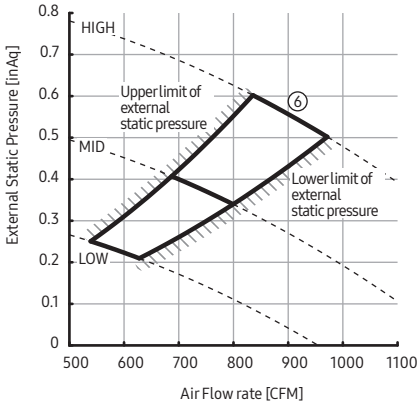
④	External Static Pressure(inAq)	Option Code
	0.30 < P ≤ 0.40	01C0EC-1C595A-274750-370005



⑤	External Static Pressure(inAq)	Option Code
	0.40 < P ≤ 0.50	01C0EC-1C5AB0-274750-370005



⑥	External Static Pressure(inAq)	Option Code
	0.50 < P ≤ 0.60	01C0EC-1C5AE3-274750-370005



Note

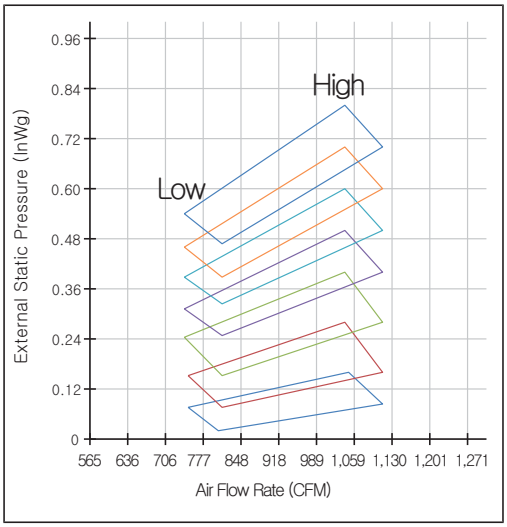
Adjust option code according to the actual installation condition (external static pressure).

The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

7 Recommended operation range

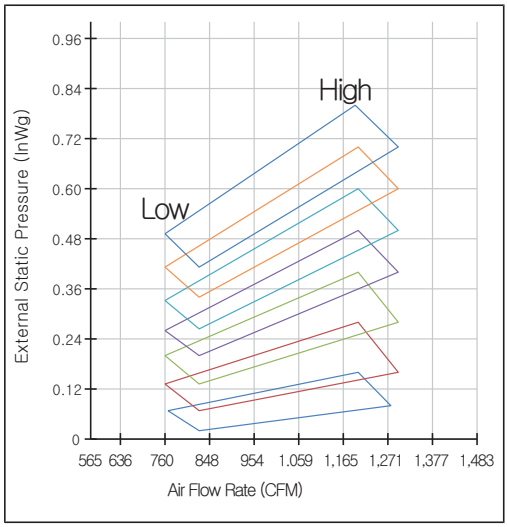
HSP Duct

3) AC030JNHDCH/AA (ODU : AC030JXADCH/AA)



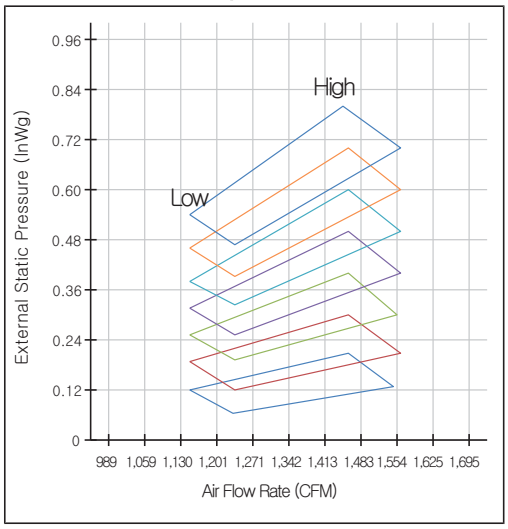
External Static Pressure (InWg)	Option Code
0.12≤P≤0.16(Default)	0100EC-1A55D4-275A64-370005
0.16P≤0.28	0100EC-1A5927-275A64-370005
0.28P≤0.40	0100EC-1A594A-275A64-370005
0.40P≤0.50	0100EC-1A598C-275A64-370005
0.50P≤0.60	0100EC-1A59BE-275A64-370005
0.60P≤0.70	0100EC-1A5AE0-275A64-370005
0.70P≤0.80	0100EC-1A5E02-275A64-370005

4) AC036JNHDCH/AA (ODU : AC036JXADCH/AA)



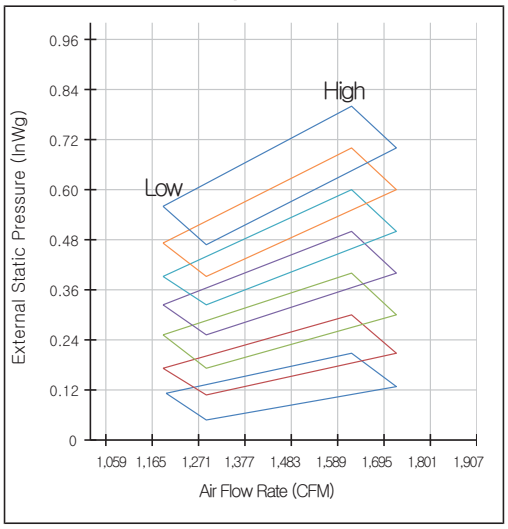
External Static Pressure (InWg)	Option Code
0.12≤P≤0.16(Default)	0100EC-1A5902-276470-370005
0.16P≤0.28	0100EC-1A595A-276470-370005
0.28P≤0.40	0100EC-1A598C-276470-370005
0.40P≤0.50	0100EC-1A59BE-276470-370005
0.50P≤0.60	0100EC-1A5AE0-276470-370005
0.60P≤0.70	0100EC-1A5E12-276470-370005
0.70P≤0.80	0100EC-1A5E34-276470-370005

