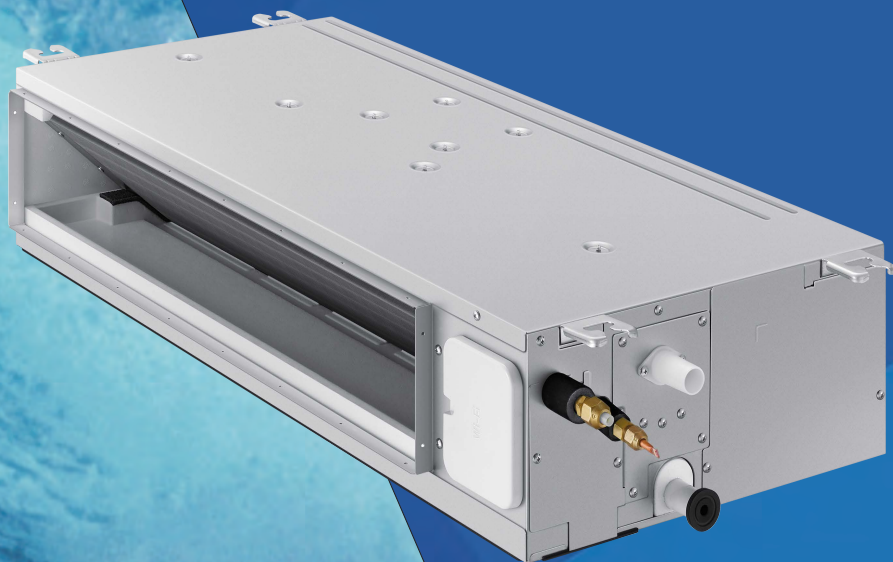


SAMSUNG

SINGLE Technical Data Book

Duct (R32, Heat Pump)



Model : CNG***DD (AC***DN*DCG/AA), CXG**SCD (AC***DXSCCG/AA)

History

Version	Modification	Date	Remark
Ver.1.0	Released Single Premium Duct TDB	24. 06. 25	
Ver.2.0	Updated new models.	24. 08. 07	
Ver.2.1	Modified some data	24. 09. 13	
Ver.3.0	Updated new models.	24. 11. 14	
Ver.3.1	Modified some data.	24. 12. 09	

Nomenclature

US Code

Model Name

C

N

G

48

H

D

D

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(1) Classification

C	CAC
---	-----

(2) Product Type

N	Indoor Unit
X	Outdoor Unit

(3) Mode

F	Cooling Only (R32)
G	Heat Pump (R32)

(4) Capacity

X1,000 Btu/h (2 digits)

(5-2) Feature1 (Outdoor Unit)

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

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium
C	Deluxe + Low Temp.

(7) Version

D	2024
---	------

(5-1) Product Notation (Indoor Unit)

1	1 Way Cassette / Wind-Free 1Way 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
H	HSP Duct
C	Ceiling
J	Console
A	AR9500 (Wall Mounted)
T	MAX4 (Wall Mounted)
Z	Multi-position AHU

Nomenclature

Indoor Unit

Model Name

AC

048

D

N

H

D

C

G

/

AA

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

Buyer

(1) Classification

AC	CAC
----	-----

(2) Capacity

X1,000 Btu/h (3 digits)

(3) Version

D	2024
---	------

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

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
H	HSP Duct
C	Ceiling
J	Console
A	AR9500 (Wall Mounted)
T	MAX4 (Wall Mounted)
Z	Multi-position AHU

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

C	1Φ, 208-230V,60Hz
---	-------------------

(8) Mode

F	Cooling Only (R32)
G	Heat Pump (R32)

Nomenclature

Outdoor Unit

Model Name

AC

048

D

X

S

C

C

G

/

AA

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

Buyer

(1) Classification

AC	CAC
----	-----

(2) Capacity

x 1000 Btu/h (3 digits)

(3) Version

D	2024
---	------

(4) Product Type

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

(5) Feature1

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

(6) Feature2

F	Flagship
S	Standard
D	Deluxe
P	Premium
C	Deluxe + Low Temp.

(7) Rating Voltage

C	1Φ, 208~230V, 60Hz
H	3Φ, 400V, 60Hz

(8) Mode

F	Cooling Only (R32)
G	Heat Pump (R32)

Contents

LSP Duct	7
HSP Duct	24
Outdoor Unit	61

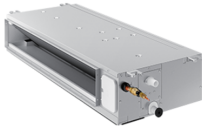
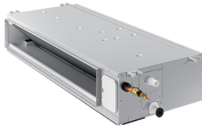
LSP Duct

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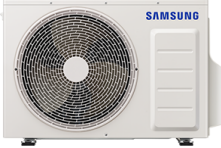
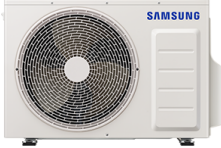
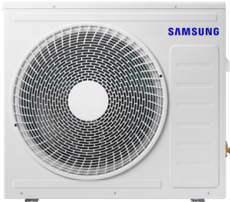
1. Line-up

LSP Duct

Indoor unit

Model	Capacity (kBtu/h)		
	9	12	18
LSP Duct			
	CNG09LDD (AC009DNLDCG/AA)	CNG12LDD (AC012DNLDCG/AA)	CNG18LDD (AC018DNLDCG/AA)

Outdoor Unit

Model	Capacity (kBtu/h)		
	9	12	18
LSP Duct			
	CXG09SCD (AC009DXSCCG/AA)	CXG12SCD (AC012DXSCCG/AA)	CXG18SCD (AC018DXSCCG/AA)

2. Specification

LSP Duct

Model Name		Indoor Unit			AC009DNLDCG/AA	AC012DNLDCG/AA	AC018DNLDCG/AA	
		Outdoor Unit			AC009DXSCCG/AA	AC012DXSCCG/AA	AC018DXSCCG/AA	
US Code		Indoor Unit			CNG09LDD	CNG12LDD	CNG18LDD	
		Outdoor Unit			CXG09SCD	CXG12SCD	CXG18SCD	
System	Mode			-	Heat Pump	Heat Pump	Heat Pump	
	Performance	Capacity	Cooling (Min/Std/Max)	kW	0.8 / 2.6 / 3.8	0.9 / 3.5 / 4.1	1.6 / 5.1 / 6.4	
				Btu/h	3,000 / 9,000 / 13,000	3,200 / 12,000 / 14,000	5,500 / 17,500 / 22,000	
				US RT	0.25 / 0.75 / 1.08	0.27 / 1 / 1.17	0.45 / 1.45 / 1.83	
			Heating (Min/Std/Max)	kW	0.8 / 3.5 / 4.6	0.8 / 4.1 / 4.9	0.8 / 5.8 / 7.3	
				Btu/h	2,900 / 12,000 / 16,000	3,000 / 14,000 / 17,000	3,000 / 20,000 / 25,000	
				US RT	0.24 / 1 / 1.33	0.25 / 1.17 / 1.42	0.25 / 1.66 / 2.08	
	Power	Power Input	Cooling (Min/Std/Max) Heating (Min/Std/Max)	kW	0.18 / 0.66 / 1.32	0.19 / 1.01 / 1.34	0.4 / 1.5 / 2.44	
					0.16 / 1.03 / 2.02	0.17 / 1.13 / 2.1	0.3 / 1.83 / 3.61	
		Current Input	Cooling (Min/Std/Max) Heating (Min/Std/Max)	A	1.2 / 2.9 / 5.9	1.3 / 4.5 / 5.9	2.4 / 6.9 / 10.8	
					1.1 / 4.6 / 9	1.1 / 5.0 / 9.3	1.8 / 8.4 / 16	
		Current	MCA	A	13.9	13.9	22.7	
			MOP	A	15	15	25	
	Efficiency	EER2	Cooling	-	3.96	3.46	3.43	
			Cooling (US)	(Btu/h)/W	13.5	11.8	11.7	
		COP	Heating	W/W	3.4	3.6	3.2	
		SEER2 (Cooling Energy Grade)			-	20.1	19.6	17
		HSPF2 (Heating Energy Grade)			-	9.6	9.5	9
		Pipe Connections	Liquid Pipe		Type	Flare	Flare	Flare
	Φ, mm(inch)				6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	
	Gas Pipe		Type	Flare	Flare	Flare		
			Φ, mm(inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)		
	Heat Insulation			-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes	
	Pipe Length (ODU-IDU)		Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)	
			Max.	m (ft)	20 (65.6)	20 (65.6)	50 (164.0)	
			Elevation	m (ft)	15 (49.2)	15 (49.2)	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	
				AWG	18	18	18	
			Remark	-	F1,F2	F1,F2	F1,F2	
	Refrigerant	Type		-	R32	R32	R32	
		Factory Charging		kg	0.9	0.9	1.7	
				lbs	1.98	1.98	3.75	
	Indoor Unit	Power Supply			Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
Heat Exchanger		Type		-	Fin & Tube	Fin & Tube	Fin & Tube	
		Material	Fin	-	Al	Al	Al	
			Tube	-	Cu	Cu	Cu	
		Fin Treatment		-	Green Hydrophile	Green Hydrophile	Green Hydrophile	
Fan		Type		-	Sirocco	Sirocco	Sirocco	
		Quantity		EA	2	2	3	
		Air Flow Rate	Cooling (H/M/L)	m ³ /min	9.2 / 8.0 / 7.0	12.9 / 10.9 / 9.2	17.0 / 13.0 / 10.0	
				ft ³ /min	325 / 283 / 247	456 / 385 / 325	600 / 459 / 353	
			Heating (H/M/L)	m ³ /min	9.2 / 8.0 / 7.0	12.9 / 10.9 / 9.2	17.0 / 13.0 / 10.0	
				ft ³ /min	325 / 283 / 247	456 / 385 / 325	600 / 459 / 353	
		External Static Pressue	Min/Std/Max	In Wg	0.01 / 0.1 / 0.24	0.01 / 0.1 / 0.24	0.01 / 0.1 / 0.24	
Fan Motor		Type		-	BLDC	BLDC	BLDC	
		Output		W x n	84 x 1	84 x 1	84 x 1	
Drain		Drain Pipe			Φ, mm	OD 26.67	OD 26.67	OD26.67
Sound Level		Sound Pressure Level	H/M/L/Silent	dB(A)	33 / 30 / 26	34 / 31 / 27	35 / 32 / 28	
		Sound Power Level		dB(A)	50	51	52	

2. Specification

LSP Duct

Model Name		Indoor Unit		AC009DNLDCG/AA	AC012DNLDCG/AA	AC018DNLDCG/AA
		Outdoor Unit		AC009DXSCCG/AA	AC012DXSCCG/AA	AC018DXSCCG/AA
US Code		Indoor Unit		CNG09LDD	CNG12LDD	CNG18LDD
		Outdoor Unit		CXG09SCD	CXG12SCD	CXG18SCD
Indoor Unit	External Dimension	Net Weight	kg(lbs)	19.2 (42.3)	19.2 (42.3)	22.5 (49.6)
		Shipping Weight	kg(lbs)	22.4 (49.4)	22.4 (49.4)	26.0 (57.3)
		Net Dimensions (WxHxD)	mm	900 x 199 x 440	900 x 199 x 440	1,100 x 199 x 440
			inch	35.43 x 7.83 x 17.32	35.43 x 7.83 x 17.32	43.31 x 7.83 x 17.32
		Shipping Dimensions (WxHxD)	mm	1,151 x 280 x 544	1,151 x 280 x 544	1,351 x 280 x 544
			inch	45.31 x 11.02 x 21.42	45.31 x 11.02 x 21.42	53.19 x 11.02 x 21.42
	Casing	Material	-	Plastic	Plastic	Steel
	Control System	Infrared remote control	-	AR-CH01U	AR-CH01U	AR-CH01U
		Wired remote control	-	MWR-WG01UN	MWR-WG01UN	MWR-WG01UN
	Drain Pump	Drain Pump	-	Included	Included	included
		Max.lifting Height / Displacement	in / gal/h	29.53 / 6.34	29.53 / 6.34	29.53 / 6.34
	Additional	Air Filter	-	Removable / Washable	Removable / Washable	Removable / Washable
Outdoor Unit	Power Supply		Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat Exchanger	Type	-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	Al	Al	Al
			Tube	Cu	Cu	Cu
		Fin Treatment	-	Green Hydrophile	Green Hydrophile	Anti-Corrosion
	Compressor	Model	-	KTN130D42UFR	KTN130D42UFR	UB8TA8265FEWSG
		Type	-	TWIN ROTARY	TWIN ROTARY	Twin Rotray
		Output	kW	1.04	1.04	2.55
		Oil	Type	POE	POE	POE
			Initial Charge	cc (fl oz)	350	700
	Fan	Type	-	Propeller	Propeller	Propeller
		Discharge direction	-	Side	Side	Side
		Quantity	EA	1	1	1
		Air Flow Rate	m ³ /min	30	30	61
			ft ³ /min	1,059	1,059	2,154
	Fan Motor	Type	-	BLDC	BLDC	BLDC
		Output	W x n	45 x 1	45 x 1	125 x 1
	Sound Level	Sound Pressure Level	Cooling	dB(A)	46	47
			Heating	dB(A)	47	48
		Sound Power Level	dB(A)	59	61	65
	External Dimension	Net Weight	kg(lbs)	31.5 (69.4)	31.5 (69.4)	53 (116.8)
		Shipping Weight	kg(lbs)	33.5 (73.9)	33.5 (73.9)	57 (125.7)
		Net Dimensions (WxHxD)	mm	790 x 548 x 285	790 x 548 x 285	880 x 798 x 310
			inch	31.10 x 21.57 x 11.22	31.10 x 21.57 x 11.22	34.65 x 31.42 x 12.20
		Shipping Dimensions (WxHxD)	mm	913 x 622 x 371	913 x 622 x 371	1,023 x 881 x 413
			inch	35.94 x 24.49 x 14.61	35.94 x 24.49 x 14.61	40.28 x 34.69 x 16.26
	Casing	Material	Body	-	Steel	Steel
	Operating Temp. Range	Cooling	°C (°F)	-18 ~ 50 (0 ~ 122)	-18 ~ 50 (0 ~ 122)	-20~50 (-4~122)
		Heating	°C (°F)	-25~24 (-13~75)	-25~24 (-13~75)	-25~24 (-13~75)

- Specification may be subject to change without prior notice.
 - 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant piping length 5m(16.4ft), Level differences : 0m(0ft))
 - 2) Select wire size based on the value of MCA
 - 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
 - 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level / Reference power : 1pW / Measured according to ISO 3741
 - 5) These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

3. Summary Table

LSP Duct

Performance Characteristics

Model Code	Net Weight (lbs)	Capacity			Fan Speed	Air Flow Rate		Sound Pressure Level (dBA)	Sound Power Level (dBA)
			Cooling (Btu/h)	Heating (Btu/h)		Cooling (CFM)	Heating (CFM)		
CNG09LDD (AC009DNLDCG/AA)	42.3	Max.	13,000	16,000	High	325	325	33	50
		Std.	9,000	12,000	Mid	283	283	30	-
		Min.	3,000	2,900	Low	247	247	26	-
CNG12LDD (AC012DNLDCG/AA)	42.3	Max.	14,000	17,000	High	456	456	34	51
		Std.	12,000	14,000	Mid	385	385	31	-
		Min.	3,200	3,000	Low	325	325	27	-
CNG18LDD (AC018DNLDCG/AA)	49.6	Max.	22,000	25,000	High	600	600	35	52
		Std.	17,500	20,000	Mid	459	459	32	-
		Min.	5,500	3,000	Low	353	353	28	-

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

Model		Outdoor Unit				Input Current (Amperes)				Power Supply	
Indoor Unit	Outdoor Unit	Rated	Voltage range			Outdoor Unit		Indoor Unit	Total	MCA(A)	MOP(A)
		Hz	Volts	Min.	Max	Cooling	Heating				
CNG09LDD (AC009DNLDCG/AA)	CXG09SCD (AC009DXSCCG/AA)	60	208 to 230	187	253	11.74	11.74	1.06	12.80	13.9	15
CNG12LDD (AC012DNLDCG/AA)	CXG12SCD (AC012DXSCCG/AA)	60	208 to 230	187	253	11.74	11.74	1.06	12.80	13.9	15
CNG18LDD (AC018DNLDCG/AA)	CXG18SCD (AC018DXSCCG/AA)	60	208 to 230	187	253	19.64	19.64	1.06	20.70	22.7	25

NOTE

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

4. Capacity Table

LSP Duct

(1) CNG09LDD (AC009DNLDCG/AA)+CXG09SCD (AC009DXSCCG/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	11.5	9.2	0.72	12.2	9.5	0.74	12.7	9.7	0.75	13.1	10.0	0.77	13.3	9.9	0.77	14.0	9.8	0.79	14.7	9.7	0.80
70	11.9	9.2	0.68	12.6	9.5	0.69	13.1	9.8	0.71	13.5	10.1	0.72	13.8	10.0	0.73	14.5	9.9	0.74	15.2	9.7	0.76
95	8.0	5.7	0.62	8.4	5.9	0.63	8.7	6.1	0.65	9.0	6.3	0.66	9.2	6.2	0.67	9.6	6.2	0.68	10.1	6.1	0.69
115	10.4	8.5	1.50	10.9	8.8	1.53	11.3	9.1	1.56	11.7	9.4	1.59	11.9	9.3	1.61	12.5	9.2	1.64	13.2	9.0	1.67
122	8.0	7.4	1.19	8.4	7.6	1.21	8.7	7.9	1.24	9.0	8.1	1.26	9.2	8.0	1.27	9.6	7.9	1.30	10.1	7.8	1.32

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
-13	5.9	1.19	6.2	1.22	6.5	1.24	6.7	1.27	6.8	1.28	7.2	1.31
-4	8.4	1.35	8.8	1.38	9.2	1.40	9.5	1.43	9.7	1.45	10.2	1.47
14	11.8	1.74	12.4	1.78	12.9	1.82	13.3	1.85	13.6	1.87	14.2	1.91
32	12.4	1.47	13.0	1.50	13.6	1.53	14.0	1.57	14.3	1.58	15.0	1.61
47	10.6	0.97	11.2	0.99	11.6	1.01	12.0	1.03	12.2	1.04	12.9	1.06
75.2	15.3	1.24	16.1	1.27	16.8	1.29	17.3	1.32	17.6	1.33	18.5	1.36

 NOTE

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

4. Capacity Table

LSP Duct

(2) CNG12LDD(AC012DNLDCG/AA)+CXG12SCD (AC012DXSCCG/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	12.2	9.7	0.75	12.9	10.0	0.77	13.4	10.3	0.78	13.8	10.6	0.80	14.1	10.5	0.81	14.8	10.4	0.82	15.5	10.2	0.84
70	12.7	9.9	0.71	13.4	10.2	0.73	14.0	10.5	0.74	14.4	10.8	0.76	14.7	10.7	0.77	15.4	10.6	0.78	16.2	10.4	0.80
95	10.6	7.7	0.95	11.2	7.9	0.97	11.6	8.1	0.99	12.0	8.4	1.01	12.2	8.3	1.02	12.9	8.2	1.04	13.5	8.1	1.06
115	10.8	8.9	1.52	11.4	9.2	1.55	11.9	9.5	1.58	12.2	9.8	1.62	12.5	9.7	1.63	13.1	9.6	1.66	13.8	9.4	1.70
122	8.5	7.9	1.25	8.9	8.1	1.27	9.3	8.4	1.30	9.6	8.6	1.32	9.8	8.6	1.34	10.3	8.5	1.36	10.8	8.3	1.39

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
-13	6.2	1.10	6.5	1.12	6.8	1.14	7.0	1.16	7.1	1.18	7.5	1.20
-4	8.8	1.23	9.2	1.26	9.6	1.28	9.9	1.31	10.1	1.32	10.6	1.35
14	12.4	1.63	13.0	1.66	13.6	1.69	14.0	1.73	14.3	1.75	15.0	1.78
32	13.0	1.37	13.7	1.40	14.3	1.43	14.7	1.46	15.0	1.47	15.7	1.50
47	12.4	1.06	13.0	1.09	13.6	1.11	14.0	1.13	14.3	1.14	15.0	1.16
75.2	16.1	1.17	16.9	1.19	17.7	1.22	18.2	1.24	18.6	1.26	19.5	1.28

 NOTE

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

4. Capacity Table

LSP Duct

(3) CNG18LDD(AC018DNLDCG/AA)+CXG18SCD (AC018DXSCCG/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	18.6	13.8	1.1	19.6	14.2	1.2	20.4	14.7	1.2	21.0	15.1	1.2	21.4	15.0	1.2	22.5	14.8	1.2	23.6	14.5	1.3
70	20.1	14.3	1.2	21.2	14.8	1.2	22.1	15.2	1.2	22.8	15.7	1.3	23.2	15.5	1.3	24.4	15.4	1.3	25.6	15.1	1.3
95	15.5	12.0	1.4	16.3	12.3	1.4	17.0	12.7	1.5	17.5	13.1	1.5	17.9	13.0	1.5	18.7	12.9	1.5	19.7	12.6	1.6
115	17.5	13.4	2.6	18.4	13.8	2.7	19.2	14.2	2.7	19.8	14.6	2.8	20.2	14.5	2.8	21.2	14.3	2.9	22.2	14.1	2.9
122	14.4	11.9	2.4	15.2	12.3	2.4	15.8	12.6	2.5	16.3	13.0	2.6	16.6	12.9	2.6	17.4	12.8	2.6	18.3	12.5	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
-13	15.9	2.8	15.7	2.8	15.6	2.8	15.4	2.7	15.2	2.7	15.1	2.7
-4	18.8	3.2	18.6	3.2	18.4	3.1	18.2	3.1	18.0	3.1	17.8	3.0
14	25.8	3.8	25.5	3.7	25.3	3.7	25.0	3.7	24.8	3.6	24.5	3.6
32	27.2	3.5	26.9	3.4	26.7	3.4	26.4	3.3	26.1	3.3	25.9	3.3
47	20.6	1.9	20.4	1.9	20.2	1.8	20.0	1.8	19.8	1.8	19.6	1.8
75.2	27.2	1.8	26.9	1.8	26.7	1.7	26.4	1.7	26.1	1.7	25.9	1.7

 NOTE

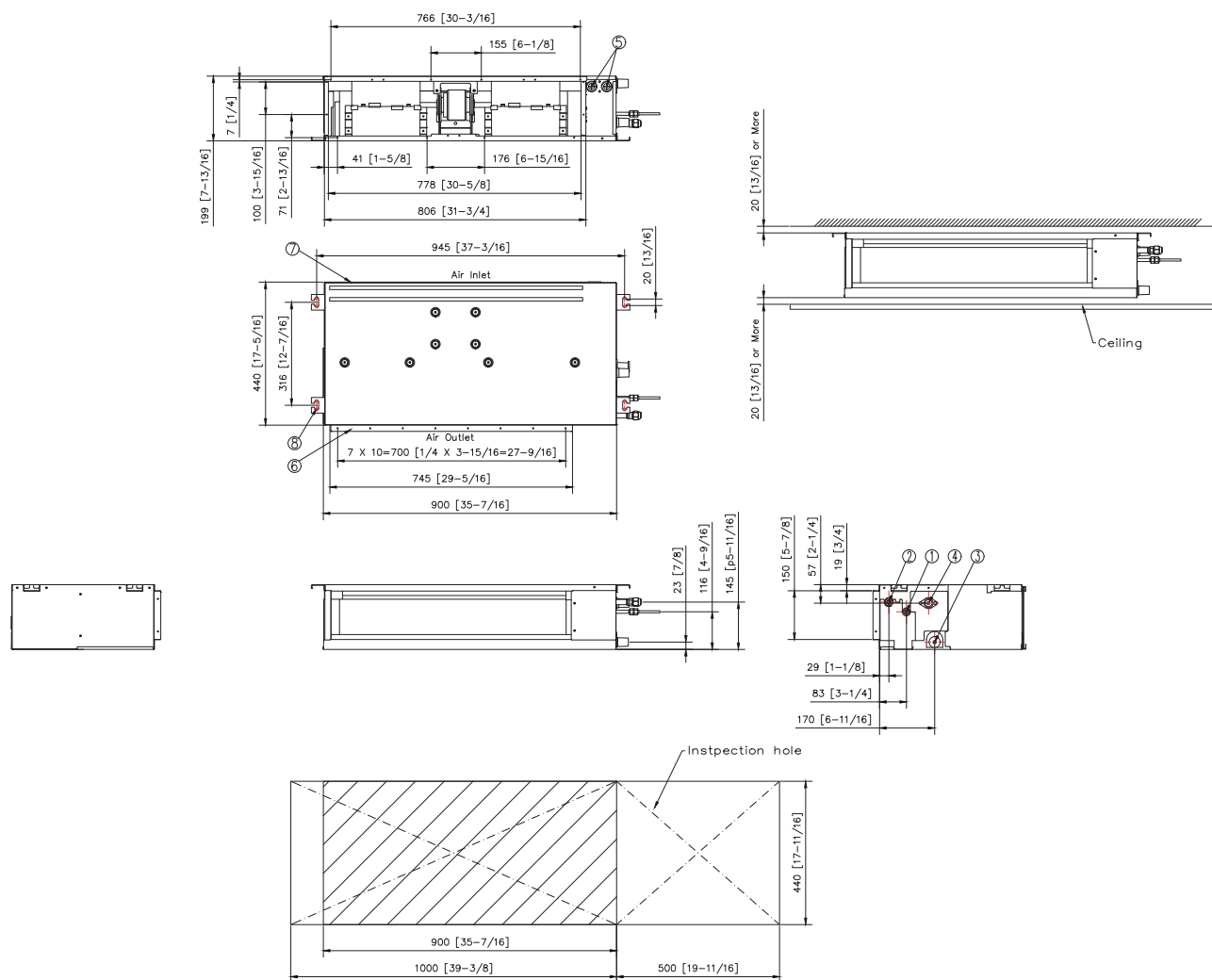
- The performance table shows the average value of each conditions.

5. Dimensional Drawing

LSP Duct

CNG09LDD(AC009DNLDCG/AA), CNG12LDD(AC012DNLDCG/AA)

Units : mm [inches]



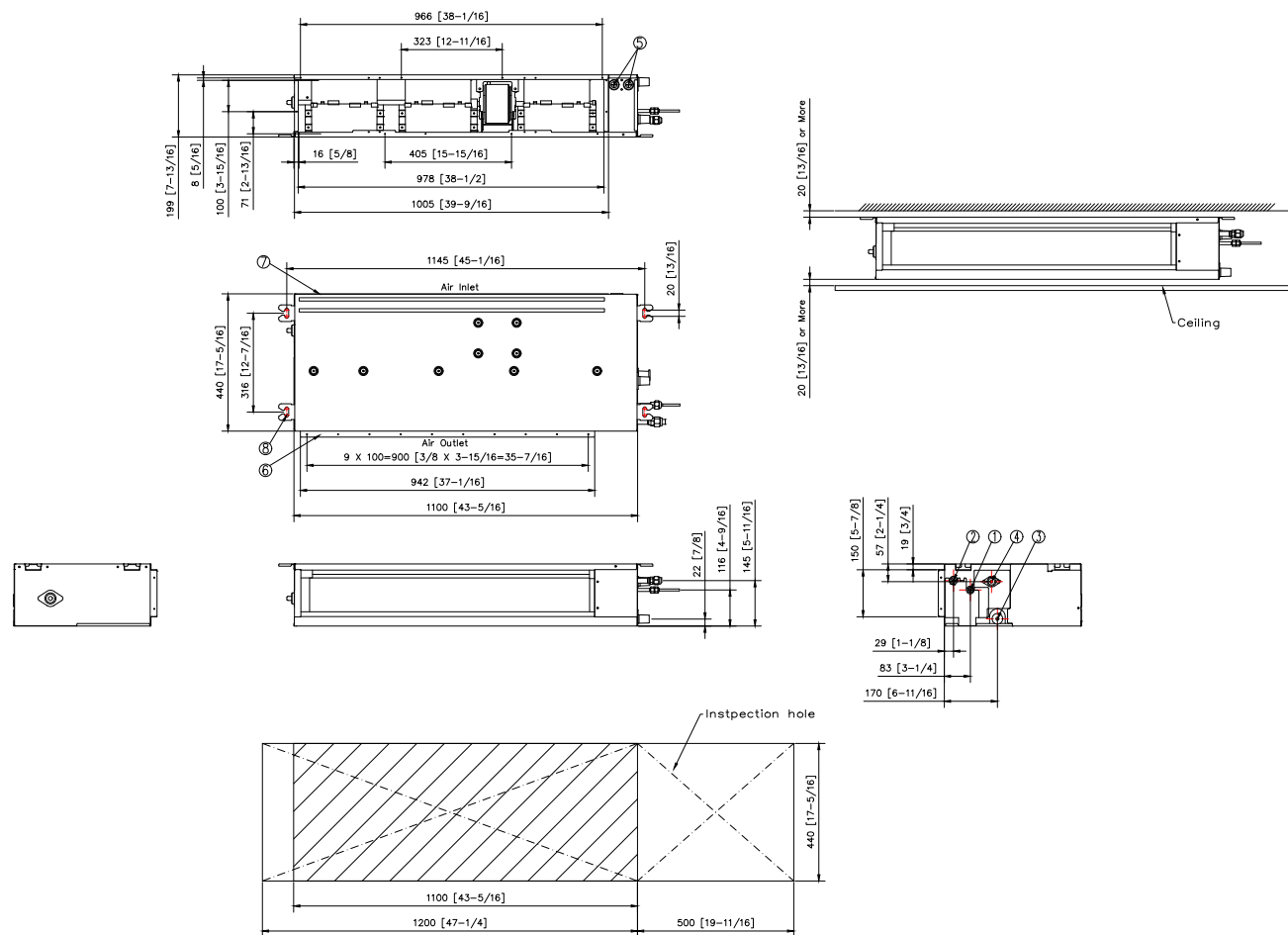
No.	Name	Description
①	Liquid pipe connection	Ø6.35 (1/4)
②	Gas pipe connection	Φ9.52 (3/8)
③	Drain pipe connection (Without drain pump)	OD 26.67
④	Drain pipe connection (With drain pump)	-
⑤	Power & Communication Conduits	-
⑥	Air discharge grille flange	-
⑦	Return Air Side	-
⑧	Hook	Ø9.52 or M10

5. Dimensional Drawing

LSP Duct

CNG18LDD(AC018DNLDCG/AA)

Units : mm [inches]

