

SAMSUNG

SINGLE

Technical

Data Book

Multi Position AHU
(R32, Heat Pump)



Model : CNG**ZDD (AC***DNZDCG/AA), CXG**ACD (AC***DXADCG/AA)

History

Version	Modification	Date	Remark
Ver.1.0	Released Single Standard Multi Position AHU TDB	24. 11. 19	
Ver.1.1	Modified some data	24. 12. 06	
Ver.1.2	Modified some data	24. 12. 27	

Nomenclature

US Code

Model Name

C

N

G

48

Z

D

D

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(1) Classification

C	CAC
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(2) Product Type

N	Indoor Unit
X	Outdoor Unit

(3) Mode

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

(4) Capacity

X1,000 Btu/h (2 digits)

(5-2) Feature1 (Outdoor Unit)

D	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
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(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

Z

D

C

G

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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
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(8) Mode

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

Nomenclature

Outdoor Unit

Model Name

AC

048

D

X

A

D

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)

Multi-position AHU

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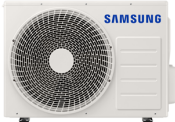
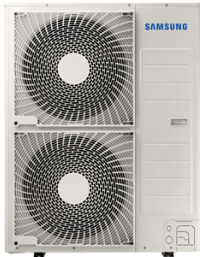
1. Line-up

Multi-position AHU

Indoor unit

Model	Capacity (kBtu/h)				
	18	24	30	36	48
Multi-position AHU					
	CNG18ZDD (AC018DNZDCG/AA)	CNG24ZDD (AC024DNZDCG/AA)	CNG30ZDD (AC030DNZDCG/AA)	CNG36ZDD (AC036DNZDCG/AA)	CNG48ZDD (AC048DNZDCG/AA)

Outdoor Unit

Model	Capacity (kBtu/h)				
	18	24	30	36	48
Multi-position AHU					
	CXG18ADD (AC018DXADCG/AA)	CXG24ADD (AC024DXADCG/AA)	CXG30ADD (AC030DXADCG/AA)	CXG36ADD (AC036DXADCG/AA)	CXG48ADD (AC048DXADCG/AA)

2. Specification

Multi-position AHU

Model Name		Indoor Unit			AC018DNZDCG/AA	AC024DNZDCG/AA	AC030DNZDCG/AA	
		Outdoor Unit			AC018DXADCG/AA	AC024DXADCG/AA	AC030DXADCG/AA	
US Code		Indoor Unit			CNG18ZDD	CNG24ZDD	CNG30ZDD	
		Outdoor Unit			CXG18ADD	CXG24ADD	CXG30ADD	
System	Mode			-	Heat Pump	Heat Pump	Heat Pump	
	Performance	Capacity	Cooling (Min/Std/Max)	kW	1.4 / 5.2 / 6.4	2.3 / 7.0 / 8.7	2.4 / 8.7 / 10.2	
				Btu/h	5,000 / 18,000 / 22,000	8,000 / 24,000 / 30,000	8,500 / 30,000 / 35,000	
				US RT	0.42 / 1.50 / 1.83	0.67 / 2.00 / 2.50	0.71 / 2.50 / 2.92	
			Heating (Min/Std/Max)	kW	1.4 / 5.8 / 8.4	2.0 / 7.9 / 10.2	2.1 / 9.9 / 11.4	
				Btu/h	5,000 / 20,000 / 29,000	7,000 / 27,000 / 35,000	7,200 / 34,000 / 39,000	
				US RT	0.42 / 1.67 / 2.42	0.58 / 2.25 / 2.92	0.60 / 2.83 / 3.25	
	Power	Power Input	Cooling (Min/Std/Max) Heating (Min/Std/Max)	kW	0.49 / 1.80 / 2.60	0.65 / 2.24 / 3.27	0.65 / 2.60 / 4.16	
					0.43 / 1.95 / 4.51	0.53 / 2.63 / 5.30	0.54 / 3.21 / 5.30	
		Current Input	Cooling (Min/Std/Max) Heating (Min/Std/Max)	A	2.6 / 8.0 / 11.5	3.4 / 10.0 / 14.4	3.4 / 11.6 / 18.3	
					2.2 / 8.7 / 16.0	2.7 / 11.7 / 16.0	2.7 / 14.3 / 23.3	
		Current	MCA	A	22.3	22.3	26.7	
			MOP	A	25	25	30	
	Efficiency	EER2	Cooling	-	2.93	3.14	3.37	
			Cooling (US)	(Btu/h)/W	10	10.7	11.5	
		COP	Heating	W/W	3	3	3.1	
			SEER2 (Cooling Energy Grade)		-	16.5	16.6	19
		HSPF2 (Heating Energy Grade)		-	8.1	8.3	9.5	
	Pipe Connections	Liquid Pipe		Type	Flare	Flare	Flare	
				Φ, mm(inch)	6.35 (1/4)	6.35 (1/4)	9.52 (3/8)	
		Gas Pipe		Type	Flare	Flare	Flare	
				Φ, mm(inch)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)	
		Heat Insulation			-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
		Pipe Length (ODU-IDU)	Standard	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)	
			Max.	m (ft)	50 (164.0)	50 (164.0)	50 (164.0)	
			Elevation	m (ft)	30 (98.4)	30 (98.4)	30 (98.4)	
			Chargeless	m (ft)	7.5 (24.6)	7.5 (24.6)	7.5 (24.6)	
	Wiring Connections	Communication	Min.	mm ²	0.75	0.75	0.75	
				AWG	18	18	18	
		Remark	-	F1,F2	F1,F2	F1,F2		
	Refrigerant	Type		-	R32	R32	R32	
		Factory Charging		kg	1.3	1.7	2.7	
				lbs	2.87	3.75	5.95	
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	1	1	1	
		Air Flow Rate	Cooling (H/M/L)	m ³ /min	18 / 16.5 / 13.5	20 / 18 / 15	28.5 / 26.0 / 24.0	
				ft ³ /min	636 / 583 / 477	706 / 636 / 530	1,007 / 918 / 848	
			Heating (H/M/L)	m ³ /min	18 / 16.5 / 13.5	20 / 18 / 15	28.5 / 26.0 / 24.0	
				ft ³ /min	636 / 583 / 477	706 / 636 / 530	1,007 / 918 / 848	
	External Static Pressue		Min/Std/Max	In Wg	0 / 0.58 / 0.8	0 / 0.58 / 1.0		
	Fan Motor	Type		-	ECM	ECM	ECM	
		Output		W x n	410 x 1	410 x 1	410 x 1	
	Drain	Drain Pipe		Φ, mm	FPT 3/4	FPT 3/4	FPT 3/4	
	Sound Level	Sound Pressure Level	H/M/L	dB(A)	40 / 37 / 34	41 / 38 / 35	41 / 38 / 35	
		Sound Power Level		dB(A)	58	59	59	

2. Specification

Multi-position AHU

Model Name		Indoor Unit		AC018DNZDCG/AA	AC024DNZDCG/AA	AC030DNZDCG/AA
		Outdoor Unit		AC018DXADCG/AA	AC024DXADCG/AA	AC030DXADCG/AA
US Code		Indoor Unit		CNG18ZDD	CNG24ZDD	CNG30ZDD
		Outdoor Unit		CXG18ADD	CXG24ADD	CXG30ADD
Indoor Unit	External Dimension	Net Weight	kg(lbs)	56.0 (124.5)	56.0 (124.5)	56.0 (124.5)
		Shipping Weight	kg(lbs)	60.5 (133.4)	60.5 (133.4)	60.5 (133.4)
		Net Dimensions (WxHxD)	mm	533 x 1,219 x 533	533 x 1,219 x 533	533 x 1,219 x 533
			inch	20.98 x 47.99 x 20.98	20.98 x 47.99 x 20.98	20.98 x 47.99 x 20.98
		Shipping Dimensions (WxHxD)	mm	590 x 1,305 x 665	590 x 1,305 x 665	590 x 1,305 x 665
			inch	23.23 x 51.38 x 26.18	23.23 x 51.38 x 26.18	23.23 x 51.38 x 26.18
	Casing	Material	-	Steal	Steal	Steal
	Control System	Infrared remote control	-	AR-CH01U	AR-CH01U	AR-CH01U
		Wired remote control	-	MWR-WG01UN	MWR-WG01UN	MWR-WG01UN
	Drain Pump	Drain Pump	-	-	-	-
		Max.lifting Height / Displacement	in / gal/h	-	-	-
	Additional	Air Filter (OPTION)	-	VFB-2 (MERV 8)	VFB-2 (MERV 8)	VFB-2 (MERV 8)
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	-	Blue Hydrophile	Anti-Corrosion	Anti-Corrosion
	Compressor	Model	-	UB9TA9180FEQTS	UG8TA8265FEWSG	UB8TN8300FJUSG
		Type	-	Twin Rotary	Twin Rotary	Twin Rotary
		Output	kW	1.68	2.55	2.91
		Oil	Type	POE	POE	POE
			Initial Charge	cc (fl oz)	700	1200
	Fan	Type	-	Propeller	Propellar	Propellar
		Discharge direction	-	Side	Side	Side
		Quantity	EA	1	1	1
		Air Flow Rate	m ³ /min	50	61	76
			ft ³ /min	1,766	2,154	2,684
	Fan Motor	Type	-	BLDC	BLDC	BLDC
		Output	W x n	125 x 1	125 x 1	125 x 1
	Sound Level	Sound Pressure	Cooling	48	50	50
		Level	Heating	48	52	52
		Sound Power Level		62	65	67
	External Dimension	Net Weight	kg(lbs)	42.5 (93.7)	53.0 (116.8)	71.0 (156.5)
		Shipping Weight	kg(lbs)	45.5 (100.3)	57.0 (125.7)	76.0 (167.6)
		Net Dimensions (WxHxD)	mm	880 x 638 x 310	880 x 798 x 310	940 x 998 x 330
			inch	34.65 x 25.12 x 12.20	34.65 x 31.42 x 12.20	37.01 x 39.29 x 12.99
		Shipping Dimensions (WxHxD)	mm	1,023 x 724 x 413	1,023 x 881 x 413	995 x 1,096 x 426
			inch	40.28 x 28.50 x 16.26	40.28 x 34.69 x 16.26	39.17 x 43.15 x 16.77
	Casing	Material	Body	Steel	Steel	Steel
	Operating Temp. Range	Cooling	°C (°F)	-18~50 (0~122)	-18~50 (0~122)	-18~50 (0~122)
		Heating	°C (°F)	-20~24 (-4~75)	-20~24 (-4~75)	-20~24 (-4~75)

- 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

Multi-position AHU

Model Name		Indoor Unit			AC036DNZDCG/AA		AC048DNZDCG/AA		
		Outdooru Unit			AC036DXADCG/AA		AC048DXADCG/AA		
US Code		Indoor Unit			CNG36ZDD		CNG48ZDD		
		Outdooru Unit			CXG36ADD		CXG48ADD		
System	Mode			-	Heat Pump		Heat Pump		
	Performance	Capacity	Cooling (Min/Std/Max)	kW	2.9 / 10.5 / 10.8		3.6 / 14.0 / 15.8		
				Btu/h	10,000 / 36,000 / 37,000		12,500 / 48,000 / 54,000		
				US RT	0.83 / 3.00 / 3.08		1.04 / 4.00 / 4.50		
			Heating (Min/Std/Max)	kW	2.9 / 11.7 / 15.2		3.2 / 15.8 / 19.3		
				Btu/h	10,000 / 40,000 / 52,000		11,000 / 54,000 / 66,000		
				US RT	0.83 / 3.33 / 4.33		0.92 / 4.50 / 5.50		
	Power	Power Input	Cooling (Min/Std/Max)	kW	0.94 / 3.78 / 5.25		0.97 / 5.00 / 6.69		
			Heating (Min/Std/Max)		0.80 / 3.90 / 5.95		0.82 / 5.27 / 7.67		
		Current Input	Cooling (Min/Std/Max)	A	4.9 / 16.9 / 23.1		5.0 / 22.4 / 29.4		
			Heating (Min/Std/Max)		4.0 / 17.4 / 24.0		4.1 / 23.6 / 32.0		
		Current	MCA	A	26.7		36.1		
			MOP	A	30		40		
		Efficiency	EER2	Cooling	-	2.78		2.81	
				Cooling (US)	(Btu/h)/W	9.5		9.6	
	COP		Heating	W/W	3		3		
			SEER2 (Cooling Energy Grade)		-	16		17.5	
	HSPF2 (Heating Energy Grade)		-	8.6		8.8			
	Pipe Connections		Liquid Pipe		Type	Flare		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)	50 (164.0)		75 (246.0)		
			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	2.7		2.9		
				lbs	5.95		6.39		
	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		-	Green Hydrophile		Green Hydrophile		
Fan		Type		-	Sirocco		Sirocco		
		Quantity		EA	1		1		
		Air Flow Rate	Cooling (H/M/L)	m ³ /min	34.8 / 30.4 / 25.5		42.3 / 39.3 / 35.6		
				ft ³ /min	1,229 / 1,074 / 901		1,494 / 1,388 / 1,257		
			Heating (H/M/L)	m ³ /min	34.8 / 30.4 / 25.5		42.3 / 39.3 / 35.6		
				ft ³ /min	1,229 / 1,074 / 901		1,494 / 1,388 / 1,257		
		External Static Pressue		Min/Std/Max	In Wg	0 / 0.58 / 1.0		0 / 0.58 / 1.0	
Fan Motor		Type		-	ECM		ECM		
		Output		W x n	410 x 1		590 x 1		
Drain		Drain Pipe		Φ, mm	FPT 3/4		FPT 3/4		
Sound Level		Sound Pressure Level	H/M/L	dB(A)	45 / 42 / 39		47 / 45 / 43		
		Sound Power Level		dB(A)	63		65		

2. Specification

Multi-position AHU

Model Name		Indoor Unit		AC036DNZDCG/AA	AC048DNZDCG/AA
		Outdoor Unit		AC036DXADCG/AA	AC048DXADCG/AA
US Code		Indoor Unit		CNG36ZDD	CNG48ZDD
		Outdoor Unit		CXG36ADD	CXG48ADD
Indoor Unit	External Dimension	Net Weight	kg(lbs)	56.0 (124.5)	73.5 (162.0)
		Shipping Weight	kg(lbs)	60.5 (133.4)	79.0 (174.2)
		Net Dimensions (WxHxD)	mm	533 x 1,219 x 533	622 x 1,492 x 554
			inch	20.98 x 47.99 x 20.98	24.49 x 58.74 x 21.81
		Shipping Dimensions (WxHxD)	mm	590 x 1,305 x 665	676 x 1,588 x 695
			inch	23.23 x 51.38 x 26.18	26.61 x 62.52 x 27.36
	Casing	Material	-	Steel	Steel
	Control System	Infrared remote control	-	AR-CH01U	AR-CH01U
		Wired remote control	-	MWR-WG01UN	MWR-WG01UN
	Drain Pump	Drain Pump	-	-	-
		Max.lifting Height / Displacement	in / gal/h	-	-
	Additional	Air Filter (option)	-	VFB-2 (MERV 8)	VFB-3 (MERV 8)
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		UB5TN5450FJXSG	UB5TN5450FJXSG
		Type		Twin Rotary	Twin Rotary
		Output		4.25	4.25
		Oil	Type	POE	POE
			Initial Charge	1,700	1,700
	Fan	Type		Propeller	Propellar
		Discharge direction		Side	Side
		Quantity		1	2
		Air Flow Rate	m ³ /min	76	100
			ft ³ /min	2,684	3,532
	Fan Motor	Type		BLDC	BLDC
		Output		125 x 1	125 x 2
	Sound Level	Sound Pressure Level	Cooling	52	56
			Heating	54	58
		Sound Power Level		69	72
	External Dimension	Net Weight	kg(lbs)	76.5 (168.7)	86.5 (190.7)
		Shipping Weight	kg(lbs)	81.5 (179.7)	96.5 (212.7)
		Net Dimensions (WxHxD)	mm	940 x 998 x 330	940 x 1,210 x 330
			inch	37.01 x 39.29 x 12.99	37.01 x 47.64 x 12.99
		Shipping Dimensions (WxHxD)	mm	995 x 1,096 x 426	995 x 1,388 x 426
			inch	39.17 x 43.15 x 16.77	39.17 x 54.65 x 16.77
	Casing	Material	Body	Steel	Steel
	Operating Temp. Range	Cooling		-18~50 (0~122)	-18~50 (0~122)
		Heating		-20~24 (-4~75)	-20~24 (-4~75)

