CAC
Technical Data Book

CAC (Inverter, 50Hz, Australia)

SAMSUNG

Contents

I. Products

1. Nomenclature 5
2. Line-up 7
3. Accessories 8

II. Specifications

1. Mini 4way Cassette S 11
2. 4way Cassette S 28
3. MSP(Middle Static Pressure) Duct 47
4. HSP(High Static Pressure) Duct 55
5. Outdoor Units 71

III. Installation

1. Space Requirements 91
2. Electric Specifications 92
3. Wiring Works 93
4. Refrigerant Piping Works 95
5. Option Switches & Function Keys 96
6. High Ceiling Option (4Way Cassette S only) 98
7. Setting an Indoor Unit Address & Installation Option 99
8. Error Code 104

I. Products

1. Nomenclature 5
2. Line-up 7
3. Accessory 8

1. Nomenclature

1-1. Indoor Unit

Model Name

NS	100	4	P	X	E	A	/	000
(1)	(2)	(3)	(4)	(5)	(6)	(7)		(Buyer)

(1) Classification	
NS	CAC (Single)

(2) Capacity
x 1/10 kW (3 digits)

(3) Product Notation		
M	Mini 4Way	Cassette Type
4	4 Way	
H	HSP Duct	Duct Type
S	MSP Duct	
L	Slim Duct (LSP)	

(4) Mode	
Z	Flagship (Heat Pump)
P	Premium (Heat Pump)
D	Deluxe (Heat Pump)

(5) Refrigerant	
X	R410A

(6) Rating Voltage	
E	1Φ, 220~240V, 50Hz

(7) Version	
A~Z	Export

Model Name (New)

AC	N	026	M	D	E	H	H	/	00
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(Buyer)

(1) Classification I	
AC	CAC (Single)

(2) Classification II	
N	Indoor Unit

(3) Capacity
x 1/10 kW (3 digits)

(4) Product Notation		
M	Mini 4Way	Cassette Type
4	4 Way	
H	HSP Duct	Duct Type
S	MSP Duct	
L	Slim Duct (LSP)	

(5) Mode	
Z	Flagship (Heat Pump)
P	Premium (Heat Pump)
D	Deluxe (Heat Pump)

(6) Rating Voltage	
E	1Φ, 220~240V, 50Hz
G	3Φ, 380~415V, 50Hz

(7) Product Notation		
H	Heat Pump	R410A

(8) Version	
A~Z	Export

1. Nomenclature

1-2. Outdoor Unit

Model Name

RC	100	P	H	X	E	A	/	000
(1)	(2)	(3)	(4)	(5)	(6)	(7)		(Buyer)

(1) Classification	
RC	CAC (Single)

(2) Capacity
x 1/10 kW (3 digits)

(3) Product Notation	
P	Inverter Premium
D	Inverter Deluxe
Z	Flagship

(4) Mode	
C	Cooling Only
H	Heat Pump

(5) Refrigerant	
X	R410A

(6) Rating Voltage	
E	1Φ, 220~240V, 50Hz
G	3Φ, 380~415V, 50Hz

(7) Version	
A~Z	Export

2. Line-up

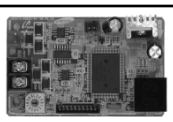
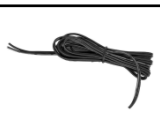
2-1. Indoor Units

Indoor Units		Capacity (kW)									
		2.6	3.5	5.2	6.0	7.1	10.0	12.5	14.0	15.5	18.0
Mini 4way Cassette S	Deluxe	●	●	●	●						
4way Cassette S	Flagship						●				
	Premium					●	●	●	●		
MSP Duct	Deluxe					●					
HSP Duct	Deluxe						●	●	●	●	●

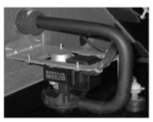
2-2. Outdoor Units

Indoor Units		Capacity (kW)									
		2.6	3.5	5.2	6.0	7.1	10.0	12.5	14.0	15.5	18.0
Single Phase	Deluxe	●	●	●	●	●	●	●	●	●	
	Premium					●	●	●	●		
	Flagship						●				
3 Phase	Deluxe										●

3. Accessories

Classification		Product		Model Name	Image
Integrated Management System	Controller	DMS 2.0		MIM-D00A	
		S-NET 3		MST-P3P	
		S-NET mini (Touch Panel Controller)		MST-S3W	
Centralized Control System	Controller	Centralized Controller (On/Off Controller)		MCM-A202D	
		Function Controller		MCM-A100	
	Interface Module	Centralized Controller Interface Module		MIM-B13D	
Individual Control System	Controller	Wireless Remote Controller		MR-DH00	
		Wired Remote Controller		MWR-WE10	
		Wired Remote Controller		MWR-WH01	
		Wired Remote Controller		MWR-SH00	
		Wireless signal receiver kit	Wireless signal receiver	MRK-A00	
			Receiver wire	MRK-10A	
		External Temp. Sensor		MRW-TA	
Guest Room Management System		External Contact Interface Module		MIM-B14	

3. Accessories

Classification	Description	Model Name	Image
Front Panel	Mini 4way Cassette S	PC4SUSMC	
	4way Cassette S (Waffle Pattern)	PC4NUSKA / PC4NUSMA	
	4way Cassette S (Waffle Pattern, Black)	PC4NBSKA	
	4way Cassette S (Classic Pattern)	PC4NUSKE / PC4NUSME	
MDS (Motion Detect Sensor)	Mini 4way Cassette S	MCR-SMA	
S-Plasma ion Kit	S-Plasma ion	MSD-CAN1	
Drain Pump	MSP Duct (1,150 x 260 x 480mm)	MDP-M075SGU1	
	HSP Duct (1,200 x 360 x 650mm)	MDP-M075SGU2	
	HSP Duct (1,240 x 470 x 1,040mm)	MDP-N047SNC1	

II. Specifications

1. Mini 4way Cassette S ……..…… 11
2. 4way Cassette S …… 28
3. MSP(Middle Static Pressure) Duct ……...… 47
4. HSP(High Static Pressure) Duct ……..….. 55
5. Outdoor Units …...……..... 71

1. Mini 4way Cassette S

1-1. Specifications 12
1-2. Capacity Tables 14
1-3. Dimensional Drawing 16
1-4. PCB Connector Lay-out 17
1-5. Electrical Wiring Diagram 18
1-6. Sound Pressure Level 19
1-7. Temperature Air Flow Distribution 20
1-8. Sub Duct 24

2-1. Specifications

Model Name	Indoor Unit				ACN026NDEHH/SA	ACN035NDEHH/SA
	Outdoor Unit				RC026DHXEH/XSA	RC035DHXEH/XSA
System	Mode			-	Heat Pump	Heat Pump
	Capacity	Capacity (Nominal)	Cooling (Min/Std/Max)	kW	0.99 / 2.6 / 3.5	0.99 / 3.5 / 4.2
				Btu/h	3,380 / 8,870 / 11,940	3,380 / 11,940 / 14,330
			Heating (Min/Std/Max)	kW	0.98 / 3.3 / 4.6	0.98 / 4.0 / 5.0
				Btu/h	3,340 / 11,260 / 15,700	3,340 / 15,350 / 17,060
	Power	Power Input (Nominal)	Cooling (Min/Std/Max)	kW	0.23 / 0.65 / 1.13	0.24 / 0.94 / 1.45
			Heating(Min/Std/Max)		0.18 / 0.87 / 1.40	0.18 / 1.07 / 1.40
		Current Input (Nominal)	Cooling (Min/Std/Max)	A	1.6 / 3.07 / 5.5	1.6 / 4.4 / 6.8
			Heating (Min/Std/Max)		1.2 / 4.1 / 6.6	1.2 / 5.0 / 6.7
		MCA		A	11	15
		MFA		A	20	20
	Energy Efficiency	EER (Nominal Cooling)		-	4.00	3.72
		COP (Nominal Heating)		-	3.80	3.78
		AEER		-	3.98	3.71
		ACOP		-	3.79	3.73
	Piping Connections	Liquid Pipe		Φ, mm	6.35	6.35
				Φ, inch	1/4"	1/4"
		Gas Pipe		Φ, mm	9.35	12.7
				Φ, inch	3/8"	1/2"
		Installation Limitation	Max. Length	m	20	30
			Max. Height	m	15	20
	Field Wiring	Indoor Power Cable		mm^2, #	0.75~1.5, 3wires	0.75~1.5, 3wires
		Communication Cable		mm^2, #	0.75~1.5, 2wires	0.75~1.5, 2wires
	Refrigerant	Type		-	R410A	R410A
		Control Method		-	EEV	EEV
		Factory Charging		kg	0.95	1.40
Indoor Unit	Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50
	Fan	Type		-	Turbo Fan	Turbo Fan
		Motor	Output	W	65	65
			Number of Unit	EA	1	1
		Air Flow Rate	High/Mid/Low	CMM	9.8 / 8.2 / 6.9	10.7 / 9.0 / 7.3
				ℓ/s	163 / 137 / 115	182 / 150 / 122
		External Static Pressure	Min/Std/Max	mmAq	-	-
				Pa	-	-
	Drain	Drain Pipe		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
	Sound *2)	Sound Pressure	High/Mid/Low	dB(A)	34 / 31 / 27	36 / 33 / 29
	External Dimension	Net Weight		kg	11.0	11.7
		Shipping Weight		kg	13.0	13.7
		Net Dimensions (WxHxD)		mm	575 x 250 x 575	575 x 250 x 575
		Shipping Dimensions (WxHxD)		mm	623 x 298 x 653	623 x 298 x 653
	Panel Size	Panel model		-	PC4SUSMC	PC4SUSMC
		Panel Net Weight		kg	2.3	2.3
		Shipping Weight		kg	3.5	3.5
		Net Dimensions (W×H×D)		mm	620 x 45 x 620	620 x 45 x 620
		Shipping Dimensions (W×H×D)		mm	661 x 106 x 671	661 x 106 x 671
	Accessories	Drain pump	Drain pump	-	Default	Default
			Max. Lifting Height / Displacement	mm / ℓ/h	750 / 24	750 / 24
		Air Filter		-	Default	Default
Outdoor Unit	Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50
	Compressor	Type		-	Single BLDC Rotary	Twin BLDC Rotary
		Model		-	UG4C090LUDJR	UG4T150FUDJQ
		Output			0.86	1.37
		Oil	Type	-	POE	POE
			Initial Charge	cc	320	650
	Fan	Air Flow Rate	Cooling / Heating	CMM	28.6	29.5
				ℓ/s	477	492
	Sound	Sound Pressure	Cooling / Heating	dB(A)	46 / 47	47 / 48
	External Dimension	Net Weight		kg	33.0	38.5
		Shipping Weight		kg	37.0	42.5
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	790 x 548 x 285
		Shipping Dimensions (WxHxD)		mm	926 x 655 x 382	926 x 655 x 382
	Operating Temp. Range	Cooling		℃	-10~46	-15~46
		Heating		℃	-15~24	-15~24

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

*1) Nominal Capacity are based on (Equivalent refrigerant piping length : 7.5m , Level differences : 0m);

- Cooling : Indoor temperature : 27℃ DB, 19℃ WB / Outdoor temperature : 35℃ DB, 24℃ WB
- Heating : Indoor temperature : 20℃ DB, 15℃ WB / Outdoor temperature : 7℃ DB, 6℃ WB

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. *3) Specifications are subject to change without prior notice for product improvement.

2-1. Specifications

Model Name	Indoor Unit				ACN052NDEHH/SA	ACN060NDEHH/SA
	Outdoor Unit				RC052DHXEH/XSA	RC060DHXEH/XSA
System	Mode			-	Heat Pump	Heat Pump
	Capacity	Capacity (Nominal)	Cooling (Min/Std/Max)	kW	1.3 / 5.0 / 5.9	1.8/5.8/6.5
				Btu/h	4,440 / 17,060 / 20,130	6,140 / 19,790 / 22,180
			Heating (Min/Std/Max)	kW	1.3 / 5.5 / 7.5	1.6 / 6.4 / 9.0
				Btu/h	4,440 / 18,770 / 25,590	5,460 / 21,840 / 30,710
	Power	Power Input (Nominal)	Cooling (Min/Std/Max)	kW	0.31 / 1.39 / 2.10	0.38 / 1.75 / 2.60
			Heating(Min/Std/Max)		0.35 / 1.62 / 2.40	0.35 / 1.93 / 3.60
		Current Input (Nominal)	Cooling (Min/Std/Max)	A	2.6 / 6.5 / 9.5	1.9 / 7.8 / 11.5
			Heating (Min/Std/Max)		2.9 / 7.6 / 11.0	1.7 / 8.7 / 17.3
		MCA		A	24	24
		MFA		A	30	30
	Energy Efficiency	EER (Nominal Cooling)		-	3.60	3.30
		COP (Nominal Heating)		-	3.40	3.30
		AEER		-	3.59	3.30
		ACOP		-	3.39	3.30
	Piping Connections	Liquid Pipe		Φ, mm	6.35	6.35
				Φ, inch	1/4"	1/4"
		Gas Pipe		Φ, mm	15.88	15.88
				Φ, inch	5/8"	5/8"
		Installation Limitation	Max. Length	m	50	50
			Max. Height	m	30	30
	Field Wiring	Indoor Power Cable		mm^2, #	0.75~1.5, 3wires	0.75~1.5, 3wires
		Communication Cable		mm^2, #	0.75~1.5, 2wires	0.75~1.5, 2wires
	Refrigerant	Type		-	R410A	R410A
		Control Method		-	EEV	EEV
		Factory Charging		kg	1.80	1.80
Indoor Unit	Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50
	Fan	Type		-	Turbo Fan	Turbo Fan
		Motor	Output	W	65	65
			Number of Unit	EA	1	1
		Air Flow Rate	High/Mid/Low	CMM	12.4/10.7/9.0	12.8/11.1/9.4
				ℓ/s	207/178/150	213/185/157
		External Static Pressure	Min/Std/Max	mmAq	-	-
				Pa	-	-
	Drain	Drain Pipe		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
	Sound *2)	Sound Pressure	High/Mid/Low	dB(A)	39 / 36 / 34	41 / 38 / 34
	External Dimension	Net Weight		kg	12.0	12.0
		Shipping Weight		kg	14.0	14.0
		Net Dimensions (WxHxD)		mm	575 x 250 x 575	575 x 250 x 575
		Shipping Dimensions (WxHxD)		mm	623 x 298 x 653	623 x 298 x 653
	Panel Size	Panel model		-	PC4SUSMC	PC4SUSMC
		Panel Net Weight		kg	2.3	2.3
		Shipping Weight		kg	3.5	3.5
		Net Dimensions (W×H×D)		mm	620 x 45 x 620	620 x 45 x 620
		Shipping Dimensions (W×H×D)		mm	661 x 106 x 671	661 x 106 x 671
	Accessories	Drain pump	Drain pump	-	Default	Default
			Max. Lifting Height / Displacement	mm / ℓ/h	750 / 24	750 / 24
		Air Filter		-	Default	Default
Outdoor Unit	Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50
	Compressor	Type		-	Twin BLDC Rotary	Twin BLDC Rotary
		Model		-	UG4T200FUAE4	UG4T200FUAE4
		Output			1.79	1.79
		Oil	Type	-	POE	POE
			Initial Charge	cc	650	650
	Fan	Air Flow Rate	Cooling / Heating	CMM	44.1	46
				ℓ/s	735	767
	Sound	Sound Pressure	Cooling / Heating	dB(A)	49 / 50	50 / 51
	External Dimension	Net Weight		kg	55.0	55.0
		Shipping Weight		kg	59.0	59.0
		Net Dimensions (WxHxD)		mm	880 x 798 x 310	880 x 798 x 310
		Shipping Dimensions (WxHxD)		mm	1,023 x 891 x 413	1,023 x 891 x 413
	Operating Temp. Range	Cooling		℃	-15~46	-15~46
		Heating		℃	-20~24	-20~24

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

*1) Nominal Capacity are based on (Equivalent refrigerant piping length : 7.5m , Level differences : 0m);

- Cooling : Indoor temperature : 27℃ DB, 19℃ WB / Outdoor temperature : 35℃ DB, 24℃ WB
- Heating : Indoor temperature : 20℃ DB, 15℃ WB / Outdoor temperature : 7℃ DB, 6℃ WB

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. *3) Specifications are subject to change without prior notice for product improvement.

1-2. Capacity Tables

1) RC026DHXEH/XSA + ACN026NDEHH/SA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)											
		-10			21			35			46		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	2.54	1.83	0.57	2.42	1.74	0.49	2.30	1.66	0.61	2.36	2.19	1.26
16	22	2.67	1.89	0.59	2.54	1.80	0.50	2.42	1.71	0.62	2.49	2.26	1.29
18	25	2.78	1.95	0.60	2.65	1.85	0.51	2.52	1.77	0.64	2.59	2.33	1.31
19	27	2.87	2.01	0.61	2.73	1.91	0.52	2.60	1.82	0.65	2.67	2.40	1.34
20	28	2.92	1.99	0.62	2.78	1.89	0.53	2.65	1.80	0.66	2.72	2.38	1.35
22	30	3.07	1.97	0.62	2.92	1.87	0.53	2.78	1.78	0.66	2.86	2.36	1.37
24	32	3.22	1.93	0.63	3.07	1.84	0.54	2.92	1.75	0.68	3.00	2.31	1.39

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)									
	-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	2.32	1.01	3.30	1.24	3.43	1.06	3.37	0.89	4.74	1.33
18	2.30	1.00	3.27	1.23	3.40	1.05	3.33	0.88	4.70	1.31
20	2.28	0.99	3.23	1.22	3.37	1.04	3.30	0.87	4.65	1.30
21	2.25	0.98	3.20	1.21	3.33	1.03	3.27	0.86	4.60	1.29
22	2.23	0.97	3.17	1.19	3.30	1.02	3.23	0.85	4.56	1.27
24	2.21	0.96	3.14	1.18	3.27	1.01	3.20	0.84	4.51	1.26

2) RC035DHXEH/XSA + ACN035NDEHH/SA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)											
		-10			21			35			46		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	3.36	2.43	0.78	3.25	2.35	0.80	3.10	2.24	0.88	2.36	2.19	1.26
16	22	3.54	2.50	0.80	3.42	2.42	0.81	3.26	2.31	0.90	2.49	2.26	1.29
18	25	3.69	2.58	0.81	3.56	2.50	0.83	3.40	2.38	0.92	2.59	2.33	1.31
19	27	3.80	2.66	0.83	3.68	2.57	0.85	3.50	2.45	0.94	2.67	2.40	1.34
20	28	3.88	2.63	0.84	3.75	2.55	0.85	3.57	2.43	0.95	2.72	2.38	1.35
22	30	4.07	2.61	0.85	3.94	2.52	0.86	3.75	2.40	0.96	2.86	2.36	1.37
24	32	4.27	2.55	0.86	4.13	2.47	0.88	3.94	2.35	0.98	3.00	2.31	1.39

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)									
	-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	2.48	1.07	4.00	1.53	4.16	1.31	4.08	1.09	5.30	1.33
18	2.45	1.06	3.96	1.51	4.12	1.30	4.04	1.08	5.25	1.31
20	2.43	1.05	3.92	1.50	4.08	1.28	4.00	1.07	5.20	1.30
21	2.41	1.04	3.88	1.48	4.04	1.27	3.96	1.06	5.15	1.29
22	2.38	1.03	3.84	1.47	4.00	1.26	3.92	1.05	5.10	1.27
24	2.36	1.02	3.80	1.45	3.96	1.25	3.88	1.04	5.05	1.26

Note

◆ Ratings shown are net capacities.

◆ Capacities are based on following conditions;

- Equivalent refrigerant piping length : 7.5m / Level difference : 0m.

1-2. Capacity Tables

3) RC052DHXEH/XSA + ACN052NDEHH/SA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)											
		-15			21			35			46		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	4.55	3.28	1.20	4.53	3.27	1.18	4.42	3.19	1.31	2.83	2.63	1.22
16	22	4.79	3.39	1.23	4.77	3.37	1.20	4.66	3.29	1.33	2.98	2.71	1.25
18	25	4.99	3.49	1.25	4.97	3.48	1.23	4.85	3.40	1.36	3.10	2.79	1.27
19	27	5.14	3.60	1.28	5.12	3.58	1.25	5.00	3.50	1.39	3.20	2.88	1.30
20	28	5.24	3.56	1.29	5.22	3.55	1.26	5.10	3.47	1.40	3.26	2.85	1.31
22	30	5.50	3.53	1.31	5.48	3.51	1.28	5.36	3.43	1.42	3.43	2.82	1.33
24	32	5.78	3.46	1.33	5.76	3.44	1.30	5.62	3.36	1.45	3.60	2.77	1.35

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	4.13	1.99	4.28	1.84	5.50	2.31	5.72	1.98	5.61	1.65	6.83	1.73
18	4.09	1.97	4.24	1.82	5.44	2.29	5.67	1.96	5.56	1.64	6.77	1.72
20	4.05	1.95	4.20	1.80	5.39	2.27	5.61	1.94	5.50	1.62	6.70	1.70
21	4.01	1.93	4.16	1.78	5.34	2.25	5.55	1.92	5.45	1.60	6.63	1.68
22	3.97	1.91	4.12	1.76	5.28	2.22	5.50	1.91	5.39	1.59	6.57	1.67
24	3.93	1.89	4.08	1.75	5.23	2.20	5.44	1.89	5.34	1.57	6.50	1.65

4) RC060DHXEH/XSA + ACN060NDEHH/SA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)											
		-15			21			35			46		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	5.57	4.02	1.51	6.15	4.44	1.55	5.13	3.71	1.65	5.26	4.89	2.92
16	22	5.87	4.15	1.54	6.47	4.58	1.58	5.40	3.82	1.68	5.54	5.04	2.98
18	25	6.11	4.28	1.57	6.74	4.72	1.62	5.63	3.94	1.72	5.77	5.19	3.04
19	27	6.30	4.41	1.60	6.95	4.87	1.65	5.80	4.06	1.75	5.95	5.36	3.10
20	28	6.43	4.37	1.62	7.09	4.82	1.67	5.92	4.02	1.77	6.07	5.30	3.13
22	30	6.75	4.32	1.63	7.44	4.77	1.68	6.21	3.98	1.79	6.37	5.25	3.16
24	32	7.08	4.24	1.66	7.82	4.67	1.72	6.52	3.90	1.82	6.69	5.14	3.23

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

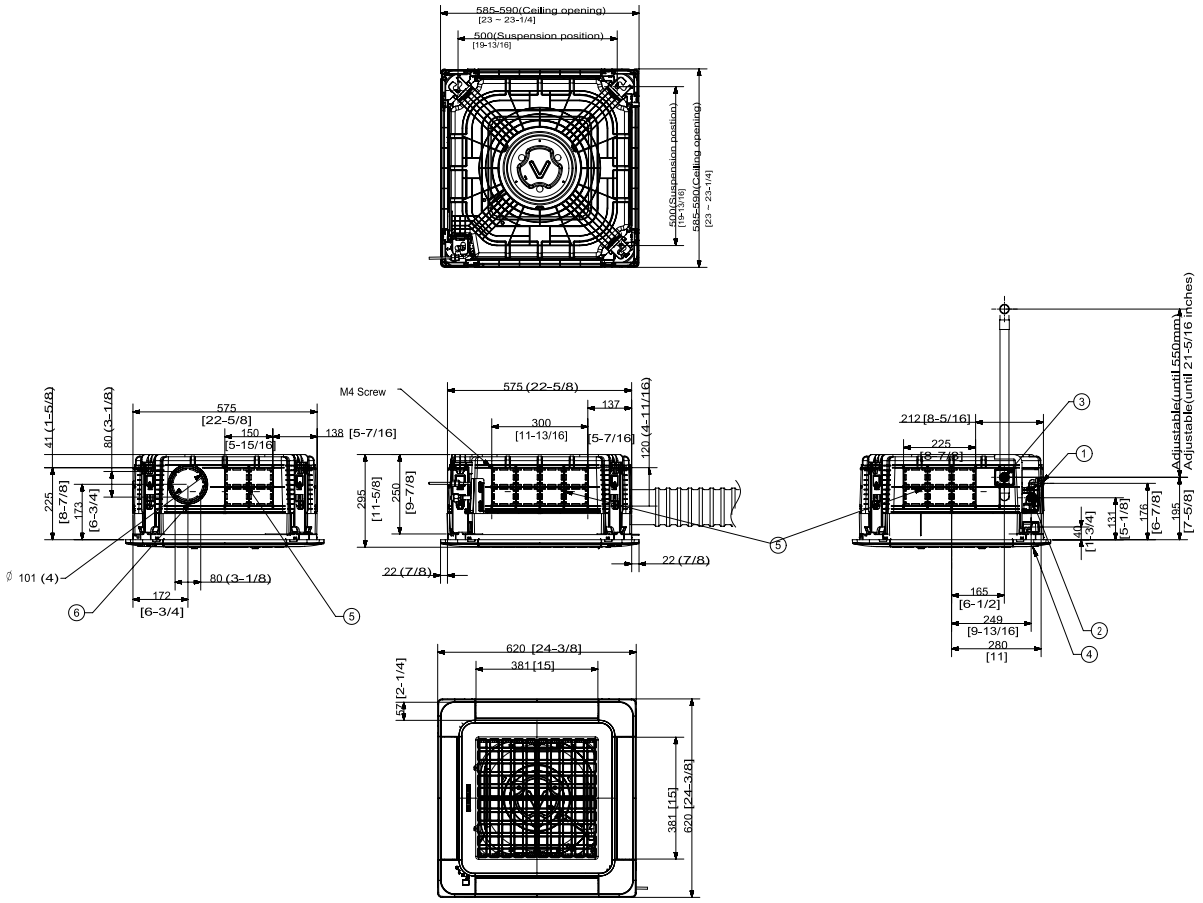
Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	4.77	2.45	5.46	2.63	6.40	2.76	6.66	2.36	6.53	1.97	8.57	2.86
18	4.73	2.42	5.40	2.61	6.33	2.73	6.59	2.34	6.46	1.95	8.48	2.83
20	4.68	2.40	5.35	2.58	6.27	2.70	6.53	2.32	6.40	1.93	8.40	2.80
21	4.63	2.38	5.30	2.55	6.21	2.67	6.46	2.29	6.34	1.91	8.32	2.77
22	4.59	2.35	5.24	2.53	6.15	2.65	6.40	2.27	6.27	1.89	8.23	2.74
24	4.54	2.33	5.19	2.50	6.09	2.62	6.33	2.25	6.21	1.87	8.15	2.72

Note

- ◆ Ratings shown are net capacities.
- ◆ Capacities are based on following conditions;
  - Equivalent refrigerant piping length : 7.5m / Level difference : 0m.

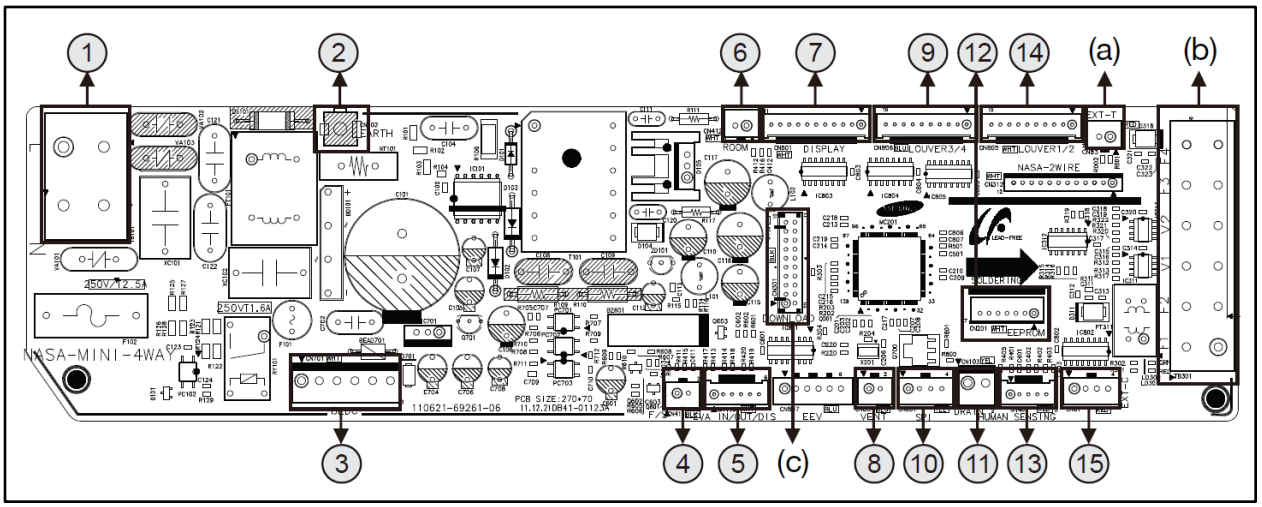
1-3. Dimensional Drawing

Unit (mm)



No.	Name	2.6kW	3.5kW	5.2 / 6.0kW
①	Liquid Pipe Connection	Φ6.35mm (1/4”)		
②	Gas Pipe Connection	Φ9.35mm (3/8”)	Φ12.7mm (1/2”)	Φ15.88mm (5/8”)
③	Drain Pipe Connection	VP25 (OD 32, ID 25)		
④	Conduit for Power Supply & Communication Wiring	-		
⑤	Sub duct connection	Use M4 Screw		
⑥	Fresh Air Intake Hole	Ø101, Use M4 Screw		

1-4. PCB Connector Lay-out



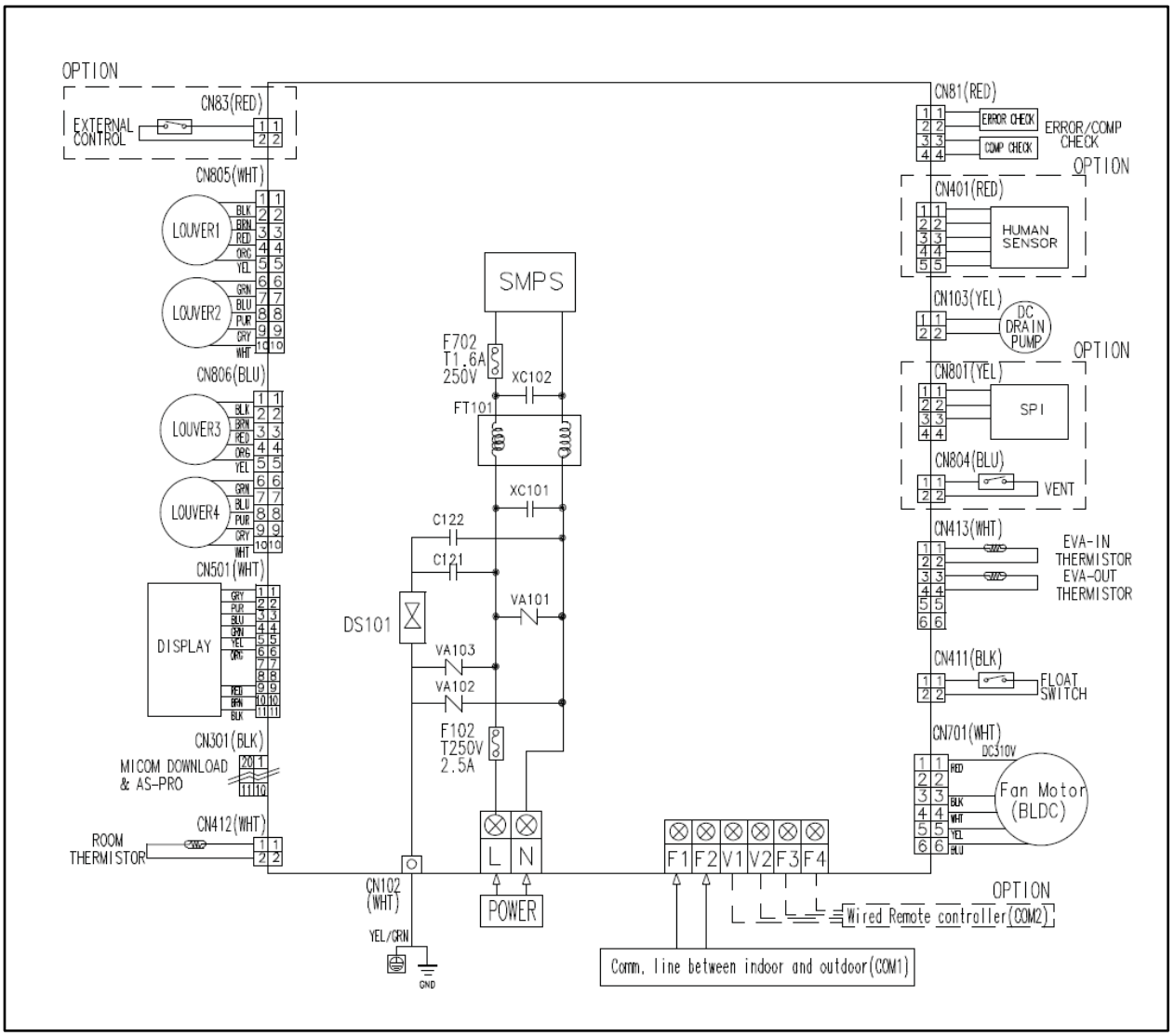
1) AC

No.	CN#	Color	Function
1	TB101	Black	Input Power (L,N)
2	CN102	White	Earth Wire
3	CN701	White	BLDC Fan Motor

2) DC

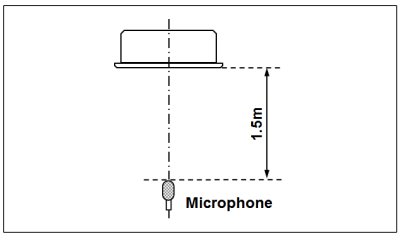
No.	CN#	Color	Function
4	CN411	Black	Float Sensor
5	CN413	Yellow	Eva In/Out/Discharge Temp. Sensor
6	CN412	White	Indoor Room Temp. Sensor
7	CN501	White	Display
8	CN804	Blue	Ventilator
9	TB806	Blue	Louver 3/4
10	CN801	Yellow	S-Plasma ion
11	CN103	Yellow	DC Drain Pump
12	CN201	White	EEPROM
13	CN401	Red	MDS (Motion Detect Sensor)
14	CN805	White	Louver 1/2
15	CN81	Red	Error / Comp. Check
(a)	CN83	Red	External Signal (On/Off)
(b)	TB301	Black	COM1 / COM2 Communication
(c)	CN301	Black	Download

1-5. Electrical Wiring Diagram



1-6. Sound Pressure Level

1) Operation Sound Level



Unit (dB(A))

Model	High	Mid	Low
ACN026NDEHH/SA	34	31	27
ACN035NDEHH/SA	36	33	29
ACN052NDEHH/SA	39	36	34
ACN060NDEHH/SA	41	38	34

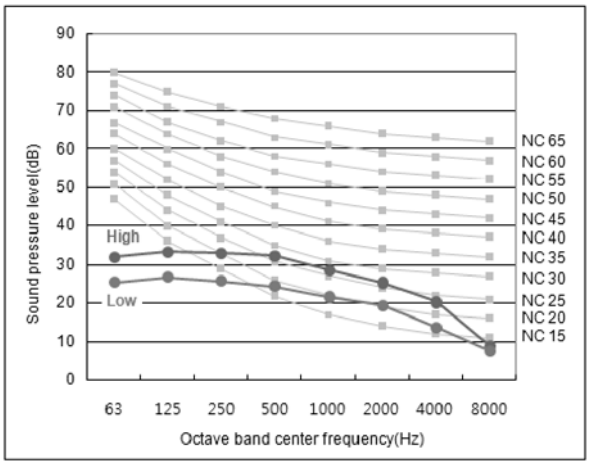
Note

* Specifications may be subject to change without prior notic

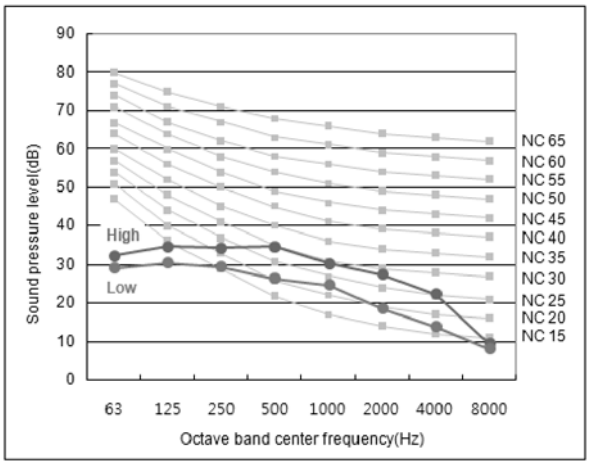
- These operation values are obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition

2) NC Curve

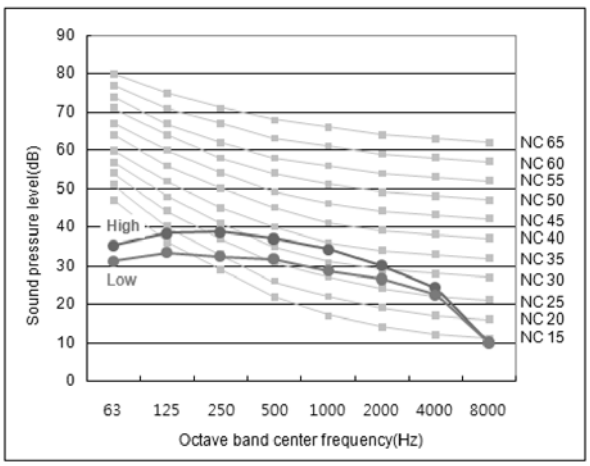
① ACN026NDEHH/SA



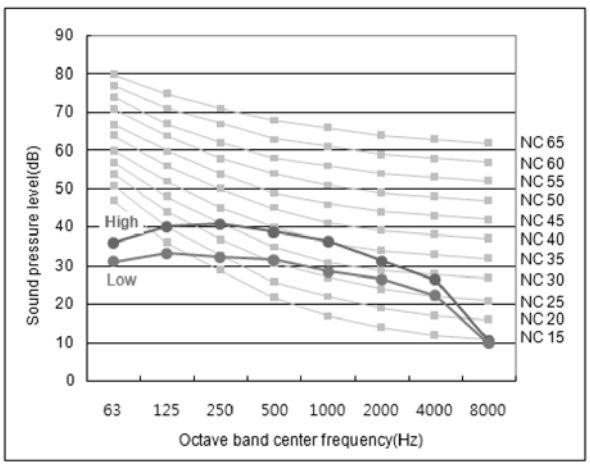
② ACN035NDEHH/SA



③ ACN052NDEHH/SA



④ ACN060NDEHH/SA

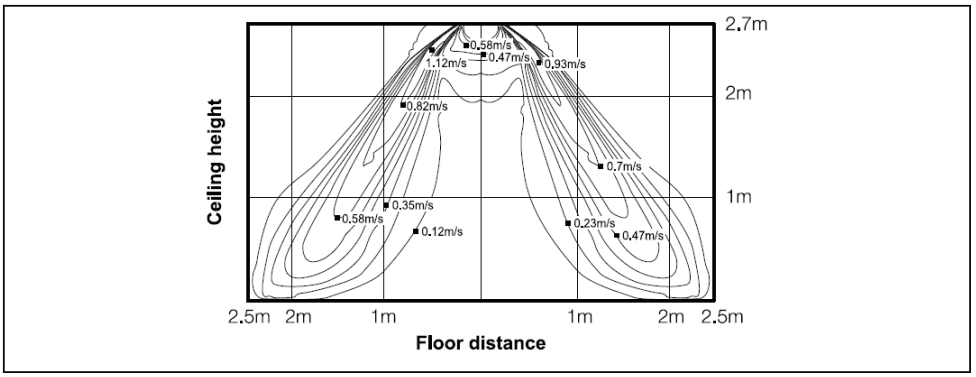


1-7. Temperature and Air Flow Distribution

1) ACN026NDEHH/SA

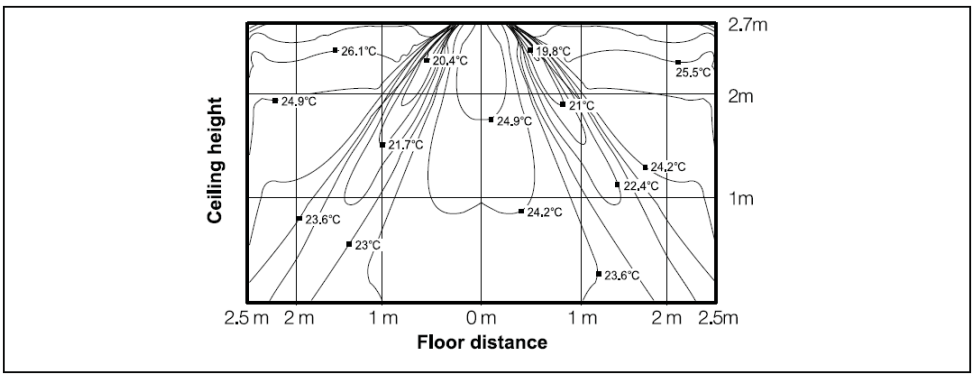
① Cooling air velocity distribution

(Discharge angle : 41˚)



