SINGLE

Technical Data Book

SINGLE Duct S for Nordic (R410A, 50Hz, H/P)

SAMSUNG

History

Version	Modification	Date	Remark
Ver.1.0	Released SINGLE for Nordic TDB	15.03.20	

Index

1 Nomenclature

Indoor Units

Model Names

AC	035	J	N	M	C	E	H	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC

(2) Capacity

x 1/10 kW (3 digits)
x 1,000 Btu/h (3 digits)

(3) Version

F	2013
H	2014
J	2015

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

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

(6) Feature

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

(7) Rating Voltage

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

(8) Mode

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

1 Nomenclature

Outdoor Units

Model Names

AC	035	J	X	S	C	E	H	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC

(2) Capacity

x 1/10 kW (3 digits)
x 1,000 Btu/h (3 digits)

(3) Version

F	2013
H	2014
J	2015

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Feature1

A	Inv+Side+General Temp
B	Non Inv+Side+General Temp
S	Inv+Side+Low Temp.
N	Non Inv+Side+Low Temp.

(6) Feature2

F	Standrad+Tropical+Non Module
S	Standard
D	Deluxe
P	Premium
C	Deluxe + Low Temp.

(7) Rating Voltage

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

(8) Mode

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

2 Specifications

Duct S

Type						Duct S	Duct S	Duct S
Model Name		Indoor Unit				AC035JNMCEH/EU	AC071JNMCEH/EU	AC100JNMCEH/EU
		Outdoor Unit				AC035JXSCEH/EU	AC071JXSCEH/EU	AC100JXSCGH/EU
System	Mode				-	Heat Pump	Heat Pump	Heat Pump
	Capacity	Cooling(Min/Std/Max)			kW	0.90 / 3.50 / 4.20	3.00 / 7.10 / 8.50	3.50 / 10.00 / 12.00
					Btu/h	3,100 / 11,900 / 14,300	10,200 / 24,200 / 29,000	11,900 / 34,100 / 40,900
		Heating(Min/Std/Max)			kW	0.80 / 4.30 / 5.80	3.00 / 8.00 / 11.00	3.70 / 11.20 / 17.00
					Btu/h	2,700 / 14,700 / 19,800	10,200 / 27,300 / 37,500	12,600 / 38,200 / 58,000
	Power	Power Input (Nominal)	Cooling(Min/Std/Max)		kW	0.19 / 0.94 / 1.26	0.86 / 1.92 / 2.20	0.95 / 2.74 / 3.54
			Heating(Min/Std/Max)			0.16 / 1.18 / 1.65	0.71 / 2.05 / 4.10	0.81 / 2.63 / 6.90
		Current Input (Nominal)	Cooling(Min/Std/Max)		A	1.30 / 4.70 / 6.10	4.30 / 8.70 / 10.00	1.90 / 4.40 / 5.50
			Heating(Min/Std/Max)			1.10 / 5.40 / 7.00	3.60 / 9.30 / 18.00	1.70 / 4.30 / 10.50
		MCA			A	12.70 (MCA)	26.70 (MCA)	14.70 (MCA)
		MFA			A	12.70	30.00	15.00
	Energy Efficiency	EER (Nominal Cooling)			-	3.72	3.70	3.65
		COP (Nominal Heating)			-	3.64	3.90	4.26
		Energy Grade			-	SEER 6.5 (A++)	SEER 6.1 (A++)	SEER 6.7 (A++)
					-	SCOP 4.4 (A+)	SCOP 4.0 (A+)	SCOP 4.1 (A+)
	Piping Connections	Liquid Pipe			Ø, mm	6.35	9.52	9.52
					Ø, inch	1/4"	3/8"	3/8"
		Gas Pipe			Ø, mm	9.52	15.88	15.88
					Ø, inch	3/8"	5/8"	5/8"
		Installation Limitation	Max. Length		m	20 (25)	75 (75)	75 (75)
			Max. Height		m	15 (15)	30 (30)	30 (30)
	Field Wiring	Power Source Wire			Ø, mm	-	-	-
		Transmission Cable			Ø, mm	0.75 ~ 1.25	0.75 ~ 1.25	0.75 ~ 1.25
	Refrigerant	Type			-	R410A	R410A	R410A
		Control Method			-	-	-	-
		Factory Charging			kg	1.27	2.90	2.90
Indoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
	Fan	Type			-	Sirocco	Sirocco	Sirocco
		Motor		Output	W	153 x 1	153 x 1	244 x 1
		Air Flow Rate		High/Mid/Low	CMM	12.90 / 11.00 / 9.50	21.00 / 18.50 / 16.50	36.10 / 29.30 / 24.00
					l/s	215.00 / 183.33 / 158.33	350.00 / 308.33 / 275.00	601.67 / 488.33 / 400.00
		External Static Pressure		Min/Std/Max	mmAq	0.00 / 2.50 / 15.00	0.00 / 3.00 / 15.00	0.00 / 4.00 / 15.00
					Pa	0.00 / 24.50 / 147.00	0.00 / 29.40 / 147.00	0.00 / 39.20 / 147.00
	Drain	Drain Pipe			Ø,mm	VP20 (OD 26,ID 20)	VP20 (OD 26,ID 20)	VP20 (OD 26,ID 20)
	Sound	Pressure	High/Mid/Low		dB(A)	31.0 / 28.0 / 25.0	33.0 / 29.0 / 25.0	37.0 / 33.0 / 28.0
		Power	Cooling			56.0	56.0	61.0
	External Dimension	Net Weight			kg	25.00	32.00	36.00
		Shipping Weight			kg	29.00	37.00	42.00
		Net Dimensions (WxHxD)			mm	850 x 250 x 700	1,200 x 250 x 700	1,300 x 300 x 700
		Shipping Dimensions (WxHxD)			mm	1,064 x 320 x 784	1,429 x 320 x 779	1,529 x 370 x 779
	Panel Size	Panel model			-	-	-	-
		Panel Net Weight			kg	-	-	-
		Shipping Weight			kg	-	-	-
		Net Dimensions (WxHxD)			mm	-	-	-
		Shipping Dimensions (WxHxD)			mm	-	-	-
	Additional Accessories	Drain pump	Drain pump		-	MDP-G075SP	MDP-G075SP	MDP-G075SP
			Max. Lifting		mm/liter/h	-	-	-
		Air Filter			-	-	-	-
Outdoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50	3,4,380-415,50
	Compressor	Type			-	BLDC Rotary	Twin BLDC -	Twin BLDC Rotary
		Model			-	DA128A1FA-20F	UG5T450FUEJX	UG5T450FXAJX
		Output			kW	0.96	4.12	4.01
		Oil	Type		-	POE	PVE	PVE
	Fan	Air Flow Rate	Cooling		CMM	33.00	112.00	112.00
					l/s	550.00	1,866.67	1,866.67
	Sound	Pressure	Cooling/Heating		dB(A)	47.0 / 48.0	49.0 / 49.0	50.0 / 50.0
		Power	Cooling			62.0	65.0	66.0
	External Dimension	Net Weight			kg	35.00	96.00	96.00
		Shipping Weight			kg	39.00	106.00	106.00
		Net Dimensions (WxHxD)			mm	790 x 548 x 285	940 x 1,420 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)			mm	926 x 640 x 384	995 x 1,598 x 426	995 x 1,598 x 426
	Operating Temp. Range	Cooling			ºC	-18.0 ~ 50.0	-18.0 ~ 50.0	-18.0 ~ 50.0
		Heating			ºC	-25.0 ~ 24.0	-25.0 ~ 24.0	-25.0 ~ 24.0

- All figures comply with EN14511
- Nominal cooling capacities are based on;
  Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Refrigerant piping : 5m , Level differences : 0m
- Nominal heating capacities are based on;
  Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Refrigerant piping : 5m, Level differences : 0m
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- Specifications may be subject to change without prior notice.
- These products contain R410A which have a global warming potential(GWP) greater than 150.

2 Specifications

Duct S

Type						Duct S	Duct S
Model Name		Indoor Unit				AC100JNMCEH/EU	AC125JNMCEH/EU
		Outdoor Unit				AC100JXSCEH/EU	AC125JXSCGH/EU
System	Mode				-	Heat Pump	Heat Pump
	Capacity	Cooling(Min/Std/Max)			kW	3.50 / 10.00 / 12.00	3.50 / 12.50 / 14.00
					Btu/h	11,900 / 34,100 / 40,900	11,900 / 42,700 / 47,800
		Heating(Min/Std/Max)			kW	3.70 / 11.20 / 17.00	3.70 / 14.00 / 19.00
					Btu/h	12,600 / 38,200 / 58,000	12,600 / 47,800 / 64,800
	Power	Power Input (Nominal)	Cooling(Min/Std/Max)		kW	0.95 / 2.74 / 3.54	0.95 / 3.79 / 4.60
			Heating(Min/Std/Max)			0.81 / 2.47 / 6.90	0.81 / 3.58 / 7.20
		Current Input (Nominal)	Cooling(Min/Std/Max)		A	4.20 / 12.00 / 15.60	1.40 / 6.00 / 7.00
			Heating(Min/Std/Max)			4.30 / 11.80 / 30.00	1.70 / 5.60 / 11.00
		MCA			A	34.70 (MCA)	14.70 (MCA)
		MFA			A	40.00	15.00
	Energy Efficiency	EER (Nominal Cooling)			-	3.65	3.30
		COP (Nominal Heating)			-	4.53	3.91
		Energy Grade			-	SEER 6.7 (A++)	-
					-	SCOP 4.1 (A+)	-
	Piping Connections	Liquid Pipe			Ø, mm	9.52	9.52
					Ø, inch	3/8"	3/8"
		Gas Pipe			Ø, mm	15.88	15.88
					Ø, inch	5/8"	5/8"
		Installation Limitation	Max. Length		m	75 (75)	75 (75)
			Max. Height		m	30 (30)	30 (30)
	Field Wiring	Power Source Wire			Ø, mm	-	-
		Transmission Cable			Ø, mm	0.75 ~ 1.25	0.75 ~ 1.25
	Refrigerant	Type			-	R410A	R410A
		Control Method			-	-	-
		Factory Charging			kg	2.90	2.90
Indoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50
	Fan	Type			-	Sirocco	Sirocco
		Motor		Output	W	244 x 1	244 x 1
		Air Flow Rate		High/Mid/Low	CMM	36.10 / 29.30 / 24.00	38.60 / 33.00 / 26.20
					l/s	601.67 / 488.33 / 400.00	643.33 / 550.00 / 436.67
		External Static Pressure		Min/Std/Max	mmAq	0.00 / 4.00 / 15.00	0.00 / 5.20 / 15.00
					Pa	0.00 / 39.20 / 147.00	0.00 / 50.96 / 147.00
	Drain	Drain Pipe			Ø,mm	VP20 (OD 26,ID 20)	VP20 (OD 26,ID 20)
	Sound	Pressure	High/Mid/Low		dB(A)	37.0 / 33.0 / 28.0	39.0 / 35.0 / 31.0
		Power	Cooling			61.0	63.0
	External Dimension	Net Weight			kg	36.00	36.00
		Shipping Weight			kg	42.00	42.00
		Net Dimensions (WxHxD)			mm	1,300 x 300 x 700	1,300 x 300 x 700
		Shipping Dimensions (WxHxD)			mm	1,529 x 370 x 779	1,529 x 370 x 779
	Panel Size	Panel model			-	-	-
		Panel Net Weight			kg	-	-
		Shipping Weight			kg	-	-
		Net Dimensions (WxHxD)			mm	-	-
		Shipping Dimensions (WxHxD)			mm	-	-
	Additional Accessories	Drain pump	Drain pump		-	MDP-G075SP	MDP-G075SP
			Max. Lifting		mm/liter/h	-	-
		Air Filter			-	-	-
Outdoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50	3,4,380-415,50
	Compressor	Type			-	Twin BLDC Rotary	Twin BLDC Rotary
		Model			-	UG5T450FXAJX	UG5T450FXAJX
		Output			kW	4.01	4.01
		Oil	Type		-	PVE	PVE
	Fan	Air Flow Rate	Cooling		CMM	112.00	112.00
					l/s	1,866.67	1,866.67
	Sound	Pressure	Cooling/Heating		dB(A)	50.0 / 50.0	52.0 / 52.0
		Power	Cooling			66.0	69.0
	External Dimension	Net Weight			kg	96.00	96.00
		Shipping Weight			kg	106.00	106.00
		Net Dimensions (WxHxD)			mm	940 x 1,420 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)			mm	995 x 1,598 x 426	995 x 1,598 x 426
	Operating Temp. Range	Cooling			ºC	-18.0 ~ 50.0	-18.0 ~ 50.0
		Heating			ºC	-25.0 ~ 24.0	-25.0 ~ 24.0

- All figures comply with EN14511
- Nominal cooling capacities are based on;
  Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Refrigerant piping : 5m , Level differences : 0m
- Nominal heating capacities are based on;
  Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Refrigerant piping : 5m, Level differences : 0m
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- Specifications may be subject to change without prior notice.
- These products contain R410A which have a global warming potential(GWP) greater than 150.