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 - 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

Multi-position AHU

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)		
CNG18ZDD (AC018DNZDCG/AA)	124.5	Max.	22,000	29,000	High	636	636	40	58
		Std.	18,000	20,000	Mid	583	583	37	-
		Min.	5,000	5,000	Low	477	477	34	-
CNG24ZDD (AC024DNZDCG/AA)	124.5	Max.	30,000	35,000	High	706	706	41	59
		Std.	24,000	27,000	Mid	636	636	38	-
		Min.	8,000	7,000	Low	530	530	35	-
CNG30ZDD (AC030DNZDCG/AA)	124.5	Max.	35,000	39,000	High	1,007	1,007	41	59
		Std.	30,000	34,000	Mid	918	918	38	-
		Min.	8,500	7,200	Low	848	848	35	-
CNG36ZDD (AC036DNZDCG/AA)	124.5	Max.	37,000	52,000	High	1,229	1,229	45	63
		Std.	36,000	40,000	Mid	1,074	1,074	42	-
		Min.	10,000	10,000	Low	901	901	39	-
CNG48ZDD (AC048DNZDCG/AA)	162.0	Max.	54,000	66,000	High	1,494	1,494	47	65
		Std.	48,000	54,000	Mid	1,388	1,388	45	-
		Min.	12,500	11,000	Low	1,257	1,257	43	-

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				
CNG18ZDD (AC018DNZDCG/AA)	CXG18ADD (AC018DXADCG/AA)	60	208 to 230	187	253	19.25	19.25	3.01	22.26	22.3	25
CNG24ZDD (AC024DNZDCG/AA)	CXG24ADD (AC024DXADCG/AA)	60	208 to 230	187	253	19.25	19.25	3.01	22.26	22.3	25
CNG30ZDD (AC030DNZDCG/AA)	CXG30ADD (AC030DXADCG/AA)	60	208 to 230	187	253	23.20	23.20	3.01	26.21	26.7	30
CNG36ZDD (AC036DNZDCG/AA)	CXG36ADD (AC036DXADCG/AA)	60	208 to 230	187	253	21.95	21.95	4.33	26.28	26.7	30
CNG48ZDD (AC048DNZDCG/AA)	CXG48ADD (AC048DXADCG/AA)	60	208 to 230	187	253	31.15	31.15	4.94	36.09	36.1	40

NOTE

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

4. Capacity Table

Multi-position AHU

(1)CNG18ZDD (AC018DNZDCG/AA) + CXG18ADD (AC018DXADCG/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	15.9	11.5	1.27	16.8	11.9	1.30	17.5	12.2	1.32	18.0	12.6	1.35	18.4	12.5	1.36	19.3	12.3	1.38	20.2	12.1	1.40
70	19.9	14.4	1.36	21.0	14.8	1.38	21.8	15.3	1.41	22.5	15.8	1.44	23.0	15.6	1.45	24.1	15.4	1.47	25.3	15.1	1.50
95	15.9	11.5	1.69	16.8	11.9	1.73	17.5	12.2	1.76	18.0	12.6	1.80	18.4	12.5	1.82	19.3	12.3	1.84	20.2	12.1	1.87
115	16.2	12.6	2.80	17.1	13.0	2.85	17.8	13.4	2.91	18.4	13.8	2.97	18.7	13.6	3.00	19.7	13.5	3.03	20.6	13.2	3.09
122	14.3	14.0	2.71	15.1	14.5	2.77	15.7	14.9	2.82	16.2	15.4	2.88	16.5	15.2	2.91	17.4	15.1	2.94	18.2	14.8	3.00

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	20.6	4.22	20.4	4.18	20.2	4.14	20.0	4.10	19.8	4.05	19.6	4.01
14	26.8	4.82	26.5	4.77	26.3	4.73	26.0	4.68	25.7	4.63	25.5	4.59
32	24.7	3.21	24.5	3.18	24.2	3.15	24.0	3.12	23.8	3.09	23.5	3.06
47	20.6	2.01	20.4	1.99	20.2	1.97	20.0	1.95	19.8	1.93	19.6	1.91
75.2	26.8	2.31	26.5	2.29	26.3	2.26	26.0	2.24	25.7	2.22	25.5	2.20

NOTE

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

4. Capacity Table

Multi-position AHU

(2)CNG24ZDD (AC024DNZDCG/AA) + CXG24ADD (AC024DXADCG/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	19.2	1.48	27.9	19.8	1.51	29.1	20.4	1.54	30.0	21.0	1.57	30.6	20.8	1.58	32.1	20.6	1.60	33.7	20.2	1.63
70	23.8	17.2	1.79	25.0	17.7	1.83	26.1	18.3	1.87	26.9	18.8	1.90	27.4	18.6	1.92	28.8	18.4	1.94	30.2	18.1	1.98
95	21.2	15.3	2.11	22.3	15.8	2.15	23.3	16.3	2.20	24.0	16.8	2.24	24.5	16.6	2.26	25.7	16.5	2.28	27.0	16.1	2.33
115	21.2	16.4	3.75	22.3	16.9	3.83	23.3	17.5	3.91	24.0	18.0	3.99	24.5	17.8	4.03	25.7	17.6	4.07	27.0	17.3	4.15
122	18.0	17.7	3.37	19.0	18.2	3.44	19.8	18.8	3.51	20.4	19.4	3.58	20.8	19.2	3.62	21.8	19.0	3.66	22.9	18.6	3.73

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	25.6	4.74	25.3	4.70	25.1	4.65	24.8	4.60	24.6	4.56	24.3	4.51
14	27.8	4.96	27.5	4.91	27.3	4.86	27.0	4.81	26.7	4.76	26.5	4.72
32	30.6	3.66	30.3	3.62	30.0	3.59	29.7	3.55	29.4	3.51	29.1	3.48
47	27.8	2.71	27.5	2.68	27.3	2.66	27.0	2.63	26.7	2.60	26.5	2.58
75.2	37.6	3.52	37.2	3.49	36.8	3.45	36.5	3.42	36.1	3.38	35.7	3.35

NOTE

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

4. Capacity Table

Multi-position AHU

(3)CNG30ZDD (AC030DNZDCG/AA) + CXG30ADD (AC030DXADCG/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	33.2	25.7	1.71	34.9	26.5	1.75	36.4	27.3	1.78	37.5	28.1	1.82	38.3	27.8	1.84	40.2	27.6	1.86	42.2	27.0	1.89
70	30.5	23.6	2.20	32.1	24.3	2.25	33.5	25.1	2.29	34.5	25.9	2.34	35.2	25.6	2.36	36.9	25.4	2.39	38.8	24.9	2.43
95	26.5	20.5	2.45	27.9	21.2	2.50	29.1	21.8	2.55	30.0	22.5	2.60	30.6	22.3	2.63	32.1	22.1	2.65	33.7	21.6	2.71
115	24.2	21.4	3.74	25.4	22.1	3.82	26.5	22.8	3.90	27.3	23.5	3.98	27.8	23.2	4.02	29.2	23.0	4.06	30.7	22.6	4.14
122	19.9	20.5	3.25	21.0	21.2	3.32	21.8	21.8	3.39	22.5	22.5	3.46	23.0	22.3	3.49	24.1	22.1	3.53	25.3	21.6	3.60

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	28.0	4.80	27.7	4.75	27.5	4.70	27.2	4.65	26.9	4.61	26.7	4.56
14	38.5	6.28	38.2	6.22	37.8	6.16	37.4	6.10	37.0	6.04	36.7	5.98
32	42.0	4.63	41.6	4.58	41.2	4.54	40.8	4.49	40.4	4.45	40.0	4.40
47	35.0	3.31	34.7	3.27	34.3	3.24	34.0	3.21	33.7	3.18	33.3	3.15
75.2	44.8	3.87	44.4	3.83	44.0	3.79	43.5	3.76	43.1	3.72	42.7	3.68



NOTE

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

4. Capacity Table

Multi-position AHU

(4)CNG36ZDD (AC036DNZDCG/AA) + CXG36ADD (AC036DXADCG/AA)

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
0	36.6	26.4	3.57	38.6	27.3	3.64	40.2	28.1	3.71	41.4	29.0	3.79	42.2	28.7	3.83	44.3	28.4	3.87	46.6	27.8	3.94
70	38.2	27.6	3.21	40.2	28.5	3.28	41.9	29.3	3.34	43.2	30.2	3.41	44.1	29.9	3.44	46.3	29.6	3.48	48.6	29.0	3.55
95	31.8	23.0	3.56	33.5	23.7	3.63	34.9	24.4	3.70	36.0	25.2	3.78	36.7	24.9	3.82	38.6	24.7	3.86	40.5	24.2	3.93
115	28.9	24.2	4.33	30.4	24.9	4.42	31.7	25.7	4.51	32.7	26.5	4.61	33.3	26.2	4.65	35.0	25.9	4.70	36.7	25.4	4.79
122	23.7	22.5	3.79	25.0	23.2	3.86	26.0	23.9	3.94	26.8	24.7	4.02	27.3	24.4	4.06	28.7	24.2	4.10	30.1	23.7	4.18

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	30.9	5.02	30.6	4.97	30.3	4.92	30.0	4.88	29.7	4.83	29.4	4.78
14	42.4	6.23	42.0	6.17	41.6	6.11	41.2	6.05	40.8	5.98	40.4	5.92
32	43.3	4.82	42.8	4.77	42.4	4.73	42.0	4.68	41.6	4.63	41.2	4.59
47	41.2	4.02	40.8	3.98	40.4	3.94	40.0	3.90	39.6	3.86	39.2	3.82
75.2	47.4	3.62	46.9	3.58	46.5	3.55	46.0	3.51	45.5	3.47	45.1	3.44

NOTE

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

4. Capacity Table

Multi-position AHU

(5)CNG48ZDD (AC048DNZDCG/AA) + CXG48ADD (AC048DXADCG/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	48.8	35.3	4.47	51.4	36.4	4.56	53.5	37.5	4.66	55.2	38.6	4.75	56.3	38.3	4.80	59.1	37.9	4.85	62.1	37.1	4.94
70	51.0	36.8	4.19	53.6	37.9	4.27	55.9	39.1	4.36	57.6	40.3	4.45	58.8	39.9	4.49	61.7	39.5	4.54	64.8	38.7	4.63
95	42.5	30.7	4.71	44.7	31.6	4.80	46.6	32.6	4.90	48.0	33.6	5.00	49.0	33.3	5.05	51.4	32.9	5.10	54.0	32.3	5.20
115	35.7	29.8	4.71	37.5	30.7	4.80	39.1	31.7	4.90	40.3	32.7	5.00	41.1	32.3	5.05	43.2	32.0	5.10	45.3	31.4	5.20
122	30.1	28.6	4.09	31.7	29.5	4.18	33.1	30.4	4.26	34.1	31.4	4.35	34.8	31.0	4.39	36.5	30.7	4.44	38.3	30.1	4.53

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4	42.3	6.24	41.9	6.18	41.5	6.12	41.0	6.06	40.6	6.00	40.2	5.94
14	55.6	7.06	55.1	6.99	54.5	6.92	54.0	6.85	53.5	6.78	52.9	6.71
32	52.9	4.89	52.3	4.84	51.8	4.79	51.3	4.74	50.8	4.70	50.3	4.65
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	64.0	4.34	63.3	4.30	62.7	4.26	62.1	4.22	61.5	4.17	60.9	4.13

NOTE

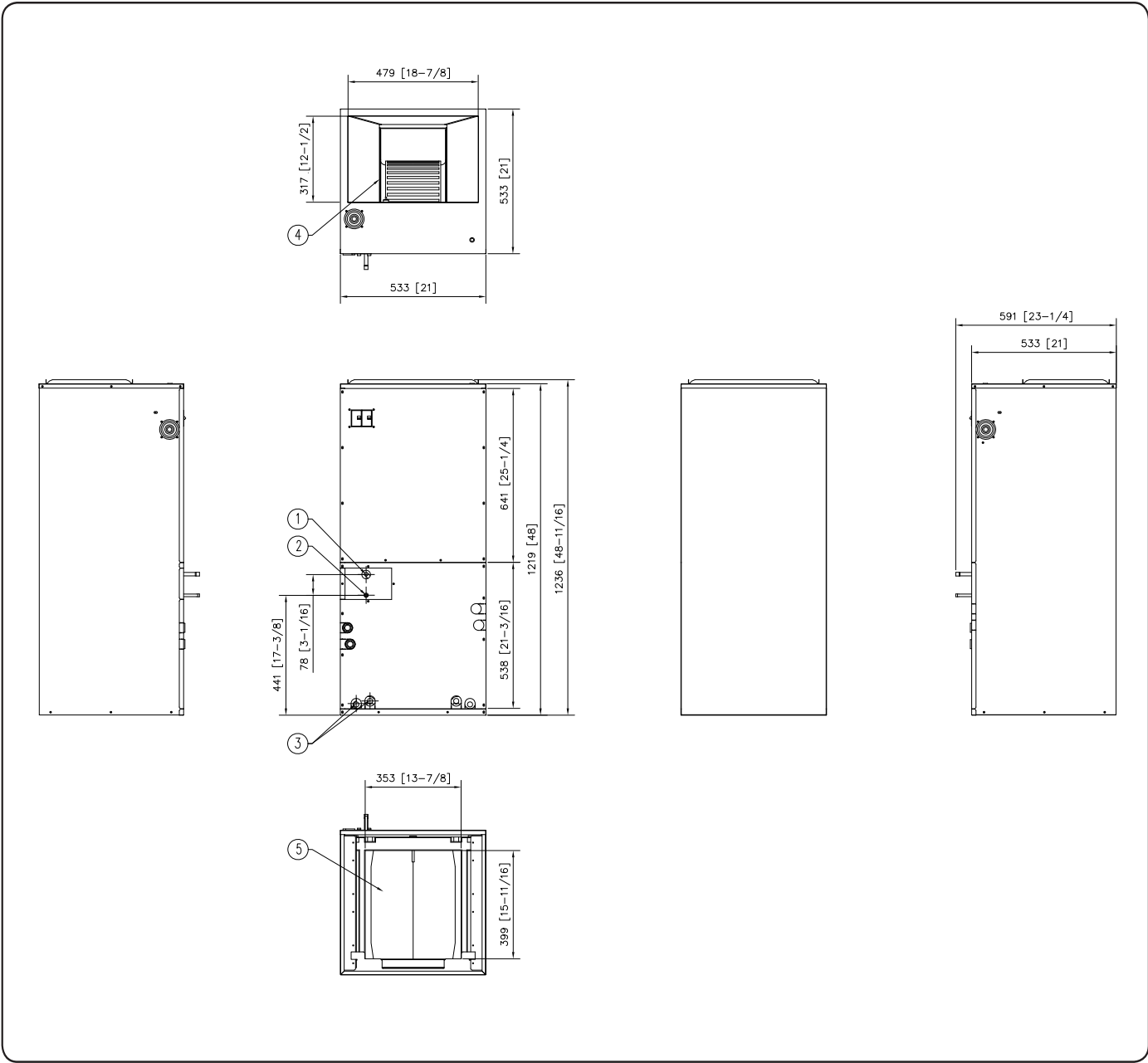
- The performance table shows the average value of each conditions.