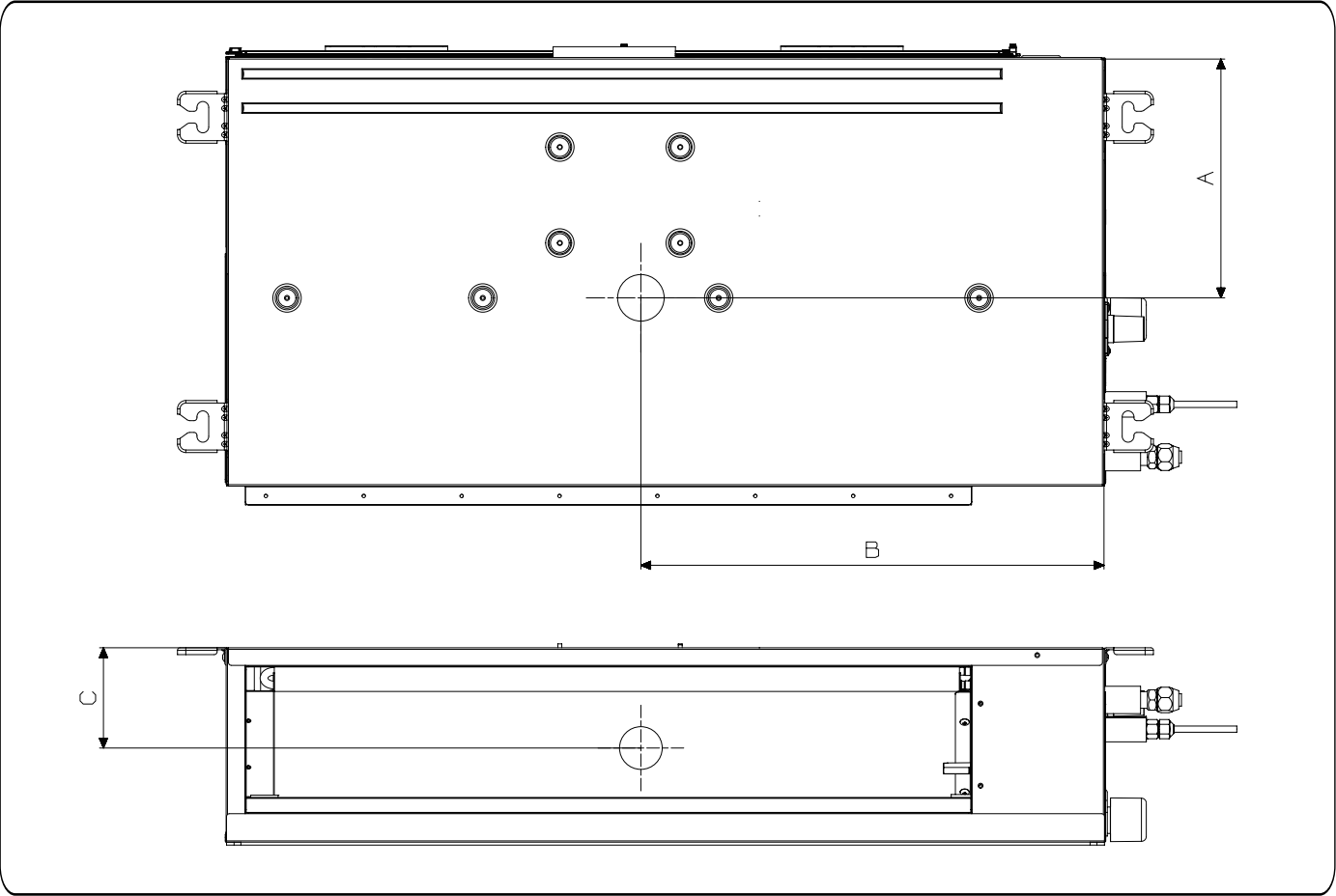


No.	Name	Description
①	Liquid pipe connection	Ø6.35 (1/4)
②	Gas pipe connection	Φ12.7 (1/2)
③	Drain pipe connection (Without drain pump)	OD 26.67
④	Drain pipe connection (With drain pump)	-
⑤	Power & Communication Conduits	-
⑥	Air discharge grille flange	-
⑦	Return Air Side	-
⑧	Hook	Ø9.52 or M10

6. Center of Gravity

LSP Duct

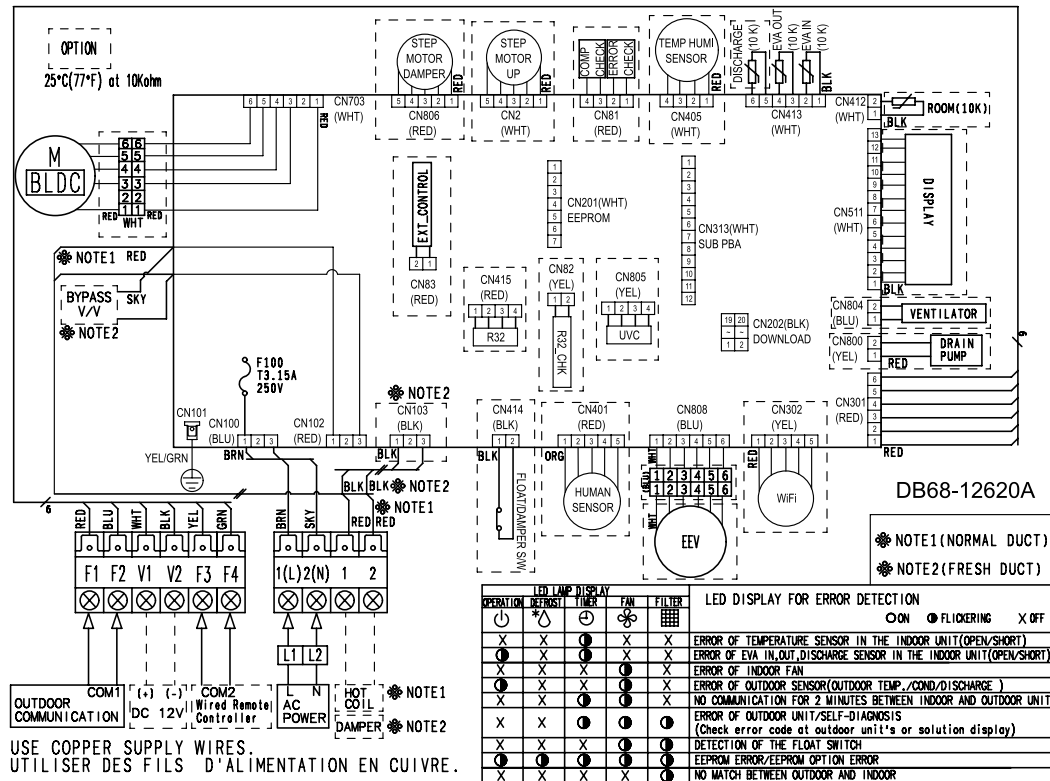
Units : mm [inches]



Model	A	B	C
CNG09LDD (AC009DNLDCG/AA) CNG12LDD (AC012DNLDCG/AA)	233 [9-3/16]	436 [17-3/16]	100 [3-15/16]
CNG18LDD (AC018DNLDCG/AA)	240 [9-7/16]	540 [21-1/4]	100 [3-15/16]

7. Electrical Wiring Diagram

LSP Duct



SUB PBA	SUB PBA for wired remote control communication	ROOM(10K)	Thermistor - Indoor Room	EEV	Electronic Expansion Valve
M-BLDC	Motor for Indoor Fan	EVA IN(10K)	Thermistor - IDU heat exchanger In	F100	Fuse
DISPLAY	Panel LED display	EVA OUT(10K)	Thermistor - IDU heat exchanger Out	EEPROM	EEPROM SUB PBA
ERROR CHECK	Contact output port for error check	VENTILATOR	Contact output port for Ventilator control		
COMP CHECK	Contact output port for compressor operation check	EXT_CONTROL	Input port for external contact control		

NOTE

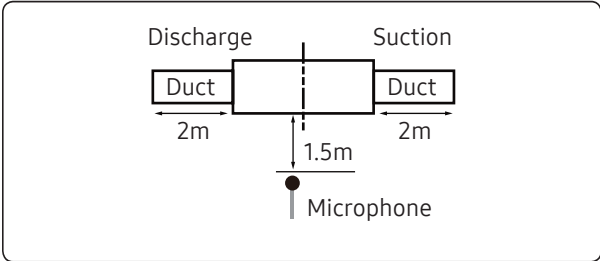
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
-  Protective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

8. Sound Data

LSP Duct

Sound Pressure level

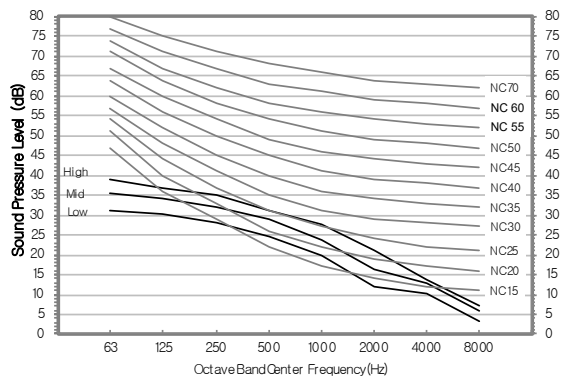
Unit: dB(A)



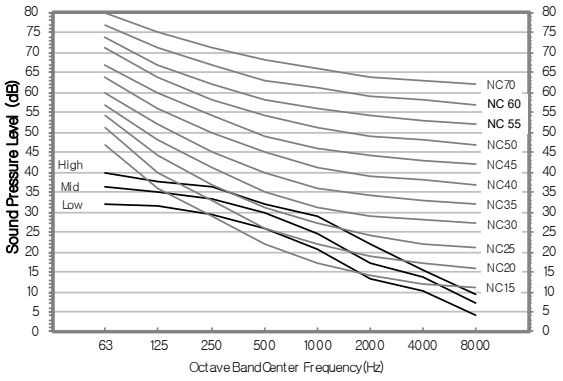
Model	High	Mid	Low
CNG09LDD (AC009DNLDCG/AA)	33	30	26
CNG12LDD (AC012DNLDCG/AA)	34	31	27
CNG18LDD (AC018DNLDCG/AA)	35	32	28

- NC Curve

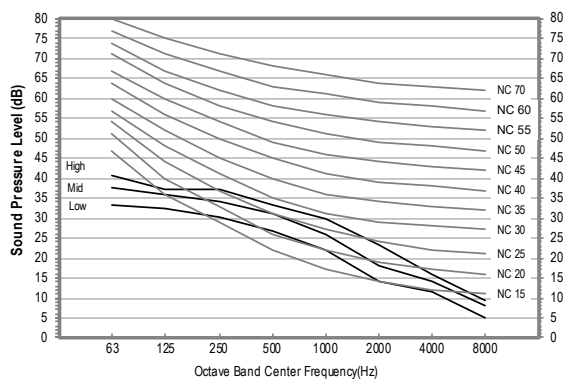
1) CNG09LDD (AC009DNLDCG/AA)



2) CNG12LDD (AC012DNLDCG/AA)



3) CNG18LDD (AC018DNLDCG/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

8. Sound Data

LSP Duct

Sound Power level



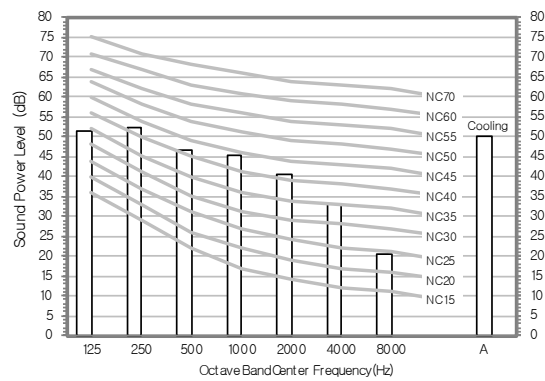
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

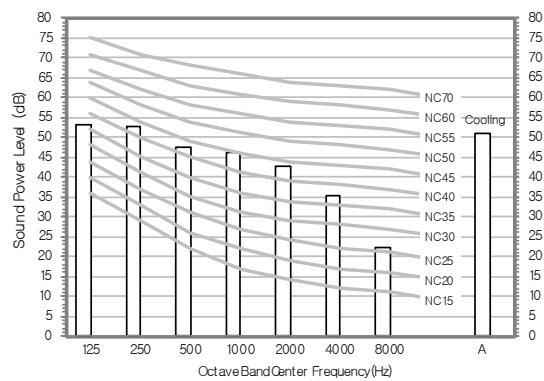
Model	Cooling
CNG09LDD (AC009DNLDCG/AA)	50
CNG12LDD (AC012DNLDCG/AA)	51
CNG18LDD (AC018DNLDCG/AA)	52

- NC Curve

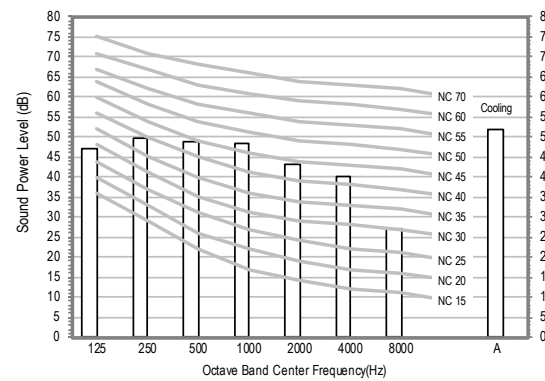
1) CNG09LDD (AC009DNLDCG/AA)



2) CNG12LDD (AC012DNLDCG/AA)



3) CNG18LDD (AC018DNLDCG/AA)

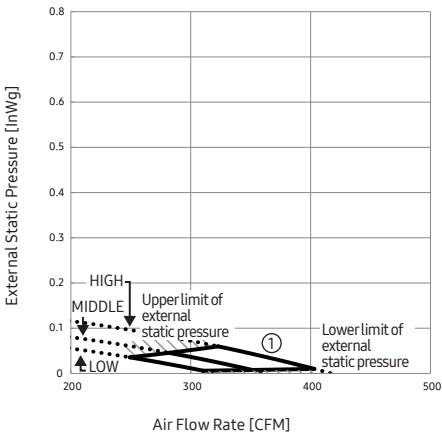


9. Fan Characteristics

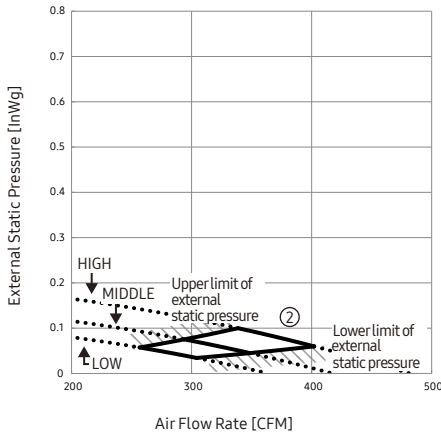
LSP Duct

CNG09LDD (AC009DNLDCG/AA)

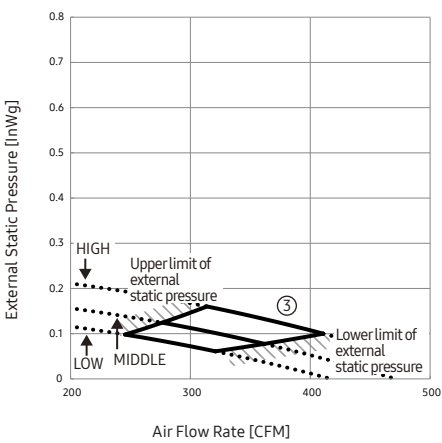
①	External Static Pressure(inWg)	Option Code
	0.01≤P<0.06	01C3FC-1C543A-271A23-372000



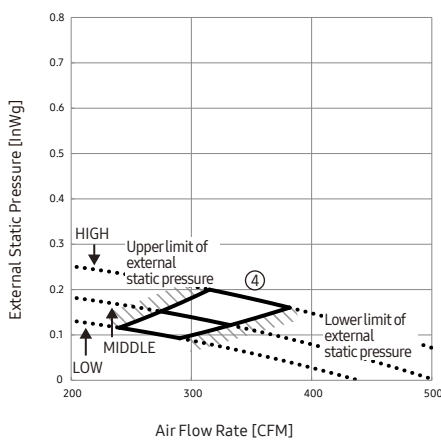
②	External Static Pressure(inWg)	Option Code
	0.06 < P≤0.1	01C3FC-1C549E-271A23-372000



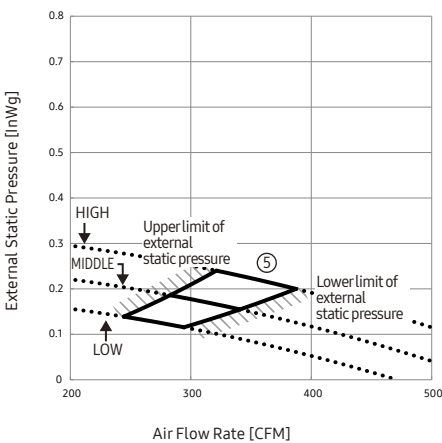
③	External Static Pressure(inWg)	Option Code
	0.1 < P≤0.16	01C3FC-1C55E3-271A23-372000



④	External Static Pressure(inWg)	Option Code
	0.16 < P≤0.2	01C3FC-1C5925-271A23-372000



⑤	External Static Pressure(inWg)	Option Code
	0.2 < P≤0.24	01C3FC-1C5968-271A23-372000

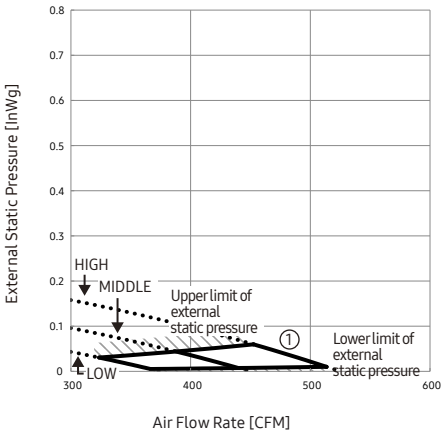


9. Fan Characteristics

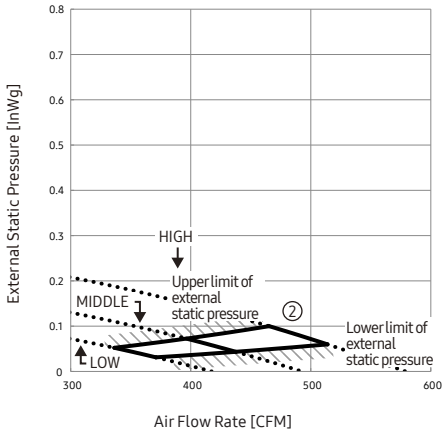
LSP Duct

CNG12LDD (AC012DNLDCG/AA)

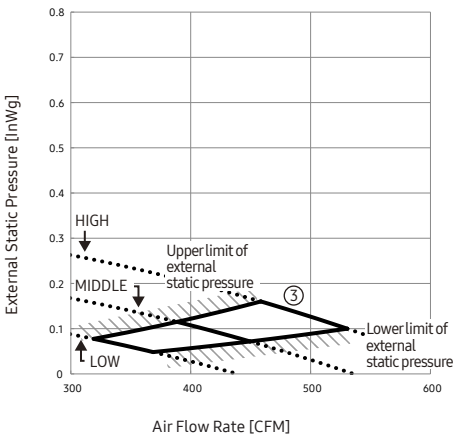
①	External Static Pressure(inWg)	Option Code
	0.01≤P<0.06	01C3FC-1C54DF-272328-372000



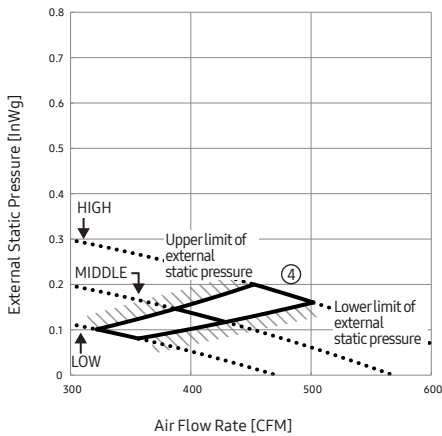
②	External Static Pressure(inWg)	Option Code
	0.06 < P≤0.1	01C3FC-1C5923-272328-372000



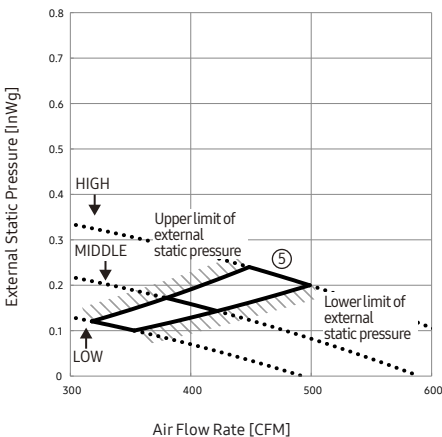
③	External Static Pressure(inWg)	Option Code
	0.1 < P≤0.16	01C3FC-1C5975-272328-372000



④	External Static Pressure(inWg)	Option Code
	0.16 < P≤0.2	01C3FC-1C59A8-272328-372000



⑤	External Static Pressure(inWg)	Option Code
	0.2 < P≤0.24	01C3FC-1C59DA-272328-372000

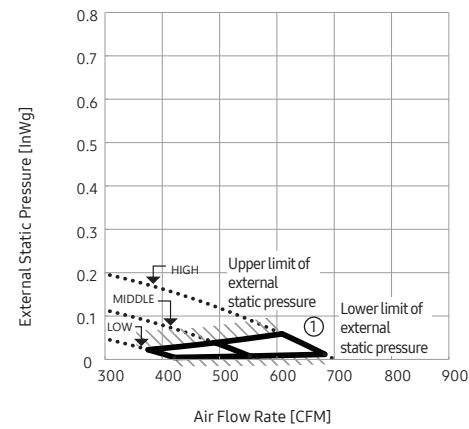


9. Fan Characteristics

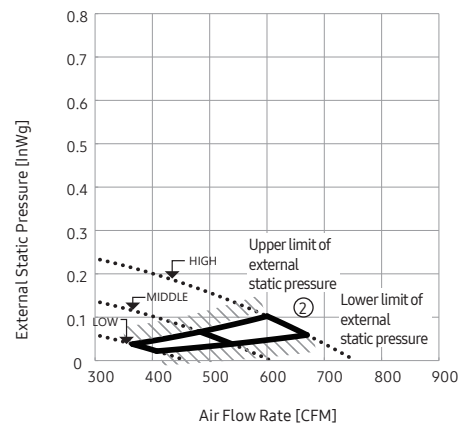
LSP Duct

CNG18LDD (AC018DNLDCG/AA)

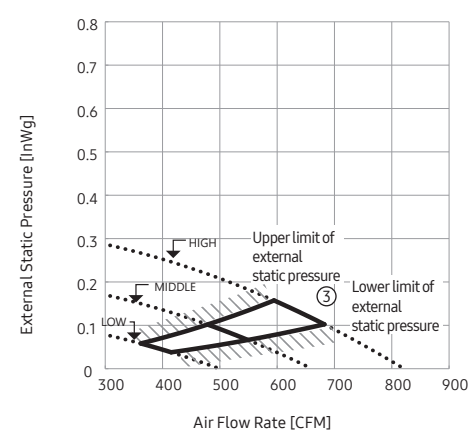
①	External Static Pressure(inWg)	Option Code
	$0.01 \leq P \leq 0.06$	01C3EC-1C54FB-23343C-372000



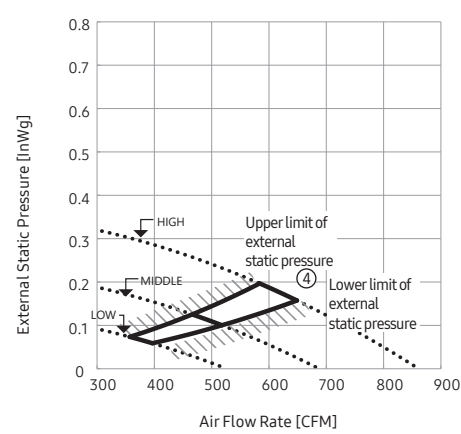
②	External Static Pressure(inWg)	Option Code
	$0.06 < P \leq 0.1$	01C3EC-1C583D-23343C-372000



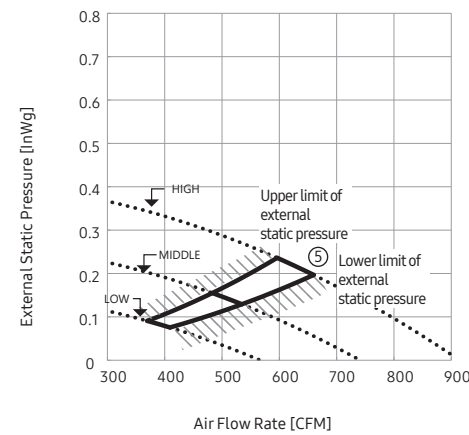
③	External Static Pressure(inWg)	Option Code
	$0.1 < P \leq 0.16$	01C3EC-1C5980-23343C-372000



④	External Static Pressure(inWg)	Option Code
	$0.16 < P \leq 0.20$	01C3EC-1C59B2-23343C-372000



⑤	External Static Pressure(inWg)	Option Code
	$0.20 < P \leq 0.24$	01C3EC-1C59F5-23343C-372000



HSP Duct

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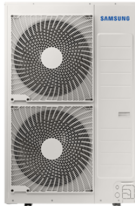
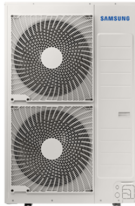
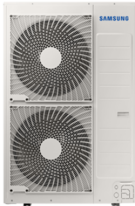
1. Line-up

HSP Duct

Indoor unit

Model	Capacity (kBtu/h)						
	9	12	18	24	30	36	48
HSP Duct							
	CNG09HDD (AC009DNHDCG/AA)	CNG12HDD (AC012DNHDCG/AA)	CNG18HDD (AC018DNHDCG/AA)	CNG24HDD (AC024DNHDCG/AA)	CNG30HDD (AC030DNHDCG/AA)	CNG36HDD (AC036DNHDCG/AA)	CNG48HDD (AC048DNHDCG/AA)

Outdoor Unit

Model	Capacity (kBtu/h)						
	9	12	18	24	30	36	48
HSP Duct							
	CXG09SCD (AC009DXSCCG/AA)	CXG12SCD (AC012DXSCCG/AA)	CXG18SCD (AC018DXSCCG/AA)	CXG24SCD (AC024DXSCCG/AA)	CXG30SCD (AC030DXSCCG/AA)	CXG36SCD (AC036DXSCCG/AA)	CXG48SCD (AC048DXSCCG/AA)

2. Specification

HSP Duct

Model Name		Indoor Unit			AC009DNHDCG/AA	AC012DNHDCG/AA	AC018DNHDCG/AA	
		Outdooru Unit			AC009DXSCCG/AA	AC012DXSCCG/AA	AC018DXSCCG/AA	
US Code		Indoor Unit			CNG09HDD	CNG12HDD	CNG18HDD	
		Outdooru Unit			CXG09SCD	CXG12SCD	CXG18SCD	
System	Mode				-	Heat Pump	Heat Pump	Heat Pump
	Performance	Capacity	Cooling (Min/Std/Max)	kW	0.9 / 2.6 / 4.1	1 / 3.5 / 4.3	1.7 / 5.2 / 7.0	
				Btu/h	3,300 / 9,000 / 14,000	3,500 / 12,000 / 15,000	6,000 / 18,000 / 24,000	
				US RT	0.28 / 0.75 / 1.17	0.29 / 1 / 1.25	0.5 / 1.5 / 2	
			Heating (Min/Std/Max)	kW	0.8 / 3.5 / 4.3	0.8 / 4.1 / 5.2	1.4 / 5.8 / 8.7	
				Btu/h	2,800 / 12,000 / 15,000	3,000 / 14,000 / 18,000	5,000 / 20,000 / 30,000	
				US RT	0.23 / 1 / 1.25	0.25 / 1.17 / 1.5	0.41 / 1.66 / 2.5	
	Power	Power Input	Cooling (Min/Std/Max)	kW	0.21 / 0.70 / 1.44	0.21 / 1.02 / 1.48	0.42 / 1.5 / 2.48	
					Heating (Min/Std/Max)	0.16 / 0.97 / 2	0.17 / 1.17 / 2.2	0.35 / 1.63 / 4.3
		Current Input	Cooling (Min/Std/Max)	A	1.4 / 3.1 / 6.4	1.4 / 4.5 / 6.6	2.5 / 7.1 / 11	
					Heating (Min/Std/Max)	1.1 / 4.3 / 8.9	1.1 / 5.2 / 9.8	2 / 7.7 / 19
		Current	MCA	A	13.9	13.9	22.7	
			MOP	A	15	15	25	
	Efficiency	EER2	Cooling	-	3.72	3.43	3.52	
			Cooling (US)	(Btu/h)/W	12.7	11.7	12	
		COP	Heating	W/W	3.6	3.5	3.6	
		SEER2 (Cooling Energy Grade)		-	18.9	18.6	18.3	
		HSPF2 (Heating Energy Grade)		-	10	9.5	8.9	
		Pipe Connections	Liquid Pipe		Type	Flare	Flare	Flare
	Φ, mm(inch)				6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	
	Gas Pipe		Type	Flare	Flare	Flare		
			Φ, mm(inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)		
	Heat Insulation			-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes	
	Pipe Length (ODU-IDU)		Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)	
			Max.	m (ft)	20 (65.6)	20 (65.6)	50 (164.0)	
			Elevation	m (ft)	15 (49.2)	15 (49.2)	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	
				AWG	18	18	18	
			Remark	-	F1,F2	F1,F2	F1,F2	
	Refrigerant	Type		-	R32	R32	R32	
		Factory Charging		kg	0.9	0.9	1.7	
				lbs	1.98	1.98	3.75	
	Indoor Unit	Power Supply			Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
Heat Exchanger		Type		-	Fin & Tube	Fin & Tube	Fin & Tube	
		Material	Fin	-	Al	Al	Al	
			Tube	-	Cu	Cu	Cu	
		Fin Treatment		-	Hydrophile	Hydrophile	Hydrophile	
Fan		Type		-	Sirocco	Sirocco	Sirocco	
		Quantity		EA	2	2	3	
		Air Flow Rate	Cooling (H/M/L)	m ³ /min	12.9 / 10.3 / 7.9	14.6 / 11.6 / 9.0	23.8 / 20.8 / 16.8	
				ft ³ /min	456 / 364 / 279	516 / 410 / 318	841 / 735 / 593	
			Heating (H/M/L)	m ³ /min	12.9 / 10.3 / 7.9	14.6 / 11.6 / 9.0	23.8 / 20.8 / 16.8	
				ft ³ /min	456 / 364 / 279	516 / 410 / 318	841 / 735 / 593	
		External Static Pressue	Min/Std/Max	In Wg	0.1 / 0.58 / 0.59	0.1 / 0.58 / 0.59	0.1 / 0.58 / 0.79	
Fan Motor		Type		-	BLDC	BLDC	BLDC	
		Output		W x n	153 x 1	153 x 1	153 x 1	
Drain		Drain Pipe		Φ, mm	OD 26.67	OD 26.67	OD 26.67	
Sound Level		Sound Pressure Level	H/M/L	dB(A)	41 / 35 / 28	42 / 36 / 29	40 / 36 / 32	
		Sound Power Level		dB(A)	61	62	61	