3 Capacity table

Duct S

AC035JNMCEH/EU + AC035JXSCEH/EU

Cooling

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

Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-18.0	3.90	3.10	0.72	4.00	3.20	0.73	4.10	3.30	0.75	4.20	3.30	0.77	4.30	3.40	0.79	4.40	3.50	0.81
21.0	4.00	3.20	0.74	4.10	3.30	0.76	4.20	3.40	0.78	4.30	3.50	0.80	4.40	3.60	0.82	4.60	3.60	0.84
35.0	3.30	2.60	0.87	3.30	2.70	0.90	3.40	2.70	0.92	3.50	2.80	0.94	3.60	2.90	0.96	3.70	2.90	0.99
43.0	2.60	2.10	1.01	2.60	2.10	1.03	2.70	2.20	1.06	2.80	2.20	1.08	2.80	2.30	1.11	2.90	2.30	1.13
50.0	2.10	1.70	0.92	2.20	1.70	0.94	2.20	1.80	0.96	2.30	1.80	0.99	2.30	1.90	1.01	2.40	1.90	1.03

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (°C, DB)	Indoor temperature (°C, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-25.0	2.60	1.28	2.50	1.27	2.50	1.25	2.50	1.24	2.50	1.23	2.40	1.22
-20.0	3.00	1.50	3.00	1.49	3.00	1.48	2.90	1.46	2.90	1.45	2.90	1.43
-10.0	4.10	1.75	4.10	1.73	4.00	1.71	4.00	1.69	4.00	1.68	3.90	1.66
0.0	4.30	1.47	4.20	1.46	4.20	1.45	4.10	1.43	4.10	1.42	4.00	1.40
7.0	4.40	1.20	4.30	1.19	4.30	1.18	4.30	1.17	4.20	1.16	4.20	1.14
24.0	5.90	1.38	5.80	1.37	5.80	1.36	5.70	1.34	5.60	1.33	5.60	1.32

AC071JNMCEH/EU + AC071JXSCEH/EU

Cooling

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

Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-18.0	7.90	6.30	1.46	8.00	6.40	1.50	8.20	6.60	1.54	8.40	6.80	1.57	8.70	6.90	1.61	8.90	7.10	1.65
21.0	8.20	6.50	1.52	8.40	6.70	1.55	8.60	6.90	1.59	8.80	7.00	1.63	9.00	7.20	1.67	9.20	7.40	1.71
35.0	6.60	5.30	1.79	6.80	5.40	1.83	6.90	5.50	1.87	7.10	5.70	1.92	7.30	5.80	1.97	7.40	6.00	2.01
43.0	5.20	4.20	2.05	5.30	4.30	2.10	5.50	4.40	2.16	5.60	4.50	2.21	5.70	4.60	2.26	5.90	4.70	2.32
50.0	4.30	3.40	1.87	4.40	3.50	1.92	4.50	3.60	1.97	4.60	3.70	2.02	4.70	3.80	2.06	4.80	3.90	2.11

Heating

TC : Total Capacity PI: Power Input

Outdoor temperature (°C, DB)	Indoor temperature (°C, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-25.0	5.60	2.61	5.60	2.59	5.50	2.56	5.50	2.54	5.40	2.51	5.40	2.49
-20.0	6.70	2.82	6.60	2.80	6.50	2.77	6.50	2.74	6.40	2.71	6.30	2.69
-10.0	7.70	3.03	7.60	3.00	7.50	2.97	7.40	2.94	7.40	2.91	7.30	2.88
0.0	7.90	2.56	7.80	2.54	7.80	2.51	7.70	2.49	7.60	2.46	7.50	2.44
7.0	8.20	2.09	8.10	2.07	8.00	2.05	7.90	2.03	7.80	2.01	7.80	1.99
24.0	10.90	2.40	10.80	2.38	10.70	2.36	10.60	2.33	10.50	2.31	10.40	2.29

- Capacities are based on following conditions;

. Cooling mode indoor air temperature (°C, DB/WB) : 20/14, 22/16, 25/18, 27/19, 28/20, 30/22, 32/24

. Heating mode outdoor air : 85%RH. However, the condition rated capacity is 7°C DB / 6°C WB.

. Refrigerant piping length : 5m

. Level difference : 0m.

3 Capacity table

Duct S

AC100JNMCEH/EU + AC100JXSCGH/EU

Cooling

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

Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-18.0	11.10	8.90	2.09	11.30	9.10	2.14	11.60	9.30	2.19	11.90	9.50	2.25	12.20	9.70	2.30	12.50	10.00	2.36
21.0	11.50	9.20	2.17	11.80	9.40	2.22	12.10	9.70	2.27	12.40	9.90	2.33	12.70	10.20	2.38	13.00	10.40	2.44
35.0	9.30	7.40	2.55	9.50	7.60	2.61	9.80	7.80	2.67	10.00	8.00	2.74	10.20	8.20	2.81	10.50	8.40	2.87
43.0	7.30	5.90	2.93	7.50	6.00	3.00	7.70	6.20	3.08	7.90	6.30	3.15	8.10	6.50	3.23	8.30	6.60	3.30
50.0	6.00	4.80	2.67	6.20	4.90	2.74	6.30	5.10	2.81	6.50	5.20	2.88	6.60	5.30	2.95	6.80	5.40	3.02

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (°C, DB)	Indoor temperature (°C, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-25.0	7.90	3.35	7.80	3.32	7.70	3.29	7.70	3.25	7.60	3.22	7.50	3.19
-20.0	9.30	3.62	9.20	3.59	9.10	3.55	9.00	3.51	8.90	3.48	8.90	3.45
-10.0	10.70	3.89	10.60	3.85	10.50	3.81	10.40	3.78	10.30	3.74	10.20	3.70
0.0	11.10	3.29	11.00	3.25	10.90	3.22	10.80	3.19	10.60	3.16	10.50	3.13
7.0	11.40	2.68	11.30	2.66	11.20	2.63	11.10	2.60	11.00	2.58	10.90	2.55
24.0	15.30	3.09	15.20	3.05	15.00	3.02	14.90	2.99	14.70	2.96	14.60	2.93

AC100JNMCEH/EU + AC100JXSCEH/EU

Cooling

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

Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-18.0	11.10	8.90	2.09	11.30	9.10	2.14	11.60	9.30	2.19	11.90	9.50	2.25	12.20	9.70	2.30	12.50	10.00	2.36
21.0	11.50	9.20	2.17	11.80	9.40	2.22	12.10	9.70	2.27	12.40	9.90	2.33	12.70	10.20	2.38	13.00	10.40	2.44
35.0	9.30	7.40	2.55	9.50	7.60	2.61	9.80	7.80	2.67	10.00	8.00	2.74	10.20	8.20	2.81	10.50	8.40	2.87
43.0	7.30	5.90	2.93	7.50	6.00	3.00	7.70	6.20	3.08	7.90	6.30	3.15	8.10	6.50	3.23	8.30	6.60	3.30
50.0	6.00	4.80	2.67	6.20	4.90	2.74	6.30	5.10	2.81	6.50	5.20	2.88	6.60	5.30	2.95	6.80	5.40	3.02

Heating

TC : Total Capacity PI: Power Input

Outdoor temperature (°C, DB)	Indoor temperature (°C, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-25.0	7.90	3.15	7.80	3.12	7.70	3.09	7.70	3.06	7.60	3.03	7.50	3.00
-20.0	9.30	3.40	9.20	3.37	9.10	3.33	9.00	3.30	8.90	3.27	8.90	3.24
-10.0	10.70	3.65	10.60	3.62	10.50	3.58	10.40	3.55	10.30	3.51	10.20	3.48
0.0	11.10	3.09	11.00	3.06	10.90	3.03	10.80	3.00	10.60	2.97	10.50	2.94
7.0	11.40	2.52	11.30	2.49	11.20	2.47	11.10	2.45	11.00	2.42	10.90	2.40
24.0	15.30	2.90	15.20	2.87	15.00	2.84	14.90	2.81	14.70	2.78	14.60	2.76

- Capacities are based on following conditions;

. Cooling mode indoor air temperature (°C, DB/WB) : 20/14, 22/16, 25/18, 27/19, 28/20, 30/22, 32/24

. Heating mode outdoor air : 85%RH. However, the condition rated capacity is 7°C DB / 6°C WB.

. Refrigerant piping length : 5m

. Level difference : 0m.

3 Capacity table

Duct S

AC125JNMCEH/EU + AC125JXSCGH/EU

Cooling

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

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-18.0	13.80	11.10	2.89	14.20	11.30	2.96	14.50	11.60	3.03	14.90	11.90	3.11	15.20	12.20	3.18	15.60	12.50	3.26
21.0	14.40	11.50	3.00	14.80	11.80	3.07	15.10	12.10	3.14	15.50	12.40	3.22	15.90	12.70	3.30	16.30	13.00	3.38
35.0	11.60	9.30	3.52	11.90	9.50	3.61	12.20	9.80	3.70	12.50	10.00	3.79	12.80	10.20	3.88	13.10	10.50	3.97
43.0	9.20	7.30	4.05	9.40	7.50	4.15	9.60	7.70	4.25	9.90	7.90	4.36	10.10	8.10	4.46	10.40	8.30	4.57
52.0	7.50	6.00	3.70	7.70	6.20	3.79	7.90	6.30	3.88	8.10	6.50	3.98	8.30	6.60	4.08	8.50	6.80	4.17

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-25.0	9.90	4.75	9.80	4.70	9.70	4.65	9.60	4.61	9.50	4.56	9.40	4.52
-20.0	11.60	5.02	11.50	4.97	11.40	4.92	11.30	4.87	11.20	4.82	11.10	4.78
-10.0	13.40	5.30	13.30	5.24	13.20	5.19	13.00	5.14	12.90	5.09	12.80	5.04
0.0	13.90	4.47	13.70	4.43	13.60	4.39	13.40	4.34	13.30	4.30	13.20	4.26
7.0	14.30	3.65	14.10	3.62	14.00	3.58	13.90	3.54	13.70	3.51	13.60	3.47
24.0	19.10	4.20	18.90	4.16	18.80	4.12	18.60	4.08	18.40	4.04	18.20	3.99

- Capacities are based on following conditions;

. Cooling mode indoor air temperature (°C, DB/WB) : 20/14, 22/16, 25/18, 27/19, 28/20, 30/22, 32/24

. Heating mode outdoor air : 85%RH. However, the condition rated capacity is 7°C DB / 6°C WB.

. Refrigerant piping length : 5m

. Level difference : 0m.