5. Dimensional Drawing

Multi-position AHU

CNG18ZDD (AC018DNZDCG/AA), CNG24ZDD (AC024DNZDCG/AA), CNG30ZDD (AC030DNZDCG/AA)
CNG36ZDD (AC036DNZDCG/AA)

Units : mm [inches]



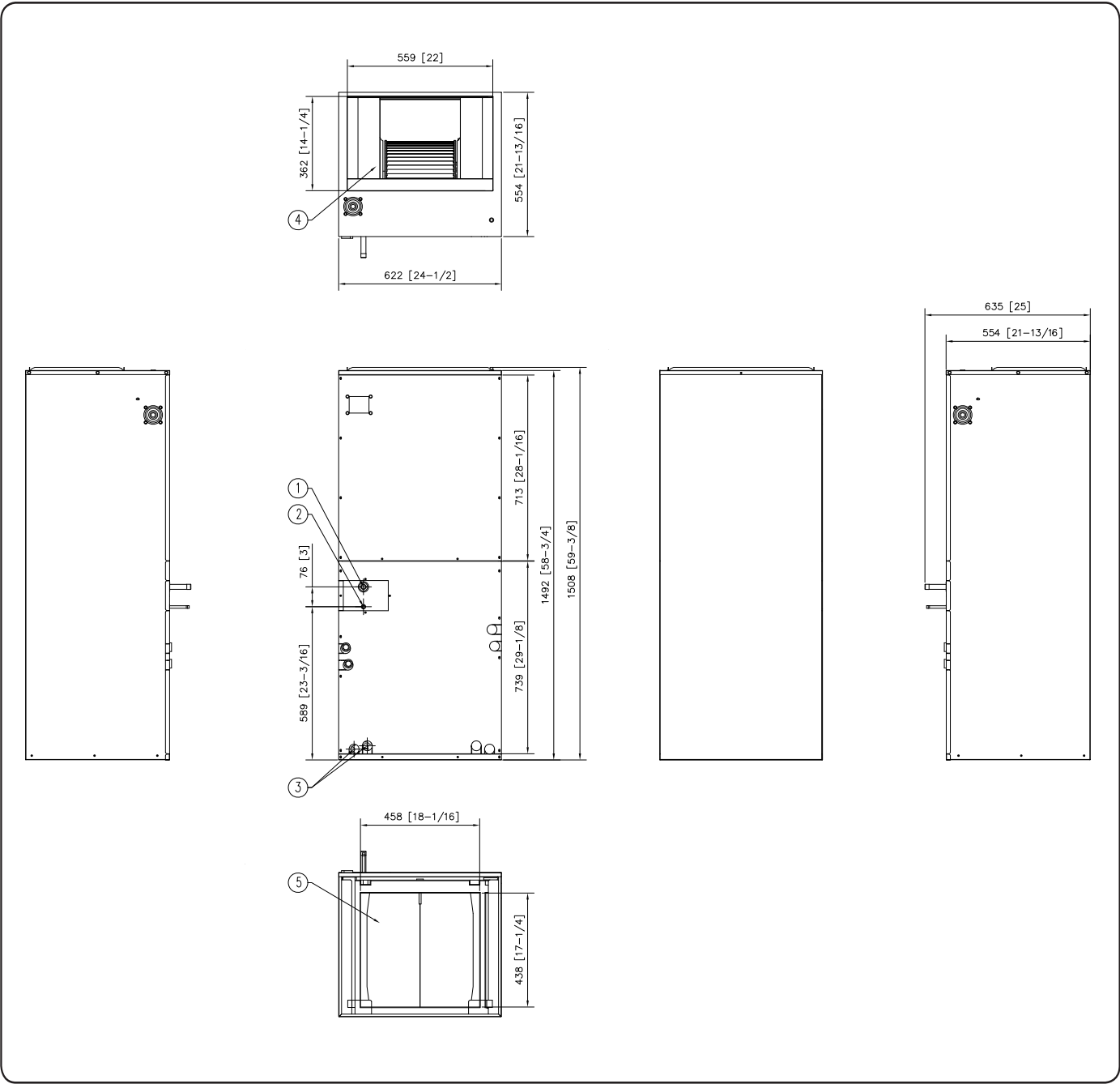
No.	Name	Description			
		CNG18ZDD (AC018DNZDCG/AA)	CNG24ZDD (AC024DNZDCG/AA)	CNG30ZDD (AC030DNZDCG/AA)	CNG36ZDD (AC036DNZDCG/AA)
1	Gas pipe connection	Φ12.7 (1/2)	Φ15.88(5/8)		
2	Liquid pipe connection	Φ6.35 (1/4)		Φ9.52(3/8)	
3	Drain pipe connection	FPT 3/4			
4	Air outlet				
5	Air intake				

5. Dimensional Drawing

Multi-position AHU

CNG48ZDD (AC048DNZDCG/AA)

Units : mm [inches]

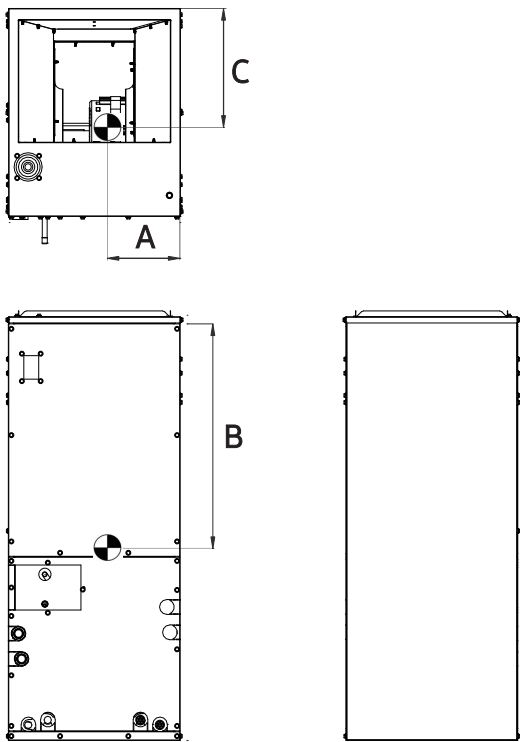


No.	Name	Description
1	Gas pipe connection	Φ15.88(5/8)
2	Liquid pipe connection	Φ9.52(3/8)
3	Drain pipe connection	FPT 3/4
4	Air outlet	
5	Air intake	

6. Center of Gravity

Multi-position AHU

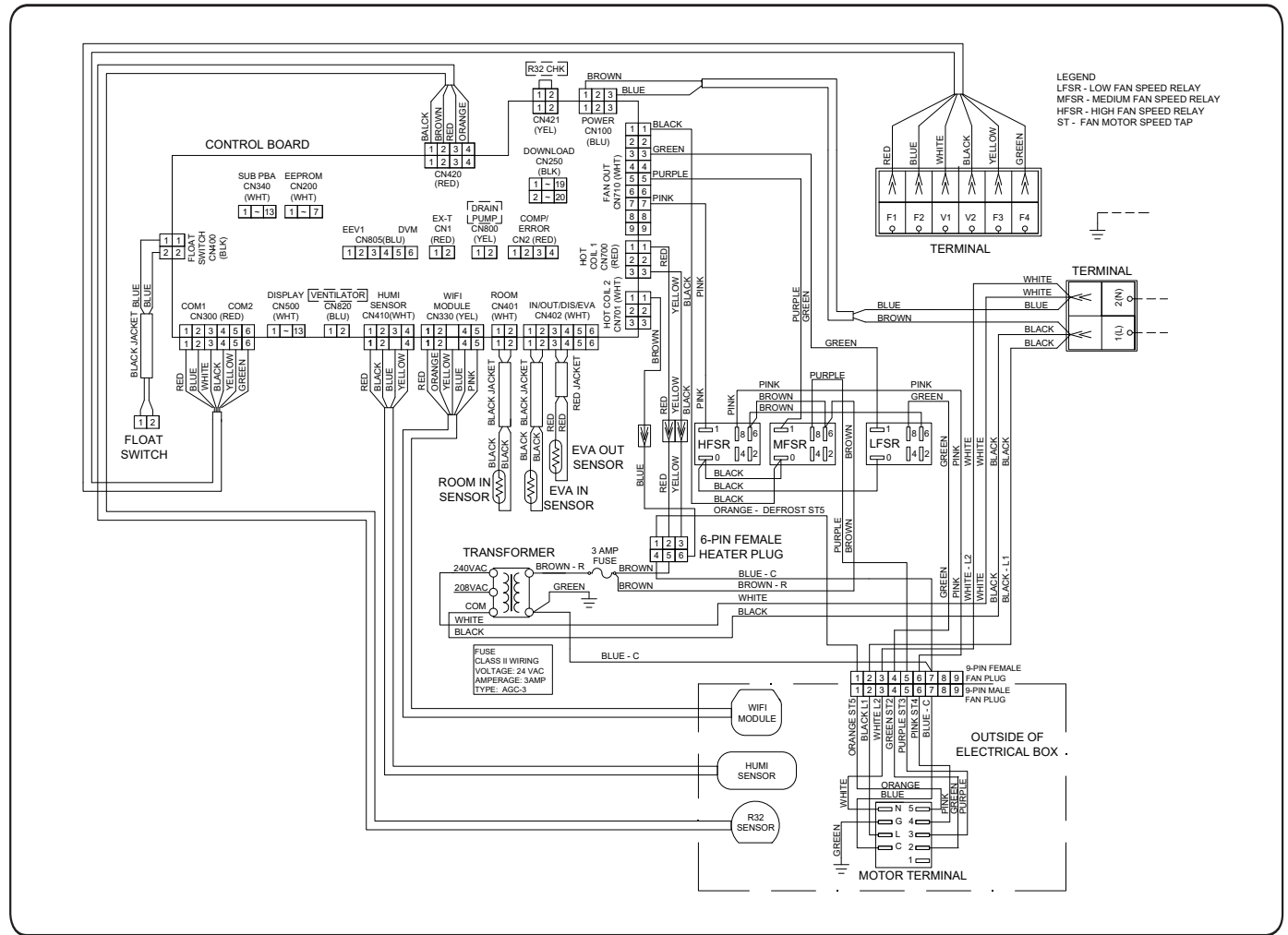
Units : mm [inches]



Model	A	B	C
CNG18ZDD(AC018DNZDCG/AA) CNG24ZDD(AC024DNZDCG/AA) CNG30ZDD(AC030DNZDCG/AA) CNG36ZDD(AC036DNZDCG/AA)	230 [9-1/16]	289 [11-3/8]	637 [25-1/16]
CNG48ZDD(AC048DNZDCG/AA)	268 [10-9/16]	300 [11-13/16]	780 [30-11/16]

7. Electrical Wiring Diagram

Multi-position AHU



COMP/ERROR	Contact output port for compressor operation/error check	6-PIN FEMALE HEATER PLUG	Intermediate connection connector connected to the heater	FAN OUT	CONNECTOR CONNECTED TO INDOOR FAN
EEV	Electronic Expansion Valve	EVA IN SENSOR	Thermistor - IDU heat exchanger In	R32 SENSOR	R32 Gas sensor
ROOM IN SENSOR	Thermistor - Indoor Room	EVA OUT SENSOR	Thermistor - IDU heat exchanger Out	EX-T	Input port for external contact control

NOTE

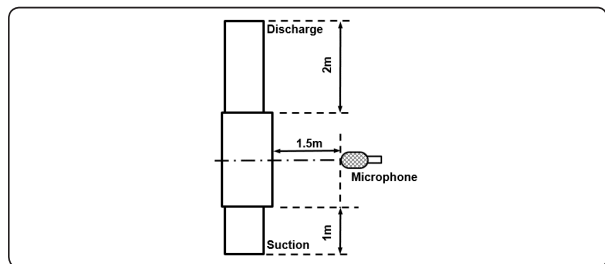
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
 blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⏏ Protective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

8. Sound Data

Multi-position AHU

Sound Pressure level

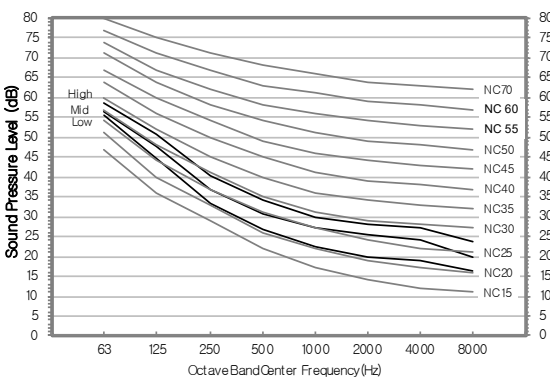
Unit: dB(A)



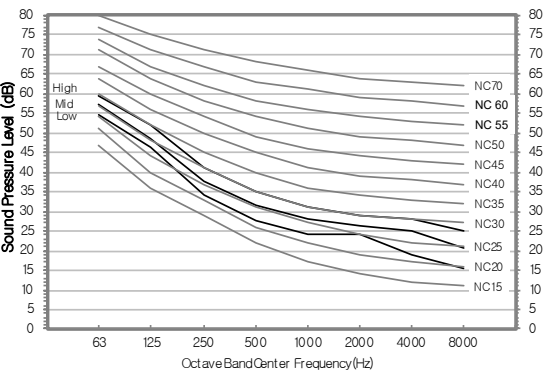
Model	High	Mid	Low
CNG18ZDD (AC018DNZDCG/AA)	40	37	34
CNG24ZDD (AC024DNZDCG/AA)	41	38	35
CNG30ZDD (AC030DNZDCG/AA)	41	38	35
CNG36ZDD (AC036DNZDCG/AA)	45	42	39

• NC Curve

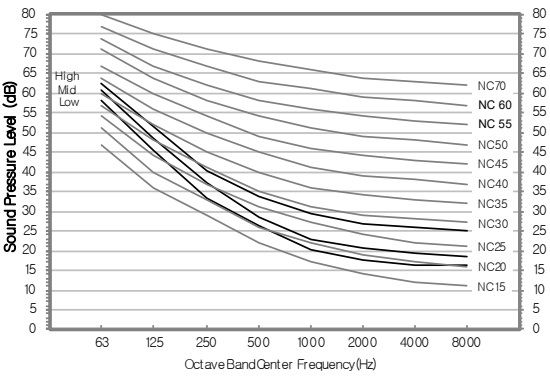
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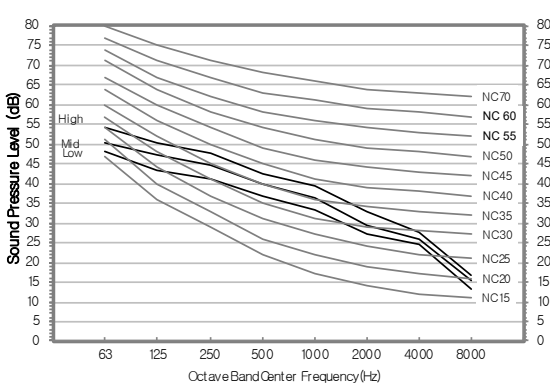
2) CNG24ZDD (AC024DNZDCG/AA)



3) CNG30ZDD (AC030DNZDCG/AA)



4) CNG36ZDD (AC036DNZDCG/AA)



NOTE

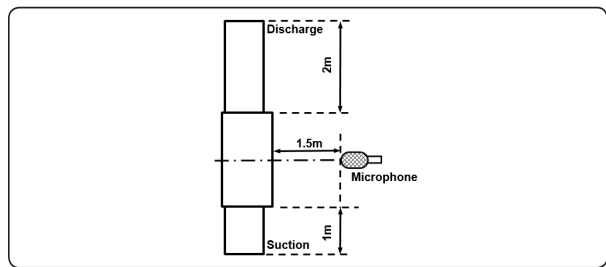
- Specifications may be subject to change without prior notice.
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted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

8. Sound Data

Multi-position AHU

Sound Pressure level

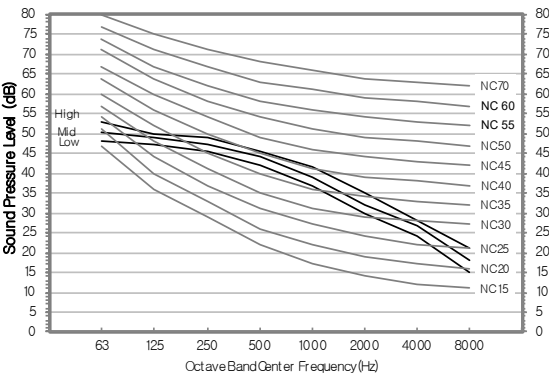
Unit: dB(A)



Model	High	Mid	Low
CNG48ZDD (AC048DNZDCG/AA)	47	45	43

• NC Curve

1) CNG48ZDD (AC048DNZDCG/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

Multi-position AHU

Sound Power level



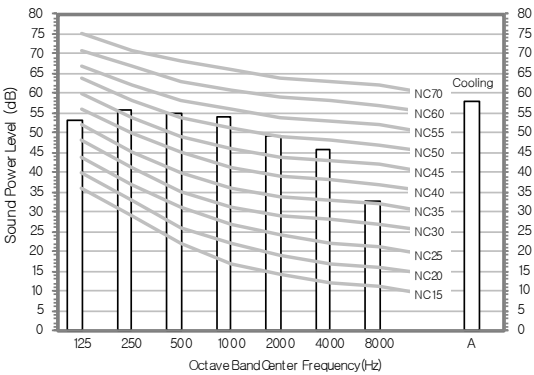
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