2. Specification

HSP Duct

Model Name			Indoor Unit		AC009DNHDCG/AA	AC012DNHDCG/AA	AC018DNHDCG/AA
			Outdooru Unit		AC009DXSCCG/AA	AC012DXSCCG/AA	AC018DXSCCG/AA
US Code			Indoor Unit		CNG09HDD	CNG12HDD	CNG18HDD
			Outdooru Unit		CXG09SCD	CXG12SCD	CXG18SCD
Indoor Unit	External Dimension	Net Weight		kg(lbs)	26.0 (57.3)	26.0 (57.3)	33.5 (73.9)
		Shipping Weight		kg(lbs)	30.0 (66.1)	30.0 (66.1)	38.0 (83.8)
		Net Dimensions (WxHxD)		mm	850 x 250 x 700	850 x 250 x 700	1,200 x 250 x 700
				inch	33.46 x 9.84 x 27.56	33.46 x 9.84 x 27.56	47.24 x 9.84 x 27.56
		Shipping Dimensions (WxHxD)		mm	1,064 x 320 x 784	1,064 x 320 x 784	1,429 x 320 x 779
				inch	41.89 x 12.60 x 30.87	41.89 x 12.60 x 30.87	56.26 x 12.60 x 30.67
	Casing	Material		-	Steel	Steel	Steel
	Control System	Infrared remote control		-	AR-CH01U	AR-CH01U	AR-CH01U
		Wired remote control		-	MWR-WG01UN	MWR-WG01UN	MWR-WG01UN
	Drain Pump	Drain Pump		-	Included	Included	included
		Max.lifting Height / Displacement		in / gal/h	29.53 / 6.34	29.53 / 6.34	29.53 / 6.34
	Additional	Air Filter		-	-	-	-
	Outdoor Unit	Power Supply		Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60	1, 2, 208-230, 60
Heat Exchanger		Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Green Hydrophile	Green Hydrophile	Anti-Corrosion
Compressor		Model		-	KTN130D42UFR	KTN130D42UFR	UB8TA8265FEWSG
		Type		-	Twin Rotary	Twin Rotary	Twin Rotray
		Output		kW	1.04	1.04	2.55
		Oil	Type	-	POE	POE	POE
			Initial Charge	cc (fl oz)	350	350	700
Fan		Type		-	Propeller	Propeller	Propeller
		Discharge direction		-	Side	Side	Side
		Quantity		EA	1	1	1
		Air Flow Rate		m³/min	30	30	61
				ft³/min	1,059	1,059	2,154
Fan Motor		Type		-	BLDC	BLDC	BLDC
		Output		W x n	45 x 1	45 x 1	125 x 1
Sound Level		Sound Pressure Level	Cooling	dB(A)	46	47	51
			Heating	dB(A)	47	48	51
		Sound Power Level		dB(A)	59	61	65
External Dimension		Net Weight		kg(lbs)	31.5 (69.4)	31.5 (69.4)	53 (116.8)
		Shipping Weight		kg(lbs)	33.5 (73.9)	33.5 (73.9)	57 (125.7)
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	790 x 548 x 285	880 x 798 x 310
	inch			31.10 x 21.57 x 11.22	31.10 x 21.57 x 11.22	34.65 x 31.42 x 12.20	
	Shipping Dimensions (WxHxD)		mm	913 x 622 x 371	913 x 622 x 371	1,023 x 881 x 413	
			inch	35.94 x 24.49 x 14.61	35.94 x 24.49 x 14.61	40.28 x 34.69 x 16.26	
Casing	Material	Body	-	Steel	Steel	Steel	
Operating Temp. Range	Cooling		°C (°F)	-18 ~ 50 (0 ~ 122)	-18 ~ 50 (0 ~ 122)	-20~50 (-4~122)	
	Heating		°C (°F)	-25~24 (-13~75)	-25~24 (-13~75)	-25~24 (-13~75)	

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant piping length 5m(16.4ft), Level differences : 0m(0ft))
- 2) Select wire size based on the value of MCA
- 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
- 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level / Reference power : 1pW / Measured according to ISO 3741
- 5) These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

2. Specification

HSP Duct

Model Name		Indoor Unit			AC024DNHDCG/AA	AC030DNHDCG/AA	
		Outdooru Unit			AC024DXSCCG/AA	AC030DXSCCG/AA	
US Code		Indoor Unit			CNG24HDD	CNG30HDD	
		Outdooru Unit			CXG24SCD	CXG30SCD	
System	Mode			-	Heat Pump	Heat Pump	
	Performance	Capacity	Cooling (Min/Std/Max)	kW	2.4 / 6.7 / 9.3	4.2 / 8.7 / 12	
				Btu/h	8,400 / 23,000 / 32,000	14,500 / 30,000 / 41,000	
				US RT	0.7 / 1.91 / 2.66	1.20 / 2.5 / 3.41	
			Heating (Min/Std/Max)	kW	2.0 / 7.9 / 11.4	3.2 / 10.2 / 16.1	
				Btu/h	7,000 / 27,000 / 39,000	11,000 / 35,000 / 55,000	
				US RT	0.58 / 2.25 / 3.25	0.91 / 2.91 / 4.58	
	Power	Power Input	Cooling (Min/Std/Max)	kW	0.46 / 1.92 / 3.13	0.83 / 2.3 / 3.4	
			Heating (Min/Std/Max)		0.36 / 2.4 / 5.3	0.68 / 2.77 / 6	
		Current Input	Cooling (Min/Std/Max)	A	2.4 / 9.1 / 14.2	4.3 / 10.3 / 15	
			Heating (Min/Std/Max)		2.3 / 11.3 / 23.5	3.4 / 12.4 / 26.4	
		Current	MCA	A	26.7	35	
			MOP	A	30	40	
	Efficiency	EER2	Cooling	-	3.52	3.81	
			Cooling (US)	(Btu/h)/W	12	13	
		COP	Heating	W/W	3.3	3.7	
		SEER2 (Cooling Energy Grade)		-	18	20	
		HSPF2 (Heating Energy Grade)		-	9.5	10	
		Pipe Connections	Liquid Pipe		Type	Flare	Flare
	Φ, mm(inch)				6.35 (1/4)	9.52 (3/8)	
	Gas Pipe		Type	Flare	Flare		
			Φ, mm(inch)	15.88 (5/8)	15.88 (5/8)		
	Heat Insulation			-	Both liquid and gas pipes	Both liquid and gas pipes	
	Pipe Length (ODU-IDU)		Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	
			Max.	m (ft)	50 (164.0)	75 (246)	
			Elevation	m (ft)	30 (98.4)	30 (98.4)	
		Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)		
	Wiring Connections	Communication	Min.	mm ²	0.75	0.75	
				AWG	18	18	
			Remark	-	F1,F2	F1,F2	
	Refrigerant	Type			-	R32	R32
		Factory Charging			kg	2.3	3.5
					lbs	5.1	7.72
	Indoor Unit	Power Supply			Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60
Heat Exchanger		Type		-	Fin & Tube	Fin & Tube	
		Material	Fin	-	Al	Al	
			Tube	-	Cu	Cu	
		Fin Treatment		-	Hydrophile	Hydrophile	
Fan		Type		-	Sirocco	Sirocco	
		Quantity		EA	3	3	
		Air Flow Rate	Cooling (H/M/L)	m ³ /min	23.8 / 20.8 / 17.2	32 / 26.8 / 22.4	
				ft ³ /min	841 / 735 / 607	1130 / 946 / 791	
			Heating (H/M/L)	m ³ /min	23.8 / 20.8 / 17.2	32 / 26.8 / 22.4	
				ft ³ /min	841 / 735 / 607	1130 / 946 / 791	
External Static Pressue		Min/Std/Max	In Wg	0.1 / 0.58 / 0.79	0.1 / 0.58 / 0.79		
Fan Motor		Type		-	BLDC	BLDC	
		Output		W x n	153 x 1	244 x 1	
Drain		Drain Pipe		Φ, mm	OD 26.67	OD 26.67	
Sound Level		Sound Pressure Level	H/M/L	dB(A)	41 / 37 / 33	41 / 37 / 33	
		Sound Power Level		dB(A)	62	63	

2. Specification

HSP Duct

Model Name		Indoor Unit		AC024DNHDCG/AA	AC030DNHDCG/AA
		Outdoor Unit		AC024DXSCCG/AA	AC030DXSCCG/AA
US Code		Indoor Unit		CNG24HDD	CNG30HDD
		Outdoor Unit		CXG24SCD	CXG30SCD
Indoor Unit	External Dimension	Net Weight	kg(lbs)	33.5 (73.9)	44.5 (98.1)
		Shipping Weight	kg(lbs)	38.0 (83.8)	50.5 (111.3)
		Net Dimensions (WxHxD)	mm	1,200 x 250 x 700	1,300 x 300 x 700
			inch	47.24 x 9.84 x 27.56	51.18 x 11.81 x 27.56
		Shipping Dimensions (WxHxD)	mm	1,429 x 320 x 779	1,529 x 370 x 779
			inch	56.26 x 12.60 x 30.67	60.20 x 14.57 x 30.67
	Casing	Material	-	Steel	Steel
	Control System	Infrared remote control	-	AR-CH01U	AR-CH01U
		Wired remote control	-	MWR-WG01UN	MWR-WG01UN
	Drain Pump	Drain Pump	-	included	included
		Max.lifting Height / Displacement	in / gal/h	29.53 / 6.34	29.53 / 6.34
	Additional	Air Filter	-	-	-
Outdoor Unit	Power Supply		Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat Exchanger	Type	-	Fin & Tube	Fin & Tube
		Material	Fin	Al	Al
			Tube	Cu	Cu
		Fin Treatment	-	Anti-Corrosion	Anti-Corrosion
	Compressor	Model	-	UB8TN8300FJUSG	ATQ420D1UNT1
		Type	-	Twin Rotary	Twin BLDC Rotary
		Output	kW	2.91	3.6
		Oil	Type	POE	POE
			Initial Charge	cc (fl oz)	1,200
	Fan	Type	-	Propeller	Propeller
		Discharge direction	-	Side	Side
		Quantity	EA	1	2
		Air Flow Rate	m ³ /min	76	125
			ft ³ /min	2,684	4,414
	Fan Motor	Type	-	BLDC	BLDC
		Output	W x n	125 x 1	125 x 2
	Sound Level	Sound Pressure Level	Cooling	50	49
			Heating	52	51
		Sound Power Level		65	67
	External Dimension	Net Weight	kg(lbs)	70.5 (155.4)	96 (211.6)
		Shipping Weight	kg(lbs)	75.5 (166.4)	106 (233.7)
		Net Dimensions (WxHxD)	mm	940 x 998 x 330	940 x 1,420 x 330
			inch	37.01 x 39.29 x 12.99	37.01 x 55.91 x 12.99
		Shipping Dimensions (WxHxD)	mm	995 x 1,096 x 426	995 x 1,598 x 426
			inch	39.17 x 43.15 x 16.77	39.17 x 62.91 x 16.77
	Casing	Material	Body	Steel	Steel
	Operating Temp. Range	Cooling	°C (°F)	-20~50 (-4~122)	-20~50 (-4~122)
		Heating	°C (°F)	-25~24 (-13~75)	-25~24 (-13~75)

- Specification may be subject to change without prior notice.
 - 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant piping length 5m(16.4ft), Level differences : 0m(0ft))
 - 2) Select wire size based on the value of MCA
 - 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
 - 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level / Reference power : 1pW / Measured according to ISO 3741
 - 5) These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

2. Specification

HSP Duct

Model Name		Indoor Unit			AC036DNHDCG/AA	AC048DNHDCG/AA
		Outdooru Unit			AC036DXSCCG/AA	AC048DXSCCG/AA
US Code		Indoor Unit			CNG36HDD	CNG48HDD
		Outdooru Unit			CXG36SCD	CXG48SCD
System	Mode			-	Heat Pump	Heat Pump
	Performance	Capacity	Cooling (Min/Std/Max)	kW	4.3 / 10.5 / 14.6	4.5 / 13.7 / 16.9
				Btu/h	15,000 / 36,000 / 50,000	15,500 / 47,000 / 58,000
				US RT	1.25 / 3 / 4.16	1.29 / 3.91 / 4.83
			Heating (Min/Std/Max)	kW	3.3 / 11.7 / 18.1	3.9 / 15.8 / 20.8
				Btu/h	11,500 / 40,000 / 62,000	13,500 / 54,000 / 71,000
				US RT	0.95 / 3.33 / 5.16	1.12 / 4.5 / 5.91
	Power	Power Input	Cooling (Min/Std/Max)	kW	0.87 / 2.81 / 4.3	0.92 / 4.01 / 5.2
			Heating (Min/Std/Max)		0.72 / 3.25 / 7	0.85 / 5.27 / 8.2
		Current Input	Cooling (Min/Std/Max)	A	4.5 / 12.5 / 18.9	4.8 / 17.9 / 22.9
			Heating (Min/Std/Max)		3.6 / 14.5 / 30.8	4.3 / 23.6 / 32
		Current	MCA	A	35.8	36.2
			MOP	A	40	40
	Efficiency	EER2	Cooling	-	3.75	3.43
			Cooling (US)	(Btu/h)/W	12.8	11.7
		COP	Heating	W/W	3.6	3
		SEER2 (Cooling Energy Grade)		-	20	18
		HSPF2 (Heating Energy Grade)		-	9.8	9.5
		Pipe Connections	Liquid Pipe		Type	Flare
	Φ, mm(inch)				9.52 (3/8)	9.52 (3/8)
	Gas Pipe		Type	Flare	Flare	
			Φ, mm(inch)	15.88 (5/8)	15.88 (5/8)	
	Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	
	Pipe Length (ODU-IDU)		Standard	m (ft)	7.5 (24.6)	7.5 (24.6)
			Max.	m (ft)	75 (246)	75 (246)
			Elevation	m (ft)	30 (98.4)	30 (98.4)
		Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)	
	Wiring Connections	Communication	Min.	mm ²	0.75	0.75
				AWG	18	18
			Remark	-	F1,F2	F1,F2
	Refrigerant	Type		-	R32	R32
		Factory Charging		kg	3.5	3.5
				lbs	7.72	7.72
Indoor Unit	Power Supply			Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Hydrophile	Hydrophile
	Fan	Type		-	Sirocco	Sirocco
		Quantity		EA	3	3
		Air Flow Rate	Cooling (H/M/L)	m ³ /min	38.5 / 33 / 27	44 / 37 / 30.5
				ft ³ /min	1360 / 1165 / 954	1554 / 1307 / 1077
			Heating (H/M/L)	m ³ /min	38.5 / 33 / 27	44 / 37 / 30.5
				ft ³ /min	1360 / 1165 / 954	1554 / 1307 / 1077
	External Static Pressue		Min/Std/Max	In Wg	0.1 / 0.58 / 0.79	0.1 / 0.58 / 0.79
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	244 x 1	244 x 1
	Drain	Drain Pipe		Φ, mm	OD 26.67	OD 26.67
	Sound Level	Sound Pressure Level	H/M/L	dB(A)	43 / 39 / 35	45 / 41 / 37
		Sound Power Level		dB(A)	65	66

2. Specification

HSP Duct

Model Name		Indoor Unit		AC036DNHDCG/AA	AC048DNHDCG/AA
		Outdoor Unit		AC036DXSCCG/AA	AC048DXSCCG/AA
US Code		Indoor Unit		CNG36HDD	CNG48HDD
		Outdoor Unit		CXG36SCD	CXG48SCD
Indoor Unit	External Dimension	Net Weight	kg(lbs)	44.5 (98.1)	44.5 (98.1)
		Shipping Weight	kg(lbs)	50.5 (111.3)	50.5 (111.3)
		Net Dimensions (WxHxD)	mm	1,300 x 300 x 700	1,300 x 300 x 700
			inch	51.18 x 11.81 x 27.56	51.18 x 11.81 x 27.56
		Shipping Dimensions (WxHxD)	mm	1,529 x 370 x 779	1,529 x 370 x 779
			inch	60.20 x 14.57 x 30.67	60.20 x 14.57 x 30.67
	Casing	Material	-	Steel	Steel
	Control System	Infrared remote control	-	AR-CH01U	AR-CH01U
		Wired remote control	-	MWR-WG01UN	MWR-WG01UN
	Drain Pump	Drain Pump	-	included	included
		Max.lifting Height / Displacement	in / gal/h	29.53 / 6.34	29.53 / 6.34
	Additional	Air Filter	-	-	-
Outdoor Unit	Power Supply		Φ,#,V,Hz	1, 2, 208-230, 60	1, 2, 208-230, 60
	Heat Exchanger	Type	-	Fin & Tube	Fin & Tube
		Material	Fin	Al	Al
			Tube	Cu	Cu
		Fin Treatment	-	Anti-Corrosion	Anti-Corrosion
	Compressor	Model	-	ATQ420D1UNT1	ATQ420D1UNT1
		Type	-	Twin BLDC Rotary	Twin BLDC Rotary
		Output	kW	3.6	3.6
		Oil	Type	POE	POE
			Initial Charge	cc (fl oz)	1,500
	Fan	Type	-	Propellar	Propellar
		Discharge direction	-	Side	Side
		Quantity	EA	2	2
		Air Flow Rate	m ³ /min	125	125
			ft ³ /min	4,414	4,414
	Fan Motor	Type	-	BLDC	BLDC
		Output	W x n	125 x 2	125 x 2
	Sound Level	Sound Pressure Level	Cooling	50	51
			Heating	52	53
		Sound Power Level		69	70
	External Dimension	Net Weight	kg(lbs)	96 (211.6)	96 (211.6)
		Shipping Weight	kg(lbs)	106 (233.7)	106 (233.7)
		Net Dimensions (WxHxD)	mm	940 x 1,420 x 330	940 x 1,420 x 330
			inch	37.01 x 55.91 x 12.99	37.01 x 55.91 x 12.99
		Shipping Dimensions (WxHxD)	mm	995 x 1,598 x 426	995 x 1,598 x 426
			inch	39.17 x 62.91 x 16.77	39.17 x 62.91 x 16.77
	Casing	Material	Body	Steel	Steel
	Operating Temp. Range	Cooling	°C (°F)	-20~50 (-4~122)	-20~50 (-4~122)
		Heating	°C (°F)	-25~24 (-13~75)	-25~24 (-13~75)

- Specification may be subject to change without prior notice.
 - 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant piping length 5m(16.4ft), Level differences : 0m(0ft))
 - 2) Select wire size based on the value of MCA
 - 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
 - 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level / Reference power : 1pW / Measured according to ISO 3741
 - 5) These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

3. Summary Table

HSP Duct

Performance Characteristics

Model Code	Net Weight (lbs)	Capacity			Fan Speed	Air Flow Rate		Sound Pressure Level (dBA)	Sound Power Level (dBA)
			Cooling (Btu/h)	Heating (Btu/h)		Cooling (CFM)	Heating (CFM)		
CNG09HDD (AC009DNHDCG/AA)	57.3	Max.	14,000	15,000	High	456	456	41	61
		Std.	9,000	12,000	Mid	364	364	35	-
		Min.	3,300	2,800	Low	279	279	28	-
CNG12HDD (AC012DNHDCG/AA)	57.3	Max.	15,000	18,000	High	516	516	42	62
		Std.	12,000	14,000	Mid	410	410	36	-
		Min.	3,500	3,000	Low	318	318	29	-
CNG18HDD (AC018DNHDCG/AA)	73.9	Max.	24,000	30,000	High	841	841	40	61
		Std.	18,000	20,000	Mid	735	735	36	-
		Min.	6,000	5,000	Low	593	593	32	-
CNG24HDD (AC024DNHDCG/AA)	73.9	Max.	32,000	39,000	High	841	841	41	62
		Std.	23,000	27,000	Mid	735	735	37	-
		Min.	8,400	7,000	Low	607	607	33	-
CNG30HDD (AC030DNHDCG/AA)	98.1	Max.	41,000	55,000	High	1,130	1,130	41	63
		Std.	30,000	35,000	Mid	946	946	37	-
		Min.	14,500	11,000	Low	791	791	33	-
CNG36HDD (AC036DNHDCG/AA)	98.1	Max.	50,000	62,000	High	1,360	1,360	43	65
		Std.	36,000	40,000	Mid	1,165	1,165	39	-
		Min.	15,000	11,500	Low	954	954	35	-
CNG48HDD (AC048DNHDCG/AA)	98.1	Max.	58,000	71,000	High	1,554	1,554	45	66
		Std.	47,000	54,000	Mid	1,307	1,307	41	-
		Min.	15,500	13,500	Low	1,077	1,077	37	-

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

Model		Outdoor Unit				Input Current (Amperes)				Power Supply	
Indoor Unit	Outdoor Unit	Rated	Voltage range		Max	Outdoor Unit		Indoor Unit	Total	MCA(A)	MOP(A)
		Hz	Volts	Min.		Cooling	Heating				
CNG09HDD (AC009DNHDCG/AA)	CXG09SCD (AC009DXSCCG/AA)	60	208 to 230	187	253	11.74	11.74	2.10	13.84	13.9	15
CNG12HDD (AC012DNHDCG/AA)	CXG12SCD (AC012DXSCCG/AA)	60	208 to 230	187	253	11.74	11.74	2.10	13.84	13.9	15
CNG18HDD (AC018DNHDCG/AA)	CXG18SCD (AC018DXSCCG/AA)	60	208 to 230	187	253	19.64	19.64	2.10	21.74	22.7	25
CNG24HDD (AC024DNHDCG/AA)	CXG24SCD (AC024DXSCCG/AA)	60	208 to 230	187	253	23.64	23.64	2.10	25.74	26.7	30
CNG30HDD (AC030DNHDCG/AA)	CXG30SCD (AC030DXSCCG/AA)	60	208 to 230	187	253	31.47	31.47	3.50	34.97	35.0	40
CNG36HDD (AC036DNHDCG/AA)	CXG36SCD (AC036DXSCCG/AA)	60	208 to 230	187	253	31.47	31.47	3.50	34.97	35.8	40
CNG48HDD (AC048DNHDCG/AA)	CXG48SCD (AC048DXSCCG/AA)	60	208 to 230	187	253	31.22	31.22	3.50	34.72	36.2	40

NOTE

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

4. Capacity Table

HSP Duct

(1)CNG09HDD(AC009DNHDCG/AA)+CXG09SCD (AC009DXSCCG/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	11.1	8.9	0.78	11.7	9.1	0.80	12.2	9.4	0.82	12.6	9.7	0.83	12.9	9.6	0.84	13.5	9.5	0.86	14.2	9.3	0.88
70	12.4	9.6	0.72	13.0	9.9	0.74	13.6	10.2	0.75	14.0	10.5	0.77	14.3	10.4	0.78	15.0	10.3	0.79	15.7	10.1	0.81
95	8.0	5.7	0.66	8.4	5.9	0.67	8.7	6.1	0.69	9.0	6.3	0.70	9.2	6.2	0.71	9.6	6.2	0.72	10.1	6.1	0.74
115	11.1	8.6	1.38	11.7	8.9	1.41	12.2	9.2	1.44	12.6	9.5	1.47	12.9	9.4	1.48	13.5	9.3	1.51	14.2	9.1	1.54
122	8.4	7.4	1.15	8.8	7.6	1.18	9.2	7.8	1.20	9.5	8.1	1.23	9.7	8.0	1.24	10.2	7.9	1.26	10.7	7.8	1.29

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
-13	5.9	0.97	6.2	0.99	6.5	1.01	6.7	1.03	6.8	1.04	7.2	1.06
-4	8.2	1.23	8.7	1.26	9.0	1.28	9.3	1.31	9.5	1.32	10.0	1.35
14	12.4	1.61	13.0	1.64	13.6	1.67	14.0	1.71	14.3	1.72	15.0	1.76
32	12.9	1.32	13.6	1.35	14.2	1.38	14.6	1.41	14.9	1.42	15.6	1.45
47	10.6	0.91	11.2	0.93	11.6	0.95	12.0	0.97	12.2	0.98	12.9	1.00
75.2	15.3	1.09	16.1	1.11	16.8	1.13	17.3	1.15	17.6	1.17	18.5	1.19

NOTE

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

4. Capacity Table

HSP Duct

(2) CNG12HDD(AC012DNHDCG/AA)+CXG12SCD (AC012DXSCCG/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	11.7	9.3	0.85	12.3	9.6	0.87	12.8	9.9	0.89	13.2	10.2	0.91	13.5	10.1	0.92	14.1	10.0	0.94	14.8	9.8	0.95
70	13.3	10.3	0.82	14.0	10.6	0.83	14.6	10.9	0.85	15.0	11.3	0.87	15.3	11.1	0.88	16.1	11.0	0.89	16.9	10.8	0.91
95	10.6	7.7	0.96	11.2	7.9	0.98	11.6	8.1	1.00	12.0	8.4	1.02	12.2	8.3	1.03	12.9	8.2	1.05	13.5	8.1	1.07
115	11.7	9.0	1.55	12.3	9.3	1.58	12.8	9.6	1.61	13.2	9.9	1.64	13.5	9.8	1.66	14.1	9.7	1.69	14.8	9.5	1.73
122	9.0	7.9	1.32	9.5	8.2	1.34	9.9	8.4	1.37	10.2	8.7	1.40	10.4	8.6	1.41	10.9	8.5	1.44	11.5	8.3	1.47

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
-13	6.2	1.08	6.5	1.10	6.8	1.12	7.0	1.15	7.1	1.16	7.5	1.18
-4	8.8	1.22	9.3	1.25	9.7	1.27	10.0	1.30	10.2	1.31	10.7	1.34
14	13.0	1.81	13.7	1.84	14.3	1.88	14.7	1.92	15.0	1.94	15.7	1.98
32	13.6	1.48	14.3	1.51	14.9	1.54	15.4	1.57	15.7	1.58	16.5	1.62
47	12.4	1.10	13.0	1.12	13.6	1.15	14.0	1.17	14.3	1.18	15.0	1.21
75.2	16.1	1.21	16.9	1.24	17.7	1.26	18.2	1.29	18.6	1.30	19.5	1.33

NOTE

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

4. Capacity Table

HSP Duct

(3) CNG18HDD(AC018DNHDCG/AA)+CXG18SCD (AC018DXSCCG/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	21.0	16.9	1.3	22.1	17.4	1.3	23.0	18.0	1.4	23.8	18.5	1.4	24.2	18.3	1.4	25.4	18.2	1.4	26.7	17.8	1.5
70	22.8	17.9	1.2	24.0	18.4	1.2	25.0	19.0	1.2	25.7	19.6	1.3	26.3	19.4	1.3	27.6	19.2	1.3	28.9	18.8	1.3
95	15.9	12.3	1.4	16.8	12.7	1.4	17.5	13.1	1.5	18.0	13.5	1.5	18.4	13.4	1.5	19.3	13.2	1.5	20.2	13.0	1.6
115	16.7	13.3	2.3	17.6	13.7	2.3	18.3	14.1	2.4	18.9	14.6	2.4	19.3	14.4	2.4	20.2	14.3	2.5	21.3	14.0	2.5
122	15.1	13.9	2.2	15.9	14.3	2.2	16.6	14.8	2.2	17.1	15.2	2.3	17.4	15.1	2.3	18.3	14.9	2.4	19.2	14.6	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
-13	15.7	2.6	15.5	2.6	15.4	2.6	15.2	2.5	15.0	2.5	14.9	2.5
-4	20.6	3.4	20.4	3.4	20.2	3.3	20.0	3.3	19.8	3.3	19.6	3.2
14	28.8	4.0	28.6	4.0	28.3	4.0	28.0	3.9	27.7	3.9	27.4	3.8
32	33.0	3.9	32.6	3.8	32.3	3.8	32.0	3.8	31.7	3.7	31.4	3.7
47	20.6	1.7	20.4	1.7	20.2	1.6	20.0	1.6	19.8	1.6	19.6	1.6
75.2	37.1	2.4	36.7	2.4	36.4	2.4	36.0	2.3	35.6	2.3	35.3	2.3



NOTE

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

4. Capacity Table

HSP Duct

(4) CNG24HDD(AC024DNHDCG/AA)+CXG24SCD (AC024DXSCCG/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	26.5	20.8	1.1	27.9	21.5	1.1	29.1	22.1	1.1	30.0	22.8	1.2	30.6	22.6	1.2	32.1	22.3	1.2	33.7	21.9	1.2
70	23.8	17.4	1.4	25.0	18.0	1.4	26.1	18.5	1.4	26.9	19.1	1.4	27.4	18.9	1.5	28.8	18.7	1.5	30.3	18.3	1.5
95	20.3	14.1	1.8	21.4	14.5	1.8	22.3	14.9	1.9	23.0	15.4	1.9	23.5	15.3	1.9	24.6	15.1	2.0	25.9	14.8	2.0
115	21.6	17.4	2.8	22.7	17.9	2.9	23.6	18.4	2.9	24.4	19.0	3.0	24.9	18.8	3.0	26.1	18.6	3.1	27.4	18.3	3.1
122	19.1	18.3	2.7	20.1	18.9	2.8	21.0	19.5	2.9	21.6	20.1	2.9	22.0	19.9	2.9	23.1	19.7	3.0	24.3	19.3	3.1

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
-13	19.5	2.3	19.3	2.3	19.1	2.3	18.9	2.3	18.7	2.3	18.5	2.2
-4	27.8	4.7	27.5	4.7	27.3	4.6	27.0	4.6	26.7	4.5	26.5	4.5
14	34.5	5.3	34.2	5.3	33.8	5.2	33.5	5.2	33.1	5.1	32.8	5.1
32	38.9	3.8	38.6	3.8	38.2	3.8	37.8	3.7	37.4	3.7	37.0	3.6
47	27.8	2.5	27.5	2.4	27.3	2.4	27.0	2.4	26.7	2.4	26.5	2.4
75.2	38.9	3.1	38.6	3.1	38.2	3.0	37.8	3.0	37.4	3.0	37.0	2.9

 NOTE

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

4. Capacity Table

HSP Duct

(5) CNG30HDD(AC030DNHDCG/AA)+CXG30SCD (AC030DXSCCG/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
-4	30.5	22.0	1.73	32.1	22.7	1.77	33.5	23.4	1.80	34.5	24.2	1.84	35.2	23.9	1.86	36.9	23.7	1.88	38.8	23.2	1.91
70	33.2	24.0	1.73	34.9	24.7	1.77	36.4	25.5	1.80	37.5	26.3	1.84	38.3	26.0	1.86	40.2	25.7	1.88	42.2	25.2	1.91
95	26.5	19.2	2.16	27.9	19.8	2.21	29.1	20.4	2.25	30.0	21.0	2.30	30.6	20.8	2.32	32.1	20.6	2.35	33.7	20.2	2.39
115	31.8	23.0	3.90	33.5	23.7	3.98	34.9	24.4	4.06	36.0	25.2	4.14	36.7	24.9	4.18	38.6	24.7	4.22	40.5	24.2	4.31
122	29.2	21.1	3.68	30.7	21.7	3.76	32.0	22.4	3.83	33.0	23.1	3.91	33.7	22.9	3.95	35.3	22.6	3.99	37.1	22.2	4.07