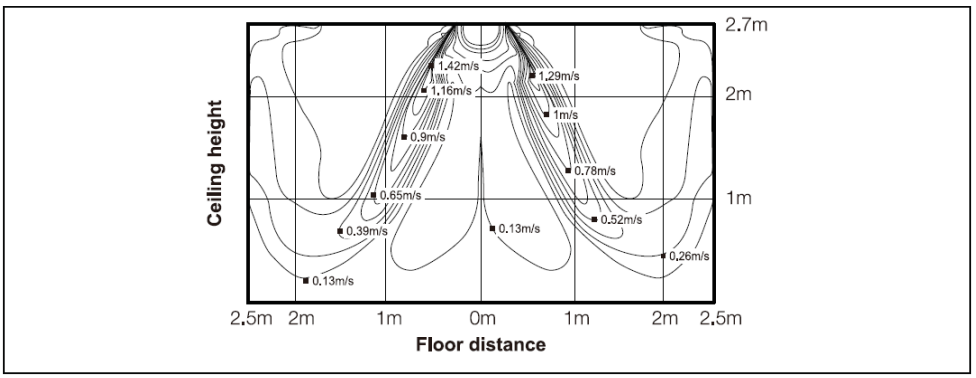
② Cooling temperature distribution

(Discharge angle : 41˚)



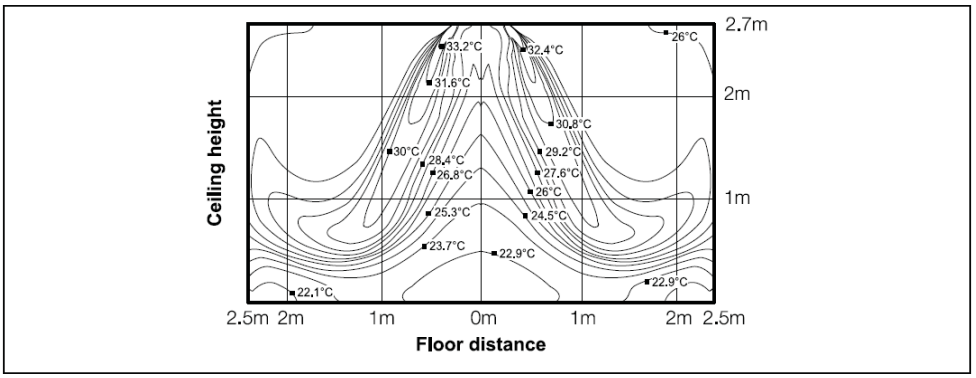
③ Heating air velocity distribution

(Discharge angle : 52˚)



④ Heating temperature distribution

(Discharge angle : 52˚)

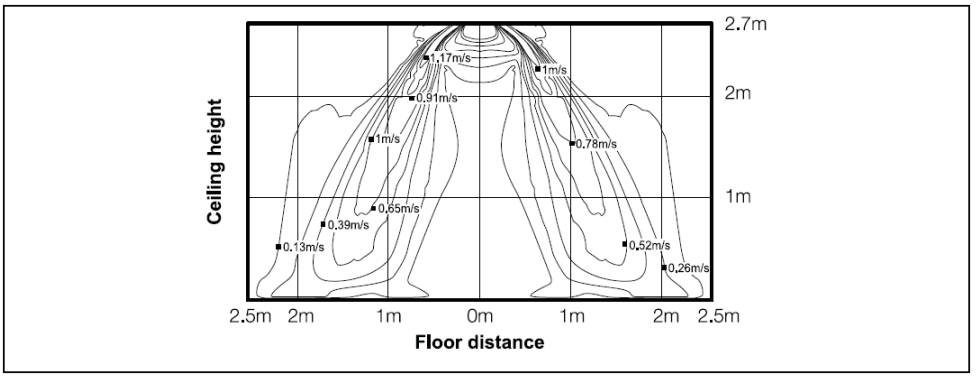


1-7. Temperature and Air Flow Distribution

2) ACN035NDEHH/SA

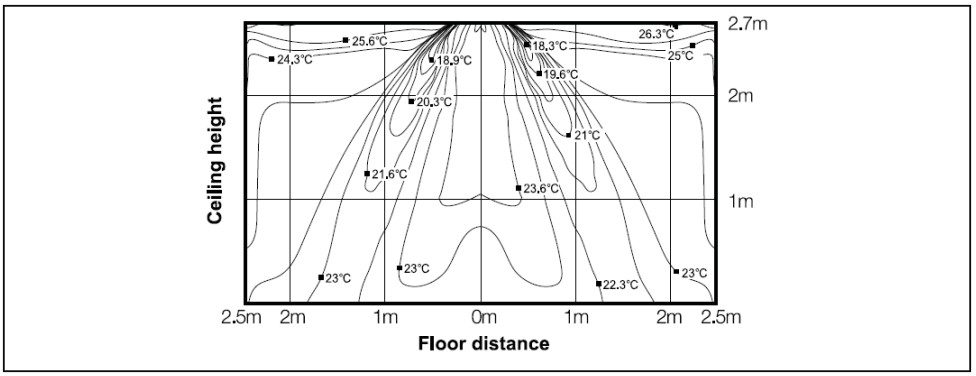
① Cooling air velocity distribution

(Discharge angle : 41˚)



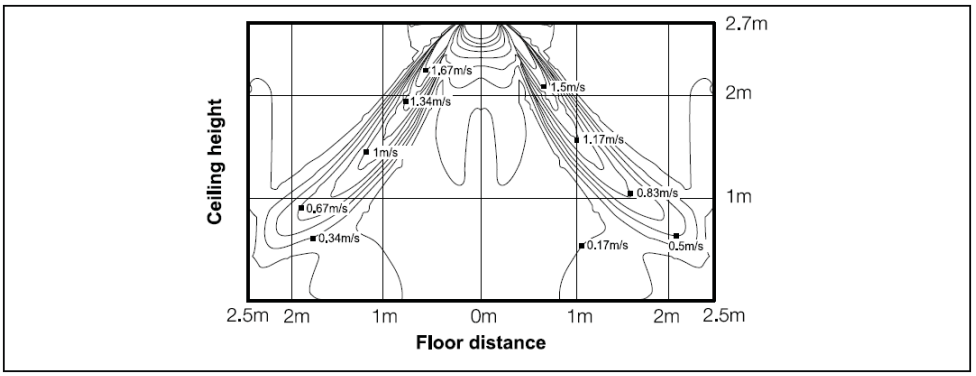
② Cooling temperature distribution

(Discharge angle : 41˚)



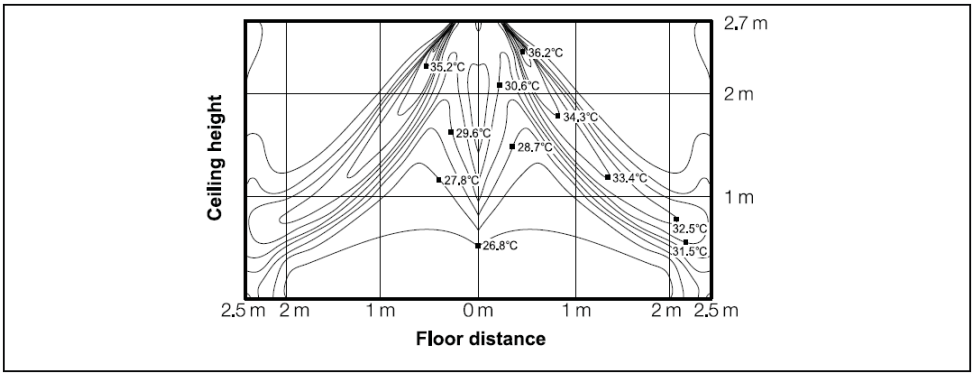
③ Heating air velocity distribution

(Discharge angle : 52˚)



④ Heating temperature distribution

(Discharge angle : 52˚)

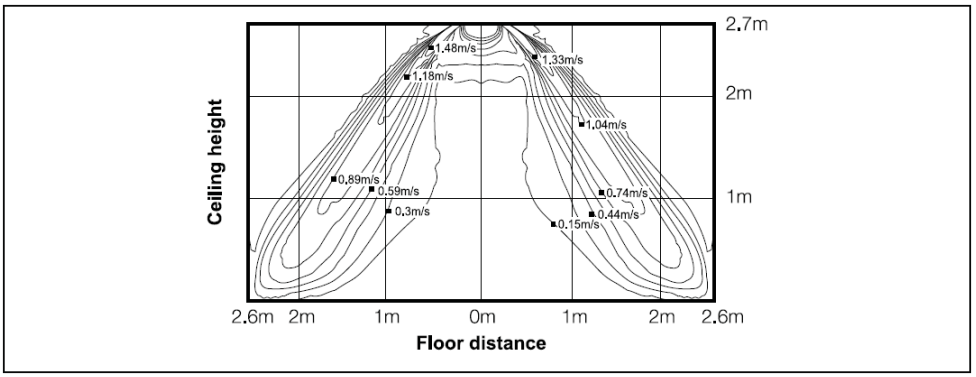


1-7. Temperature and Air Flow Distribution

3) ACN052NDEHH/SA

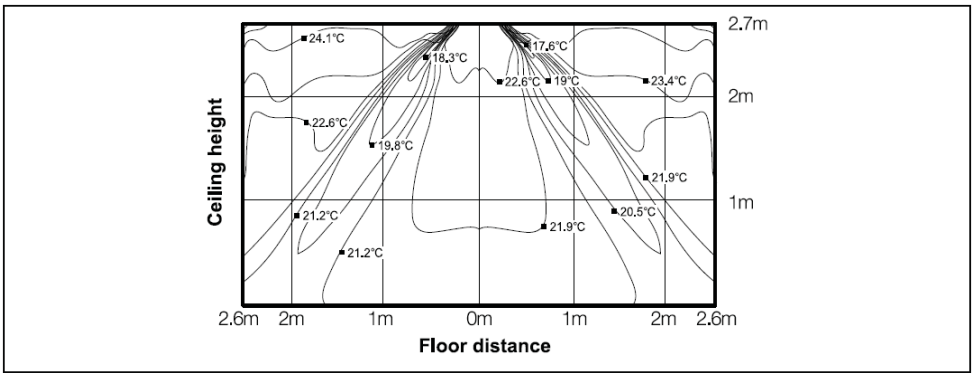
① Cooling air velocity distribution

(Discharge angle : 41˚)



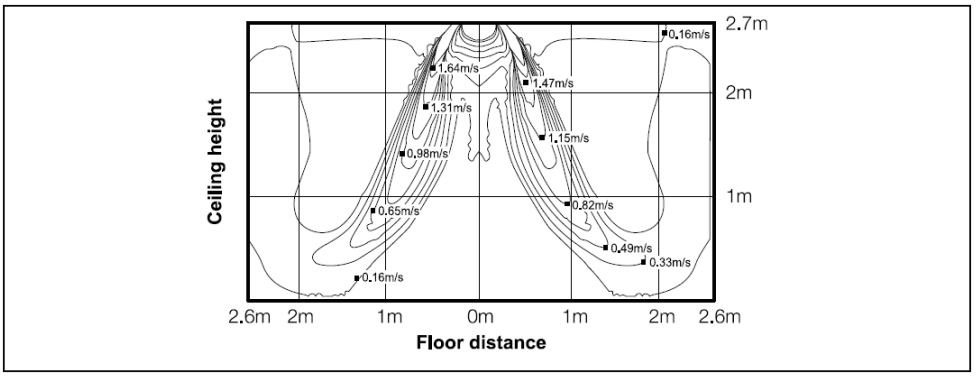
② Cooling temperature distribution

(Discharge angle : 41˚)



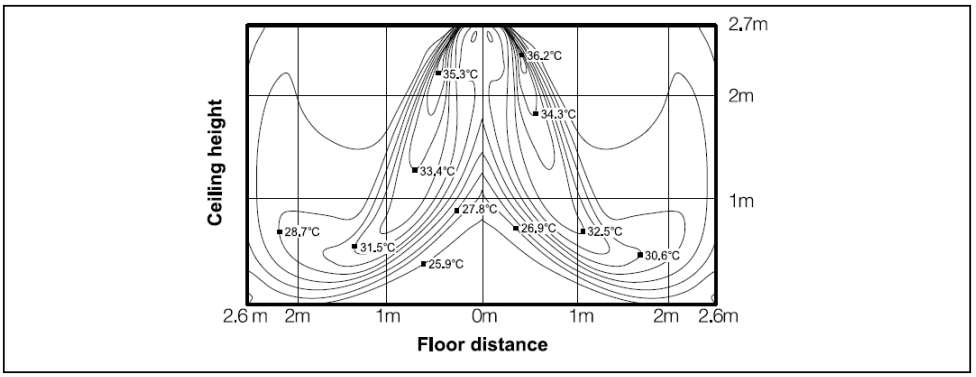
③ Heating air velocity distribution

(Discharge angle : 52˚)



④ Heating temperature distribution

(Discharge angle : 52˚)

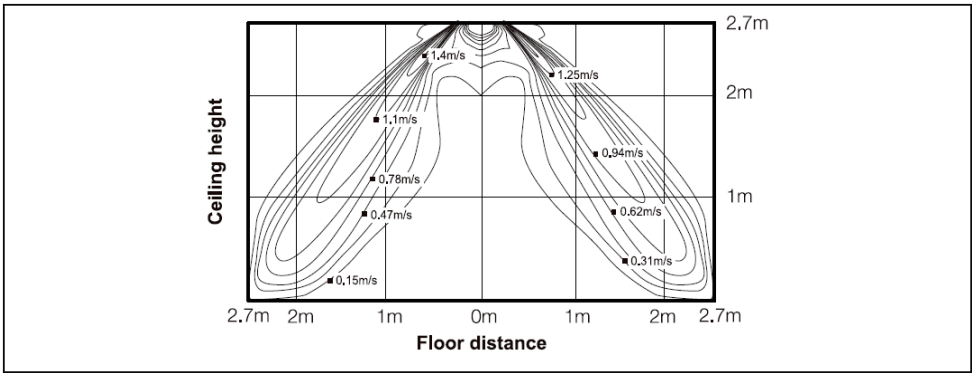


1-7. Temperature and Air Flow Distribution

4) ACN060NDEHH/SA

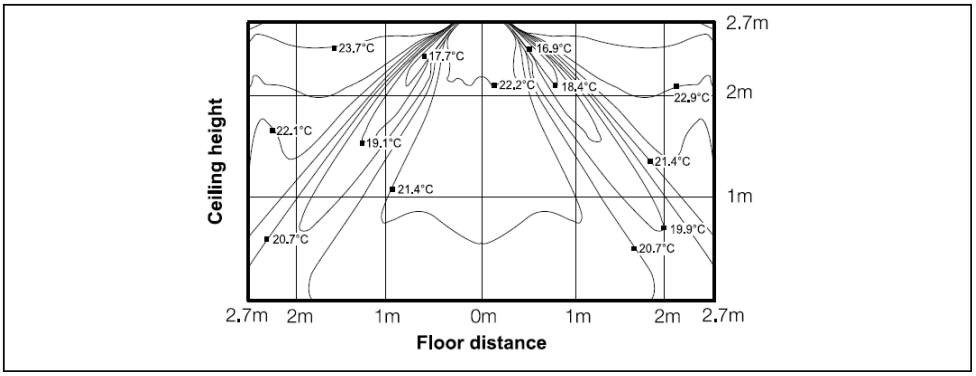
① Cooling air velocity distribution

(Discharge angle : 41˚)



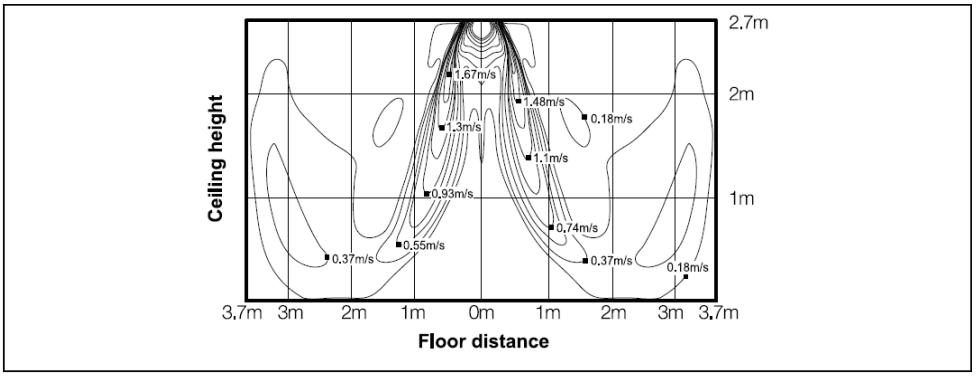
② Cooling temperature distribution

(Discharge angle : 41˚)



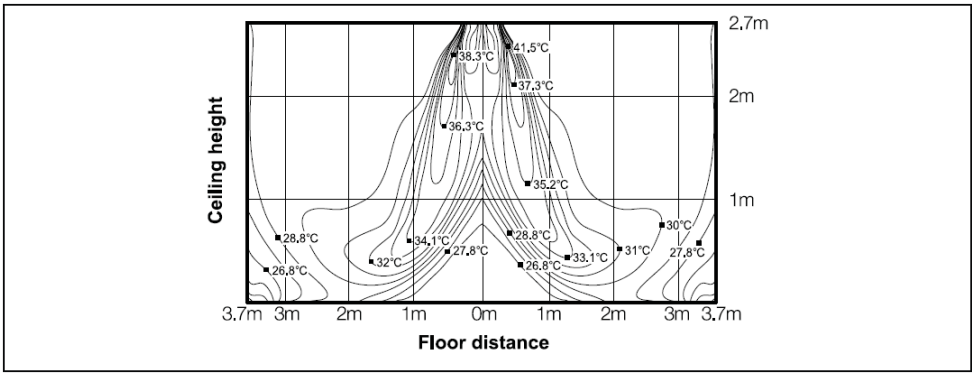
③ Heating air velocity distribution

(Discharge angle : 52˚)



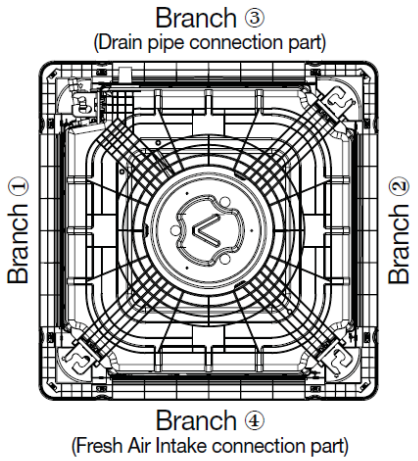
④ Heating temperature distribution

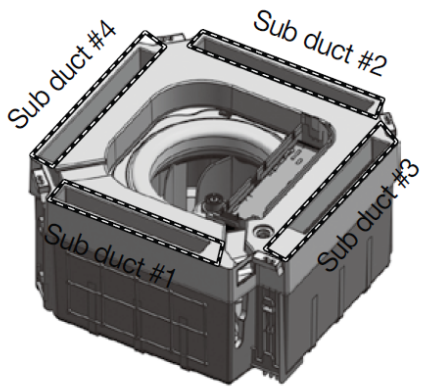
(Discharge angle : 52˚)

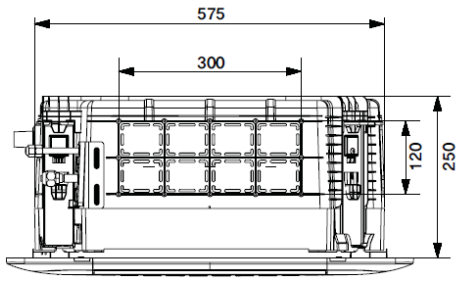


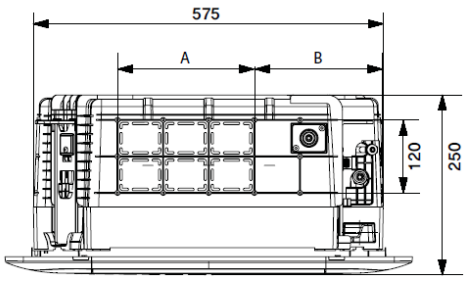
1-8. Sub Duct

1) Dimensional Drawing









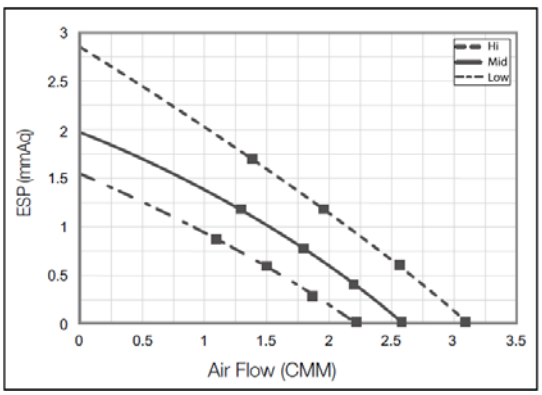
Note

- ◆ Sub duct can be used for 2 directions independently or together.
- ◆ Be sure to seal off the air outlet of the indoor unit to which the sub duct is connected.
  If not, it may cause water splattering and condensation.

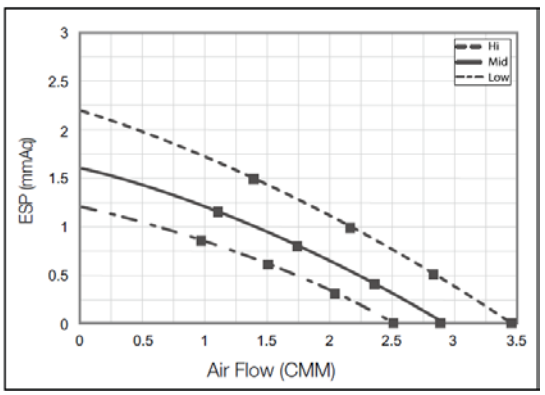
2) P-Q Curve

① ACN026NDEHH/SA

Branch ①



Branch ②

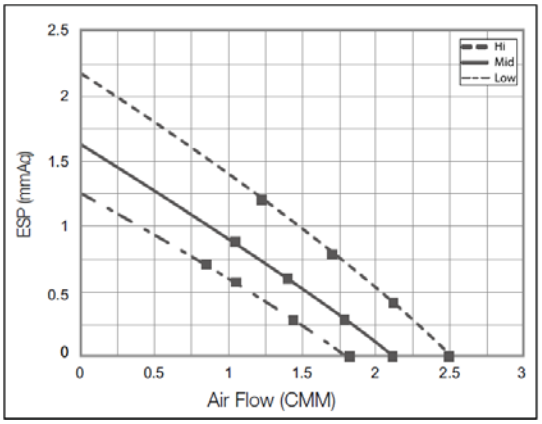


1-8. Sub Duct

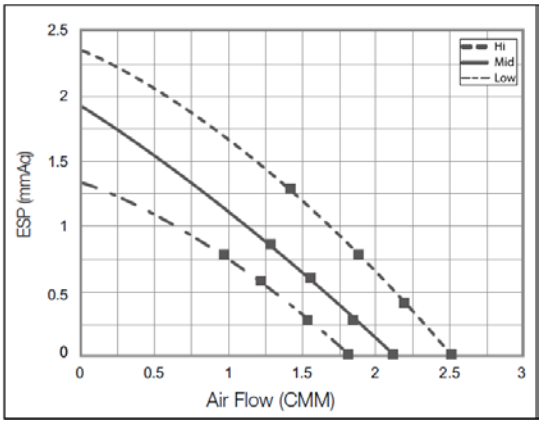
2) P-Q Curve

① ACN026NDEHH/SA

Branch ③

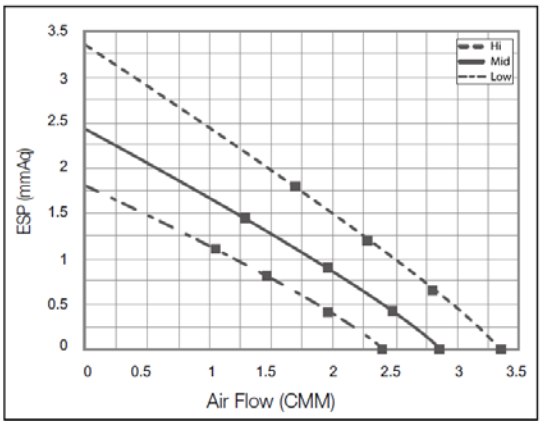


Branch ④

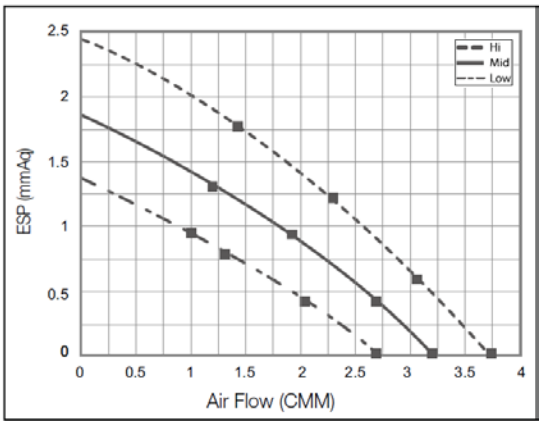


② ACN035NDEHH/SA

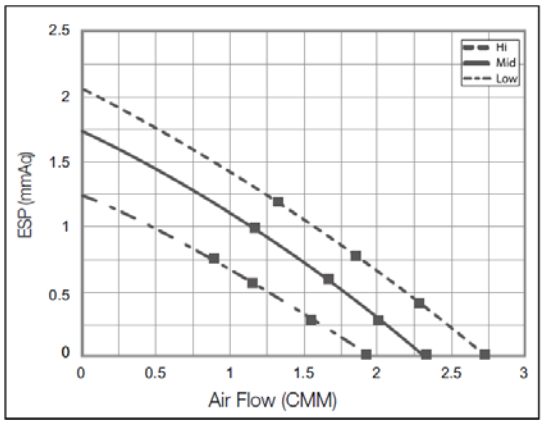
Branch ①



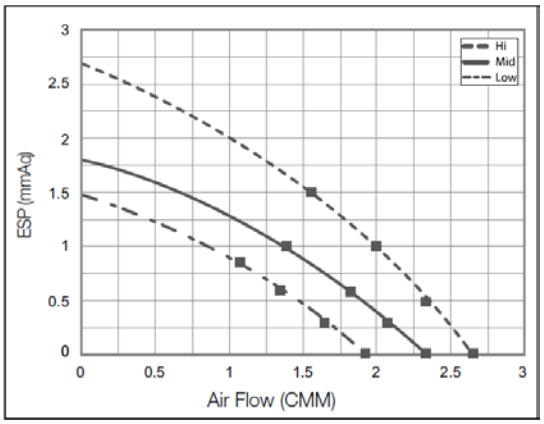
Branch ②



Branch ③



Branch ④

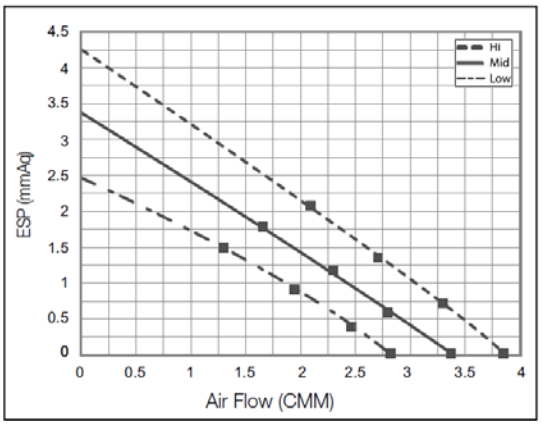


1-8. Sub Duct

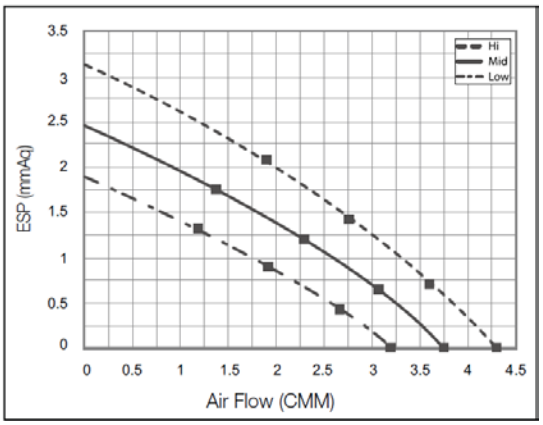
2) P-Q Curve

③ ACN052NDEHH/SA

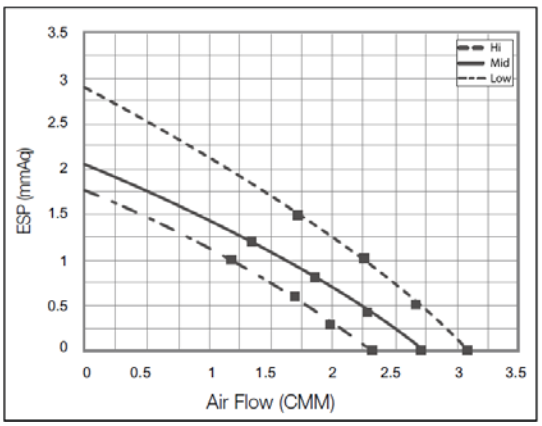
Branch ①



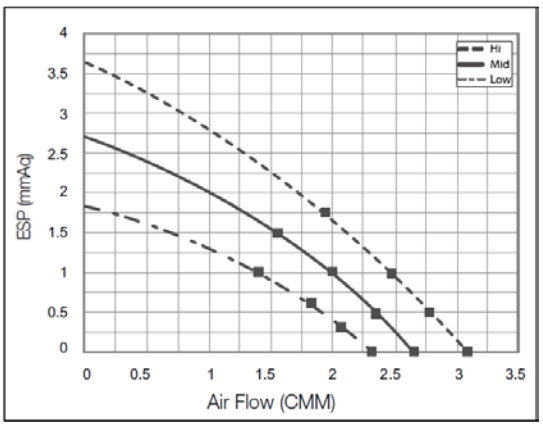
Branch ②



Branch ③

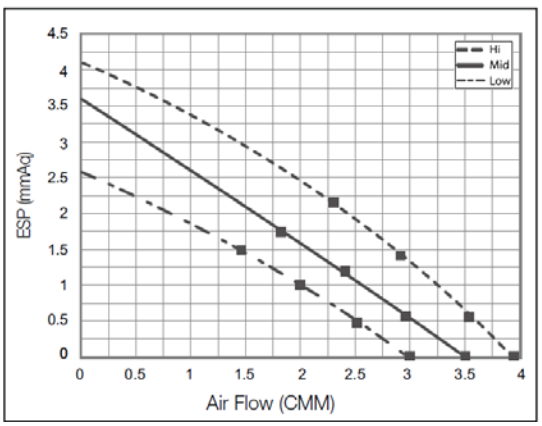


Branch ④

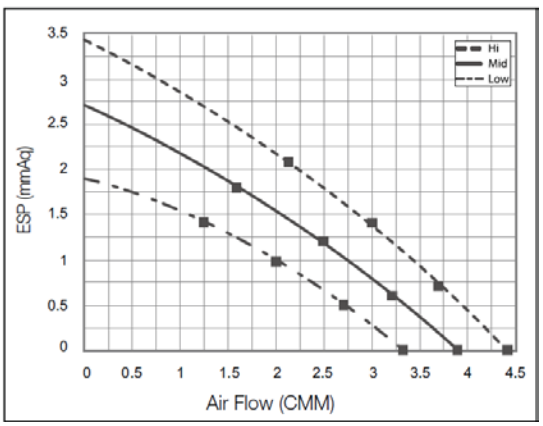


④ ACN060NDEHH/SA

Branch ①



Branch ②

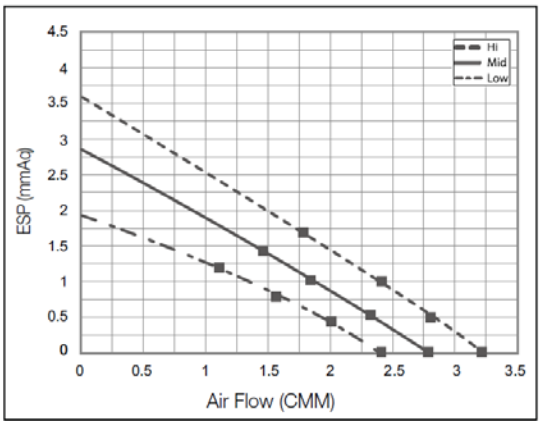


1-8. Sub Duct

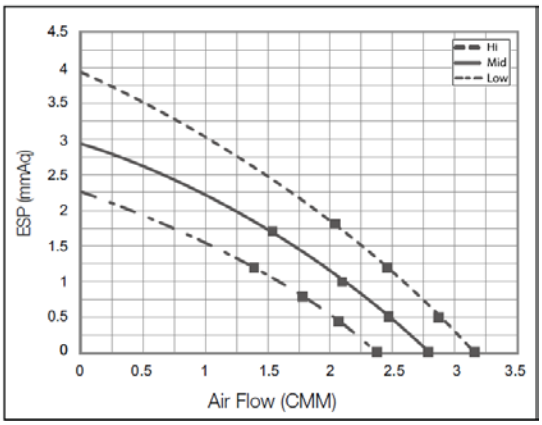
2) P-Q Curve

④ ACN060NDEHH/SA

Branch ③



Branch ④



2. 4way Cassette S

2-1. Specifications 29
2-2. Capacity Tables 31
2-3. Dimensional Drawing 34
2-4. PCB Connector Lay-out 35
2-5. Electrical Wiring Diagram 36
2-6. Sound Pressure Level 37
2-7. Temperature Air Flow Distribution 39
2-8. Sub Duct 44

2-1. Specifications

Model Name	Indoor Unit				NS0714PXEA/XSA	NS1004PXEA/XSA	NS1004ZXEA/XSA
	Outdoor Unit				RC071PHXEA/XSA	RC100PHXEA/XSA	RC100ZHXEA/XSA
System	Mode			-	Heat Pump	Heat Pump	Heat Pump
	Capacity	Capacity (Nominal)	Cooling (Min/Std/Max)	kW	2.2 / 7.1 / 8.0	3.5 / 10.0 / 12.0	4.4 / 10.0 / 12.0
				Btu/h	7,500 / 24,200 / 27,300	11,900 / 34,100 / 40,900	15,000 / 34,100 / 40,900
			Heating (Min/Std/Max)	kW	1.9 / 8.0 / 9.0	3.5 / 11.2 / 15.5	3.5 / 11.2 / 15.5
				Btu/h	6,500 / 27,300 / 30,700	11,900 / 38,200 / 52,900	11,900 / 38,200 / 52,900
	Power	Power Input (Nominal)	Cooling (Min/Std/Max)	kW	0.35 / 2.03 / 4.00	0.8 / 2.5 / 3.8	1.05 / 2.33 / 3.1
			Heating(Min/Std/Max)		0.35 / 2.05 / 4.00	0.7 / 2.61 / 4.5	0.62 / 2.46 / 4.6
		Current Input (Nominal)	Cooling (Min/Std/Max)	A	2.1 / 9.5 / 18.0	3.7 / 10.5 / 24.0	4.6 / 9.7 / 24.0
			Heating (Min/Std/Max)		2.1 / 9.5 / 18.0	3.5 / 11.5 / 24.0	3.0 / 10.3 / 24.0
		MCA		A	20.3	25.0	25.0
		MFA		A	25.0	30.0	30.0
	Energy Efficiency	EER (Nominal Cooling)		-	3.50	4.00	4.29
		COP (Nominal Heating)		-	3.90	4.29	4.55
		AEER		-	3.49	3.99	4.29
		ACOP		-	3.90	4.29	4.55
	Piping Connections	Liquid Pipe		Φ, mm	6.35	9.52	9.52
				Φ, inch	1/4	3/8	3/8
		Gas Pipe		Φ, mm	15.88	15.88	15.88
				Φ, inch	5/8	5/8	5/8
		Installation Limitation	Max. Length	m	50.0	75.0	75.0
			Max. Height	m	30.0	30.0	30.0
	Field Wiring	Indoor Power Cable		mm^2, #	0.75~1.5, 3wires	0.75~1.5, 3wires	0.75~1.5, 3wires
		Communication Cable		mm^2, #	0.75~1.5, 2wires	0.75~1.5, 2wires	0.75~1.5, 2wires
	Refrigerant	Type		-	R410A	R410A	R410A
		Control Method		-	EEV	EEV	EEV
		Factory Charging		kg	1.8 (Charged for 5m)	3.4 (Charged for 30m)	3.8 (Charged for 30m)
Indoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50	1, 2, 220~240, 50
	Fan	Type		-	Turbo Fan / BLDC	Turbo Fan / BLDC	Turbo Fan / BLDC
		Motor	Output	W	65	97	97
			Number of Unit	EA	1	1	1
		Air Flow Rate	High/Mid/Low	CMM	(C) 23.0 / 21.0 / 17.5 (H) 22.0 / 18.0 / 16.0	30.0 / 24.0 / 18.0	32.0 / 25.0 / 19.0
				ℓ/s	(C) 383 / 350 / 292 (H) 367 / 300 / 267	500 / 400 / 300	533 / 417 / 371
		External Static Pressure	Min/Std/Max	mmAq	-	-	-
				Pa	-	-	-
	Drain	Drain Pipe		Φ,mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
	Sound *2)	Sound Pressure	High/Mid/Low	dB(A)	36 / 32 / 28	44 / 39 / 34	45 / 38.5 / 32
	External Dimension	Net Weight		kg	17	21	21
		Shipping Weight		kg	22	26	26
		Net Dimensions (WxHxD)		mm	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840
		Shipping Dimensions (WxHxD)		mm	898 x 316 x 898	898 x 357 x 898	898 x 357 x 898
	Panel Size	Panel model		-	PC4NU(B)SKA / PC4NUSKE	PC4NU(B)SKA / PC4NUSKE	PC4NU(B)SKA / PC4NUSKE
		Panel Net Weight		kg	5.9	5.9	5.9
		Shipping Weight		kg	8.4	8.4	8.4
		Net Dimensions (W×H×D)		mm	950 x 45 x 950	950 x 45 x 950	950 x 45 x 950
		Shipping Dimensions (W×H×D)		mm	1,005 x 100 x 1,005	1,005 x 100 x 1,005	1,005 x 100 x 1,005
	Accessories	Drain pump	Drain pump	-	Built-in / -	Built-in / -	Built-in / -
			Max. Lifting Height / Displacement	mm / ℓ/h	750 / 24	750 / 24	750 / 24
		Air Filter		-	Long life filter	Long life filter	Long life filter
Outdoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50	1, 2, 220~240, 50
	Compressor	Type		-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
		Model		-	UG4T200FUAE4	UG5T450FUEJX	UG5T450FXAJX
		Output			-	-	-
		Oil	Type	-	POE	PVE	PVE
			Initial Charge	cc	650	1,750	1,750
	Fan	Air Flow Rate	Cooling / Heating	CMM	50.0 / 48.0	90.5 / 83.0	101.0 / 82.5
				ℓ/s	833 / 800	1,508 / 1,383	1,683 / 1,375
	Sound	Sound Pressure	Cooling / Heating	dB(A)	49 / 51	49 / 51	49 / 51
	External Dimension	Net Weight		kg	55	88	98
		Shipping Weight		kg	59	98	108
		Net Dimensions (WxHxD)		mm	880 x 798 x 310	940 x 1,210 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)		mm	1,023 x 889 x 416	995 x 1,338 x 426	995 x 1,548 x 426
	Operating Temp. Range	Cooling		℃	-15 ~ 50	-15 ~ 50	-15 ~ 50
		Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

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

*1) Nominal Capacity are based on (Equivalent refrigerant piping length : 5m , Level differences : 0m);

- Cooling : Indoor temperature : 27℃ DB, 19℃ WB / Outdoor temperature : 35℃ DB, 24℃ WB
- Heating : Indoor temperature : 20℃ DB, 15℃ WB / Outdoor temperature : 7℃ DB, 6℃ WB

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. *3) Specifications are subject to change without prior notice for product improvement.