5) AC042JNHDCH/AA (ODU : AC042JXADCH/AA)



External Static Pressure (InWg)	Option Code
0.16≤P≤0.20(Default)	0100EC-1A194D-277D8C-370005
0.20P≤0.30	0100EC-1A597F-277D8C-370005
0.30P≤0.40	0100EC-1A5AA1-277D8C-370005
0.40P≤0.50	0100EC-1A5AD3-277D8C-370005
0.50P≤0.60	0100EC-1A5E06-277D8C-370005
0.60P≤0.70	0100EC-1A5E38-277D8C-370005
0.70P≤0.80	0100EC-1A5E5A-277D8C-370005

6) AC048JNHDCH/AA (ODU : AC048JXADCH/AA)



External Static Pressure (InWg)	Option Code
0.16≤P≤0.20(Default)	0100EC-1A1A81-278CA0-370005
0.20P≤0.30	0100EC-1A5AA2-278CA0-370005
0.30P≤0.40	0100EC-1A5AD4-278CA0-370005
0.40P≤0.50	0100EC-1A5E06-278CA0-370005
0.50P≤0.60	0100EC-1A5E38-278CA0-370005
0.60P≤0.70	0100EC-1A5E6A-278CA0-370005
0.70P≤0.80	0100EC-1A5E7D-278CA0-370005

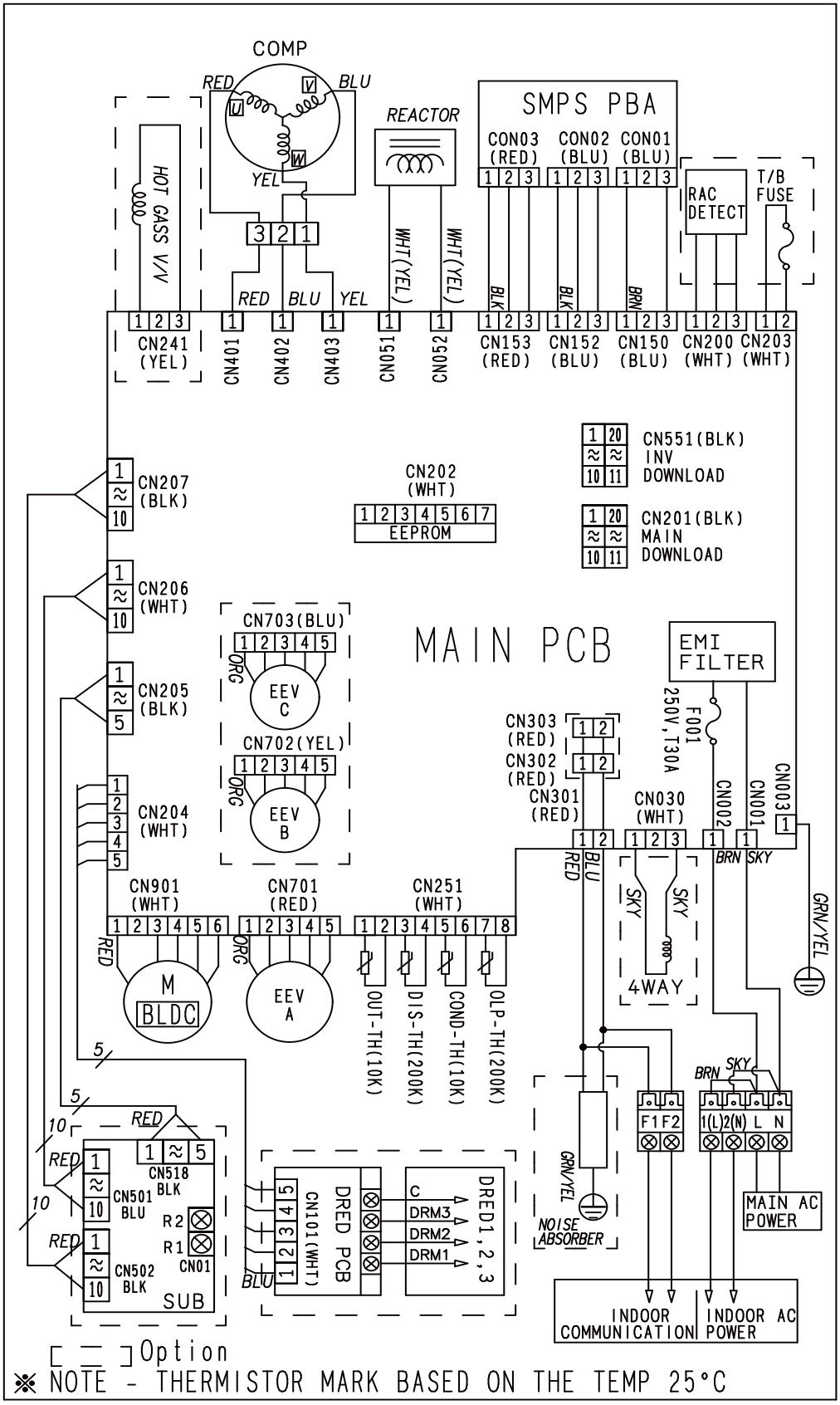
Note

Adjust option code according to the actual installation condition (external static pressure).
The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