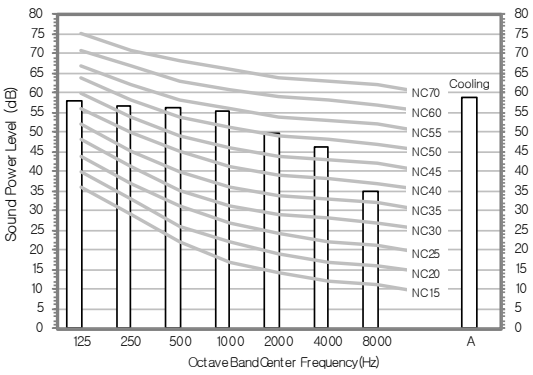
Model	Cooling
CNG18ZDD (AC018DNZDCG/AA)	58
CNG24ZDD (AC024DNZDCG/AA)	59
CNG30ZDD (AC030DNZDCG/AA)	59
CNG36ZDD (AC036DNZDCG/AA)	63

NC Curve

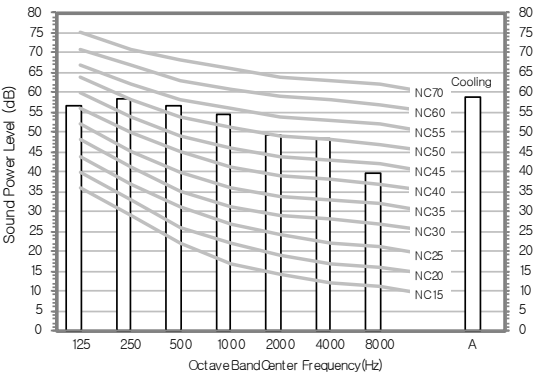
1) CNG18ZDD (AC018DNZDCG/AA)



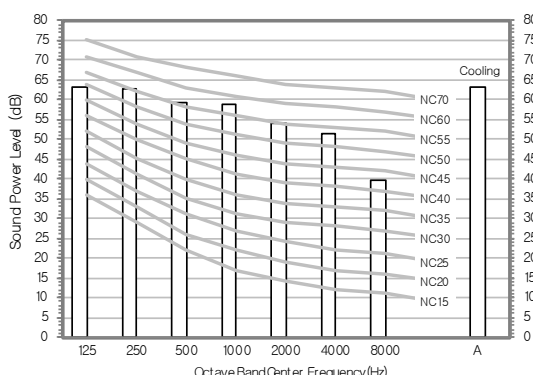
2) CNG24ZDD (AC024DNZDCG/AA)



3) CNG30ZDD (AC030DNZDCG/AA)



4) CNG36ZDD (AC036DNZDCG/AA)



8. Sound Data

Multi-position AHU

Sound Power level

 NOTE

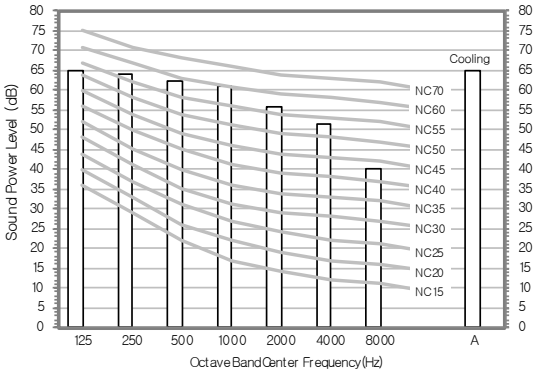
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

Model	Cooling
CNG48ZDD (AC048DNZDCG/AA)	65

- NC Curve

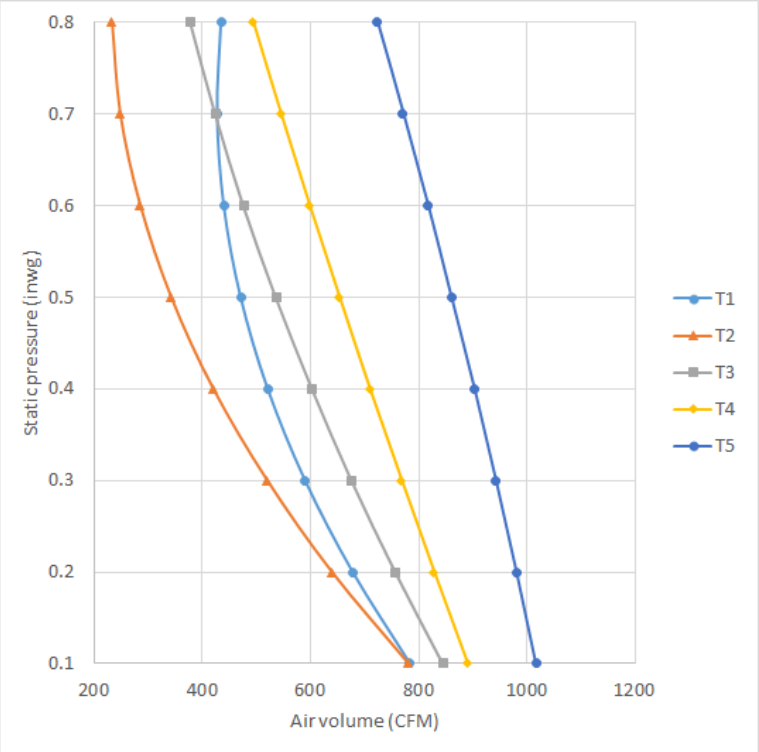
1) CNG48ZDD (AC048DNZDCG/AA)



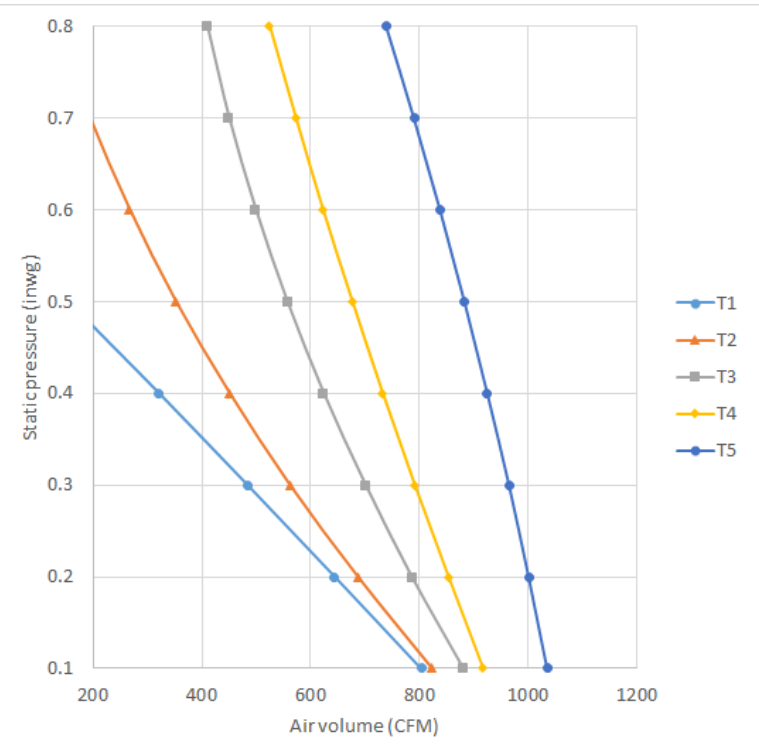
9. Fan Characteristics

Multi-position AHU

CNG18ZDD (AC018DNZDCG/AA) + CXG18ADD (AC018DXADCG/AA)



CNG24ZDD (AC024DNZDCG/AA) + CXG24ADD (AC024DXADCG/AA)

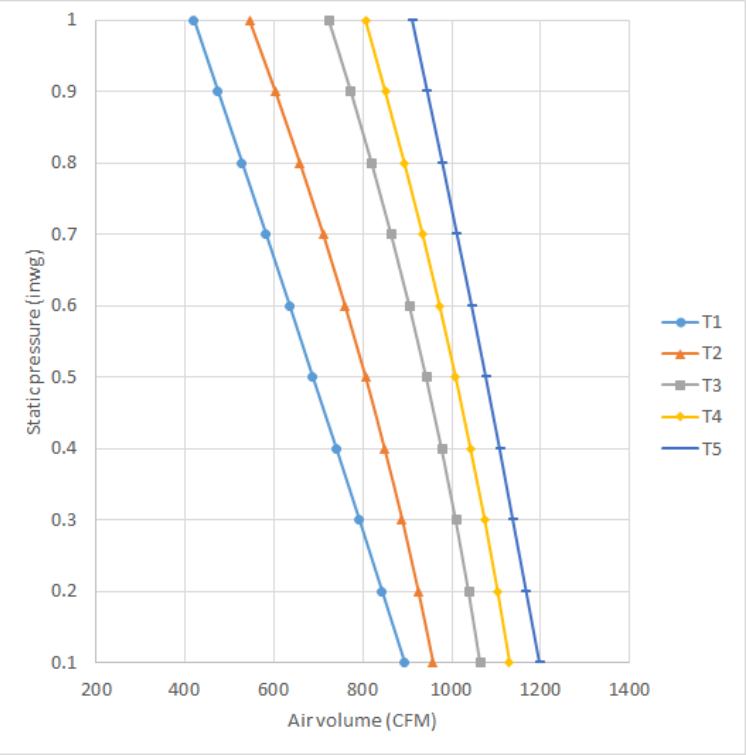


T1	Low speed tap
T2	Medium-low speed tap
T3	Medium speed tap
T4	Medium-high speed tap
T5	High speed tap

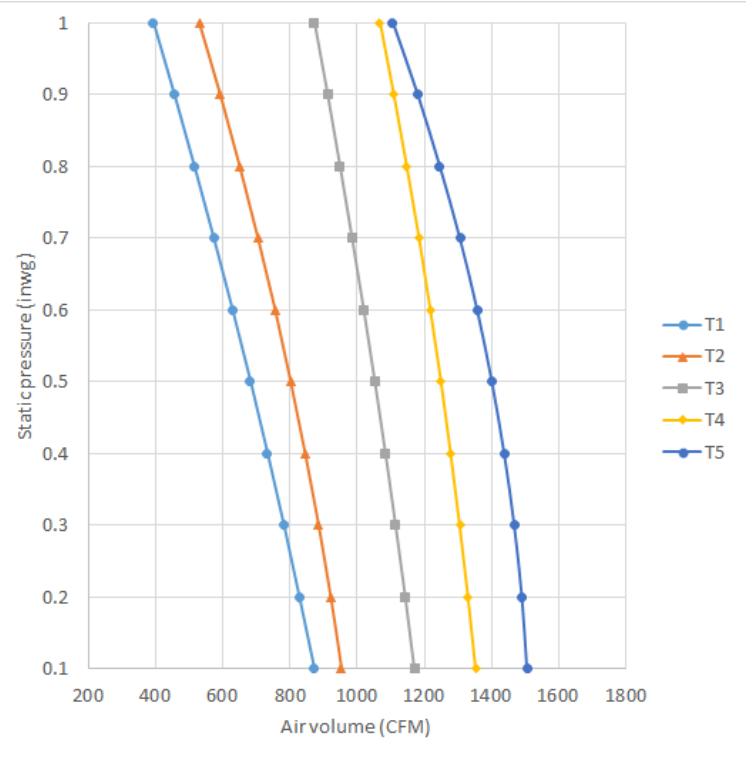
9. Fan Characteristics

Multi-position AHU

CNG30ZDD (AC030DNZDCG/AA) + CXG30ADD (AC030DXADCG/AA)



CNG36ZDD (AC036DNZDCG/AA) + CXG36ADD (AC036DXADCG/AA)

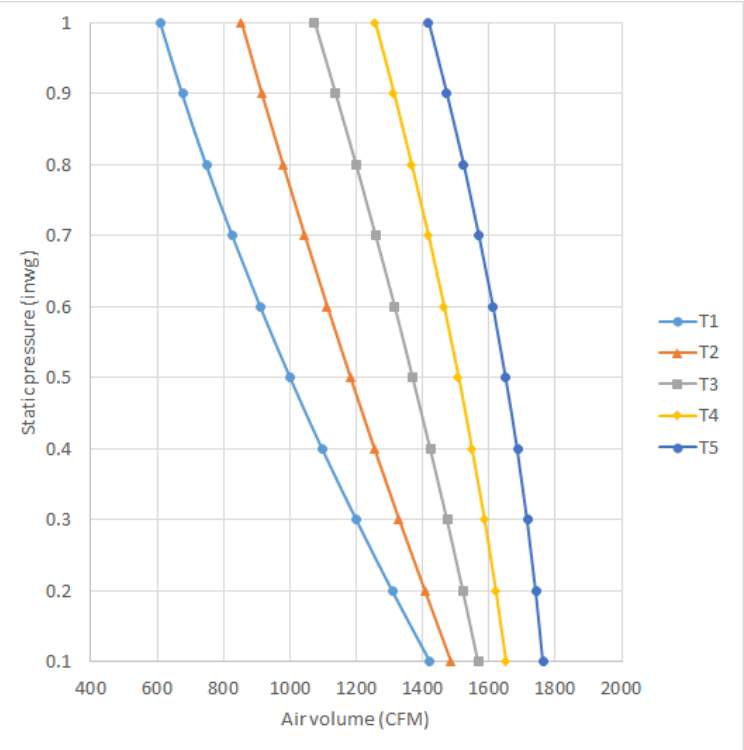


T1	Low speed tap
T2	Medium-low speed tap
T3	Medium speed tap
T4	Medium-high speed tap
T5	High speed tap

9. Fan Characteristics

Multi-position AHU

CNG48ZDD (AC048DNZDCG/AA) + CXG48ADD (AC048DXADCG/AA)



T1	Low speed tap
T2	Medium-low speed tap
T3	Medium speed tap
T4	Medium-high speed tap
T5	High speed tap

Outdoor Units

1. Summary Table	38
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8. Piping Diagram	54

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	
18,000	CXG18ADD (AC018DXADCG/AA)	34.65 x 25.12 x 12.20	93.7	1,766	48	48	62
24,000	CXG24ADD (AC024DXADCG/AA)	34.65 x 31.42 x 12.20	116.8	2,154	50	52	65
30,000	CXG30ADD (AC030DXADCG/AA)	37.01 x 39.29 x 12.99	156.5	2,684	50	52	67
36,000	CXG36ADD (AC036DXADCG/AA)	37.01 x 39.29 x 12.99	168.7	2,684	52	54	69
48,000	CXG48ADD (AC048DXADCG/AA)	37.01 x 47.64 x 12.99	190.7	3,532	56	58	72

NOTE

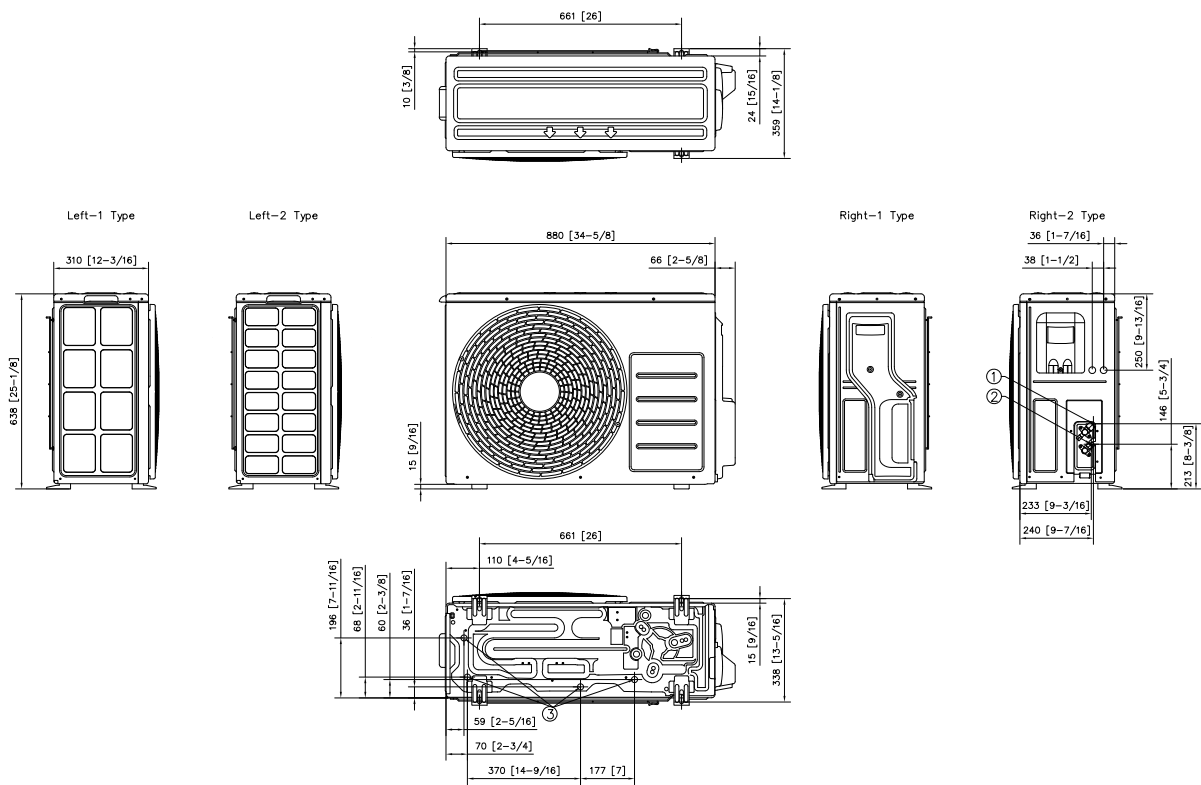
- Sound power level is based on cooling operation.