2-1. Specifications

Model Name	Indoor Unit			NS1254PXEA/XSA	NS1404PXEA/XSA
	Outdoor Unit			RC125PHXEA/XSA	RC140PHXEA/XSA
System	Mode		-	Heat Pump	Heat Pump
	Capacity	Capacity (Nominal) Cooling (Min/Std/Max)	kW	3.5 / 12.5 / 14.0	4.4 / 14.0 / 15.5
			Btu/h	11,900 / 42,700 / 47,800	15,000 / 47,800 / 52,900
		Heating (Min/Std/Max)	kW	3.5 / 14.0 / 16.2	3.5 / 16.0 / 20.0
			Btu/h	11,900 / 47,800 / 55,300	11,900 / 54,600 / 68,200
	Power	Power Input (Nominal) Cooling (Min/Std/Max)	kW	0.8 / 3.68 / 4.8	1.05 / 4.24 / 5.4
		Heating(Min/Std/Max)		0.7 / 3.78 / 4.5	0.87 / 4.32 / 6.5
		Current Input (Nominal) Cooling (Min/Std/Max)	A	3.7 / 15.5 / 24.0	4.6 / 17.8 / 24.0
		Heating (Min/Std/Max)		3.5 / 16.0 / 24.0	4.0 / 18.7 / 28.0
		MCA	A	25.0	33.0
		MFA	A	30.0	40.0
	Energy Efficiency	EER (Nominal Cooling)	-	3.40	3.30
		COP (Nominal Heating)	-	3.70	3.70
		AEER	-	3.39	3.30
		ACOP	-	3.70	3.79
	Piping Connections	Liquid Pipe	Φ, mm	9.52	9.52
			Φ, inch	3/8	3/8
		Gas Pipe	Φ, mm	15.88	15.88
			Φ, inch	5/8	5/8
		Installation Limitation Max. Length	m	75.0	75.0
		Max. Height	m	30.0	30.0
	Field Wiring	Indoor Power Cable	mm^2, #	0.75~1.5, 3wires	0.75~1.5, 3wires
		Communication Cable	mm^2, #	0.75~1.5, 2wires	0.75~1.5, 2wires
	Refrigerant	Type	-	R410A	R410A
		Control Method	-	EEV	EEV
		Factory Charging	kg	3.4 (Charged for 30m)	3.8 (Charged for 30m)
Indoor Unit	Power Supply		Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50
	Fan	Type	-	Turbo Fan / BLDC	Turbo Fan / BLDC
		Motor Output	W	97	97
		Number of Unit	EA	1	1
		Air Flow Rate High/Mid/Low	CMM	30.0 / 24.0 / 19.0	32.0 / 26.0 / 21.0
			ℓ/s	500 / 400 / 317	533 / 433 / 350
		External Static Pressure Min/Std/Max	mmAq	-	-
			Pa	-	-
	Drain	Drain Pipe	Φ,mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
	Sound *2)	Sound Pressure High/Mid/Low	dB(A)	44 / 40 / 36	45 / 41.5 / 38
	External Dimension	Net Weight	kg	21	21
		Shipping Weight	kg	26	26
		Net Dimensions (WxHxD)	mm	840 x 288 x 840	840 x 288 x 840
		Shipping Dimensions (WxHxD)	mm	898 x 357 x 898	898 x 357 x 898
	Panel Size	Panel model	-	PC4NU(B)SKA / PC4NUSKE	PC4NU(B)SKA / PC4NUSKE
		Panel Net Weight	kg	5.9	5.9
		Shipping Weight	kg	8.4	8.4
		Net Dimensions (W×H×D)	mm	950 x 45 x 950	950 x 45 x 950
		Shipping Dimensions (W×H×D)	mm	1,005 x 100 x 1,005	1,005 x 100 x 1,005
	Accessories	Drain pump Drain pump	-	Built-in / -	Built-in / -
		Max. Lifting Height / Displacement	mm / ℓ/h	750 / 24	750 / 24
		Air Filter	-	Long life filter	Long life filter
Outdoor Unit	Power Supply		Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50
	Compressor	Type	-	Twin BLDC Rotary	Twin BLDC Rotary
		Model	-	UG5T450FUEJX	UG5T450FXAJX
		Output		-	-
		Oil Type	-	PVE	PVE
		Initial Charge	cc	1,750	1,750
	Fan	Air Flow Rate Cooling / Heating	CMM	90.5 / 90.5	101.0 / 101.0
			ℓ/s	1,508 / 1,508	1,683 / 1,683
	Sound	Sound Pressure Cooling / Heating	dB(A)	51 / 52	51 / 53
	External Dimension	Net Weight	kg	88	98
		Shipping Weight	kg	98	108
		Net Dimensions (WxHxD)	mm	940 x 1,210 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)	mm	995 x 1,338 x 426	995 x 1,548 x 426
	Operating Temp. Range	Cooling	℃	-15 ~ 50	-15 ~ 50
		Heating	℃	-20 ~ 24	-20 ~ 24

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

*1) Nominal Capacity are based on (Equivalent refrigerant piping length : 5m , Level differences : 0m);

- Cooling : Indoor temperature : 27℃ DB, 19℃ WB / Outdoor temperature : 35℃ DB, 24℃ WB
- Heating : Indoor temperature : 20℃ DB, 15℃ WB / Outdoor temperature : 7℃ DB, 6℃ WB

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. *3) Specifications are subject to change without prior notice for product improvement.

2-2. Capacity Tables

1) RC071PHXEA/XSA + NS0714PXEA/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	6.72	4.86	1.69	7.27	5.25	1.67	6.28	4.54	1.91	6.24	4.54	2.99	5.05	4.69	2.61
16	22	7.08	5.01	1.73	7.65	5.41	1.70	6.61	4.68	1.95	6.56	4.68	3.05	5.32	4.84	2.66
18	25	7.37	5.16	1.76	7.97	5.58	1.73	6.89	4.82	1.99	6.84	4.82	3.12	5.54	4.98	2.71
19	27	7.60	5.32	1.80	8.22	5.75	1.77	7.10	4.97	2.03	7.05	4.97	3.18	5.71	5.14	2.77
20	28	7.75	5.27	1.82	8.38	5.70	1.79	7.24	4.92	2.05	7.19	4.92	3.21	5.82	5.09	2.80
22	30	8.14	5.21	1.84	8.80	5.64	1.81	7.60	4.87	2.07	7.55	4.87	3.24	6.12	5.04	2.83
24	32	8.55	5.11	1.87	9.24	5.53	1.84	7.98	4.77	2.11	7.93	4.77	3.31	6.42	4.94	2.88

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	4.89	2.26	5.93	2.65	8.00	2.93	8.32	2.51	8.16	2.09	9.68	2.35
18	4.84	2.24	5.87	2.63	7.92	2.90	8.24	2.48	8.08	2.07	9.58	2.32
20	4.79	2.22	5.81	2.60	7.84	2.87	8.16	2.46	8.00	2.05	9.49	2.30
21	4.74	2.20	5.75	2.57	7.76	2.84	8.08	2.44	7.92	2.03	9.40	2.28
22	4.69	2.18	5.69	2.55	7.68	2.81	8.00	2.41	7.84	2.01	9.30	2.25
24	4.65	2.15	5.64	2.52	7.61	2.78	7.92	2.39	7.76	1.99	9.21	2.23

2) RC100PHXEA/XSA + NS1004PXEA/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	9.73	7.03	1.79	10.88	7.86	3.29	8.85	6.39	2.35	7.09	6.39	4.60	6.19	5.75	3.39
16	22	10.24	7.24	1.82	11.45	8.10	3.36	9.31	6.59	2.40	7.47	6.59	4.70	6.52	5.93	3.46
18	25	10.67	7.47	1.86	11.93	8.35	3.43	9.70	6.79	2.45	7.78	6.79	4.79	6.79	6.11	3.53
19	27	11.00	7.70	1.90	12.30	8.61	3.50	10.00	7.00	2.50	8.02	7.00	4.89	7.00	6.30	3.60
20	28	11.22	7.62	1.92	12.55	8.52	3.54	10.20	6.93	2.53	8.18	6.93	4.94	7.14	6.24	3.64
22	30	11.78	7.55	1.94	13.17	8.44	3.57	10.71	6.86	2.55	8.59	6.86	4.99	7.50	6.17	3.67
24	32	12.37	7.40	1.98	13.83	8.27	3.64	11.25	6.72	2.60	9.02	6.72	5.09	7.87	6.05	3.75

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	10.71	5.00	11.00	4.98	11.20	4.29	11.65	3.19	11.43	2.66	15.61	3.88
18	10.61	4.95	10.89	4.93	11.09	4.25	11.54	3.16	11.31	2.64	15.45	3.84
20	10.50	4.90	10.78	4.88	10.98	4.21	11.42	3.13	11.20	2.61	15.30	3.80
21	10.40	4.85	10.67	4.83	10.87	4.17	11.31	3.10	11.09	2.58	15.15	3.76
22	10.29	4.80	10.57	4.78	10.76	4.13	11.20	3.07	10.98	2.56	15.00	3.72
24	10.19	4.75	10.46	4.74	10.65	4.08	11.08	3.04	10.87	2.53	14.85	3.69

Note

◆ Ratings shown are net capacities.

◆ Capacities are based on following conditions;

- Equivalent refrigerant piping length : 5m / Level difference : 0m.

2-2. Capacity Tables

3) RC100ZHXEA/XSA + NS1004ZXEA/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	9.97	7.20	1.65	9.36	6.76	2.31	8.85	6.39	2.19	8.09	6.39	3.66	7.76	7.20	3.92
16	22	10.49	7.42	1.68	9.85	6.97	2.35	9.31	6.59	2.24	8.52	6.59	3.74	8.17	7.43	4.00
18	25	10.93	7.65	1.72	10.26	7.18	2.40	9.70	6.79	2.28	8.88	6.79	3.81	8.51	7.66	4.08
19	27	11.27	7.89	1.75	10.58	7.41	2.45	10.00	7.00	2.33	9.15	7.00	3.89	8.77	7.89	4.16
20	28	11.50	7.81	1.77	10.79	7.33	2.47	10.20	6.93	2.35	9.33	6.93	3.93	8.95	7.81	4.20
22	30	12.07	7.73	1.79	11.33	7.26	2.50	10.71	6.86	2.38	9.80	6.86	3.97	9.39	7.74	4.24
24	32	12.67	7.58	1.82	11.90	7.11	2.55	11.25	6.72	2.42	10.29	6.72	4.05	9.86	7.58	4.33

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	11.02	5.02	11.32	5.05	11.20	4.29	11.65	3.01	11.43	2.51	14.75	2.74
18	10.91	4.97	11.21	5.00	11.09	4.25	11.54	2.98	11.31	2.48	14.60	2.72
20	10.80	4.92	11.10	4.95	10.98	4.21	11.42	2.95	11.20	2.46	14.46	2.69
21	10.69	4.87	10.99	4.90	10.87	4.17	11.31	2.92	11.09	2.44	14.32	2.66
22	10.59	4.82	10.88	4.85	10.76	4.13	11.20	2.89	10.98	2.41	14.17	2.64
24	10.48	4.77	10.77	4.80	10.65	4.08	11.08	2.86	10.87	2.39	14.03	2.61

4) RC125PHXEA/XSA + NS1254PXEA/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	10.74	7.87	1.96	11.73	8.59	3.45	11.06	8.10	3.46	9.63	8.10	4.56	5.02	4.72	3.48
16	22	11.30	8.11	2.00	12.35	8.86	3.52	11.64	8.35	3.53	10.14	8.35	4.66	5.29	4.86	3.55
18	25	11.78	8.36	2.04	12.86	9.13	3.60	12.13	8.61	3.61	10.56	8.61	4.75	5.51	5.01	3.63
19	27	12.14	8.62	2.08	13.26	9.41	3.67	12.50	8.88	3.68	10.89	8.88	4.85	5.68	5.17	3.70
20	28	12.38	8.53	2.10	13.53	9.32	3.71	12.75	8.79	3.72	11.11	8.79	4.90	5.79	5.12	3.74
22	30	13.00	8.45	2.12	14.20	9.23	3.74	13.39	8.70	3.75	11.66	8.70	4.95	6.08	5.07	3.77
24	32	13.65	8.28	2.16	14.91	9.04	3.82	14.06	8.52	3.83	12.25	8.52	5.05	6.39	4.96	3.85

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	11.22	5.20	11.73	5.22	14.00	4.29	14.57	4.63	14.28	3.86	17.64	4.16
18	11.11	5.15	11.62	5.17	13.86	4.25	14.42	4.58	14.14	3.82	17.46	4.12
20	11.00	5.10	11.50	5.12	13.72	4.21	14.28	4.54	14.00	3.78	17.29	4.08
21	10.89	5.05	11.39	5.07	13.58	4.17	14.14	4.49	13.86	3.74	17.12	4.04
22	10.78	5.00	11.27	5.02	13.45	4.13	14.00	4.45	13.72	3.70	16.95	4.00
24	10.67	4.95	11.16	4.97	13.31	4.08	13.86	4.40	13.58	3.67	16.78	3.96

Note

◆ Ratings shown are net capacities.

◆ Capacities are based on following conditions;

- Equivalent refrigerant piping length : 5m / Level difference : 0m.

2-2. Capacity Tables

5) RC140PHXEA/XSA + NS1404PXEA/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	10.09	7.50	1.52	11.72	8.71	3.06	12.38	9.20	3.99	9.78	9.20	5.75	6.07	5.76	3.01
16	22	10.62	7.73	1.56	12.34	8.98	3.12	13.04	9.48	4.07	10.29	9.48	5.87	6.39	5.94	3.07
18	25	11.07	7.97	1.59	12.85	9.25	3.19	13.58	9.78	4.16	10.72	9.78	5.99	6.65	6.12	3.14
19	27	11.41	8.22	1.62	13.25	9.54	3.25	14.00	10.08	4.24	11.05	10.08	6.11	6.86	6.31	3.20
20	28	11.64	8.13	1.64	13.52	9.44	3.28	14.28	9.98	4.28	11.27	9.98	6.17	7.00	6.25	3.23
22	30	12.22	8.05	1.65	14.19	9.35	3.32	14.99	9.88	4.32	11.83	9.88	6.23	7.35	6.19	3.26
24	32	12.83	7.89	1.69	14.90	9.16	3.38	15.74	9.68	4.41	12.43	9.68	6.36	7.71	6.06	3.33

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	11.76	6.06	13.85	7.60	16.00	6.99	16.65	5.29	16.32	4.41	20.26	5.31
18	11.65	6.00	13.72	7.52	15.84	6.92	16.48	5.24	16.16	4.36	20.06	5.26
20	11.53	5.94	13.58	7.45	15.68	6.85	16.32	5.18	16.00	4.32	19.86	5.21
21	11.41	5.88	13.44	7.38	15.52	6.78	16.16	5.13	15.84	4.28	19.66	5.16
22	11.30	5.82	13.31	7.30	15.37	6.71	16.00	5.08	15.68	4.23	19.46	5.11
24	11.19	5.76	13.18	7.23	15.21	6.65	15.84	5.03	15.52	4.19	19.27	5.06

Note

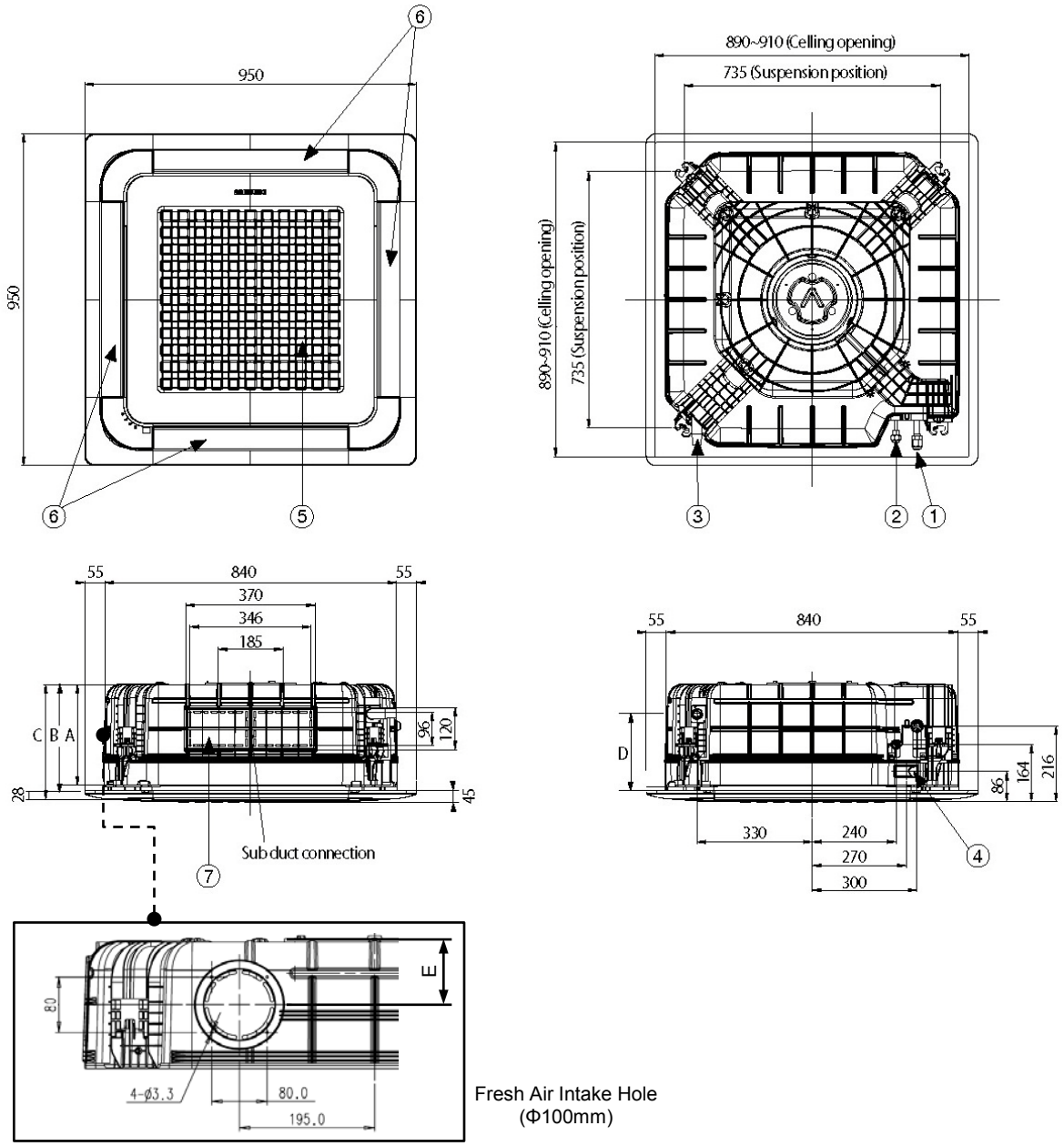
◆ Ratings shown are net capacities.

◆ Capacities are based on following conditions;

- Equivalent refrigerant piping length : 5m / Level difference : 0m.

2-3. Dimensional Drawing

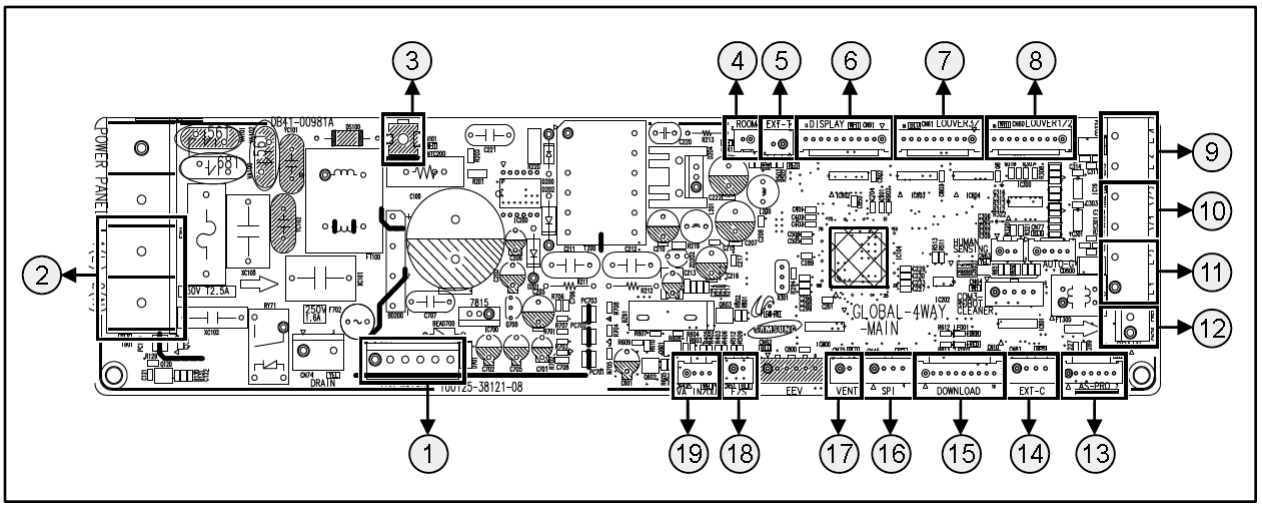
Unit (mm)



No.	Name	7.1kW	10.0 / 12.5 / 14.0 kW
①	Liquid Pipe Connection	Φ6.35mm (1/4")	Φ9.52mm (3/8")
②	Gas Pipe Connection	Φ15.88mm (5/8")	
③	Drain Pipe Connection	VP25 (OD 32, ID 25)	
④	Conduit for Power Supply & Communication Wiring	-	
⑤	Air Inlet Grile	-	
⑥	Air Outlet Louver	-	

Model	A	B	C	D	E
7.1kW	246mm	267mm	295mm	215mm	90.4mm
10.0 / 12.5 / 14.0kW	288mm	309mm	337mm	215mm	132.4mm

2-4. PCB Connector Lay-out



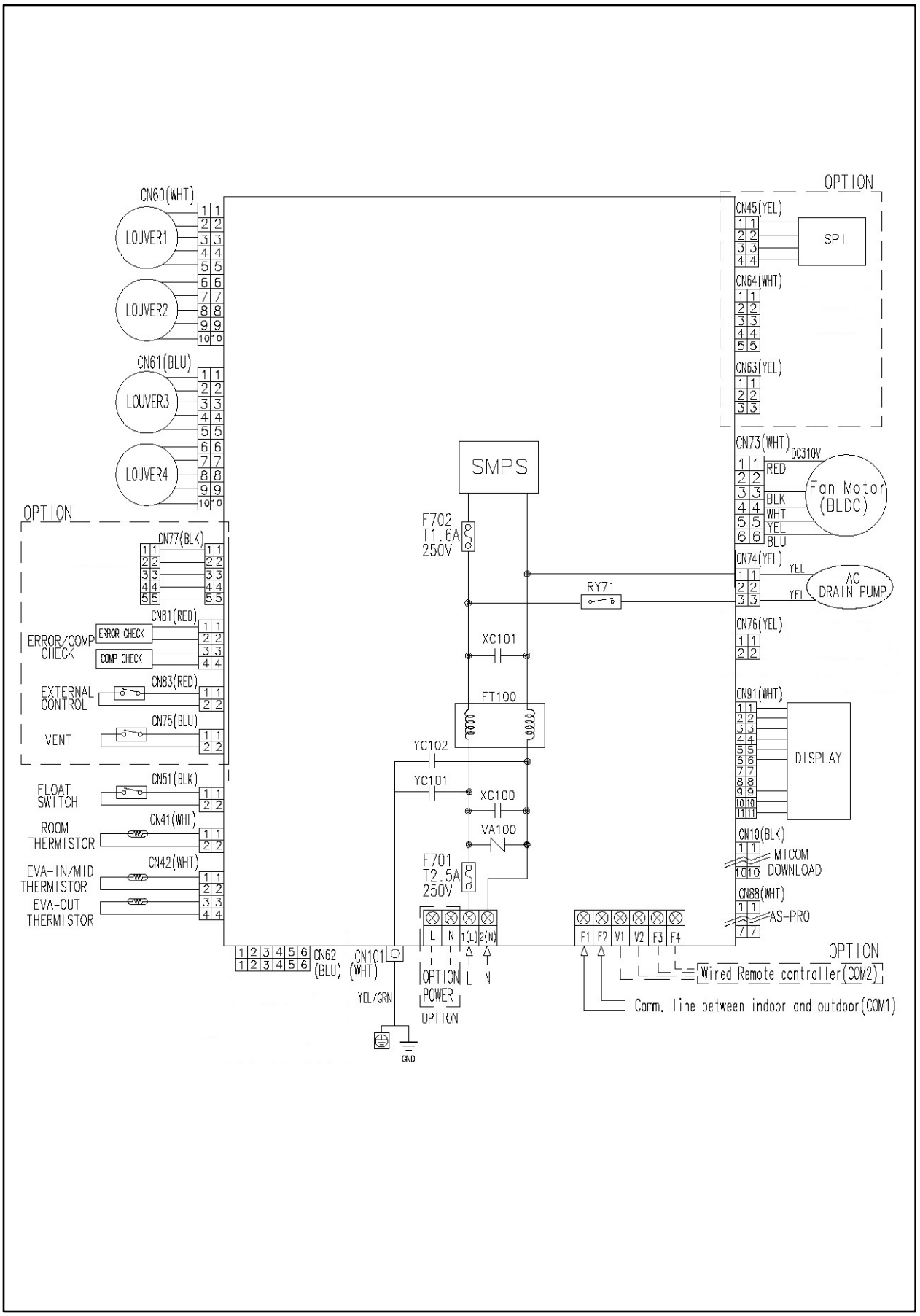
1) AC

No.	CN#	Color	Function
1	CN37	White	BLDC Fan Motor
2	TB01	Black	Input Power (L,N)
3	CN101	White	Earth Wire

2) DC

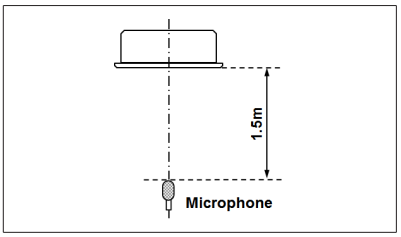
No.	CN#	Color	Function
4	CN41	White	Indoor Room Sensor
5	CN83	Red	External Contact Signal (On/Off)
6	CN91	White	Panel Display
7	CN61	Blue	Louver 3 / 4
8	CN60	White	Louver 1 / 2
9	TB02	Black	COM2 Communication - F3, F4 (for Wired Remote Controller)
10	TB02	Black	DC 12V – V1, V2 (for Wired Remote Controller)
11	TB02	Black	COM1 Communication - F1, F2
12	CN76	Yellow	Drain Pump (DC 12V)
13	CN88	White	Download (AS-Pro)
14	CN81	Red	External Contact Control Check (Error, Operating)
15	CN10	Black	Download
16	CN45	Yellow	Spi (S-Plasma ion)
17	CN75	Blue	Ventilator
18	CN51	Black	Float Sensor
19	CN42	White	Eva In/Out Temperature Sensor

2-5. Electrical Wiring Diagram



2-6. Sound Pressure Level

1) Operation Sound Level



Unit (dB(A))

Model	High	Mid	Low
NS0714PXEA/XSA	36	32	28
NS1004PXEA/XSA	44	39	34
NS1004ZXEA/XSA	45	38.5	32
NS1254PXEA/XSA	44	40	36
NS1404PXEA/XSA	45	41.5	38

Note

* Specifications may be subject to change without prior notic

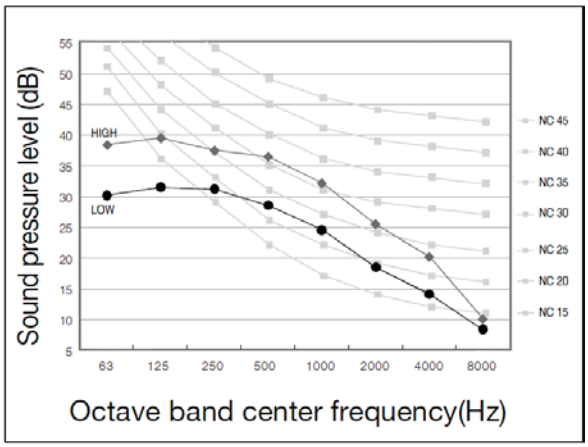
- These operation values are obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.

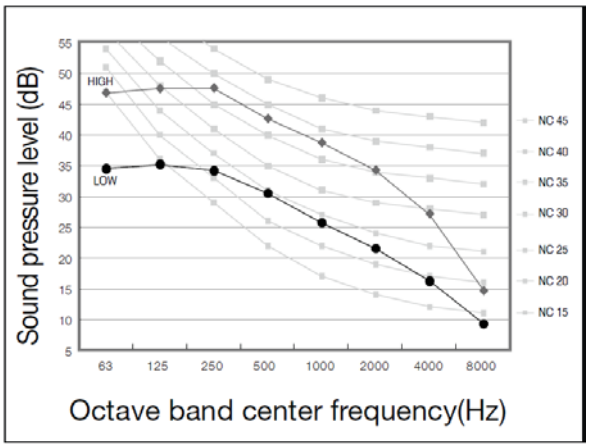
- Sound pressure level may differ depending on operation condition

2) NC Curve

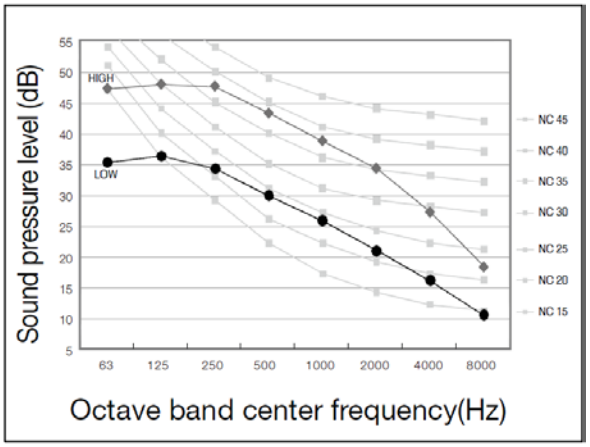
① NS0714PXEA/XSA



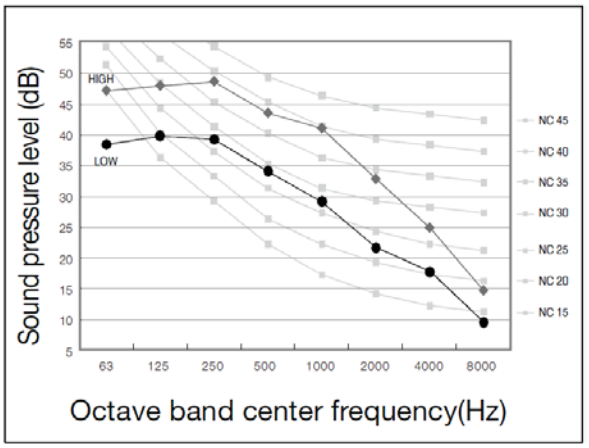
② NS1004PXEA/XSA



③ NS1004ZXEA/XSA



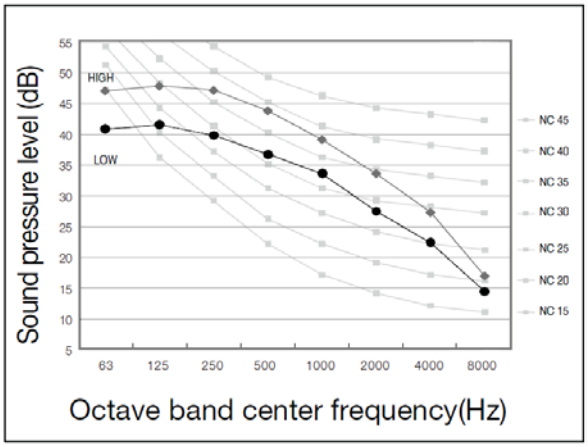
④ NS1254PXEA/XSA



2-6. Sound Pressure Level

2) NC Curve

⑤ NS1404PXEA/XSA

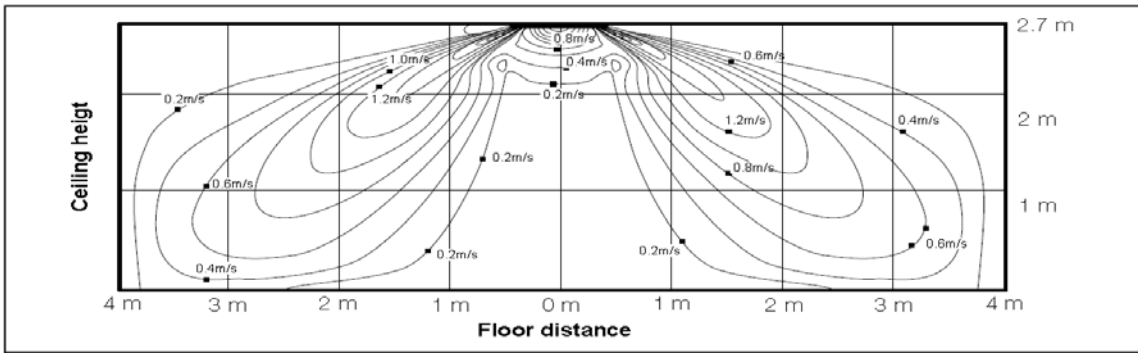


2-7. Temperature and Air Flow Distribution

1) NS0714PXEA/XSA

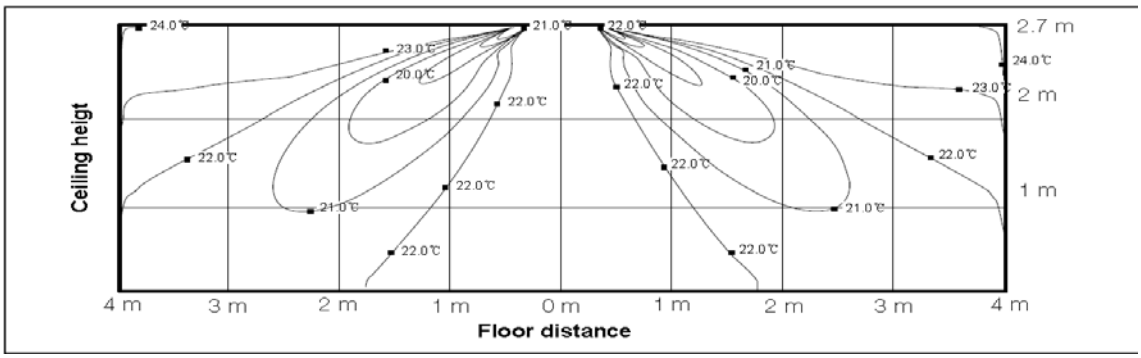
① Cooling air velocity distribution

(Discharge angle : 45˚)



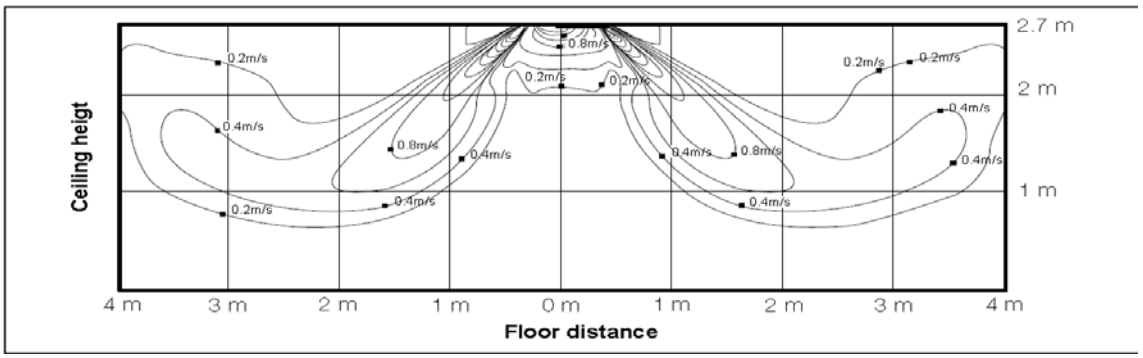
② Cooling temperature distribution

(Discharge angle : 45˚)



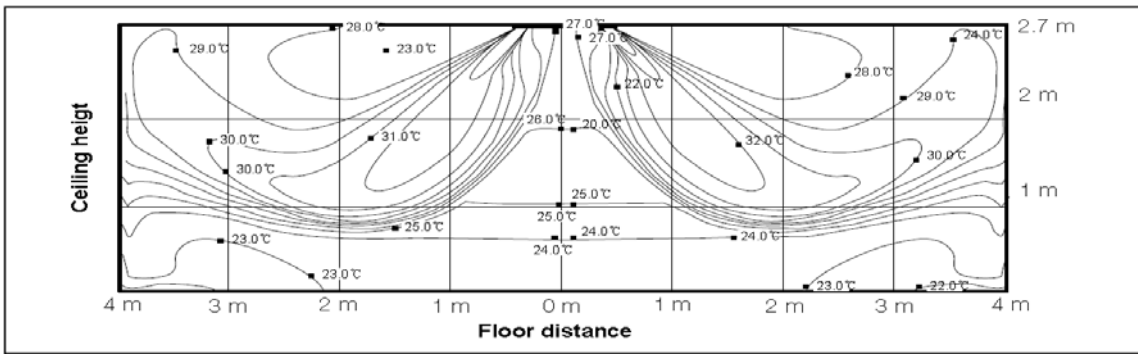
③ Heating air velocity distribution

(Discharge angle : 52˚)



④ Heating temperature distribution

(Discharge angle : 52˚)

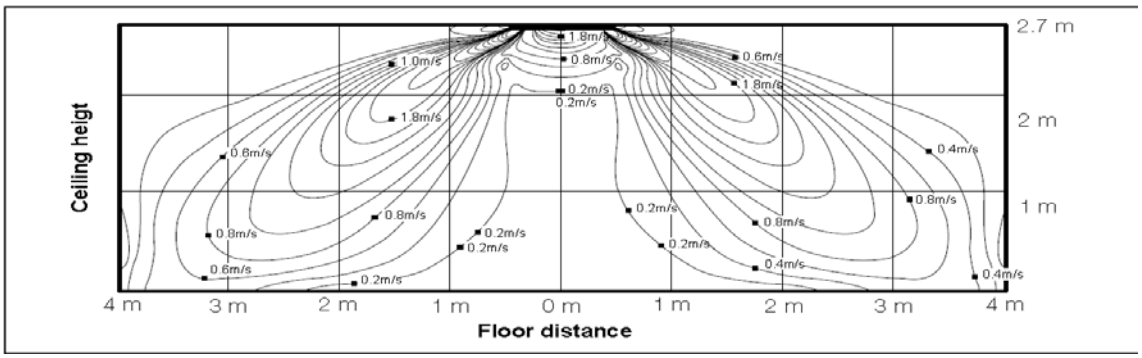


2-7. Temperature and Air Flow Distribution

2) NS1004PXEA/XSA

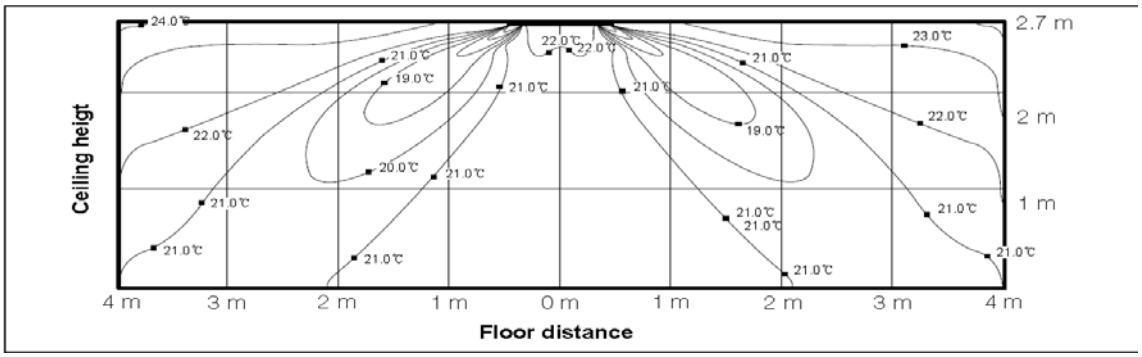
① Cooling air velocity distribution

(Discharge angle : 45˚)



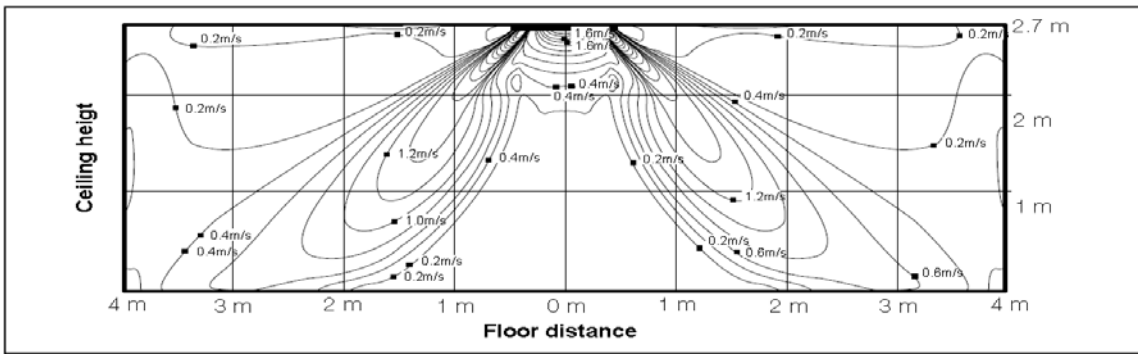
② Cooling temperature distribution

(Discharge angle : 45˚)