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
-13	28.8	4.31	28.6	4.27	28.3	4.22	28.0	4.18	27.7	4.14	27.4	4.10
-4	36.1	4.47	35.7	4.42	35.4	4.38	35.0	4.34	34.7	4.29	34.3	4.25
14	39.7	4.42	39.3	4.38	38.9	4.34	38.5	4.29	38.1	4.25	37.7	4.21
32	41.5	4.28	41.1	4.24	40.7	4.20	40.3	4.16	39.8	4.11	39.4	4.07
47	36.1	2.85	35.7	2.83	35.4	2.80	35.0	2.77	34.7	2.74	34.3	2.71
75.2	45.1	3.00	44.6	2.97	44.2	2.94	43.8	2.91	43.3	2.88	42.9	2.85

NOTE

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

4. Capacity Table

HSP Duct

(6)CNG36HDD(AC036DNHDCG/AA)+CXG36SCD (AC036DXSCCG/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
-4	35.0	25.3	2.25	36.9	26.1	2.29	38.4	26.9	2.34	39.6	27.7	2.39	40.4	27.4	2.41	42.4	27.2	2.44	44.5	26.6	2.48
70	39.8	28.7	2.38	41.9	29.6	2.43	43.7	30.6	2.48	45.0	31.5	2.53	45.9	31.2	2.55	48.2	30.9	2.58	50.6	30.3	2.63
95	31.8	23.0	2.64	33.5	23.7	2.70	34.9	24.4	2.75	36.0	25.2	2.81	36.7	24.9	2.84	38.6	24.7	2.87	40.5	24.2	2.92
115	33.4	24.1	4.18	35.2	24.9	4.26	36.7	25.7	4.35	37.8	26.5	4.44	38.6	26.2	4.48	40.5	25.9	4.53	42.5	25.4	4.62
122	30.3	23.4	3.83	31.8	24.1	3.91	33.2	24.9	3.99	34.2	25.7	4.07	34.9	25.4	4.12	36.6	25.1	4.16	38.5	24.6	4.24

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
-13	33.0	5.03	32.6	4.98	32.3	4.93	32.0	4.88	31.7	4.84	31.4	4.79
-4	41.2	5.32	40.8	5.27	40.4	5.22	40.0	5.17	39.6	5.11	39.2	5.06
14	43.3	5.19	42.8	5.14	42.4	5.09	42.0	5.04	41.6	4.99	41.2	4.94
32	47.4	5.02	46.9	4.97	46.5	4.92	46.0	4.88	45.5	4.83	45.1	4.78
47	41.2	3.35	40.8	3.32	40.4	3.28	40.0	3.25	39.6	3.22	39.2	3.19
75.2	53.6	3.85	53.0	3.81	52.5	3.77	52.0	3.74	51.5	3.70	51.0	3.66

NOTE

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

4. Capacity Table

HSP Duct

(7)CNG48HDD(AC048DNHDCG/AA)+CXG48SCD (AC048DXSCCG/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
-4	43.7	31.5	3.21	46.0	32.5	3.27	47.9	33.5	3.34	49.4	34.5	3.41	50.3	34.2	3.44	52.9	33.9	3.48	55.5	33.2	3.55
70	45.7	33.0	3.40	48.1	34.1	3.47	50.1	35.1	3.54	51.7	36.2	3.61	52.7	35.8	3.65	55.4	35.5	3.68	58.1	34.8	3.75
95	41.6	30.0	3.77	43.8	31.0	3.85	45.6	31.9	3.93	47.0	32.9	4.01	47.9	32.6	4.05	50.3	32.2	4.09	52.9	31.6	4.17
115	39.9	28.8	5.96	42.0	29.7	6.08	43.8	30.6	6.21	45.1	31.6	6.34	46.0	31.3	6.40	48.3	31.0	6.46	50.7	30.3	6.59
122	32.8	25.4	5.47	34.6	26.2	5.58	36.0	27.0	5.70	37.1	27.8	5.81	37.9	27.6	5.87	39.8	27.3	5.93	41.8	26.7	6.05

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
-13	38.9	6.24	38.6	6.18	38.2	6.12	37.8	6.06	37.4	6.00	37.0	5.94
-4	47.3	7.06	46.8	6.99	46.4	6.92	45.9	6.85	45.4	6.78	45.0	6.71
14	58.4	8.69	57.8	8.60	57.3	8.52	56.7	8.43	56.1	8.35	55.6	8.26
32	64.0	7.87	63.3	7.80	62.7	7.72	62.1	7.64	61.5	7.57	60.9	7.49
47	55.6	5.43	55.1	5.38	54.5	5.32	54.0	5.27	53.5	5.22	52.9	5.17
75.2	66.8	5.54	66.1	5.48	65.4	5.43	64.8	5.38	64.2	5.32	63.5	5.27

 NOTE

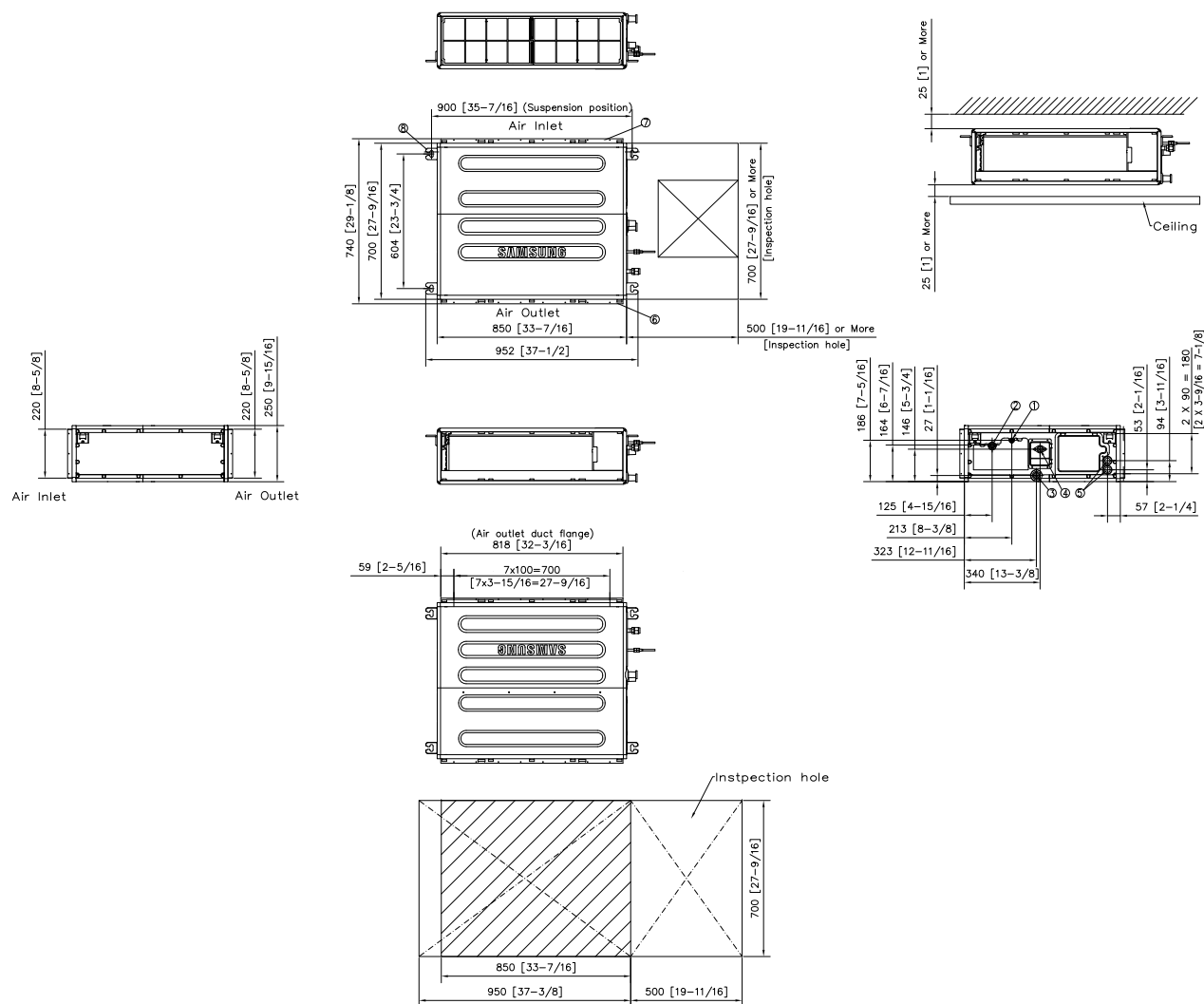
- The performance table shows the average value of each conditions.

5. Dimensional Drawing

HSP Duct

CNG09HDD (AC009DNHDCG/AA), CNG12HDD (AC012DNHDCG/AA)

Units : mm [inches]



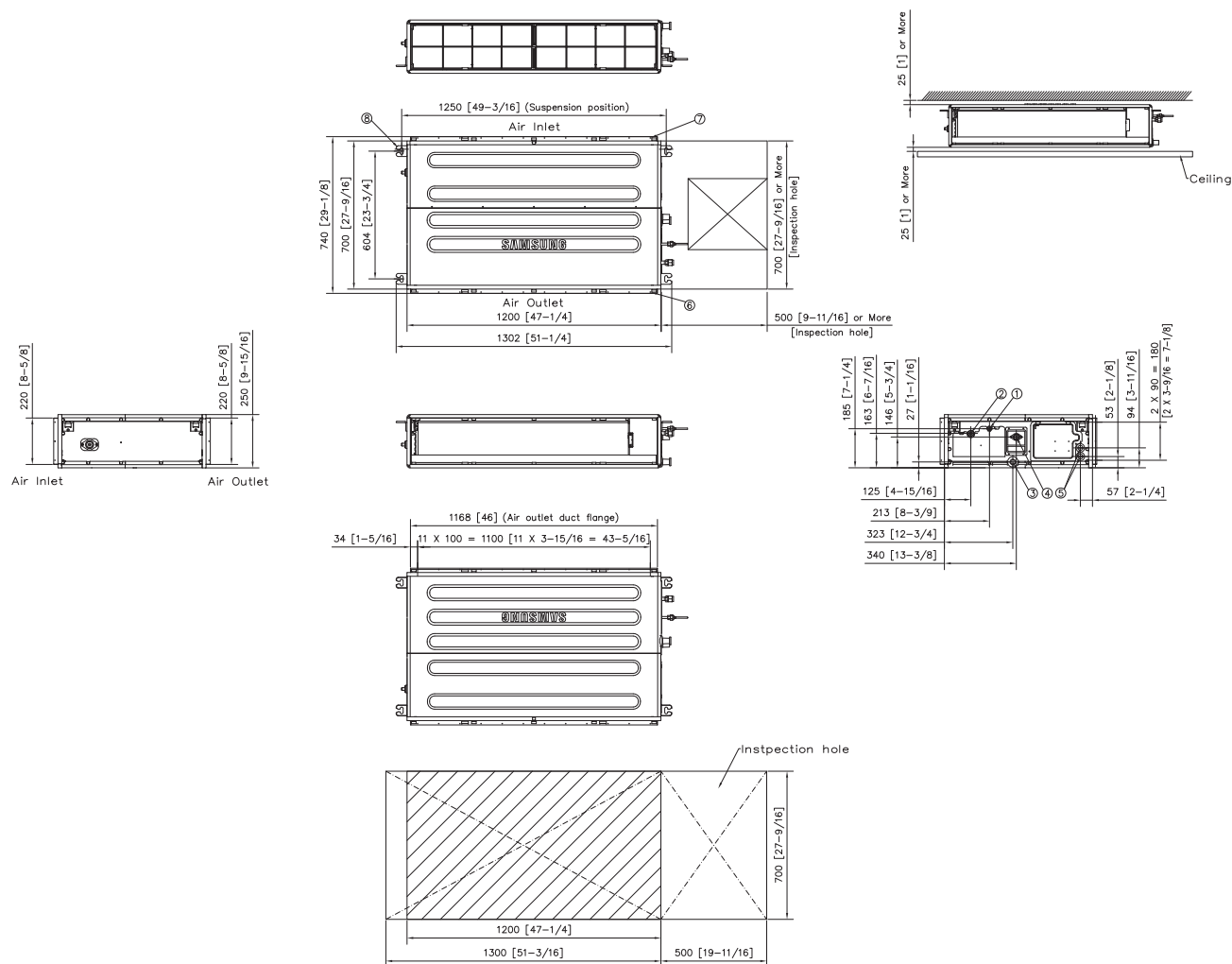
No.	Name	Description
①	Liquid pipe connection	Φ6.35 (1/4)
②	Gas pipe connection	Φ9.52 (3/8)
③	Drain pipe connection (Without drain pump)	OD 26.67
④	Drain pipe connection (With drain pump)	-
⑤	Power & Communication Conduits	-
⑥	Air discharge grille flange	-
⑦	Air suction flange	-
⑧	Hook	Use M8-M10 bolt(4ea)

5. Dimensional Drawing

HSP Duct

CNG18HDD (AC018DNHDCG/AA), CNG24HDD (AC024DNHDCG/AA)

Units : mm [inches]



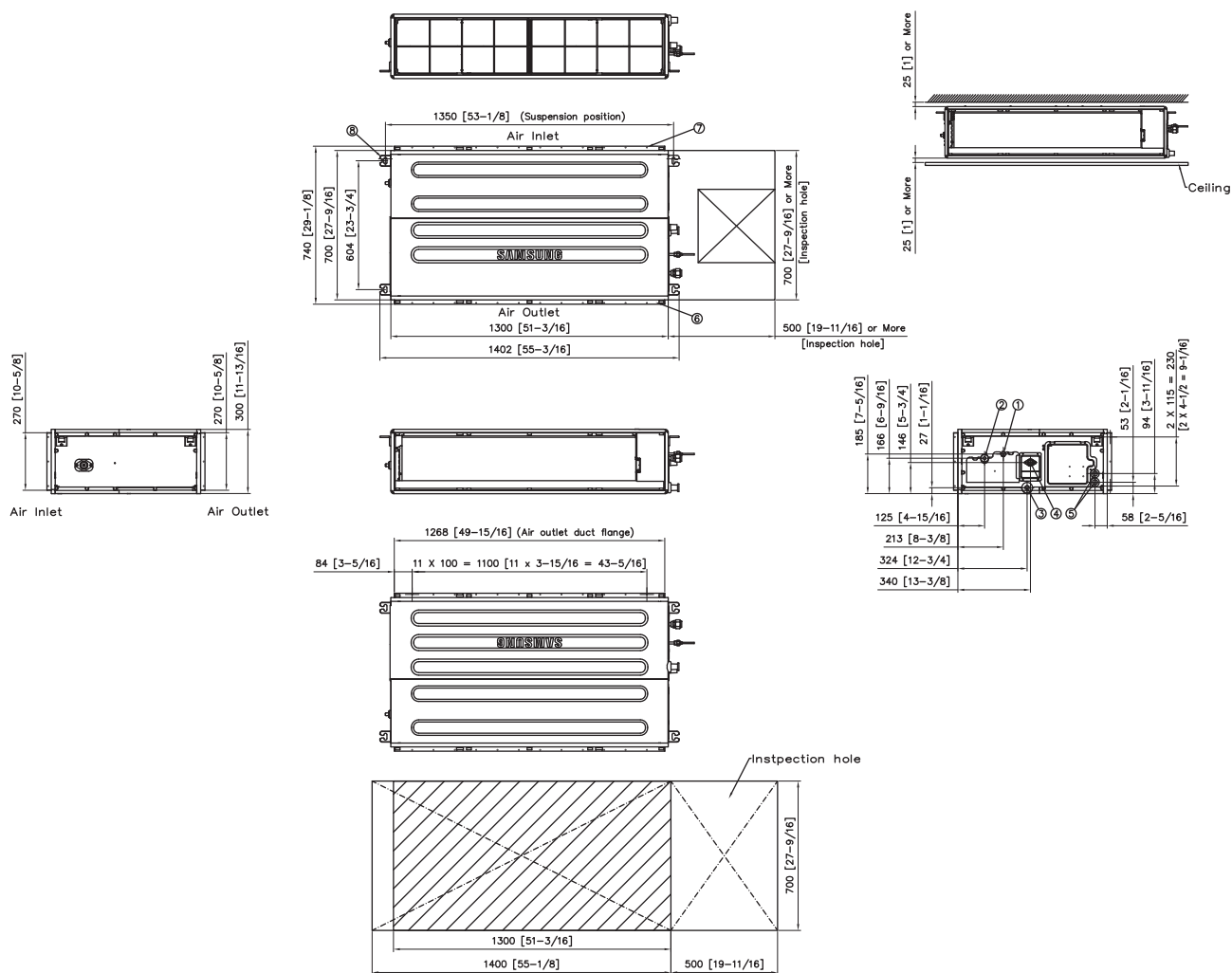
No.	Name	Description	
		CNG18HDD (AC018DNHDCG/AA)	CNG24HDD (AC024DNHDCG/AA)
①	Liquid pipe connection	Φ6.35 (1/4)	
②	Gas pipe connection	Φ12.7 (1/2)	Φ15.88 (5/8)
③	Drain pipe connection (Without drain pump)	OD 26.67	
④	Drain pipe connection (With drain pump)	-	
⑤	Power & Communication Conduits	-	
⑥	Air discharge grille flange	-	
⑦	Air suction flange	-	
⑧	Hook	Use M8~M10 bolt(4ea)	

5. Dimensional Drawing

HSP Duct

CNG30HDD (AC030DNHDCG/AA), CNG36HDD (AC036DNHDCG/AA), CNG48HDD (AC048DNHDCG/AA)

Units : mm [inches]

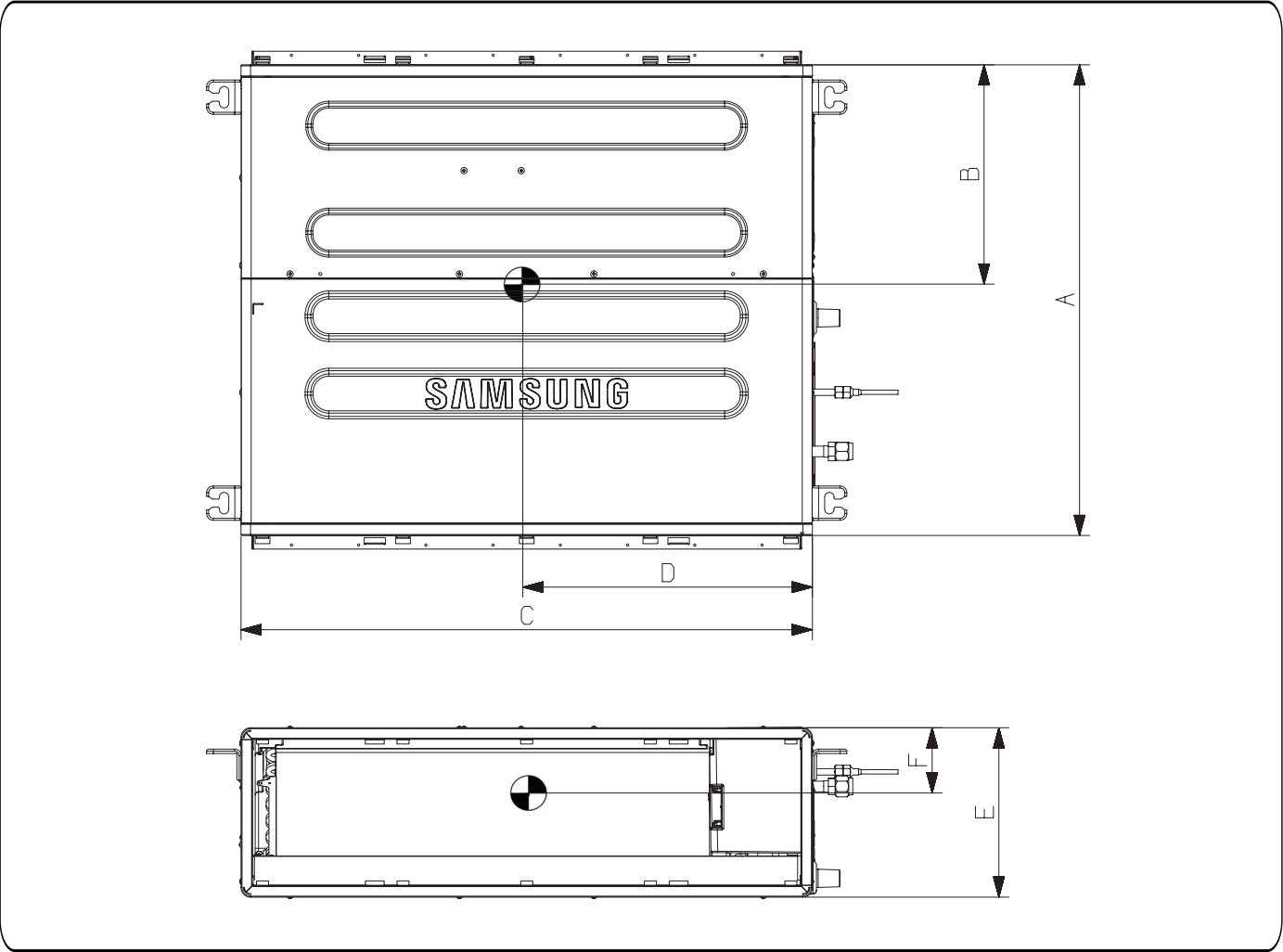


No.	Name	Description
①	Liquid pipe connection	Φ9.52 (3/8)
②	Gas pipe connection	Φ15.88 (5/8)
③	Drain pipe connection (Without drain pump)	OD 26.67
④	Drain pipe connection (With drain pump)	-
⑤	Power & Communication Conduits	-
⑥	Air discharge grille flange	-
⑦	Air suction flange	-
⑧	Hook	Use M8~M10 bolt(4ea)

6. Center of Gravity

HSP Duct

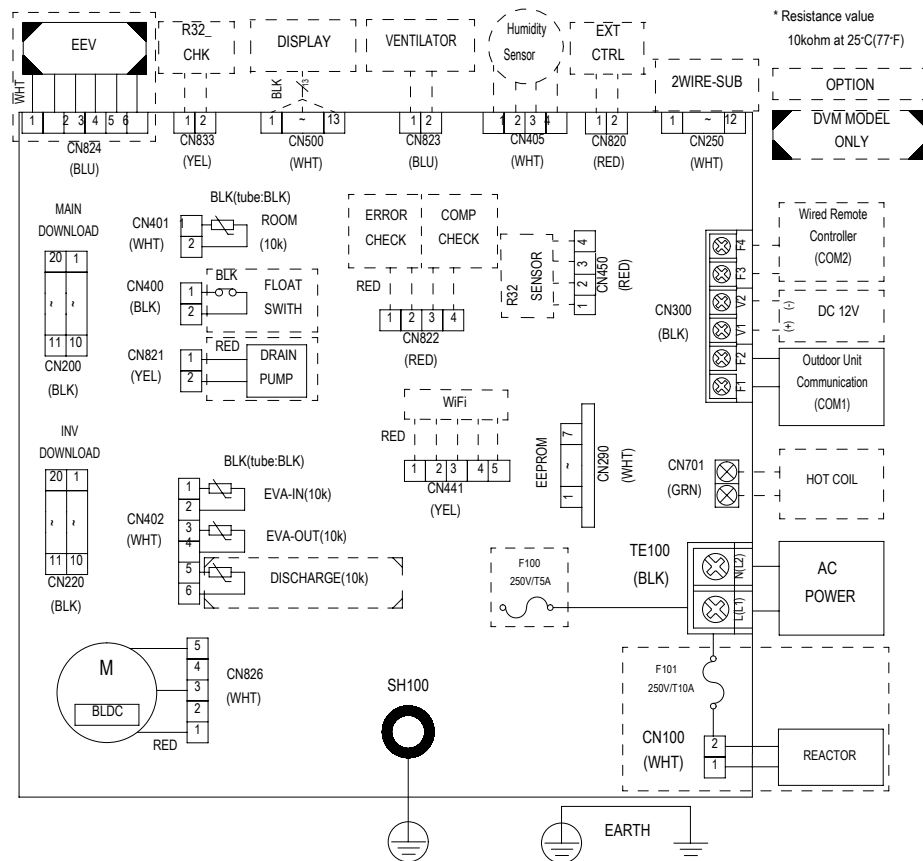
Units : mm [inches]



Model	A	B	C	D	E	F
CNG09HDD (AC009DNHDCG/AA) CNG12HDD (AC012DNHDCG/AA)	700 [27-9/16]	335 [14]	900 [35-7/16]	405 [15-15/16]	252 [9-15/16]	125 [4-15/16]
CNG18HDD (AC018DNHDCG/AA) CNG24HDD (AC024DNHDCG/AA)	700 [27-9/16]	265 [10-7/16]	1200 [47-1/4]	540 [21-17/64]	250 [9-13/16]	125 [4-15/16]
CNG30HDD (AC030DNHDCG/AA) CNG36HDD (AC036DNHDCG/AA) CNG48HDD (AC048DNHDCG/AA)	700 [27-9/16]	265 [10-7/16]	1300 [51-3/16]	625 [24-39/64]	300 [11-13/16]	150 [5-15/16]

7. Electrical Wiring Diagram

HSP Duct



2WIRE-SUB	SUB PBA for wired remote control communication	ROOM(10K)	Thermistor - Indoor Room	EEV	Electronic Expansion Valve
M-BLDC	Motor for Indoor Fan	EVA IN(10K)	Thermistor - IDU heat exchanger In	F100, F101	Fuse
DISPLAY	Panel LED display	EVA OUT(10K)	Thermistor - IDU heat exchanger Out	EEPROM	EEPROM SUB PBA
ERROR CHECK	Contact output port for error check	VENTILATOR	Contact output port for Ventilator control		
COMP CHECK	Contact output port for compressor operation check	EXT CTRL	Input port for external contact control		

NOTE

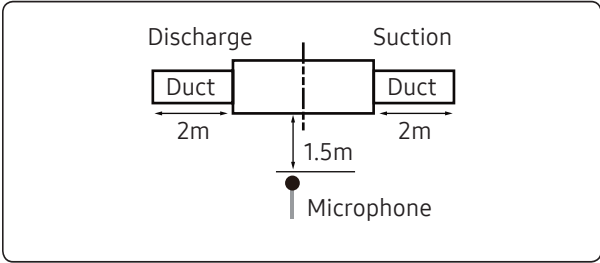
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⏏ Protective earth(screw), □□□ : connector, $\frac{N}{\text{wire}}$: The wire quantity

8. Sound Data

HSP Duct

Sound Pressure level

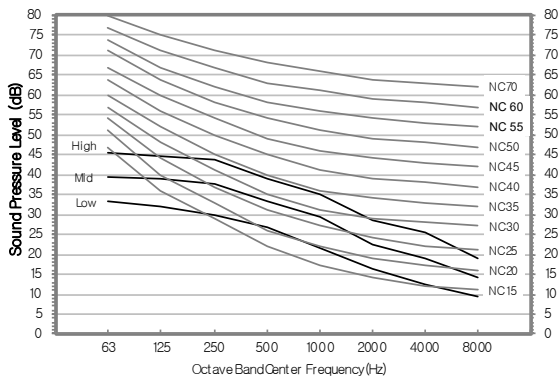
Unit: dB(A)



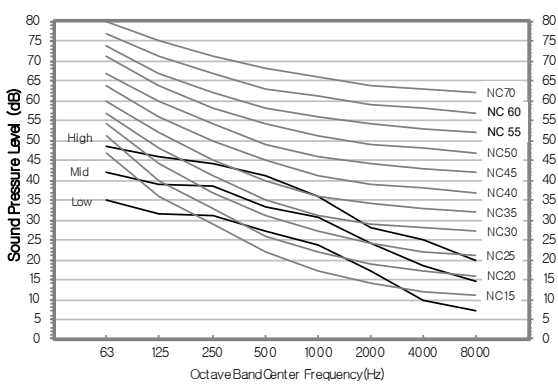
Model	High	Mid	Low
CNG09HDD (AC009DNHDCG/AA)	41	35	28
CNG12HDD (AC012DNHDCG/AA)	42	36	29
CNG18HDD (AC018DNHDCG/AA)	40	36	32
CNG24HDD (AC024DNHDCG/AA)	41	37	33

• NC Curve

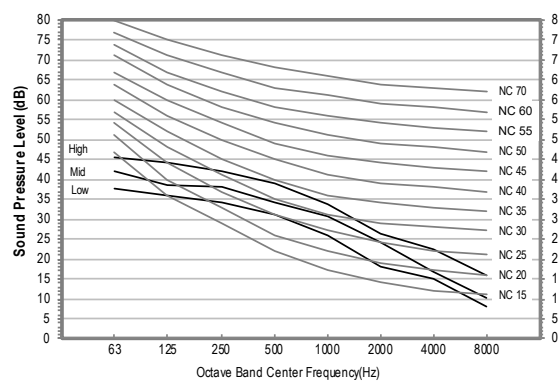
1) CNG09HDD (AC009DNHDCG/AA)



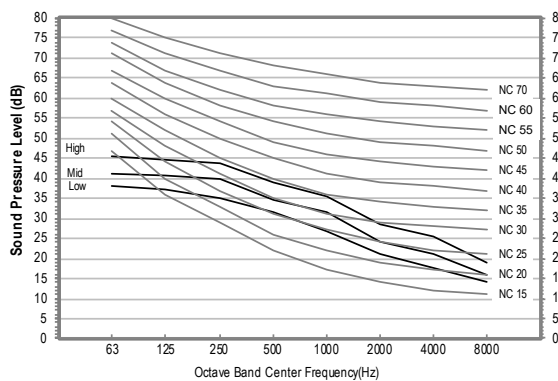
2) CNG12HDD (AC012DNHDCG/AA)



3) CNG18HDD (AC018DNHDCG/AA)



4) CNG24HDD (AC024DNHDCG/AA)



NOTE

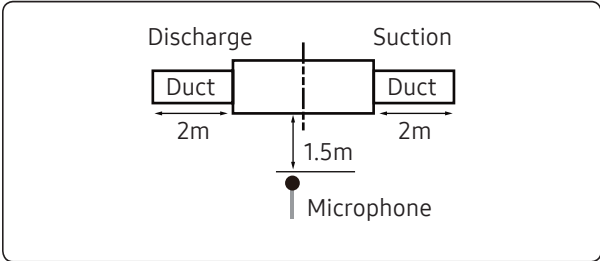
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

