

SINGLE

Technical Data Book

Big Duct for Australia (R410A, 50Hz, H/P)



Model : AC160JNHFKH/SA
AC160JXAFKH/SA
AC160JXAFNH/SA
AC180JNHFKH/SA
AC180JXAFNH/SA
AC200JNHFKH/SA
AC200JXAFNH/SA

[illegible]

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1 Nomenclature

Indoor Units

Model Names

AC

(1)

160

(2)

J

(3)

N

(4)

H

(5)

F

(6)

K

(7)

H

(8)

/

SA

Buyer

(1) Classification

AC	SINGLE
AM	VRF

(2) Capacity

x 1/10 kW (3 digits)

(3) Version

F	2013
H	2014
J	2015

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

1	1Way Cassette
2	2Way Cassette
N	4Way Cassette S (600 x 600)
4	4Way Cassette S
L	LSP Duct (Slim Duct)
M	MSP Duct
H	HSP Duct
C	Ceiling
T	Neo Forte
E	OAP Duct

(6) Feature

D	DELUXE
F	FLAGSHIP
P	Premium
G(EHS)	Cascade (EEV)

(7) Rating Voltage

C	1Ø, 208~230V, 60Hz
E	1Ø, 220~240V, 50Hz
G	3Ø, 380~415V, 50Hz
K	1Ø, 220~240V, 50/60Hz
N	3Ø, 380~415V, 50/60Hz

(8) Mode

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

1 Nomenclature

Outdoor Units

Model Names

AC	160	J	X	A	F	K	H	/	SA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	SINGLE
AM	VRF

(2) Capacity

x 1/10 kW (3 digits)

(3) Version

E	2012
F	2013
H	2014
J	2015

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Feature1

A	Inv+Side+General Temp
B	Non Inv+Side+General Temp

(6) Feature2

D	Deluxe
F	Flagship
P	Premium
S	Standard

(7) Rating Voltage

E	1Ø, 220~240V, 50Hz
G	3Ø, 380~415V, 50Hz
K	1Ø, 220~240V, 50/60Hz
N	3Ø, 380~415V, 50/60Hz

(8) Mode

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

2 Specifications

HSP Duct

Type				HSP Duct		HSP Duct				
Model Name		Indoor Unit		AC160JNHFKH/SA		AC160JNHFKH/SA				
		Outdoor Unit		AC160JXAFKH/SA		AC160JXAFNH/SA				
System	Mode		-	Heat Pump		Heat Pump				
	Capacity	Cooling(Min/Std/Max)		kW	4.50 / 16.00 / 18.00		4.50 / 16.00 / 18.00			
				Btu/h	15,400 / 54,600 / 61,400		15,400 / 54,600 / 61,400			
		Heating(Min/Std/Max)		kW	3.70 / 18.00 / 20.00		3.70 / 18.00 / 20.00			
				Btu/h	12,600 / 61,400 / 68,200		12,600 / 61,400 / 68,200			
	Power	Power Input (Nominal)	Cooling(Min/Std/Max)	kW	1.20 / 4.71 / 6.90		1.20 / 4.71 / 6.90			
			Heating(Min/Std/Max)		1.10 / 4.86 / 8.00		1.10 / 4.86 / 8.00			
		Current Input (Nominal)	Cooling(Min/Std/Max)	A	5.80 / 21.00 / 30.00		2.40 / 7.40 / 16.10			
			Heating(Min/Std/Max)		5.50 / 21.00 / 31.60		2.20 / 7.60 / 16.10			
		MCA		A	34.50 (MCA)		18.60 (MCA)			
		MFA		A	40.00		20.46			
	Energy Efficiency	EER (Nominal Cooling)		-	11.60		11.60			
		COP (Nominal Heating)		-	3.70		3.70			
		Energy Grade		-	Energy Grade(C) Australia MEPS		Energy Grade(C) Australia MEPS			
				-	Energy Grade(H) Australia MEPS		Energy Grade(H) Australia MEPS			
	Piping Connections	Liquid Pipe			Ø, mm	9.52		9.52		
					Ø, inch	3/8"		3/8"		
			Gas Pipe			Ø, mm	15.88		15.88	
						Ø, inch	5/8"		5/8"	
		Installation Limitation	Max. Length	m	75		75			
			Max. Height	m	30		30			
	Field Wiring	Power Source Wire		Ø, mm	-		-			
		Transmission Cable		Ø, mm	-		-			
	Refrigerant	Type		-	R410A		R410A			
		Control Method		-	-		-			
		Factory Charging		kg	3.50		3.50			
Indoor Unit	Power Supply			Ø, #, V, Hz	1,2,220-240,50		1,2,220-240,50			
	Fan	Type		-	Sirocco Fan		Sirocco Fan			
		Motor	Output	W	500		500			
				CMM	67.00 / 58.00 / 49.00		67.00 / 58.00 / 49.00			
		Air Flow Rate	High/Mid/Low	l/s	1,116.67 / 966.67 / 816.67		1,116.67 / 966.67 / 816.67			
				mmAq	5.00 / 6.12 / 20.00		5.00 / 6.12 / 20.00			
		External Static Pressure	Min/Std/Max	Pa	49.00 / 60.00 / 196.00		49.00 / 60.00 / 196.00			
	VP25 (OD 32,ID 25)			VP25 (OD 32,ID 25)		VP25 (OD 32,ID 25)				
	Sound	Pressure	High/Mid/Low	dB(A)	43.0 / 39.0 / 35.0		43.0 / 39.0 / 35.0			
		Power	Cooling		-		-			
	External Dimension	Net Weight		kg	78.50		78.50			
		Shipping Weight		kg	88.00		88.00			
		Net Dimensions (WxHxD)		mm	1,350 x 450 x 910		1,350 x 450 x 910			
		Shipping Dimensions (WxHxD)		mm	1,612 x 519 x 984		1,612 x 519 x 984			
	Panel Size	Panel model		-	-		-			
		Panel Net Weight		kg	-		-			
		Shipping Weight		kg	-		-			
		Net Dimensions (WxHxD)		mm	-		-			
	Additional Accessories	Shipping Dimensions (WxHxD)		mm	-		-			
		Drain pump	External	-	MDP-G075SP		MDP-G075SP			
			Internal	-	MDP-G075SQ		MDP-G075SQ			
Air Filter		-	-		-					
Outdoor Unit	Power Supply			Ø, #, V, Hz	1,2,220-240,50		3,4,380-415,50			
	Compressor	Type		-	Twin BLDC Rotary		Twin BLDC Rotary			
		Model		-	UG5T450FAXJX		UG5T450FAXJX			
		Output		kW	4.01		4.01			
		Oil	Type	-	PVE		PVE			
	CMM			100.00		100.00				
	Fan	Air Flow Rate	Cooling	l/s	1,666.67		1,666.67			
				dB(A)	53 / 55		53 / 55			
	Sound	Pressure	Cooling/Heating	dB(A)	-		-			
		Power	Cooling		-		-			
	External Dimension	Net Weight		kg	95.00		95.00			
		Shipping Weight		kg	105.00		105.00			
		Net Dimensions (WxHxD)		mm	940 x 1,420 x 330		940 x 1,420 x 330			
		Shipping Dimensions (WxHxD)		mm	995 x 1,598 x 426		995 x 1,598 x 426			
	Operating Temp. Range	Cooling		°C	-15.0 ~ 50.0		-15.0 ~ 50.0			
		Heating		°C	-20.0 ~ 24.0		-20.0 ~ 24.0			

* Specifications may be subject to change without prior notice for product improvement.

*1) Nominal cooling capacities are based on;

- Indoor temperature : 27°C DB, 19°C WB

- Outdoor temperature : 35°C DB, 24°C WB, Refrigerant piping : 5m(16kW, 18kW) / 7.5m(20kW), Level differences : 0m

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

2 Specifications

HSP Duct

Type				HSP Duct		HSP Duct			
Model Name		Indoor Unit			AC180JNHFKH/SA		AC200JNHFKH/SA		
		Outdoor Unit			AC180JXAFNH/SA		AC200JXAFNH/SA		
System	Mode				Heat Pump		Heat Pump		
	Capacity	Cooling(Min/Std/Max)		kW	6.00 / 18.00 / 20.00		6.20 / 20.00 / 22.50		
				Btu/h	20,500 / 61,400 / 68,200		21,200 / 68,200 / 76,800		
		Heating(Min/Std/Max)		kW	4.80 / 20.00 / 22.50		5.00 / 22.50 / 25.00		
				Btu/h	16,400 / 68,200 / 76,800		17,100 / 76,800 / 85,300		
	Power	Power Input (Nominal)	Cooling(Min/Std/Max)	kW	1.30 / 5.29 / 7.30		1.40 / 6.06 / 11.00		
			Heating(Min/Std/Max)		1.20 / 5.41 / 7.60		2.30 / 6.08 / 11.50		
		Current Input (Nominal)	Cooling(Min/Std/Max)	A	2.30 / 8.10 / 16.10		2.70 / 9.80 / 17.00		
			Heating(Min/Std/Max)		2.20 / 8.40 / 16.10		4.10 / 9.90 / 16.10		
		MCA		A	18.60 (MCA)		25.00 (MCA)		
		MFA		A	20.46		31.25		
	Energy Efficiency	EER (Nominal Cooling)		-	11.60		11.60		
		COP (Nominal Heating)		-	3.70		3.70		
		Energy Grade		-	Energy Grade(C) Australia MEPS		Energy Grade(C) Australia MEPS		
				-	Energy Grade(H) Australia MEPS		Energy Grade(H) Australia MEPS		
	Piping Connections	Liquid Pipe			Ø, mm	9.52		9.52	
					Ø, inch	3/8"		3/8"	
			Gas Pipe	Ø, mm	19.05		19.05		
				Ø, inch	3/4"		3/4"		
		Installation Limitation	Max. Length	m	75		150		
			Max. Height	m	30		50		
	Field Wiring	Power Source Wire		Ø, mm	-		-		
		Transmission Cable		Ø, mm	-		-		
	Refrigerant	Type		-	R410A		R410A		
		Control Method		-	-		-		
		Factory Charging		kg	4.60		8.00		
Indoor Unit	Power Supply			Ø, #, V, Hz	1,2,220-240,50		1,2,220-240,50		
	Fan	Type		-	Sirocco Fan		Sirocco Fan		
		Motor	Output	W	500		500		
				CMM	71.00 / 60.00 / 50.00		72.00 / 61.00 / 51.00		
		Air Flow Rate	High/Mid/Low	l/s	1,183.33 / 1,000.00 / 833.33		1,200.00 / 1,016.67 / 850.00		
		External Static Pressure	Min/Std/Max	mmAq	5.00 / 6.12 / 20.00		5.00 / 7.34 / 20.00		
	Pa			49.00 / 60.00 / 196.00		49.00 / 72.00 / 196.00			
	Drain	Drain Pipe		Ø,mm	VP25 (OD 32,ID 25)		VP25 (OD 32,ID 25)		
	Sound	Pressure	High/Mid/Low	dB(A)	43.0 / 39.0 / 35.0		44.0 / 40.0 / 36.0		
		Power	Cooling		-		-		
	External Dimension	Net Weight		kg	82.50		82.50		
		Shipping Weight		kg	92.00		92.00		
		Net Dimensions (WxHxD)		mm	1,350 x 450 x 910		1,350 x 450 x 910		
		Shipping Dimensions (WxHxD)		mm	1,612 x 519 x 984		1,612 x 519 x 984		
	Panel Size	Panel model		-	-		-		
		Panel Net Weight		kg	-		-		
		Shipping Weight		kg	-		-		
		Net Dimensions (WxHxD)		mm	-		-		
		Shipping Dimensions (WxHxD)		mm	-		-		
	Additional Accessories	Drain pump	External	-	MDP-G075SP		MDP-G075SP		
			Internal	-	MDP-G075SQ		MDP-G075SQ		
Air Filter		-	-		-				
Outdoor Unit	Power Supply			Ø, #, V, Hz	3,4,380-415,50		3,4,380-415,50		
	Compressor	Type		-	Twin BLDC Rotary		BLDC Scroll		
		Model		-	UG5T520FUBJX		DS-GB052FAVA		
		Output		kW	-		-		
		Oil	Type	-	PVE		PVE		
	Fan	Air Flow Rate	Cooling	CMM	110.00		176.00		
		Pressure	Cooling/Heating	l/s	1,833.33		2,933.33		
	Sound				55 / 57		57 / 59		
	Power	Cooling		-		-			
	External Dimension	Net Weight		kg	107.50		190.00		
		Shipping Weight		kg	117.50		195.00		
		Net Dimensions (WxHxD)		mm	940 x 1,420 x 330		880 x 1,695 x 765		
		Shipping Dimensions (WxHxD)		mm	995 x 1,598 x 426		948 x 1,887 x 832		
	Operating Temp. Range	Cooling		°C	-15.0 ~ 50.0		-15.0 ~ 50.0		
		Heating		°C	-20.0 ~ 24.0		-20.0 ~ 24.0		