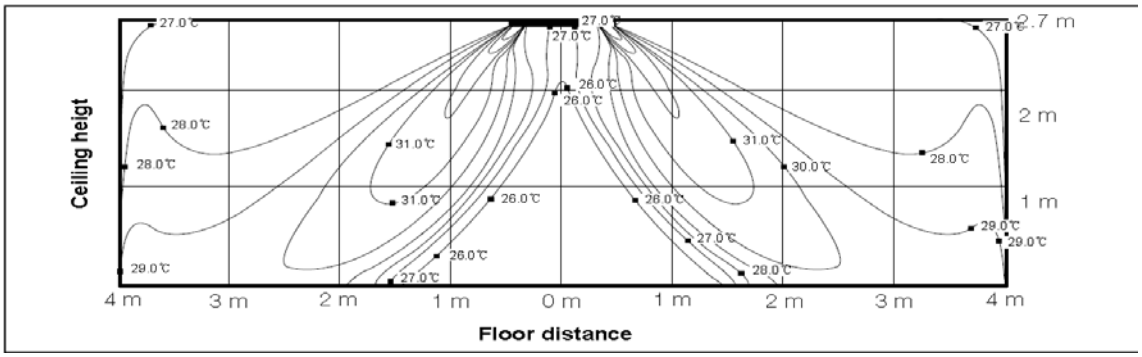
③ Heating air velocity distribution

(Discharge angle : 52˚)



④ Heating temperature distribution

(Discharge angle : 52˚)

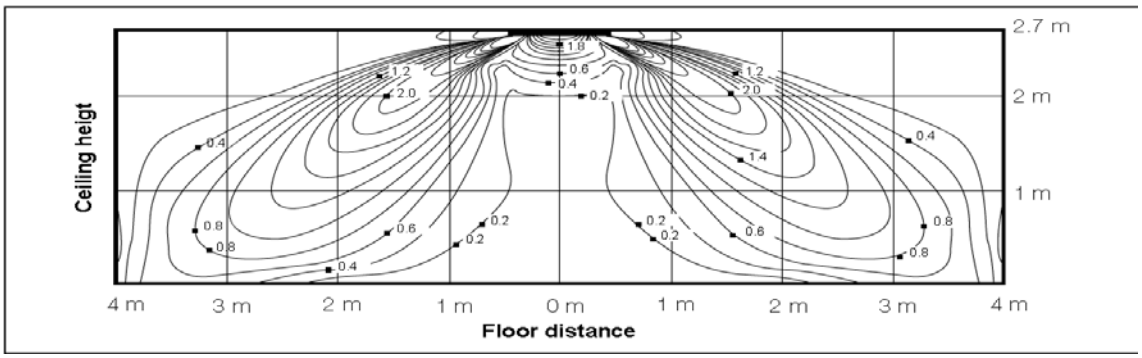


2-7. Temperature and Air Flow Distribution

3) NS1004ZXEA/XSA

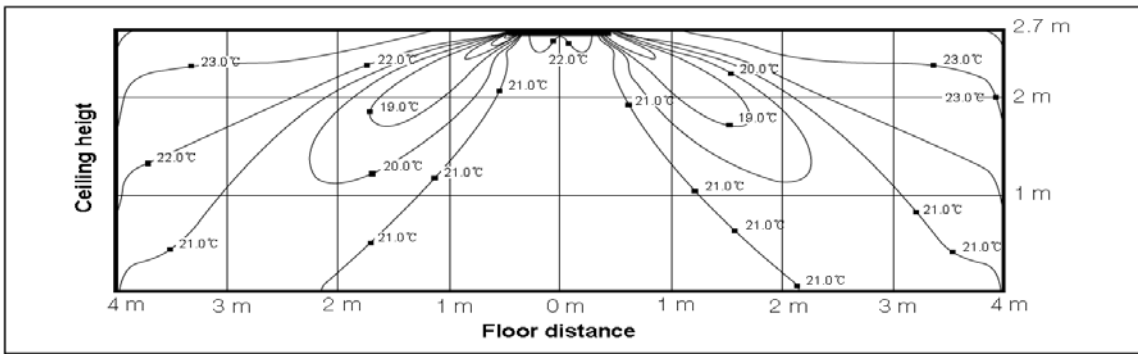
① Cooling air velocity distribution

(Discharge angle : 45˚)



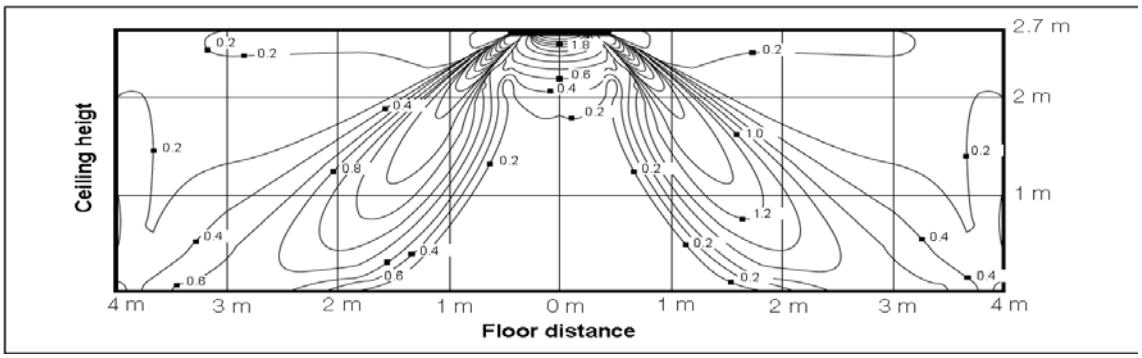
② Cooling temperature distribution

(Discharge angle : 45˚)



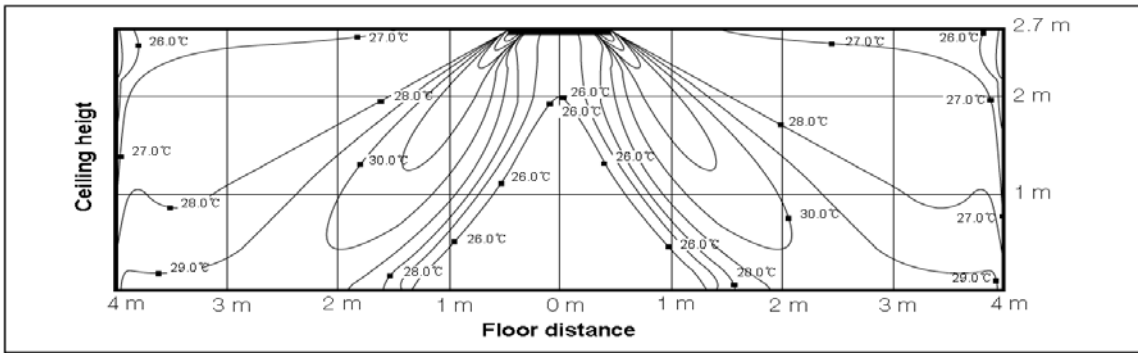
③ Heating air velocity distribution

(Discharge angle : 52˚)



④ Heating temperature distribution

(Discharge angle : 52˚)

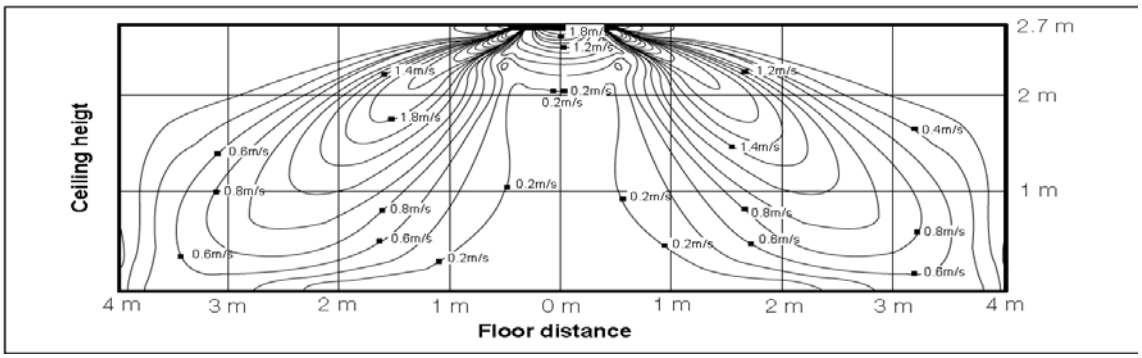


2-7. Temperature and Air Flow Distribution

4) NS1254PXEA/XSA

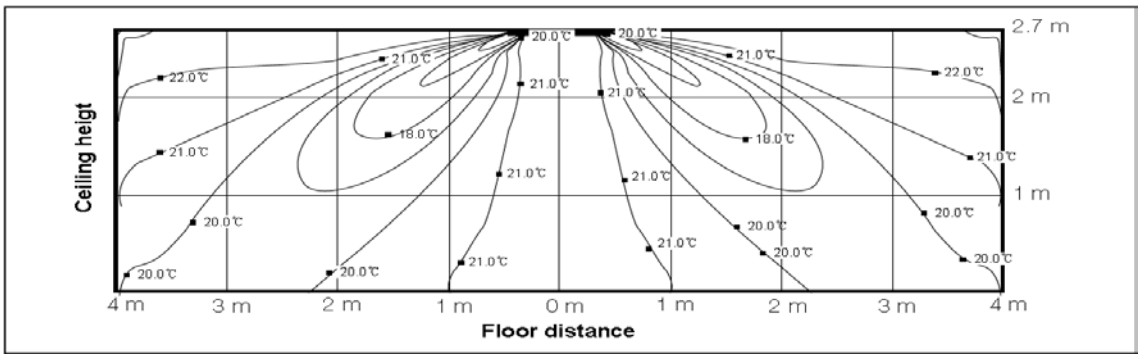
① Cooling air velocity distribution

(Discharge angle : 45˚)



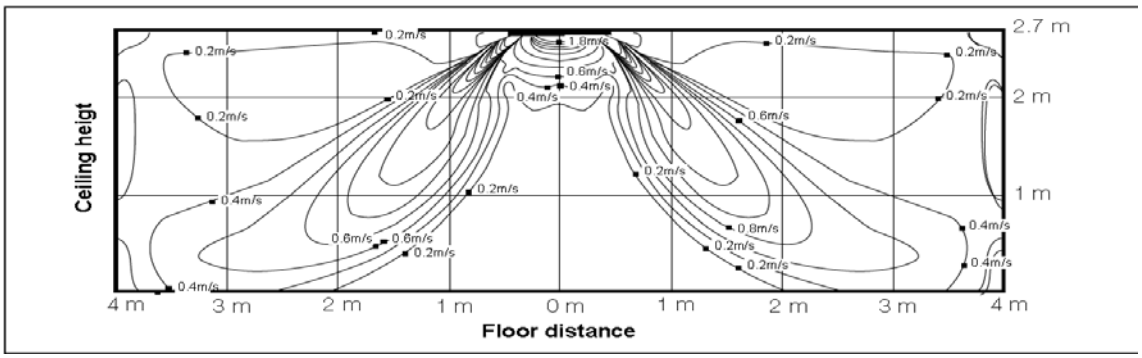
② Cooling temperature distribution

(Discharge angle : 45˚)



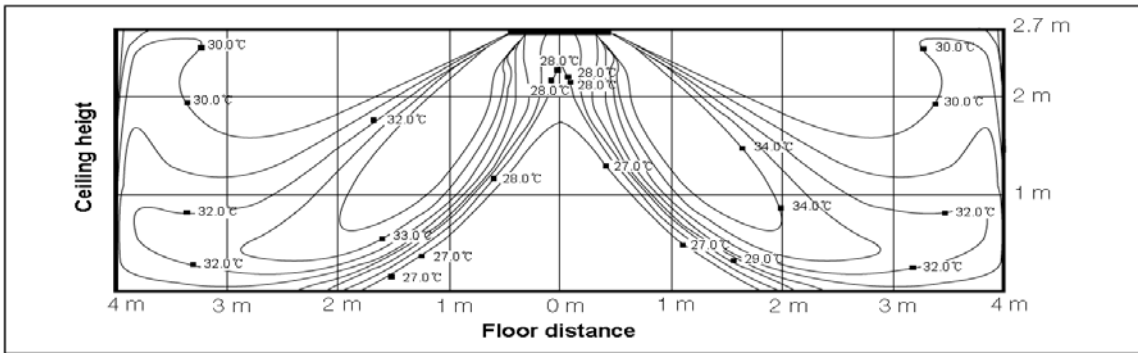
③ Heating air velocity distribution

(Discharge angle : 52˚)



④ Heating temperature distribution

(Discharge angle : 52˚)

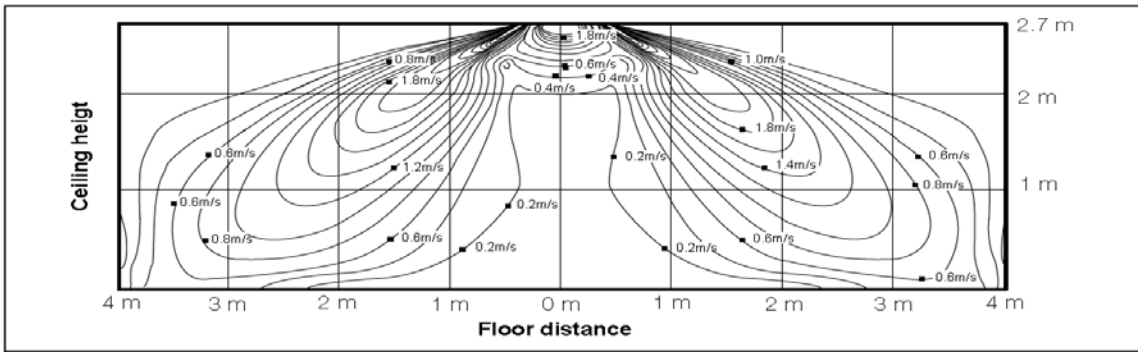


2-7. Temperature and Air Flow Distribution

5) NS1404PXEA/XSA

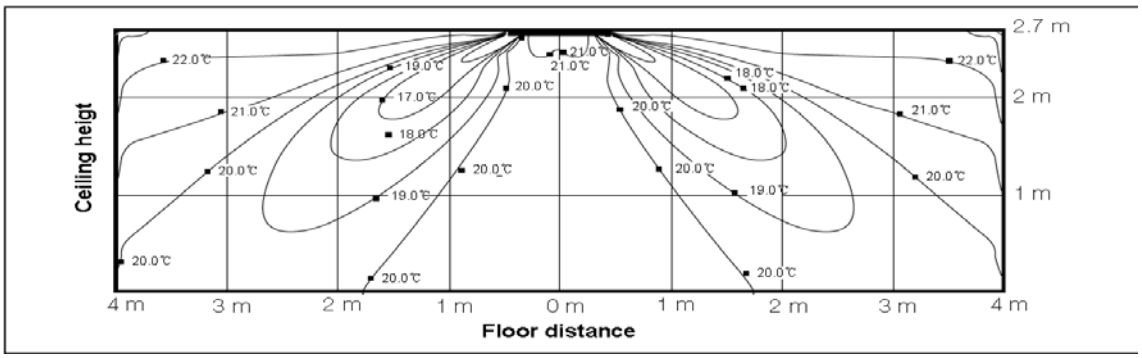
① Cooling air velocity distribution

(Discharge angle : 45˚)



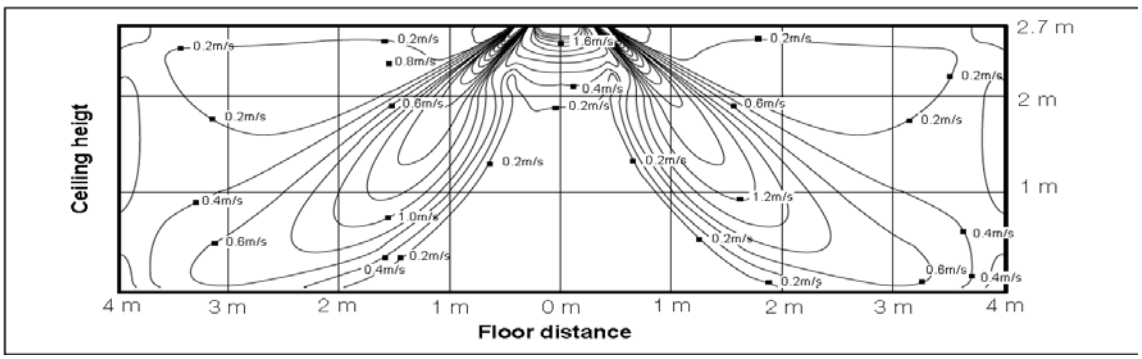
② Cooling temperature distribution

(Discharge angle : 45˚)



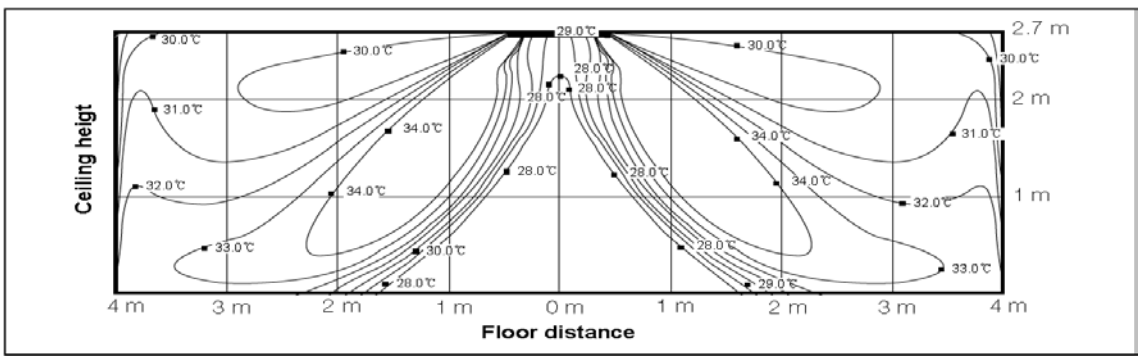
③ Heating air velocity distribution

(Discharge angle : 52˚)



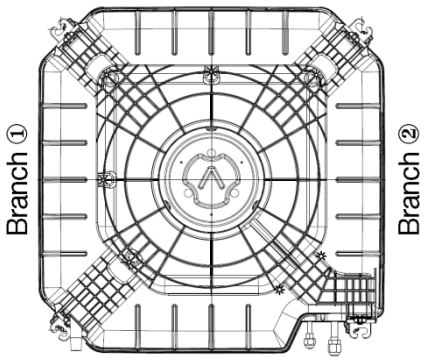
④ Heating temperature distribution

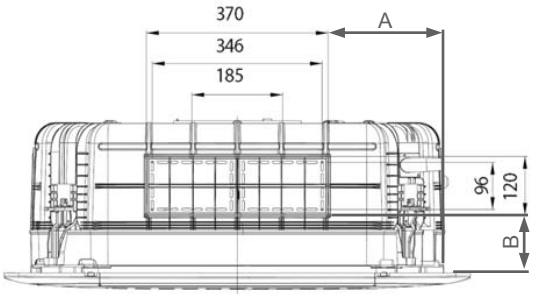
(Discharge angle : 52˚)



2-8. Sub Duct

1) Dimensional Drawing





Indoor Unit (Height)		204mm	246mm	288mm
A	mm	235 (Branch ①), 260 (Branch ②)		
B	mm	95	118	118

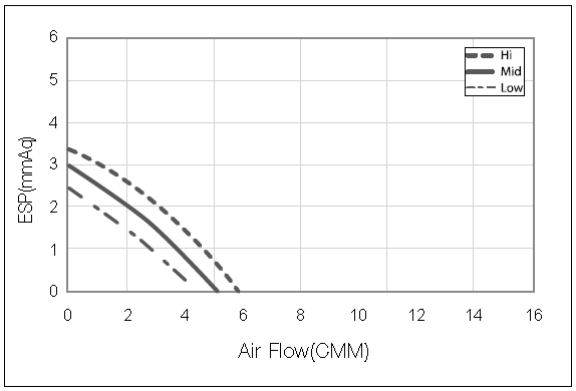
Note

- ◆ Sub duct can be used for 2 directions independently or together.
- ◆ Be sure to seal off the air outlet of the indoor unit to which the sub duct is connected. If not, it may cause water splattering and condensation.

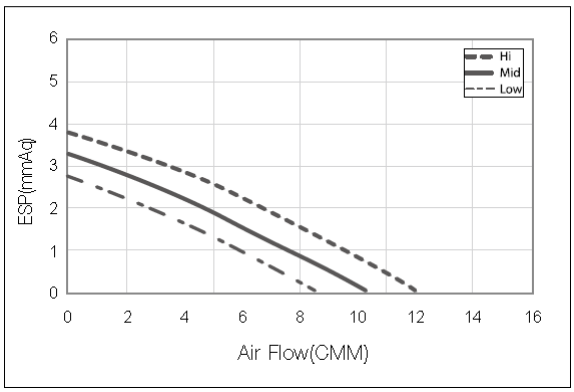
2) P-Q Curve

① NS0714PXEA/XSA

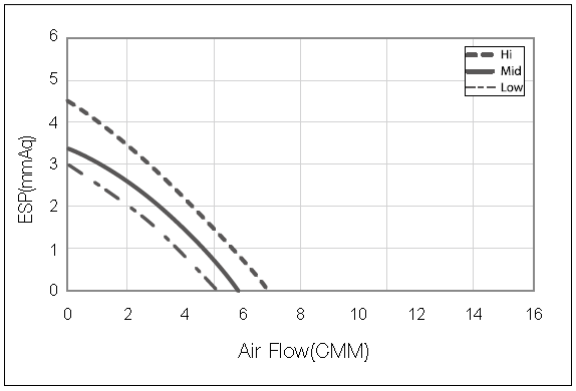
Branch ①



Branch ① + ②



Branch ②

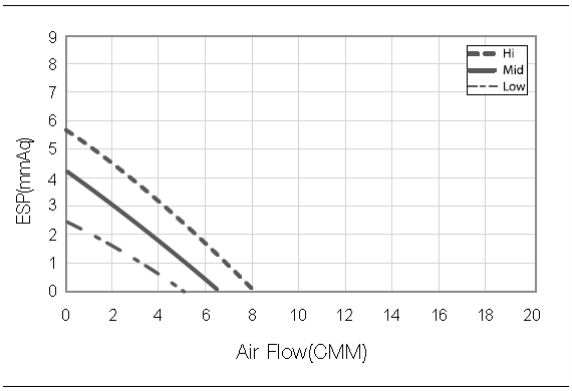


2-8. Sub Duct

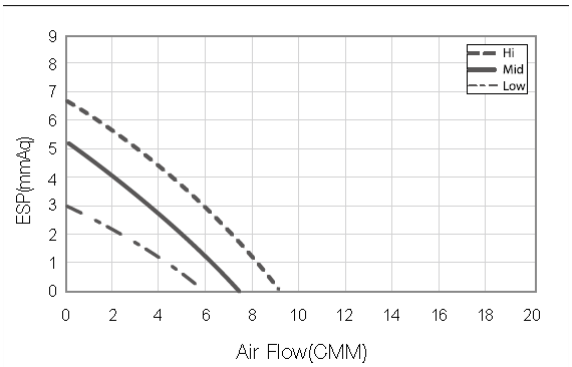
2) P-Q Curve

② NS1004PXEA/XSA

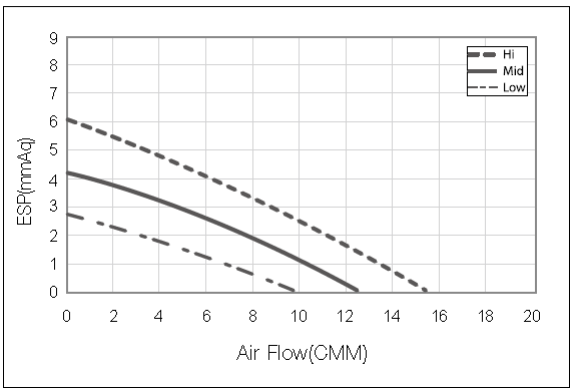
Branch ①



Branch ②

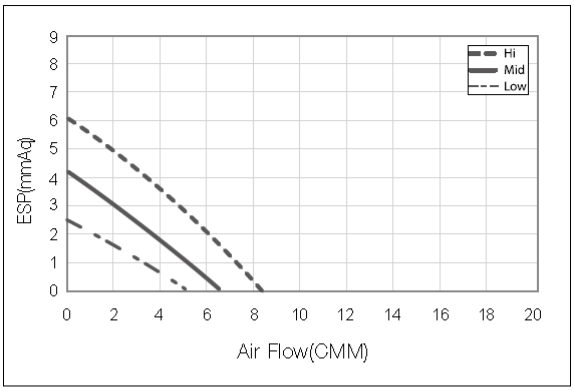


Branch ① + ②

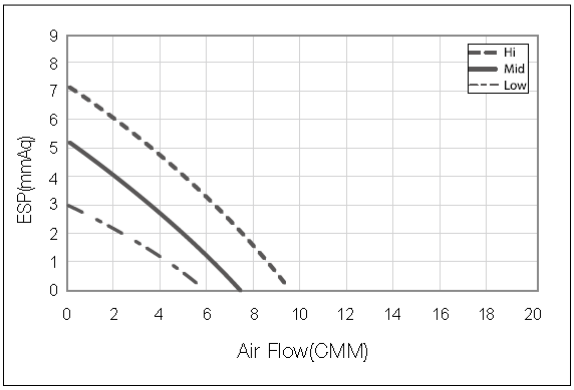


③ NS1004ZXEA/XSA

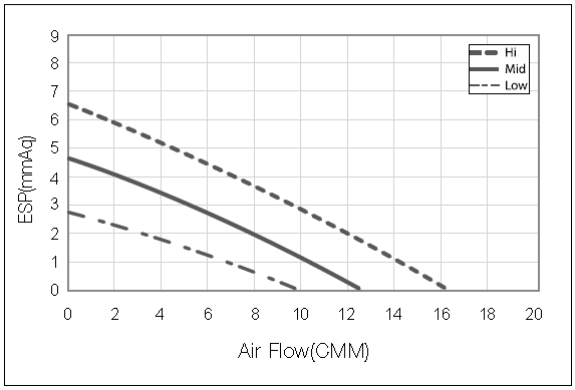
Branch ①



Branch ②



Branch ① + ②

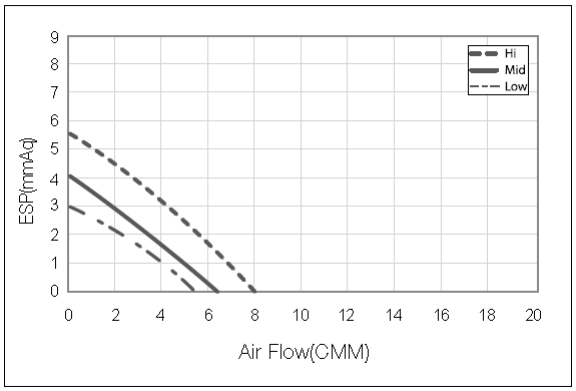


2-8. Sub Duct

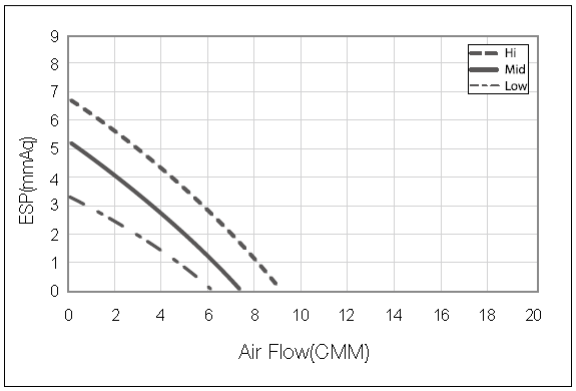
2) P-Q Curve

④ NS1254PXEA/XSA

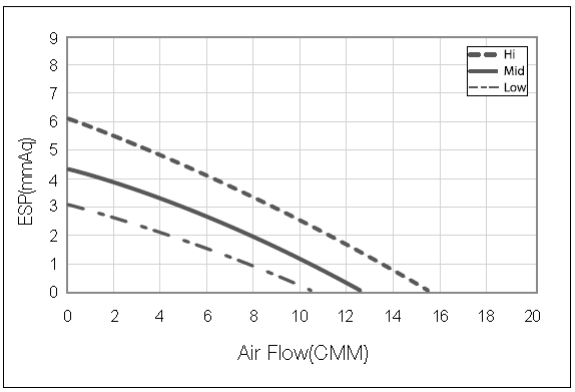
Branch ①



Branch ②

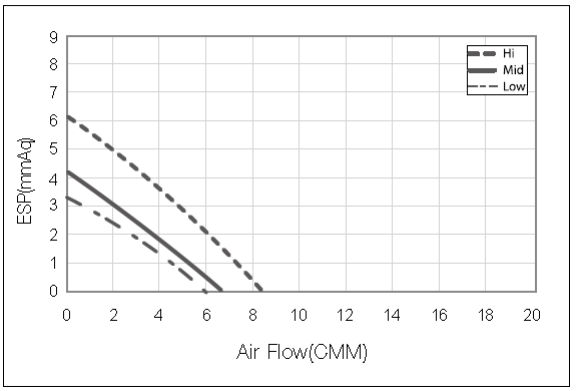


Branch ① + ②

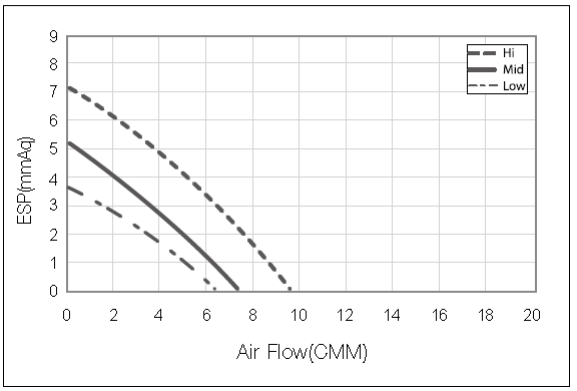


⑤ NS1404PXEA/XSA

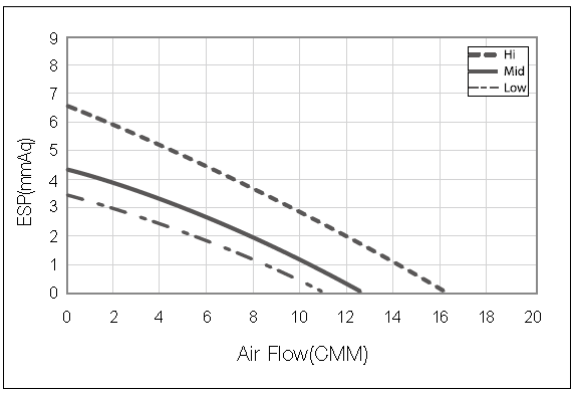
Branch ①



Branch ②



Branch ① + ②



3. MSP Duct

3-1. Specifications 48

3-2. Capacity Tables 49

3-3. Dimensional Drawing 50

3-4. PCB Connector Lay-out 51

3-5. Electrical Wiring Diagram 52

3-6. Sound Pressure Level 53

3-7. Recommended Operation Range (P-Q Curve) 54

2-1. Specifications

Model Name		Indoor Unit			NS071SDXEA/XSA
		Outdoor Unit			RC071DHXEA/XSA
System	Mode			-	Heat Pump
	Capacity	Capacity (Nominal)	Cooling (Min/Std/Max)	kW	2.2 / 7.1 / 8.0
				Btu/h	7,500 / 24,200 / 27,300
			Heating (Min/Std/Max)	kW	1.9 / 8.0 / 9.0
				Btu/h	6,500 / 27,300 / 30,700
	Power	Power Input (Nominal)	Cooling (Min/Std/Max)	kW	0.35 / 2.21 / 4.0
			Heating(Min/Std/Max)		0.35 / 2.22 / 4.0
		Current Input (Nominal)	Cooling (Min/Std/Max)	A	2.0 / 10.5 / 21.0
			Heating (Min/Std/Max)		2.0 / 10.5 / 21.0
		MCA		A	20.3
		MFA		A	25.0
	Energy Efficiency	EER (Nominal Cooling)		-	3.21
		COP (Nominal Heating)		-	3.61
		AEER		-	3.15
		ACOP		-	3.24
	Piping Connections	Liquid Pipe		Φ, mm	6.35
				Φ, inch	1/4
		Gas Pipe		Φ, mm	15.88
				Φ, inch	5/8
		Installation Limitation	Max. Length	m	50.0
			Max. Height	m	30.0
	Field Wiring	Indoor Power Cable		mm^2, #	0.75~1.5, 3wires
		Communication Cable		mm^2, #	0.75~1.5, 2wires
	Refrigerant	Type		-	R410A
		Control Method		-	EEV
		Factory Charging		kg	1.8 (Charged for 5m)
Indoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50
	Fan	Type		-	Sirocco Fan
		Motor	Output	W	200
			Number of Unit	EA	1
		Air Flow Rate	High/Mid/Low	CMM	19.0 / 17.0 / 15.0
				ℓ/s	317 / 283 / 250
		External Static Pressure	Min/Std/Max	mmAq	0 / 4 / 10
				Pa	0 / 39 / 98
	Drain	Drain Pipe		Φ,mm	VP25 (OD 32,ID 25)
	Sound *2)	Sound Pressure	High/Mid/Low	dB(A)	39 / 37 / 35
	External Dimension	Net Weight		kg	33
		Shipping Weight		kg	40
		Net Dimensions (WxHxD)		mm	1,150 x 260 x 480
		Shipping Dimensions (WxHxD)		mm	1,405 x 354 x 593
	Panel Size	Panel model		-	-
		Panel Net Weight		kg	-
		Shipping Weight		kg	-
		Net Dimensions (W×H×D)		mm	-
		Shipping Dimensions (W×H×D)		mm	-
	Accessories	Drain pump	Drain pump	-	Optional / MDP-M075SGU1
			Max. Lifting Height / Displacement	mm / ℓ/h	750 / 24
		Air Filter		-	Long life filter
Outdoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50
	Compressor	Type		-	Twin BLDC Rotary
		Model		-	UG4T200FUAE4
		Output			-
		Oil	Type	-	POE
			Initial Charge	cc	650
	Fan	Air Flow Rate	Cooling / Heating	CMM	50.0 / 48.0
				ℓ/s	833 / 800
	Sound	Sound Pressure	Cooling / Heating	dB(A)	49 / 51
	External Dimension	Net Weight		kg	55
		Shipping Weight		kg	59
		Net Dimensions (WxHxD)		mm	880 x 798 x 310
		Shipping Dimensions (WxHxD)		mm	1,023 x 889 x 416
	Operating Temp. Range	Cooling		℃	-15 ~ 50
		Heating		℃	-20 ~ 24

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

*1) Nominal Capacity are based on (Equivalent refrigerant piping length : 5m , Level differences : 0m);

- Cooling : Indoor temperature : 27℃ DB, 19℃ WB / Outdoor temperature : 35℃ DB, 24℃ WB
- Heating : Indoor temperature : 20℃ DB, 15℃ WB / Outdoor temperature : 7℃ DB, 6℃ WB

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. *3) Specifications are subject to change without prior notice for product improvement.

Standard Accessory
Wired Remote Controller (MWR-WE10)

3-2. Capacity Tables

1) RC071DHXEA/XSA + NS071SDXEA/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	7.28	5.41	1.77	7.27	5.40	1.99	6.28	4.67	2.08	5.33	4.67	4.54	3.72	3.53	3.76
16	22	7.66	5.58	1.81	7.65	5.57	2.03	6.61	4.81	2.12	5.61	4.81	4.63	3.91	3.64	3.84
18	25	7.98	5.75	1.84	7.97	5.74	2.07	6.89	4.96	2.17	5.84	4.96	4.72	4.07	3.75	3.92
19	27	8.23	5.93	1.88	8.22	5.92	2.11	7.10	5.11	2.21	6.02	5.11	4.82	4.20	3.86	4.00
20	28	8.39	5.87	1.90	8.38	5.86	2.13	7.24	5.06	2.23	6.14	5.06	4.87	4.28	3.83	4.04
22	30	8.81	5.81	1.92	8.80	5.80	2.15	7.60	5.01	2.25	6.45	5.01	4.92	4.50	3.79	4.08
24	32	9.26	5.69	1.96	9.24	5.68	2.20	7.98	4.91	2.30	6.77	4.91	5.01	4.72	3.71	4.16

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

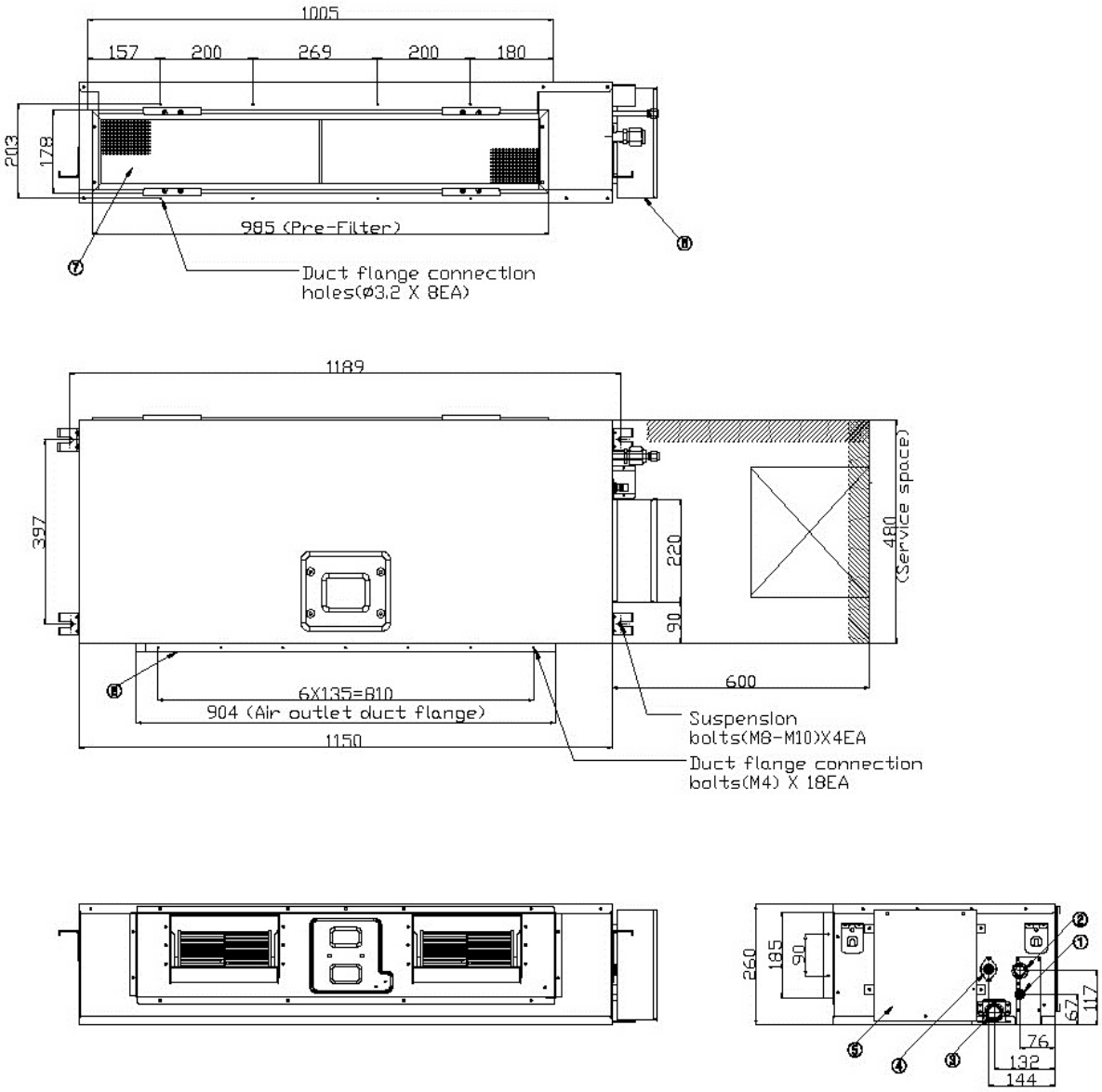
Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	5.77	2.85	6.58	2.73	8.00	2.53	8.32	2.72	8.16	2.26	8.63	2.33
18	5.72	2.82	6.51	2.71	7.92	2.50	8.24	2.69	8.08	2.24	8.54	2.30
20	5.66	2.79	6.45	2.68	7.84	2.48	8.16	2.66	8.00	2.22	8.46	2.28
21	5.60	2.76	6.39	2.65	7.76	2.46	8.08	2.64	7.92	2.20	8.38	2.26
22	5.55	2.73	6.32	2.63	7.68	2.43	8.00	2.61	7.84	2.18	8.29	2.23
24	5.49	2.71	6.26	2.60	7.61	2.41	7.92	2.58	7.76	2.15	8.21	2.21

Note

◆ Ratings shown are net capacities.
◆ Capacities are based on following conditions;
- Equivalent refrigerant piping length : 5m / Level difference : 0m.