8. Sound Data

HSP Duct

Sound Pressure level

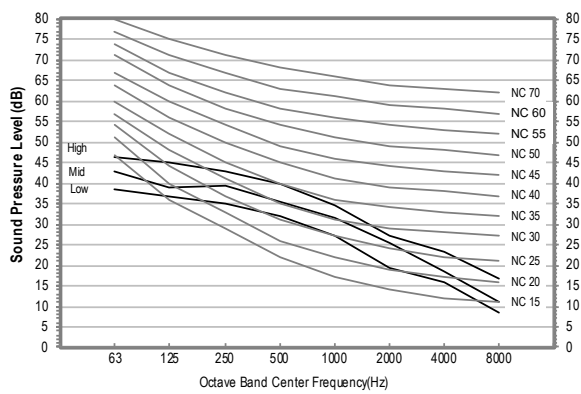
Unit: dB(A)



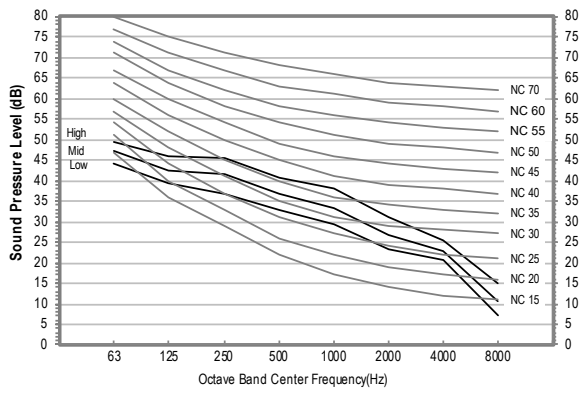
Model	High	Mid	Low
CNG30HDD (AC030DNHDCG/AA)	41	37	33
CNG36HDD (AC036DNHDCG/AA)	43	39	35
CNG48HDD (AC048DNHDCG/AA)	45	41	37

- NC Curve

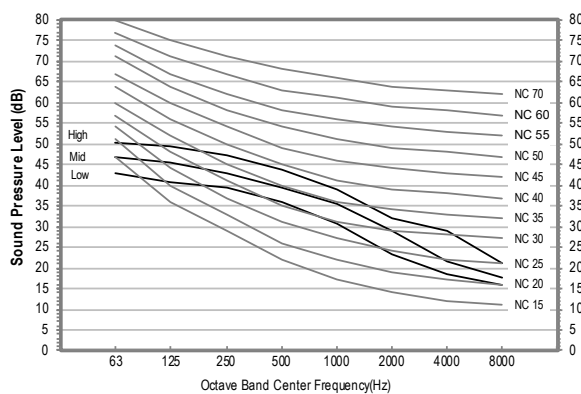
1) CNG30HDD (AC030DNHDCG/AA)



2) CNG36HDD (AC036DNHDCG/AA)



3) CNG48HDD (AC048DNHDCG/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

8. Sound Data

HSP Duct

Sound Power level



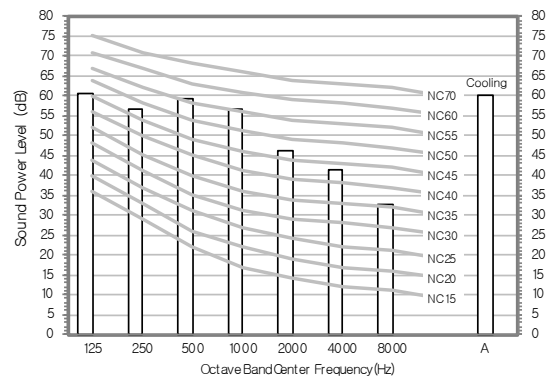
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

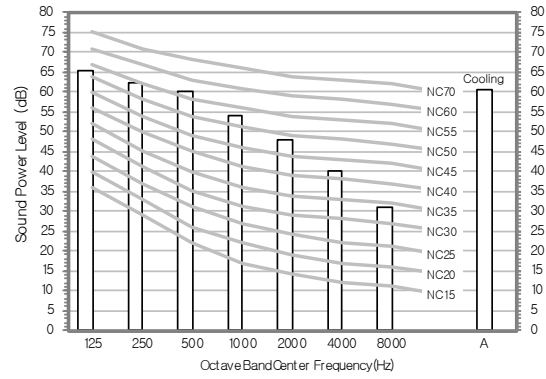
Model	Cooling
CNG09HDD (AC009DNHDCG/AA)	61
CNG12HDD (AC012DNHDCG/AA)	62
CNG18HDD (AC018DNHDCG/AA)	61
CNG24HDD (AC024DNHDCG/AA)	62

NC Curve

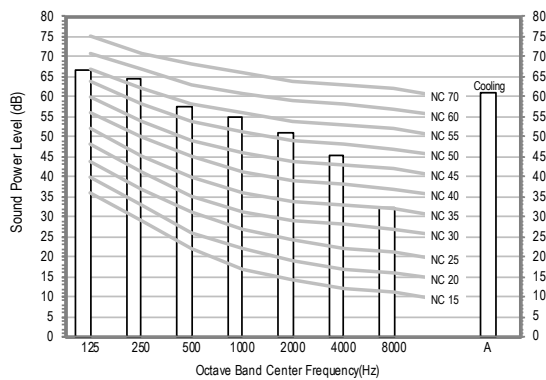
1) CNG09HDD (AC009DNHDCG/AA)



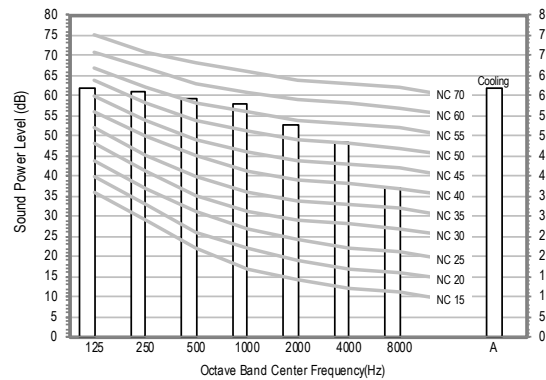
2) CNG12HDD (AC012DNHDCG/AA)



3) CNG18HDD (AC018DNHDCG/AA)



4) CNG24HDD (AC024DNHDCG/AA)



8. Sound Data

HSP Duct

Sound Power level

 NOTE

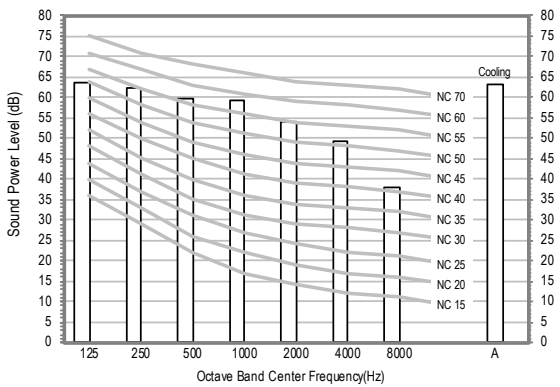
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

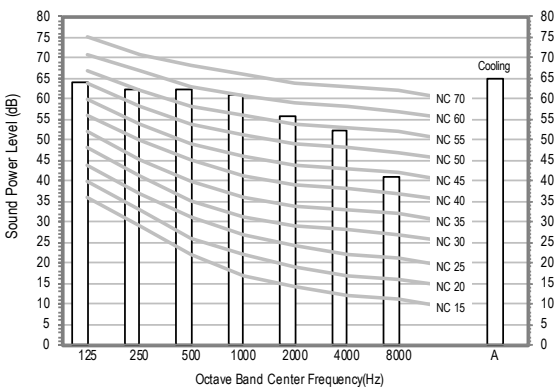
Model	Cooling
CNG30HDD (AC030DNHDCG/AA)	63
CNG36HDD (AC036DNHDCG/AA)	65
CNG48HDD (AC048DNHDCG/AA)	66

• NC Curve

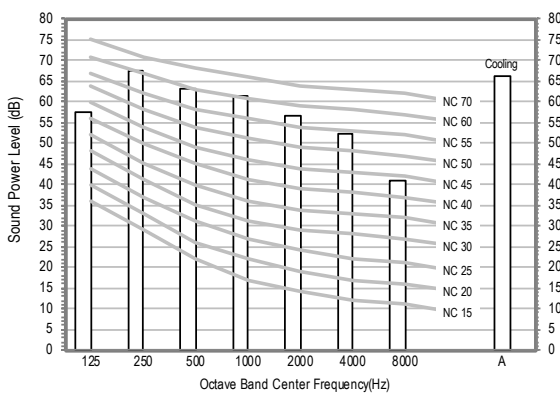
1) CNG30HDD (AC030DNHDCG/AA)



2) CNG36HDD (AC036DNHDCG/AA)



3) CNG48HDD (AC048DNHDCG/AA)

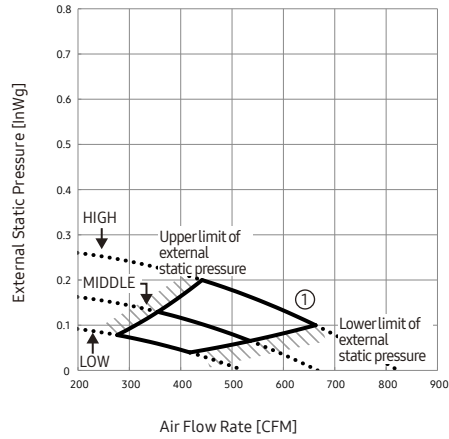


9. Fan Characteristics

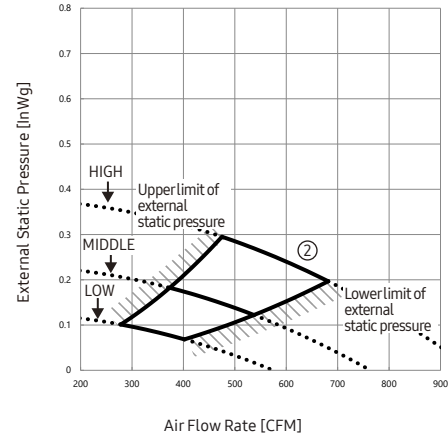
HSP Duct

CNG09HDD (AC009DNHDCG/AA)

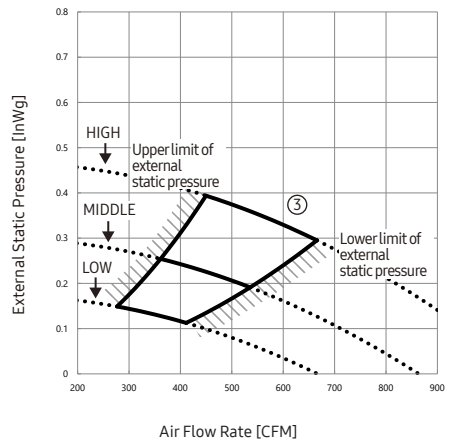
①	External Static Pressure(inWg)	Option Code
	$0.1 \leq P < 0.2$	01B3FC-1C5422-271A23-372000



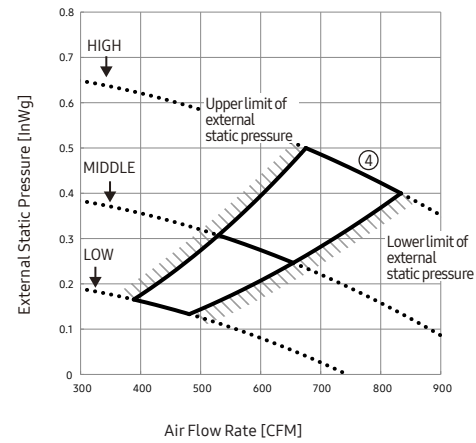
②	External Static Pressure(inWg)	Option Code
	$0.2 < P \leq 0.3$	01B3FC-1C5495-271A23-372000



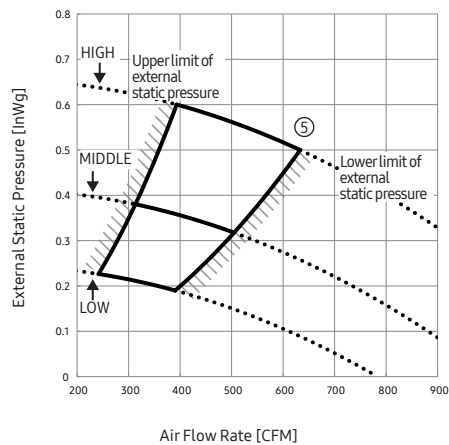
③	External Static Pressure(inWg)	Option Code
	$0.3 < P \leq 0.4$	01B3FC-1C54EA-271A23-372000



④	External Static Pressure(inWg)	Option Code
	$0.4 < P \leq 0.5$	01B3FC-1C588E-271A23-372000



⑤	External Static Pressure(inWg)	Option Code
	$0.5 < P \leq 0.6$	01B3FC-1C5970-271A23-372000

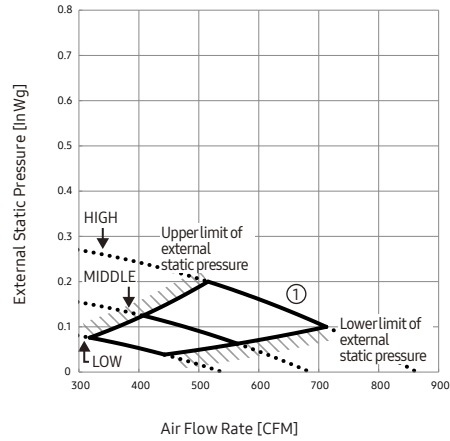


9. Fan Characteristics

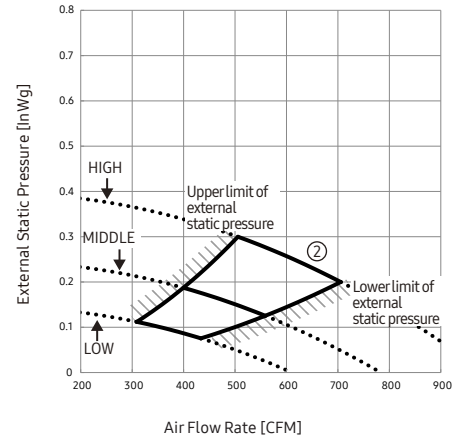
HSP Duct

CNG12HDD (AC012DNHDCG/AA)

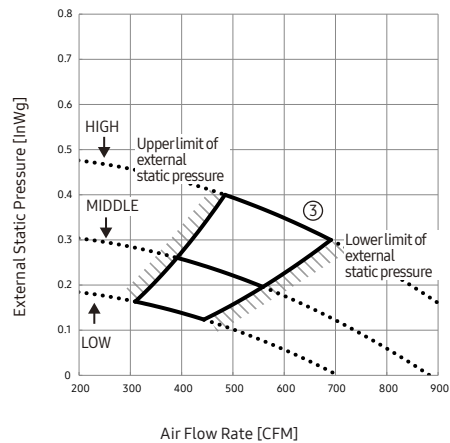
①	External Static Pressure(inWg)	Option Code
	$0.1 \leq P < 0.2$	01B3FC-1C5443-272328-372000



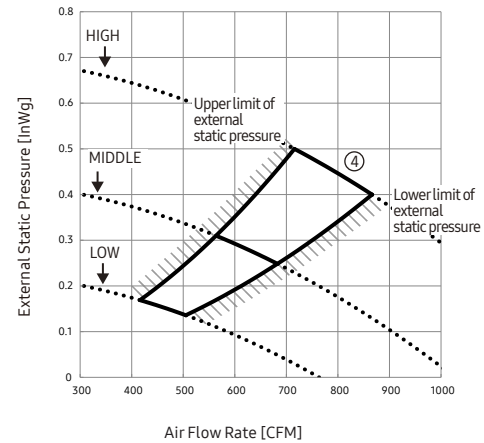
②	External Static Pressure(inWg)	Option Code
	$0.2 < P \leq 0.3$	01B3FC-1C54A7-272328-372000



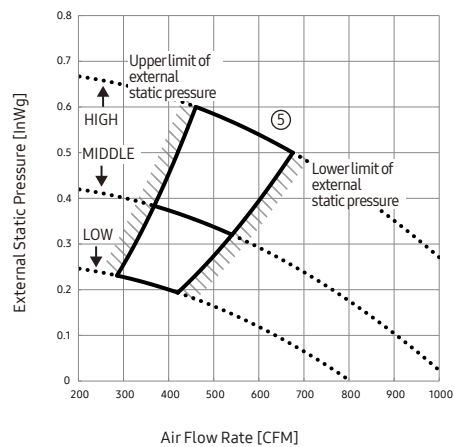
③	External Static Pressure(inWg)	Option Code
	$0.3 < P \leq 0.4$	01B3FC-1C54FC-272328-372000



④	External Static Pressure(inWg)	Option Code
	$0.4 < P \leq 0.5$	01B3FC-1C589F-272328-372000



⑤	External Static Pressure(inWg)	Option Code
	$0.5 < P \leq 0.6$	01B3FC-1C5981-272328-372000

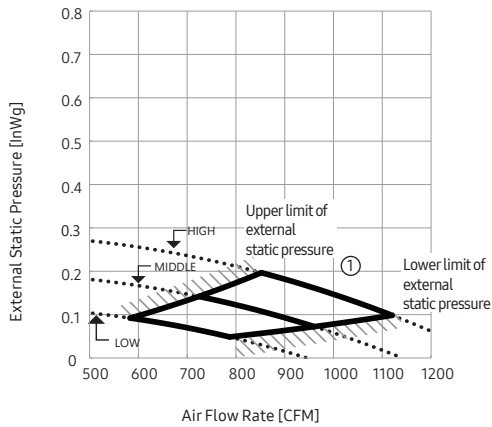


9. Fan Characteristics

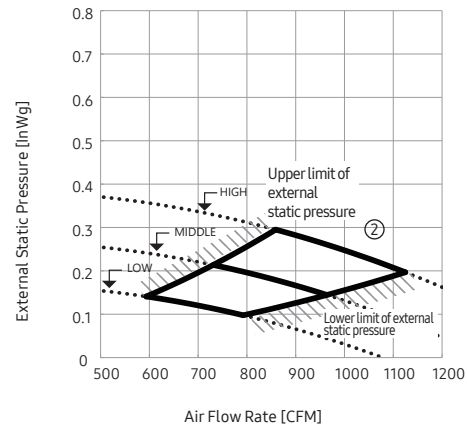
HSP Duct

CNG18HDD (AC018DNHDCG/AA)

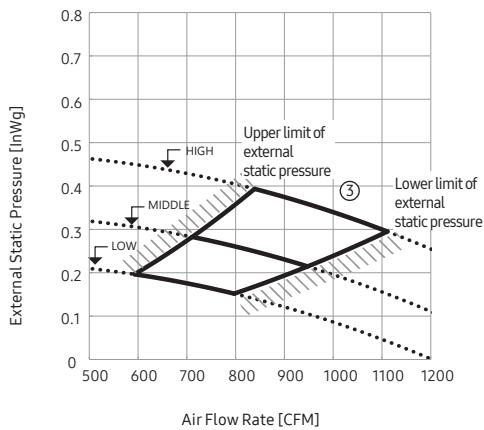
①	External Static Pressure(inWg)	Option Code
	$0.1 \leq P \leq 0.2$	01B3FC-1C5459-27343C-372020



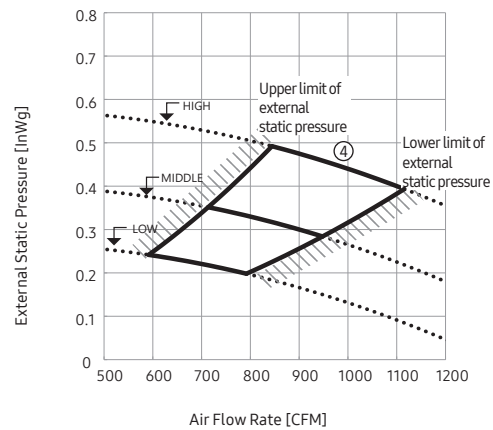
②	External Static Pressure(inWg)	Option Code
	$0.2 < P \leq 0.3$	01B3FC-1C54BD-27343C-372020



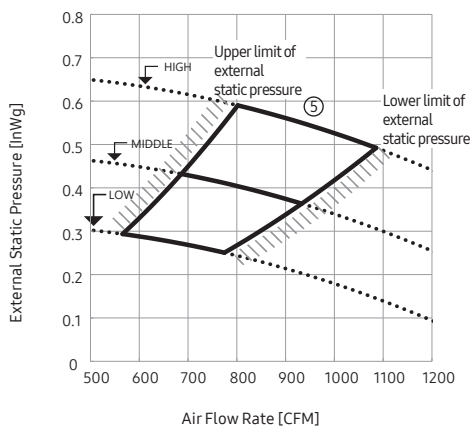
③	External Static Pressure(inWg)	Option Code
	$0.3 < P \leq 0.4$	01B3FC-1C5901-27343C-372020



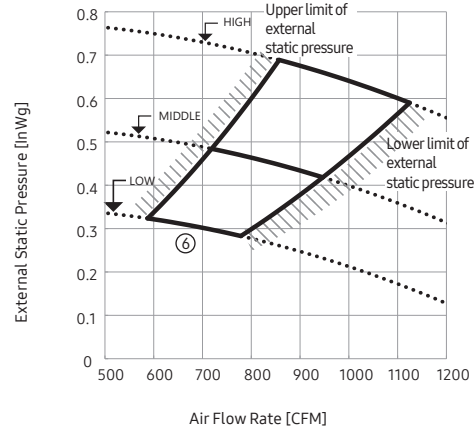
④	External Static Pressure(inWg)	Option Code
	$0.4 < P \leq 0.5$	01B3FC-1C5954-27343C-372020



⑤	External Static Pressure(inWg)	Option Code
	$0.5 < P \leq 0.6$	01B3FC-1C5997-27343C-372020



⑥	External Static Pressure(inWg)	Option Code
	$0.6 < P \leq 0.7$	01B3FC-1C59E9-27343C-372020

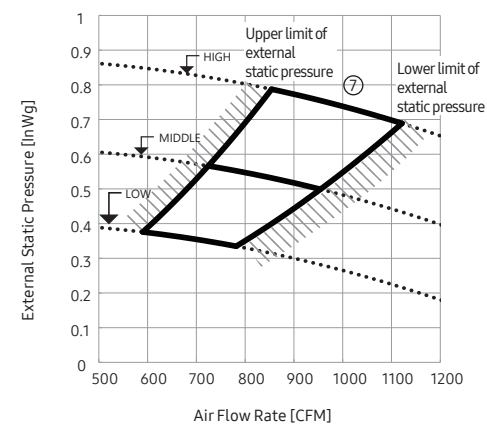


9. Fan Characteristics

HSP Duct

CNG18HDD (AC018DNHDCG/AA)

⑦	External Static Pressure(inWg)	Option Code
	0.7 < P ≤ 0.8	01B3FC-1C5D2C-27343C-372020

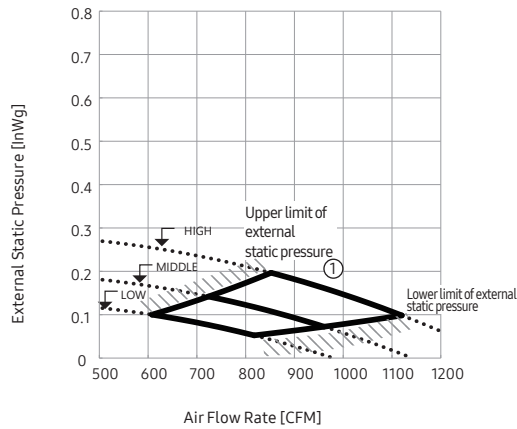


9. Fan Characteristics

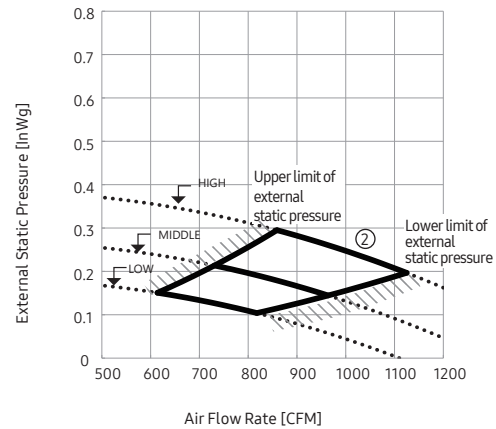
HSP Duct

CNG24HDD (AC024DNHDCG/AA)

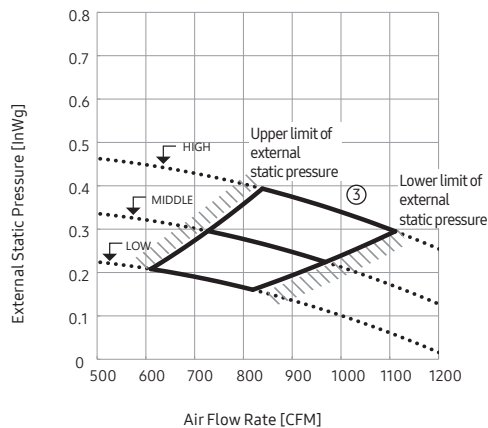
①	External Static Pressure(inWg)	Option Code
	$0.1 \leq P \leq 0.2$	01B3FC-1C545A-27484F-372020



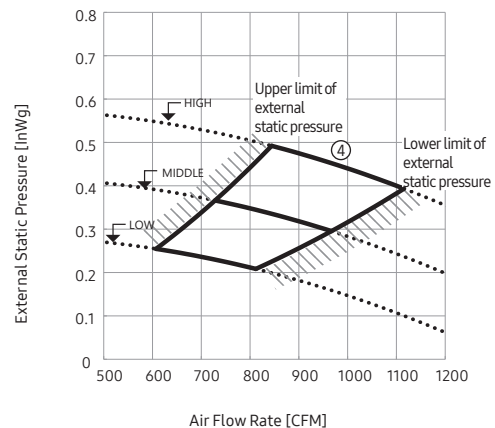
②	External Static Pressure(inWg)	Option Code
	$0.2 < P \leq 0.3$	01B3FC-1C548E-27484F-372020



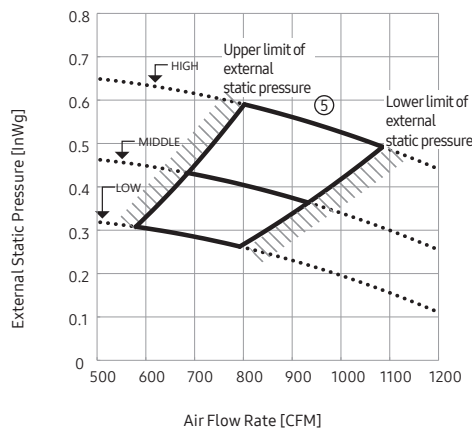
③	External Static Pressure(inWg)	Option Code
	$0.3 < P \leq 0.4$	01B3FC-1C5902-27484F-372020



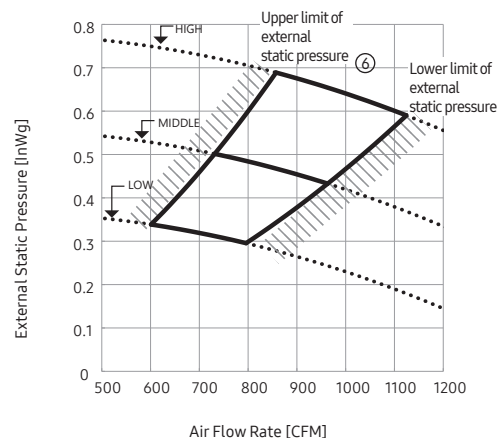
④	External Static Pressure(inWg)	Option Code
	$0.4 < P \leq 0.5$	01B3FC-1C5955-27484F-372020



⑤	External Static Pressure(inWg)	Option Code
	$0.5 < P \leq 0.6$	01B3FC-1C5998-27484F-372020



⑥	External Static Pressure(inWg)	Option Code
	$0.6 < P \leq 0.7$	01B3FC-1C59EA-27484F-372020

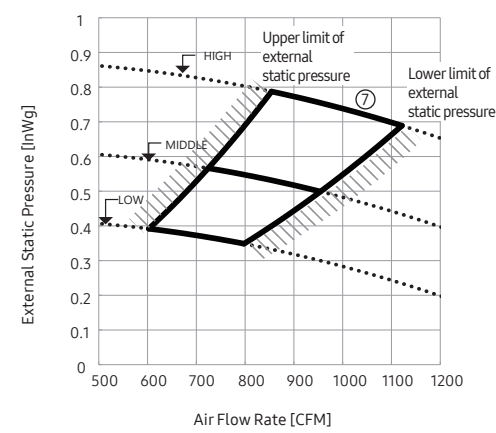


9. Fan Characteristics

HSP Duct

CNG24HDD (AC024DNHDCG/AA)

⑦	External Static Pressure(inWg)	Option Code
	0.7 < P ≤ 0.8	01B3FC-1C5D2D-27484F-372020

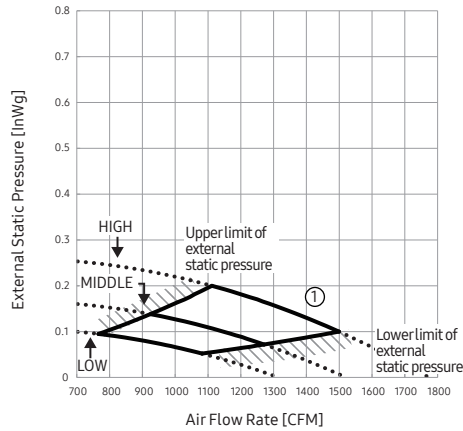


9. Fan Characteristics

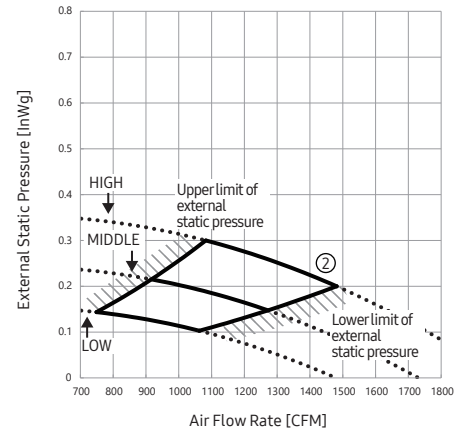
HSP Duct

CNG30HDD (AC030DNHDCG/AA)

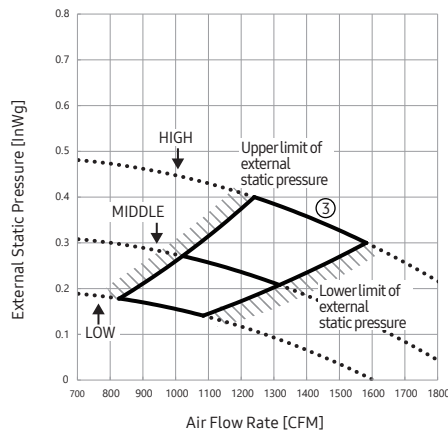
①	External Static Pressure(inWg)	Option Code
	$0.1 \leq P \leq 0.2$	01B3FC-1C5405-275A66-372045