* Specifications may be subject to change without prior notice for product improvement.

*1) Nominal cooling capacities are based on;

- Indoor temperature : 27°C DB, 19°C WB

- Outdoor temperature : 35°C DB, 24°C WB, Refrigerant piping : 5m(16kW, 18kW) / 7.5m(20kW), Level differences : 0m

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

3 Capacity table

HSP Duct

AC160JNHFKH/SA + AC160JXAFKH/SA

Cooling

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

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	14.7	14.0	3.55	15.5	14.4	3.62	16.1	14.8	3.69	16.6	15.3	3.77	17.0	15.2	3.81	17.8	15.0	3.85	18.7	14.7	3.92
21	16.8	16.0	4.21	17.7	16.5	4.29	18.5	17.0	4.38	19.0	17.5	4.47	19.4	17.3	4.51	20.4	17.2	4.56	21.4	16.8	4.65
35	14.2	13.4	4.43	14.9	13.9	4.52	15.5	14.3	4.62	16.0	14.7	4.71	16.3	14.6	4.76	17.1	14.4	4.80	18.0	14.1	4.90
46	11.2	11.0	4.66	11.8	11.3	4.75	12.3	11.7	4.85	12.6	12.0	4.95	12.9	11.9	5.00	13.5	11.8	5.05	14.2	11.6	5.15
52	9.2	9.2	4.56	9.7	9.5	4.66	10.1	9.8	4.75	10.4	10.1	4.85	10.6	10.0	4.90	11.1	9.9	4.95	11.7	9.7	5.05

Heating

TC : Total Capacity, PI: Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	9.0	4.71	8.9	4.67	8.8	4.62	8.7	4.57	8.6	4.53	8.6	4.48
-15	16.0	7.44	15.8	7.36	15.7	7.29	15.5	7.22	15.3	7.14	15.2	7.07
-5	18.0	6.94	17.8	6.87	17.6	6.80	17.5	6.74	17.3	6.67	17.1	6.60
0	18.7	5.95	18.5	5.89	18.4	5.83	18.2	5.77	18.0	5.72	17.8	5.66
7	18.4	4.96	18.2	4.91	18.0	4.86	17.8	4.81	17.6	4.76	17.5	4.72
24	20.9	5.20	20.7	5.15	20.5	5.10	20.3	5.05	20.1	5.00	19.9	4.95

AC160JNHFKH/SA + AC160JXAFNH/SA

Cooling

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

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	14.7	14.0	3.55	15.5	14.4	3.62	16.1	14.8	3.69	16.6	15.3	3.77	17.0	15.2	3.81	17.8	15.0	3.85	18.7	14.7	3.92
21	16.8	16.0	4.21	17.7	16.5	4.29	18.5	17.0	4.38	19.0	17.5	4.47	19.4	17.3	4.51	20.4	17.2	4.56	21.4	16.8	4.65
35	14.2	13.4	4.43	14.9	13.9	4.52	15.5	14.3	4.62	16.0	14.7	4.71	16.3	14.6	4.76	17.1	14.4	4.80	18.0	14.1	4.90
46	11.2	11.0	4.66	11.8	11.3	4.75	12.3	11.7	4.85	12.6	12.0	4.95	12.9	11.9	5.00	13.5	11.8	5.05	14.2	11.6	5.15
52	9.2	9.2	4.56	9.7	9.5	4.66	10.1	9.8	4.75	10.4	10.1	4.85	10.6	10.0	4.90	11.1	9.9	4.95	11.7	9.7	5.05

Heating

TC : Total Capacity PI: Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	9.0	4.71	8.9	4.67	8.8	4.62	8.7	4.57	8.6	4.53	8.6	4.48
-15	16.0	7.44	15.8	7.36	15.7	7.29	15.5	7.22	15.3	7.14	15.2	7.07
-5	18.0	6.94	17.8	6.87	17.6	6.80	17.5	6.74	17.3	6.67	17.1	6.60
0	18.7	5.95	18.5	5.89	18.4	5.83	18.2	5.77	18.0	5.72	17.8	5.66
7	18.4	4.96	18.2	4.91	18.0	4.86	17.8	4.81	17.6	4.76	17.5	4.72
24	20.9	5.20	20.7	5.15	20.5	5.10	20.3	5.05	20.1	5.00	19.9	4.95

1) Ratings shown are capacities.

2) Capacities are based on following conditions;

- Refrigerant piping length : 5m(16kW, 18kW), 7.5m(20kW) / Level difference : 0m.

3 Capacity table

HSP Duct

AC180JNHFKH/SA + AC180JXAFNH/SA

Cooling

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

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	18.9	16.8	4.08	19.9	17.3	4.17	20.8	17.9	4.25	21.4	18.4	4.34	21.8	18.2	4.38	22.9	18.1	4.43	24.1	17.7	4.52
21	19.7	17.5	4.24	20.8	18.1	4.32	21.7	18.6	4.41	22.3	19.2	4.50	22.8	19.0	4.55	23.9	18.8	4.59	25.1	18.4	4.68
35	15.9	14.1	4.98	16.8	14.6	5.08	17.5	15.0	5.18	18.0	15.5	5.29	18.4	15.3	5.34	19.3	15.2	5.40	20.2	14.9	5.50
46	12.6	12.1	5.72	13.2	12.5	5.84	13.8	12.8	5.96	14.2	13.2	6.08	14.5	13.1	6.14	15.2	13.0	6.20	16.0	12.7	6.33
50	10.3	10.3	5.22	10.9	10.7	5.33	11.3	11.0	5.44	11.7	11.3	5.55	11.9	11.2	5.61	12.5	11.1	5.66	13.1	10.9	5.77

Heating

TC : Total Capacity, PI: Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	14.1	6.90	13.9	6.83	13.8	6.76	13.7	6.69	13.5	6.63	13.4	6.56
-15	17.7	8.28	17.6	8.20	17.4	8.12	17.2	8.03	17.1	7.95	16.9	7.87
-5	20.0	7.73	19.8	7.65	19.6	7.57	19.4	7.50	19.2	7.42	19.0	7.35
0	20.8	6.62	20.6	6.56	20.4	6.49	20.2	6.43	20.0	6.36	19.8	6.30
7	20.4	5.52	20.2	5.46	20.0	5.41	19.8	5.36	19.6	5.30	19.4	5.25
24	27.3	6.35	27.1	6.28	26.8	6.22	26.5	6.16	26.3	6.10	26.0	6.04

AC200JNHFKH/SA + AC200JXAFNH/SA

Cooling

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

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	21.1	17.4	4.68	22.2	17.9	4.77	23.1	18.5	4.87	23.8	19.0	4.97	24.3	18.8	5.02	25.5	18.7	5.07	26.8	18.3	5.17
21	21.9	18.1	4.85	23.1	18.7	4.95	24.1	19.2	5.05	24.8	19.8	5.15	25.3	19.6	5.20	26.6	19.4	5.25	27.9	19.1	5.36
35	17.7	14.6	5.70	18.6	15.1	5.82	19.4	15.5	5.94	20.0	16.0	6.06	20.4	15.8	6.12	21.4	15.7	6.18	22.5	15.4	6.30
46	14.0	13.0	6.56	14.7	13.4	6.69	15.3	13.8	6.83	15.8	14.3	6.97	16.1	14.1	7.04	16.9	14.0	7.11	17.8	13.7	7.25
50	11.5	11.4	5.99	12.1	11.7	6.11	12.6	12.1	6.23	13.0	12.5	6.36	13.2	12.3	6.42	13.9	12.2	6.49	14.6	12.0	6.62

Heating

TC : Total Capacity PI: Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-20	15.8	7.75	15.7	7.68	15.5	7.60	15.4	7.52	15.2	7.45	15.1	7.37
-15	20.0	9.30	19.8	9.21	19.6	9.12	19.4	9.03	19.2	8.94	19.0	8.85
-5	22.5	8.68	22.3	8.60	22.1	8.51	21.8	8.43	21.6	8.34	21.4	8.26
0	23.4	7.44	23.2	7.37	23.0	7.30	22.7	7.22	22.5	7.15	22.3	7.08
7	23.0	6.20	22.7	6.14	22.5	6.08	22.3	6.02	22.1	5.96	21.8	5.90
24	30.8	7.13	30.5	7.06	30.2	6.99	29.8	6.92	29.6	6.85	29.3	6.78

2) Capacities are based on following conditions;

- Refrigerant piping length : 5m(16kW, 18kW), 7.5m(20kW) / Level difference : 0m.