3-3. Dimensional Drawing

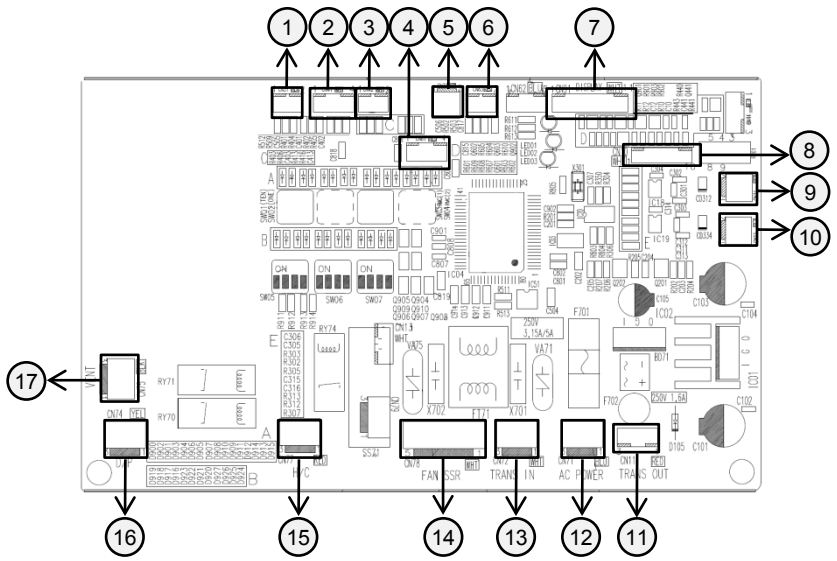
Unit (mm)



No.	Name	7.1kW
①	Liquid Pipe Connection	Φ6.35mm (1/4”)
②	Gas Pipe Connection	Φ15.88mm (5/8”)
③	Drain Pipe Connection without Drain Pump	VP25 (OD 32, ID 25)
④	Drain Pipe Connection with Drain Pump	-
⑤	Control Unit	-
⑥	Conduit for Power Supply & Communication Wiring	-
⑦	Air Inlet Duct Flange	1,005mm x 203mm
⑧	Air Outlet Duct Flange	904mm x 185mm

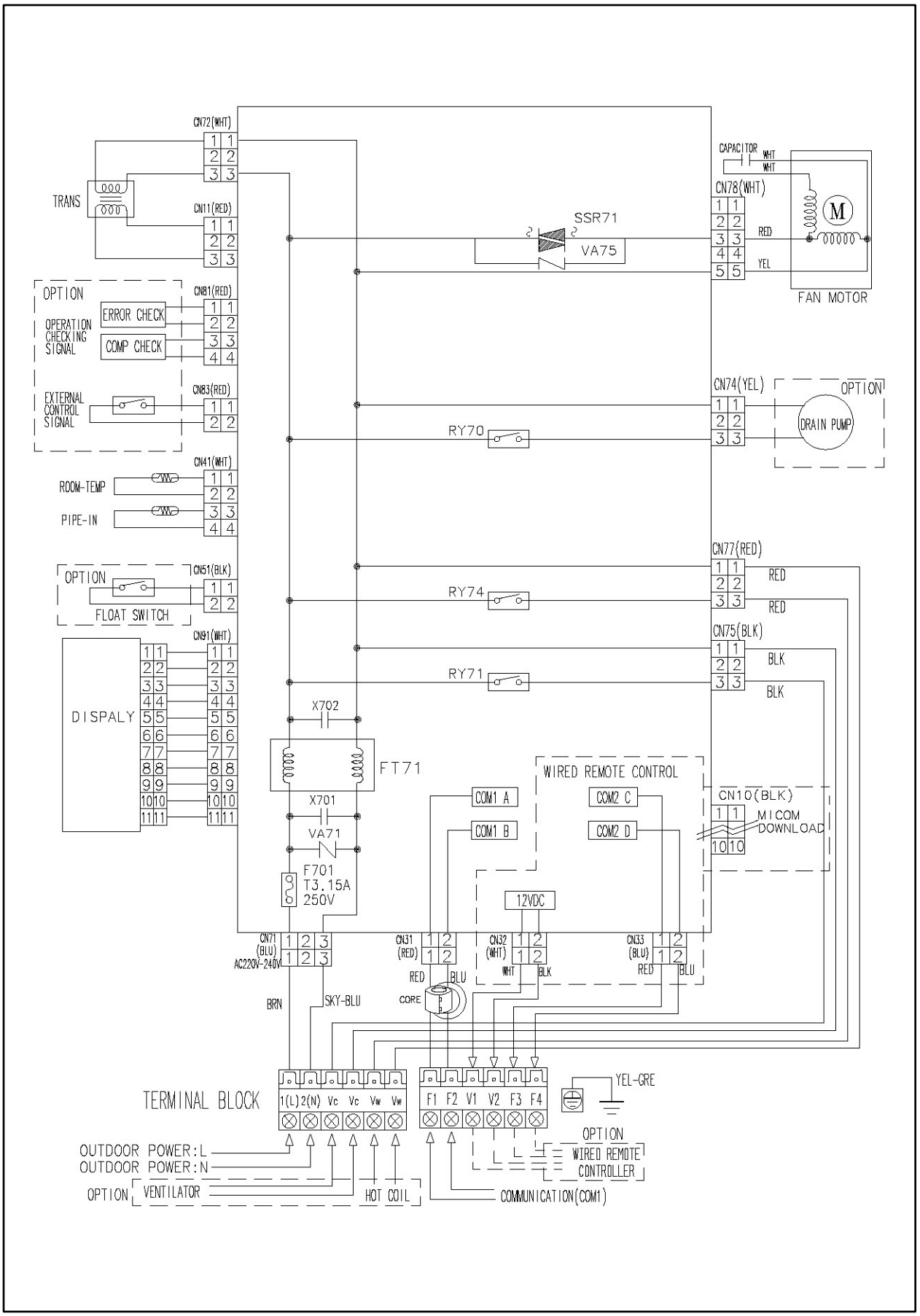
3-4. PCB Connector Lay-out

1) NS071SDXEA/XSA



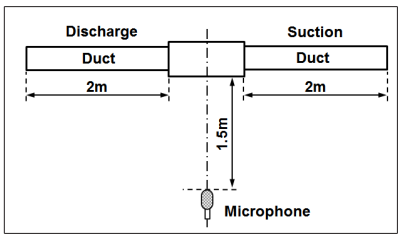
No.	CN#	Color	Function
1	CN51	Black	Float Switch
2	CN41	White	Indoor Room & Eva In Temp. Sensor
3	CN42	White	Eva Out Temp. Sensor
4	CN81	Red	External Control - Display Part
5	CN32	White	DC 12V for Wired Remote Controller
6	CN83	Red	External Contact Control – S/W Part
7	CN91	White	Display
8	CN10	White	Micom Download
9	CN31	Red	Communication 1 – F1, F2 (IDU~ODU)
10	CN33	Blue	COM2 Communication – F3, F4 (for Wired Remote Controller)
11	CN11	Red	Trans-Out
12	CN71	Blue	AC Power
13	CN72	White	Trans-In
14	CN78	White	Fan (SSR)
15	CN77	Red	Hot Coil
16	CN74	Yellow	Drain Pump
17	CN75	Black	Ventilator

3-5. Electrical Wiring Diagram



3-6. Sound Pressure Level

1) Operation Sound Level



Unit (dB(A))

Model	High	Mid	Low
NS071SDXEA/XSA	39	37	35

Note

* Specifications may be subject to change without prior notic

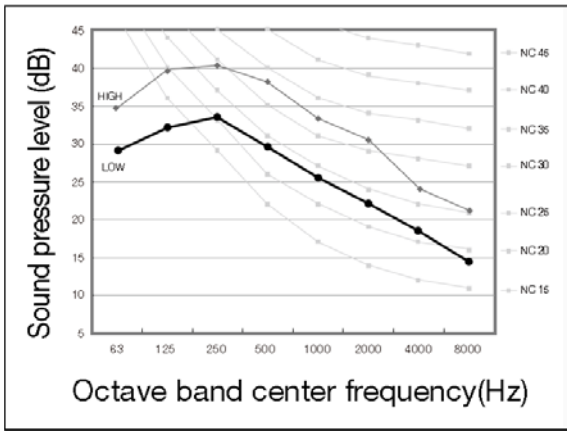
- These operation values are obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.

- Sound pressure level may differ depending on operation condition

2) NC Curve

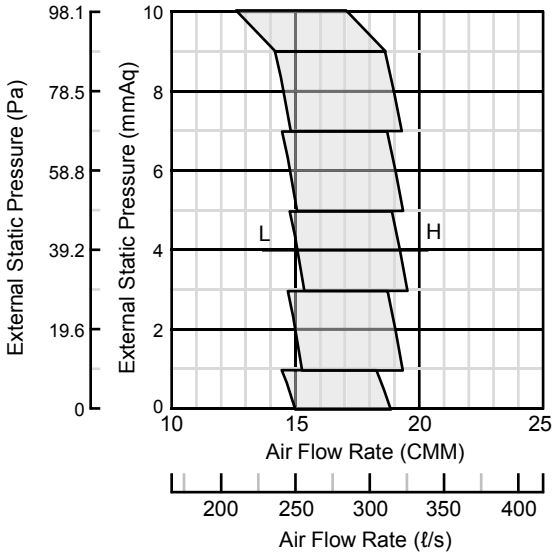
① NS071SDXEA/XSA



3-7. Recommended Operation Range(P-Q Curve)

◆ Please adjust option code according to the actual installation condition(External Static Pressure).

1) NS071SDXEA/XSA



ESP (mmAq)	Option code
0 ~ 1	011017-1563E7-274750-3700010
1 ~ 3	011037-15613A-274750-3700010
3 ~ 5	011037-11618C-274750-3700010
5 ~ 7	011047-116203-274750-3700010
7 ~ 9	011047-1162FF-274750-3700010
9 ~ 10	011047-1263FD-274750-3700010

4. HSP Duct

4-1. Specifications ……..……..……..…… 56

4-2. Capacity Tables …...……..……...…… 58

4-3. Dimensional Drawing ……..……...…. 61

4-4. PCB Connector Lay-out ……..…. 63

4-5. Electrical Wiring Diagram ……..…. 65

4-6. Sound Pressure Level ……..... 67

4-7. Recommended Operation Range (P-Q Curve) …..…. 69

2-1. Specifications

Model Name	Indoor Unit				NS100HHXEH/XSA	NS125HHXEH/XSA	NS140HHXEH/XSA
	Outdoor Unit				RC100DHXEH/XSA	RC125DHXEH/XSA	RC140DHXEH/XSA
System	Mode			-	Heat Pump	Heat Pump	Heat Pump
	Capacity	Capacity (Nominal)	Cooling (Min/Std/Max)	kW	3.5 / 10.0 / 13.0	3.5 / 12.5 / 14.0	3.5 / 14.0 / 16.0
				Btu/h	11,900 / 34,100 / 45,400	11,900 / 42,700 / 47,800	11,900 / 47,800 / 54,600
			Heating (Min/Std/Max)	kW	3.8 / 11.2 / 15.0	3.8 / 14.0 / 17.0	3.8 / 16.0 / 19.0
				Btu/h	13,000 / 38,200 / 51,200	13,000 / 47,800 / 58,000	13,000 / 54,600 / 64,830
	Power	Power Input (Nominal)	Cooling (Min/Std/Max)	kW	1.3 / 2.7 / 4.8	1.3 / 3.85 / 5.1	1.5 / 4.31 / 6.2
			Heating(Min/Std/Max)		1.1 / 2.87 / 4.9	1.0 / 3.78 / 6.2	1.2 / 4.32 / 7.4
		Current Input (Nominal)	Cooling (Min/Std/Max)	A	6.5 / 12.2 / 20.7	6.5 / 17.0 / 22.5	7.0 / 19.0 / 28.0
			Heating (Min/Std/Max)		6.0 / 12.9 / 21.2	6.0 / 16.5 / 26.0	6.5 / 19.0 / 32.0
		MCA		A	26.0	26.8	35.5
		MFA		A	30.0	30.0	40.0
	Energy Efficiency	EER (Nominal Cooling)		-	3.70	3.25	3.25
		COP (Nominal Heating)		-	3.90	3.70	3.70
		AEER		-	3.65	3.21	3.22
		ACOP		-	3.85	3.66	3.67
	Piping Connections	Liquid Pipe		Φ, mm	9.52	9.52	9.52
				Φ, inch	3/8	3/8	3/8
		Gas Pipe		Φ, mm	19.05	19.05	19.05
				Φ, inch	3/4	3/4	3/4
		Installation Limitation	Max. Length	m	75.0	75.0	75.0
			Max. Height	m	30.0	30.0	30.0
	Field Wiring	Indoor Power Cable		mm^2, #	0.75~1.5, 3wires	0.75~1.5, 3wires	0.75~1.5, 3wires
		Communication Cable		mm^2, #	0.75~1.5, 2wires	0.75~1.5, 2wires	0.75~1.5, 2wires
	Refrigerant	Type		-	R410A	R410A	R410A
		Control Method		-	EEV	EEV	EEV
		Factory Charging		kg	3.4 (Charged for 30m)	3.4 (Charged for 30m)	4.4 (Charged for 30m)
Indoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50	1, 2, 220~240, 50
	Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan
		Motor	Output	W	243 x 2	243 x 2	243 x 2
			Number of Unit	EA	2	2	2
		Air Flow Rate	High/Mid/Low	CMM	36 / 33 / 30	45 / 38 / 31	50 / 44 / 38
				ℓ/s	600 / 550 / 500	750 / 633 / 517	833 / 733 / 633
		External Static Pressure	Min/Std/Max	mmAq	5 / 6.1 /20	5 / 6.1 /20	5 / 6.1 /20
				Pa	49 / 60 / 196	49 / 60 / 196	49 / 60 / 196
	Drain	Drain Pipe		Φ,mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
	Sound *2)	Sound Pressure	High/Mid/Low	dB(A)	46 / 40.5 / 35	48 / 42.5 / 37	50 / 44.5 / 39
	External Dimension	Net Weight		kg	58.0	60.0	60.0
		Shipping Weight		kg	67.5	69.5	69.5
		Net Dimensions (WxHxD)		mm	1,200 x 360 x 650	1,200 x 360 x 650	1,200 x 360 x 650
		Shipping Dimensions (WxHxD)		mm	1,447 x 425 x 769	1,447 x 425 x 769	1,447 x 425 x 769
	Panel Size	Panel model		-	-	-	-
		Panel Net Weight		kg	-	-	-
		Shipping Weight		kg	-	-	-
		Net Dimensions (W×H×D)		mm	-	-	-
		Shipping Dimensions (W×H×D)		mm	-	-	-
	Accessories	Drain pump	Drain pump	-	Optional / MDP-M075SGU2	Optional / MDP-M075SGU2	Optional / MDP-M075SGU2
			Max. Lifting Height / Displacement	mm / ℓ/h	750 / 24	750 / 24	750 / 24
		Air Filter		-	Optional	Optional	Optional
Outdoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50	1, 2, 220~240, 50
	Compressor	Type		-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
		Model		-	UG5T450FUEJX	UG5T450FUEJX	UG5T450FXAJX
		Output			-	-	-
		Oil	Type	-	PVE	PVE	PVE
			Initial Charge	cc	1,700	1,700	1,700
	Fan	Air Flow Rate	Cooling / Heating	CMM	90.5 / 90.5	90.5 / 90.5	101.0 / 101.0
				ℓ/s	1,508 / 1,508	1,508 / 1,508	1,683 / 1,683
	Sound *	Sound Pressure	Cooling / Heating	dB(A)	50 / 52	51 / 53	52 / 54
	External Dimension	Net Weight		kg	88.0	88.0	99.0
		Shipping Weight		kg	98.0	98.0	109.0
		Net Dimensions (WxHxD)		mm	940 x 1,210 x 330	940 x 1,210 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)		mm	995 x 1,338 x 426	995 x 1,338 x 426	995 x 1,548 x 426
	Operating Temp. Range	Cooling		℃	-15 ~ 50	-15 ~ 50	-15 ~ 50
		Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

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

*1) Nominal Capacity are based on (Equivalent refrigerant piping length : 5m , Level differences : 0m);

- Cooling : Indoor temperature : 27℃ DB, 19℃ WB / Outdoor temperature : 35℃ DB, 24℃ WB
- Heating : Indoor temperature : 20℃ DB, 15℃ WB / Outdoor temperature : 7℃ DB, 6℃ WB

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. *3) Specifications are subject to change without prior notice for product improvement.

Standard Accessory
Wired Remote Controller (MWR-WE10)

2-1. Specifications

Model Name	Indoor Unit				NS155HHXEH/XSA	NS180HHXEH/XSA
	Outdoor Unit				RC155DHXEH/XSA	RC180DHXGH/XSA
System	Mode			-	Heat Pump	Heat Pump
	Capacity	Capacity (Nominal)	Cooling (Min/Std/Max)	kW	3.5 / 15.5 / 17.0	3.8 / 17.5 / 20.0
				Btu/h	11,900 / 52,900 / 58,000	13,000 / 59,700 / 68,200
			Heating (Min/Std/Max)	kW	3.8 / 17.0 / 20.0	4.4 / 21.0 / 24.0
				Btu/h	13,000 / 58,000 / 68,200	15,000 / 71,700 / 81,900
	Power	Power Input (Nominal)	Cooling (Min/Std/Max)	kW	1.5 / 4.77 / 7.4	1.2 / 5.47 / 7.2
			Heating(Min/Std/Max)		1.2 / 4.72 / 8.0	1.2 / 6.0 / 8.0
		Current Input (Nominal)	Cooling (Min/Std/Max)	A	7.0 / 21.5 / 32.0	2.6 / 9.1 / 11.3
			Heating (Min/Std/Max)		6.5 / 21.0 / 34.0	2.6 / 9.9 / 12.0
		MCA		A	36.6	14.9
		MFA		A	40.3	16.4
	Energy Efficiency	EER (Nominal Cooling)		-	3.25	3.20
		COP (Nominal Heating)		-	3.60	3.50
		AEER		-	3.22	3.18
		ACOP		-	3.57	3.48
	Piping Connections	Liquid Pipe		Φ, mm	9.52	9.52
				Φ, inch	3/8	3/8
		Gas Pipe		Φ, mm	19.05	19.05
				Φ, inch	3/4	3/4
		Installation Limitation	Max. Length	m	75.0	75.0
			Max. Height	m	30.0	30.0
	Field Wiring	Indoor Power Cable		mm^2, #	0.75~1.5, 3wires	0.75~1.5, 3wires
		Communication Cable		mm^2, #	0.75~1.5, 2wires	0.75~1.5, 2wires
	Refrigerant	Type		-	R410A	R410A
		Control Method		-	EEV	EEV
		Factory Charging		kg	4.4 (Charged for 30m)	4.8 (Charged for 30m)
Indoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50
	Fan	Type		-	Sirocco Fan	Sirocco Fan
		Motor	Output	W	243 x 2	770
			Number of Unit	EA	2	1
		Air Flow Rate	High/Mid/Low	CMM	52 / 46 / 40	64 / 56 / 50
				ℓ/s	867 / 767 / 667	1,067 / 933 / 833
		External Static Pressure	Min/Std/Max	mmAq	5 / 6.1 / 20	5 / 6.1 / 25
				Pa	49 / 60 / 196	49 / 60 / 245
	Drain	Drain Pipe		Φ,mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
	Sound *2)	Sound Pressure	High/Mid/Low	dB(A)	51 / 46 / 41	52 / 46 / 44
	External Dimension	Net Weight		kg	60.0	95.0
		Shipping Weight		kg	69.5	105.0
		Net Dimensions (WxHxD)		mm	1,200 x 360 x 650	1,240 x 470 x 1,040
		Shipping Dimensions (WxHxD)		mm	1,447 x 425 x 769	1,507 x 558 x 1,155
	Panel Size	Panel model		-	-	-
		Panel Net Weight		kg	-	-
		Shipping Weight		kg	-	-
		Net Dimensions (W×H×D)		mm	-	-
		Shipping Dimensions (W×H×D)		mm	-	-
	Accessories	Drain pump	Drain pump	-	Optional / MDP-M075SGU2	Optional / MDP-N047SNC1
			Max. Lifting Height / Displacement	mm / ℓ/h	750 / 24	750 / 24
		Air Filter		-	Optional	(Field Supply)
Outdoor Unit	Power Supply			Φ, #, V, Hz	1, 2, 220~240, 50	3, 4, 380~415, 50
	Compressor	Type		-	Twin BLDC Rotary	Twin BLDC Rotary
		Model		-	UG5T450FXAJX	UG5T450FXAJX
		Output			-	-
		Oil	Type	-	PVE	PVE
			Initial Charge	cc	1,700	1,700
	Fan	Air Flow Rate	Cooling / Heating	CMM	101.0 / 101.0	129.0 / 129.0
				ℓ/s	1,683 / 1,683	2,150 / 2,150
	Sound	Sound Pressure	Cooling / Heating	dB(A)	53 / 55	55 / 57
	External Dimension	Net Weight		kg	99.0	102.0
		Shipping Weight		kg	109.0	111.0
		Net Dimensions (WxHxD)		mm	940 x 1,420 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)		mm	995 x 1,548 x 426	995 x 1,548 x 426
	Operating Temp. Range	Cooling		℃	-15 ~ 50	-15 ~ 50
		Heating		℃	-20 ~ 24	-20 ~ 24

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

*1) Nominal Capacity are based on (Equivalent refrigerant piping length : 5m , Level differences : 0m);

- Cooling : Indoor temperature : 27℃ DB, 19℃ WB / Outdoor temperature : 35℃ DB, 24℃ WB
- Heating : Indoor temperature : 20℃ DB, 15℃ WB / Outdoor temperature : 7℃ DB, 6℃ WB

*2) Sound pressure level is acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. *3) Specifications are subject to change without prior notice for product improvement.

Standard Accessory
Wired Remote Controller (MWR-WE10)

4-2. Capacity Tables

1) RC100DHXEH/XSA + NS100HHXEH/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	10.26	7.62	1.88	10.48	7.79	1.99	8.85	6.57	2.08	8.85	6.57	4.09	5.84	5.54	3.11
16	22	10.80	7.86	1.92	11.03	8.03	2.03	9.31	6.77	2.12	9.31	6.77	4.18	6.15	5.71	3.17
18	25	11.25	8.10	1.96	11.49	8.28	2.07	9.70	6.98	2.17	9.70	6.98	4.26	6.40	5.89	3.23
19	27	11.60	8.35	2.00	11.85	8.53	2.11	10.00	7.20	2.21	10.00	7.20	4.35	6.60	6.07	3.30
20	28	11.83	8.27	2.02	12.09	8.45	2.13	10.20	7.13	2.23	10.20	7.13	4.39	6.73	6.01	3.33
22	30	12.42	8.19	2.04	12.69	8.36	2.15	10.71	7.06	2.25	10.71	7.06	4.44	7.07	5.95	3.37
24	32	13.04	8.02	2.08	13.33	8.19	2.20	11.25	6.92	2.30	11.25	6.92	4.53	7.42	5.83	3.43

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	9.89	4.69	10.71	4.34	11.20	3.93	11.65	3.51	11.43	2.93	16.53	3.57
18	9.80	4.65	10.61	4.29	11.09	3.89	11.54	3.48	11.31	2.90	16.36	3.54
20	9.70	4.60	10.50	4.25	10.98	3.85	11.42	3.44	11.20	2.87	16.20	3.50
21	9.60	4.55	10.40	4.21	10.87	3.81	11.31	3.41	11.09	2.84	16.04	3.47
22	9.51	4.51	10.29	4.17	10.76	3.77	11.20	3.38	10.98	2.81	15.88	3.43
24	9.41	4.46	10.19	4.12	10.65	3.74	11.08	3.34	10.87	2.78	15.72	3.40

2) RC125DHXEH/XSA + NS125HHXEH/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	11.15	8.28	2.64	11.23	8.35	2.68	11.06	8.21	3.62	11.06	8.21	5.13	7.70	7.31	4.24
16	22	11.73	8.54	2.69	11.83	8.60	2.74	11.64	8.47	3.70	11.64	8.47	5.23	8.10	7.53	4.32
18	25	12.22	8.80	2.74	12.32	8.87	2.79	12.13	8.73	3.77	12.13	8.73	5.34	8.44	7.76	4.41
19	27	12.60	9.07	2.80	12.70	9.14	2.85	12.50	9.00	3.85	12.50	9.00	5.45	8.70	8.00	4.50
20	28	12.85	8.98	2.83	12.95	9.05	2.88	12.75	8.91	3.89	12.75	8.91	5.50	8.87	7.92	4.55
22	30	13.49	8.89	2.86	13.60	8.96	2.91	13.39	8.82	3.93	13.39	8.82	5.56	9.32	7.84	4.59
24	32	14.17	8.71	2.91	14.28	8.78	2.97	14.06	8.64	4.01	14.06	8.64	5.67	9.78	7.69	4.68

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	10.00	4.69	12.75	5.59	14.00	5.15	14.57	4.63	14.28	3.86	17.95	4.08
18	9.90	4.65	12.63	5.53	13.86	5.10	14.42	4.58	14.14	3.82	17.78	4.04
20	9.80	4.60	12.50	5.48	13.72	5.05	14.28	4.54	14.00	3.78	17.60	4.00
21	9.70	4.55	12.38	5.43	13.58	5.00	14.14	4.49	13.86	3.74	17.42	3.96
22	9.60	4.51	12.25	5.37	13.45	4.95	14.00	4.45	13.72	3.70	17.25	3.92
24	9.51	4.46	12.13	5.32	13.31	4.90	13.86	4.40	13.58	3.67	17.08	3.88

Note

◆ Ratings shown are net capacities.

◆ Capacities are based on following conditions;

- Equivalent refrigerant piping length : 5m / Level difference : 0m.

4-2. Capacity Tables

3) RC140DHXEH/XSA + NS140HHXEH/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	11.77	8.74	3.37	12.27	9.11	3.41	12.38	9.20	4.06	11.59	9.20	5.48	8.40	7.98	4.42
16	22	12.38	9.01	3.44	12.92	9.40	3.48	13.04	9.48	4.14	12.20	9.48	5.59	8.85	8.22	4.51
18	25	12.90	9.29	3.51	13.45	9.69	3.55	13.58	9.78	4.22	12.71	9.78	5.70	9.22	8.48	4.61
19	27	13.30	9.58	3.58	13.87	9.99	3.62	14.00	10.08	4.31	13.10	10.08	5.82	9.50	8.74	4.70
20	28	13.57	9.48	3.62	14.15	9.89	3.66	14.28	9.98	4.35	13.36	9.98	5.88	9.69	8.65	4.75
22	30	14.24	9.39	3.65	14.85	9.79	3.69	14.99	9.88	4.40	14.03	9.88	5.94	10.17	8.57	4.79
24	32	14.96	9.20	3.72	15.60	9.59	3.77	15.74	9.68	4.48	14.73	9.68	6.06	10.68	8.39	4.89

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	10.20	4.90	14.28	6.00	16.00	5.61	16.65	5.29	16.32	4.41	18.97	4.69
18	10.10	4.85	14.14	5.94	15.84	5.56	16.48	5.24	16.16	4.36	18.79	4.65
20	10.00	4.80	14.00	5.88	15.68	5.50	16.32	5.18	16.00	4.32	18.60	4.60
21	9.90	4.75	13.86	5.82	15.52	5.45	16.16	5.13	15.84	4.28	18.41	4.55
22	9.80	4.70	13.72	5.76	15.37	5.39	16.00	5.08	15.68	4.23	18.23	4.51
24	9.70	4.66	13.58	5.71	15.21	5.34	15.84	5.03	15.52	4.19	18.05	4.46

4) RC155DHXEH/XSA + NS155HHXEH/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	15.22	11.30	5.74	14.94	11.10	5.46	13.71	10.19	4.49	12.21	10.19	5.48	8.93	8.48	4.80
16	22	16.02	11.65	5.86	15.73	11.44	5.57	14.43	10.50	4.58	12.85	10.50	5.59	9.41	8.74	4.90
18	25	16.68	12.01	5.98	16.38	11.80	5.68	15.04	10.83	4.67	13.39	10.83	5.70	9.80	9.01	5.00
19	27	17.20	12.38	6.10	16.89	12.16	5.80	15.50	11.16	4.77	13.80	11.16	5.82	10.10	9.29	5.10
20	28	17.54	12.26	6.16	17.23	12.04	5.86	15.81	11.05	4.82	14.08	11.05	5.88	10.30	9.20	5.15
22	30	18.42	12.14	6.22	18.09	11.92	5.92	16.60	10.94	4.87	14.78	10.94	5.94	10.82	9.11	5.20
24	32	19.34	11.89	6.35	18.99	11.68	6.03	17.43	10.72	4.96	15.52	10.72	6.06	11.36	8.92	5.31

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	10.51	4.90	15.81	6.99	16.99	6.48	17.69	5.78	17.34	4.81	20.61	5.81
18	10.40	4.85	15.66	6.92	16.83	6.41	17.51	5.72	17.17	4.77	20.40	5.76
20	10.30	4.80	15.50	6.85	16.66	6.35	17.34	5.66	17.00	4.72	20.20	5.70
21	10.20	4.75	15.35	6.78	16.49	6.29	17.17	5.61	16.83	4.67	20.00	5.64
22	10.10	4.70	15.19	6.71	16.33	6.22	16.99	5.55	16.66	4.63	19.80	5.59
24	9.99	4.66	15.04	6.65	16.17	6.16	16.82	5.50	16.50	4.58	19.60	5.53

Note

- ◆ Ratings shown are net capacities.
- ◆ Capacities are based on following conditions;
  - Equivalent refrigerant piping length : 5m / Level difference : 0m.

4-2. Capacity Tables

5) RC180DHXGH/XSA + NS180HHXEH/XSA

① Cooling

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

Indoor Temp. (℃)		Outdoor Temperature (℃, DB)														
		-15			21			35			43			50		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	15.48	11.50	4.24	15.61	11.60	4.91	15.48	11.50	5.18	14.15	11.50	5.98	10.44	9.91	5.18
16	22	16.30	11.86	4.32	16.44	11.96	5.01	16.30	11.86	5.28	14.90	11.86	6.10	10.99	10.21	5.28
18	25	16.98	12.22	4.41	17.12	12.33	5.12	16.98	12.22	5.39	15.52	12.22	6.22	11.45	10.53	5.39
19	27	17.50	12.60	4.50	17.65	12.71	5.22	17.50	12.60	5.50	16.00	12.60	6.35	11.80	10.86	5.50
20	28	17.85	12.47	4.55	18.00	12.58	5.27	17.85	12.47	5.56	16.32	12.47	6.41	12.04	10.75	5.56
22	30	18.74	12.35	4.59	18.90	12.46	5.32	18.74	12.35	5.61	17.14	12.35	6.48	12.64	10.64	5.61
24	32	19.68	12.10	4.68	19.85	12.21	5.43	19.68	12.10	5.72	17.99	12.10	6.61	13.27	10.43	5.72

② Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temp. (℃)	Outdoor Temperature (℃, DB)											
	-20		-15		-5		0		7		24	
DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	12.85	6.53	17.55	7.09	20.99	7.16	21.85	7.34	21.42	6.12	26.73	7.34
18	12.73	6.46	17.37	7.02	20.79	7.09	21.63	7.27	21.21	6.06	26.46	7.27
20	12.60	6.40	17.20	6.95	20.58	7.02	21.42	7.20	21.00	6.00	26.20	7.20
21	12.47	6.34	17.03	6.88	20.37	6.95	21.21	7.13	20.79	5.94	25.94	7.13
22	12.35	6.27	16.86	6.81	20.17	6.88	20.99	7.06	20.58	5.88	25.68	7.06
24	12.23	6.21	16.69	6.74	19.97	6.81	20.78	6.99	20.38	5.82	25.42	6.99

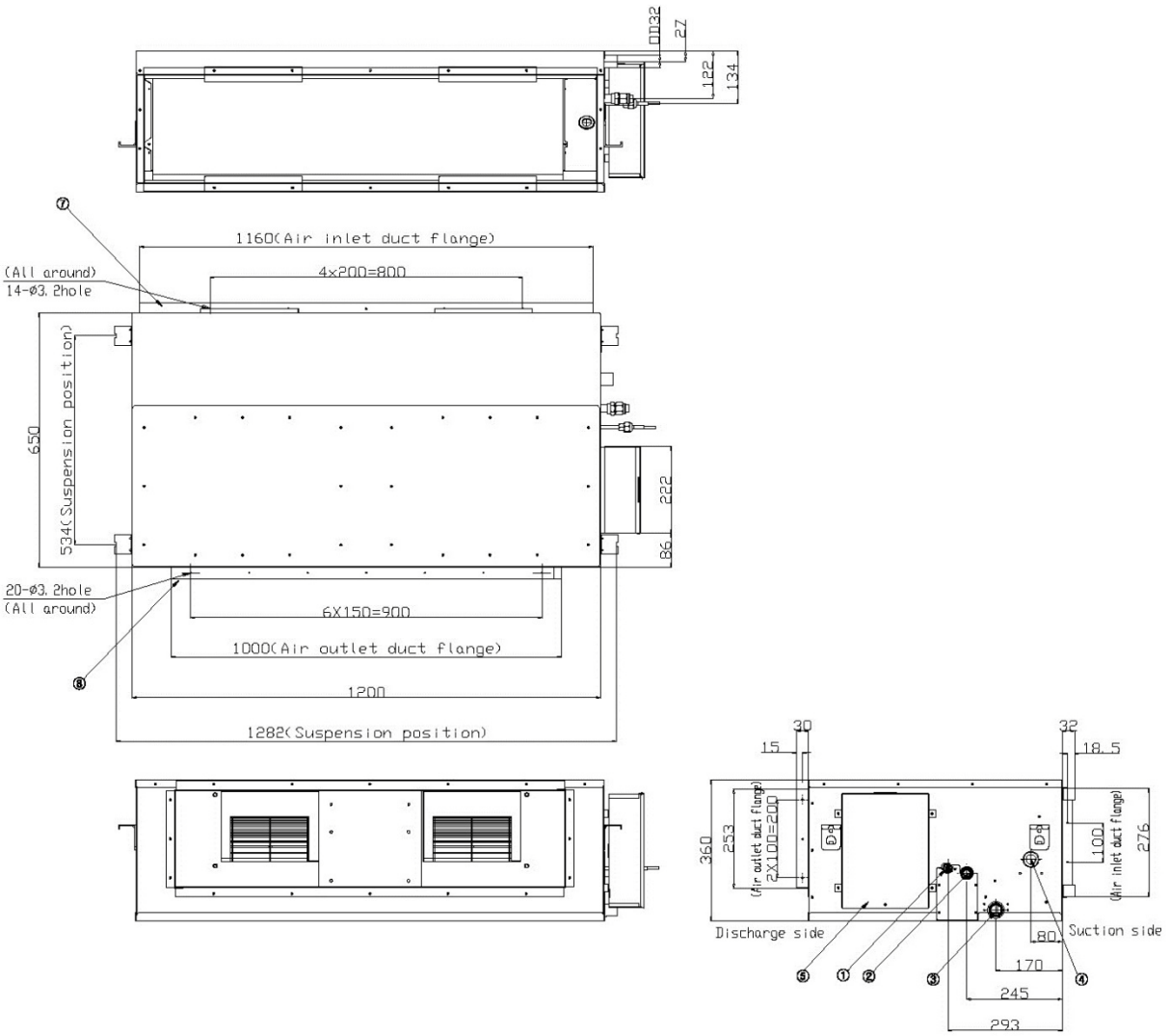
Note

◆ Ratings shown are net capacities.
◆ Capacities are based on following conditions;
- Equivalent refrigerant piping length : 5m / Level difference : 0m.