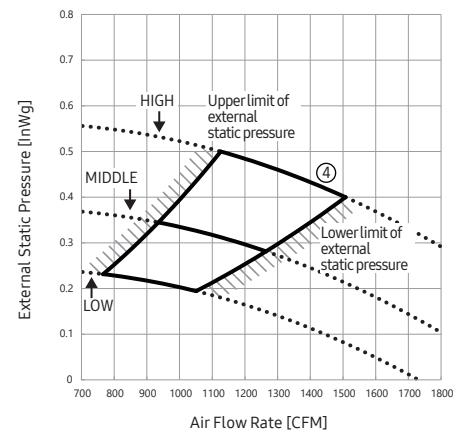
②	External Static Pressure(inWg)	Option Code
	$0.2 < P \leq 0.3$	01B3FC-1C5459-275A66-372045



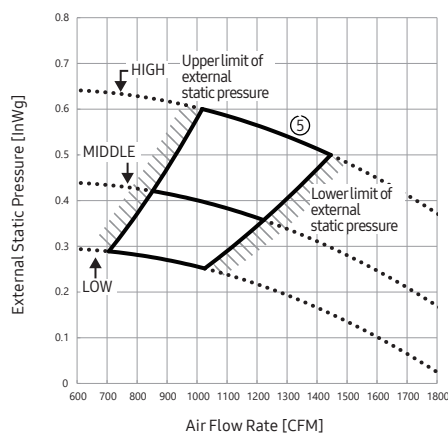
③	External Static Pressure(inWg)	Option Code
	$0.3 < P \leq 0.4$	01B3FC-1C54AC-275A66-372045



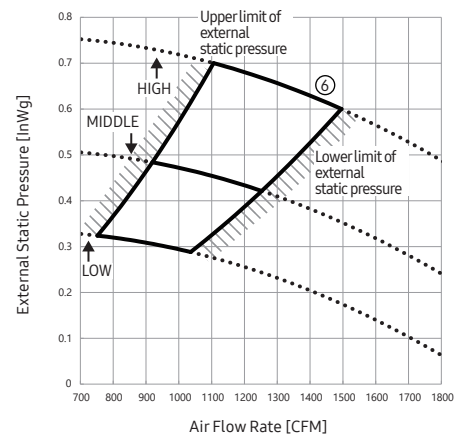
④	External Static Pressure(inWg)	Option Code
	$0.4 < P \leq 0.5$	01B3FC-1C54EF-275A66-372045



⑤	External Static Pressure(inWg)	Option Code
	$0.5 < P \leq 0.6$	01B3FC-1C5912-275A66-372045



⑥	External Static Pressure(inWg)	Option Code
	$0.6 < P \leq 0.7$	01B3FC-1C5954-275A66-372045

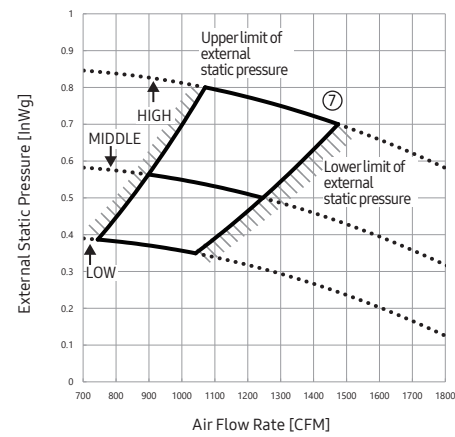


9. Fan Characteristics

HSP Duct

CNG30HDD (AC030DNHDCG/AA)

⑦	External Static Pressure(inWg)	Option Code
	0.7 < P ≤ 0.8	01B3FC-1C5987-275A66-372045

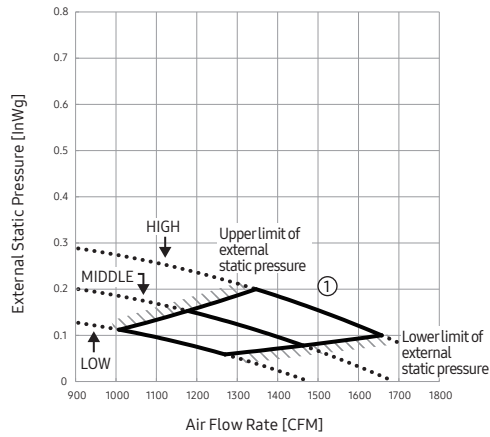


9. Fan Characteristics

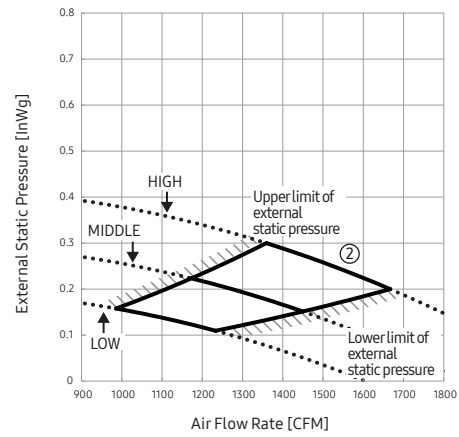
HSP Duct

CNG36HDD (AC036DNHDCG/AA)

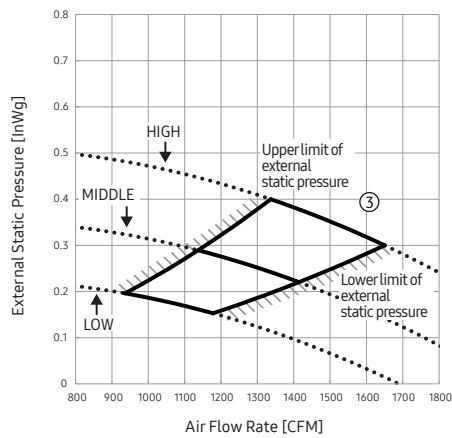
①	External Static Pressure(inWg)	Option Code
	$0.1 \leq P \leq 0.2$	01B3FC-1C5439-276975-372045



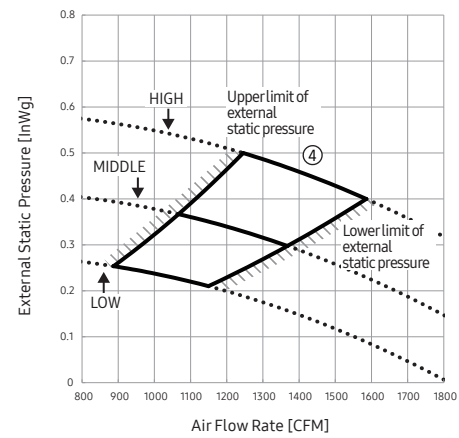
②	External Static Pressure(inWg)	Option Code
	$0.2 < P \leq 0.3$	01B3FC-1C548C-276975-372045



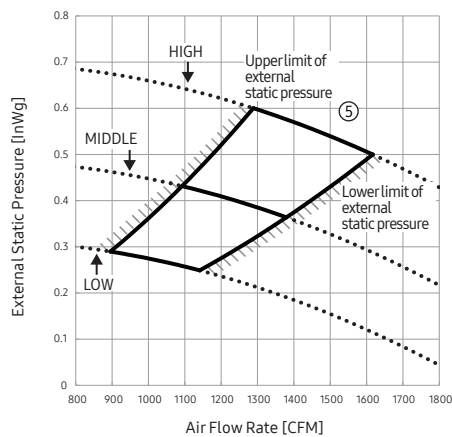
③	External Static Pressure(inWg)	Option Code
	$0.3 < P \leq 0.4$	01B3FC-1C54CE-276975-372045



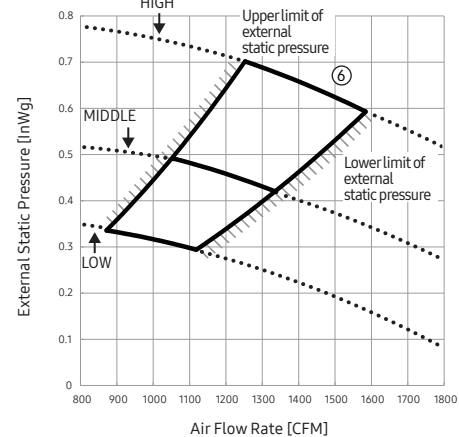
④	External Static Pressure(inWg)	Option Code
	$0.4 < P \leq 0.5$	01B3FC-1C55F1-276975-372045



⑤	External Static Pressure(inWg)	Option Code
	$0.5 < P \leq 0.6$	01B3FC-1C5933-276975-372045



⑥	External Static Pressure(inWg)	Option Code
	$0.6 < P \leq 0.7$	01B3FC-1C5965-276975-372045

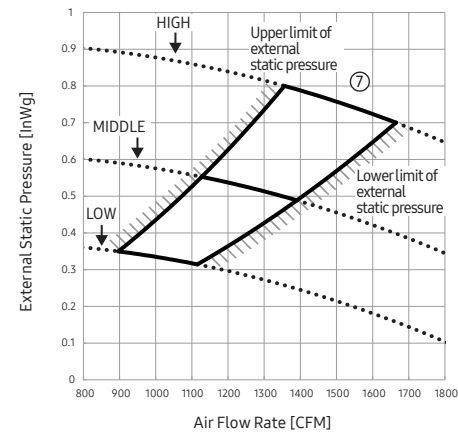


9. Fan Characteristics

HSP Duct

CNG36HDD (AC036DNHDCG/AA)

⑦	External Static Pressure(inWg)	Option Code
	0.7 < P ≤ 0.8	01B3FC-1C59A6-276975-372045

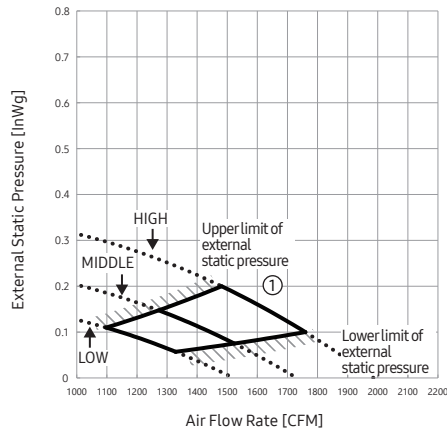


9. Fan Characteristics

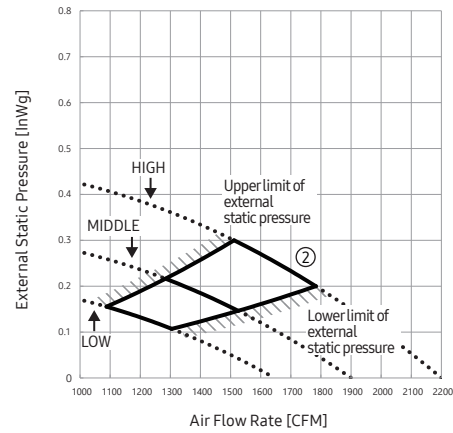
HSP Duct

CNG48HDD (AC048DNHDCG/AA)

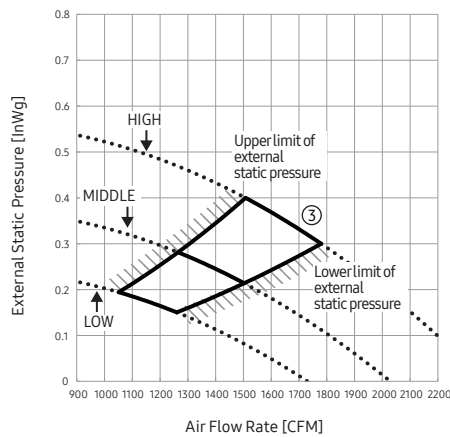
①	External Static Pressure(inWg)	Option Code
	$0.1 \leq P \leq 0.2$	01B3FC-1C545A-278C9B-372045



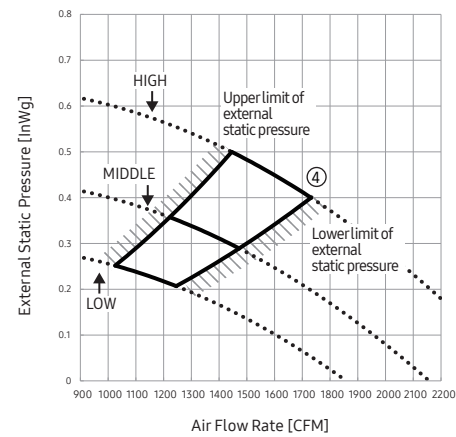
②	External Static Pressure(inWg)	Option Code
	$0.2 < P \leq 0.3$	01B3FC-1C54AD-278C9B-372045



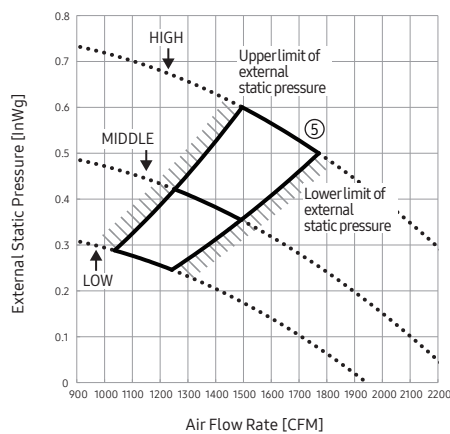
③	External Static Pressure(inWg)	Option Code
	$0.3 < P \leq 0.4$	01B3FC-1C54EF-278C9B-372045



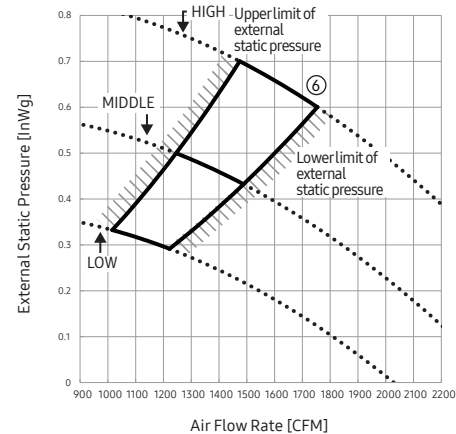
④	External Static Pressure(inWg)	Option Code
	$0.4 < P \leq 0.5$	01B3FC-1C5912-278C9B-372045



⑤	External Static Pressure(inWg)	Option Code
	$0.5 < P \leq 0.6$	01B3FC-1C5954-278C9B-372045



⑥	External Static Pressure(inWg)	Option Code
	$0.6 < P \leq 0.7$	01B3FC-1C5986-278C9B-372045

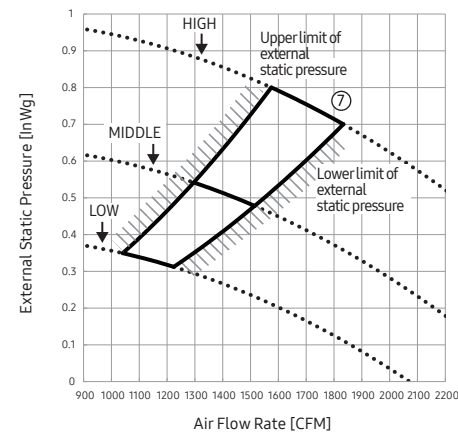


9. Fan Characteristics

HSP Duct

CNG48HDD (AC048DNHDCG/AA)

⑦	External Static Pressure(inWg)	Option Code
	0.7 < P ≤ 0.8	01B3FC-1C59C7-278C9B-372045



Outdoor Units

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1. Summary Table

Outdoor Units

Performance Characteristics

Capacity (Btu/h)	Model Code	Net Size (WxHxD inch)	Net Weight (lbs)	Airflow (CFM)	Sound Pressure Level (dBA)		Sound Power Level (dBA)
					Cooling	Heating	
9,000	CXG09SCD (AC009DXSCCG/AA)	31.10 x 21.57 x 11.22	69.4	1,059	46	47	59
12,000	CXG12SCD (AC012DXSCCG/AA)	31.10 x 21.57 x 11.22	69.4	1,059	47	48	61
18,000	CXG18SCD (AC018DXSCCG/AA)	34.65 x 31.42 x 12.20	116.8	2,154	51	51	65
24,000	CXG24SCD (AC024DXSCCG/AA)	37.01 x 39.29 x 12.99	155.4	2,684	50	52	65
30,000	CXG30SCD (AC030DXSCCG/AA)	37.01 x 55.91 x 12.99	211.6	4,414	49	51	67
36,000	CXG36SCD (AC036DXSCCG/AA)	37.01 x 55.91 x 12.99	211.6	4,414	50	52	69
48,000	CXG48SCD (AC048DXSCCG/AA)	37.01 x 55.91 x 12.99	211.6	4,414	51	53	70

NOTE

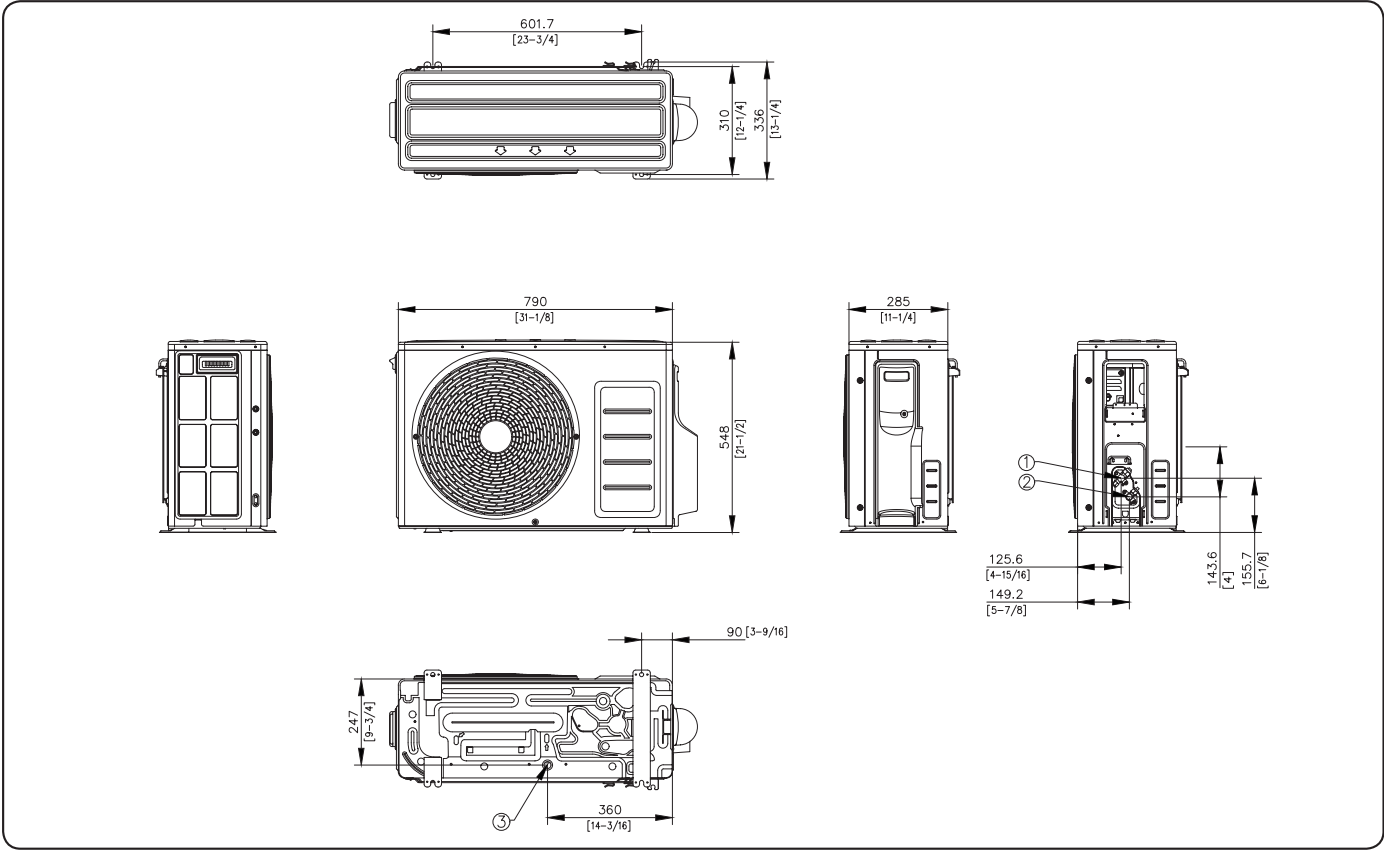
- Sound power level is based on cooling operation.

2. Dimensional Drawing

Outdoor Units

CXG09SCD (AC009DXSCCG/AA), CXG12SCD (AC012DXSCCG/AA)

Units : mm [inches]



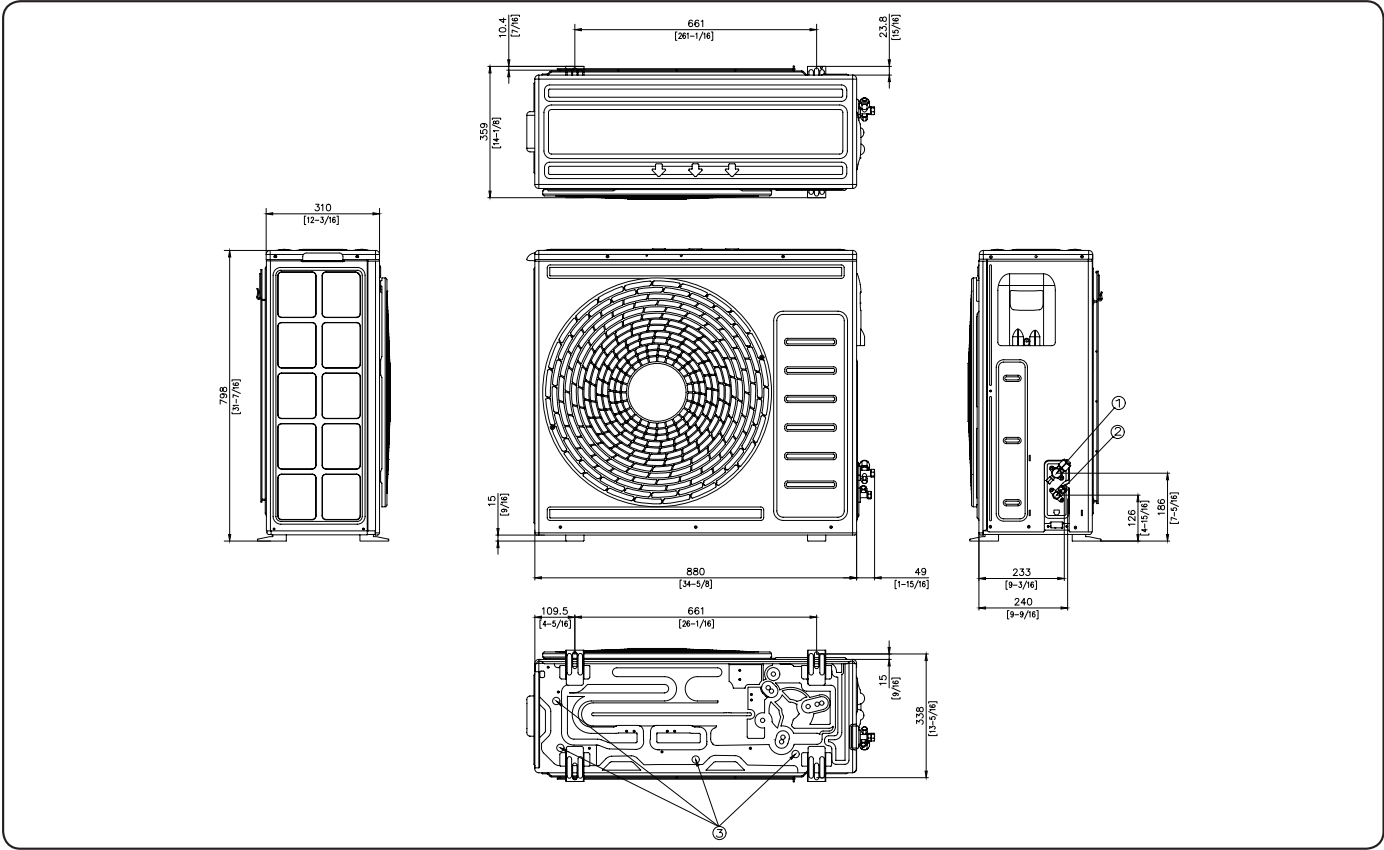
No.	Name	Description
1	Gas pipe connection	Φ 9.52 (3/8)
2	Liquid pipe connection	Φ 6.35 (1/4)
3	Drain pipe connection	

2. Dimensional Drawing

Outdoor Units

CXG18SCD (AC018DXSCCG/AA)

Units : mm [inches]



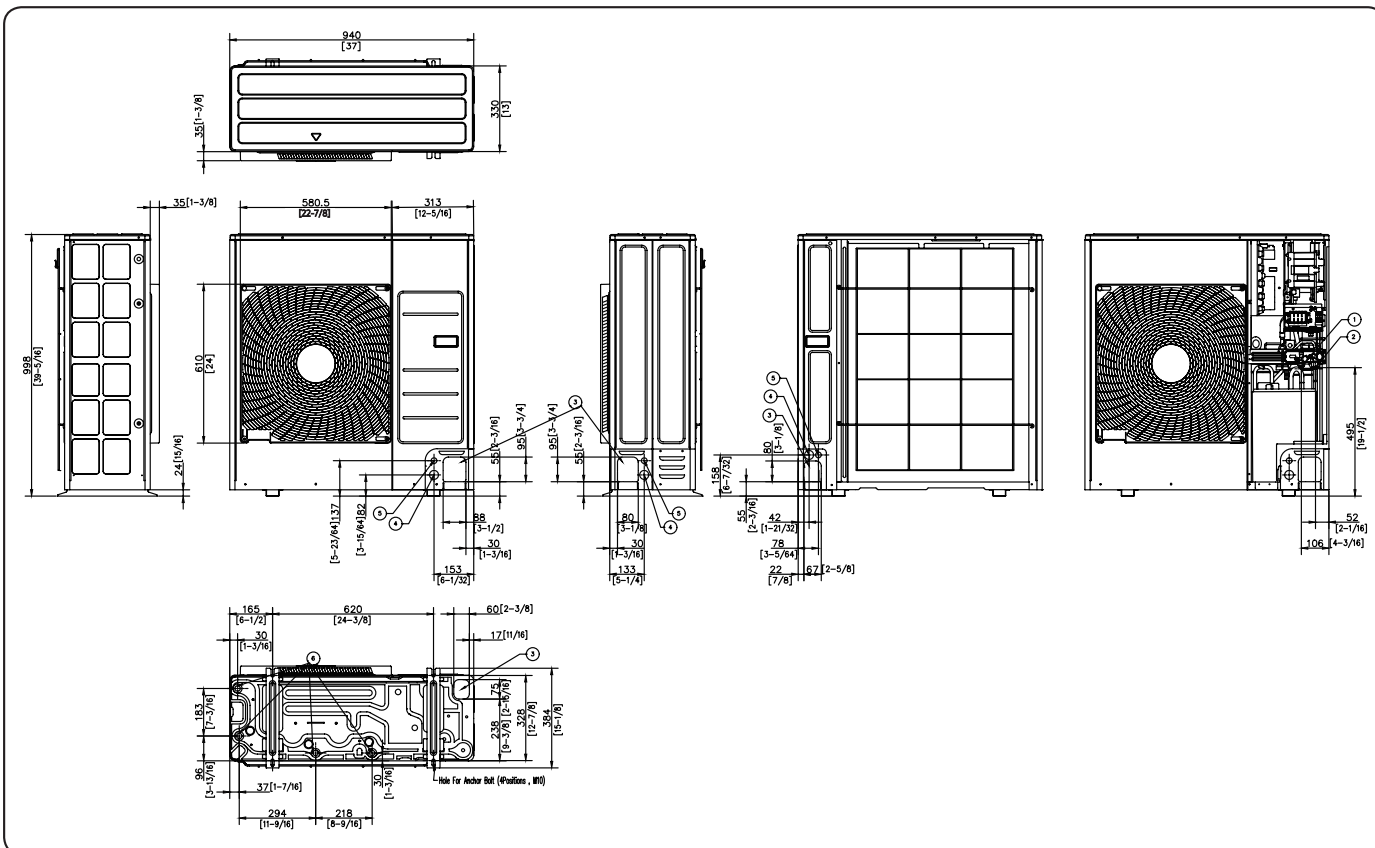
No.	Name	Description
1	Gas pipe connection	Φ 12.7 (1/2)
2	Liquid pipe connection	Φ 6.35 (1/4)
3	Drain pipe connection	

2. Dimensional Drawing

Outdoor Units

CXG24SCD (AC024DXSCCG/AA)

Units : mm [inches]



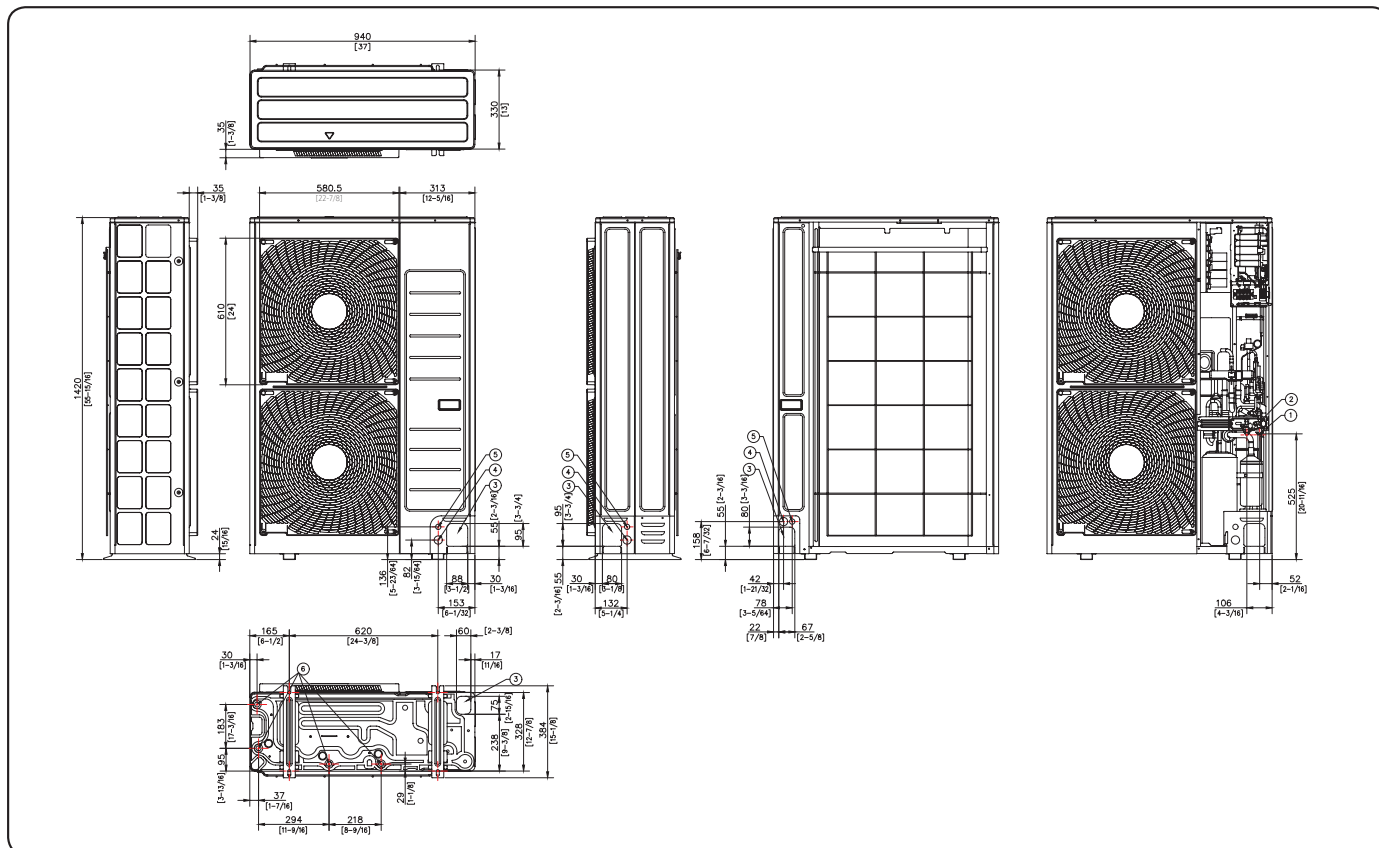
No.	Name	Description
1	Liquid pipe connection	Φ 6.35 (1/4)
2	Gas pipe connection	Φ 15.88 (5/8)
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear , Φ 34(1-3/8)
5	Communication wiring conduit	Front / Side / Rear , Φ 22(7/8)
6	Drain Hole	Connect with the provided drain plug