4 Dimensional drawing

HSP Duct

AC160JNHFKH/SA, AC180JNHFKH/SA, AC200JNHFKH/SA

Units : mm / inches

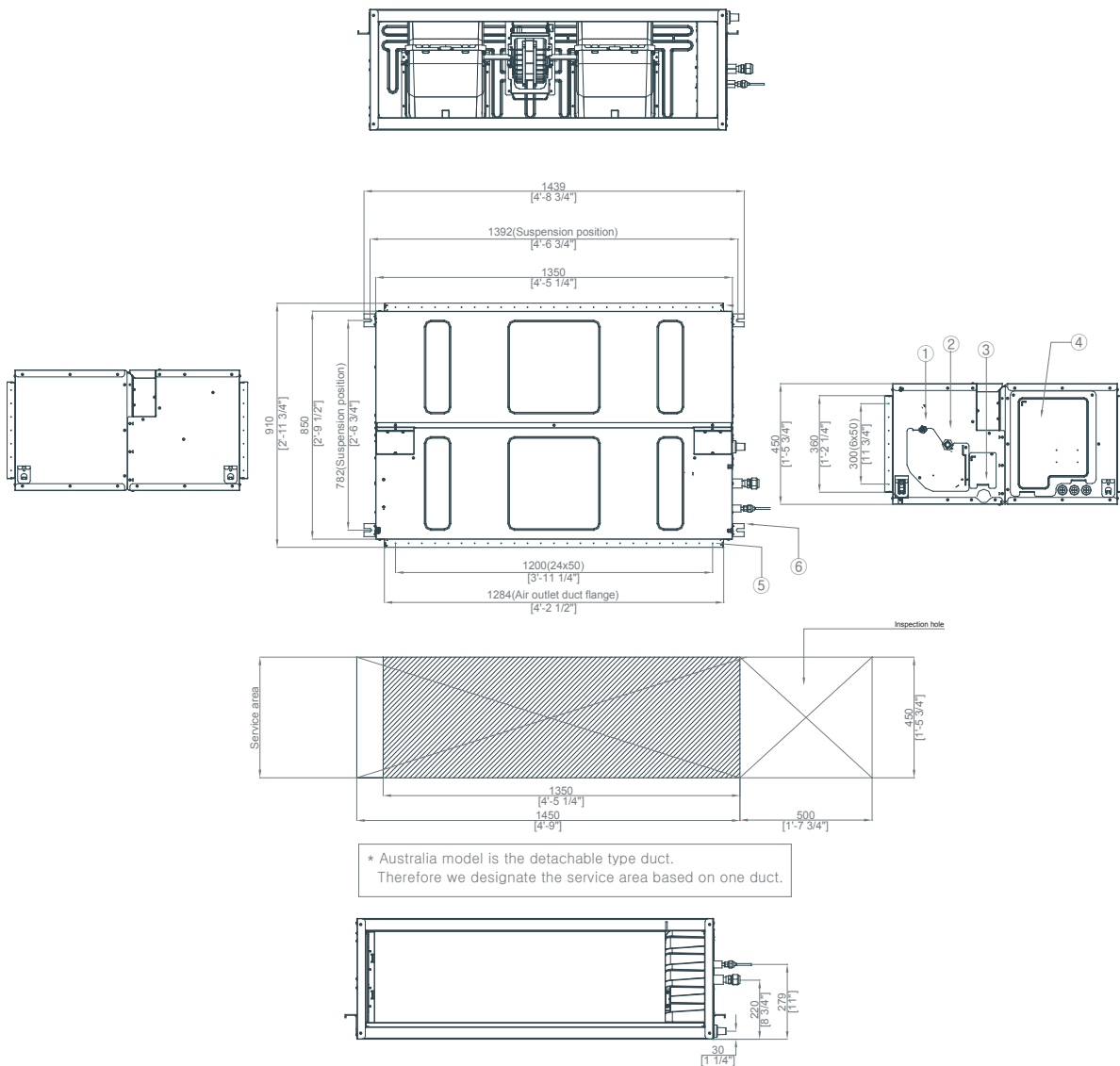


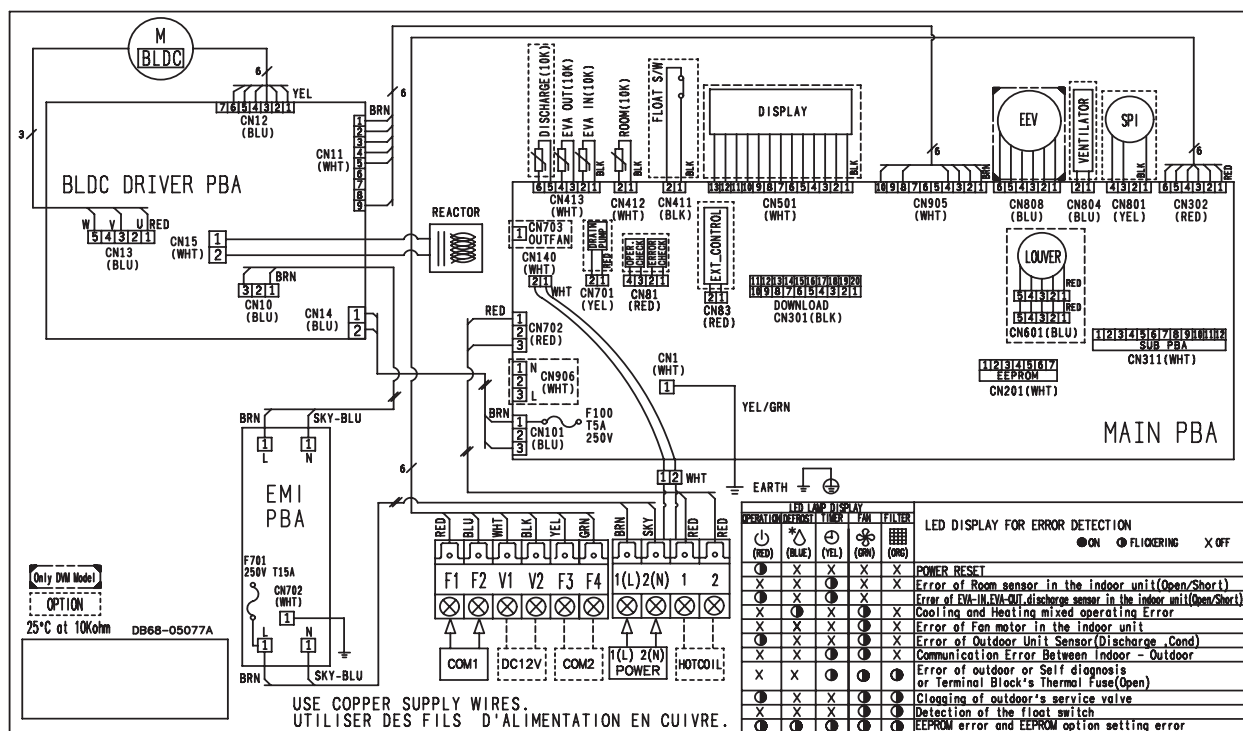
Table of descriptions

1	Liquid pipe connection	7	
2	Gas pipe connection	8	
3	Drain pipe connection	9	
4	Power supply connection	10	
5	Air discharge flange	11	
6	Hook	12	

5) Electrical wiring diagram

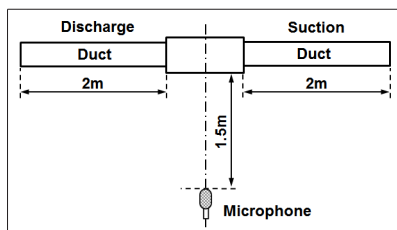
HSP Duct

AC160JNHFKH/SA, AC180JNHFKH/SA, AC200JNHFKH/SA



6 Sound pressure level

HSP Duct



Unit: dB(A)

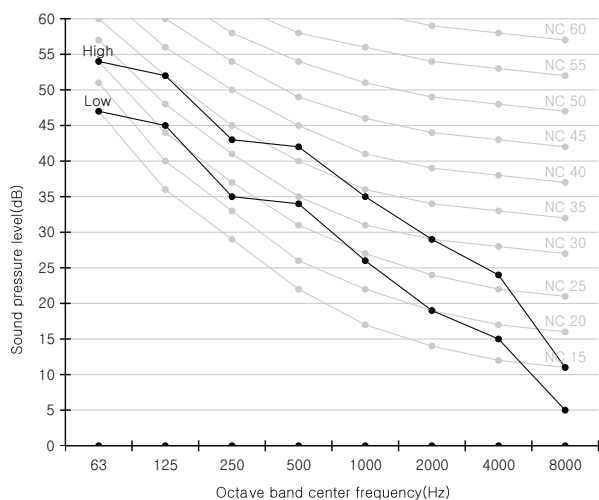
Model	High	Low
AC160JNHFKH/SA (ODU : AC160JXAFKH/SA)	43	35
AC160JNHFKH/SA (ODU : AC160JXAFNH/SA)	43	35
AC180JNHFKH/SA (ODU : AC180JXAFNH/SA)	43	35
AC200JNHFKH/SA (ODU : AC200JXAFNH/SA)	44	36

Note

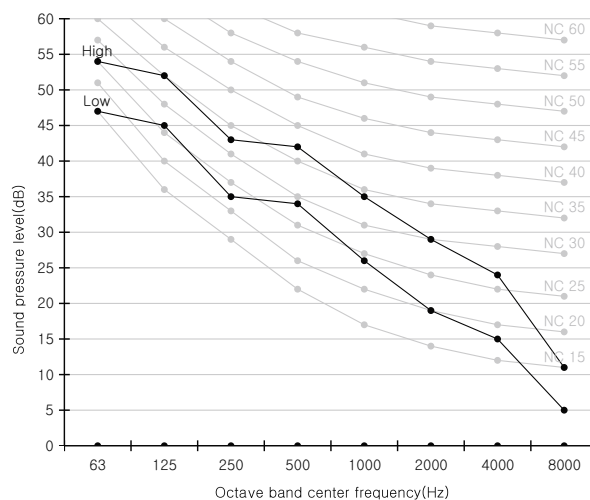
- * Specifications may be subject to change without prior notice
- These operation values are obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition

NC curve

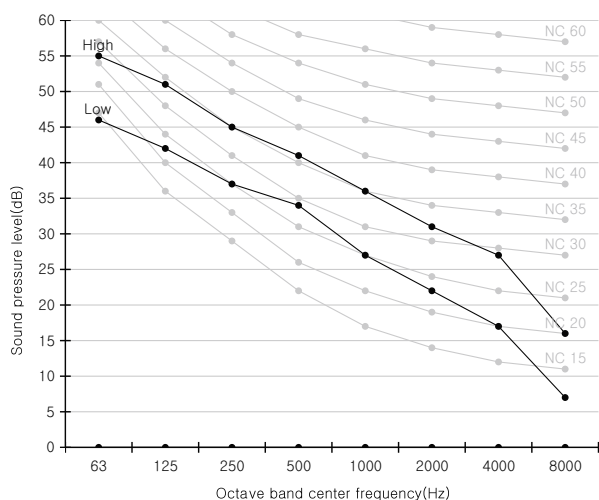
1) AC160JNHFKH/SA (ODU : AC160JXAFKH/SA)