4 Dimensional drawing

Duct S

AC035JNMCEH/EU

Units : mm / inches

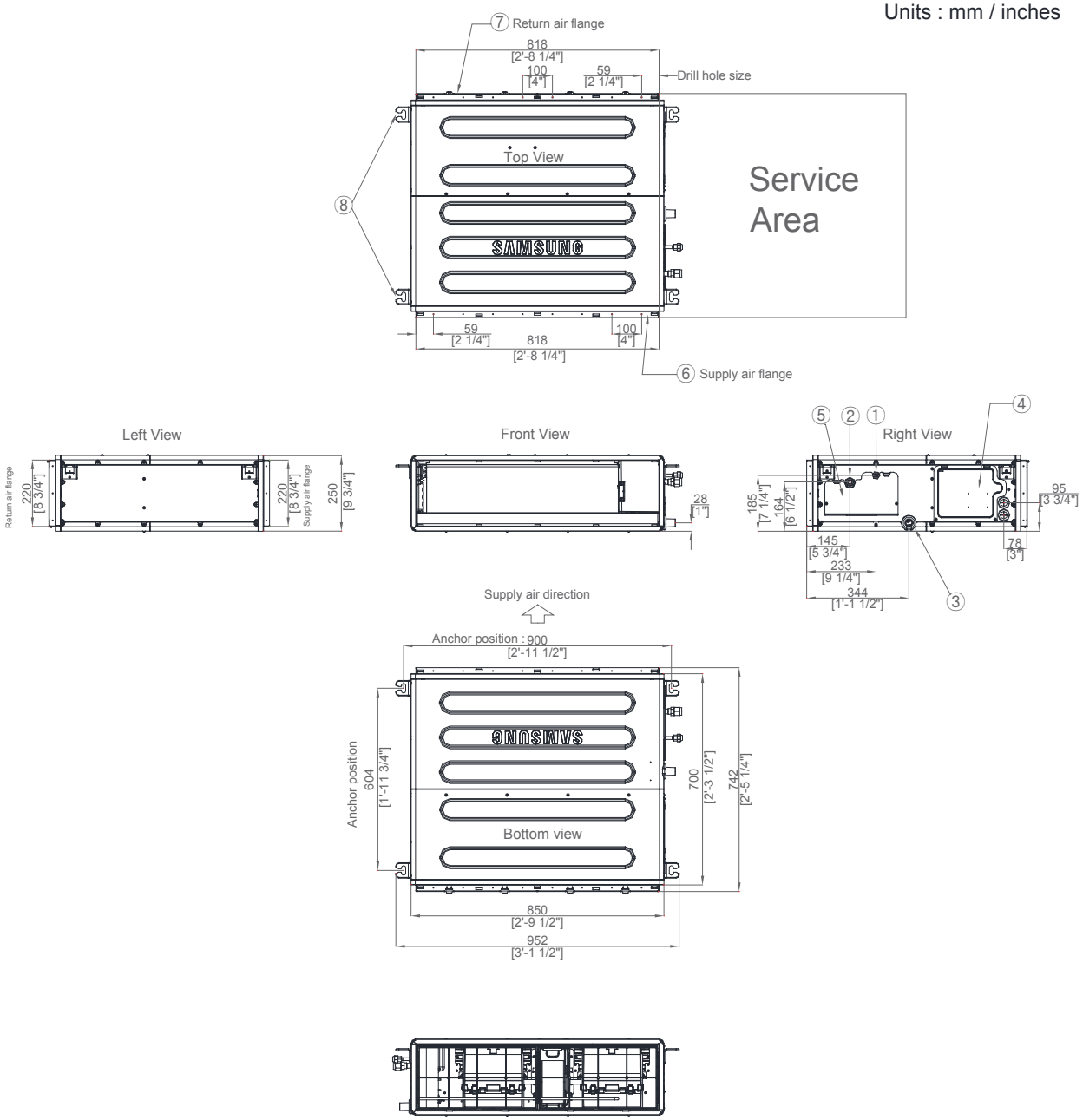


Table of descriptions			
1	Refrigerant liquid pipe	7	Return air flange
2	Refrigerant gas pipe	8	Hook
3	Condensate drain	9	
4	Power & Comm. wiring conduits	10	
5	Refrigerant pipe conduits	11	
6	Supply air flange	12	

4 Dimensional drawing

Duct S

AC071JNMCEH/EU

Units : mm / inches

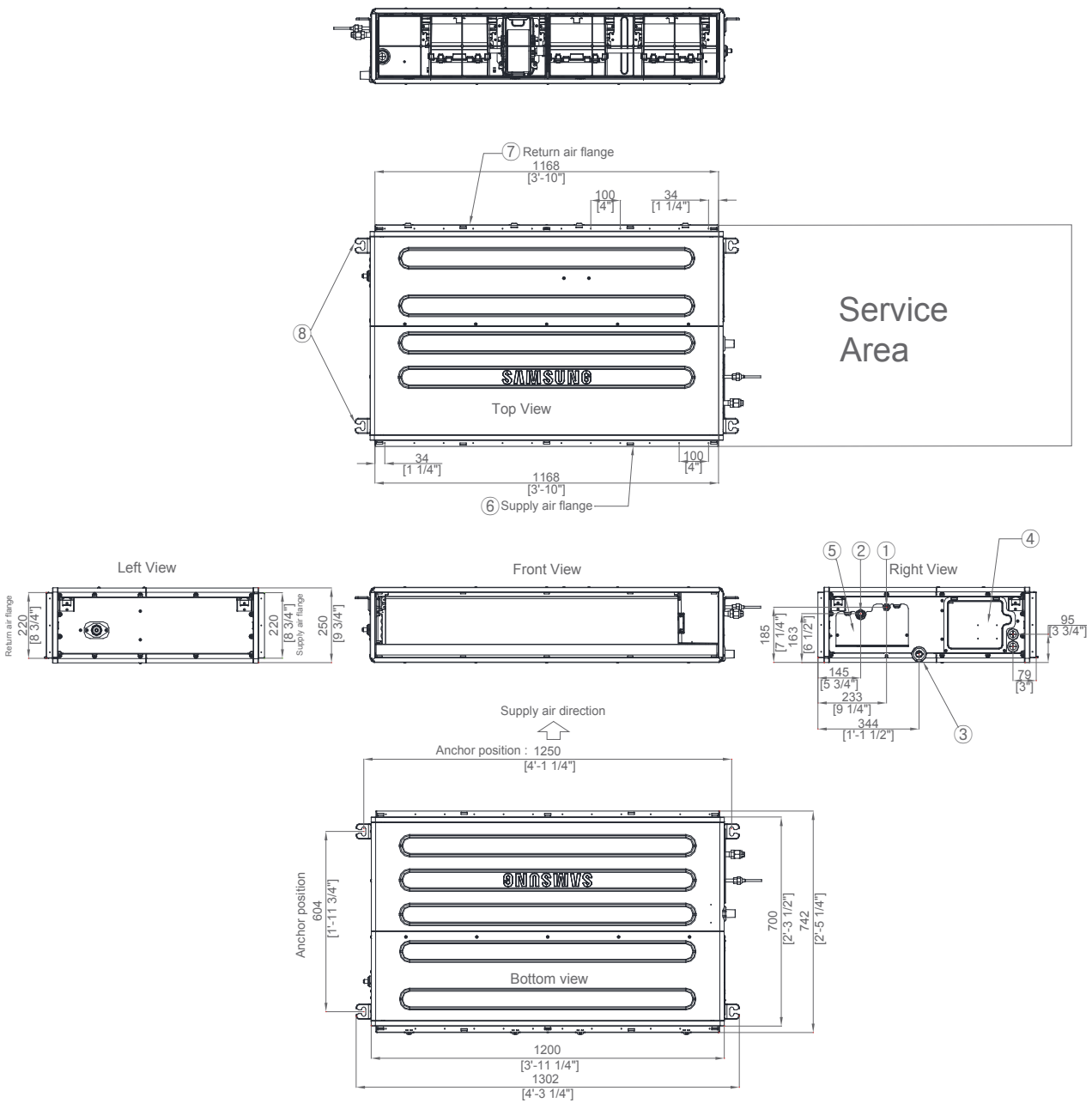


Table of descriptions			
1	Refrigerant liquid pipe	7	Return air flange
2	Refrigerant gas pipe	8	Hook
3	Condensate drain	9	
4	Power & Comm. wiring conduits	10	
5	Refrigerant pipe conduits	11	
6	Supply air flange	12	

4 Dimensional drawing

Duct S

AC100JNMCEH/EU, AC125JNMCEH/EU

Units : mm / inches

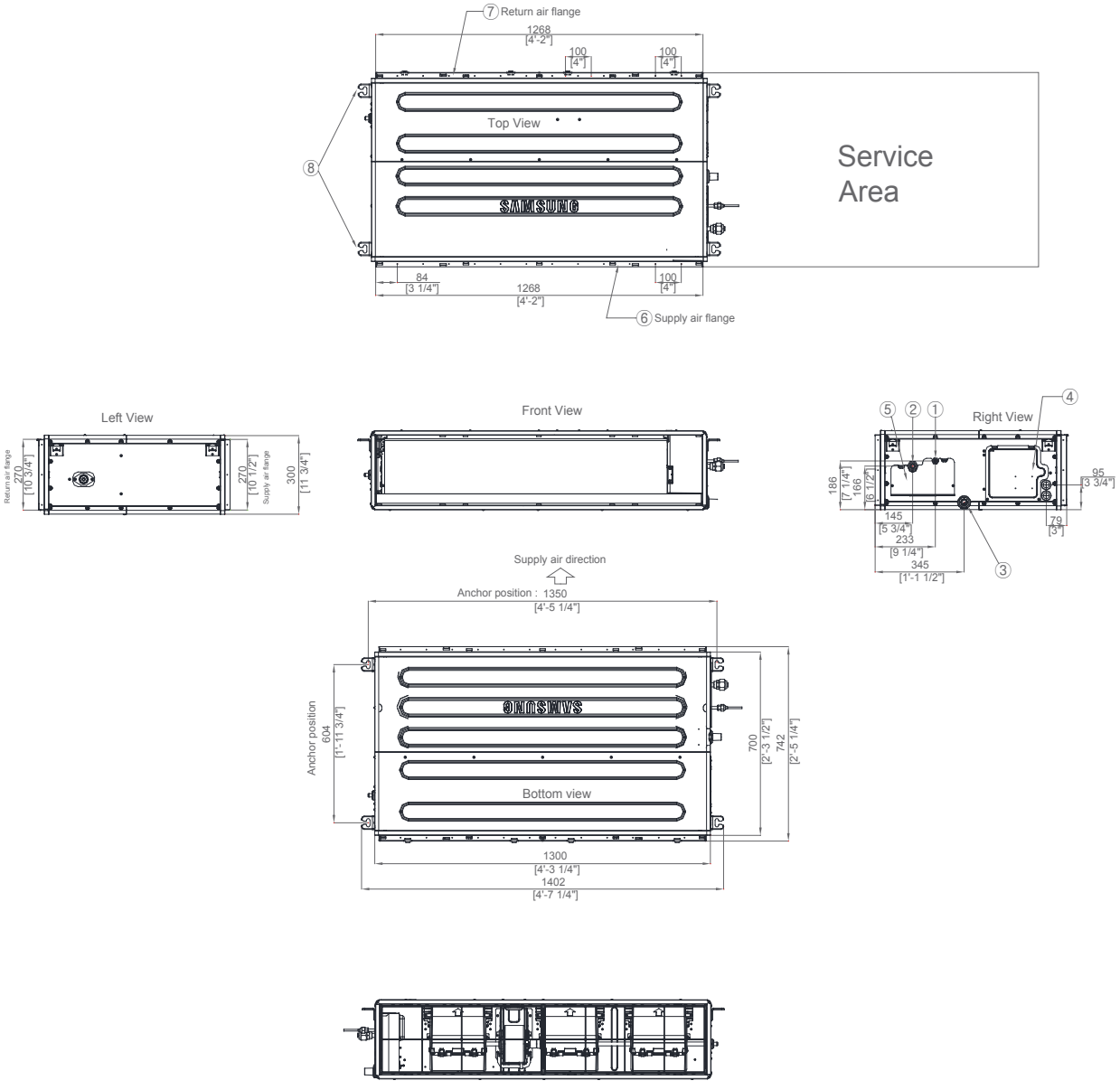
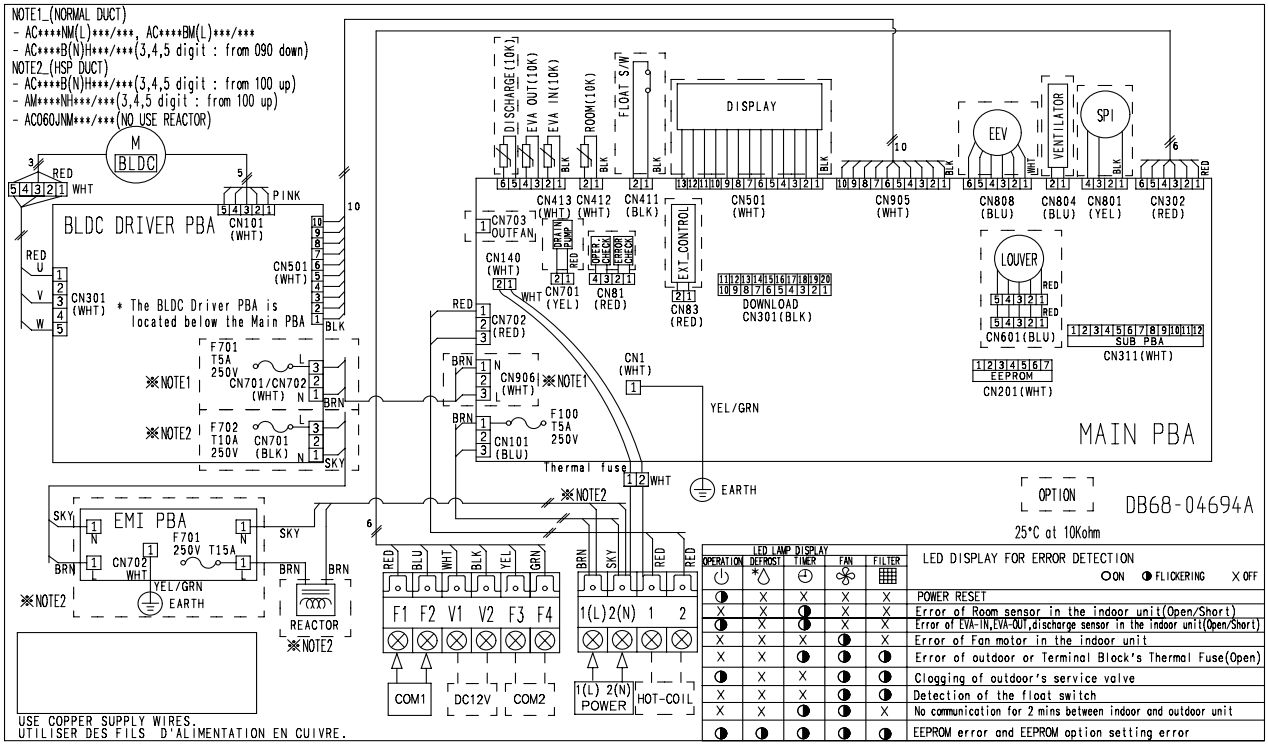