2. Dimensional Drawing

Outdoor Units

CXG30SCD (AC030DXSCCG/AA), CXG36SCD (AC036DXSCCG/AA), CXG48SCD (AC048DXSCCG/AA)

Units : mm [inches]



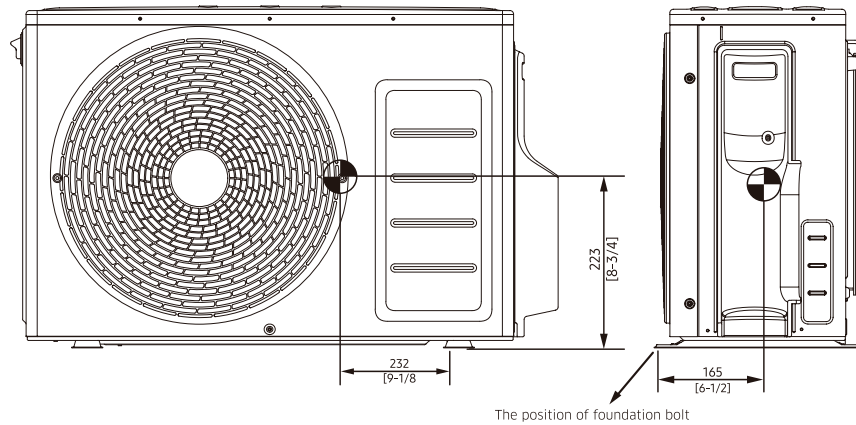
No.	Name	Description
1	Liquid pipe connection	Φ 9.52 (3/8)
2	Gas pipe connection	Φ 15.88 (5/8)
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear , Φ 34(1-3/8)
5	Communication wiring conduit	Front / Side / Rear , Φ 22(7/8)
6	Drain Hole	Connect with the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

3. Center of Gravity

Outdoor Units

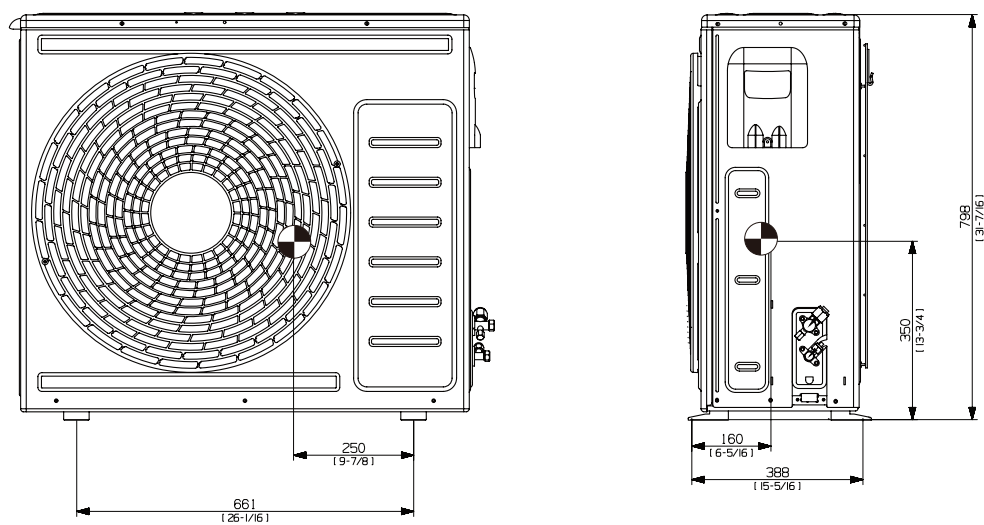
CXG09SCD (AC009DXSCCG/AA), CXG12SCD (AC012DXSCCG/AA)

Units : mm [inches]



CXG18SCD (AC018DXSCCG/AA)

Units : mm [inches]

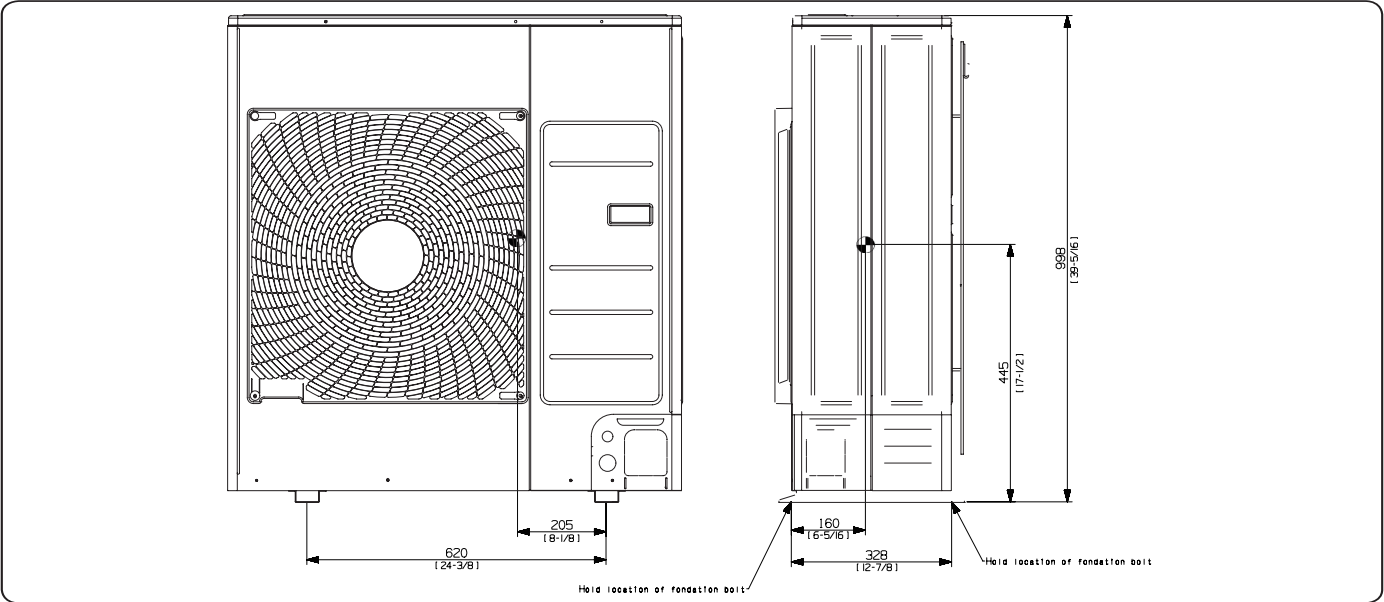


3. Center of Gravity

Outdoor Units

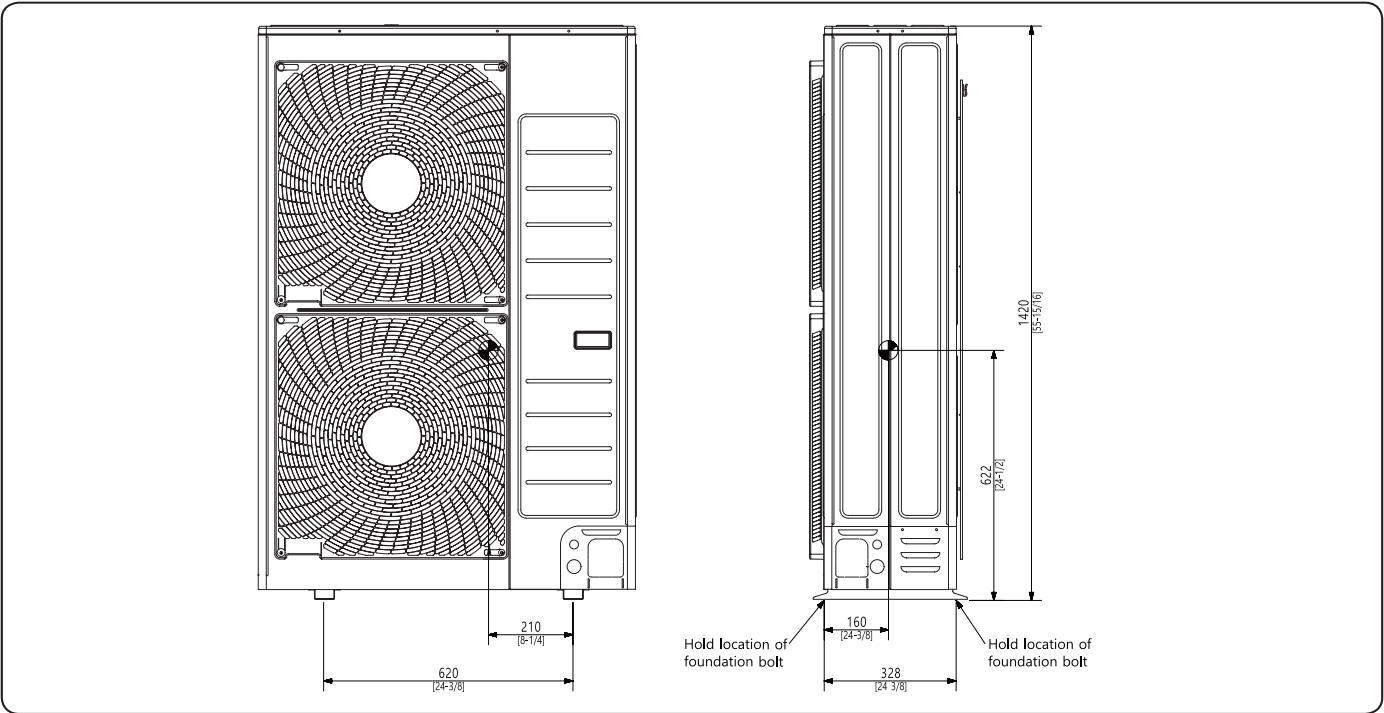
CXG24SCD (AC024DXSCCG/AA)

Units : mm [inches]



CXG30SCD (AC030DXSCCG/AA), CXG36SCD (AC036DXSCCG/AA), CXG48SCD (AC048DXSCCG/AA)

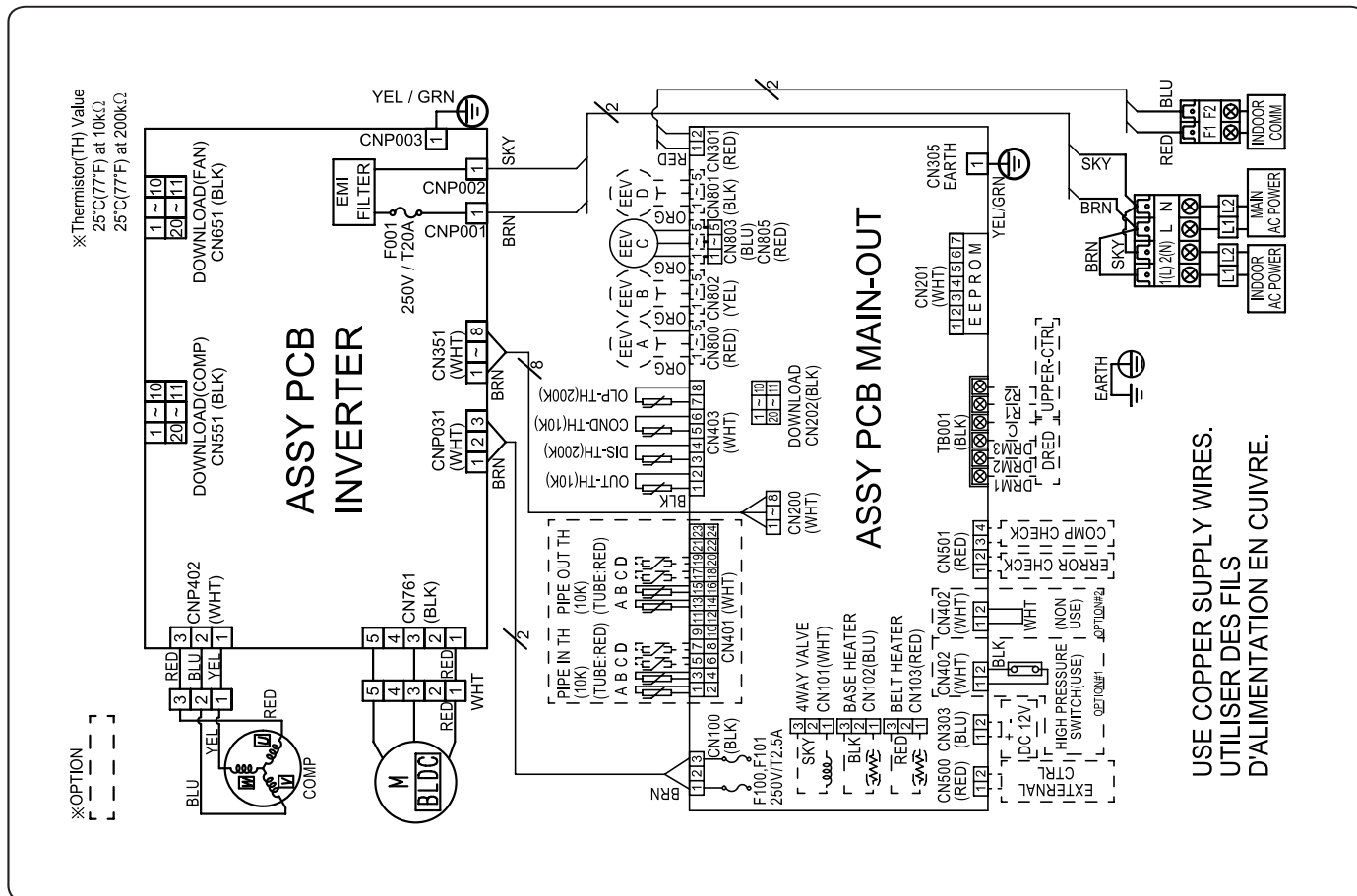
Units : mm [inches]



4. Electrical Wiring Diagram

Outdoor Units

CXG09SCD (AC009DXSCCG/AA), CXG12SCD (AC012DXSCCG/AA)



ERROR CHECK	Contact output port for error check	OUT-TH(10K)	OUTDOOR TEMPERATURE SENSOR	EEV	Electronic Expansion Valve
COMP CHECK	Contact output port for compressor operation check	DIS-TH(200K)	DISCHARGE TEMPERATURE SENSOR	EXTERNAL CRTL	Input port for external contact control
PIPE IN TH(10K)	Thermistor - ODU PIPE IN	COND-TH(10K)	CONDENSOR TEMPERATURE SENSOR	F100, F101	Fuse
PIPE OUT TH(10K)	Thermistor - ODU PIPE OUT	OLP-TH(200K)	OLP TEMPERATURE SENSOR	M-BLDC	Motor for outdoor Fan

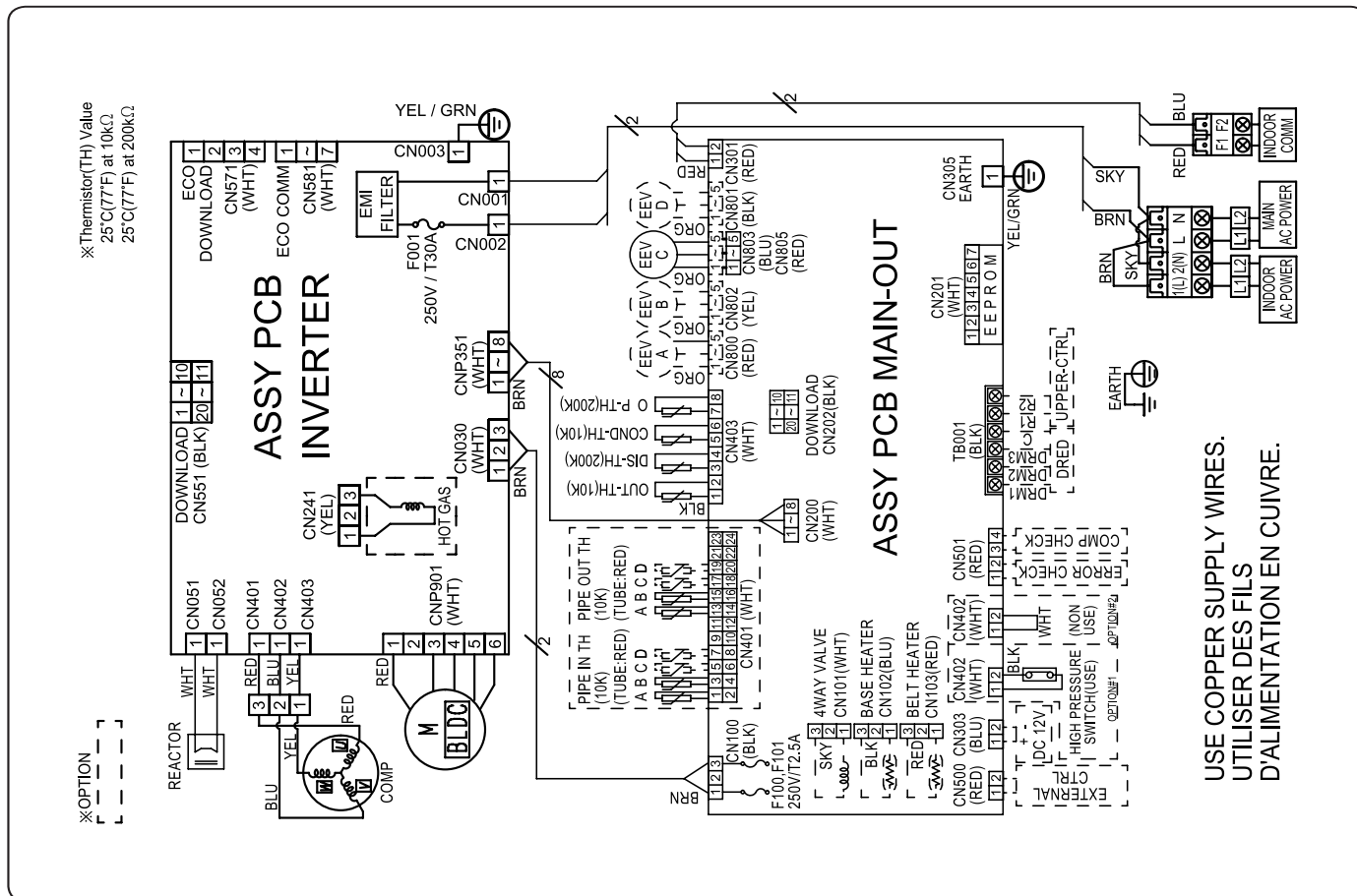
NOTE

- This wiring diagram applies only to the outdoor unit.
- Colors blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue
- When operating, don't shortcircuit the protection device (High Pressure switch)
- For connection wiring indoor-outdoor transmission F1-F2, outdoor-outdoor transmission OF1-OF2, refer to the installation manual.
- ⏏ Protective earth(screw), □□□□ : connector, ✂ : The wire quantity

4. Electrical Wiring Diagram

Outdoor Units

CXG18SCD (AC018DXSCCG/AA)



ERROR CHECK	Contact output port for error check	OUT-TH(10K)	OUTDOOR TEMPERATURE SENSOR	EUV	Electronic Expansion Valve
COMP CHECK	Contact output port for compressor operation check	DIS-TH(200K)	DISCHARGE TEMPERATURE SENSOR	EXTERNAL CRTL	Input port for external contact control
INDOOR ROOM(10K)	Thermistor - Indoor Room	COND-TH(10K)	CONDENSOR TEMPERATURE SENSOR	F100, F101	Fuse
PIPE IN TH(10K)	Thermistor - ODU PIPE IN	OLP-TH(200K)	OLP TEMPERATURE SENSOR	M-BLDC	Motor for outdoor Fan
PIPE OUT TH(10K)	Thermistor - ODU PIPE OUT	DISPLAY	Panel LED display		

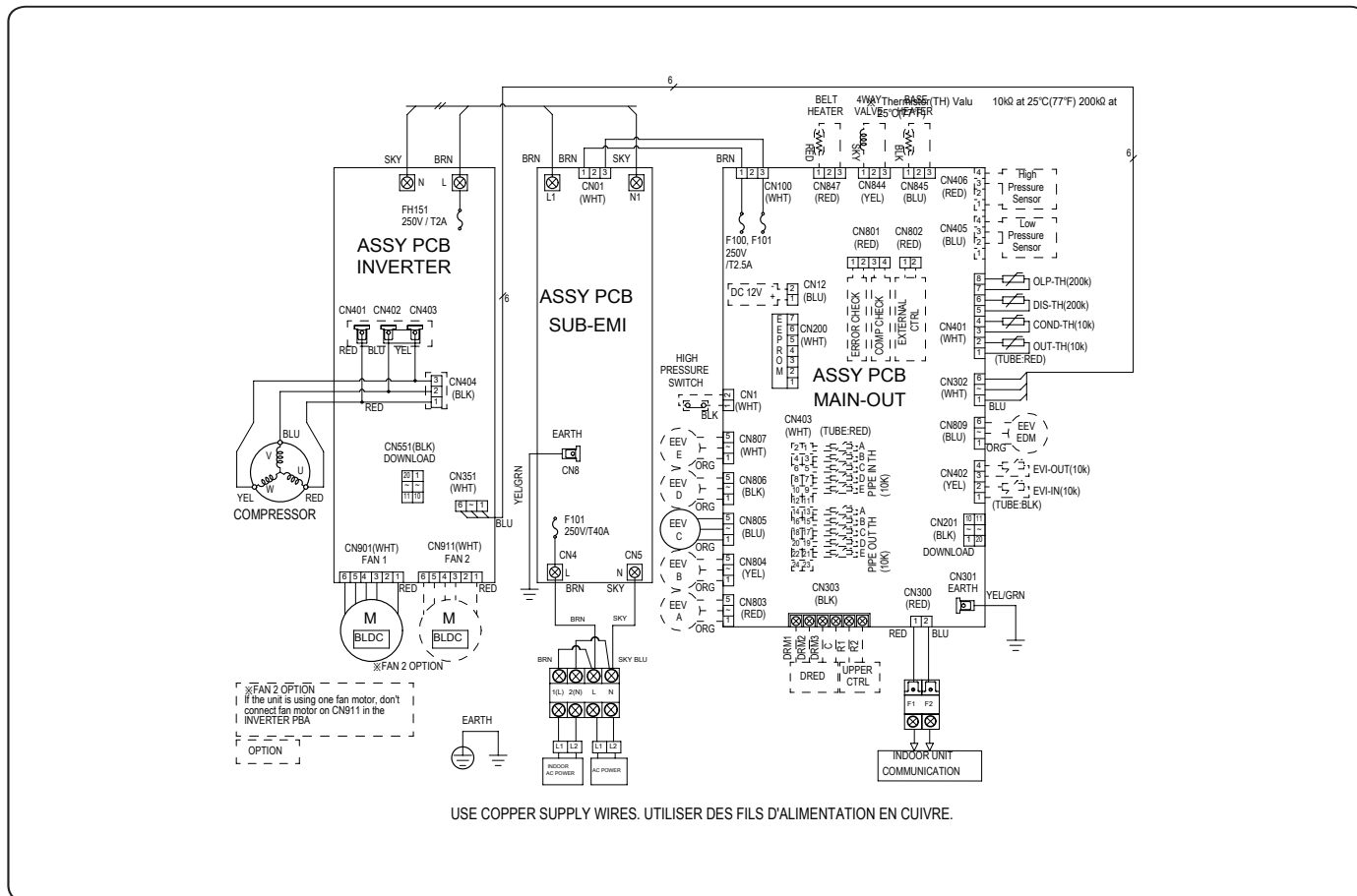
NOTE

- This wiring diagram applies only to the outdoor unit.
- Colors blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue
- When operating, don't shortcircuit the protection device (High Pressure switch)
- For connection wiring indoor-outdoor transmission F1-F2, outdoor-outdoor transmission OF1-OF2, refer to the installation manual.
- ⚡ Protective earth(screw), □□□□ : connector, ✂ : The wire quantity

4. Electrical Wiring Diagram

Outdoor Units

CXG24SCD (AC024DXSCCG/AA), CXG30SCD (AC030DXSCCG/AA), CXG36SCD (AC036DXSCCG/AA)
CXG48SCD (AC048DXSCCG/AA)



M-BLDC	Motor for outdoor Fan	PIPE IN TH(10K)	Thermistor - ODU PIPE IN	EEV	Electronic Expansion Valve
ERROR CHECK	Contact output port for error check	PIPE OUT TH(10K)	Thermistor - ODU PIPE OUT	EXTERNAL CRTL	Input port for external contact control
COMP CHECK	Contact output port for compressor operation check	OUT-TH(10K)	OUTDOOR TEMPERATURE SENSOR	F100, F101	Fuse
INDOOR ROOM(10K)	Thermistor - Indoor Room	DIS-TH(200K)	DISCHARGE TEMPERATURE SENSOR	DISPLAY	Panel LED display
EVI-IN(10K)	ESC IN TEMPERATURE SENSOR	COND-TH(10K)	CONDENSOR TEMPERATURE SENSOR		
EVI-OUT(10K)	ESC OUT TEMPERATURE SENSOR	OLP-TH(200K)	OLP TEMPERATURE SENSOR		

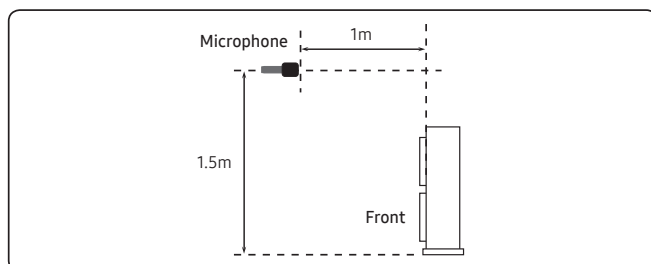
NOTE

- This wiring diagram applies only to the outdoor unit.
- Colors blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue
- When operating, don't shortcircuit the protection device (High Pressure switch)
- For connection wiring indoor-outdoor transmission F1-F2, outdoor-outdoor transmission OF1-OF2, refer to the installation manual.
- ⏏ Protective earth(screw), □□□□ : connector, $\frac{N}{\text{wire}}$: The wire quantity

5. Sound Data

Outdoor Units

Sound Pressure level

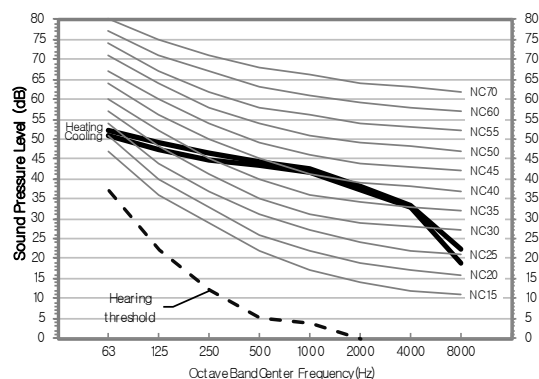


Unit: dB(A)

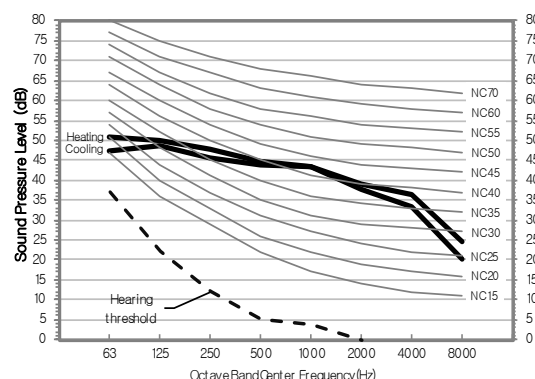
Model	Cooling	Heating
CXG09SCD (AC009DXSCCG/AA)	46	47
CXG12SCD (AC012DXSCCG/AA)	47	48
CXG18SCD (AC018DXSCCG/AA)	51	51
CXG24SCD (AC024DXSCCG/AA)	50	52

• NC Curve

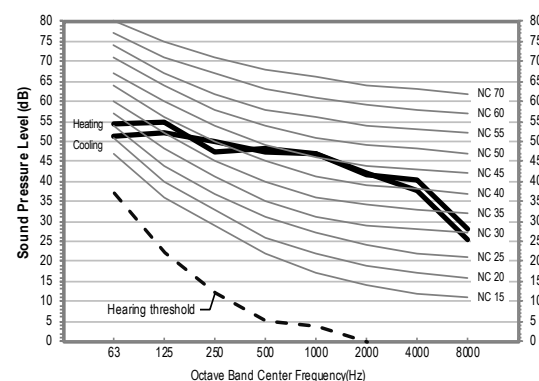
1) CXG09SCD (AC009DXSCCG/AA)



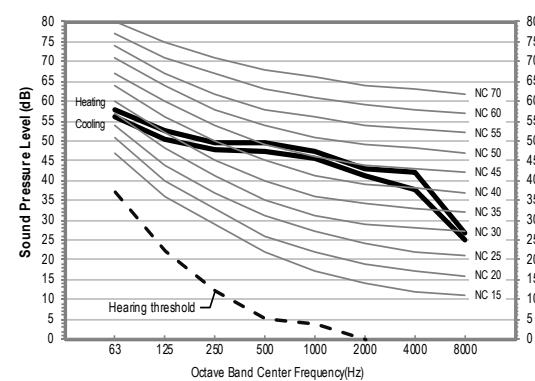
2) CXG12SCD (AC012DXSCCG/AA)



3) CXG18SCD (AC018DXSCCG/AA)



4) CXG24SCD (AC024DXSCCG/AA)