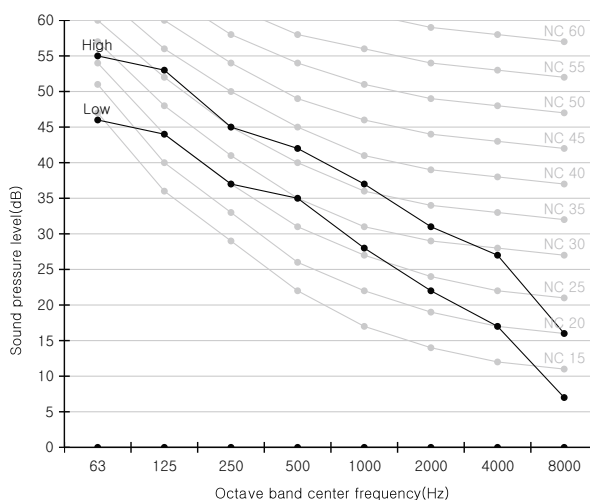
2) AC160JNHFKH/SA (ODU : AC160JXAFNH/SA)



3) AC180JNHFKH/SA (ODU : AC180JXAFNH/SA)



4) AC200JNHFKH/SA (ODU : AC200JXAFNH/SA)

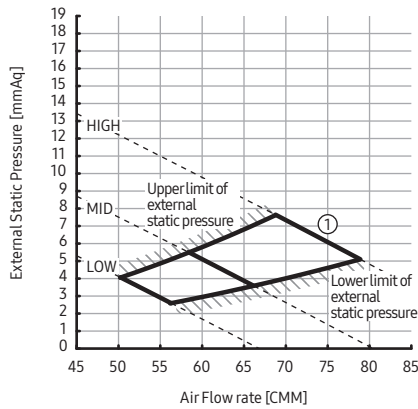


7 Recommended operation range

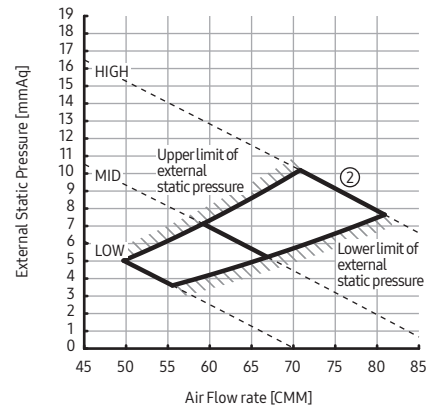
HSP Duct

1) AC160JNHFKH/SA (ODU : AC160JXAFKH/SA)

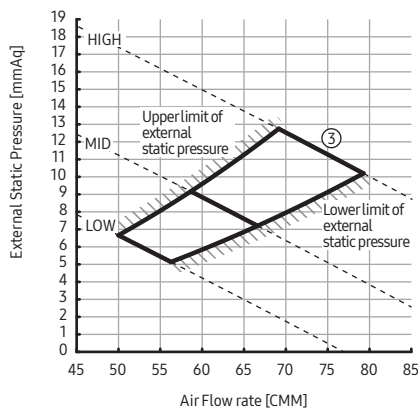
①	External Static Pressure(mmAq)	Option Code
	5-7.5	01107C-1C50A0-27A0B4-370060



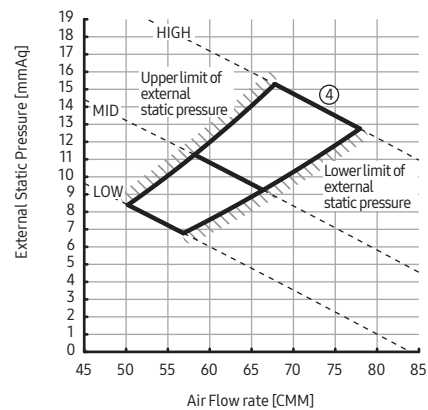
②	External Static Pressure(mmAq)	Option Code
	7.5-10	01107C-1C50D3-27A0B4-370060



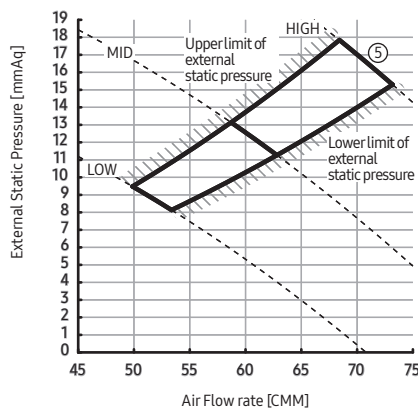
③	External Static Pressure(mmAq)	Option Code
	10-12.5	01107C-1C50F5-27A0B4-370060



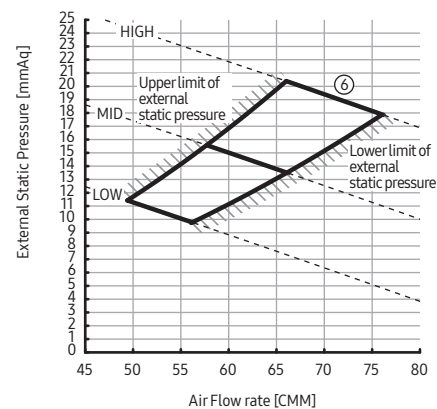
④	External Static Pressure(mmAq)	Option Code
	12.5-15	01107C-1C5437-27A0B4-370060



⑤	External Static Pressure(mmAq)	Option Code
	15-17.5	01107C-1C5448-27A0B4-370060



⑥	External Static Pressure(mmAq)	Option Code
	17.5-20	01107C-1C5468-27A0B4-370060



Note

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

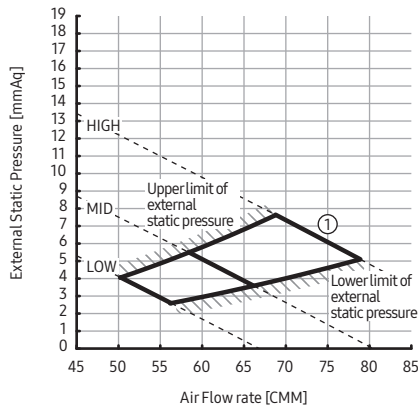
The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

7 Recommended operation range

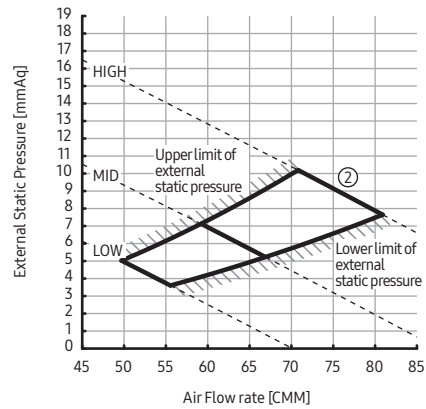
HSP Duct

2) AC160JNHFKH/SA (ODU : AC160JXAFNH/SA)

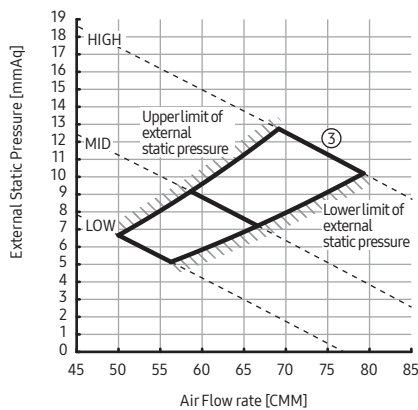
①	External Static Pressure(mmAq)	Option Code
	5-7.5	01107C-1C50A0-27A0B4-370060



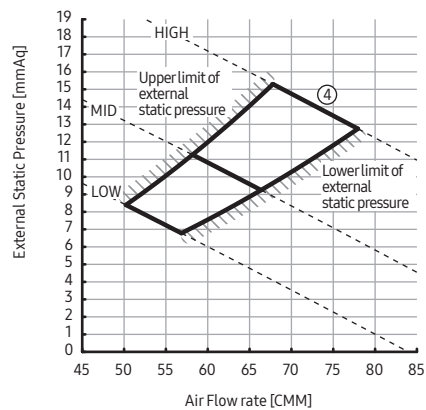
②	External Static Pressure(mmAq)	Option Code
	7.5-10	01107C-1C50D3-27A0B4-370060



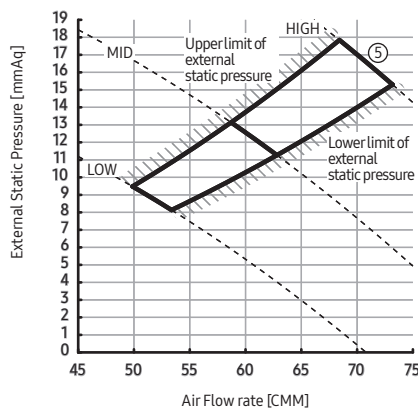
③	External Static Pressure(mmAq)	Option Code
	10-12.5	01107C-1C50F5-27A0B4-370060



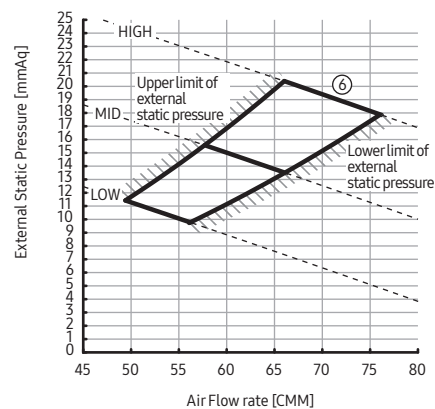
④	External Static Pressure(mmAq)	Option Code
	12.5-15	01107C-1C5437-27A0B4-370060



⑤	External Static Pressure(mmAq)	Option Code
	15-17.5	01107C-1C5448-27A0B4-370060



⑥	External Static Pressure(mmAq)	Option Code
	17.5-20	01107C-1C5468-27A0B4-370060



Note

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

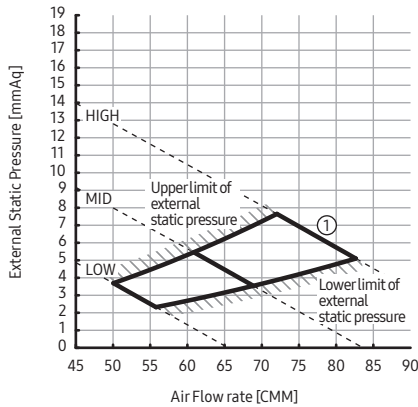
The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

7 Recommended operation range

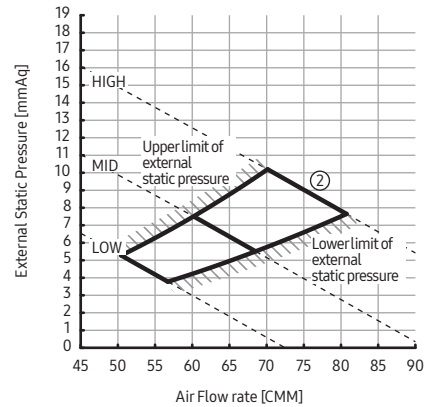
HSP Duct

3) AC180JNHFKH/SA (ODU : AC180JXAFNH/SA)