2. Dimensional Drawing

Outdoor Units

CXG18ADD (AC018DXADCG/AA)

Units : mm [inches]



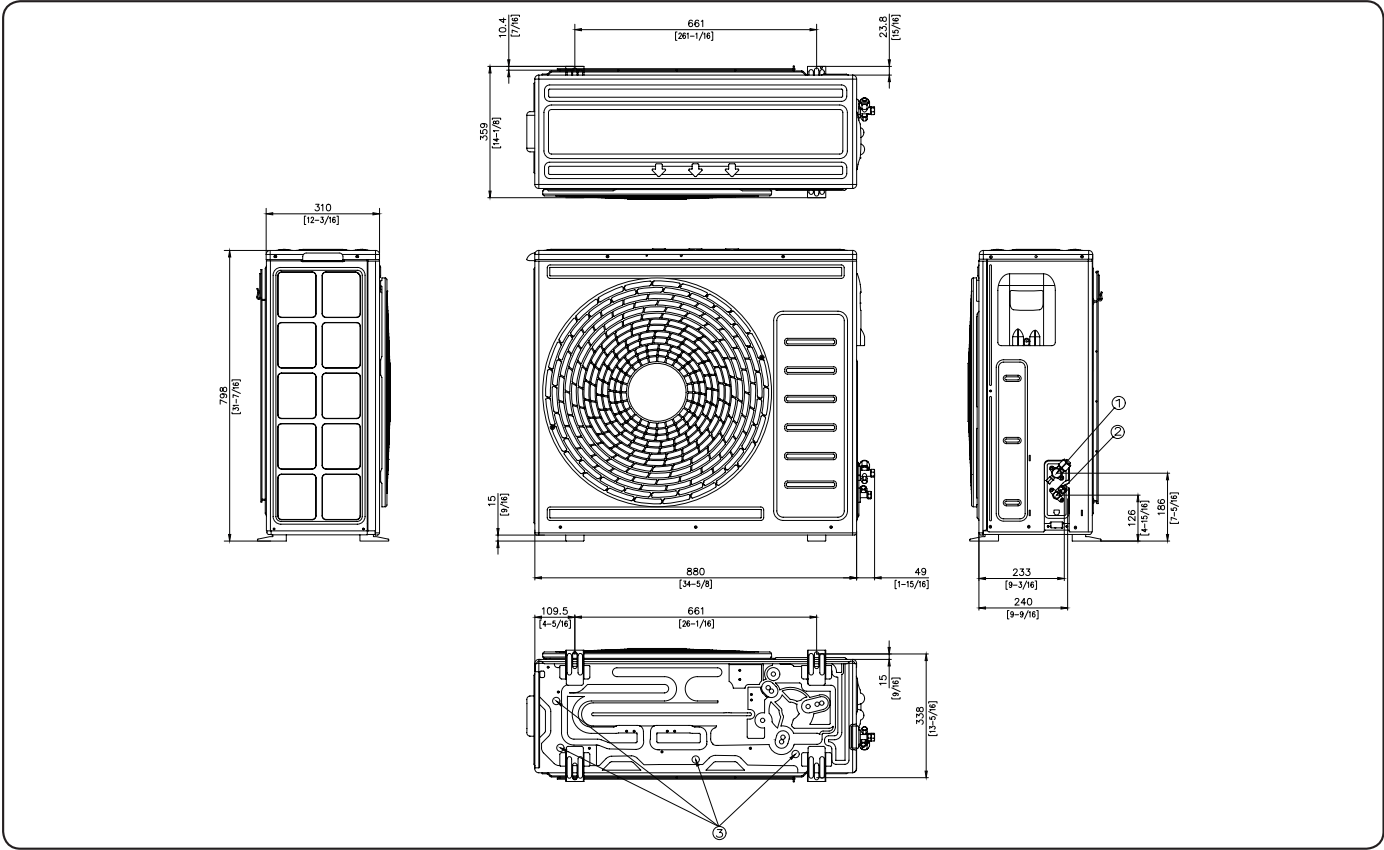
No.	Name	Description
1	Gas pipe connection	Φ 12.7 (1/2)
2	Liquid pipe connection	Φ 6.35 (1/4)
3	Drain pipe connection	

2. Dimensional Drawing

Outdoor Units

CXG24ADD (AC024DXADCG/AA)

Units : mm [inches]



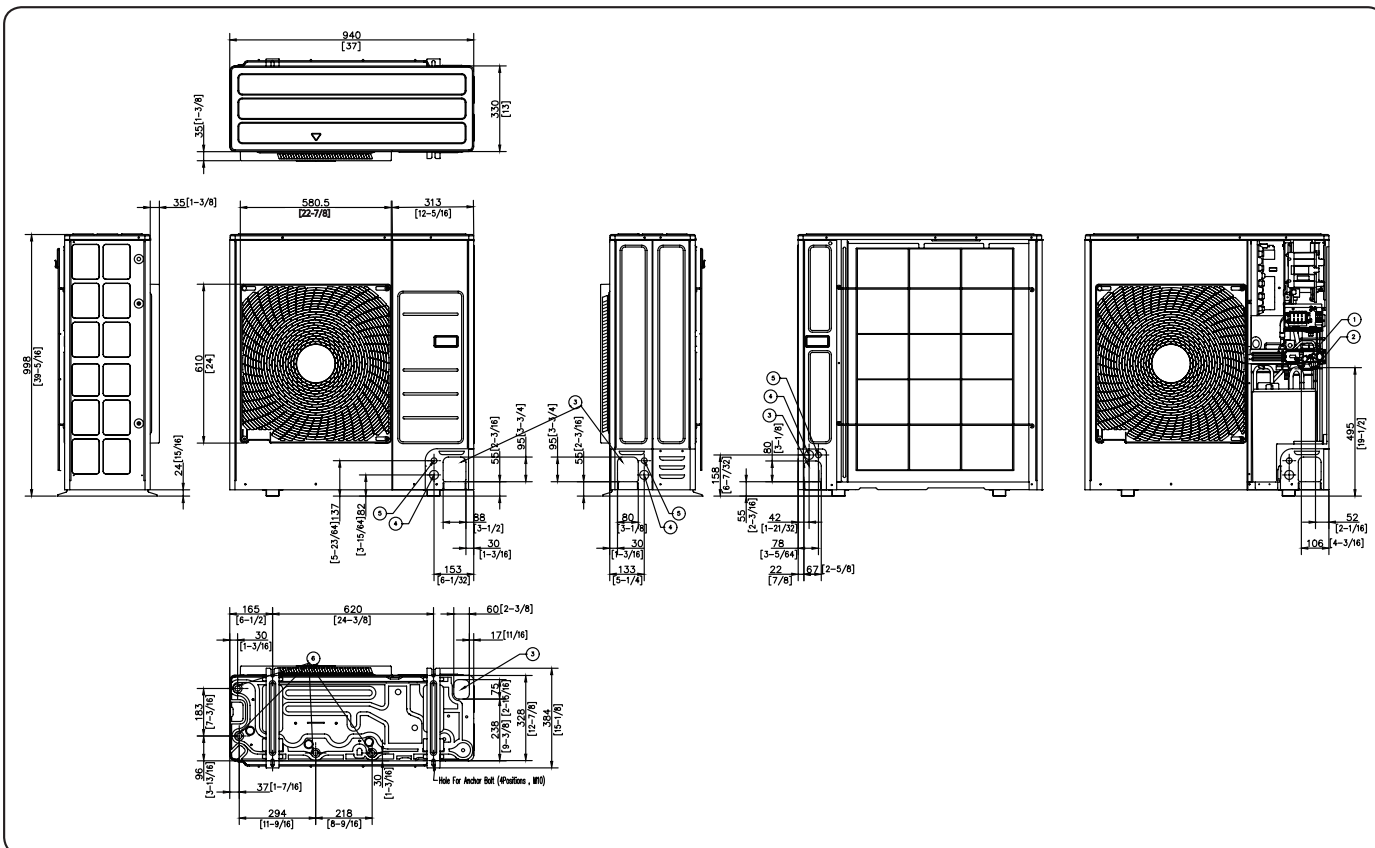
No.	Name	Description
1	Gas pipe connection	Φ 15.88 (5/8)
2	Liquid pipe connection	Φ 6.35 (1/4)
3	Drain pipe connection	

2. Dimensional Drawing

Outdoor Units

CXG30ADD (AC030DXADCG/AA), CXG36ADD (AC036DXADCG/AA)

Units : mm [inches]



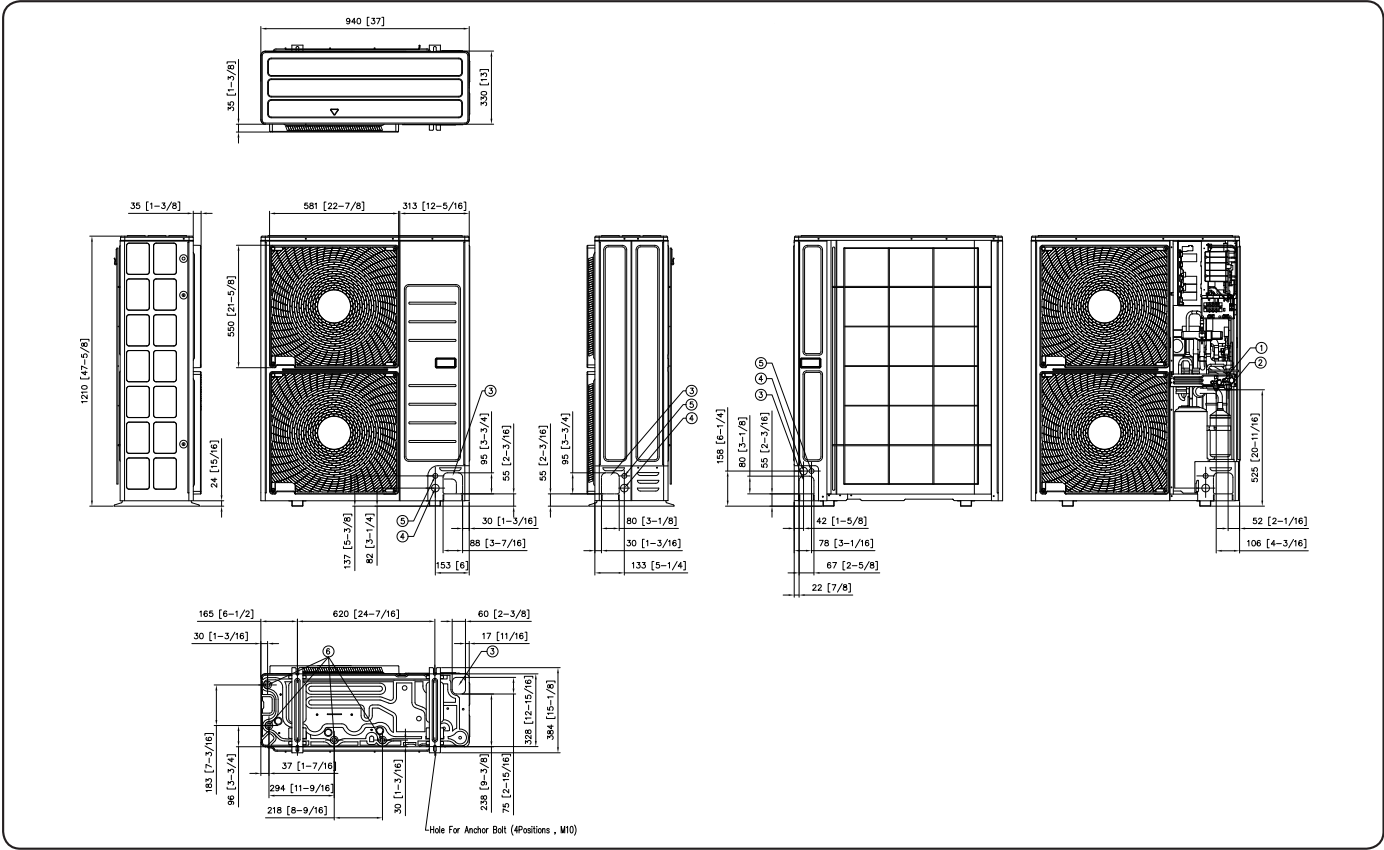
No.	Name	Description
1	Liquid pipe connection	Φ 9.52 (3/8)
2	Gas pipe connection	Φ 15.88 (5/8)
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear , Φ 34(1-3/8)
5	Communication wiring conduit	Front / Side / Rear , Φ 22(7/8)
6	Drain Hole	Connect with the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

2. Dimensional Drawing

Outdoor Units

CXG48ADD (AC048DXADCG/AA)

Units : mm [inches]



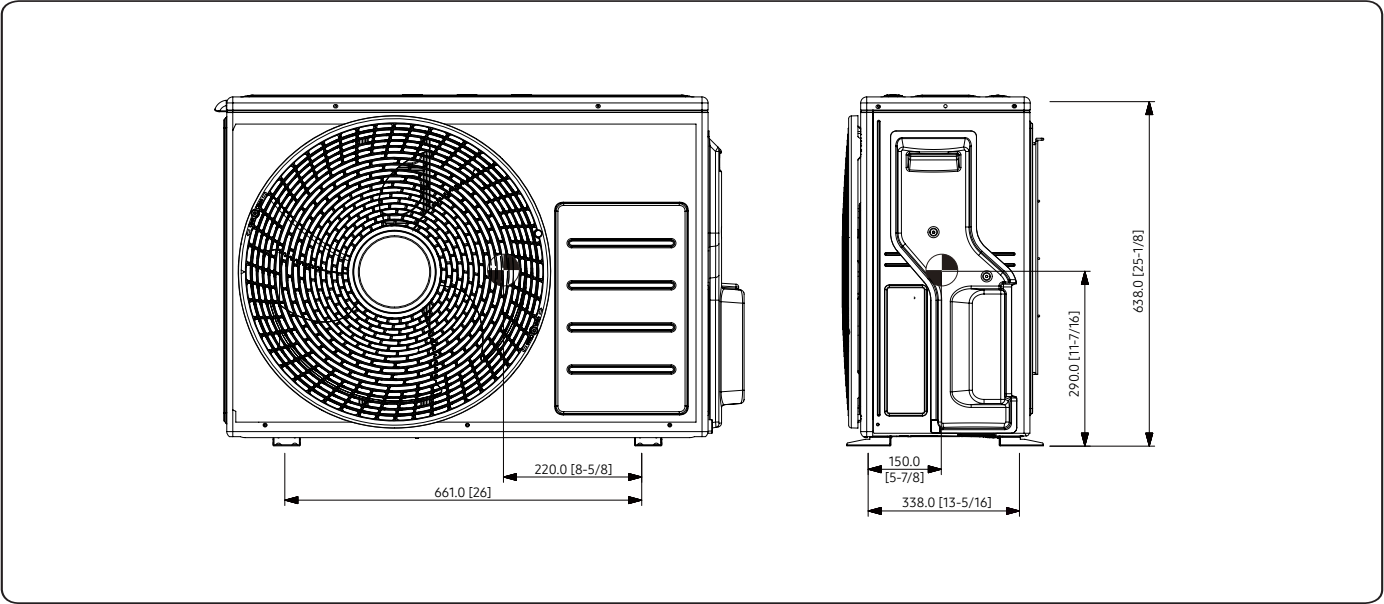
No.	Name	Description
1	Liquid pipe connection	Φ 9.52 (3/8)
2	Gas pipe connection	Φ 15.88 (5/8)
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear , Φ 34(1-3/8)
5	Communication wiring conduit	Front / Side / Rear , Φ 22(7/8)
6	Drain Hole	Connect with the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