8 Electrical wiring diagram

Outdoor

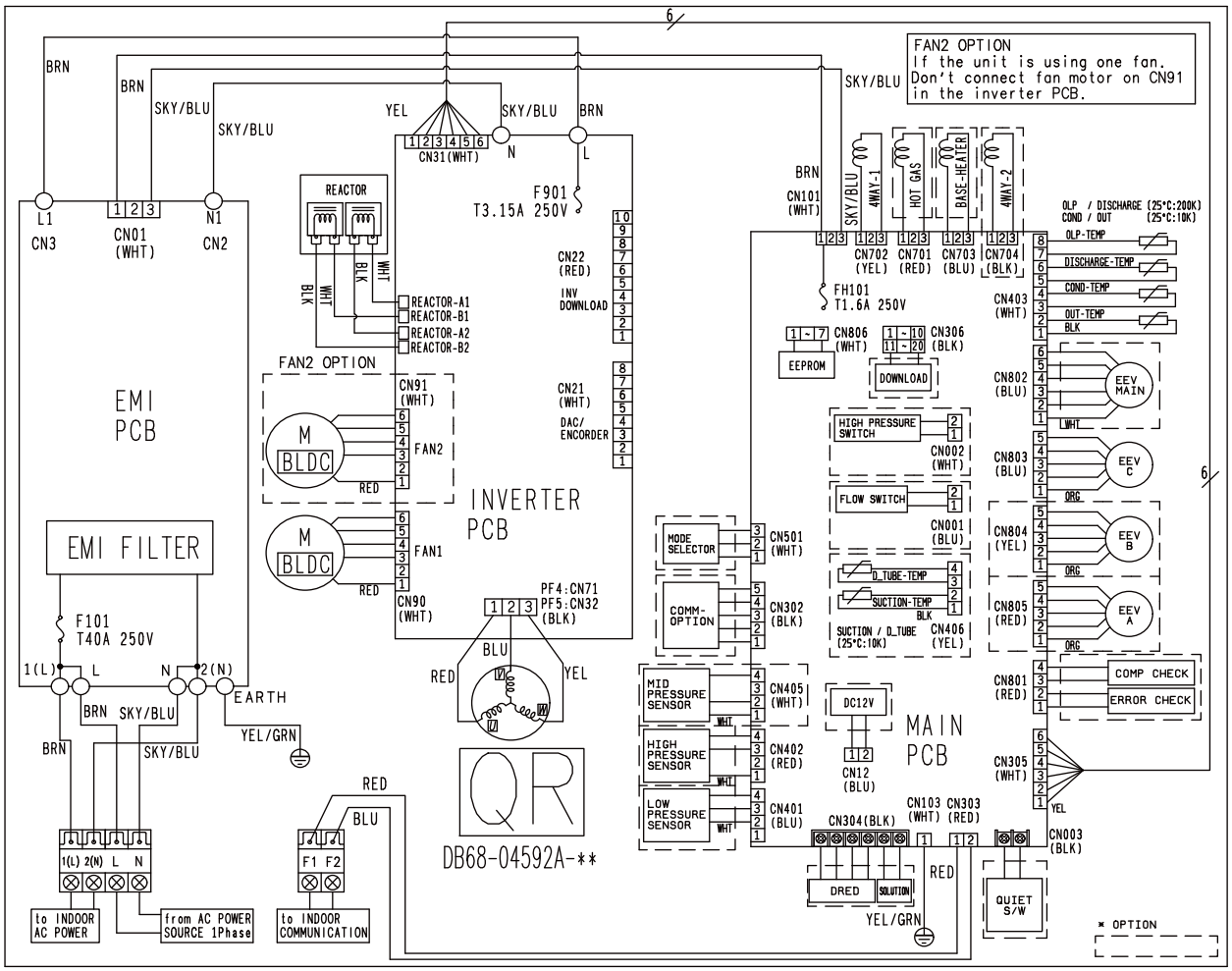
AC018JXADCH/AA



8 Electrical wiring diagram

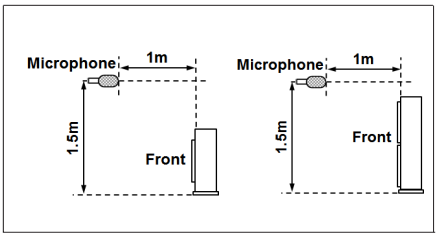
Outdoor

AC024JXADCH/AA, AC030JXADCH/AA, AC036JXADCH/AA, AC042JXADCH/AA, AC048JXADCH/AA



9 Sound pressure level

Outdoor

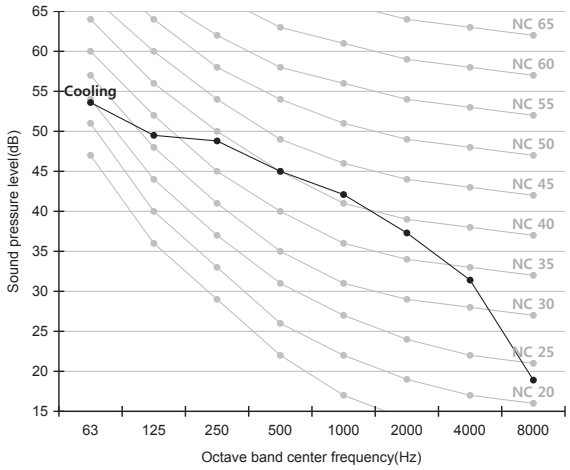


Unit: dB(A)