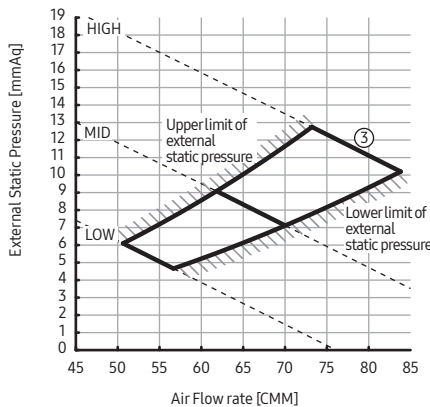
①	External Static Pressure(mmAq)	Option Code
	5-7.5	01107C-1C50B0-27B414-370060



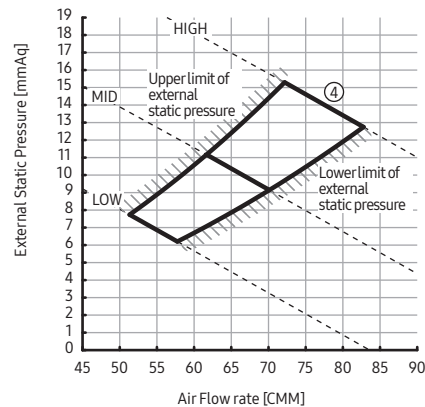
②	External Static Pressure(mmAq)	Option Code
	7.5-10	01107C-1C50E3-27B414-370060



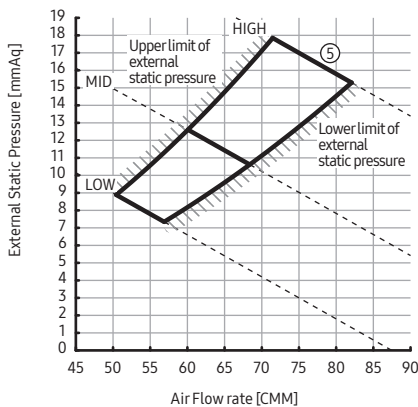
③	External Static Pressure(mmAq)	Option Code
	10-12.5	01107C-1C50F5-27B414-370060



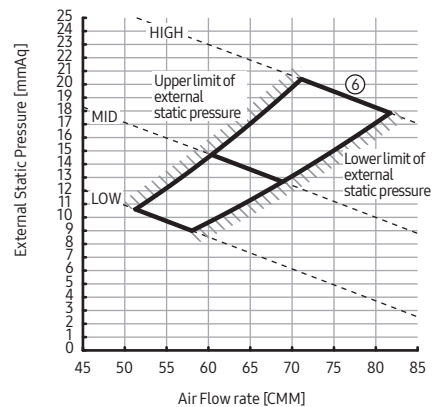
④	External Static Pressure(mmAq)	Option Code
	12.5-15	01107C-1C5436-27B414-370060



⑤	External Static Pressure(mmAq)	Option Code
	15-17.5	01107C-1C5458-27B414-370060



⑥	External Static Pressure(mmAq)	Option Code
	17.5-20	01107C-1C548E-27B414-370060



Note

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

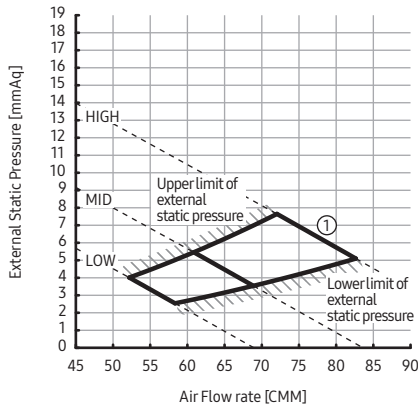
The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

7 Recommended operation range

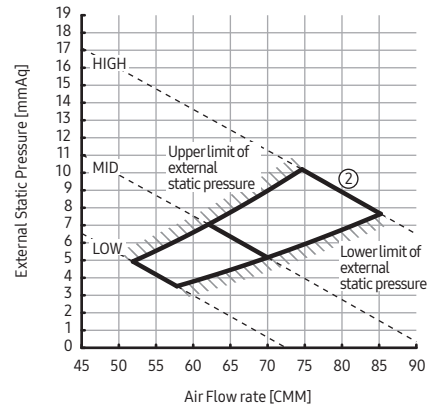
HSP Duct

4) AC200JNHFKH/SA (ODU : AC200JXAFNH/SA)

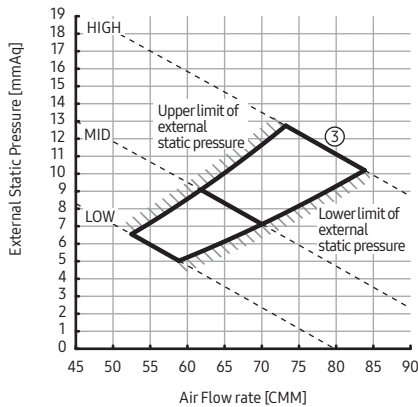
①	External Static Pressure(mmAq)	Option Code
	5-7.5	012474-1C50C0-20C8E1-320000



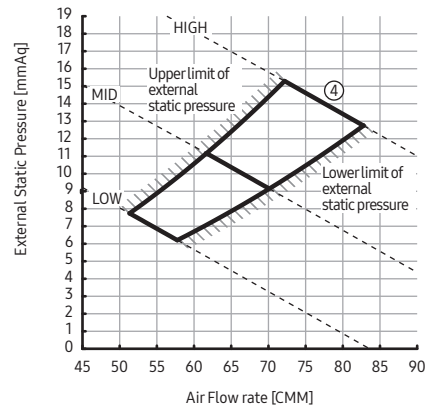
②	External Static Pressure(mmAq)	Option Code
	7.5-10	012474-1C50E3-20C8E1-320000



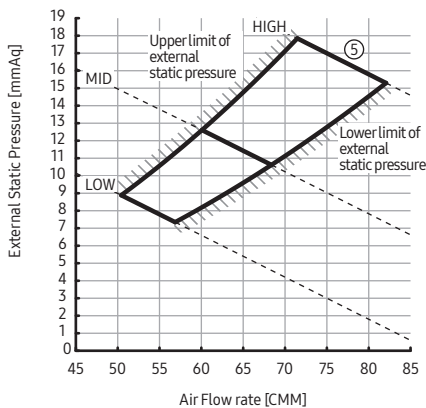
③	External Static Pressure(mmAq)	Option Code
	10-12.5	012474-1C50F5-20C8E1-320000



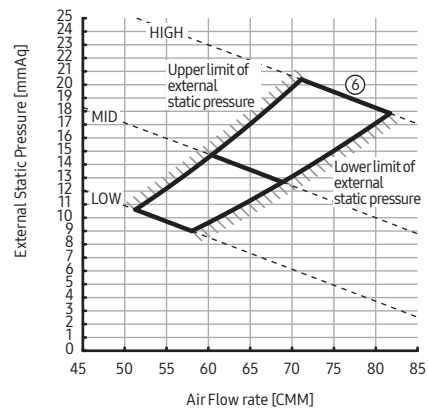
④	External Static Pressure(mmAq)	Option Code
	12.5-15	012474-1C5436-20C8E1-320000



⑤	External Static Pressure(mmAq)	Option Code
	15-17.5	012474-1C5458-20C8E1-320000



⑥	External Static Pressure(mmAq)	Option Code
	17.5-20	012474-1C548E-20C8E1-320000



Note

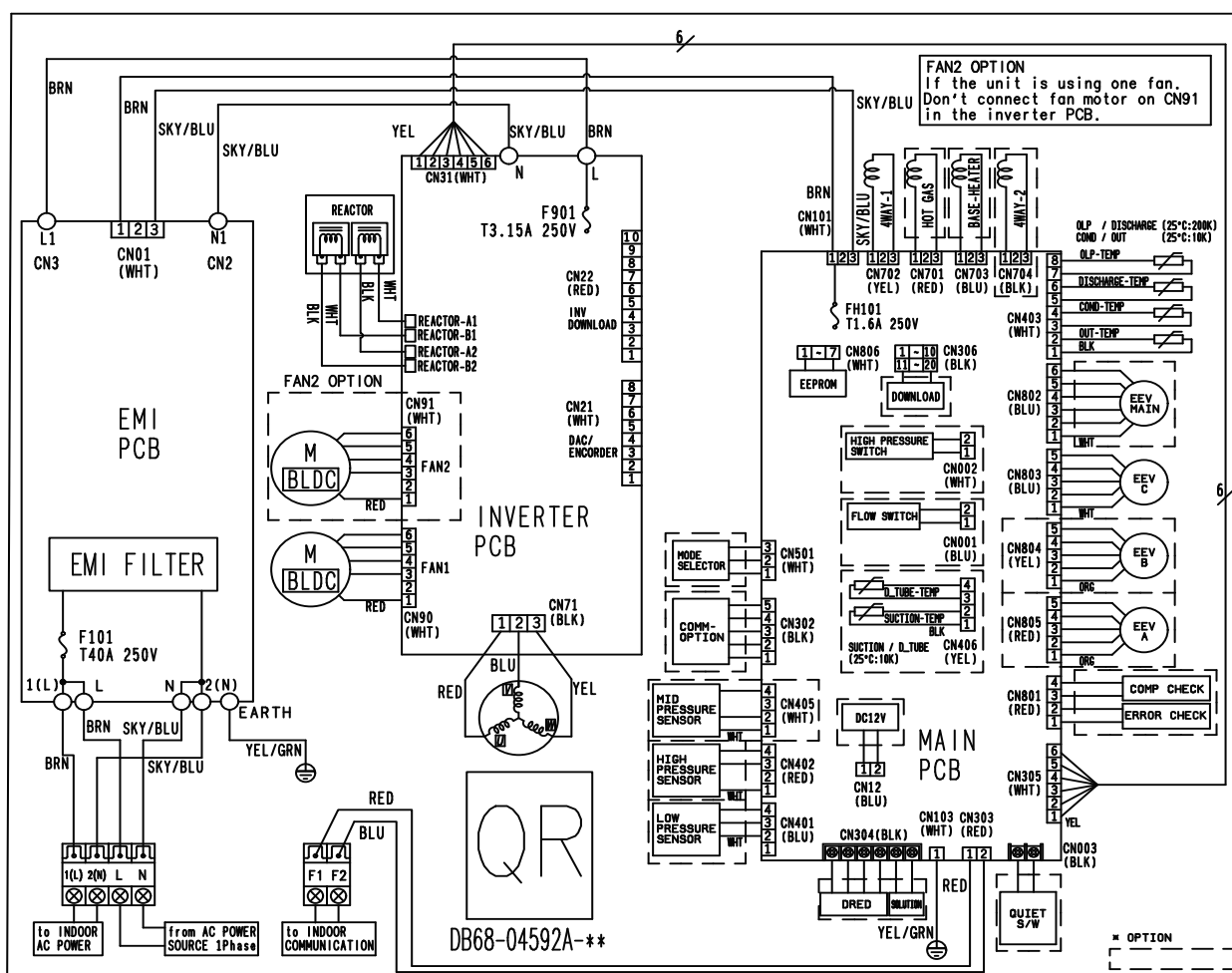
Adjust option code according to the actual installation condition (external static pressure).