Table of descriptions			
1	Refrigerant liquid pipe	7	Return air flange
2	Refrigerant gas pipe	8	Hook
3	Condensate drain	9	
4	Power & Comm. wiring conduits	10	
5	Refrigerant pipe conduits	11	
6	Supply air flange	12	

5 Electrical wiring diagram

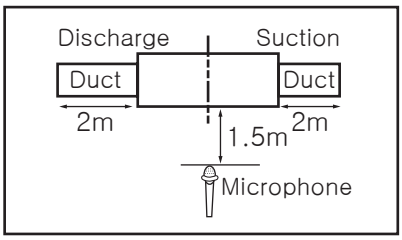
Duct S

AC035JNMCEH/EU, AC071JNMCEH/EU, AC100JNMCEH/EU, AC125JNMCEH/EU



6 Sound pressure level

Duct S



Unit: dB(A)

Model	High	Low
AC035JNMCEH/EU (ODU : AC035JXSCEH/EU)	31.0	25.0
AC071JNMCEH/EU (ODU : AC071JXSCEH/EU)	33.0	25.0
AC100JNMCEH/EU (ODU : AC100JXSCGH/EU)	37.0	28.0
AC100JNMCEH/EU (ODU : AC100JXSCEH/EU)	37.0	28.0

Note

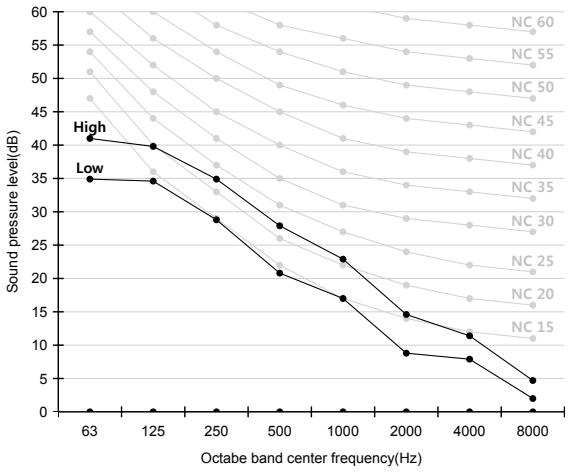
> Measuring place: Anechoic chamber (conversion value)

> These operation values were obtained in an anechoic room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

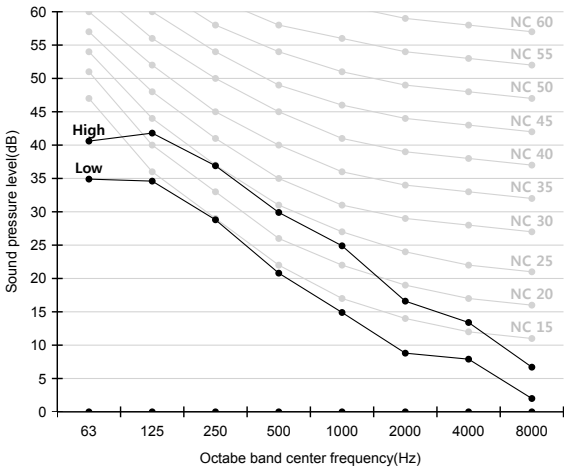
> Operation sound level may differ depending on operation and ambient conditions.)

NC curve

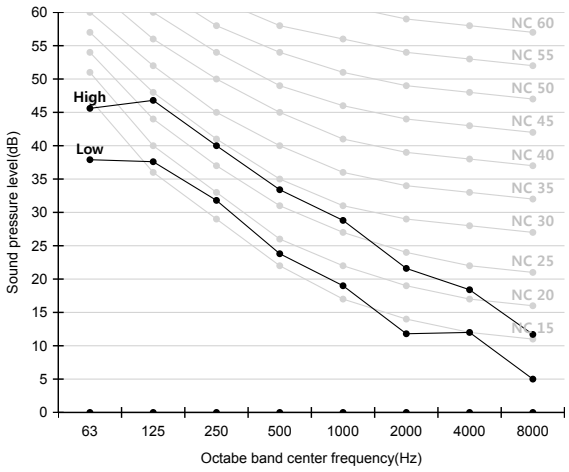
1) AC035JNMCEH/EU (ODU : AC035JXSCEH/EU)



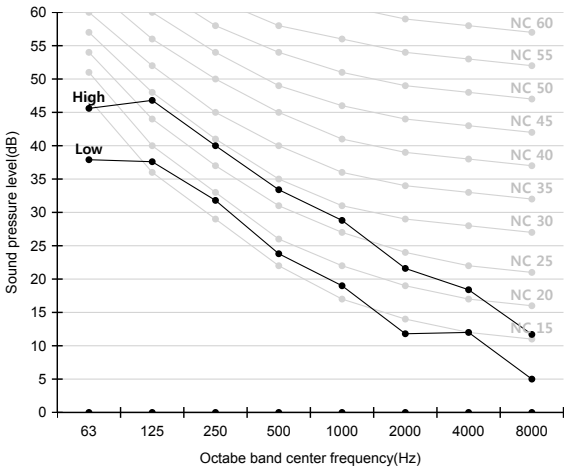
2) AC071JNMCEH/EU (ODU : AC071JXSCEH/EU)



3) AC100JNMCEH/EU (ODU : AC100JXSCGH/EU)

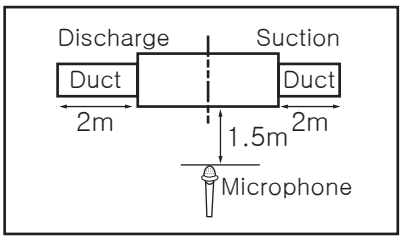


4) AC100JNMCEH/EU (ODU : AC100JXSCEH/EU)



6 Sound pressure level

Duct S



Unit: dB(A)

Model	High	Low
AC125JNMCEH/EU (ODU : AC125JXSCGH/EU)	39.0	31.0

Note

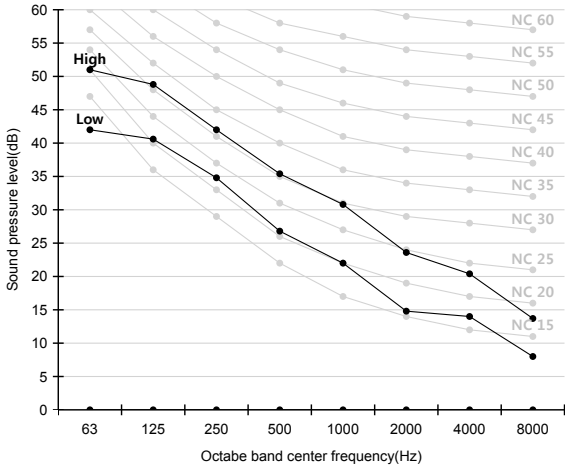
> Measuring place: Anechoic chamber (conversion value)

> These operation values were obtained in an anechoic room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

> Operation sound level may differ depending on operation and ambient conditions.)

NC curve

1) AC125JNMCEH/EU (ODU : AC125JXSCGH/EU)



7 Sound power level

Duct S

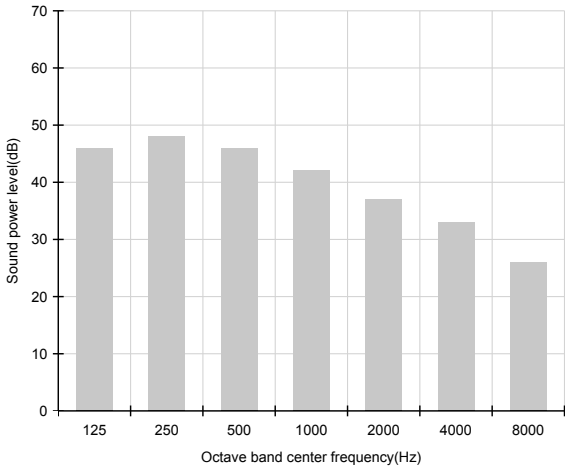
Note

dBA = A-weighted sound power level.
Reference power : 1pW.
Measured according to ISO 3741.