3. Center of Gravity

Outdoor Units

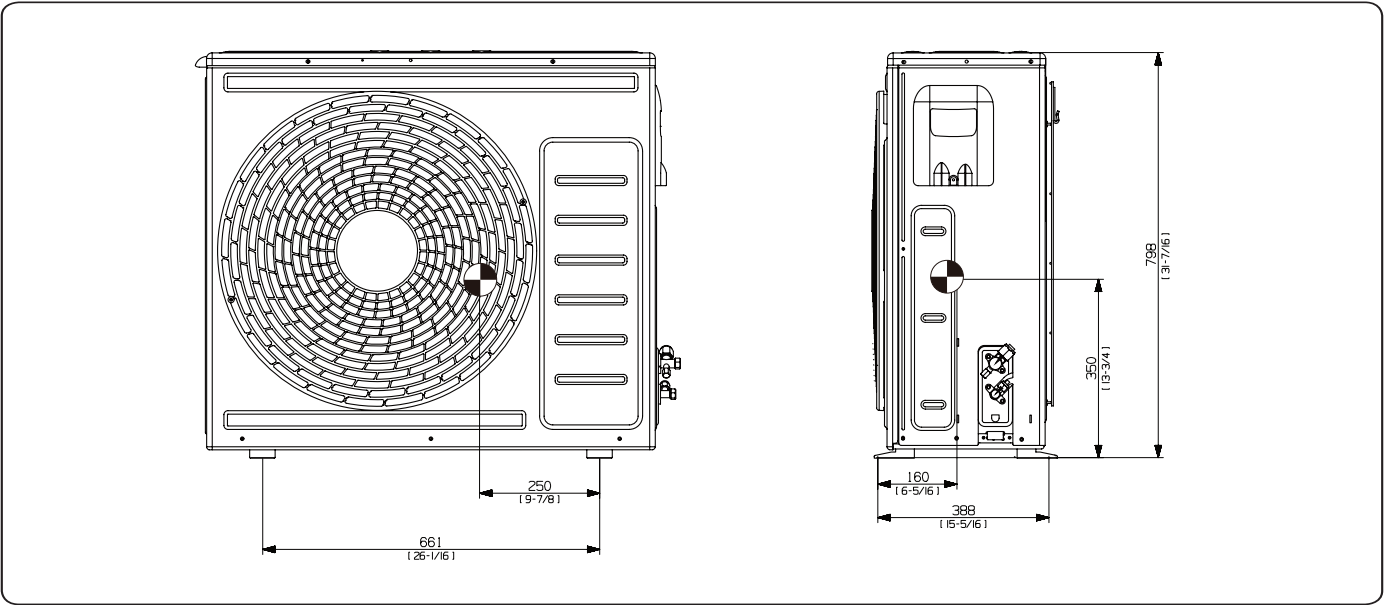
CXG18ADD (AC018DXADCG/AA)

Units : mm [inches]



CXG24ADD (AC024DXADCG/AA)

Units : mm [inches]

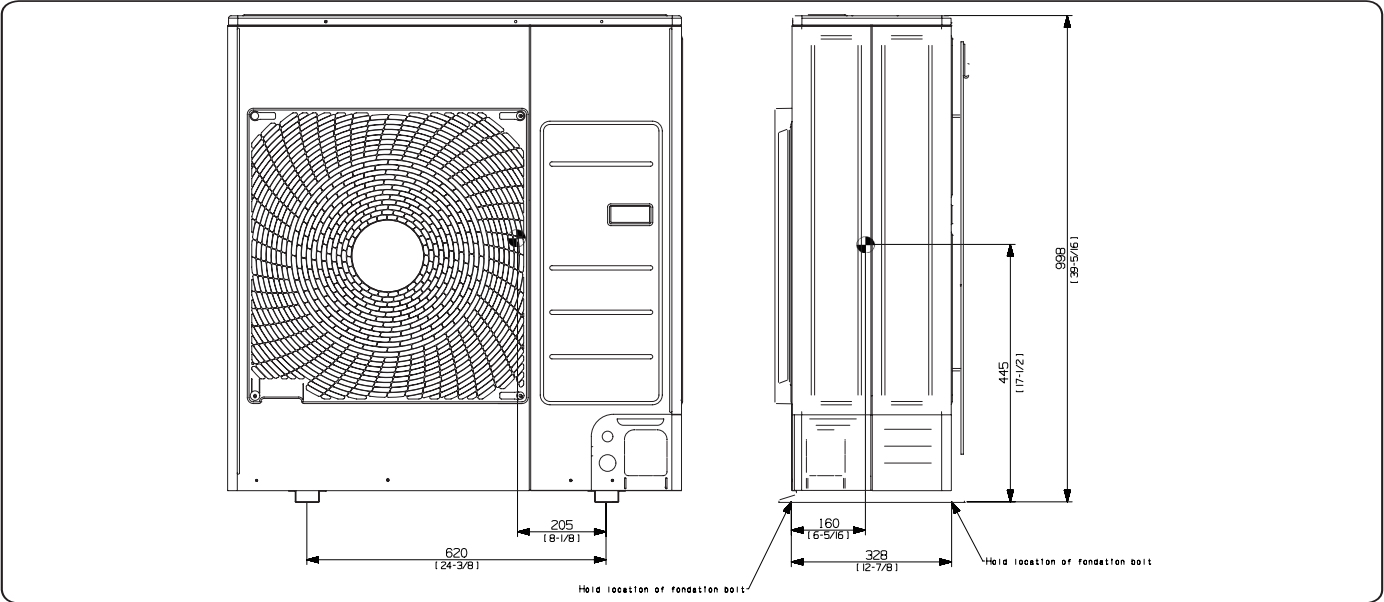


3. Center of Gravity

Outdoor Units

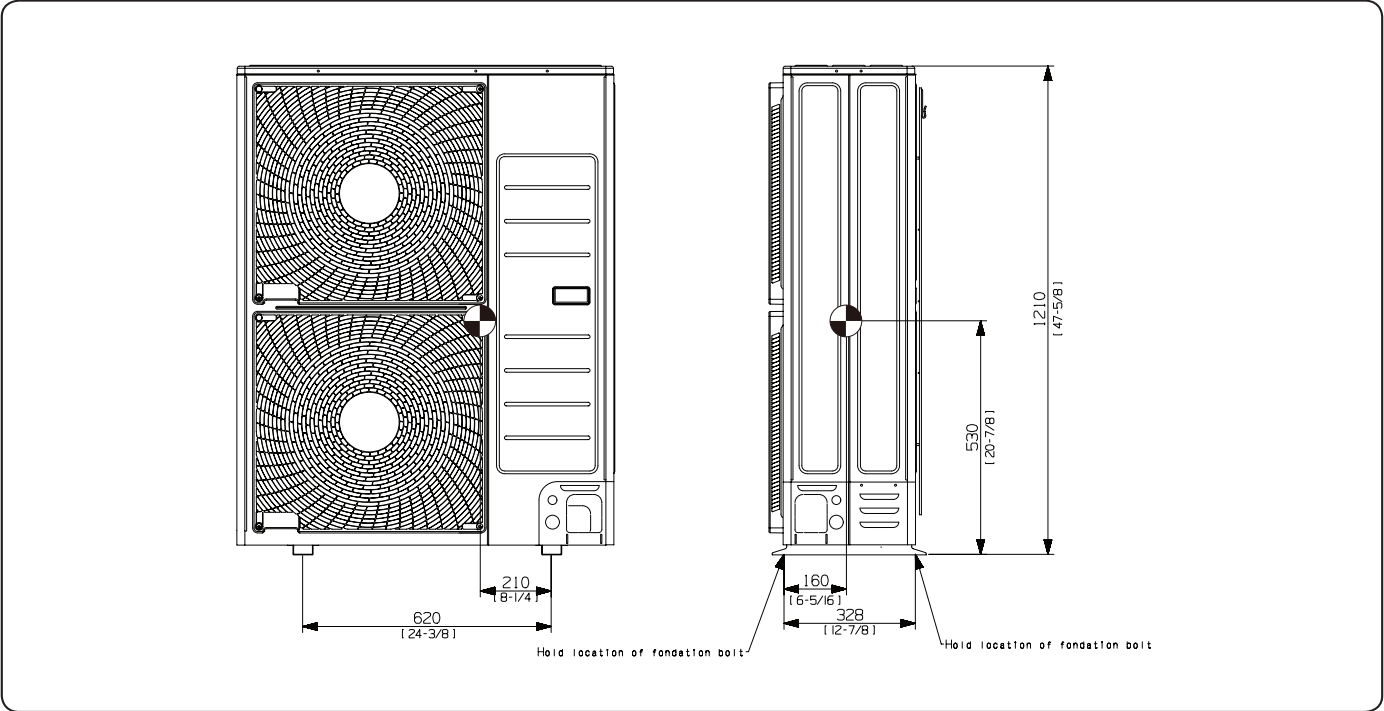
CXG30ADD (AC030DXADCG/AA), CXG36ADD (AC036DXADCG/AA)

Units : mm [inches]



CXG48ADD (AC048DXADCG/AA)

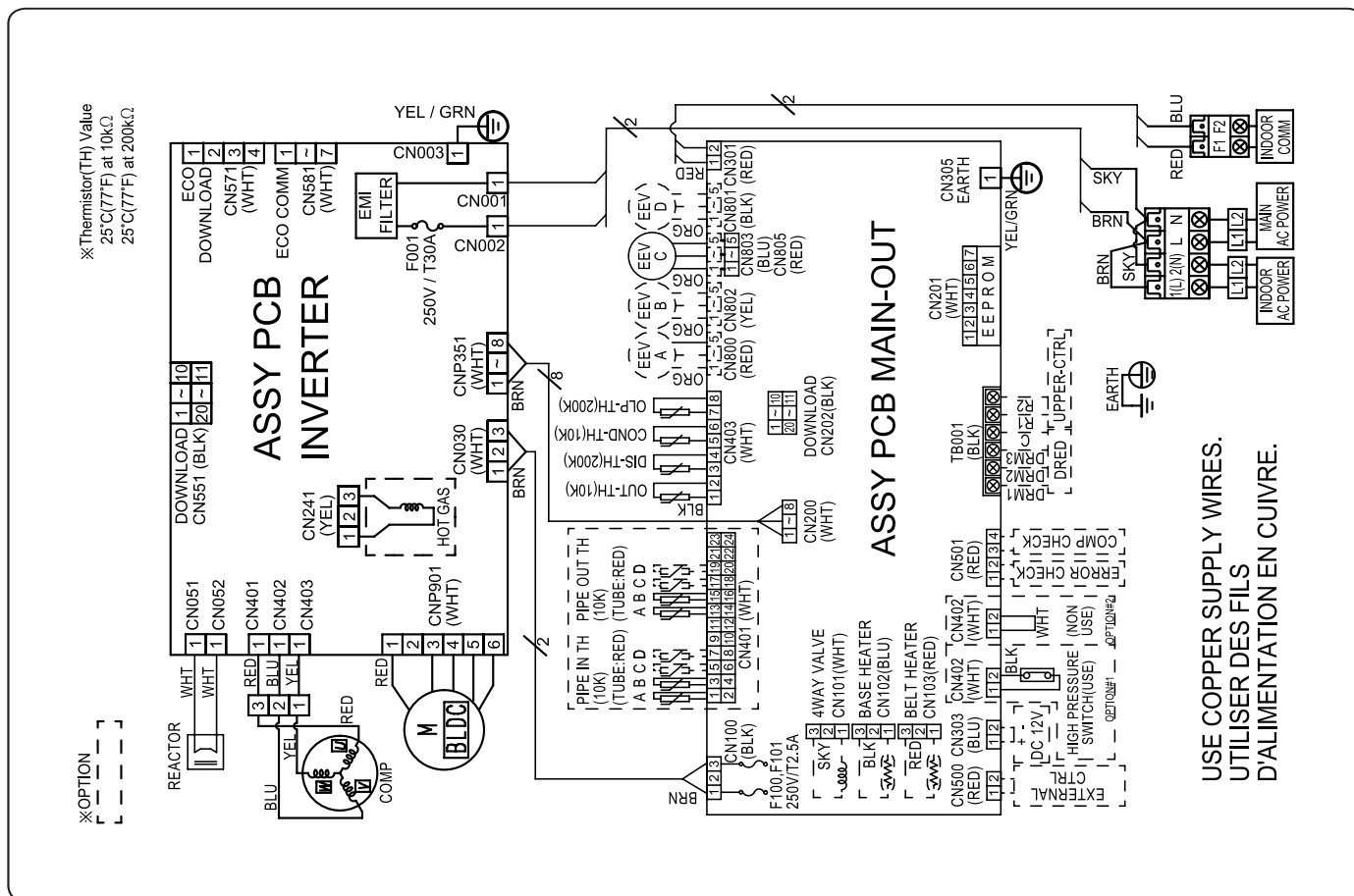
Units : mm [inches]



4. Electrical Wiring Diagram

Outdoor Units

CXG18ADD (AC018DXADCG/AA), CXG24ADD (AC024DXADCG/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		

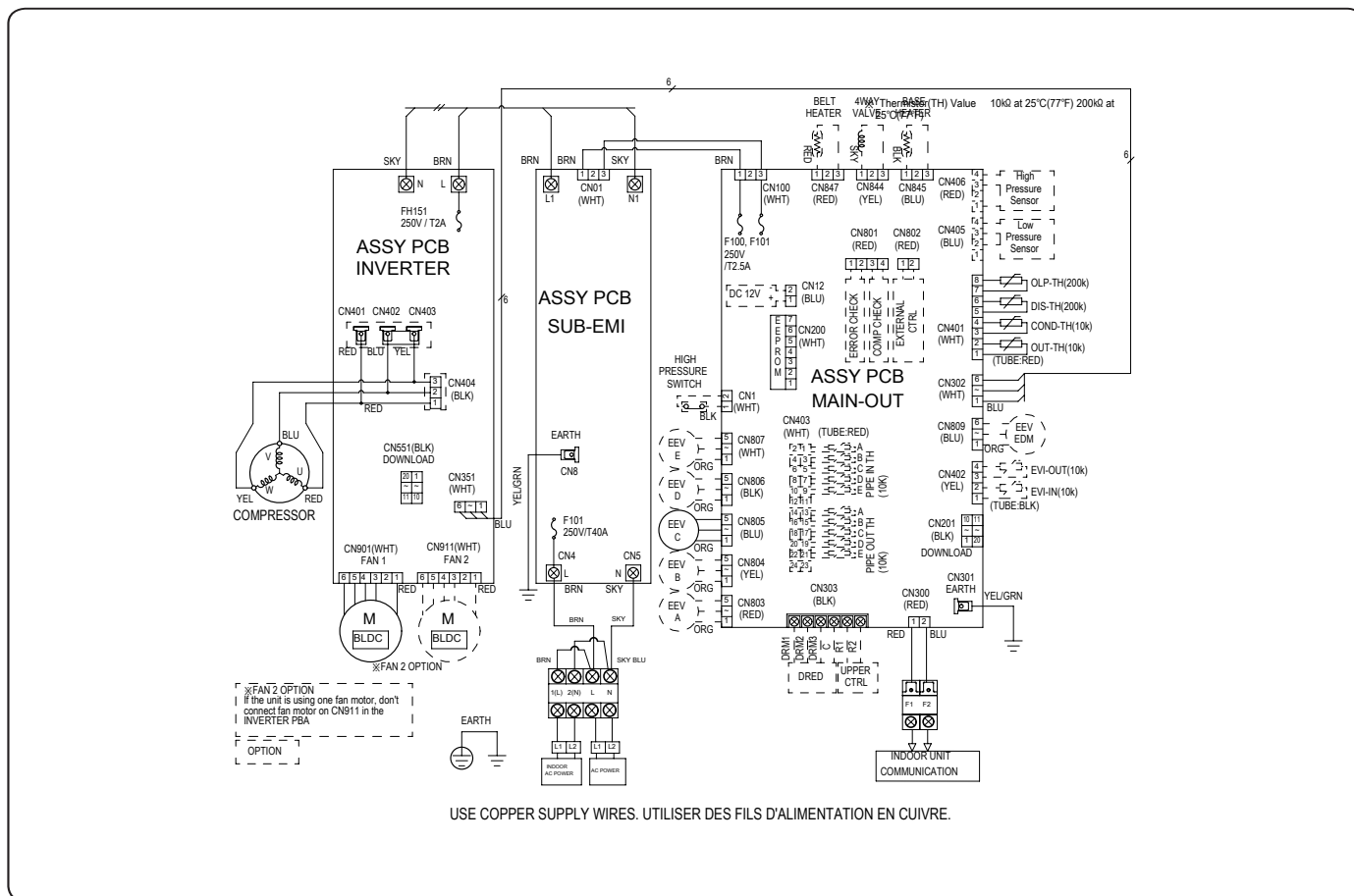
NOTE

- 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

CXG30ADD (AC030DXADCG/AA), CXG36ADD (AC036DXADCG/AA), CXG48ADD (AC048DXADCG/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