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

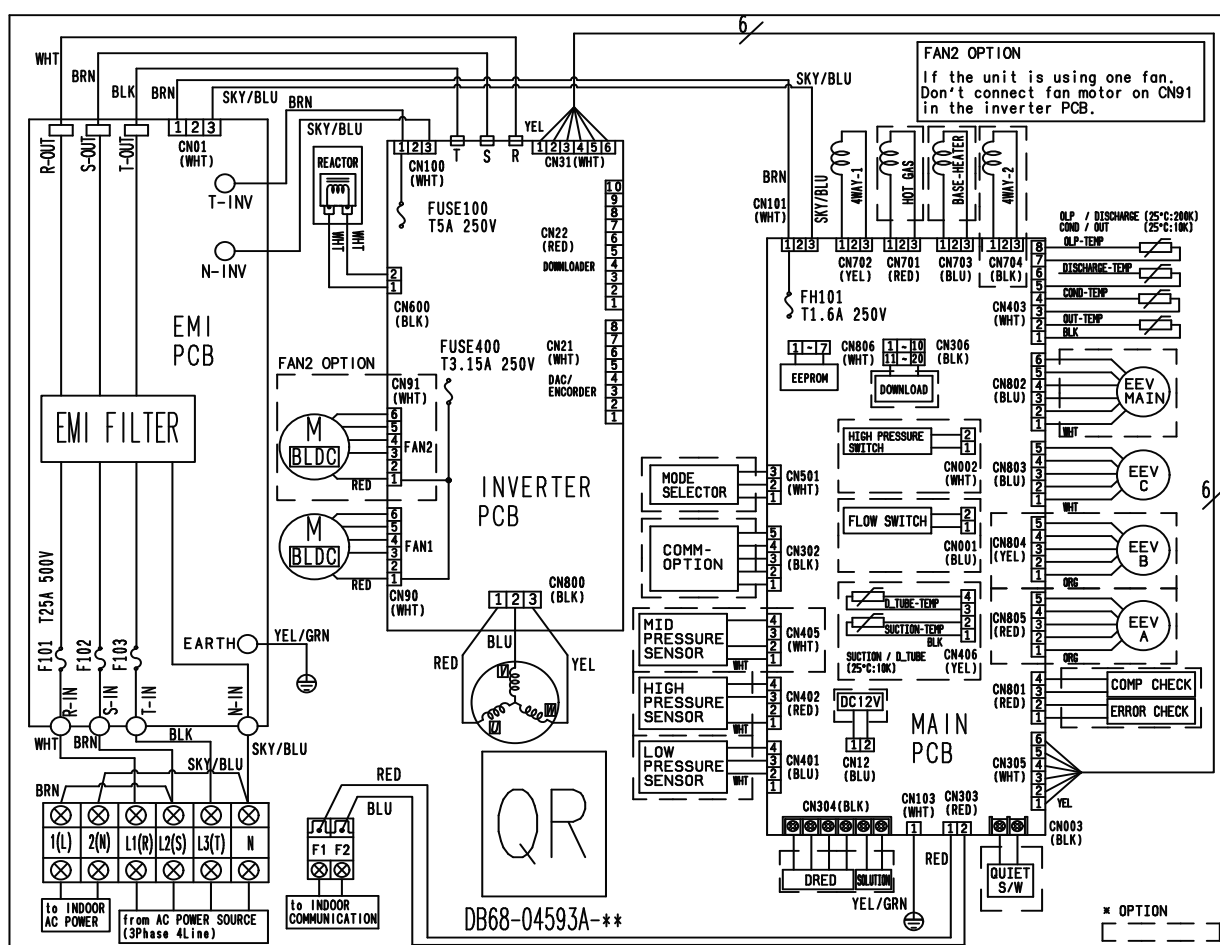
AC160JXAFKH/SA



8 Electrical wiring diagram

Outdoor

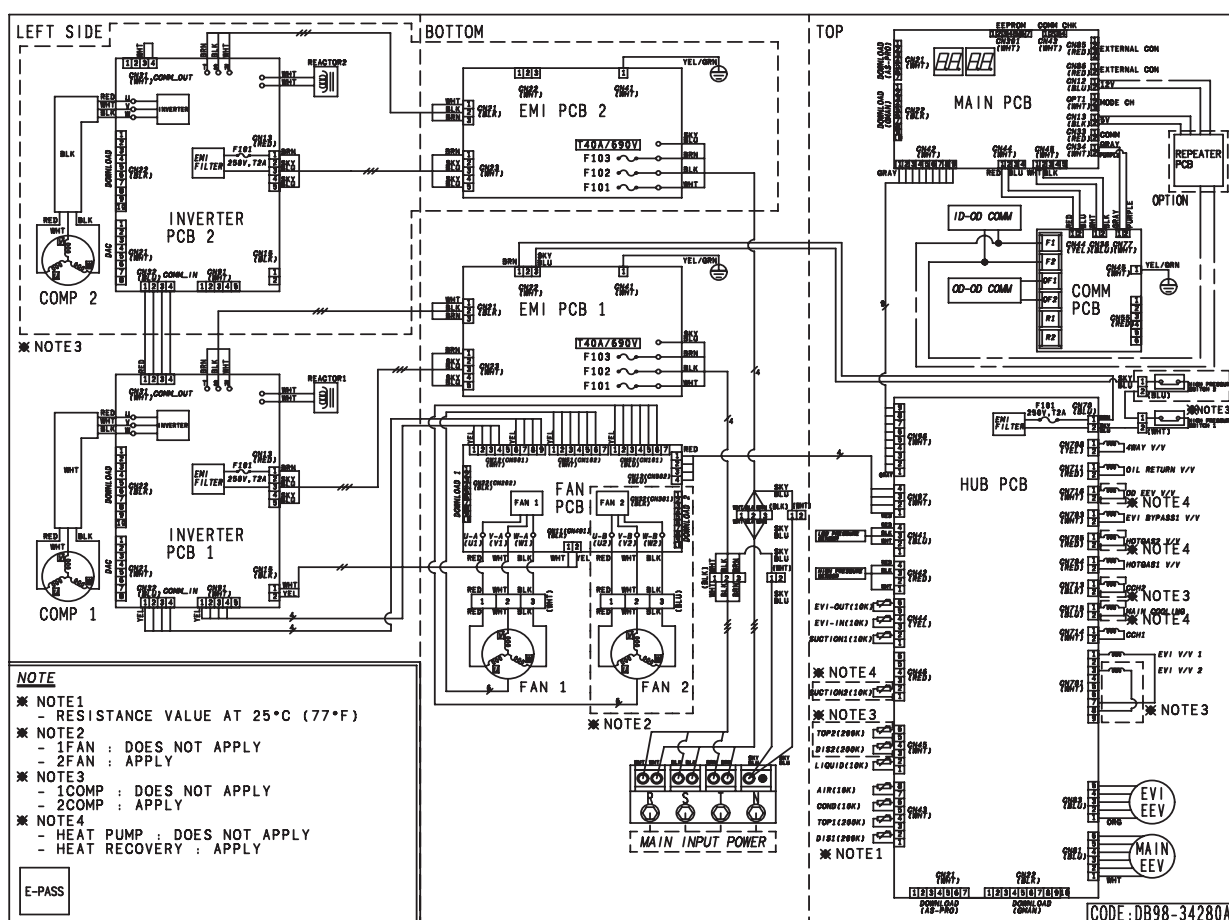
AC160JXAFNH/SA, AC180JXAFNH/SA



8 Electrical wiring diagram

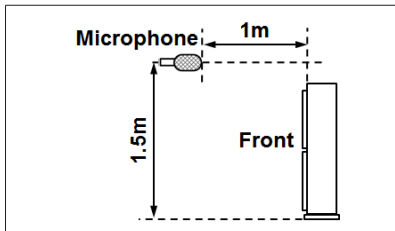
Outdoor

AC200JXAFNH/SA



9 Sound pressure level

Outdoor



Unit: dB(A)

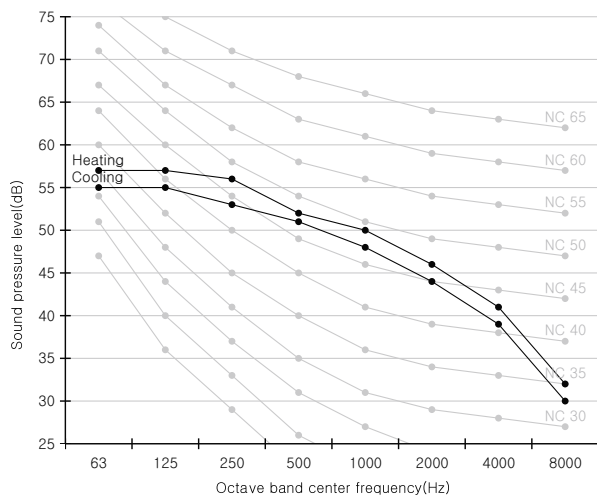
Model	Cooling	Heating
AC160JXAFKH/SA (IDU : AC160JNHFKH/SA)	53	55
AC160JXAFNH/SA (IDU : AC160JNHFKH/SA)	53	55
AC180JXAFNH/SA (IDU : AC180JNHFKH/SA)	55	57

Note

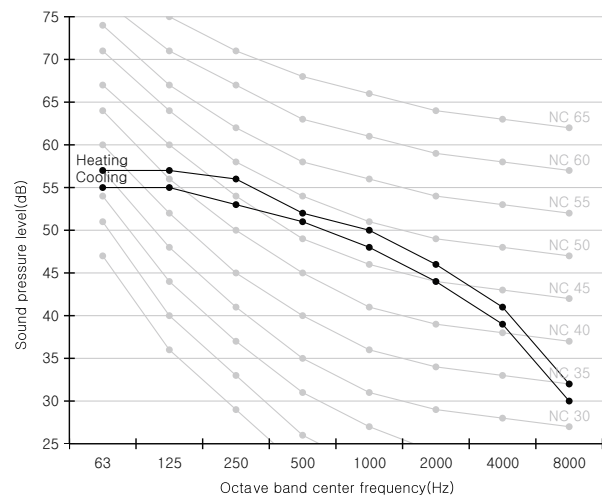
- * Specifications may be subject to change without prior notice
- These operation values are obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition

NC curve

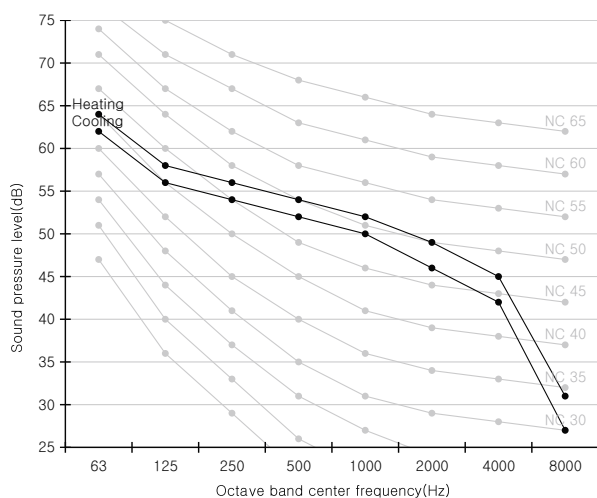
1) AC160JXAFKH/SA (IDU : AC160JNHFKH/SA)



2) AC160JXAFNH/SA (IDU : AC160JNHFKH/SA)

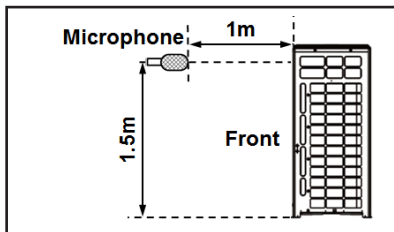


3) AC180JXAFNH/SA (IDU : AC180JNHFKH/SA)



9 Sound pressure level

Outdoor



Unit: dB(A)

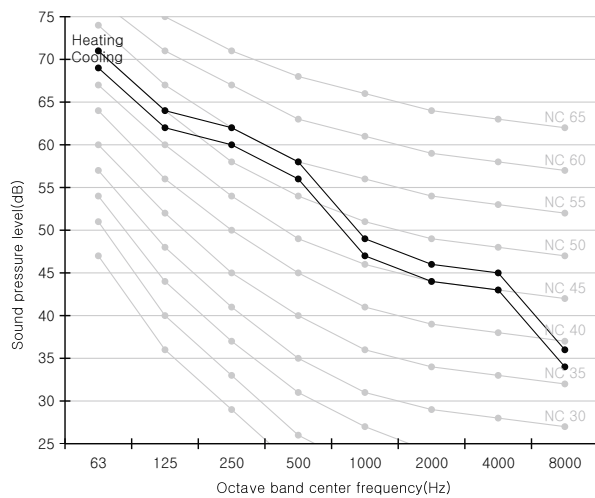
Model	Cooling	Heating
AC200JXAFNH/SA (IDU : AC200JNHFKH/SA)	57	59

Note

- * Specifications may be subject to change without prior notice
- These operation values are 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

NC curve

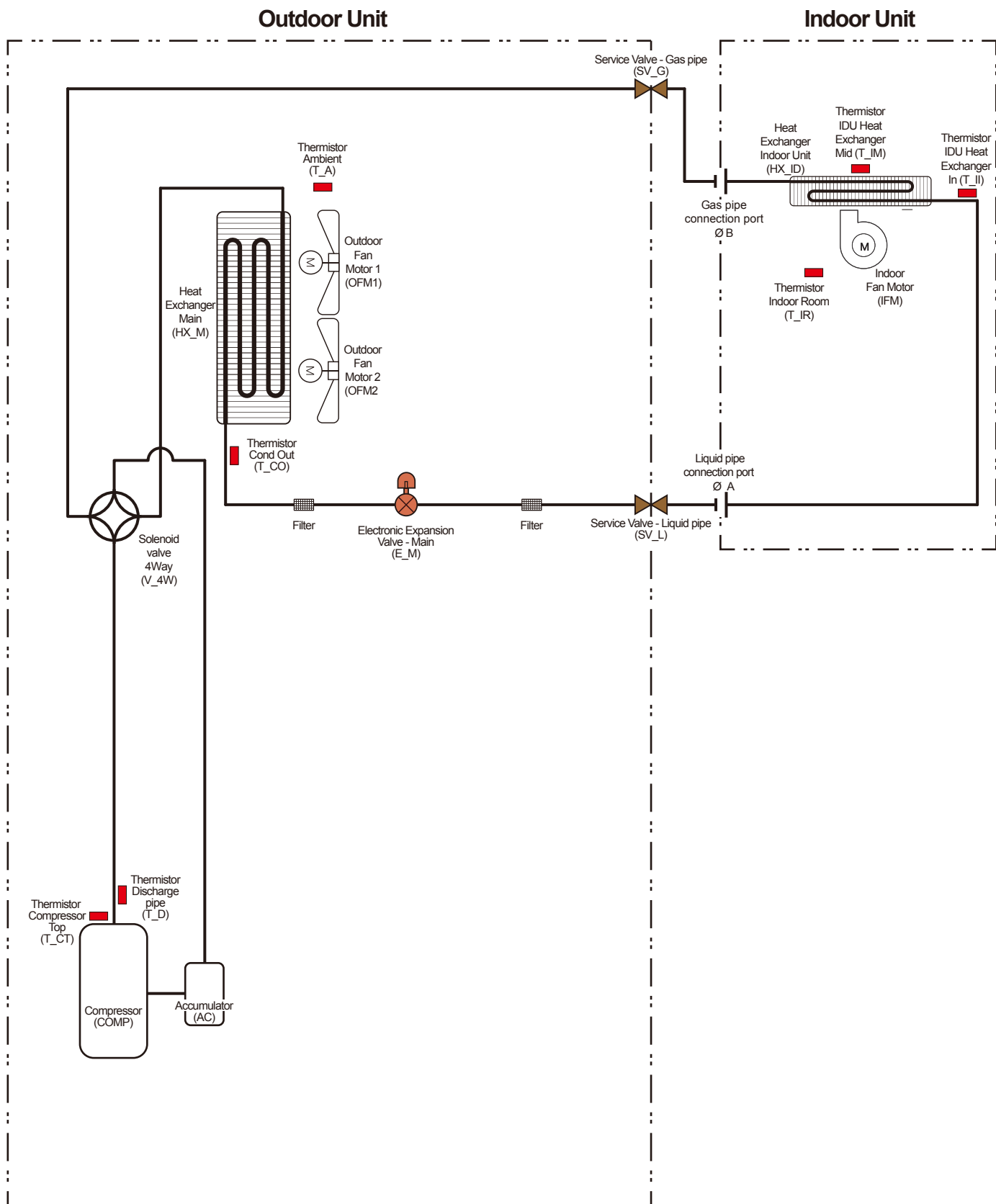
4) AC200JXAFNH/SA (IDU : AC200JNHFKH/SA)



10 Cycle diagram

Outdoor

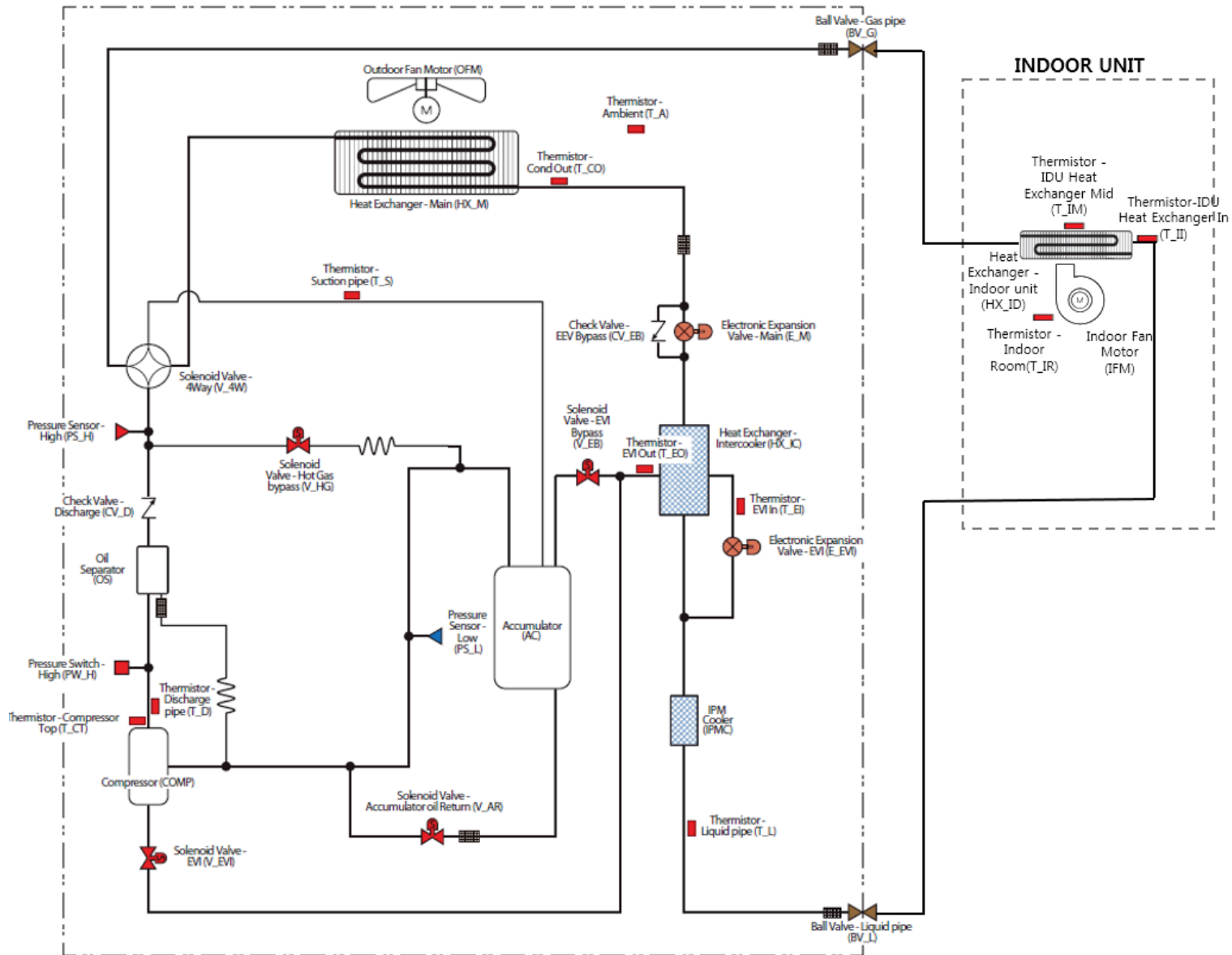
AC160JXAFNH/SA, AC160JXAFKH/SA, AC180JXAFNH/SA