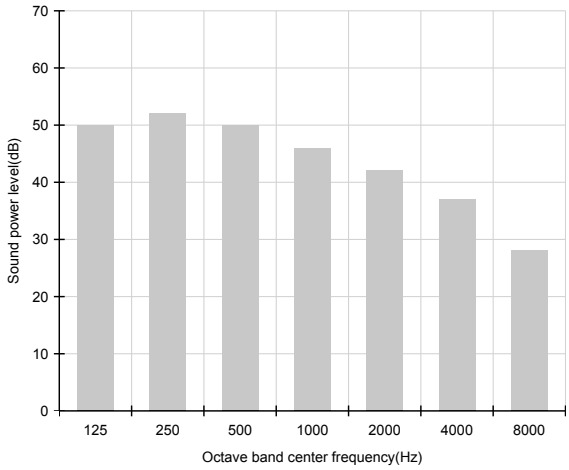
Unit: dB(A)

Model	Power
AC035JNMCEH/EU (ODU : AC035JXSCEH/EU)	56.0
AC071JNMCEH/EU (ODU : AC071JXSCEH/EU)	56.0
AC100JNMCEH/EU (ODU : AC100JXSCGH/EU)	61.0
AC100JNMCEH/EU (ODU : AC100JXSCEH/EU)	61.0

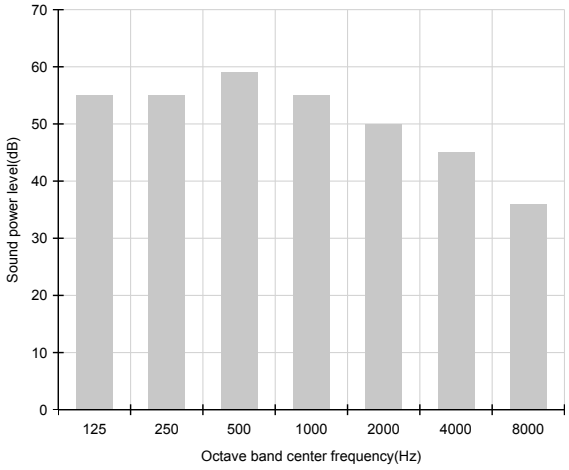
1) AC035JNMCEH/EU (ODU : AC035JXSCEH/EU)



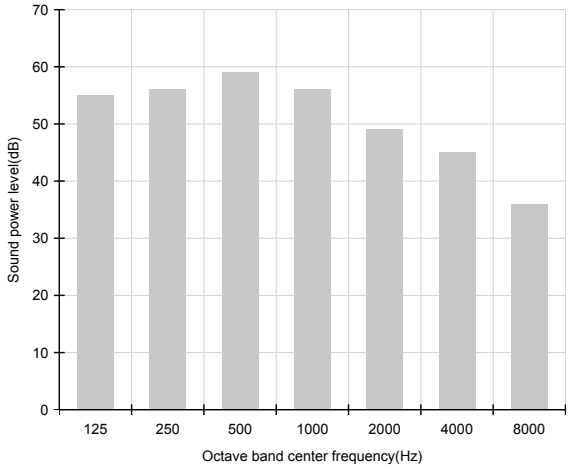
2) AC071JNMCEH/EU (ODU : AC071JXSCEH/EU)



3) AC100JNMCEH/EU (ODU : AC100JXSCGH/EU)



4) AC100JNMCEH/EU (ODU : AC100JXSCEH/EU)



7 Sound power level

Duct S

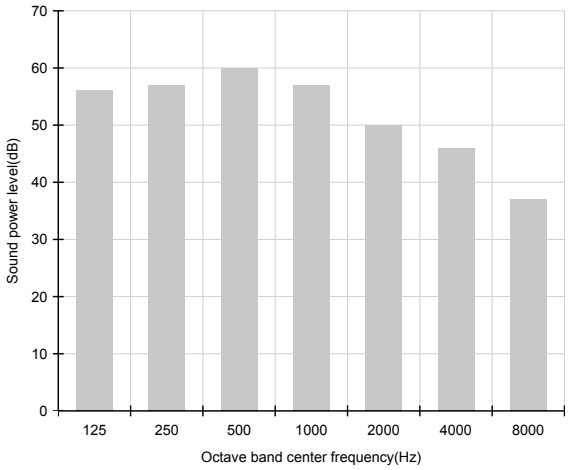
Note

dBA = A-weighted sound power level.
Reference power : 1pW.
Measured according to ISO 3741.

Unit: dB(A)

Model	Power
AC125JNMCEH/EU (ODU : AC125JXSCGH/EU)	63.0

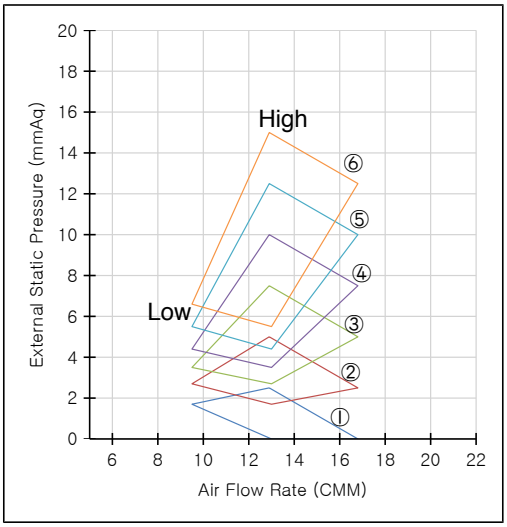
1) AC125JNMCEH/EU (ODU : AC125JXSCGH/EU)



8 Recommended operation range

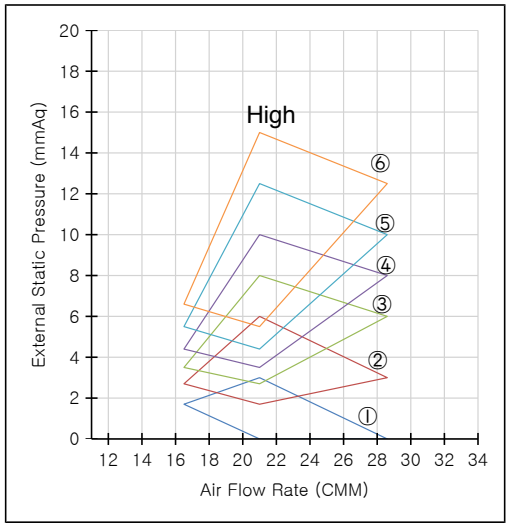
Duct S

1) AC035JNMCEH/EU (ODU : AC035JXSCEH/EU)



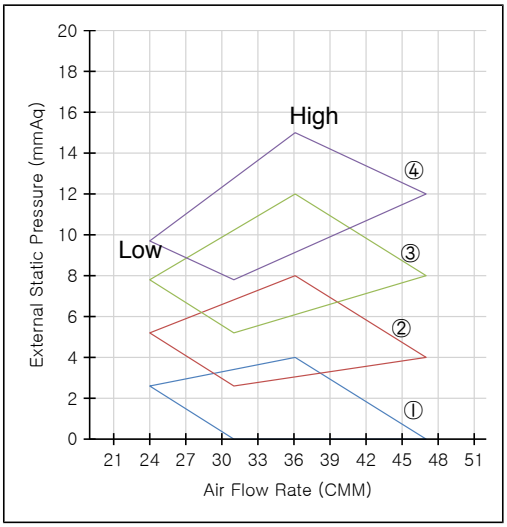
External Static Pressure (mmAq)	Option Code
① 0≤ SP ≤2.5(Default)	01B26C-1C5081-27232B-371000
② 2.5< SP ≤5	01B26C-1C50E6-27232B-371000
③ 5< SP ≤7.5	01B26C-1C545B-27232B-371000
④ 7.5< SP ≤10	01B26C-1C54CF-27232B-371000
⑤ 10< SP ≤12.5	01B26C-1C5933-27232B-371000
⑥ 12.5< SP ≤15	01B26C-1C5987-27232B-371000

2) AC071JNMCEH/EU (ODU : AC071JXSCEH/EU)



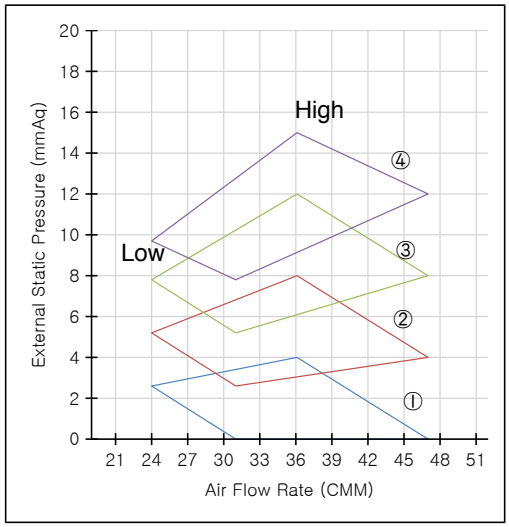
External Static Pressure (mmAq)	Option Code
① 0≤ SP ≤3 (Default)	01B26C-1C50D5-274750-372020
② 3< SP ≤6	01B26C-1C5459-274750-372020
③ 6<P≤8	01B26C-1C54BC-274750-372020
④ 8<P≤10	01B26C-1C54FE-274750-372020
⑤ 10<P≤12.5	01B26C-1C5942-274750-372020
⑥ 12.5<P≤15	01B26C-1C5994-274750-372020

3) AC100JNMCEH/EU (ODU : AC100JXSCGH/EU)



External Static Pressure (mmAq)	Option Code
① 0≤ SP ≤4 (Default)	01B26C-1C50F2-276470-375045
② 4< SP ≤8	01B26C-1C5447-276470-375045
③ 8< SP ≤12	01B26C-1C54BC-276470-375045
④ 12< SP ≤15	01B26C-1C5910-276470-375045

4) AC100JNMCEH/EU (ODU : AC100JXSCEH/EU)



External Static Pressure (mmAq)	Option Code
① 0≤ SP ≤4 (Default)	01B26C-1C50F2-276470-375045
② 4< SP ≤8	01B26C-1C5447-276470-375045
③ 8< SP ≤12	01B26C-1C54BC-276470-375045
④ 12< SP ≤15	01B26C-1C5910-276470-375045

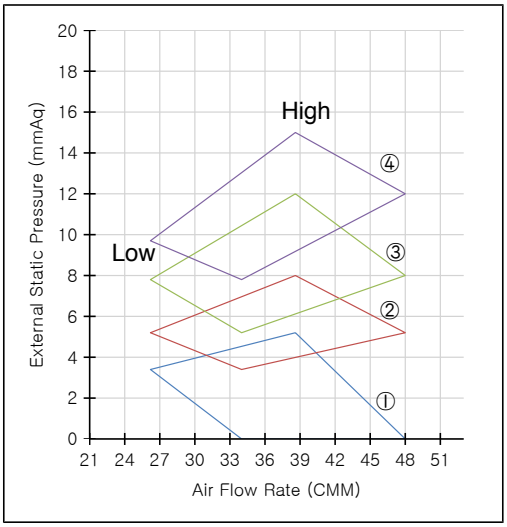
Note

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

8 Recommended operation range

Duct S

5) AC125JNMCEH/EU (ODU : AC125JXSCGH/EU)



External Static Pressure (mmAq)	Option Code
① 0≤ SP ≤5.2 (Default)	01B26C-1C5425-277D8C-374045
② 5.2< SP ≤8	01B26C-1C547A-277D8C-374045
③ 8< SP ≤12	01B26C-1C54ED-277D8C-374045
④ 12< SP ≤15	01B26C-1C5929-277D8C-374045