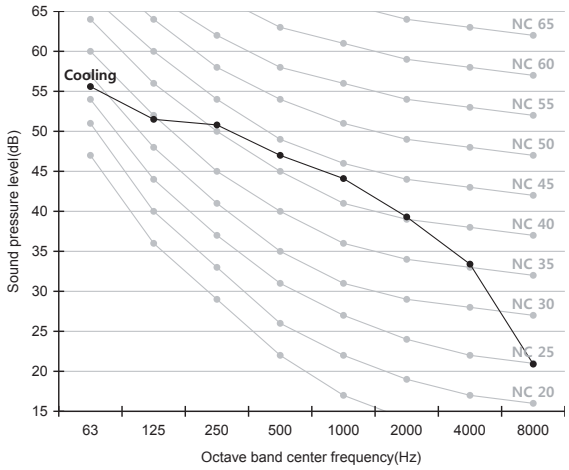
Model	Cooling
AC018JXADCH/AA (IDU : AC018JNHDCH/AA)	48
AC024JXADCH/AA (IDU : AC024JNHDCH/AA)	50
AC030JXADCH/AA (IDU : AC030JNHDCH/AA)	50
AC036JXADCH/AA (IDU : AC036JNHDCH/AA)	49

NC curve

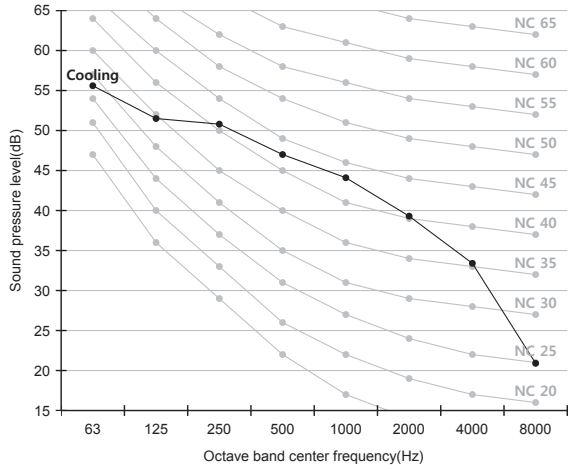
1) AC018JXADCH/AA (IDU : AC018JNHDCH/AA)



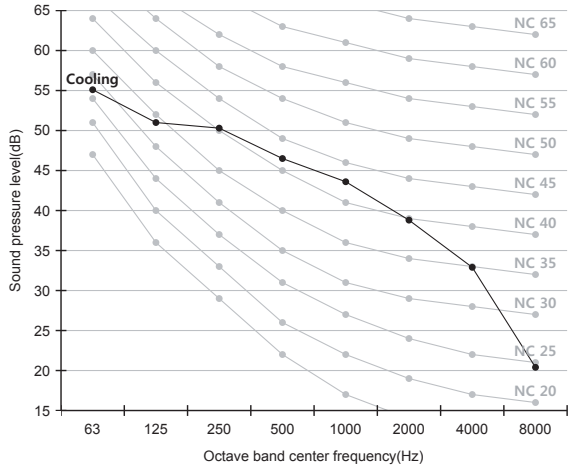
2) AC024JXADCH/AA (IDU : AC024JNHDCH/AA)



3) AC030JXADCH/AA (IDU : AC030JNHDCH/AA)



4) AC036JXADCH/AA (IDU : AC036JNHDCH/AA)

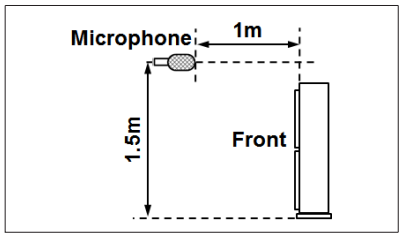


NOTE

- 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

9 Sound pressure level

Outdoor

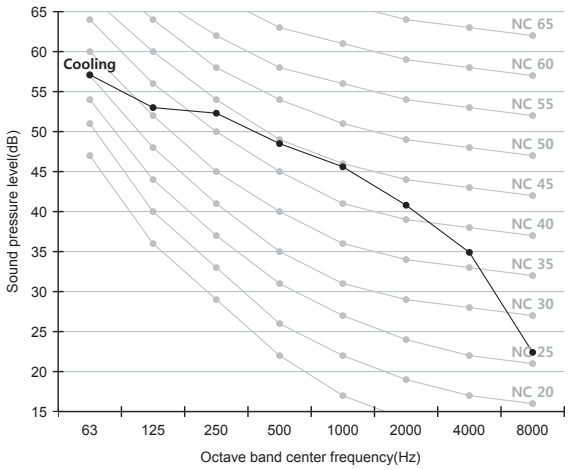


Unit: dB(A)

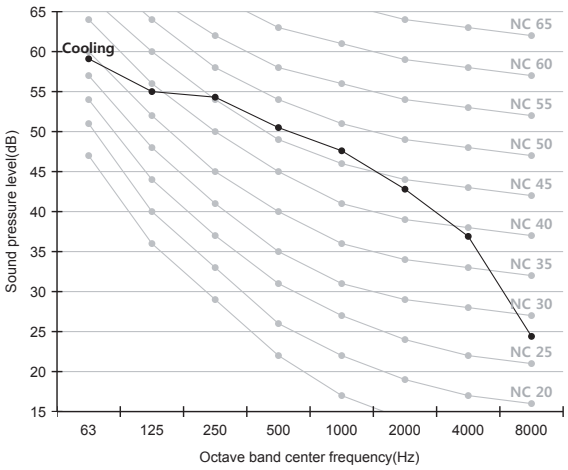
Model	Cooling
AC042JXADCH/AA (IDU : AC042JNHDCH/AA)	51
AC048JXADCH/AA (IDU : AC048JNHDCH/AA)	53