10 Cycle diagram

Outdoor

AC200JXAFNH/SA



11 Dimensional drawing

Outdoor

AC160JXAFNH/SA, AC160JXAFKH/SA, AC180JXAFNH/SA

Units : mm / inches

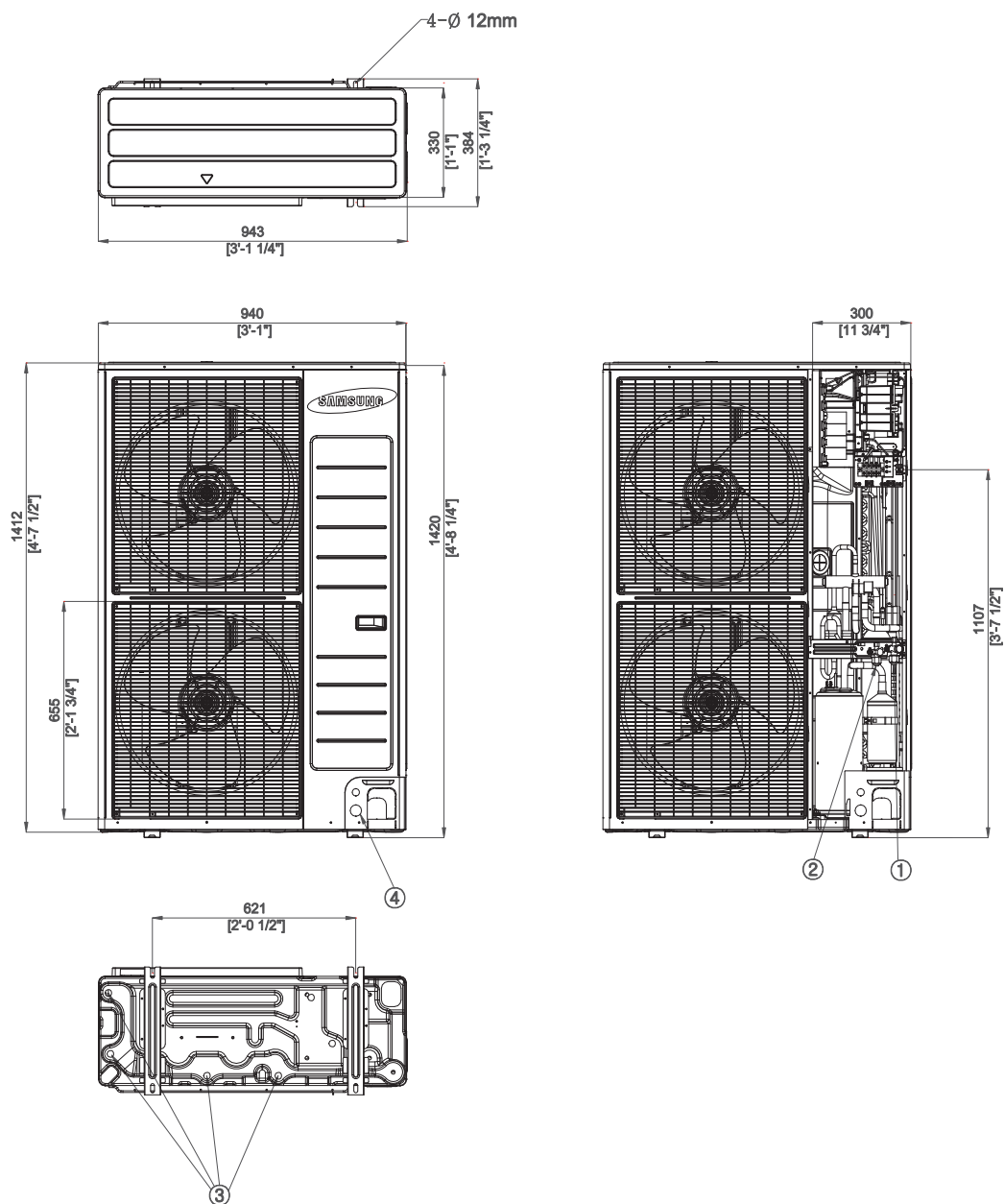


Table of descriptions

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

AC200JXAFNH/SA

Units : mm / inches

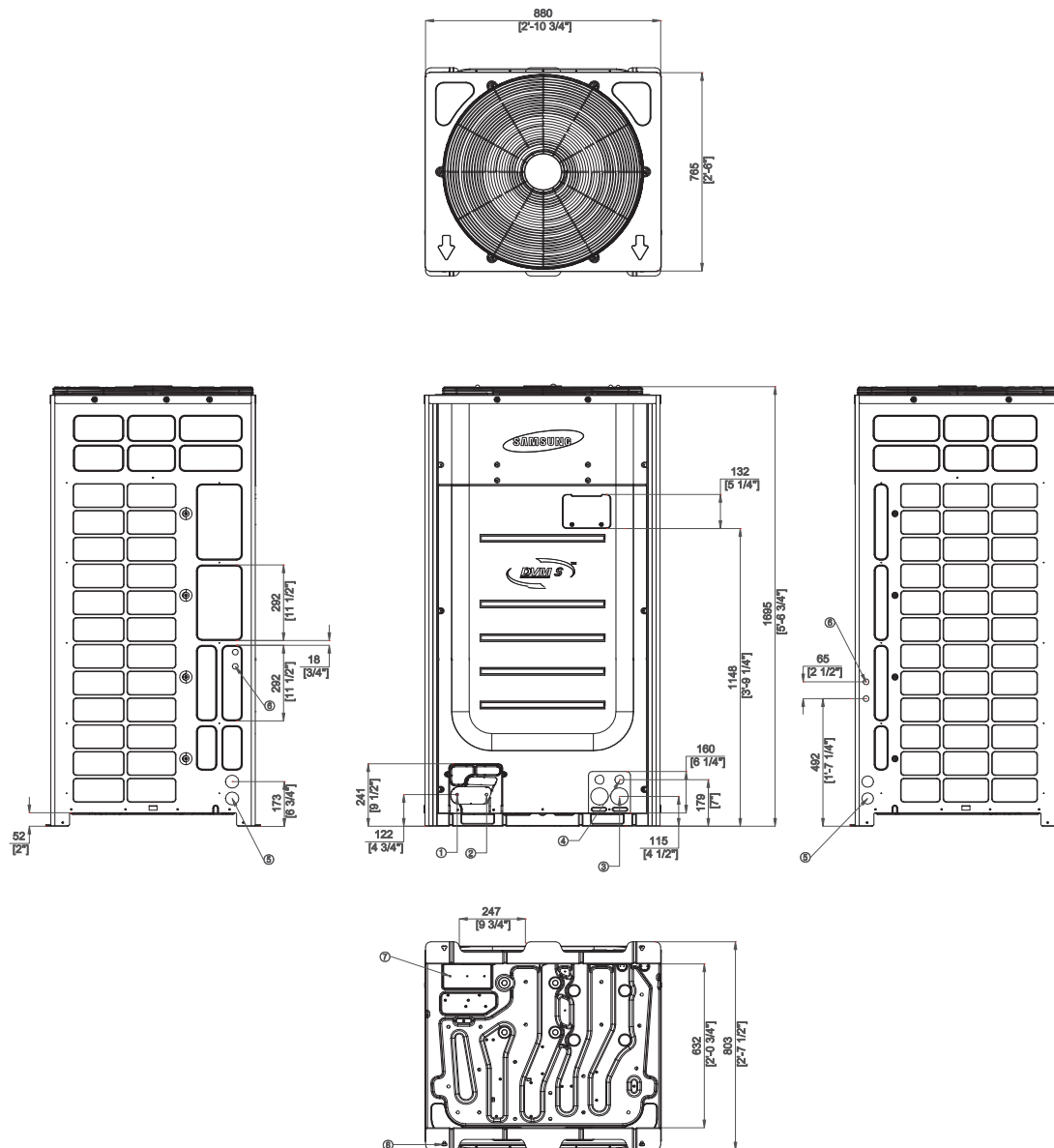


Table of descriptions

1	Refrigerant gas pipe	7	Knock-out Hole for Ref. Piping
2	Refrigerant liquid pipe	8	Anchor Bolt Hole
3	Power wiring conduit	9	
4	Communication wiring conduit	10	
5	Power wiring conduit	11	
6	Communication wiring conduit	12	

12 Capacity correction

Outdoor

AC180JNHFKH/SA + AC180JXAFNH/SA

Cooling



		Pipe Length (m)														
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
Level Difference (m)	30	-	-	-	-	-	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	25	-	-	-	-	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	20	-	-	-	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	15	-	-	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	10	-	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	5	1.00	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	0	1.00	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	-5	1.00	0.98	0.97	0.95	0.94	0.92	0.91	0.90	0.88	0.87	0.85	0.84	0.83	0.81	0.80
	-10	-	0.97	0.96	0.95	0.93	0.92	0.90	0.89	0.88	0.86	0.85	0.83	0.82	0.81	0.80
	-15	-	-	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.82	0.81	0.80
	-20	-	-	-	0.94	0.92	0.91	0.90	0.88	0.87	0.85	0.84	0.83	0.81	0.80	0.80
	-25	-	-	-	-	0.92	0.90	0.89	0.88	0.86	0.85	0.83	0.82	0.81	0.80	0.80
	-30	-	-	-	-	-	0.90	0.89	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.80

Heating



		Pipe Length (m)														
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
Level Difference (m)	30	-	-	-	-	-	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	25	-	-	-	-	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	20	-	-	-	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	15	-	-	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	10	-	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	5	1.00	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	0	1.00	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	-5	1.00	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	-10	-	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	-15	-	-	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	-20	-	-	-	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	-25	-	-	-	-	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80
	-30	-	-	-	-	-	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80

AC200JNHFKH/SA + AC200JXAFNH/SA

Cooling



		Pipe Length (m)															
		8	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Level Difference (m)	50	-	-	-	-	-	0.99	0.98	0.97	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89
	40	-	-	-	-	1.00	0.99	0.98	0.97	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89
	30	-	-	-	1.02	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
	20	-	-	1.03	1.02	1.01	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
	10	-	1.05	1.04	1.02	1.01	1.00	0.99	0.97	0.96	0.96	0.95	0.94	0.92	0.91	0.90	0.89
	0	1.05	1.05	1.04	1.02	1.01	1.00	0.99	0.98	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.90
	-10	-	1.05	1.04	1.03	1.01	1.00	0.99	0.98	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.90
	-20	-	-	1.04	1.03	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90
	-30	-	-	-	1.03	1.02	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90
-40	-	-	-	-	1.02	1.01	1.00	0.98	0.97	0.97	0.96	0.94	0.93	0.92	0.91	0.90	

Heating



		Pipe Length (m)															
		8	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Level Difference (m)	50	-	-	-	-	-	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	40	-	-	-	-	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	30	-	-	-	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	20	-	-	1.02	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	10	-	1.02	1.02	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	0	1.03	1.02	1.02	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	-10	-	1.02	1.02	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	-20	-	-	1.02	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
	-30	-	-	-	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95
-40	-	-	-	-	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	

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