4-3. Dimensional Drawing

1) NS100/125/140/155HHXEH/XSA

Unit (mm)

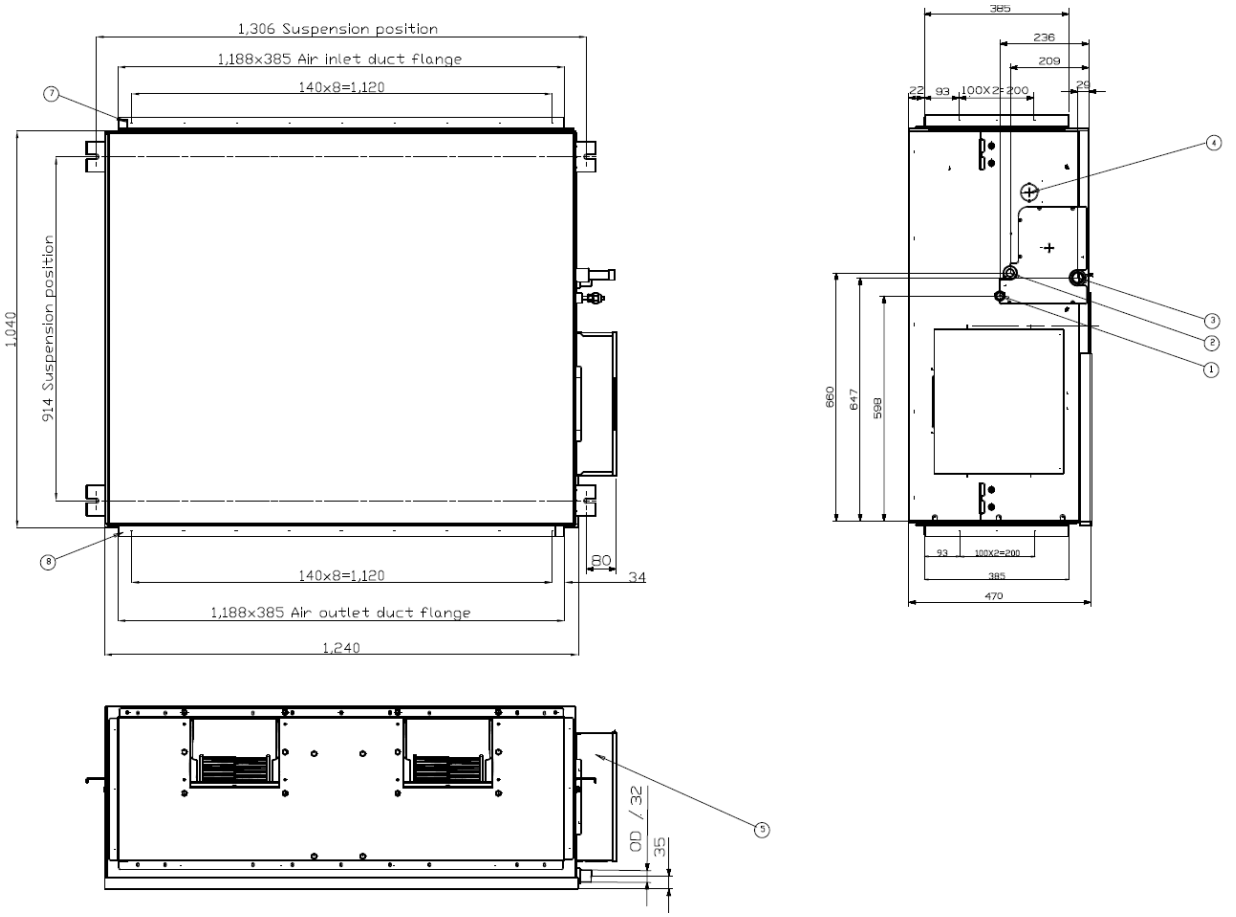


No.	Name	10.0kW	12.5kW	14.0kW	15.5kW
①	Liquid Pipe Connection	Φ9.52mm (3/8”)			
②	Gas Pipe Connection	Φ19.05mm (3/4”)			
③	Drain Pipe Connection without Drain Pump	VP25 (OD 32, ID 25)			
④	Drain Pipe Connection with Drain Pump				
⑤	Control Unit	-			
⑥	Conduit for Power Supply & Communication Wiring	-			
⑦	Air Inlet Duct Flange	1,160mm x 276mm			
⑧	Air Outlet Duct Flange	1,000mm x 253mm			

4-3. Dimensional Drawing

2) NS180HHXEH/XSA

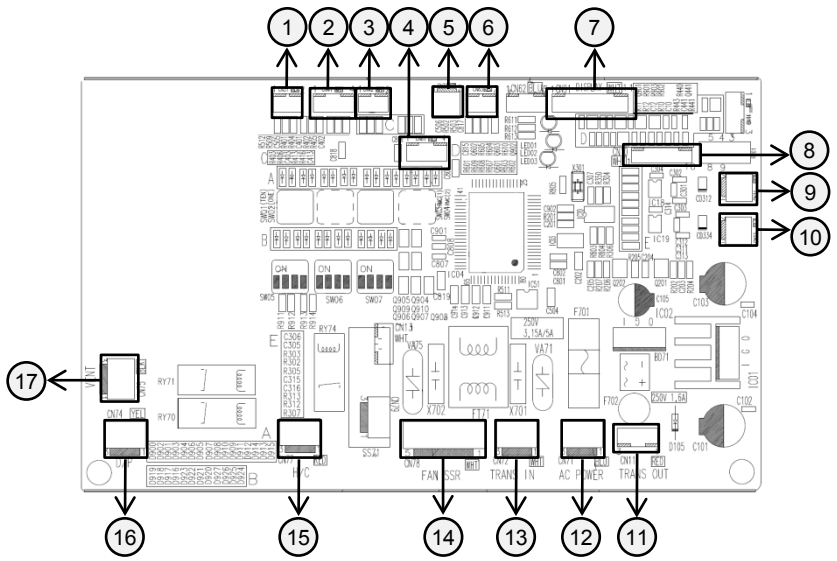
Unit (mm)



No.	Name	18.0 kW
①	Liquid Pipe Connection	Φ9.52mm (3/8”)
②	Gas Pipe Connection	Φ19.05mm (3/4”)
③	Drain Pipe Connection without Drain Pump	VP25 (OD 32, ID 25)
④	Drain Pipe Connection with Drain Pump	
⑤	Control Unit	-
⑥	Conduit for Power Supply & Communication Wiring	-
⑦	Air Inlet Duct Flange	1,188mm x 385mm
⑧	Air Outlet Duct Flange	1,188mm x 385mm

4-4. PCB Connector Lay-out

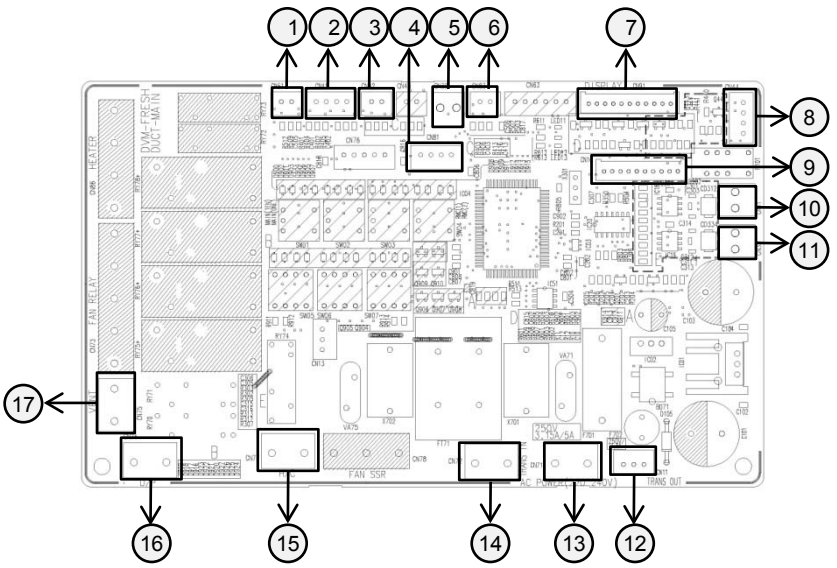
1) NS100/125/140/155HHXEH/XSA



No.	CN#	Color	Function
1	CN51	Black	Float Switch
2	CN41	White	Indoor Room & Eva In Temp. Sensor
3	CN42	White	Eva Out Temp. Sensor
4	CN81	Red	External Control - Display Part
5	CN32	White	DC 12V for Wired Remote Controller
6	CN83	Red	External Contact Control – S/W Part
7	CN91	White	Display
8	CN10	White	Micom Download
9	CN31	Red	Communication 1 – F1, F2 (IDU~ODU)
10	CN33	Blue	COM2 Communication – F3, F4 (for Wired Remote Controller)
11	CN11	Red	Trans-Out
12	CN71	Blue	AC Power
13	CN72	White	Trans-In
14	CN78	White	Fan (SSR)
15	CN77	Red	Hot Coil
16	CN74	Yellow	Drain Pump
17	CN75	Black	Ventilator

4-4. PCB Connector Lay-out

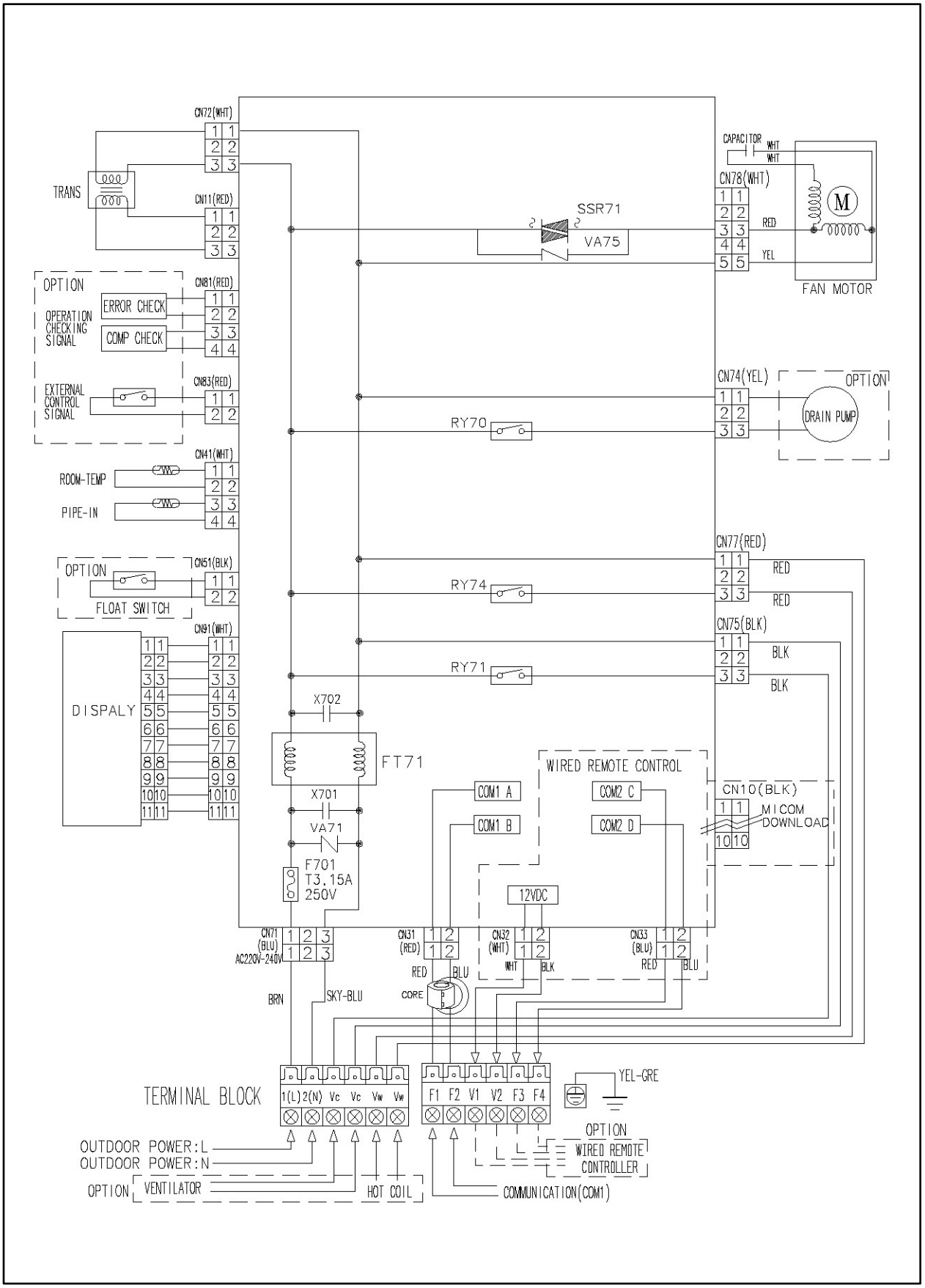
2) NS180HHXEH/XSA



No.	CN#	Color	Function
1	CN51	Black	Float Switch
2	CN41	White	Indoor Room & Eva In Temp. Sensor
3	CN42	White	Eva Out Temp. Sensor
4	CN81	Red	External Check (Error Check, Comp Check)
5	CN32	White	DC 12V for Wired Remote Controller
6	CN83	Red	External Control (External Control Signal Input)
7	CN91	White	Display
8	CN10	White	Motor Feedback
9	CN31	Red	Micom Download
10	CN33	Blue	Communication 1 – F1, F2 (IDU~ODU)
11	CN11	Red	COM2 Communication – F3, F4 (for Wired Remote Controller)
12	CN71	Blue	Trans-Out
13	CN72	White	AC Power (L, N)
14	CN78	White	Trans-In
15	CN77	Red	Hot Coil
16	CN74	Yellow	Drain Pump
17	CN75	Black	Ventilator

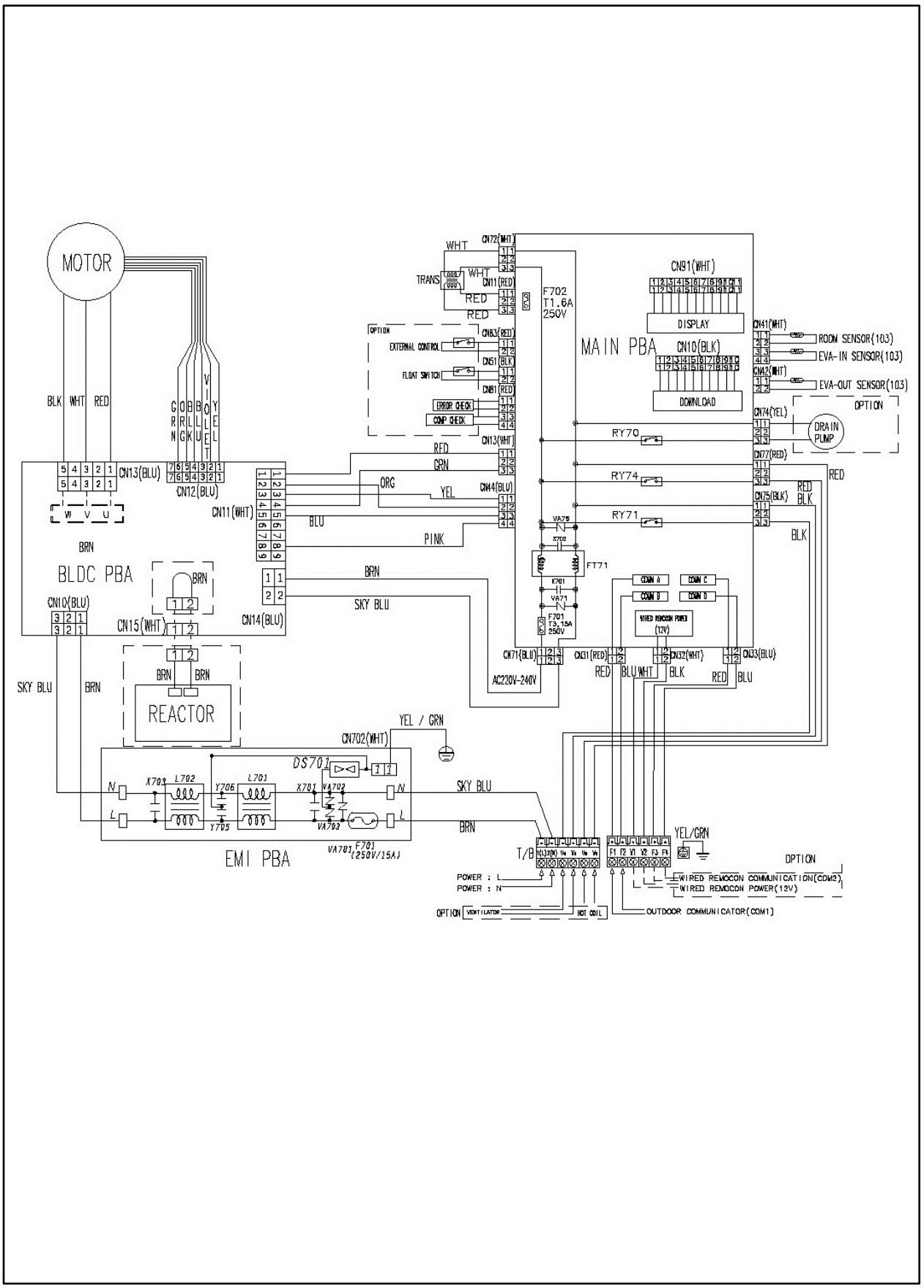
4-5. Electrical Wiring Diagram

1) NS100/125/140/155HHXEH/XSA



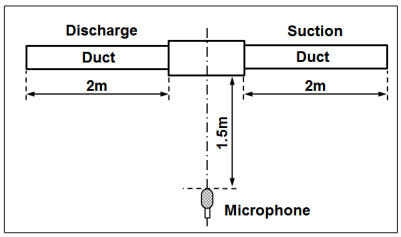
4-5. Electrical Wiring Diagram

2) NS180HHXEH/XSA



4-6. Sound Pressure Level

1) Operation Sound Level



Unit (dB(A))

Model	High	Mid	Low
NS100HHXEH/XSA	46	40.5	35
NS125HHXEH/XSA	48	42.5	37
NS140HHXEH/XSA	50	44.5	39
NS155HHXEH/XSA	51	46	41
NS180HHXEH/XSA	52	46	44

Note

* Specifications may be subject to change without prior notic

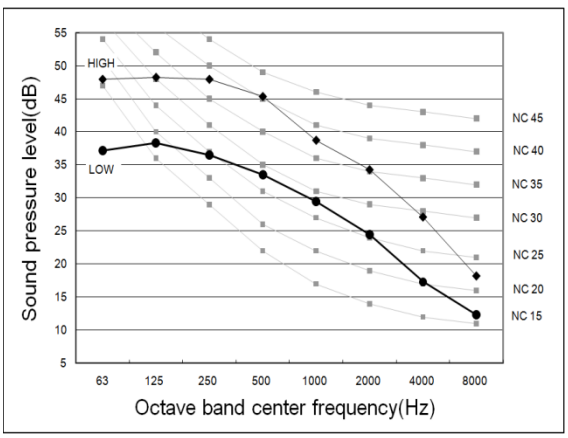
- These operation values are obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.

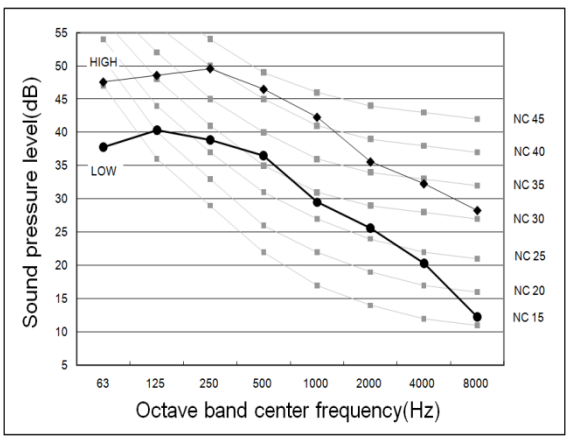
- Sound pressure level may differ depending on operation condition

2) NC Curve

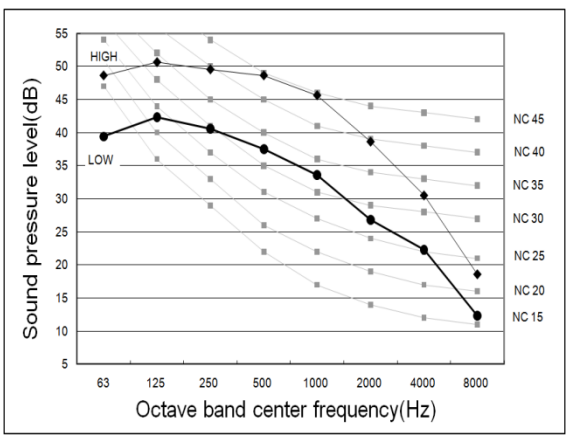
① NS100HHXEH/XSA



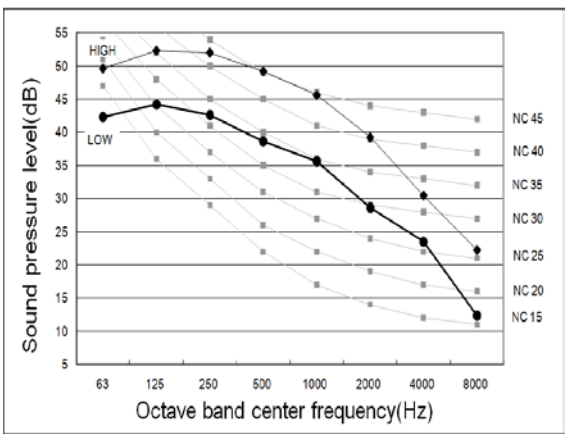
① NS125HHXEH/XSA



③ NS140HHXEH/XSA



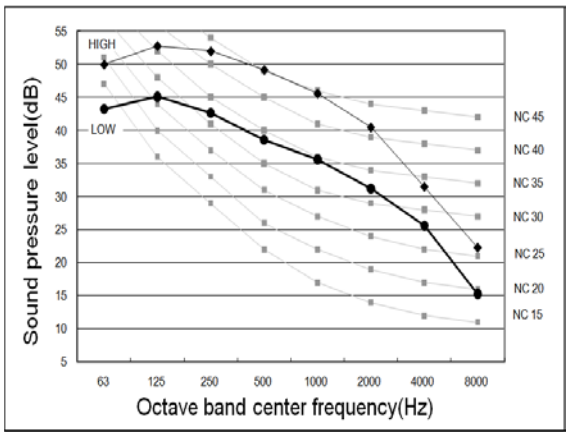
④ NS155HHXEH/XSA



4-6. Sound Pressure Level

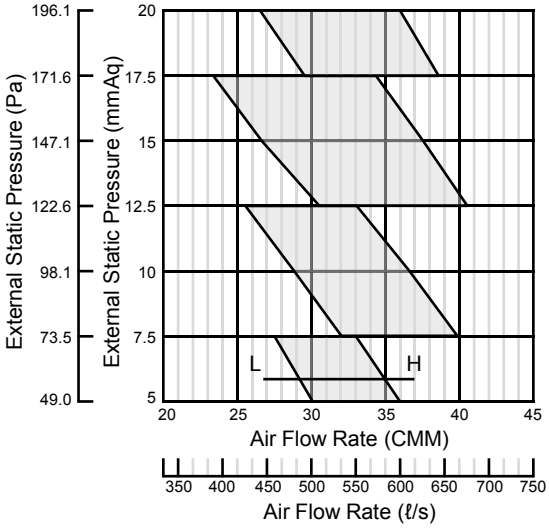
2) NC Curve

⑤ NS180HHXEH/XSA



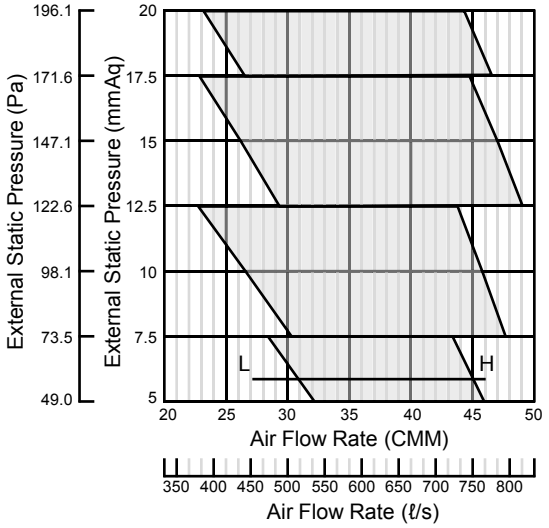
4-7. Recommended Operation Range(P-Q Curve)

1) NS100HHXEH/XSA



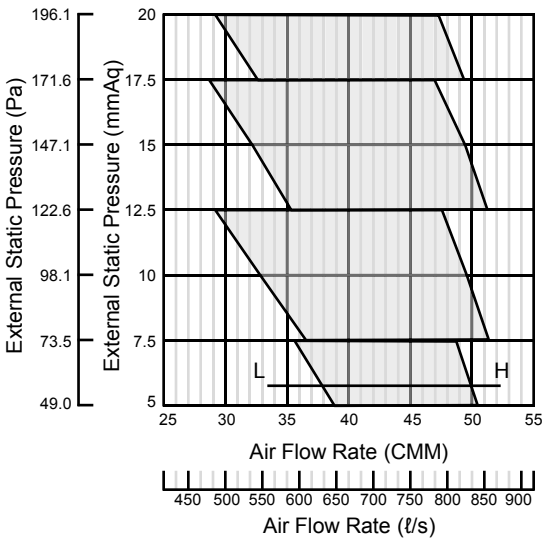
ESP (mmAq)	Option code
5.0 ~ 7.5	011014-15624F-276470-370000
7.5 ~ 12.5	011014-1563A3-276470-370000
12.5 ~ 17.5	011034-156138-276470-370000
17.5 ~ 20.0	011034-15617E-276470-370000

2) NS125HHXEH/XSA



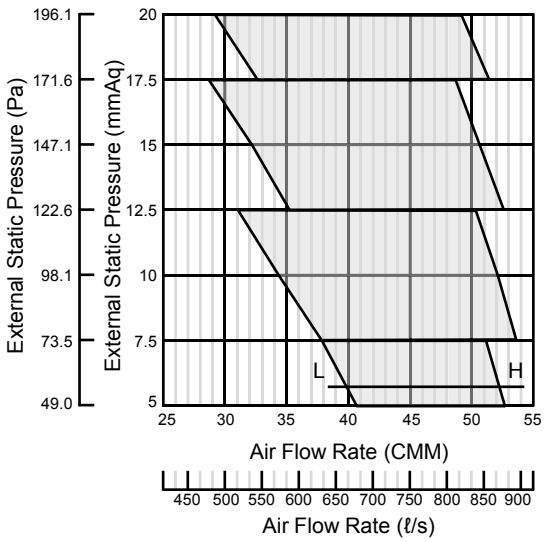
ESP (mmAq)	Option code
5.0 ~ 7.5	011034-156123-277D8C-370000
7.5 ~ 12.5	011034-156186-277D8C-370000
12.5 ~ 17.5	011034-1561DA-277D8C-370000
17.5 ~ 20.0	011034-1561FE-277D8C-370000

3) NS140HHXEH/XSA



ESP (mmAq)	Option code
5.0 ~ 7.5	011034-116189-278CA0-370000
7.5 ~ 12.5	011034-1161CB-278CA0-370000
12.5 ~ 17.5	011044-1160F0-278CA0-370000
17.5 ~ 20.0	011044-116223-278CA0-370000

4) NS155HHXEH/XSA



ESP (mmAq)	Option code
5.0 ~ 7.5	011034-116189-279BAA-370000
7.5 ~ 12.5	011034-1161CB-279BAA-370000
12.5 ~ 17.5	011044-1160F0 -279BAA-370000
17.5 ~ 20.0	011044-116223-279BAA-370000

Note

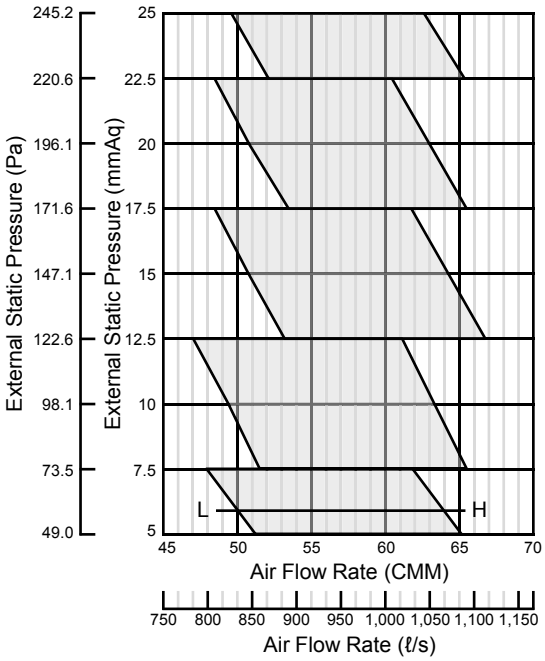
◆ Please adjust option code according to the actual installation condition(External Static Pressure).

◆ ▭ : Factory setting option code

4-7. Recommended Operation Range(P-Q Curve)

◆ Please adjust option code according to the actual installation condition(External Static Pressure).

5) NS180HHXEH/XSA



ESP (mmAq)	Option code
5.0 ~ 7.5	011074-1660C6-27B4D2-370010
7.5 ~ 12.5	011074-1560F9-27B4D2-370010
12.5 ~ 17.5	011074-15622D-27B4D2-370010
17.5 ~ 22.5	011074-156352-27B4D2-370010
22.5 ~ 25.0	011074-156396-27B4D2-370010

Note

◆ Please adjust option code according to the actual installation condition(External Static Pressure).

◆ ▭ : Factory setting option code

5. Outdoor Unit

5-1. Capacity Correction 72

5-2. Operation Limit 76

5-3. Electrical Wiring Diagram 77

5-4. Sound Pressure Level 82

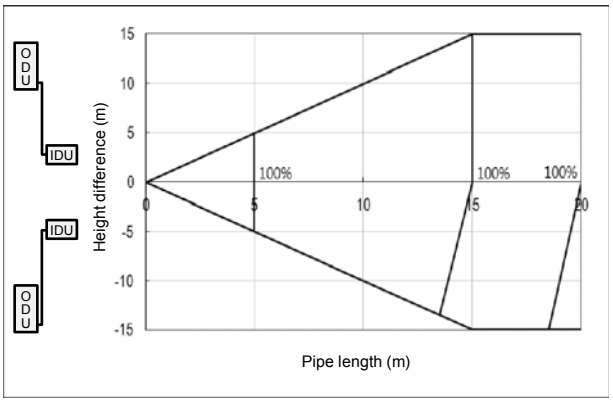
5-5. Cycle Diagram 85

5-6. Dimensional Drawing 86

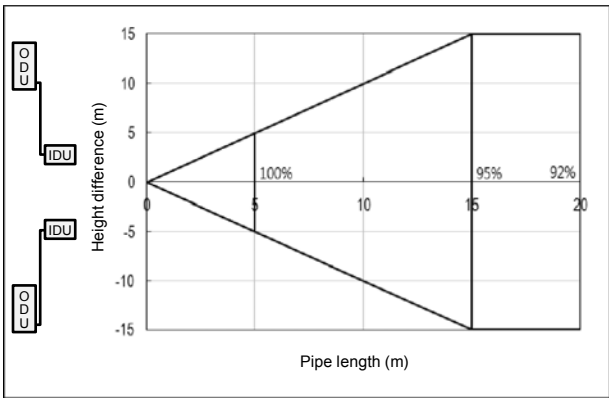
5-1. Capacity Correction

1) RC026DHXEH/XSA

① Cooling

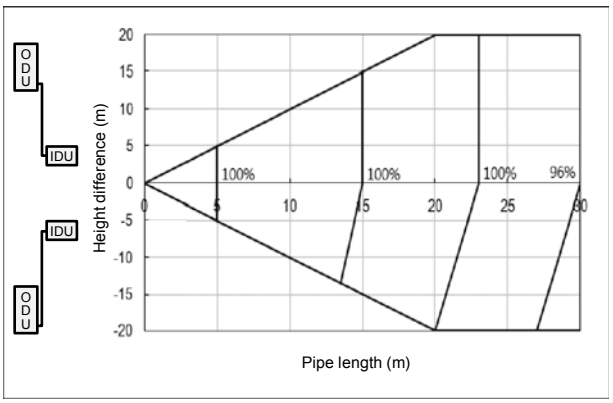


② Heating

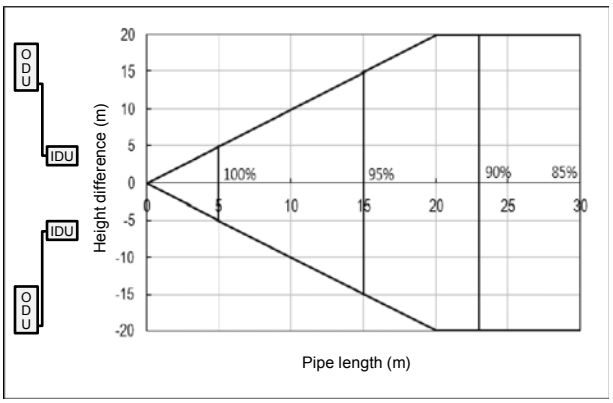


2) RC035DHXEH/XSA

① Cooling

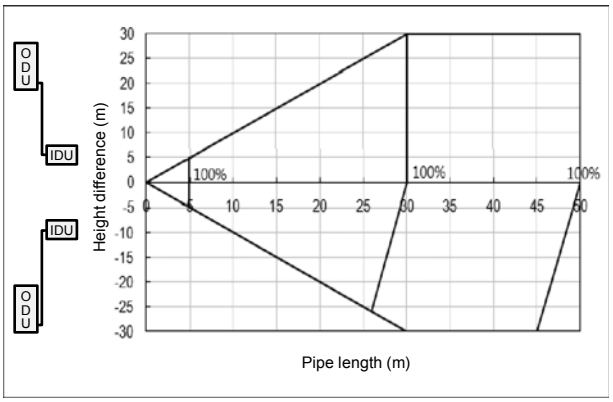


② Heating

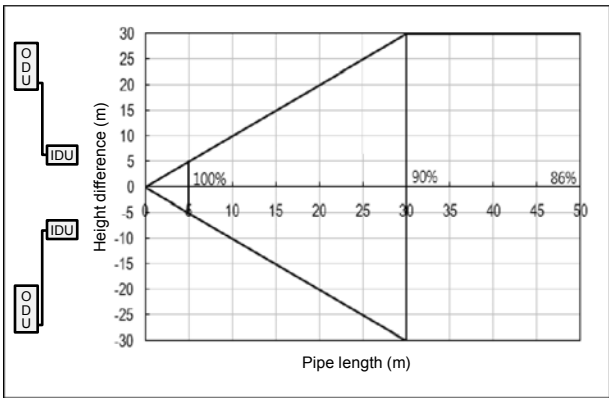


3) RC052/060DHXEH/XSA

① Cooling



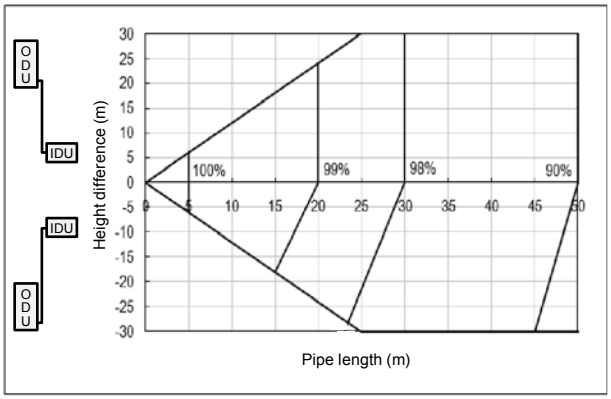
② Heating



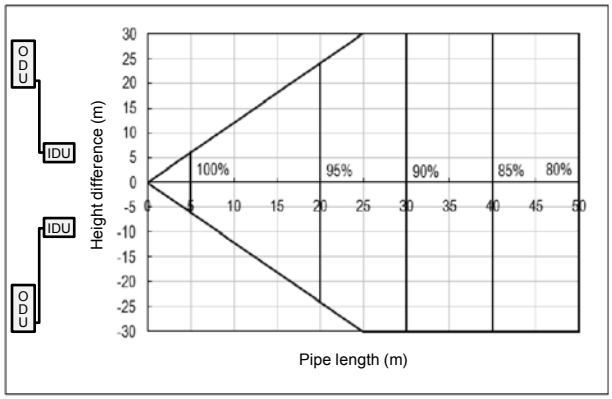
5-1. Capacity Correction

4) RC071DHXEA/XSA

① Cooling

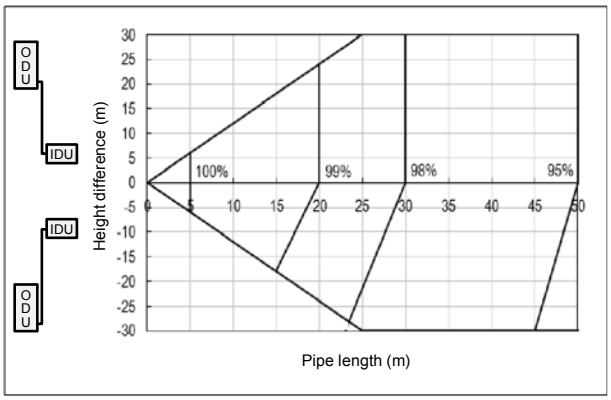


② Heating

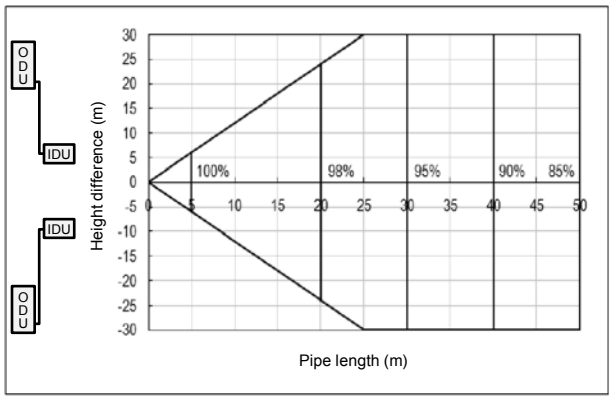


5) RC071PHXEA/XSA

① Cooling

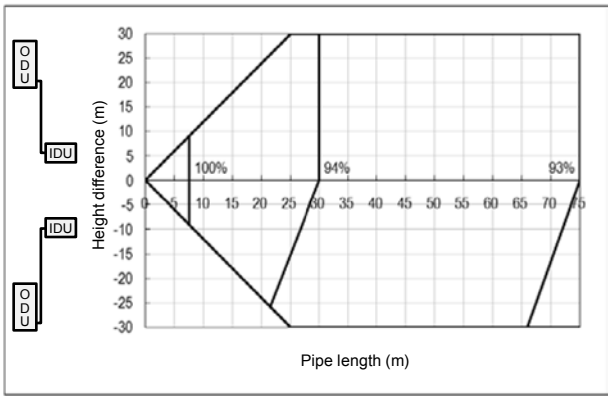


② Heating

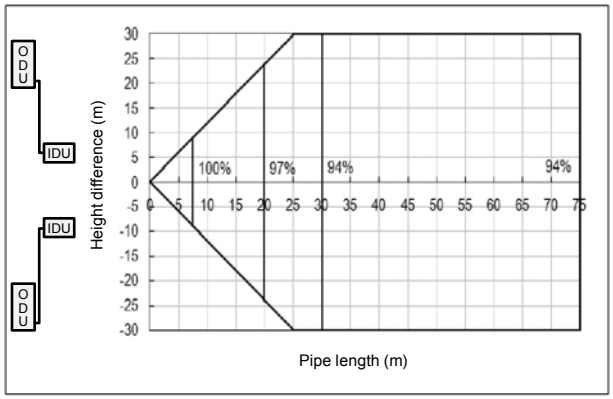


6) RC100/125/140/155DHXEH/XSA, RC180DHXGA/XSA

① Cooling



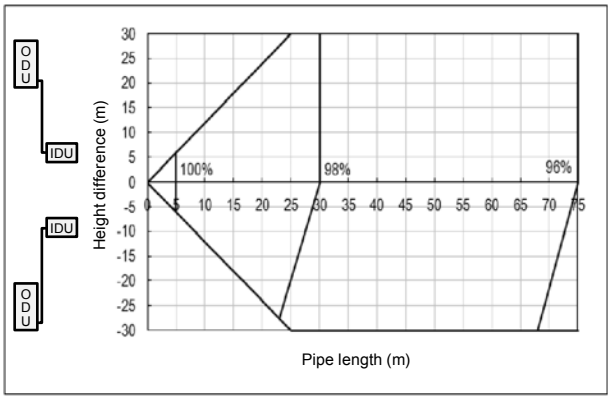
② Heating



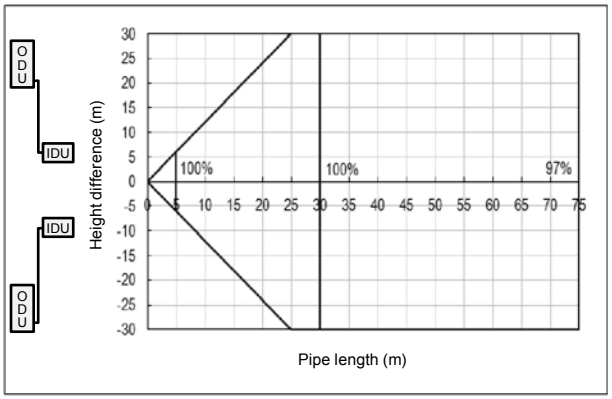
5-1. Capacity Correction

7) RC100PHXEA/XSA

① Cooling

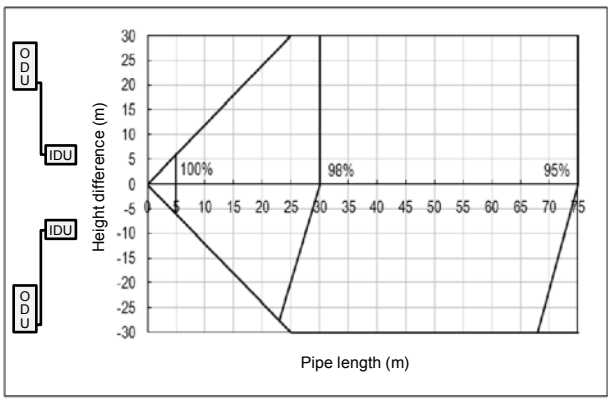


② Heating

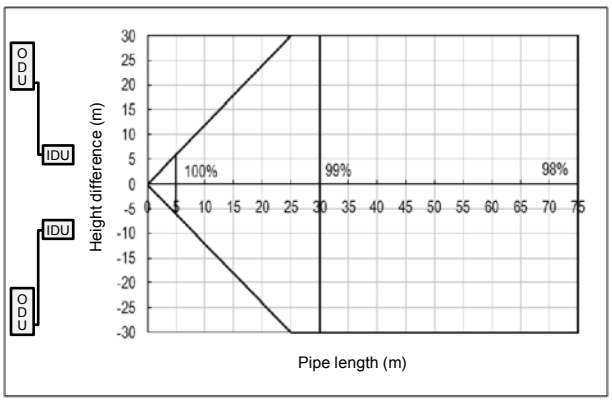


8) RC100ZHXEA/XSA

① Cooling

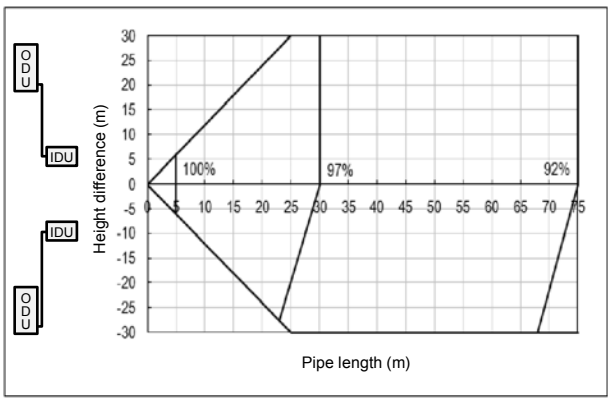


② Heating

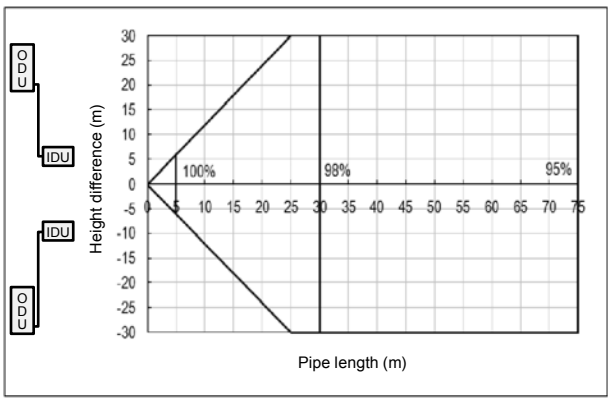


9) RC125PHXEA/XSA

① Cooling



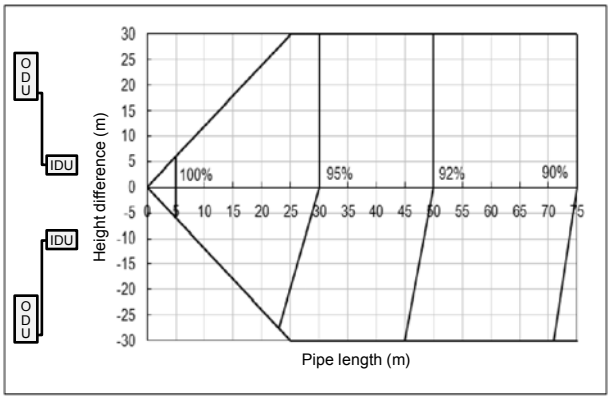
② Heating



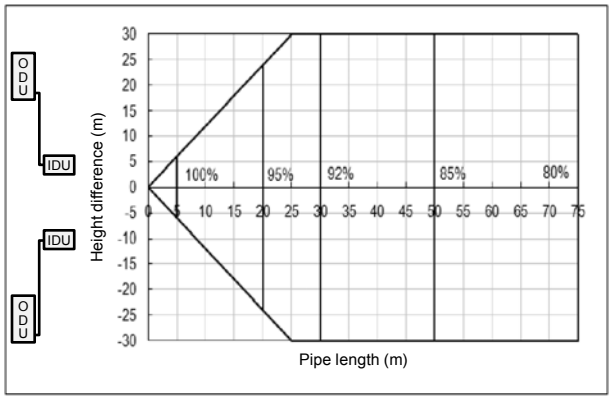
5-1. Capacity Correction

10) RC140PHXEA/XSA

① Cooling



② Heating



5-2. Operation Limit

◆ The table below indicates the temperature and humidity ranges the air conditioner can be operated within. Refer to the table for efficient use.