NC curve

1) AC042JXADCH/AA (IDU : AC042JNHDCH/AA)



2) AC048JXADCH/AA (IDU : AC048JNHDCH/AA)



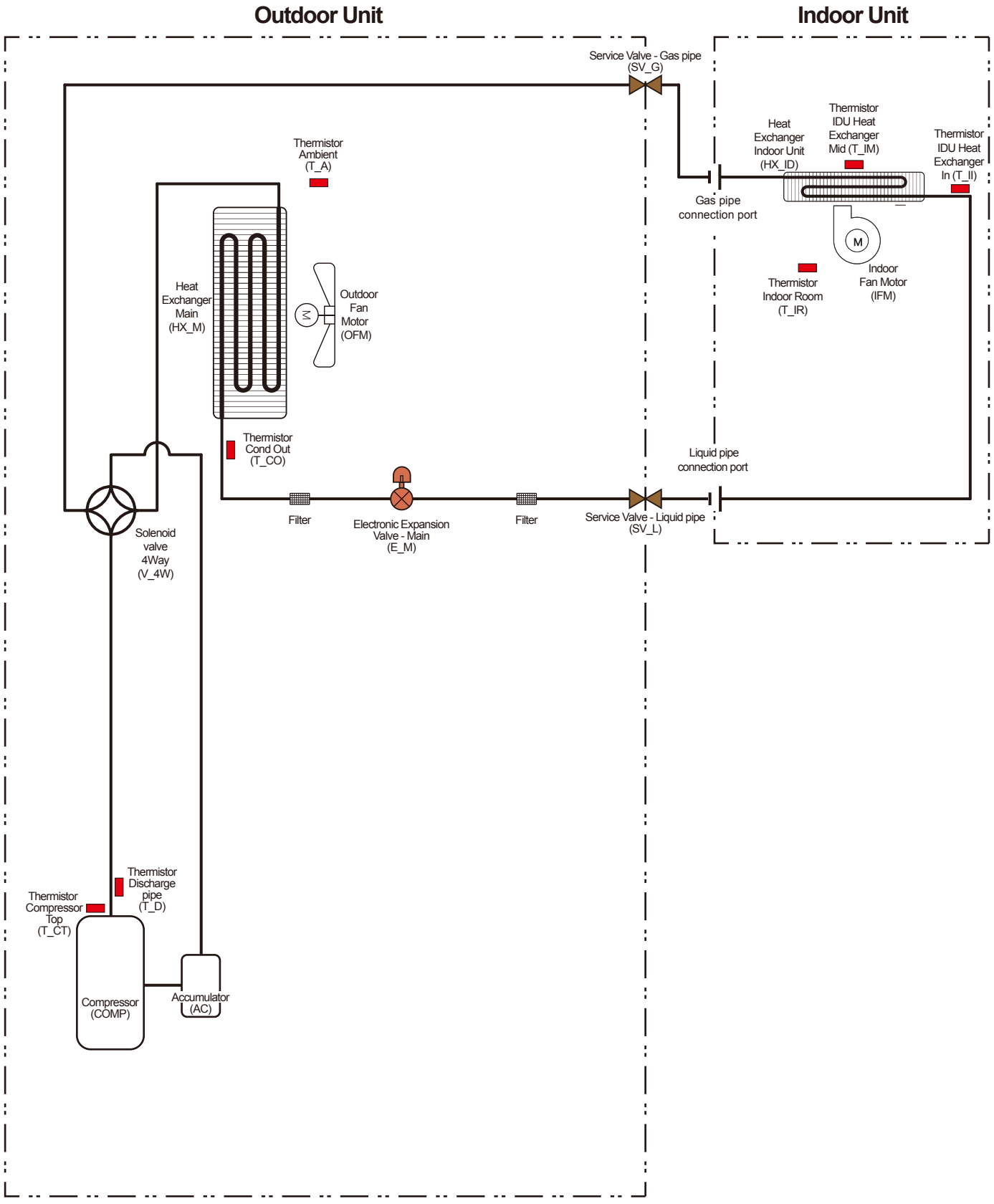
NOTE

- 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

10 Cycle diagram

Outdoor

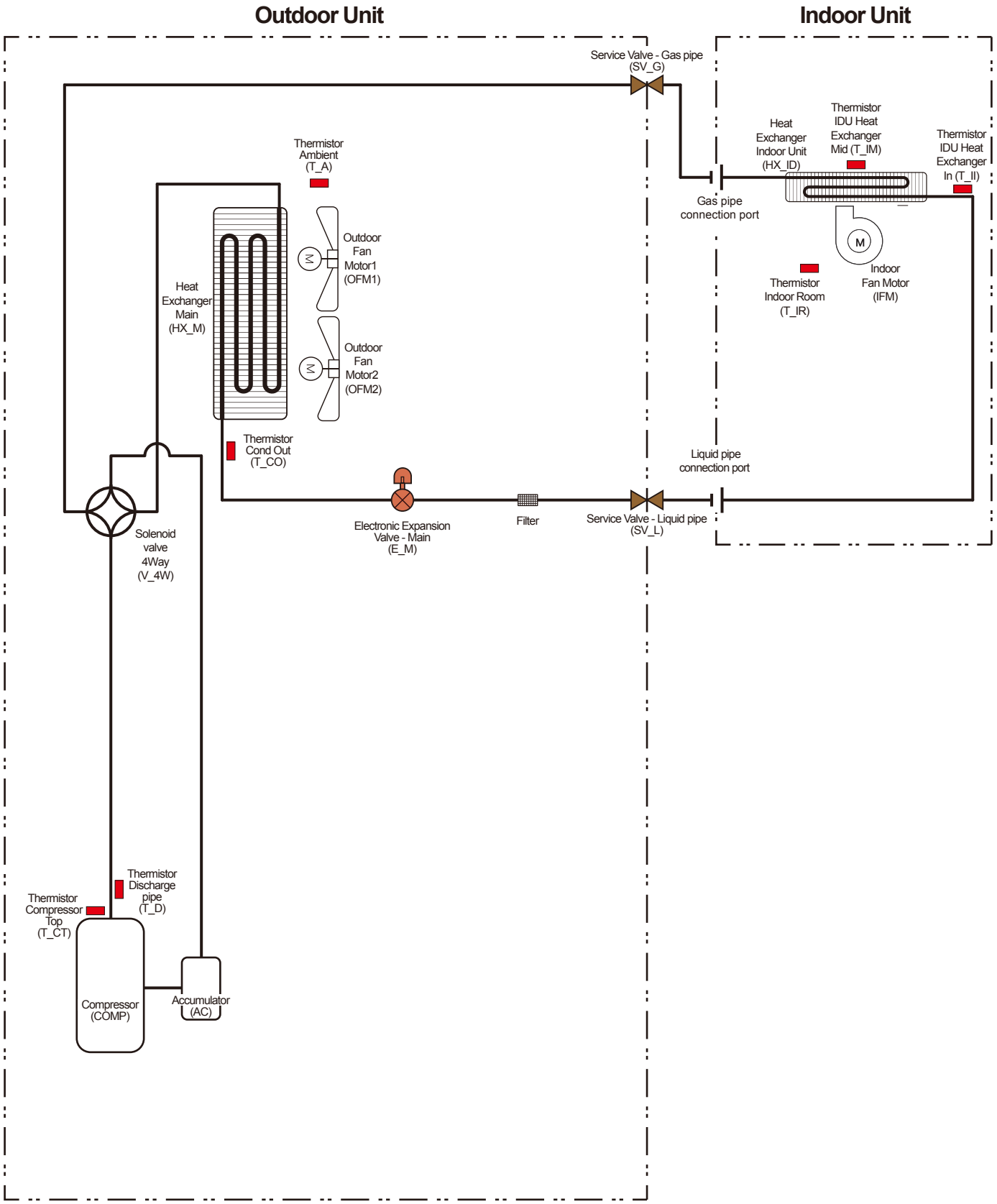
AC018JXADCH/AA, AC024JXADCH/AA, AC030JXADCH/AA