NOTE

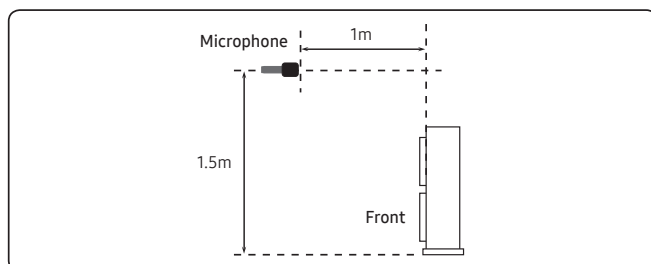
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A weighted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

5. Sound Data

Outdoor Units

Sound Pressure level

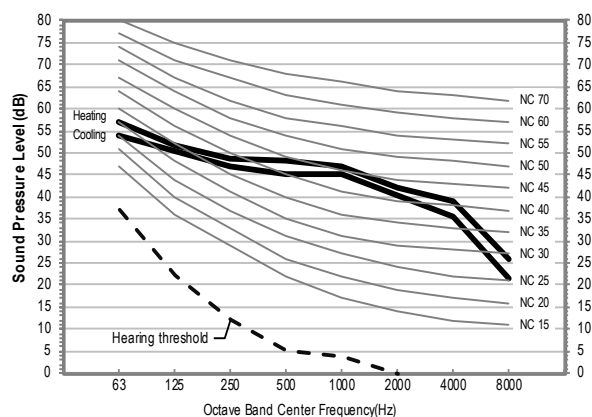
Unit: dB(A)



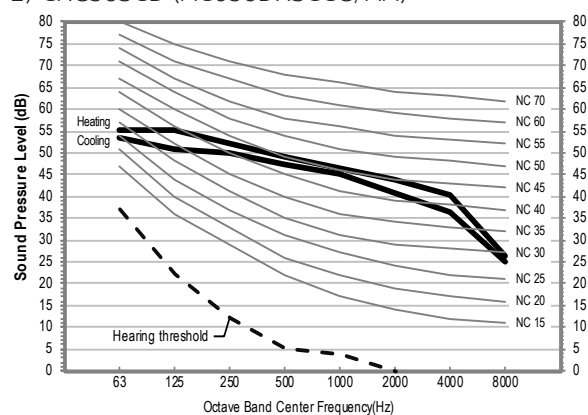
Model	Cooling	Heating
CXG30SCD (AC030DXSCCG/AA)	49	51
CXG36SCD (AC036DXSCCG/AA)	50	52
CXG48SCD (AC048DXSCCG/AA)	51	53

NC Curve

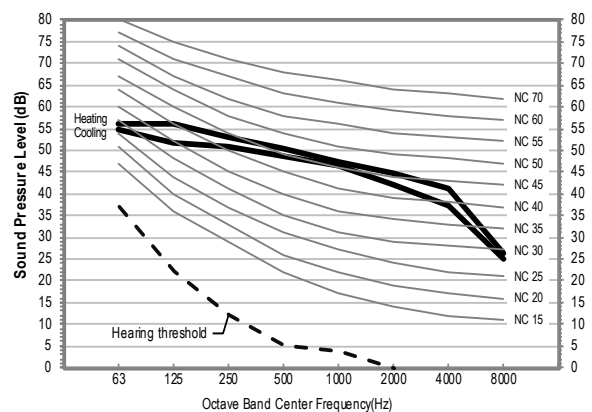
1) CXG30SCD (AC030DXSCCG/AA)



2) CXG36SCD (AC036DXSCCG/AA)



3) CXG48SCD (AC048DXSCCG/AA)



NOTE

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

5. Sound Data

Outdoor Units

Sound Power level

 NOTE

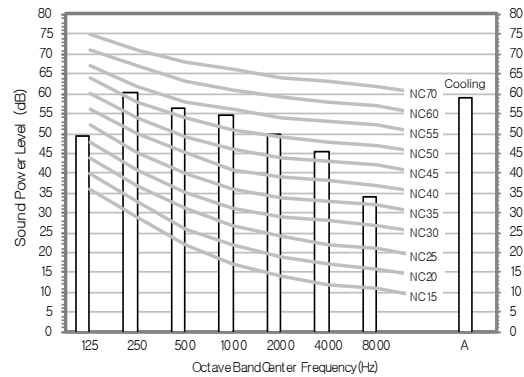
Unit: dB(A)

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

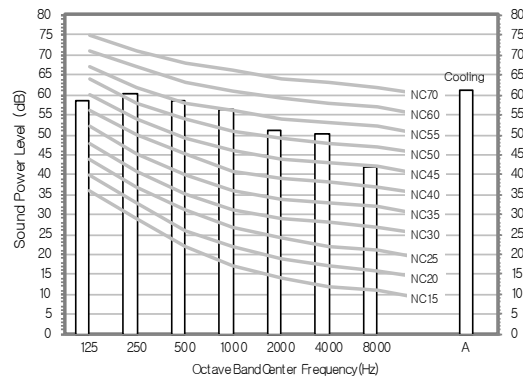
Model	Cooling
CXG09SCD (AC009DXSCCG/AA)	59
CXG12SCD (AC012DXSCCG/AA)	61
CXG18SCD (AC018DXSCCG/AA)	65
CXG24SCD (AC024DXSCCG/AA)	65

- NC Curve

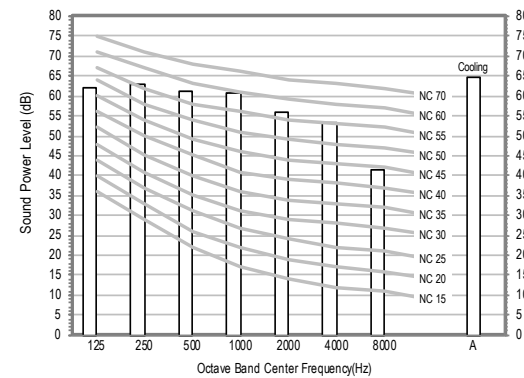
1) CXG09SCD (AC009DXSCCG/AA)



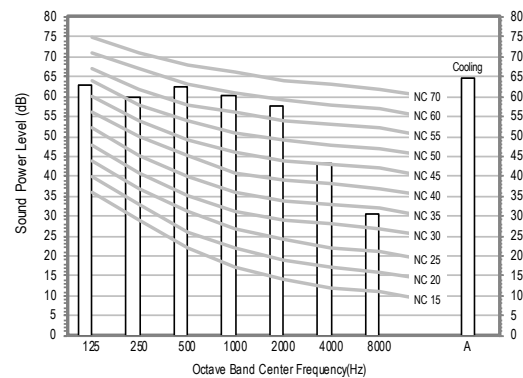
2) CXG12SCD (AC012DXSCCG/AA)



3) CXG18SCD (AC018DXSCCG/AA)



4) CXG24SCD (AC024DXSCCG/AA)



5. Sound Data

Outdoor Units

Sound Power level

 NOTE

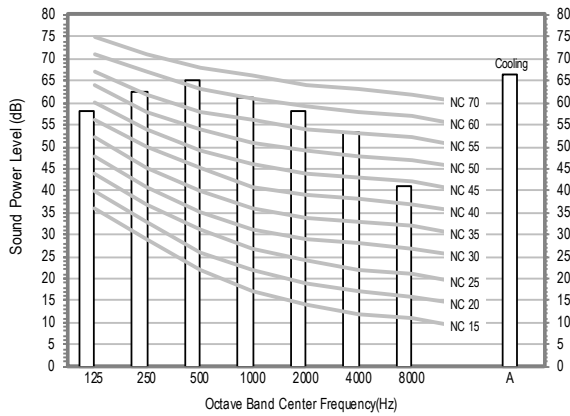
Unit: dB(A)

- Specifications may be subject to change without prior notice
 - 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.

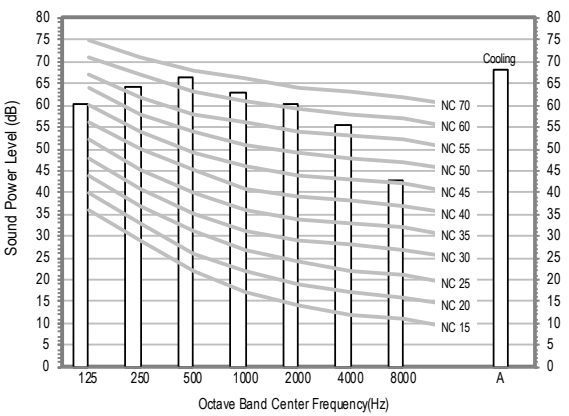
Model	Cooling
CXG30SCD (AC030DXSCCG/AA)	67
CXG36SCD (AC036DXSCCG/AA)	69
CXG48SCD (AC048DXSCCG/AA)	70

- NC Curve

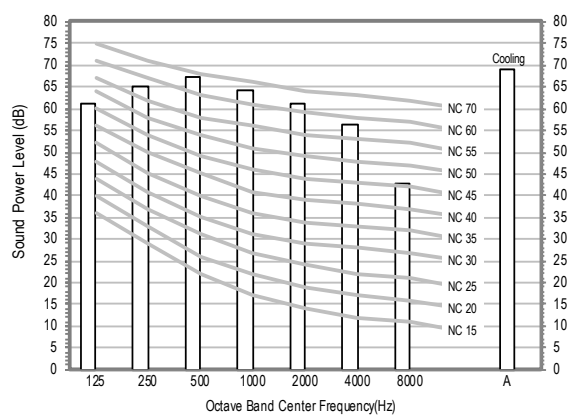
1) CXG30SCD (AC030DXSCCG/AA)



2) CXG36SCD (AC036DXSCCG/AA)



3) CXG48SCD (AC048DXSCCG/AA)

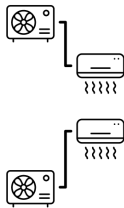


6. Capacity Correction

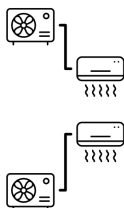
Outdoor Units

CXG09SCD (AC009DXSCCG/AA), CXG12SCD (AC012DXSCCG/AA)

Cooling

		Pipe Length (ft)				
		24.6	32.8	49.2	65.6	
	Level Difference (ft)	49.2	-	-	0.95	0.93
		32.8	-	0.98	0.95	0.93
		16.4	1.00	0.98	0.95	0.93
		0.0	1.00	0.98	0.95	0.93
		-16.4	1.00	0.97	0.95	0.92
		-32.8	-	0.95	0.94	0.92
		-49.2	-	-	0.93	0.91

Heating

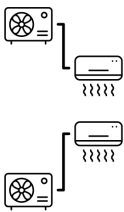
		Pipe Length (ft)				
		24.6	32.8	49.2	65.6	
	Level Difference (ft)	49.2	-	-	0.94	0.91
		32.8	-	0.97	0.94	0.91
		16.4	1.00	0.97	0.94	0.91
		0.0	1.00	0.97	0.94	0.91
		-16.4	1.00	0.97	0.94	0.91
		-32.8	-	0.97	0.94	0.91
		-49.2	-	-	0.94	0.91

6. Capacity Correction

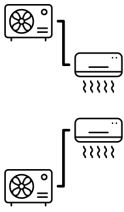
Outdoor Units

CXG18SCD (AC018DXSCCG/AA), CXG24SCD (AC024DXSCCG/AA)

Cooling

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

Heating

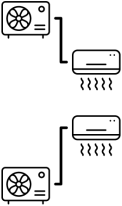
		Pipe Length (ft)									
		24.6	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
	Level Difference (ft)	98.4	-	-	-	-	0.94	0.93	0.92	0.91	0.90
		82.0	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
		65.6	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
		49.2	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
		32.8	0.99	0.98	0.97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

6. Capacity Correction

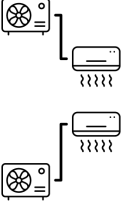
Outdoor Units

CXG30SCD (AC030DXSCCG/AA), CXG36SCD (AC036DXSCCG/AA), CXG48SCD (AC048DXSCCG/AA)

Cooling

		Pipe Length (ft)														
		24.6	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0	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
		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
		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
		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
		0.0	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
		-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
		-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
		-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
		-65.6	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86
		-82.0	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.88	0.87	0.85
		-98.4	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.84

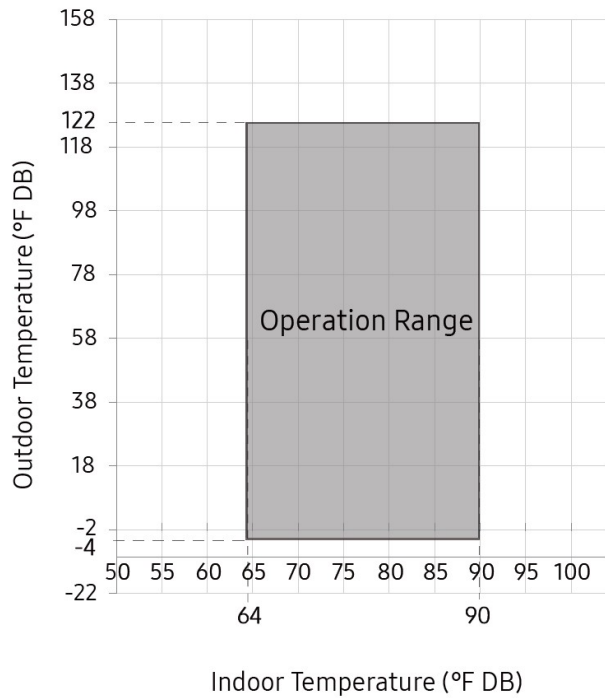
Heating

		Pipe Length (ft)														
		24.6	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
		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
		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
		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
		0.0	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
		-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
		-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
		-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
		-65.6	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89
		-82.0	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89
		-98.4	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89

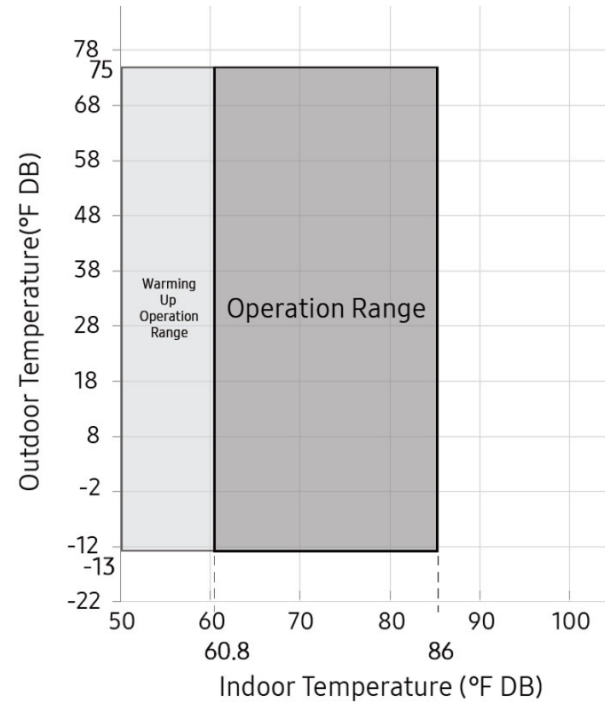
7. Operation Range

Outdoor Units

Cooling



Heating



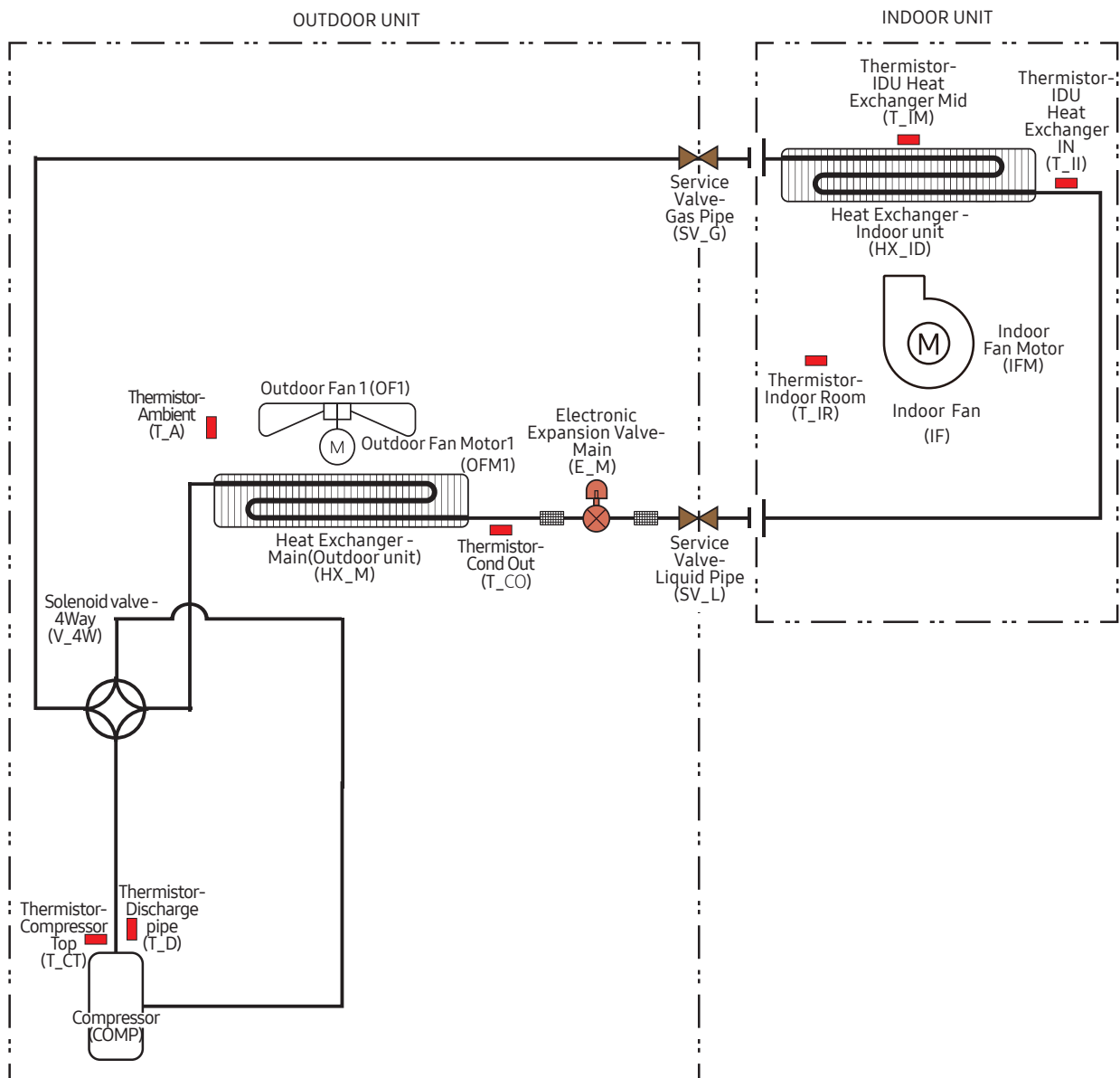
NOTE

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

8. Piping Diagram

Outdoor Units

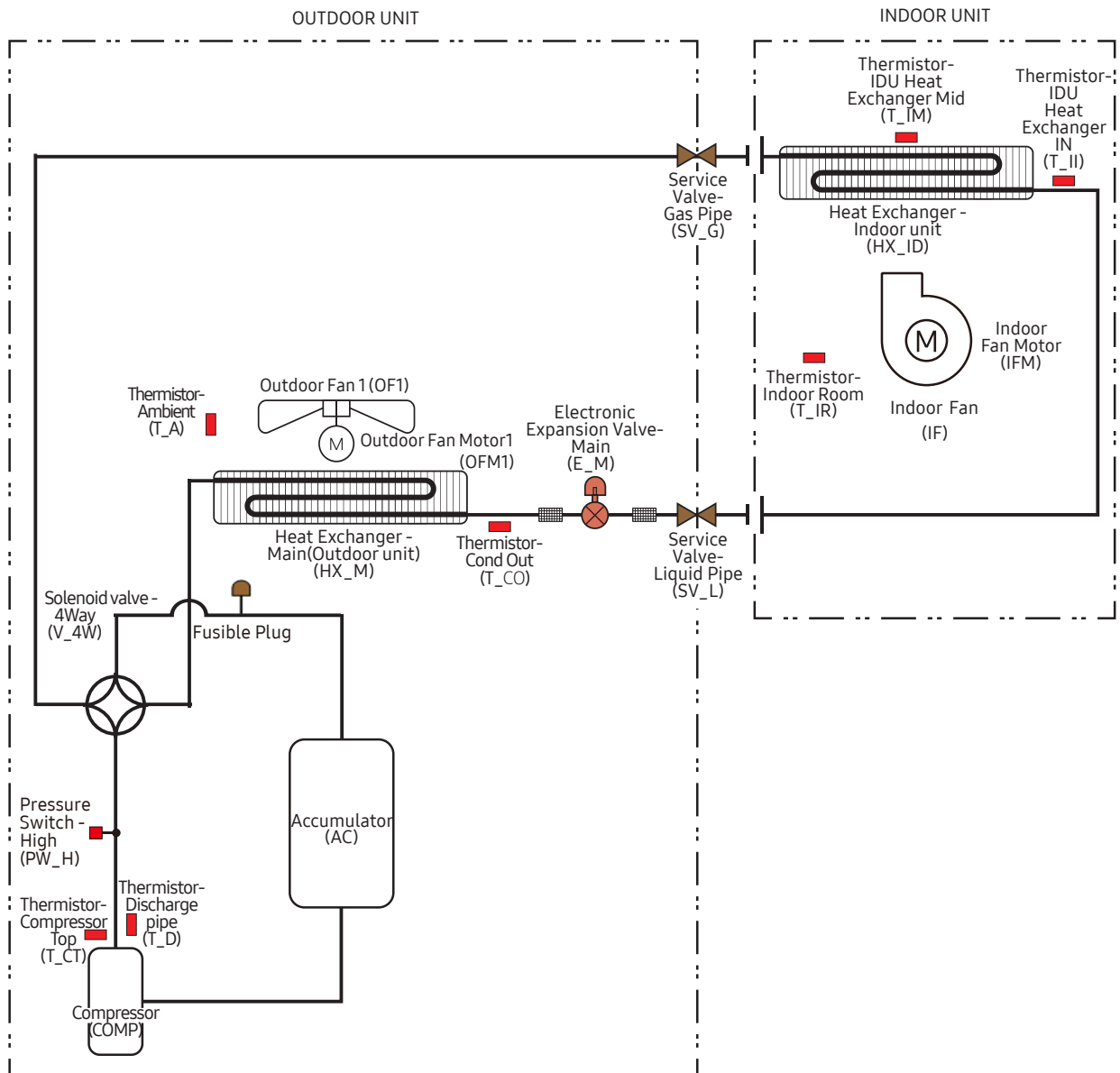
AC009DNHDCG/AA + AC009DXSCCG/AA , AC012DNHDCG/AA + AC012DXSCCG/AA
AC009DNLDCG/AA + AC009DXSCCG/AA , AC012DNLDCG/AA + AC012DXSCCG/AA



8. Piping Diagram

Outdoor Units

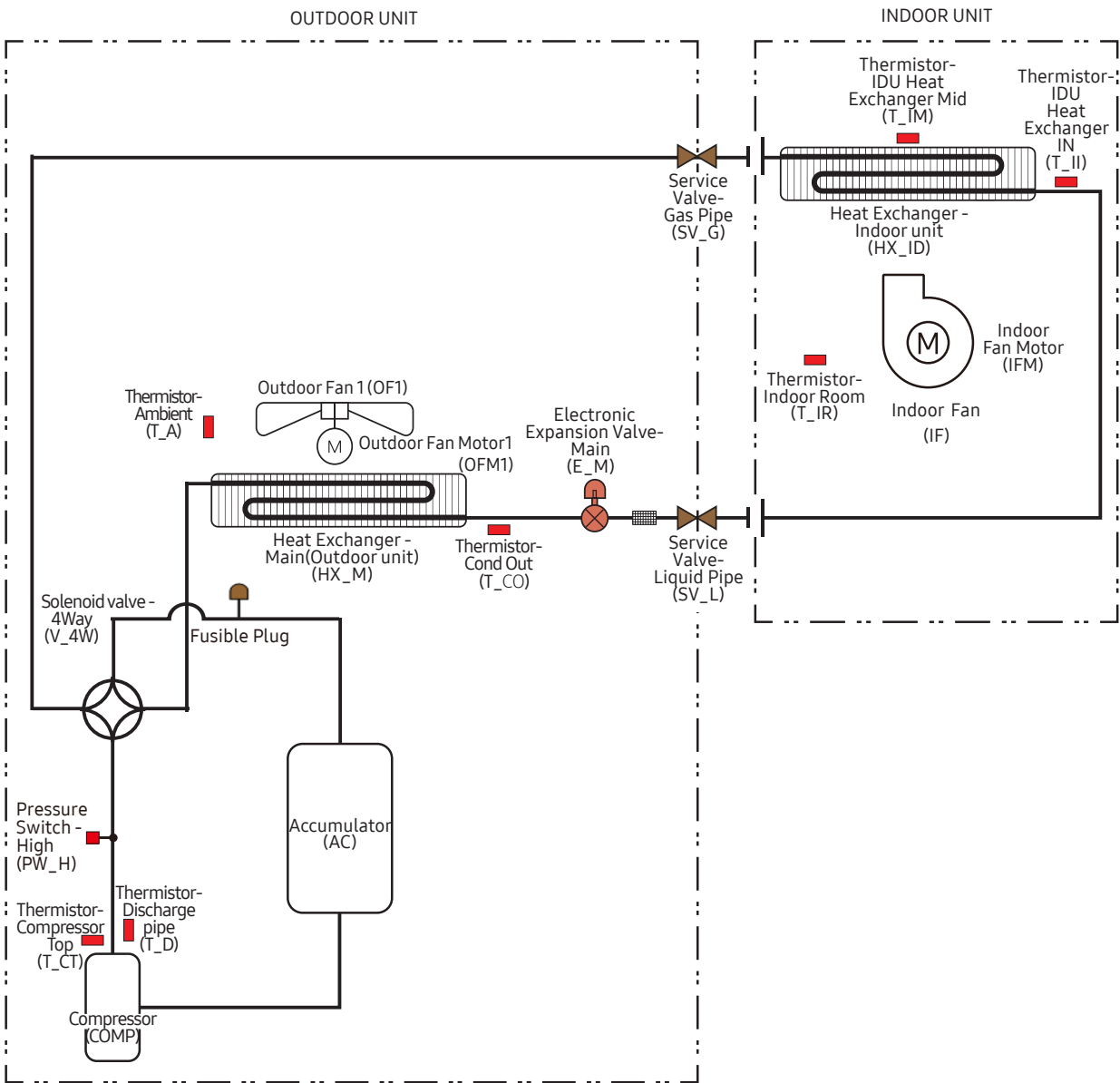
AC018DNHDCG/AA + AC018DXSCCG/AA , AC018DNLDCG/AA + AC018DXSCCG/AA



8. Piping Diagram

Outdoor Units

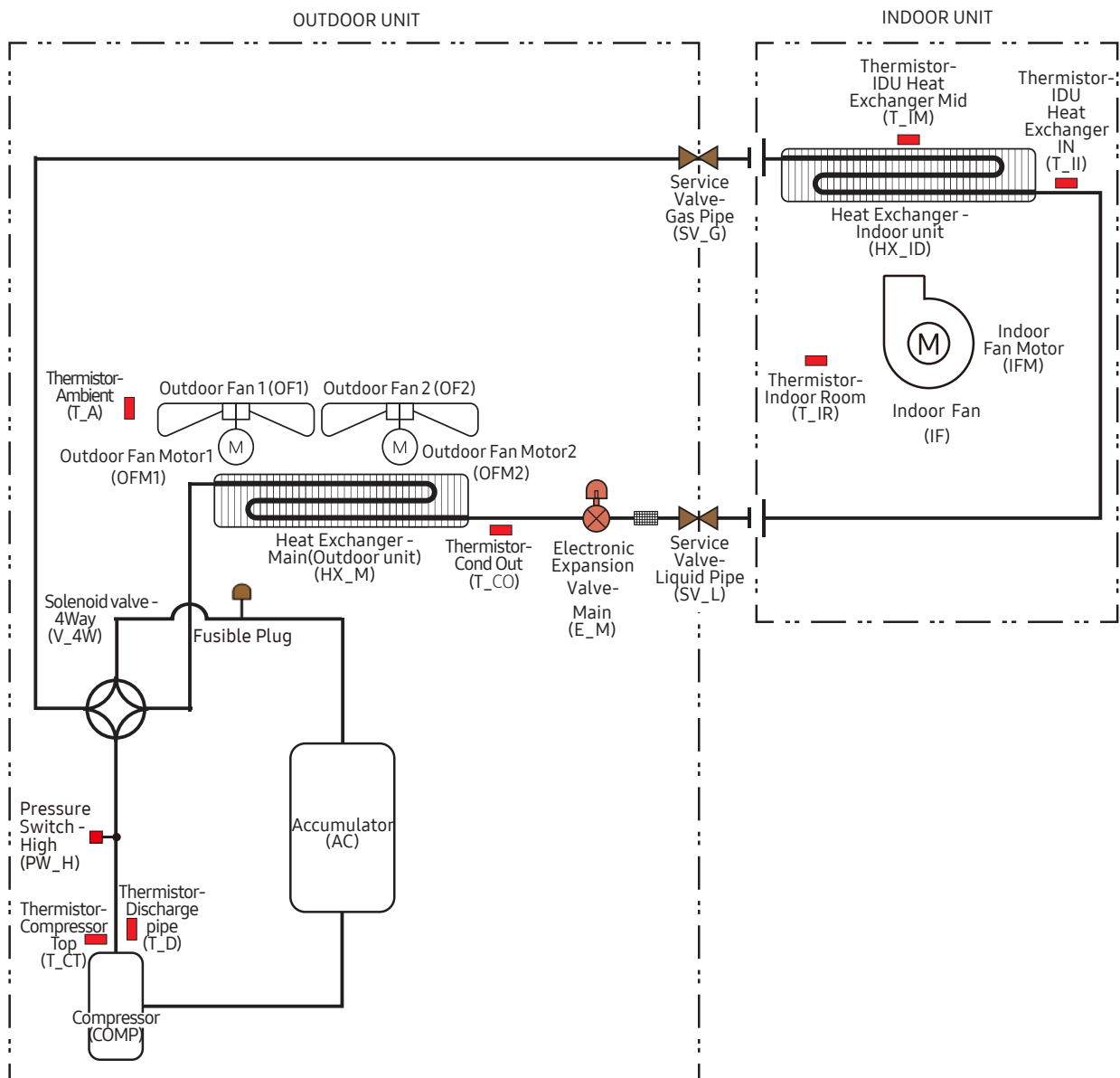
AC024DNHDCG/AA + AC024DXSCCG/AA



8. Piping Diagram

Outdoor Units

AC030DNHDCG/AA + AC030DXSCCG/AA , AC036DNHDCG/AA + AC036DXSCCG/AA
AC048DNHDCG/AA + AC048DXSCCG/AA





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Ver.3.1

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