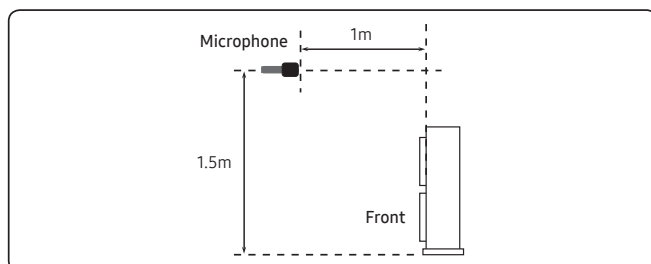
- This wiring diagram applies only to the outdoor unit.
- Colors blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue
- When operating, don't shortcircuit the protection device (High Pressure switch)
- For connection wiring indoor-outdoor transmission F1-F2, outdoor-outdoor 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

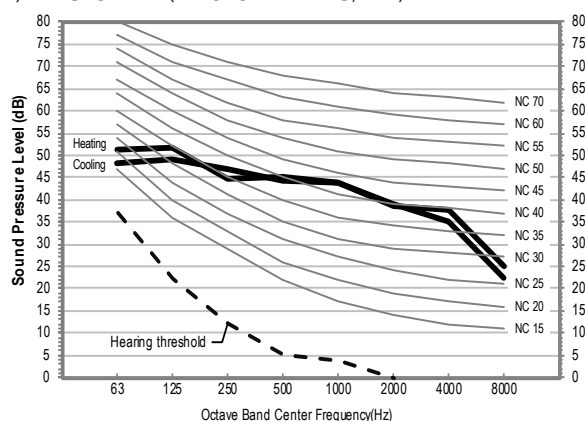
Unit: dB(A)



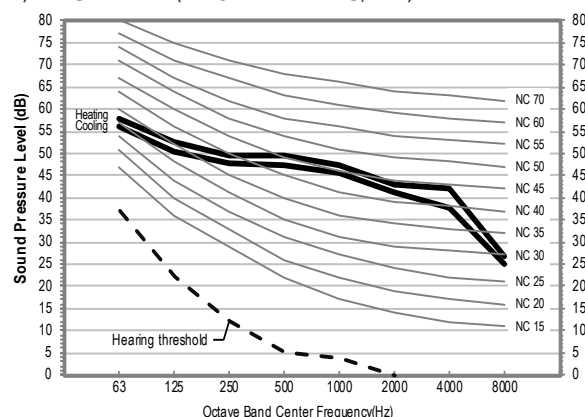
Model	Cooling	Heating
CXG18ADD (AC018DXADCG/AA)	48	48
CXG24ADD (AC024DXADCG/AA)	50	52
CXG30ADD (AC030DXADCG/AA)	50	52
CXG36ADD (AC036DXADCG/AA)	52	54

• NC Curve

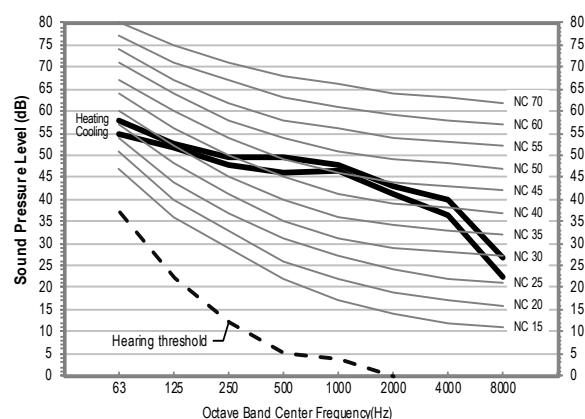
1) CXG18ADD (AC018DXADCG/AA)



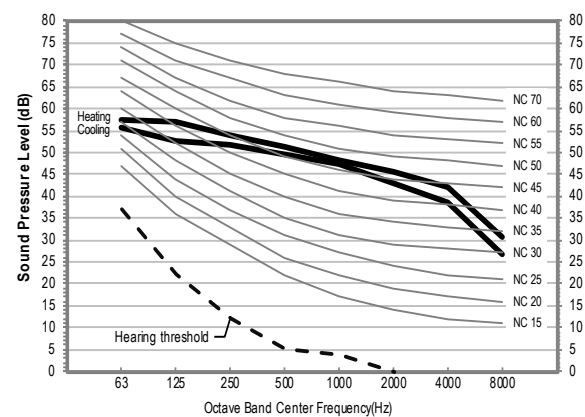
2) CXG24ADD (AC024DXADCG/AA)



3) CXG30ADD (AC030DXADCG/AA)



4) CXG36ADD (AC036DXADCG/AA)



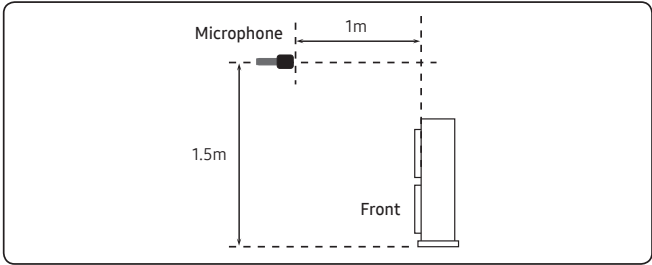
NOTE

- 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 Pressure level

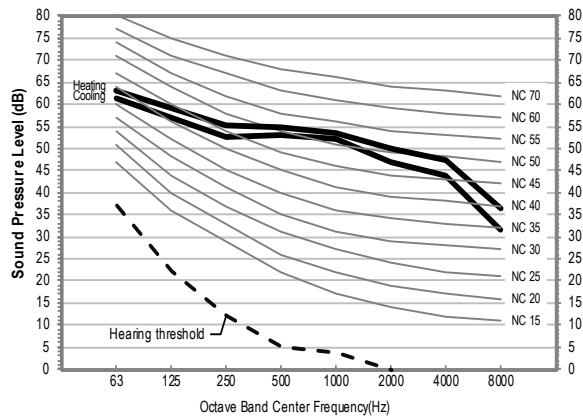


Unit: dB(A)

Model	Cooling	Heating
CXG48ADD (AC048DXADCG/AA)	56	58

- NC Curve

1) CXG48ADD (AC048DXADCG/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

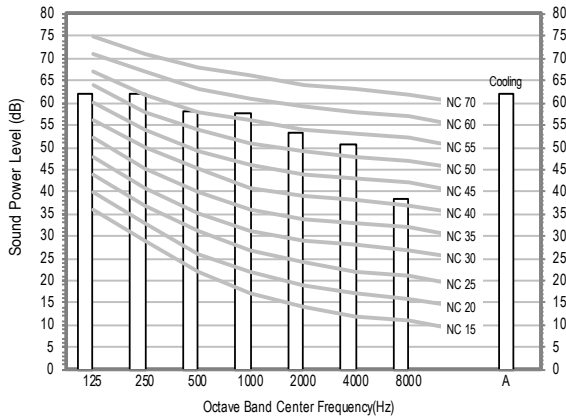
Unit: dB(A)

- 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.

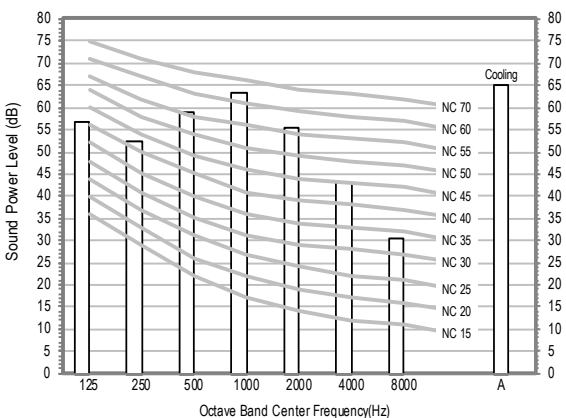
Model	Cooling
CXG18ADD (AC018DXADCG/AA)	62
CXG24ADD (AC024DXADCG/AA)	65
CXG30ADD (AC030DXADCG/AA)	67
CXG36ADD (AC036DXADCG/AA)	69

- NC Curve

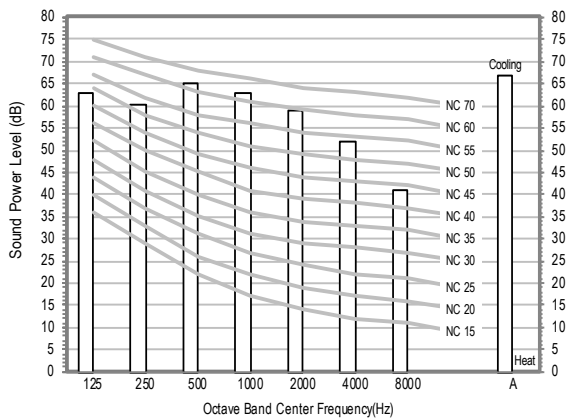
1) CXG18ADD (AC018DXADCG/AA)



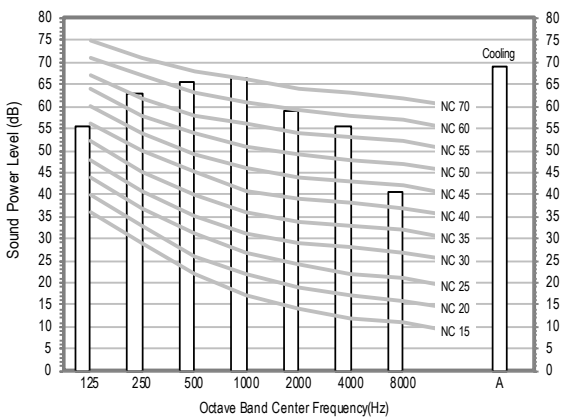
2) CXG24ADD (AC024DXADCG/AA)



3) CXG30ADD (AC030DXADCG/AA)



4) CXG36ADD (AC036DXADCG/AA)



5. Sound Data

Outdoor Units

Sound Power level

 NOTE

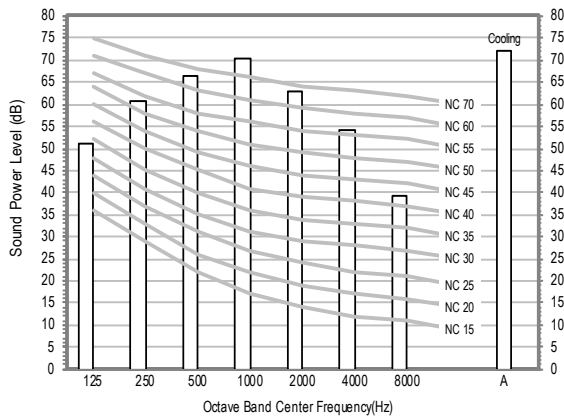
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

Model	Cooling
CXG48ADD (AC048DXADCG/AA)	72

- NC Curve

1) CXG48ADD (AC048DXADCG/AA)

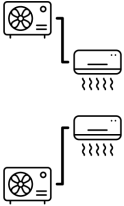


6. Capacity Correction

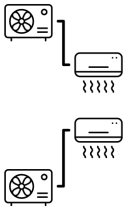
Outdoor Units

CXG18ADD (AC018DXADCG/AA), CXG24ADD (AC024DXADCG/AA), CXG30ADD (AC030DXADCG/AA)
CXG36ADD (AC036DXADCG/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	-	-	-	-	0.95	0.94	0.93	0.92	0.90
		82.0	-	-	-	0.96	0.95	0.94	0.93	0.92	0.90
		65.6	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.90
		49.2	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90
		32.8	-	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.90
		16.4	1.00	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.90
		0.0	1.00	0.99	0.97	0.96	0.94	0.93	0.92	0.91	0.90
		-16.4	1.00	0.98	0.97	0.96	0.95	0.94	0.92	0.90	0.88
		-32.8	-	0.98	0.97	0.96	0.95	0.94	0.92	0.91	0.89
		-49.2	-	-	0.97	0.96	0.94	0.93	0.92	0.90	0.88
		-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

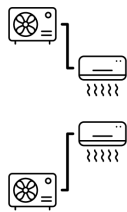
		Pipe Length (ft)									
		24.6	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
	Level Difference (ft)	98.4	-	-	-	-	0.94	0.93	0.92	0.91	0.90
		82.0	-	-	-	0.96	0.94	0.93	0.92	0.91	0.90
		65.6	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90
		49.2	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90
		32.8	-	0.99	0.97	0.96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

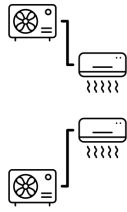
Outdoor Units

CXG48ADD (AC048DXADCG/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	197	213	230	246
	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	-	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89
		49.2	-	-	0.98	0.98	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	0.98	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	0.98	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	0.98	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	0.88
		-49.2	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
		-65.6	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
		-82.0	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
		-98.4	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85

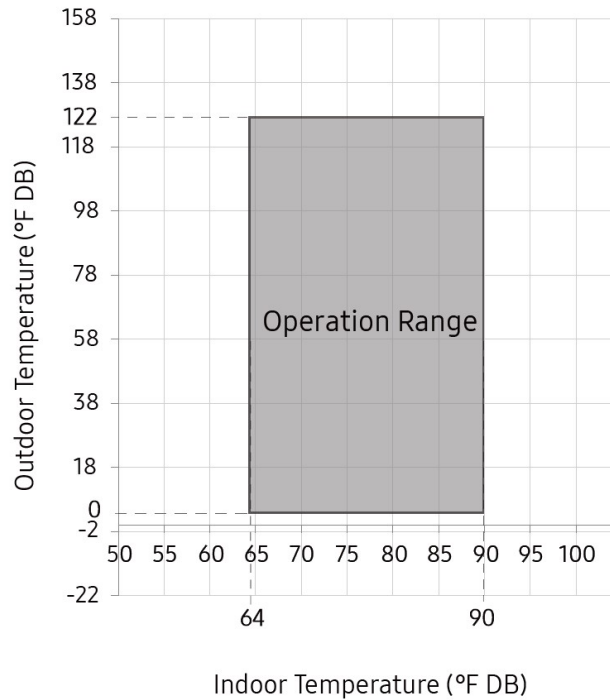
Heating

		Pipe Length (ft)														
		24.6	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0	180	197	213	230	246
	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	0.88
		-98.4	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88