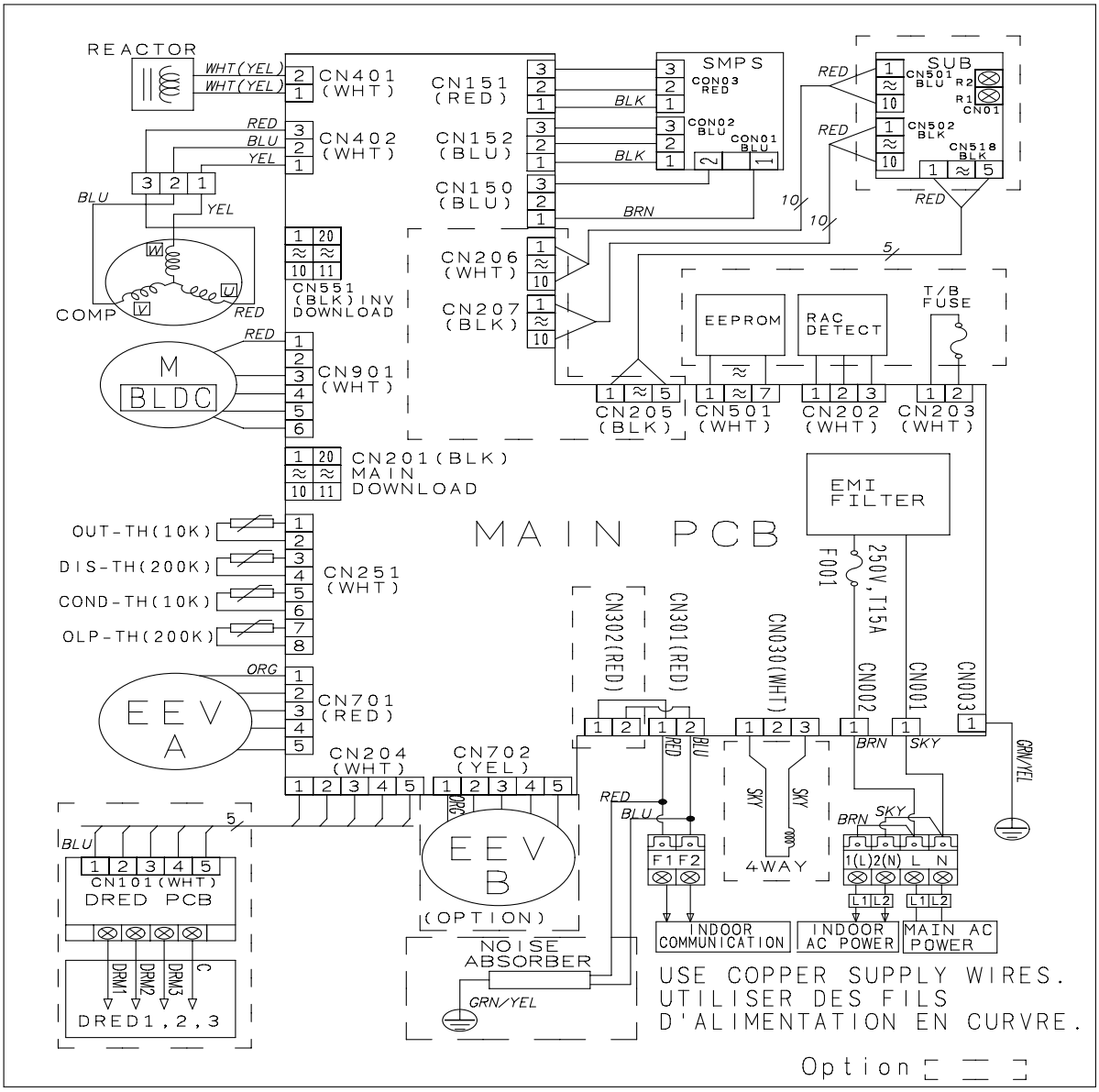
Note

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

9 Electrical wiring diagram

Outdoor

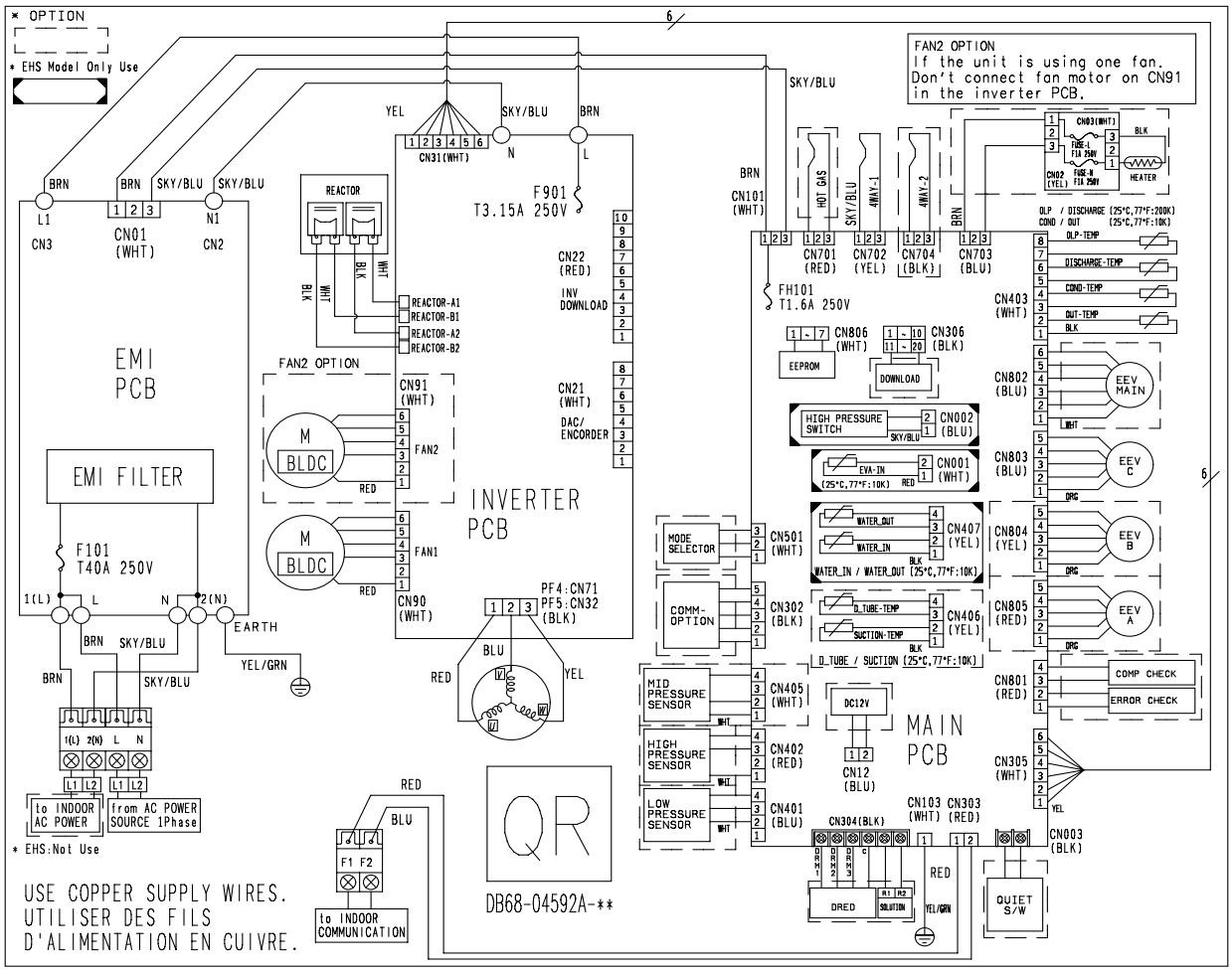
AC035JXSCEH/EU



9 Electrical wiring diagram

Outdoor

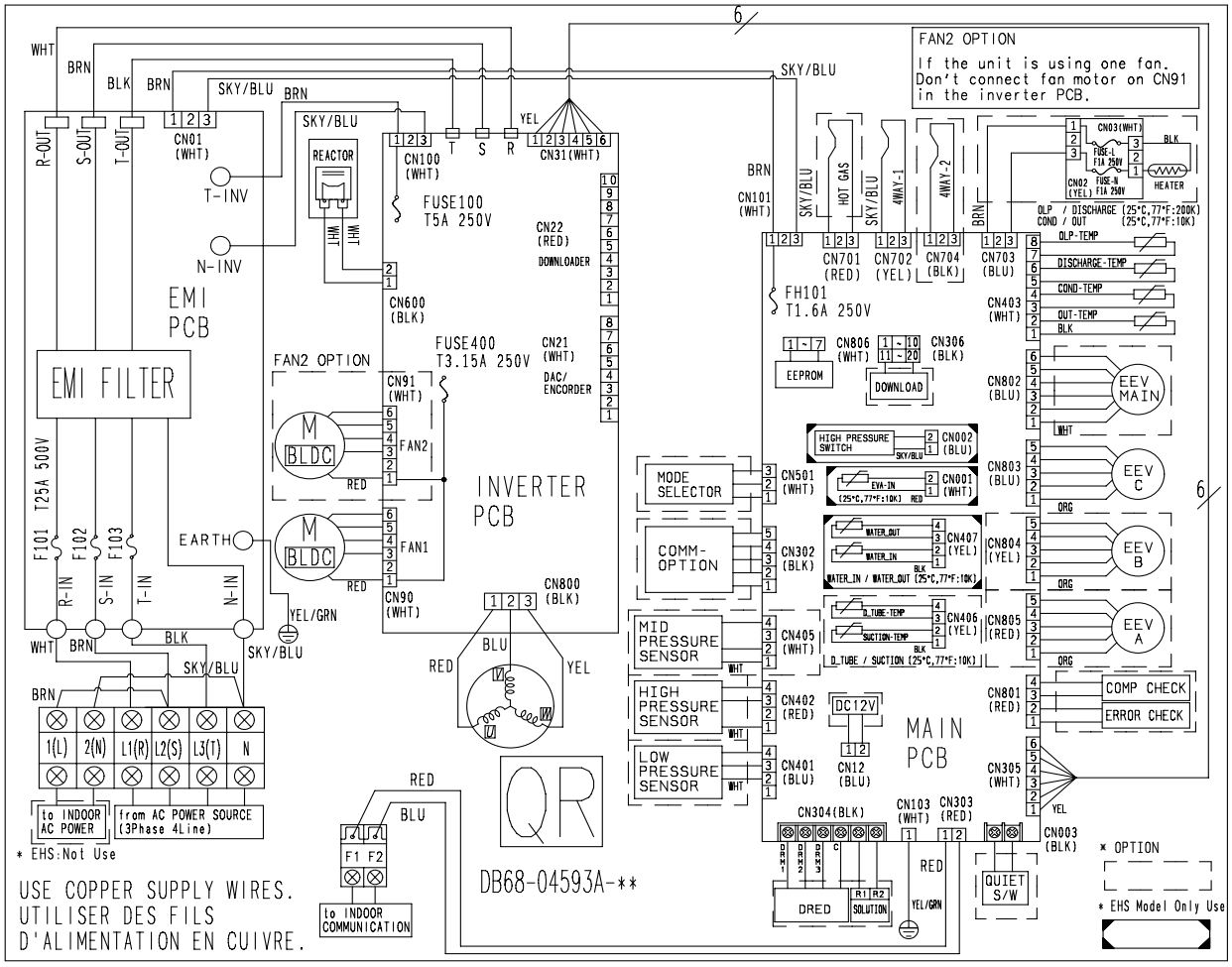
AC071JXSCEH/EU, AC100JXSCEH/EU



9 Electrical wiring diagram

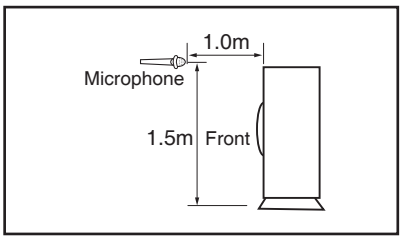
Outdoor

AC100JXSCGH/EU, AC125JXSCGH/EU



10 Sound pressure level

Outdoor



Unit: dB(A)

Model	Cooling	Heating
AC035JXSCEH/EU (IDU : AC035JNMCEH/EU)	47.0	48.0
AC071JXSCEH/EU (IDU : AC071JNMCEH/EU)	49.0	49.0
AC100JXSCGH/EU (IDU : AC100JNMCEH/EU)	50.0	50.0
AC100JXSCEH/EU (IDU : AC100JNMCEH/EU)	50.0	50.0

Note

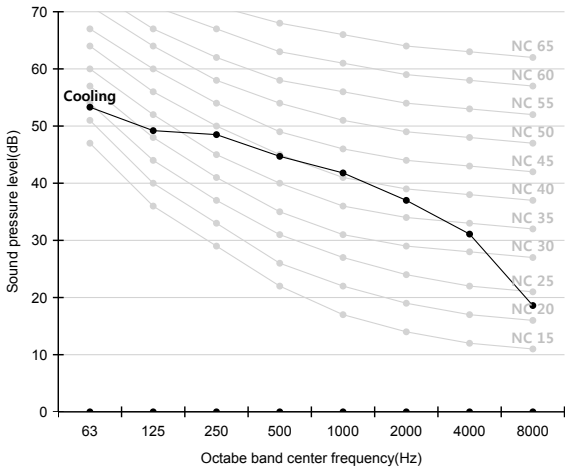
> Measuring place: Anechoic chamber (conversion value)

> These operation values were obtained in an anechoic room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

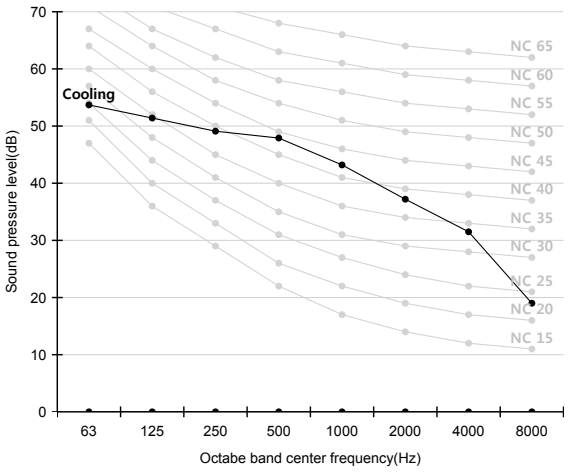
> Operation sound level may differ depending on operation and ambient conditions.)