1) Mini 4way Cassette S

Mode		Outdoor Temperature (DB)	Indoor Temperature (DB)	Indoor Humidity (RH)
Cooling / Drying	2.6kW	-10℃ ~ 46℃	18℃ ~ 32℃	80% or less
	3.5 / 5.2 / 6.0kW	-15℃ ~ 46℃		
Heating	2.6 / 3.5 / 5.2kW	-15℃ ~ 24℃	27℃ or less	
	6.0kW	-20℃ ~ 24℃		

2) 4way Cassette S, MSP/HSP Duct

Mode	Outdoor Temperature (DB)	Indoor Temperature (DB)	Indoor Humidity (RH)
Cooling / Drying	-15℃ ~ 50℃	18℃ ~ 32℃	80% or less
Heating	-20℃ ~ 24℃	27℃ or less	

Note

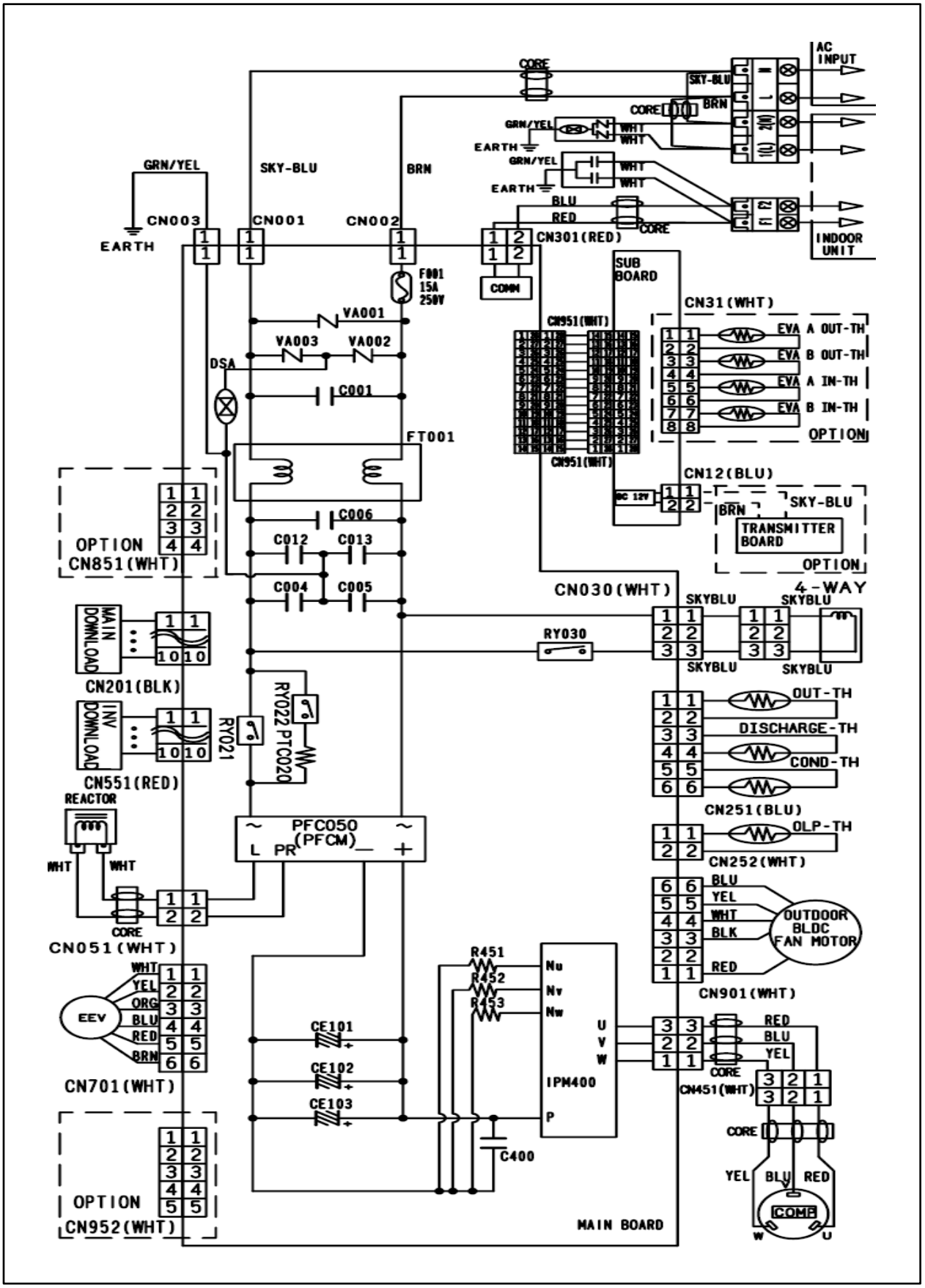
◆ The standardized temperature for cooling is 35℃ DB. If the outdoor temperature rises over 35℃ DB, it does not cool at its full capacity.

◆ The standardized temperature for heating is 7℃ DB. If the outdoor temperature drops to 0℃ DB or below, the heating capacity can be reduced depending on the temperature condition.

◆ The use of the air conditioner at a relative humidity above the expected one (80%) may cause the formation of conden -sate and the leakage of water drops on the floor.

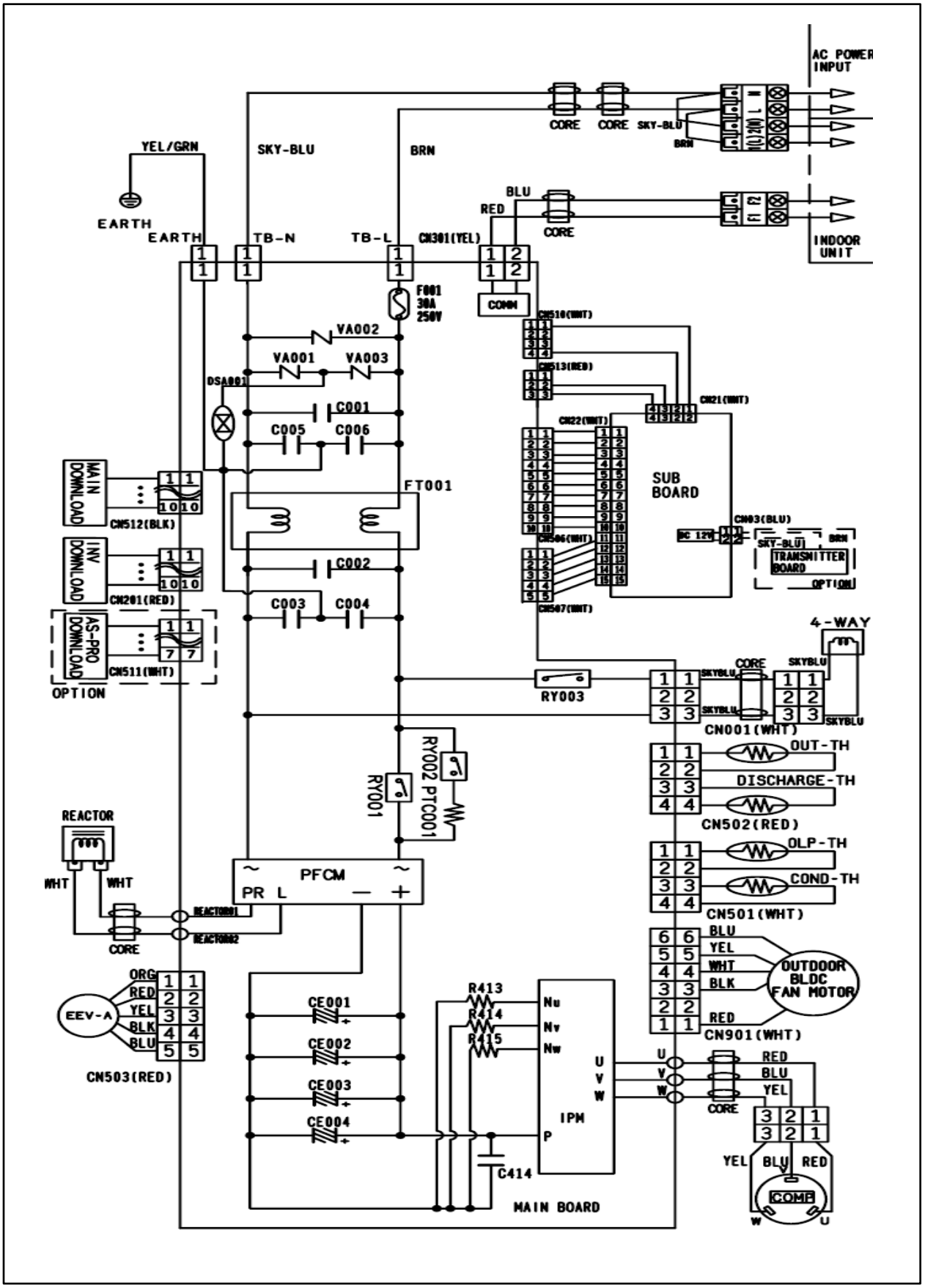
5-3. Electrical Wiring Diagram

1) RC026/035DHXEH/XSA



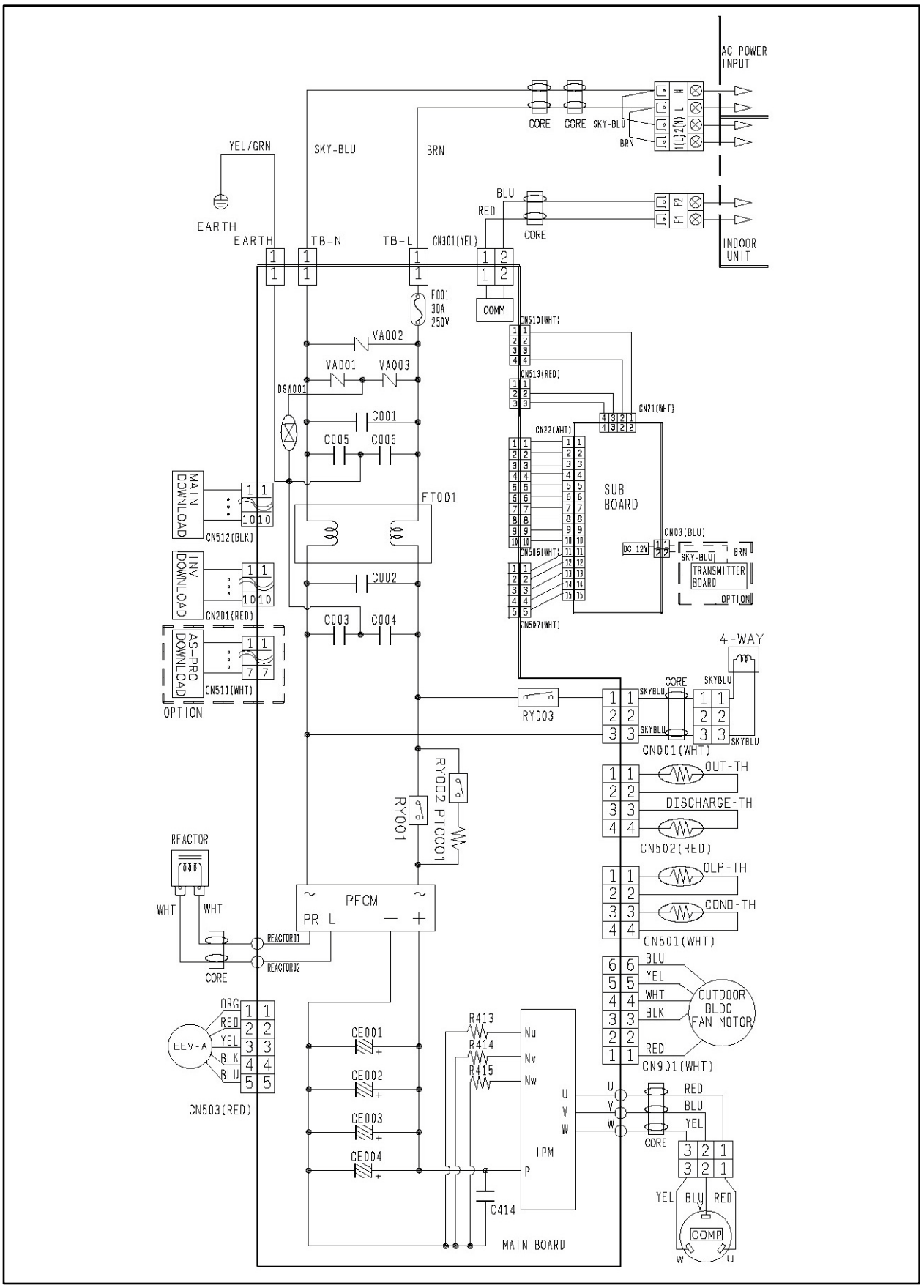
5-3. Electrical Wiring Diagram

2) RC052/060DHXEH/XSA



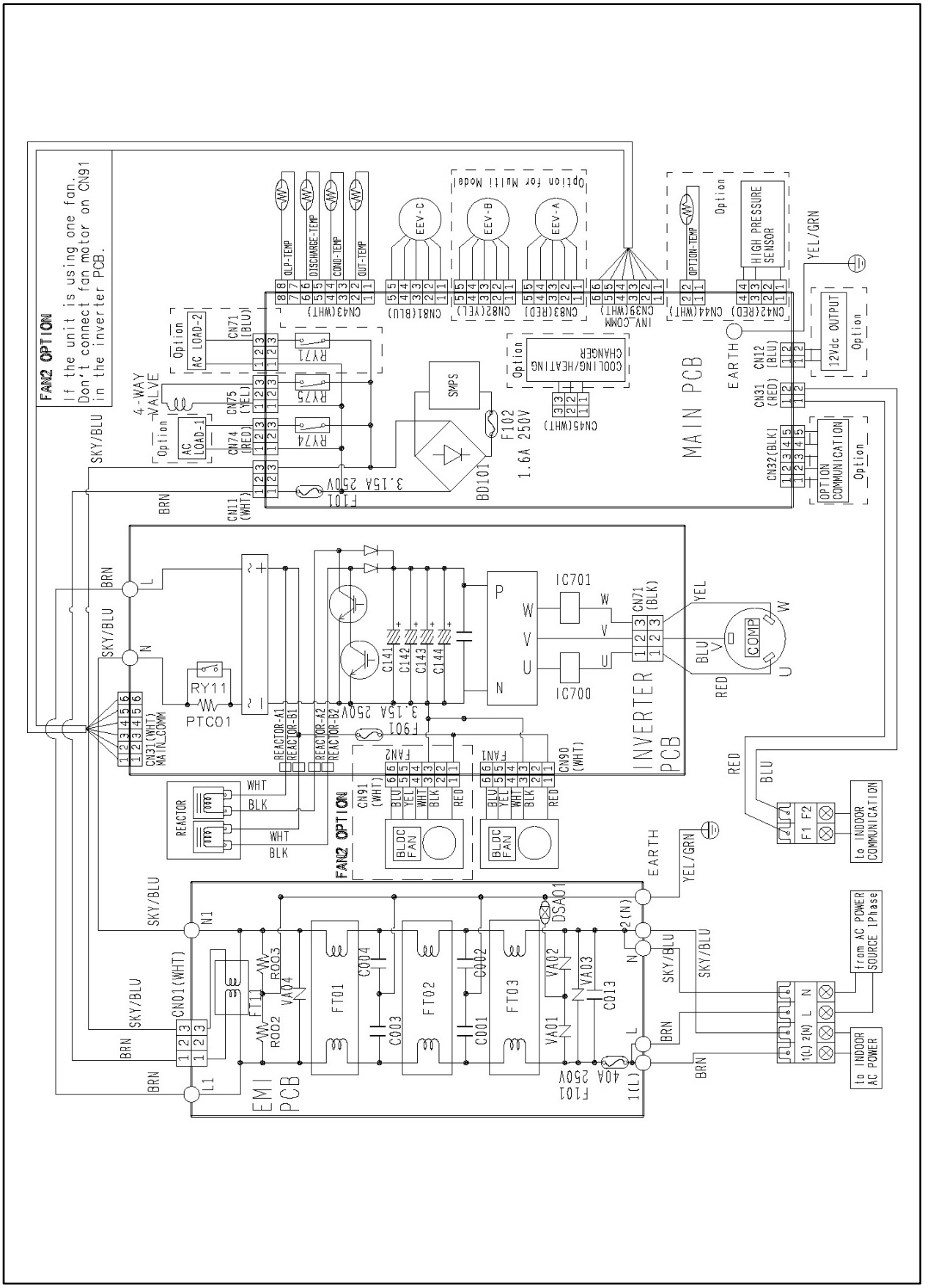
5-3. Electrical Wiring Diagram

3) RC071D/PHXEA/XSA



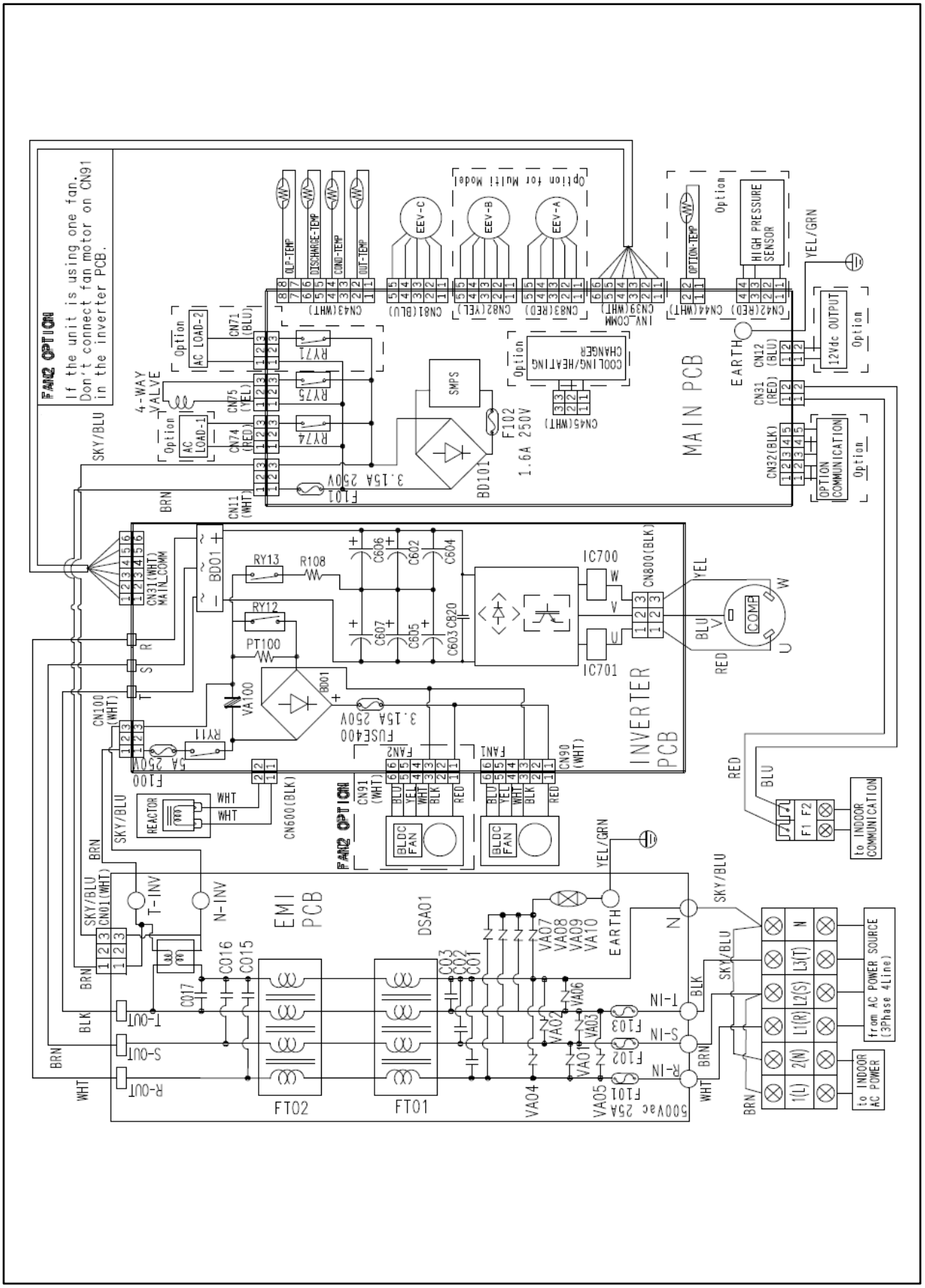
5-3. Electrical Wiring Diagram

4) RC100/125/140/155D/P/ZHXE*/XSA



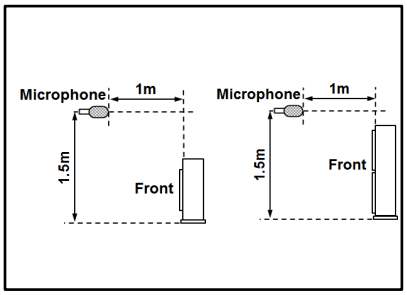
5-3. Electrical Wiring Diagram

5) RC180DHXG*/XSA



5-4. Sound Pressure Level

1) Operation Sound Level



Unit (dB(A))

Model	Cooling	Heating
RC071DHXEA/XSA	49	51
RC071PHXEA/XSA	49	51
RC100PHXEA/XSA	49	51
RC100ZHXEA/XSA	49	51
RC125PHXEA/XSA	51	52
RC140PHXEA/XSA	51	53

Model	Cooling	Heating
RC026DHXEH/XSA	46	47
RC035DHXEH/XSA	47	48
RC052DHXEH/XSA	49	50
RC060DHXEH/XSA	50	51
RC100DHXEH/XSA	50	52
RC125DHXEH/XSA	51	53
RC140DHXEH/XSA	52	54
RC155DHXEH/XSA	53	55
RC180DHXGH/XSA	55	57

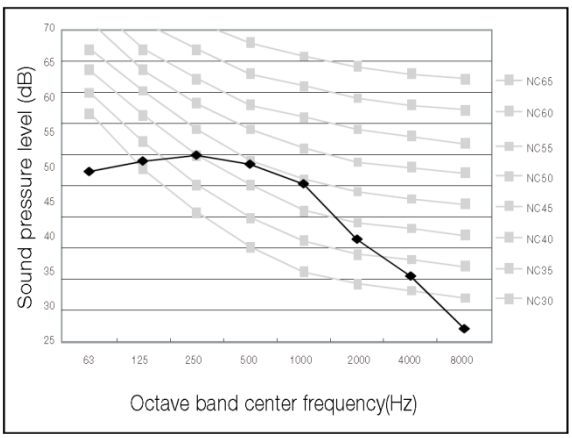
Note

* Specifications may be subject to change without prior notic

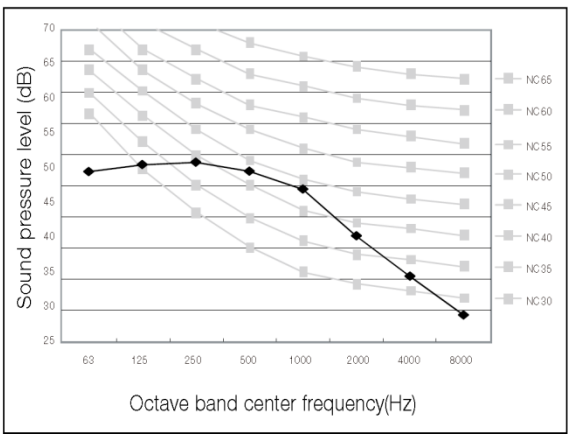
- These operation values are obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition