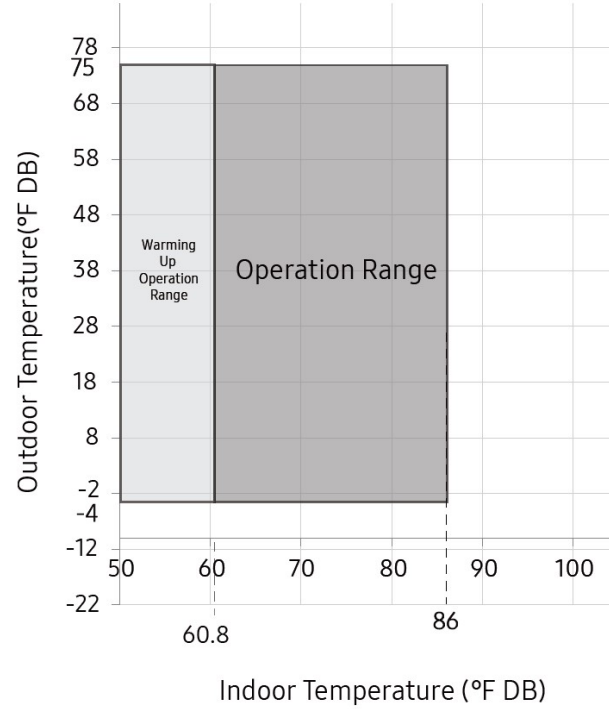
7. Operation Range

Outdoor Units

Cooling



Heating



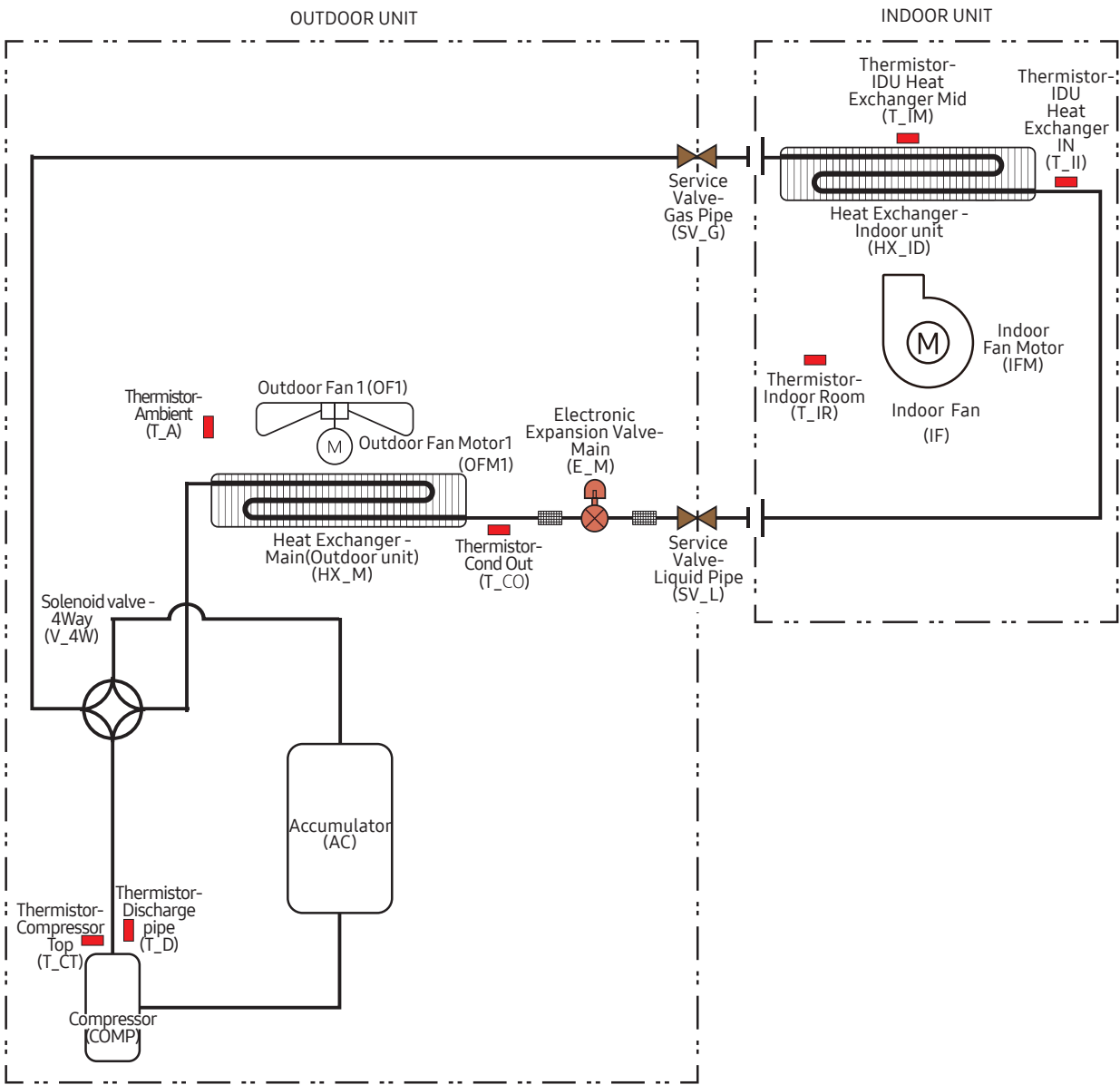
NOTE

- 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

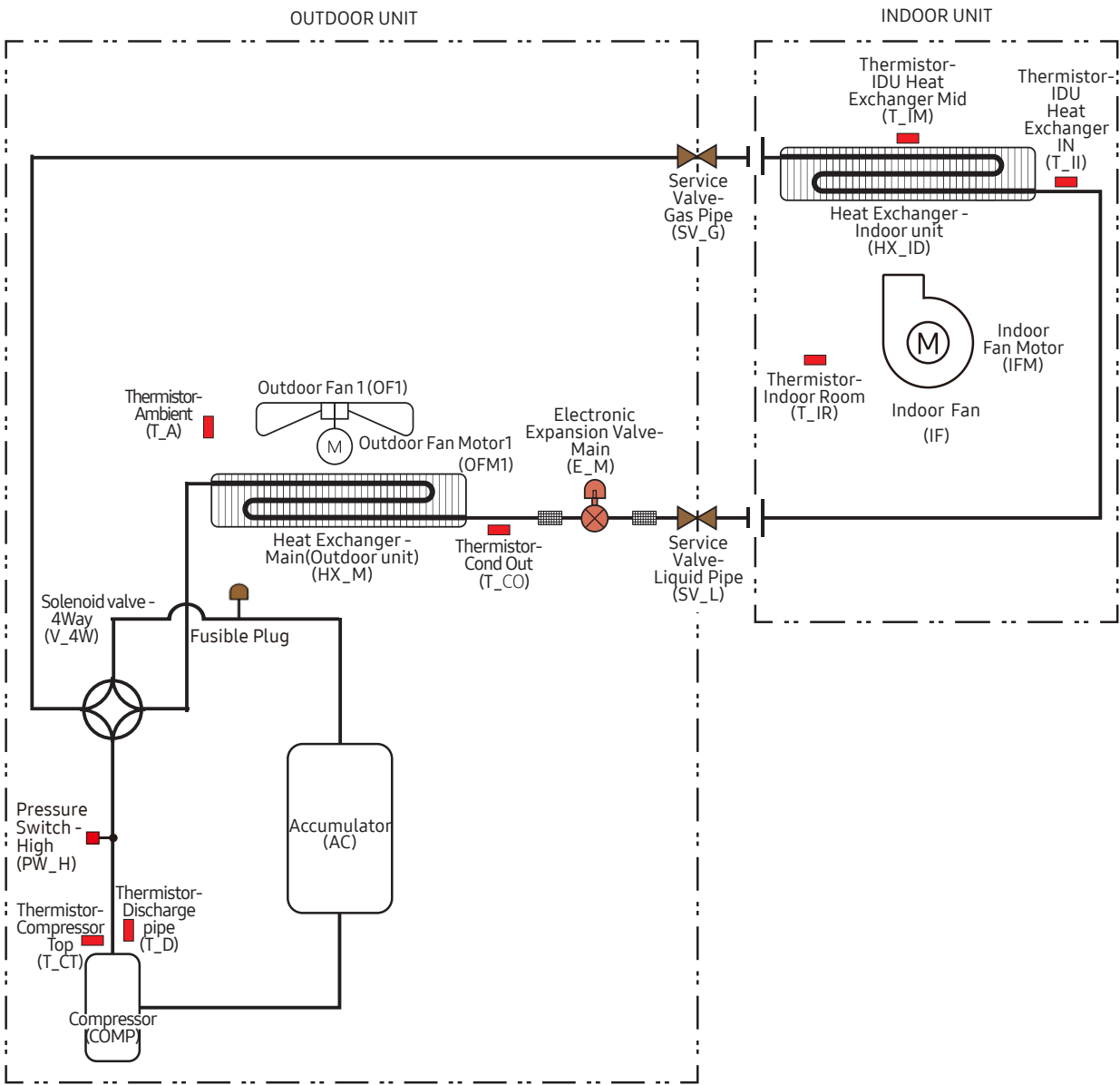
CNG18ZDD (AC018DNZDCG/AA) + CXG18ADD (AC018DXADCG/AA)



8. Piping Diagram

Outdoor Units

CNG24ZDD (AC024DNZDCG/AA) + CXG24ADD (AC024DXADCG/AA)

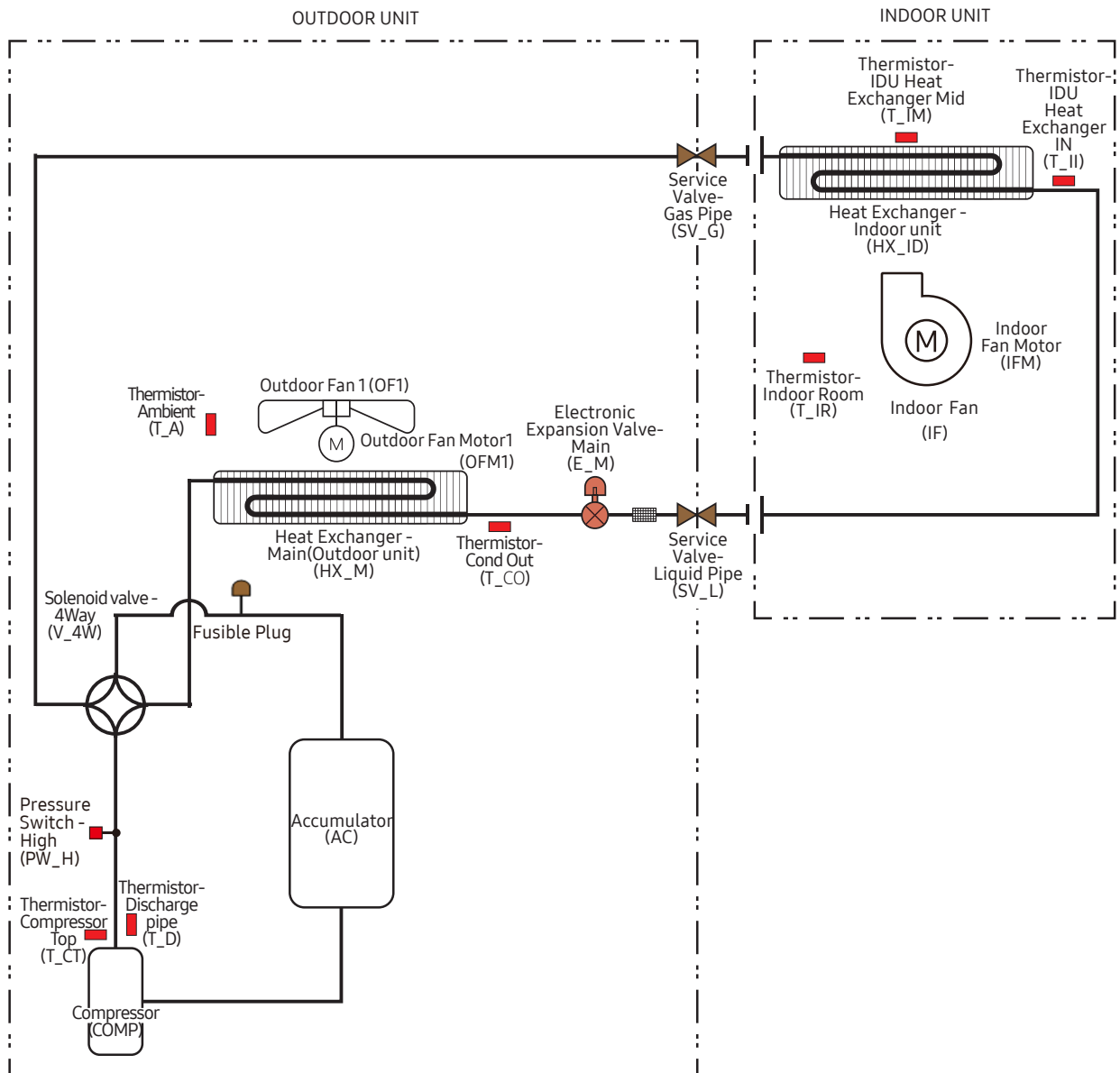


8. Piping Diagram

Outdoor Units

CNG30ZDD (AC030DNZDCG/AA) + CXG30ADD (AC030DXADCG/AA)

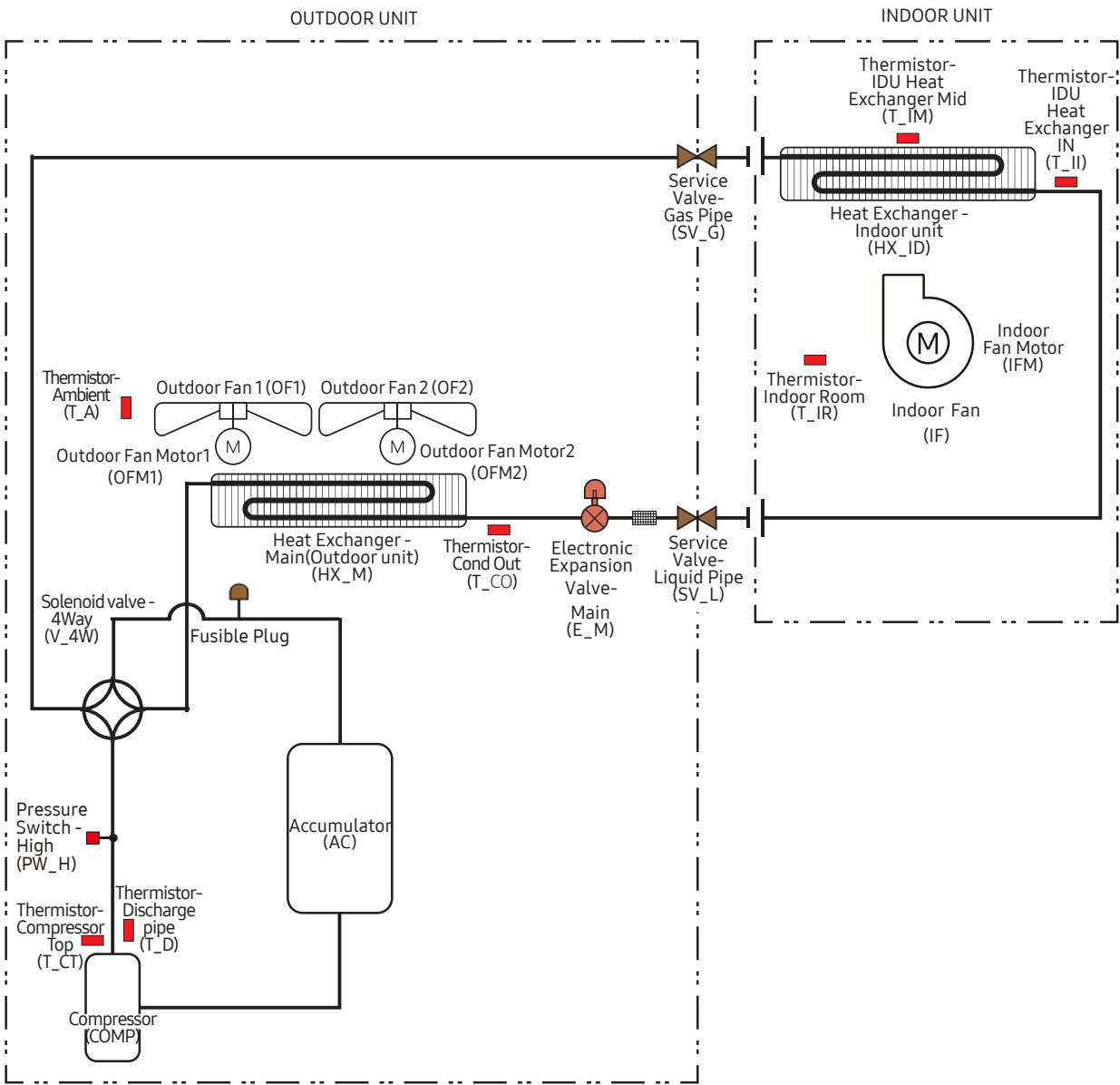
CNG36ZDD (AC036DNZDCG/AA) + CXG36ADD (AC036DXADCG/AA)



8. Piping Diagram

Outdoor Units

CNG48ZDD (AC048DNZDCG/AA) + CXG48ADD (AC048DXADCG/AA)





2024.12
Ver.1.2

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