10 Cycle diagram

Outdoor

AC036JXADCH/AA, AC042JXADCH/AA, AC048JXADCH/AA



11 Dimensional drawing

Outdoor

AC018JXADCH/AA

Units : mm / inches

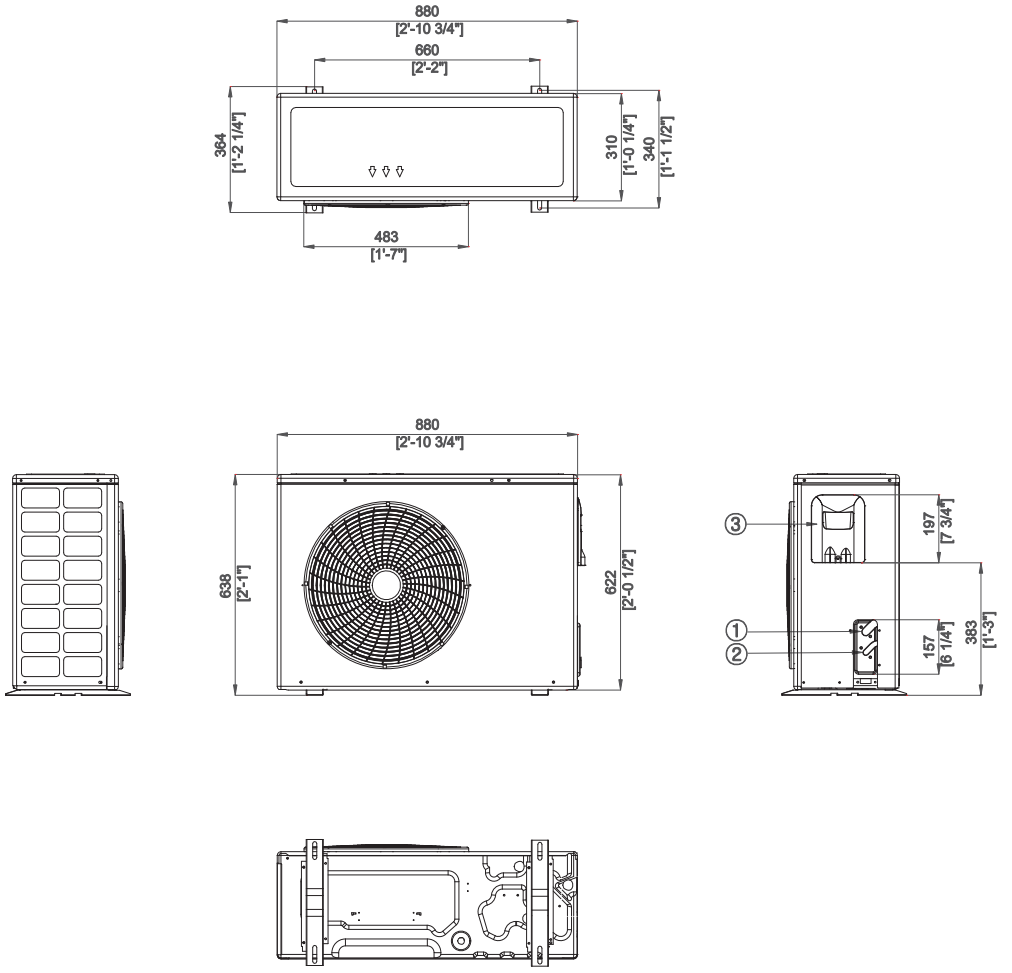


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Power & Comm. wiring conduits	9	
4		10	
5		11	
6		12	