NC curve

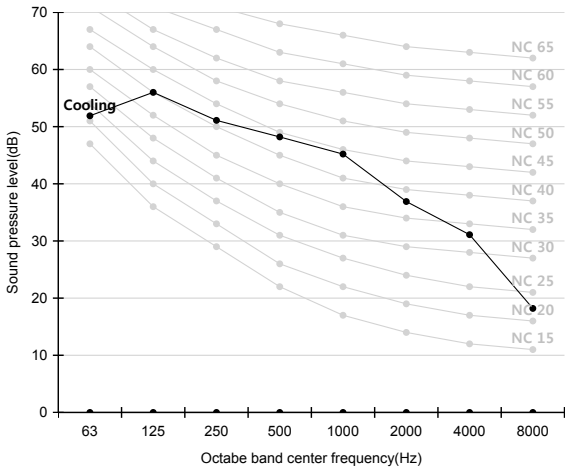
1) AC035JXSCEH/EU (IDU : AC035JNMCEH/EU)



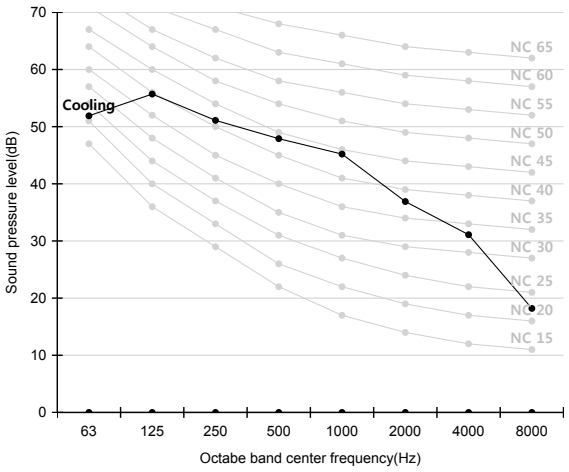
2) AC071JXSCEH/EU (IDU : AC071JNMCEH/EU)



3) AC100JXSCGH/EU (IDU : AC100JNMCEH/EU)

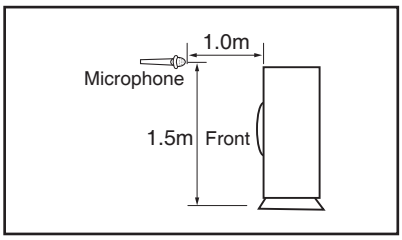


4) AC100JXSCEH/EU (IDU : AC100JNMCEH/EU)



10 Sound pressure level

Outdoor



Unit: dB(A)

Model	Cooling	Heating
AC125JXSCGH/EU (IDU : AC125JNMCEH/EU)	52.0	52.0

Note

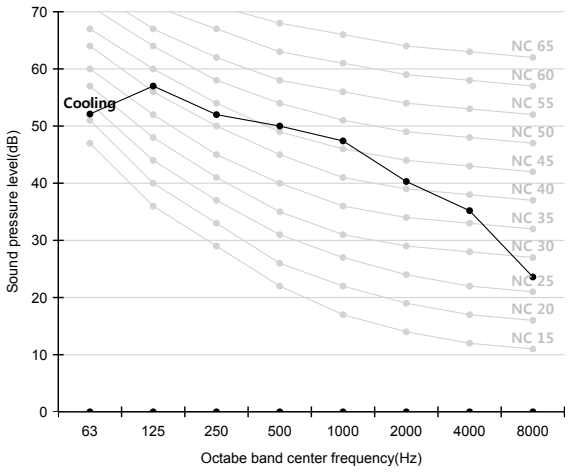
> Measuring place: Anechoic chamber (conversion value)

> These operation values were obtained in an anechoic room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

> Operation sound level may differ depending on operation and ambient conditions.)

NC curve

1) AC125JXSCGH/EU (IDU : AC125JNMCEH/EU)



11 Sound power level

Outdoor

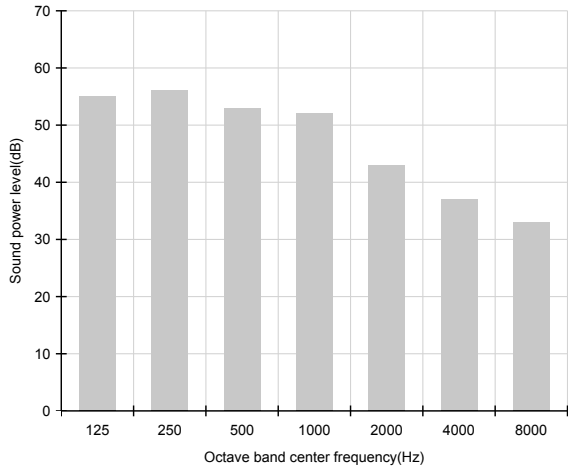
Note

dBA = A-weighted sound power level.
Reference power : 1pW.
Measured according to ISO 3741.

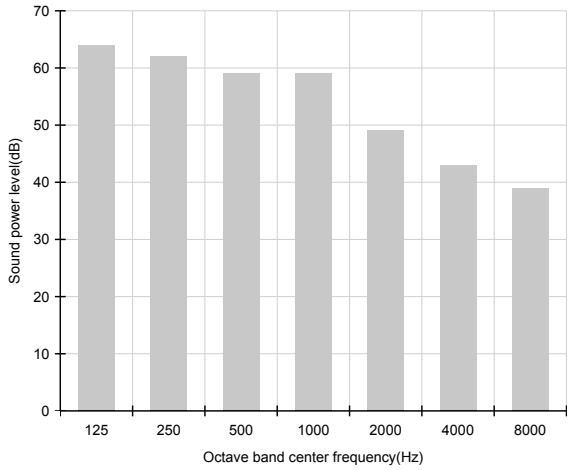
Unit: dB(A)

Model	Power
AC035JXSCEH/EU (IDU : AC035JNMCEH/EU)	62.0
AC071JXSCEH/EU (IDU : AC071JNMCEH/EU)	65.0
AC100JXSCGH/EU (IDU : AC100JNMCEH/EU)	66.0
AC100JXSCEH/EU (IDU : AC100JNMCEH/EU)	66.0

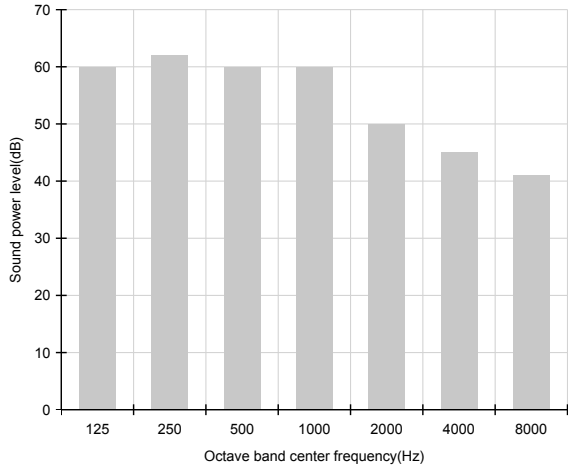
1) AC035JXSCEH/EU (IDU : AC035JNMCEH/EU)



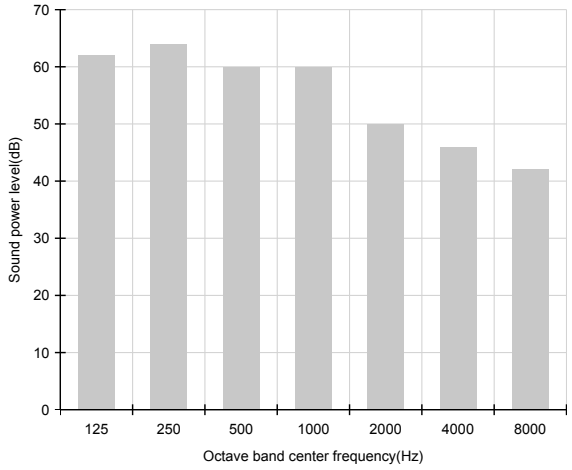
2) AC071JXSCEH/EU (IDU : AC071JNMCEH/EU)



3) AC100JXSCGH/EU (IDU : AC100JNMCEH/EU)



4) AC100JXSCEH/EU (IDU : AC100JNMCEH/EU)



11 Sound power level

Outdoor

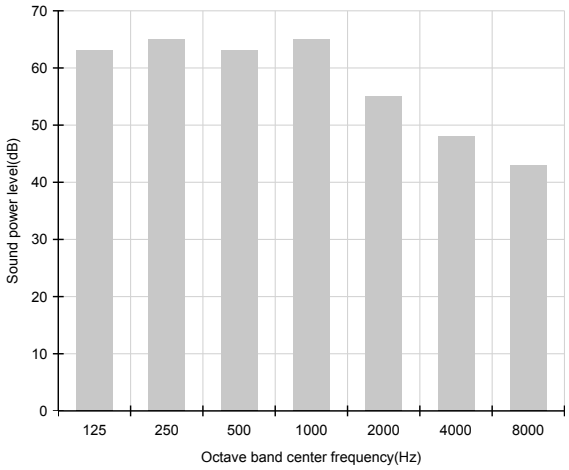
Note

dBA = A-weighted sound power level.
Reference power : 1pW.
Measured according to ISO 3741.

Unit: dB(A)

Model	Power
AC125JXSCGH/EU (IDU : AC125JNMCEH/EU)	69.0

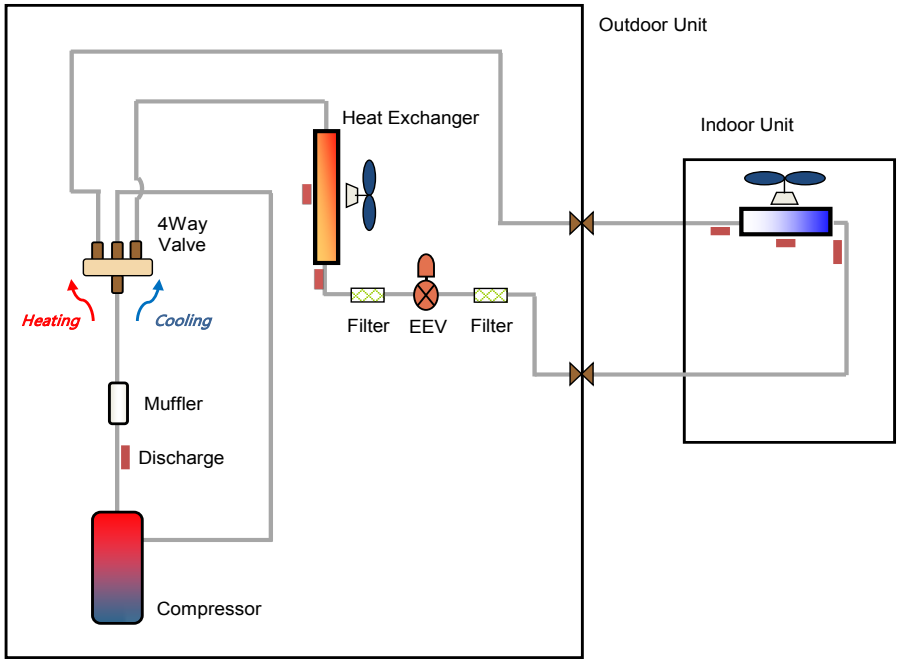
1) AC125JXSCGH/EU (IDU : AC125JNMCEH/EU)