11 Dimensional drawing

Outdoor

AC024JXADCH/AA, AC030JXADCH/AA

Units : mm / inches

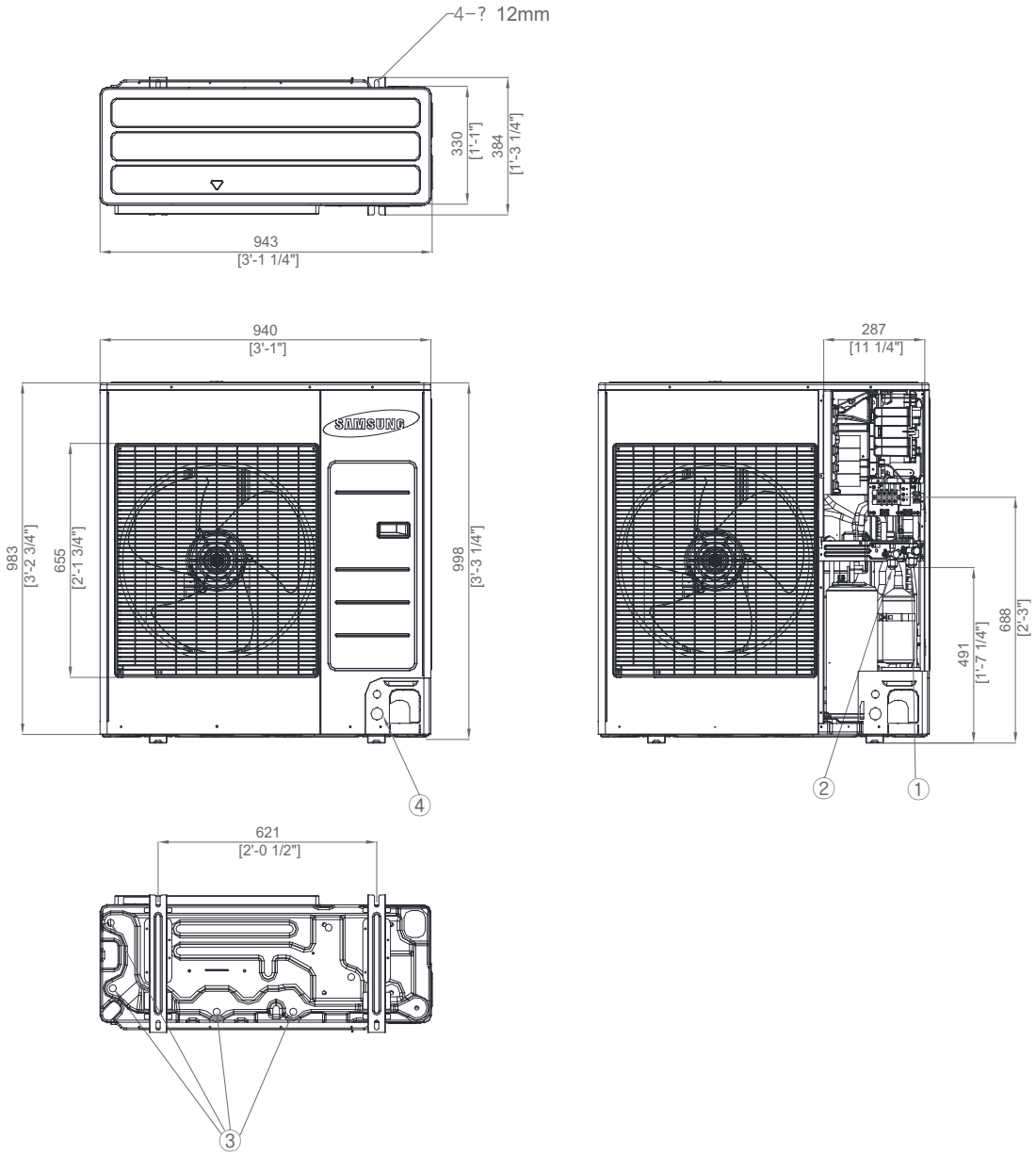


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Drain Hole	9	
4	Power & Comm. wiring conduits	10	
5		11	
6		12	

11 Dimensional drawing

Outdoor

AC036JXADCH/AA, AC042JXADCH/AA, AC048JXADCH/AA

Units : mm / inches

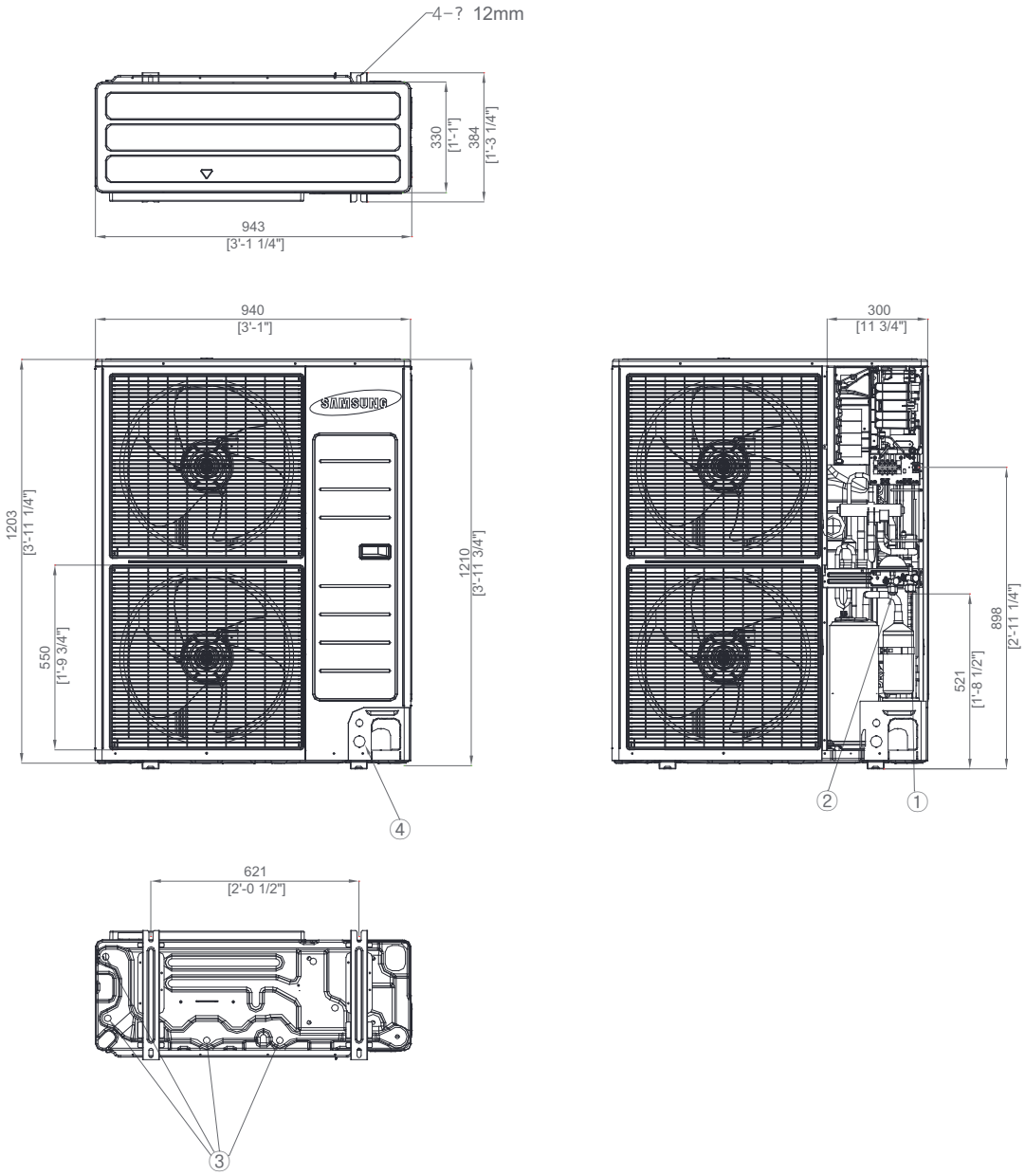


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Drain Hole	9	
4	Power & Comm. wiring conduits	10	
5		11	
6		12	

12 Capacity correction

Outdoor

AC018JNHDCH/AA + AC018JXADCH/AA

Cooling

Level Difference (ft)	Pipe Length (ft)					
	16.4	32.8	49.2	65.6	82.0	98.4
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	1.00	0.99	0.97	0.96	0.94	0.93
0.0	1.00	0.99	0.97	0.96	0.94	0.93
-16.4	1.00	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	0.92	0.91

Heating

Level Difference (ft)	Pipe Length (ft)					
	16.4	32.8	49.2	65.6	82.0	98.4
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	1.00	0.98	0.96	0.94	0.92	0.90
0.0	1.00	0.98	0.96	0.94	0.92	0.90
-16.4	1.00	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

AC024JNHDCH/AA + AC024JXADCH/AA

Cooling

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

Heating

Level Difference (ft)	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
98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
16.4	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
0.0	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-16.4	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-

12 Capacity correction

Outdoor

AC030JNHDCH/AA + AC030JXADCH/AA

Cooling

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

Heating

Level Difference (ft)	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
98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
16.4	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
0.0	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-16.4	1.00	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-32.8	-	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-49.2	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-65.6	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-82.0	-	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-
-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	-	-	-	-	-

AC036JNHDCH/AA + AC036JXADCH/AA

Cooling

Level Difference (ft)	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
98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-16.4	1.00	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
-32.8	-	0.98	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.87	0.85
-49.2	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84
-65.6	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.83
-82.0	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.88	0.87	0.85	0.81
-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84	0.80

Heating

Level Difference (ft)	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
98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88

12 Capacity correction

Outdoor

AC042JNHDCH/AA + AC042JXADCH/AA

Cooling

Level Difference (ft)	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
98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-16.4	1.00	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
-32.8	-	0.98	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.87	0.85
-49.2	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84
-65.6	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.83
-82.0	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.88	0.87	0.85	0.81
-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84	0.80

Heating

Level Difference (ft)	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
98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88

AC048JNHDCH/AA + AC048JXADCH/AA

Cooling

Level Difference (ft)	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
98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-16.4	1.00	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
-32.8	-	0.98	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.87	0.85
-49.2	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84
-65.6	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.83
-82.0	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.88	0.87	0.85	0.81
-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84	0.80

Heating

Level Difference (ft)	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
98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
0.0	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-16.4	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-32.8	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-49.2	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88
-98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88

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