12 Cycle diagram

Outdoor

AC035JXSCEH/EU

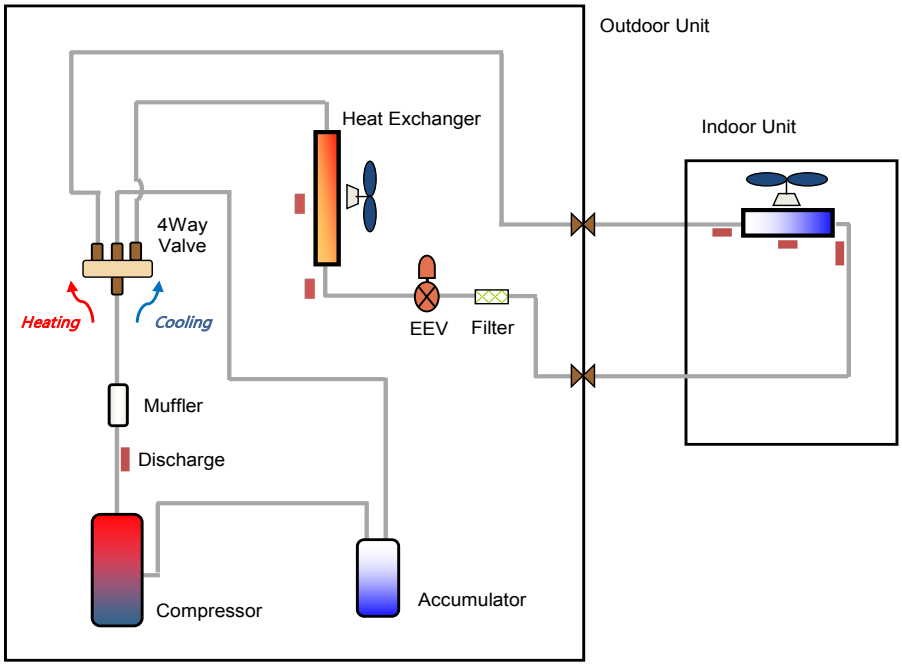


Category		Symbol	Description
Compressor			Rotary Inveter Compressor
Heat Exchanger			Condensing/Evaporating unit(FMC)
Filter			Filter
Valve	Expansion		Electronic Expansion Valve(EEV)
	Reversing		4 Way valve (Reversing valve)
	Service		Service valve
Senser	Temperature		Pip/Air Temperature sensor

12 Cycle diagram

Outdoor

AC071JXSCEH/EU, AC100JXSCEH/EU, AC100JXSCGH/EU, AC125JXSCGH/EU



Category		Symbol	Description
Compressor			Rotary Inveter Compressor
Heat Exchanger			Condensing/Evaporating unit(FMC)
Accumulator			Accumulator
Filter			Filter
Valve	Expansion		Electronic Expansion Valve(EEV)
	Reversing		4 Way valve (Reversing valve)
	Service		Service valve
Senser	Temperature		Pip/Air Temperature sensor

13 Dimensional drawing

Outdoor

AC035JXSCEH/EU

Units : mm / inches

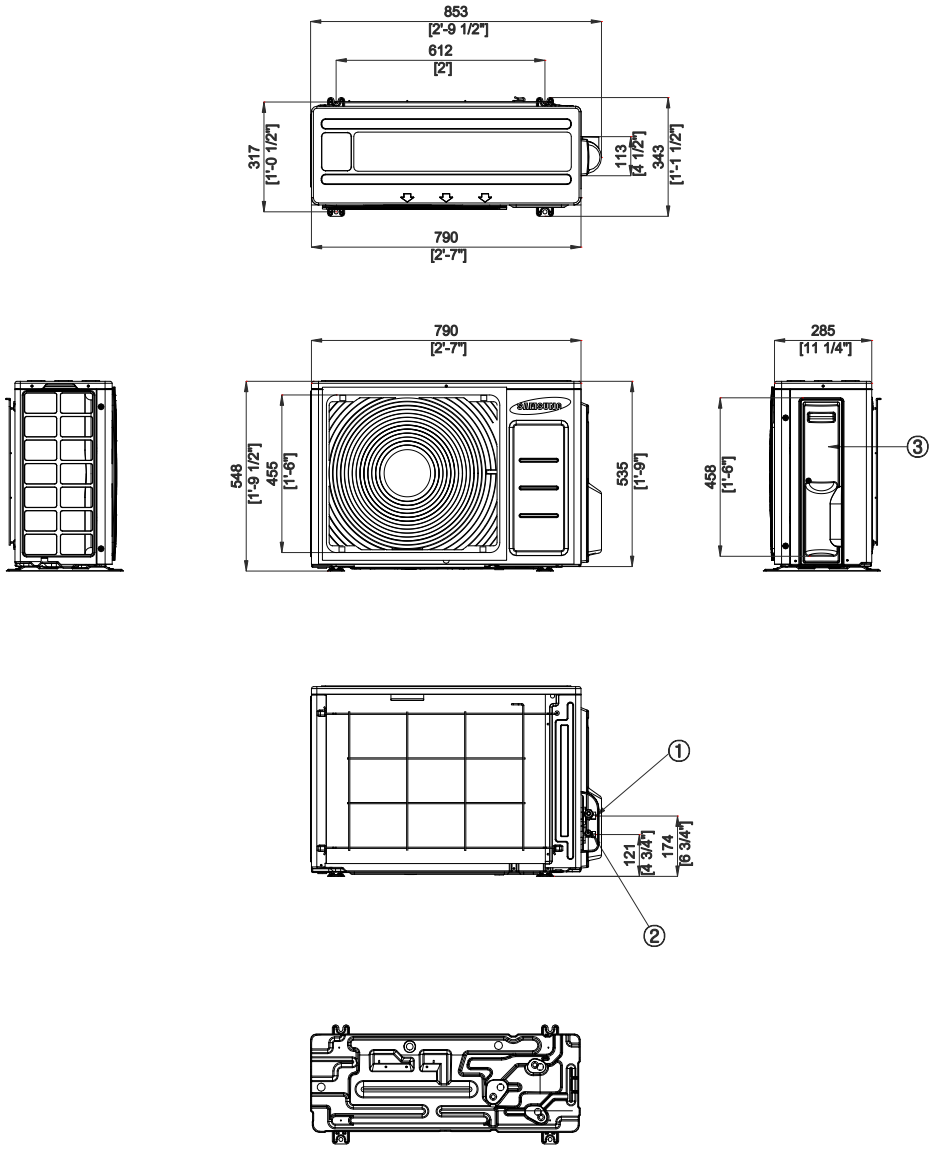


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Power & Comm. wiring conduits	9	
4		10	
5		11	
6		12	

13 Dimensional drawing

Outdoor

AC071JXSCEH/EU, AC100JXSCEH/EU, AC100JXSCGH/EU, AC125JXSCGH/EU

Units : mm / inches

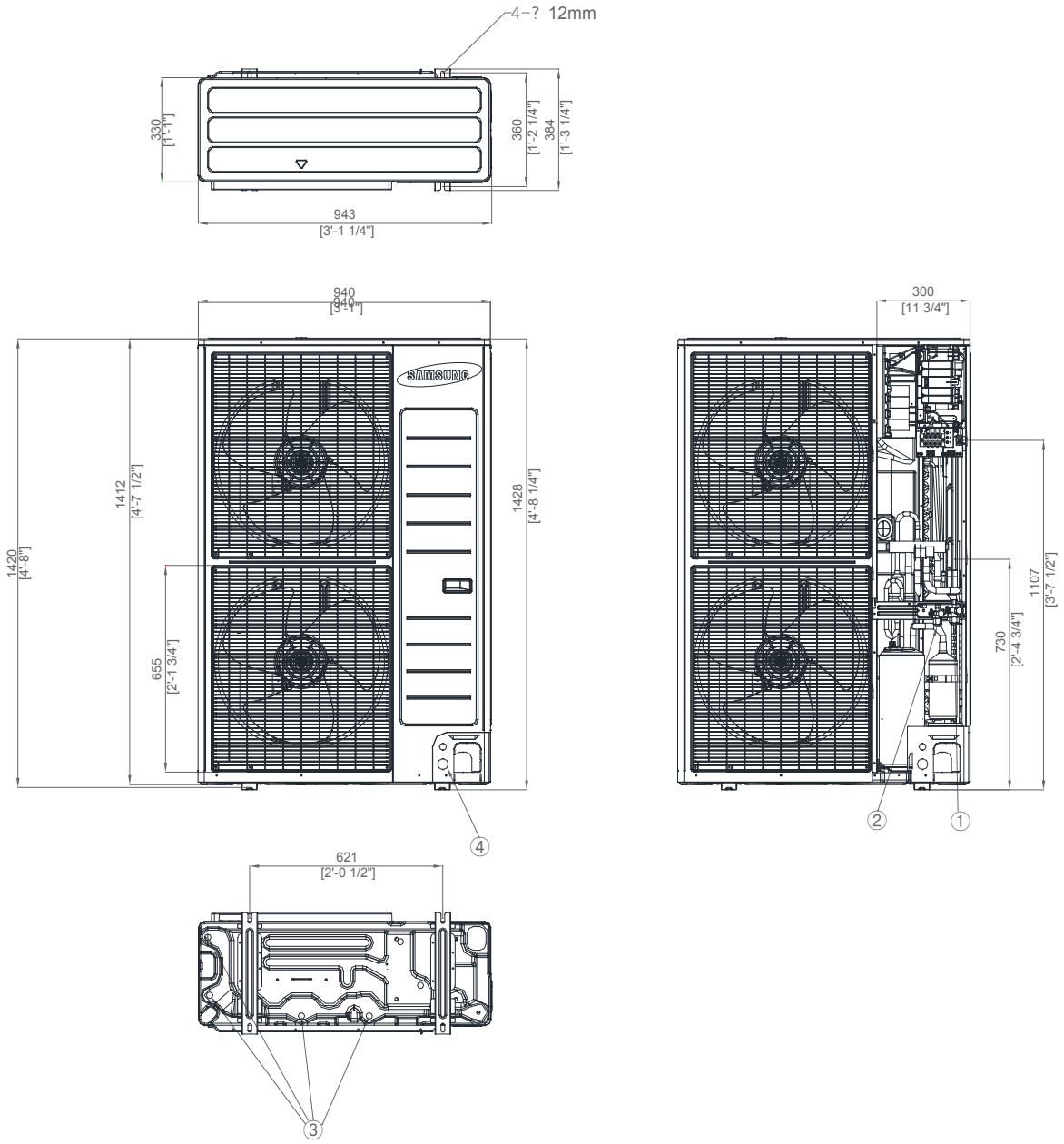


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Drain Hole	9	
4	Power & Comm. wiring conduits	10	
5		11	
6		12	

14 Capacity correction

Outdoor

AC035JXSCEH/EU

Cooling

Level Difference (m)	Pipe Length (m) 5	10	15	20
15	-	-	0.91	0.87
10	-	0.96	0.91	0.87
5	1.00	0.96	0.91	0.87
0	1.00	0.96	0.91	0.87
-5	1.00	0.94	0.90	0.86
-10	-	0.91	0.88	0.85
-15	-	-	0.87	0.84

Heating

Level Difference (m)	Pipe Length (m) 5	10	15	20
15	-	-	0.91	0.87
10	-	0.96	0.91	0.87
5	1.00	0.96	0.91	0.87
0	1.00	0.96	0.91	0.87
-5	1.00	0.96	0.91	0.87
-10	-	0.96	0.91	0.87
-15	-	-	0.91	0.87

AC071JXSCEH/EU, AC100JXSCEH/EU, AC100JXSCGH/EU, AC125JXSCGH/EU

Cooling

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

Heating

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

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Ver.1.0

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