2) NC Curve

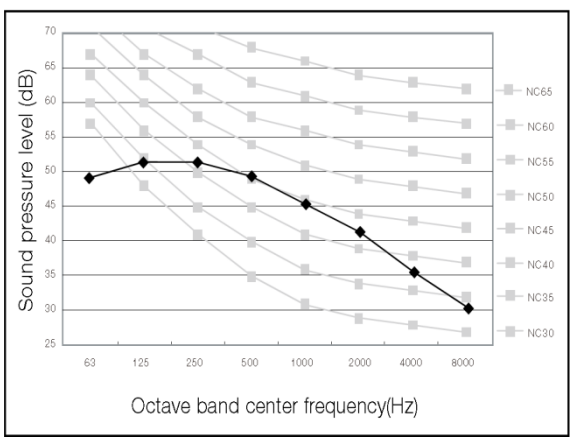
① RC071DHXEA/XSA



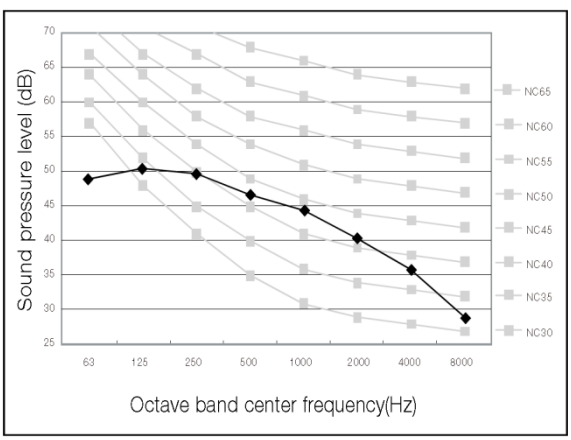
② RC071PHXEA/XSA



③ RC100PHXEA/XSA



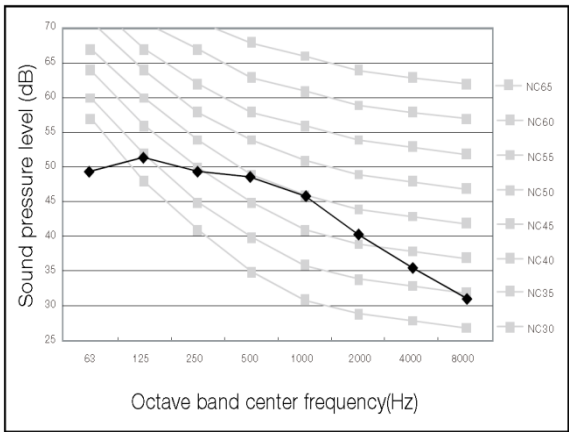
④ RC100ZHXEA/XSA



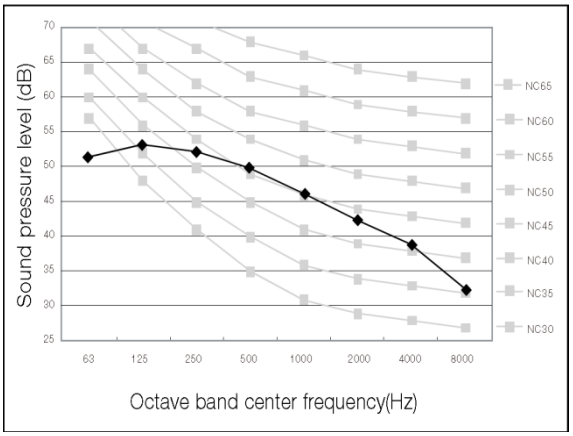
5-4. Sound Pressure Level

2) NC Curve

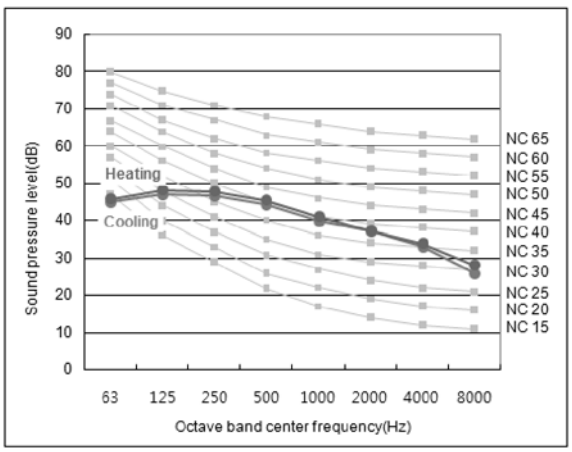
⑤ RC125PHXEA/XSA



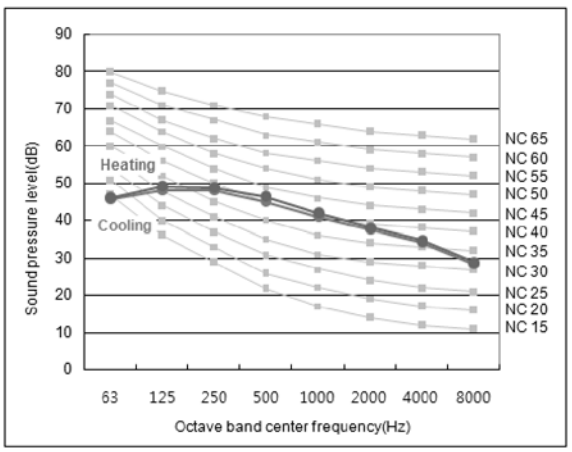
⑥ RC140PHXEA/XSA



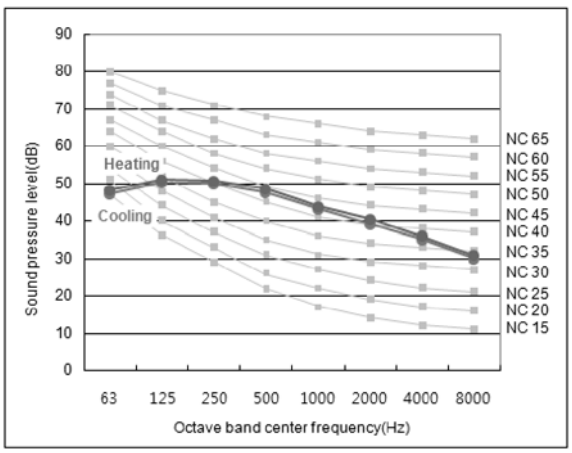
⑦ RC026DHXEH/XSA



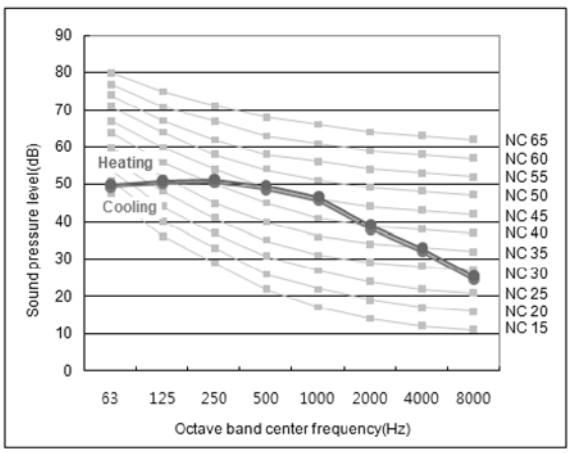
⑧ RC035DHXEH/XSA



⑨ RC052DHXGH/XSA



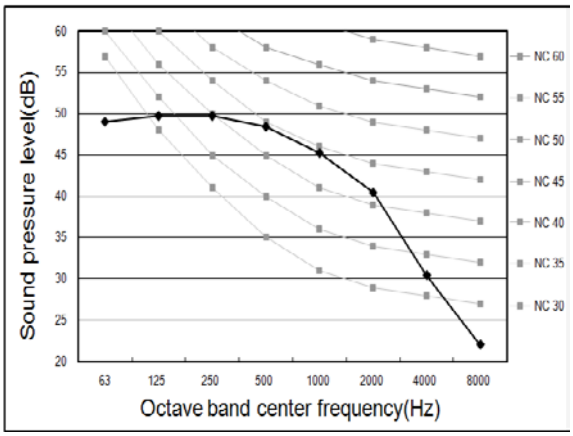
⑩ RC060DHXEH/XSA



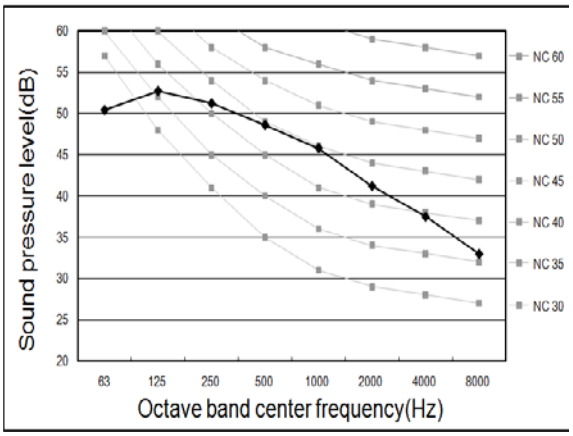
5-4. Sound Pressure Level

2) NC Curve

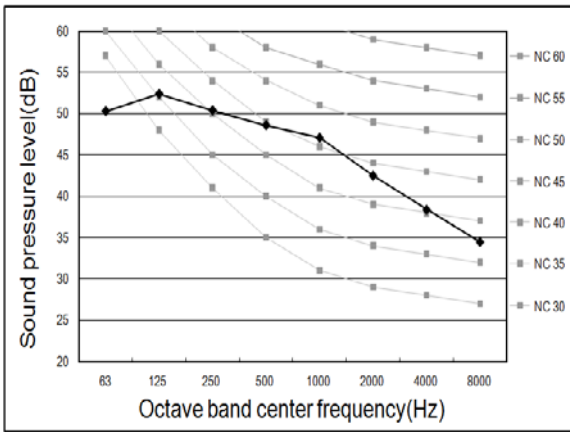
⑪ RC100DHXEH/XSA



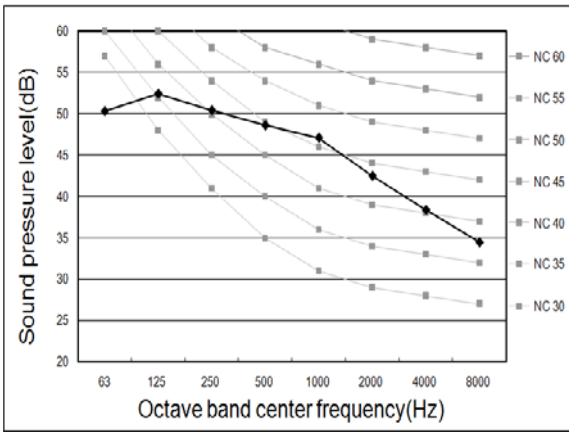
⑫ RC125DHXEH/XSA



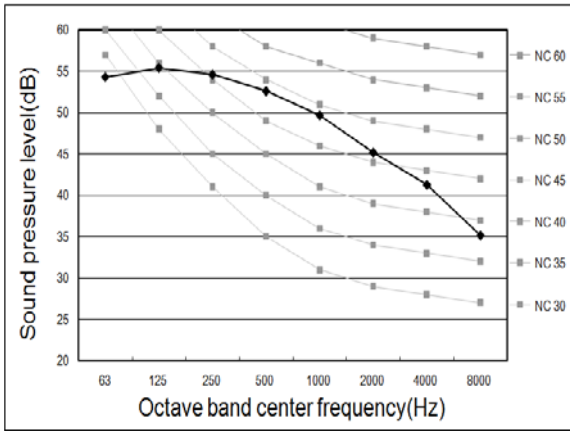
⑬ RC140DHXEH/XSA



⑭ RC155DHXEH/XSA

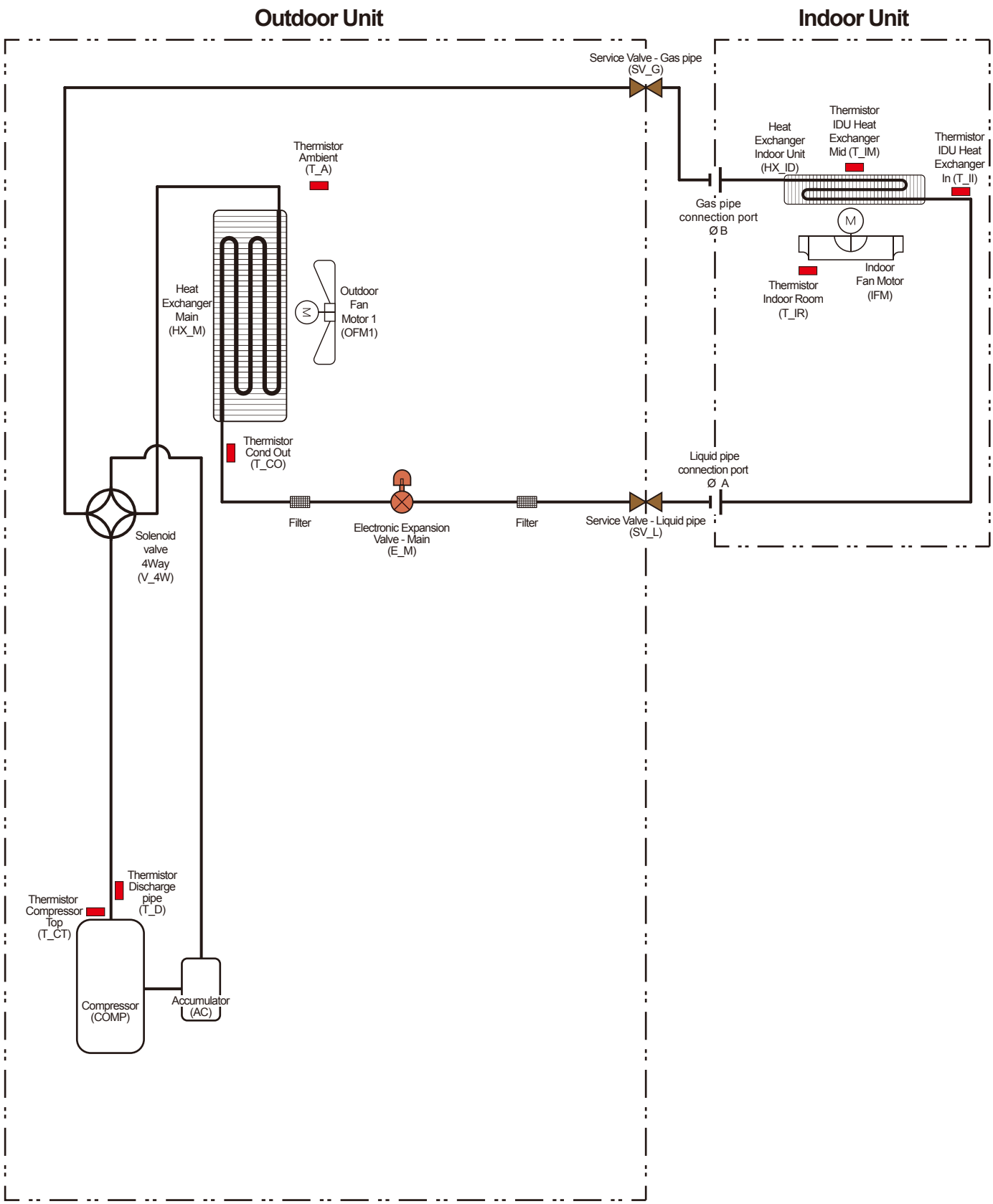


⑮ RC180DHXGH/XSA



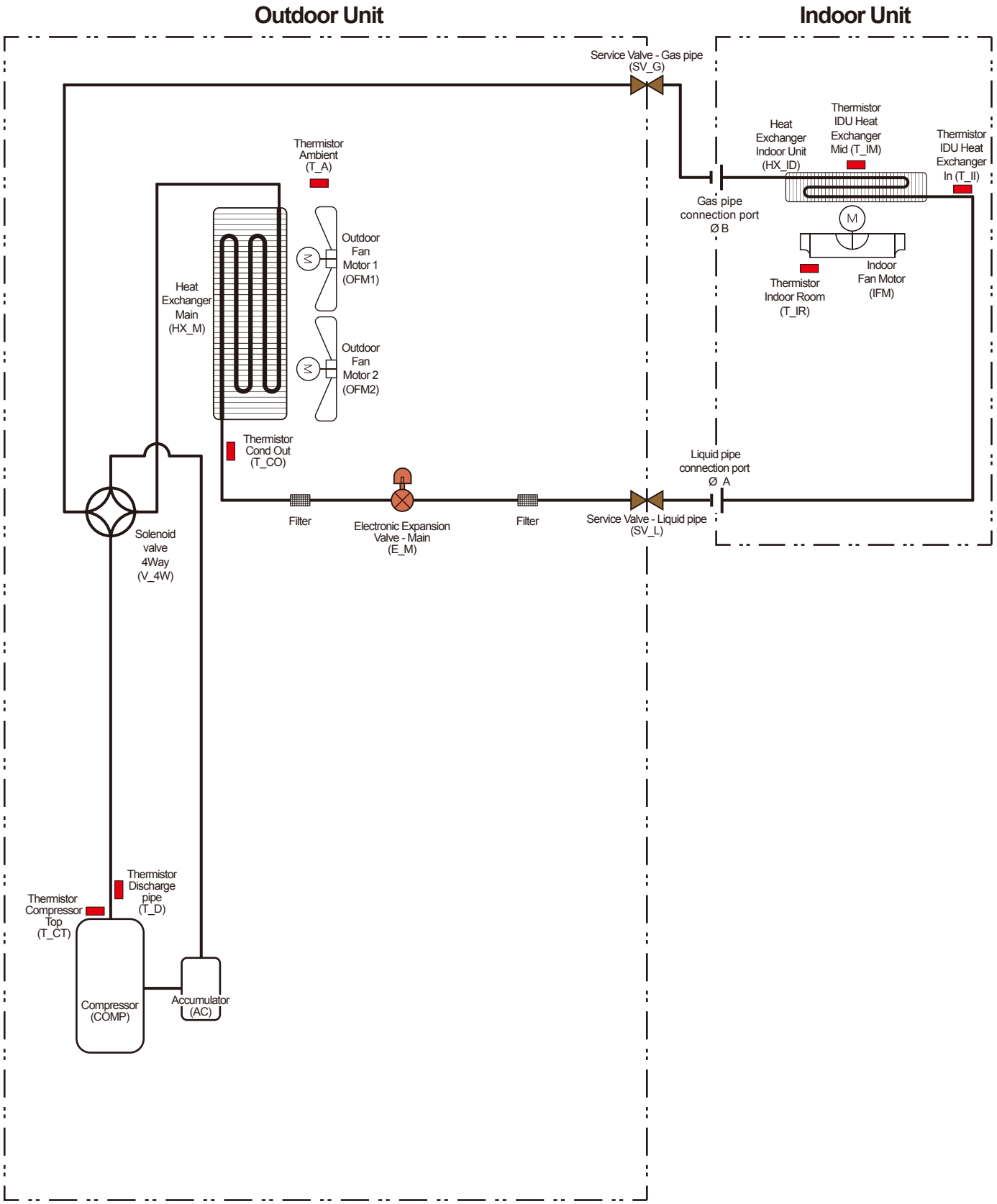
5-5. Cycle Diagram

RC026/035/052DXEH/XSA



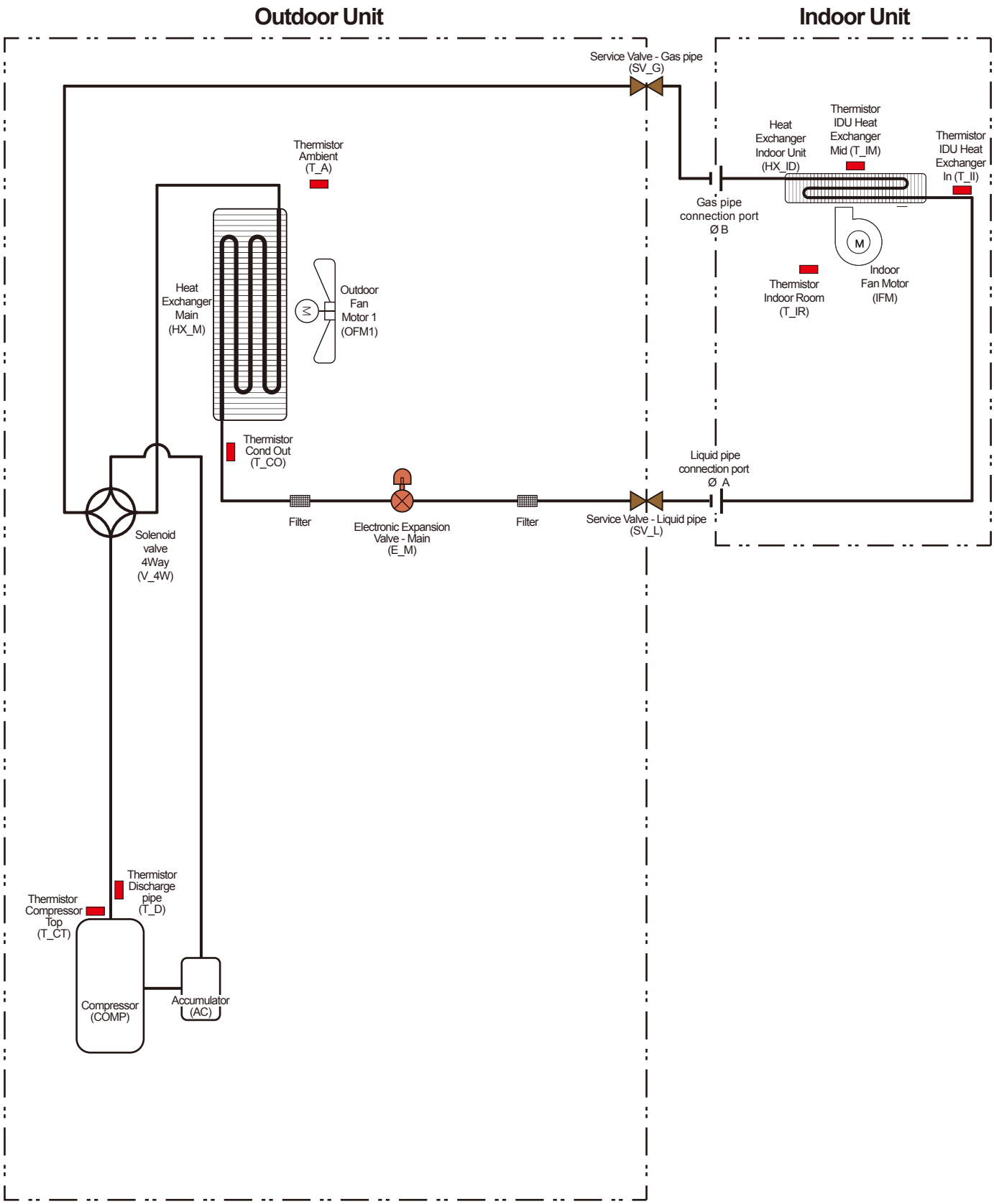
5-5. Cycle Diagram

RC100PHXEA/XSA, RC100ZHXEA/XSA, RC125PHXEA/XSA, RC140PHXEA/XSA



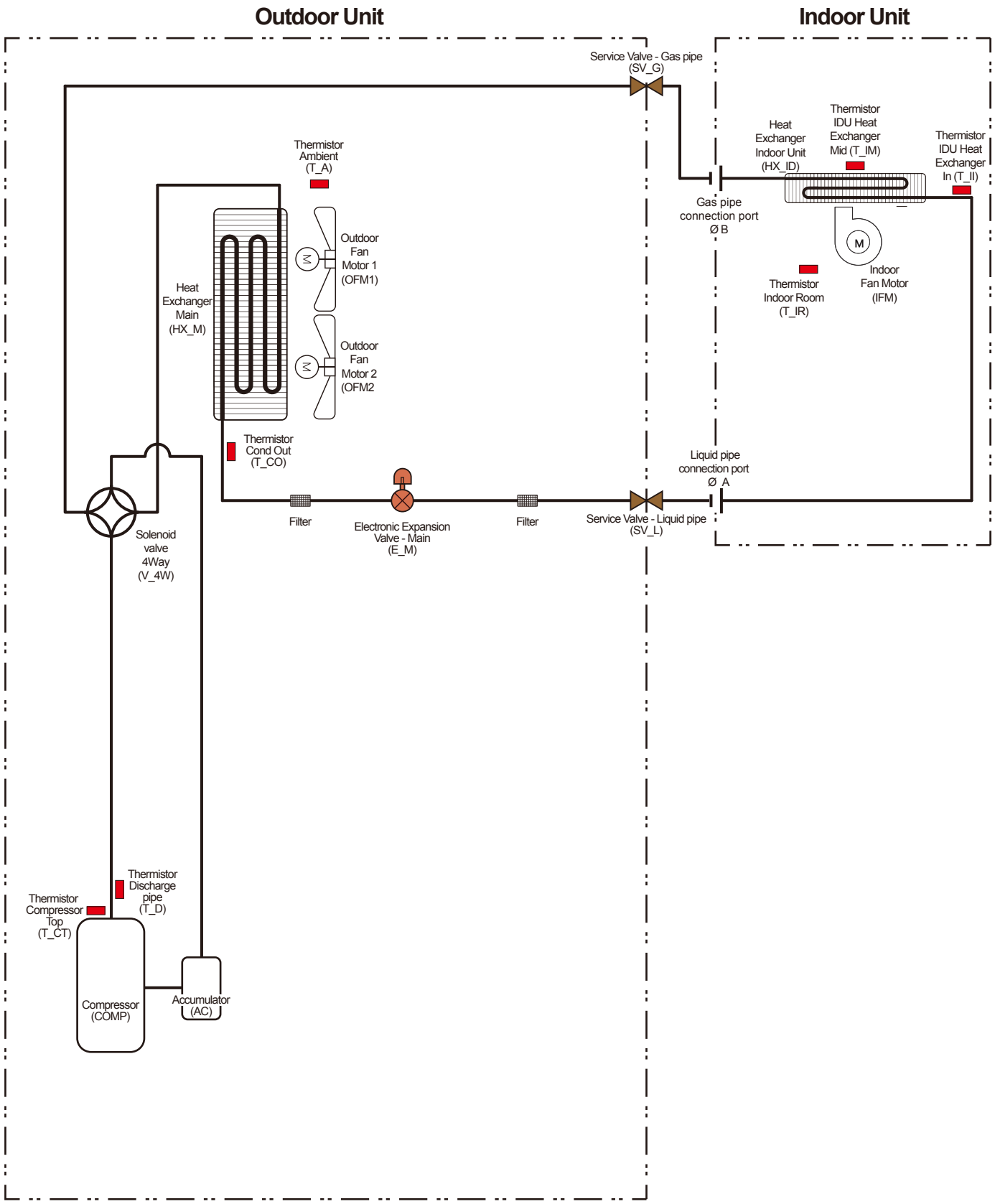
5-5. Cycle Diagram

RC071DHXEA/XSA



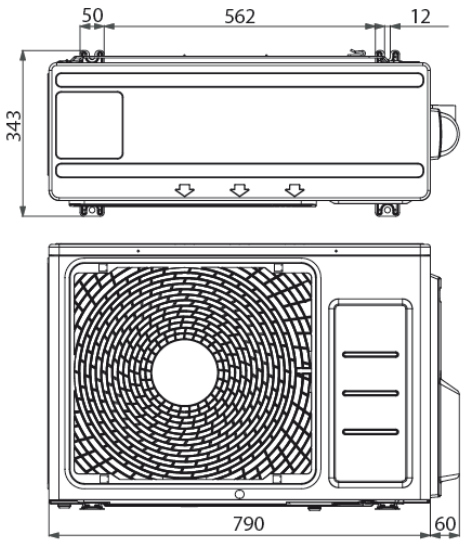
5-5. Cycle Diagram

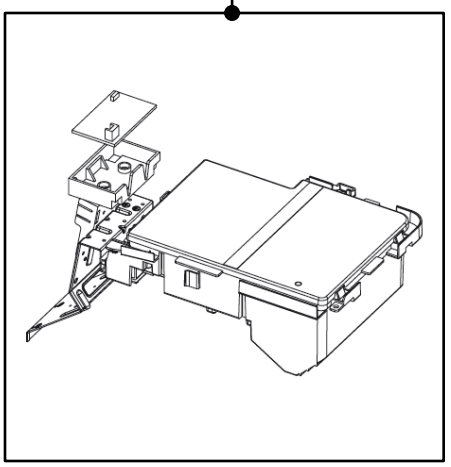
RC071DHXEA/XSA



5-6. Dimensional Drawing

1) RC026/035DHXEH/XSA



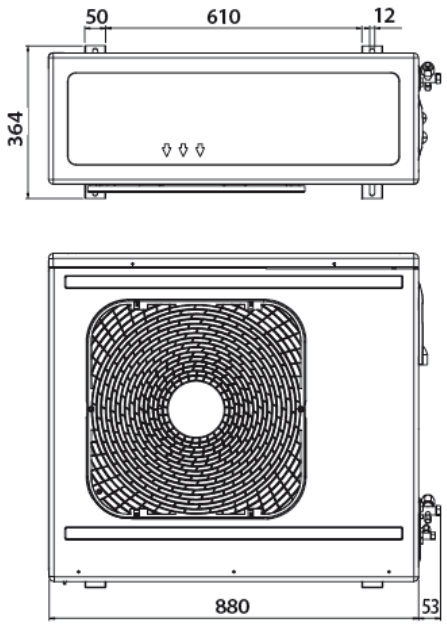


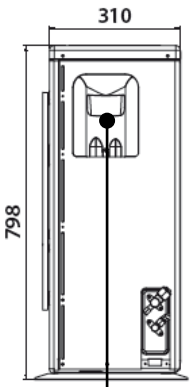
Interface Module
Installation (Option)

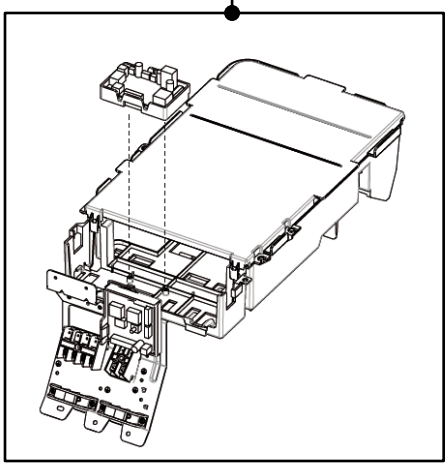
No.	Name		Description	
			RC026D*	RC035D*
①	Gas Ref. Pipe	Φ, mm(inch)	9.35 (3/8)	12.7 (1/2)
②	Liquid Ref. Pipe	Φ, mm(inch)	6.35 (1/4)	6.35 (1/4)
③	Condensate Drain Holes	Φ, mm	20 x 1	
④	Power & Communication Wiring Holes	Φ, mm	-	

5-6. Dimensional Drawing

2) RC052/060/071D(P)*/XSA





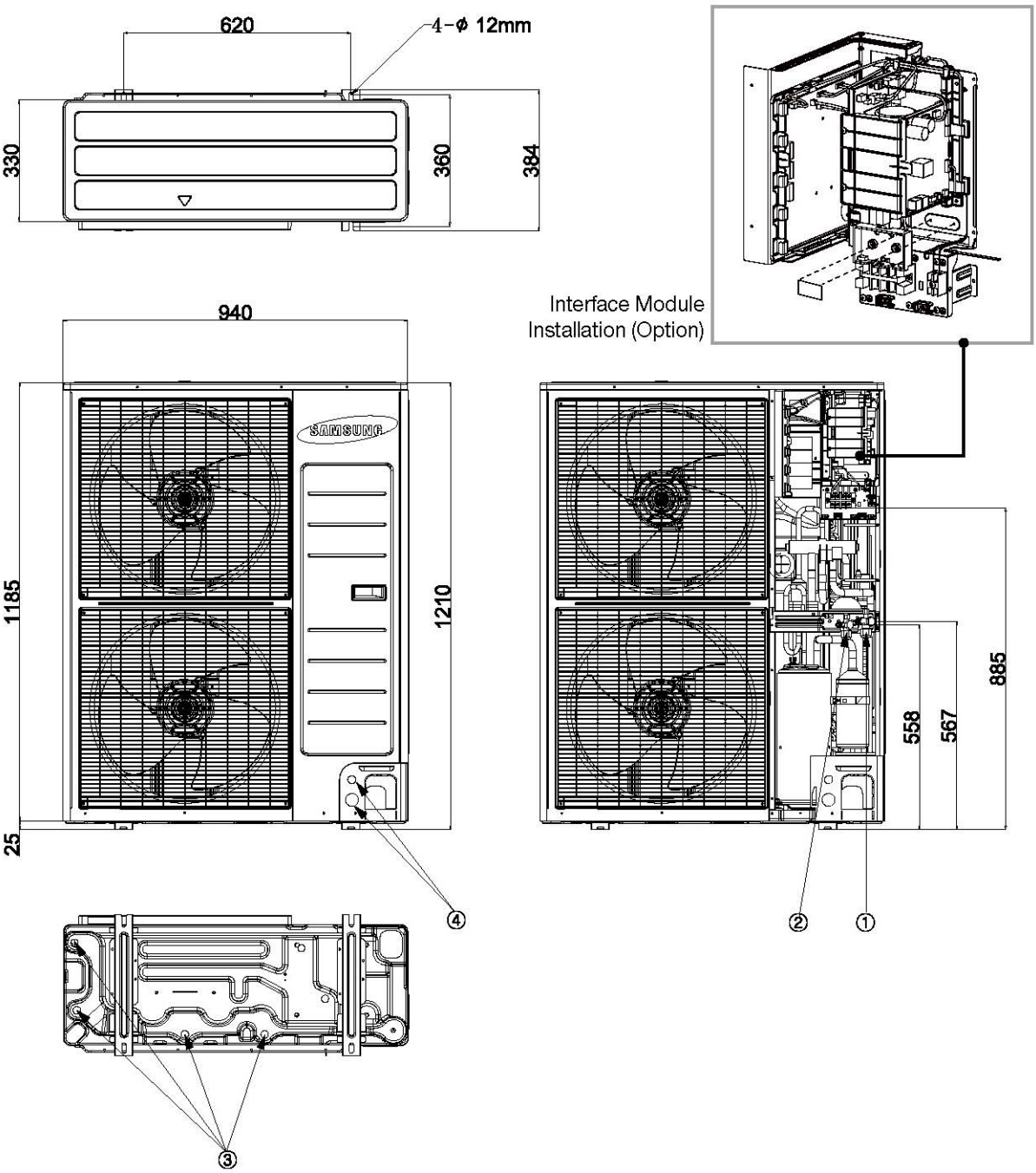


Interface Module
Installation (Option)

No.	Name		Description		
			RC052D*	RC060D*	RC071D(P)*
①	Gas Ref. Pipe	Φ, mm(inch)	15.88 (5/8)		
②	Liquid Ref. Pipe	Φ, mm(inch)	6.35 (1/4)		
③	Condensate Drain Holes	Φ, mm	20 x 1		
④	Power & Communication Wiring Holes	Φ, mm	-		

5-6. Dimensional Drawing

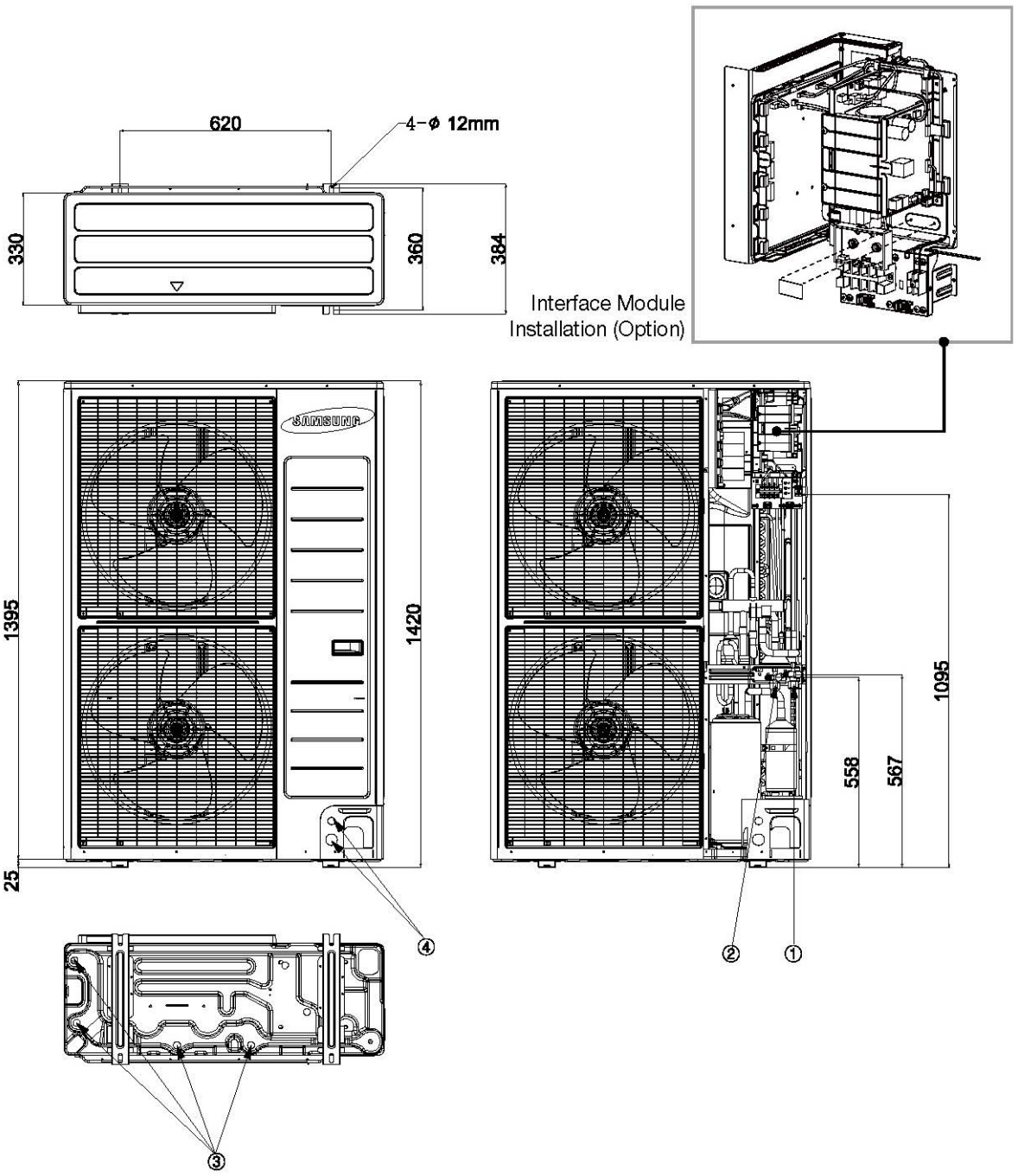
3) RC100P*/XSA, RC100/125D*/XSA



No.	Name		Description	
			100P	*100/125D*
①	Gas Ref. Pipe	Φ, mm(inch)	15.88 (5/8)	19.05 (3/4)
②	Liquid Ref. Pipe	Φ, mm(inch)	9.52 (3/8)	
③	Condensate Drain Holes	Φ, mm	20 x 4	
④	Power & Communication Wiring Holes	Φ, mm	22.2 x 3 / 34.5 x 3	

5-6. Dimensional Drawing

4) RC100Z*/XSA, RC125/140P*/XSA, RC140/155/180D*/XSA



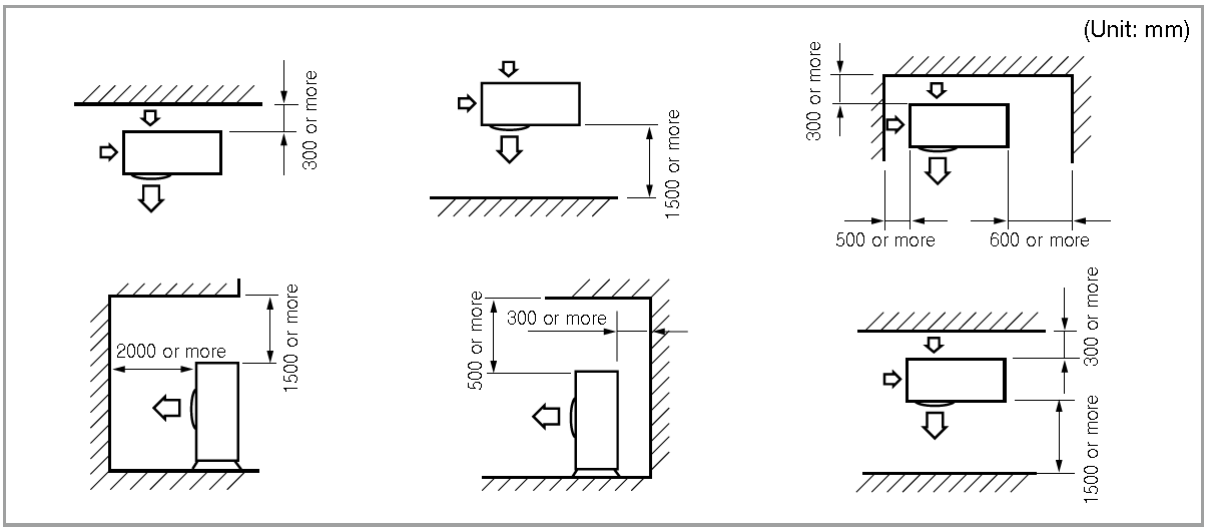
No.	Name		Description	
			100Z, *125/140P*	*140/155/180D*
①	Gas Ref. Pipe	Φ, mm(inch)	15.88 (5/8)	19.05 (3/4)
②	Liquid Ref. Pipe	Φ, mm(inch)	9.52 (3/8)	
③	Condensate Drain Holes	Φ, mm	20 x 4	
④	Power & Communication Wiring Holes	Φ, mm	22.2 x 3 / 34.5 x 3	

III. Installation

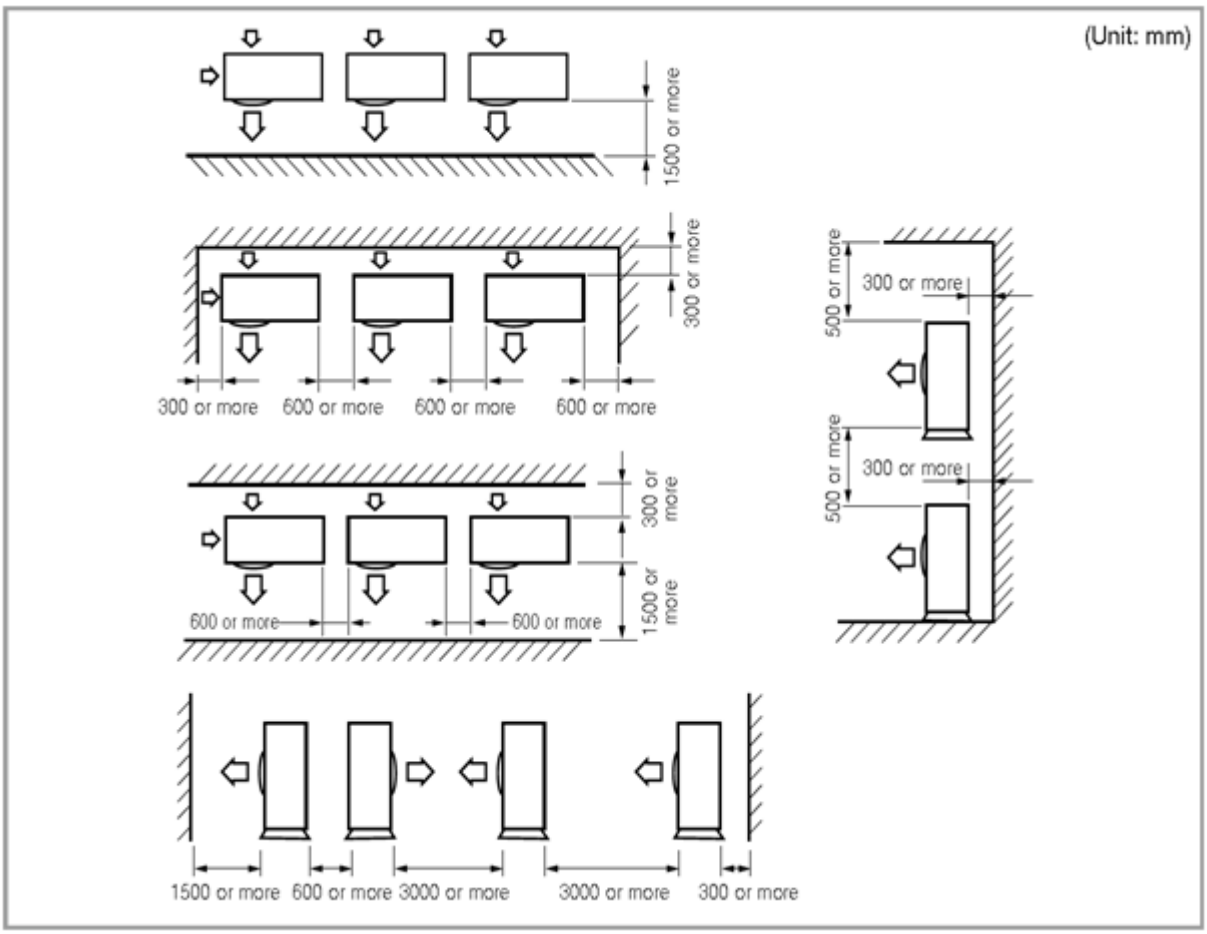
1. Space Requirements ..…….....…… 91
2. Electric Specifications ……..……..…… 92
3. Wiring Works ……..……..…… 93
4. Refrigerant Piping Works ……..…… 95
5. Option Switches & Function Keys ……..…… 96
6. High Ceiling Option (4Way Cassette S only) ……..…… 98
7. Setting an Indoor Unit Address & Installation Option …. 99
8. Error Code ……..……..... 104

1. Space Requirements

1-1. Single Installation



1-2. Group Installation



Note

- ◆ The suggested installation above has concerned minimum installation space.
- ◆ To secure enough service space and performance of system, take account of more sufficient space.

2. Electric Specifications

2-1. Electric Specifications

Product	Model		Outdoor Units					
			Rated		Voltage Range		Power Supply	
	Indoor Unit	Outdoor Unit	Hz	Volts	Min.	Max.	MCA	MFA
Mini 4way Cassette S	ACN026NDEHH/SA	RC026DHXEH/XSA	50	220-240	198	264	10.30	12.50
	ACN035NDEHH/SA	RC035DHXEH/XSA	50	220-240	198	264	10.80	13.13
	ACN052NDEHH/SA	RC052DHXEH/XSA	50	220-240	198	264	20.30	25.00
	ACN060NDEHH/SA	RC060DHXEH/XSA	50	220-240	198	264	20.30	25.00
4way Cassette S	NS0714PXEA/XSA	RC071PHXEA/XSA	50	220-240	198	264	20.30	25.00
	NS1004PXEA/XSA	RC100PHXEA/XSA	50	220-240	198	264	25.00	30.00
	NS1004ZXEA/XSA	RC100ZHXEA/XSA	50	220-240	198	264	25.00	30.00
	NS1254PXEA/XSA	RC125PHXEA/XSA	50	220-240	198	264	25.00	30.00
	NS1404PXEA/XSA	RC140PHXEA/XSA	50	220-240	198	264	33.00	40.00
MSP Duct	NS071SDXEA/XSA	RC071DHXEA/XSA	50	220-240	198	264	20.30	25.00
HSP Duct	NS100HHXEH/XSA	RC100DHXEH/XSA	50	220-240	198	264	26.00	30.00
	NS125HHXEH/XSA	RC125DHXEH/XSA	50	220-240	198	264	26.80	30.00
	NS140HHXEH/XSA	RC140DHXEH/XSA	50	220-240	198	264	35.50	40.00
	NS155HHXEH/XSA	RC155DHXEH/XSA	50	220-240	198	264	36.60	40.30
	NS180HHXEH/XSA	RC180DHXGH/XSA	50	380-415	342	456.5	14.90	16.40

Note

- ◆ Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC : 60245 IEC 57 / CENELEC : H05RN-F)
- ◆ Select power supply cord based on MCA.
- ◆ MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).
- ◆ MCA represents maximum input current.
- ◆ MFA represents capacity which may accept MCA.
- ◆ Communication cable specification : 0.75~1.5㎟, 2wires

※ Abbreviations

- MCA : Minimum Circuit Amps.(A)
- MFA : Maximum Fuse Amps.(A)

3. Wiring Works

3-1. Power Supply and Communication Cable Configuration

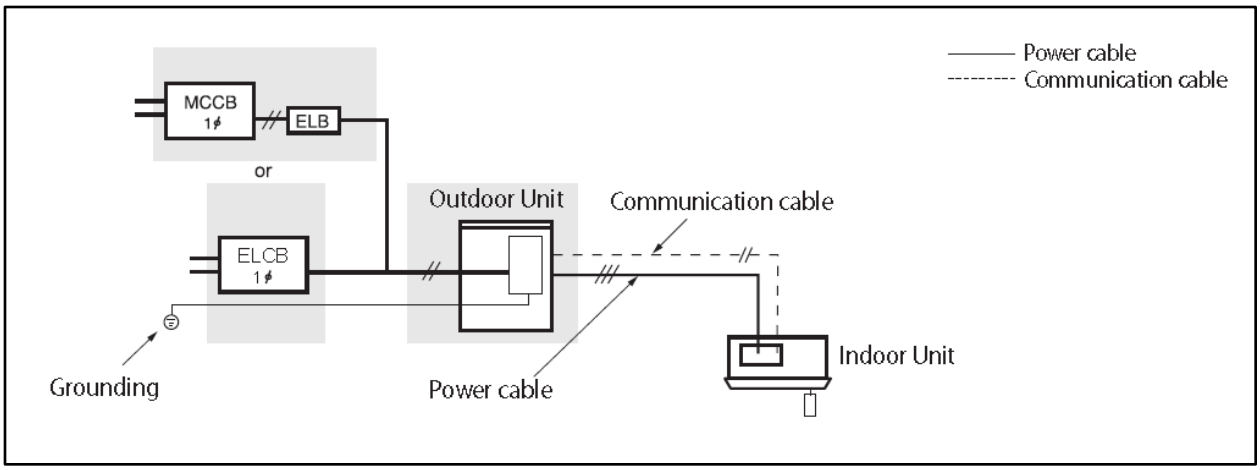
❖ Two electronic cables must be connected to the outdoor unit.

- One is the connection cord between indoor unit and outdoor unit.
- Another is the power cable between outdoor unit and auxiliary circuit breaker.
- Specially for Russian and European market, before installation, the supply authority should be consulted to determine the supply system impedance to ensure compliance.

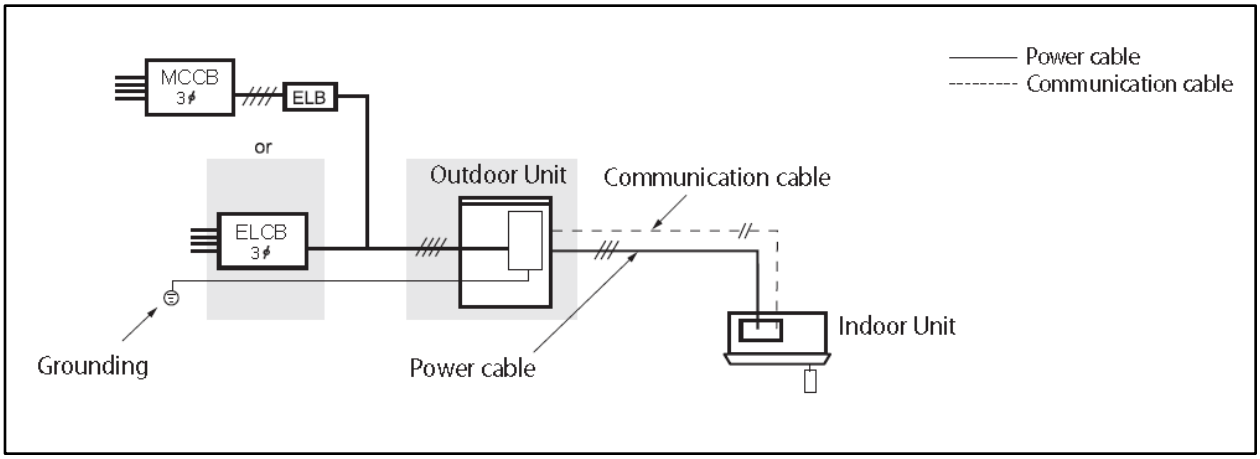
CAUTION

- During the unit installation make first refrigerant connections and then electrical connections. If unit is uninstalled first disconnect electrical cables, then refrigerant connections.
- Connect the air conditioner to grounding system before performing the electrical connection.
- When installing the unit, you shouldn't use inter connection wire.

1) When using ELB for 1 phase



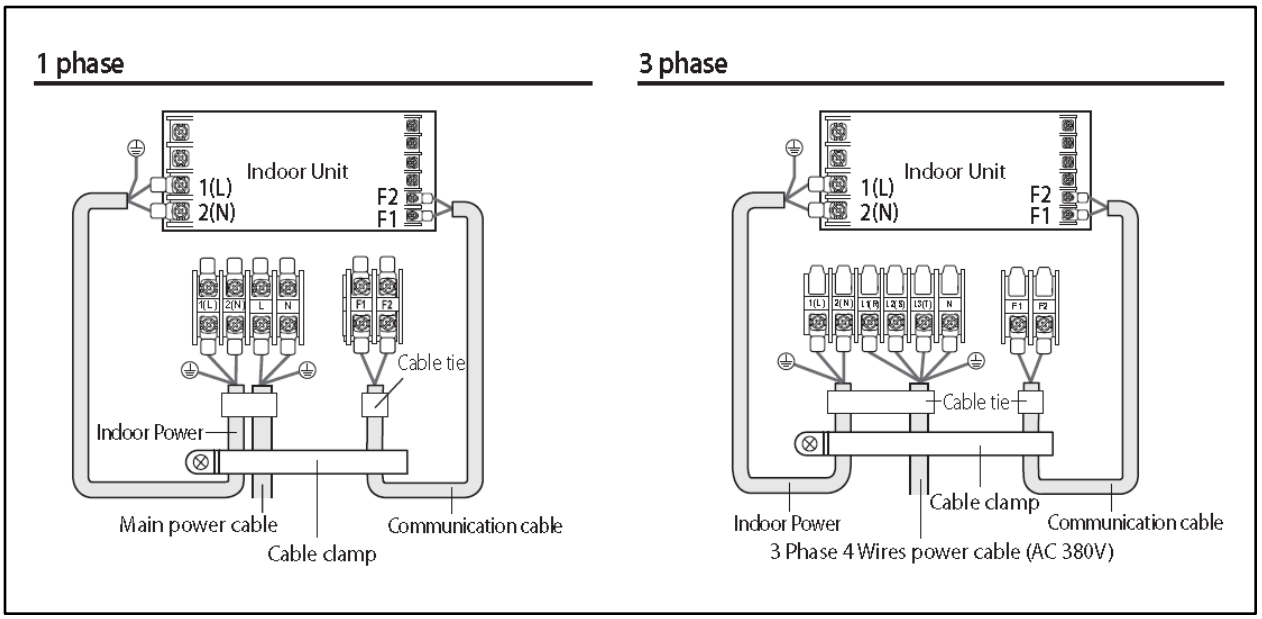
2) When using ELB for 3 phase



❖ If an outdoor unit is installed in a place in danger of an electric leak or submergence, you must install the ELB.

3. Wiring Works

3-2. Wiring Diagram of Connection Cord



Caution

- ◆ You should connect the power cable into the power cable terminal and fasten it with a clamp.
- ◆ The unbalanced power must be maintained within 2% of supply rating.
  - If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 4% of supply rating, the indoor unit is protected, stopped and the error mode indicates.
- ◆ To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units within ducts. (with appropriate IP rating and material selection for your application)
- ◆ Ensure that main supply connection is made through a switch that disconnects all poles, with contact gap of a least 3 mm.
- ◆ Devices disconnected from the power supply should be completely disconnected in the condition of over voltage category.
- ◆ Keep distances of 50mm or more between power cable and communication cable.

NOTE

- Lay the electrical wiring so that the front cover does not rise up when doing wiring work and attach the front cover securely.
- Ground wire for the indoor unit and outdoor unit connection cable must be clamped to a soft copper tin-plated eyelet terminal with M4 screw hole(NOT SUPPLIED WITH UNIT ACCESSORIES).

4. Refrigerant Piping Works

4-1. Piping Specifications

Product	Model		Piping Specifications					
			Pipe Size (mm/inch)		Installation Limitation		Additional Refrigerant	
	Indoor Unit	Outdoor Unit	Liquid	Gas	Max. Length (m)	Max. Height (m)	Chargeless (m)	Additional Ref. Amount (g/m)
Mini 4way Cassette S	ACN026NDEHH/SA	RC026DHXEH/XSA	6.35(1/4)	9.35(3/8)	20	15	20	0
	ACN035NDEHH/SA	RC035DHXEH/XSA	6.35(1/4)	12.7(1/2)	30	20	7.5	10
	ACN052NDEHH/SA	RC052DHXEH/XSA	6.35(1/4)	15.88(5/8)	50	30	7.5	25
	ACN060NDEHH/SA	RC060DHXEH/XSA	6.35(1/4)	15.88(5/8)	50	30	7.5	25
4Way Cassette S	NS0714PXEA/XSA	RC071PHXEA/XSA	6.35(1/4)	15.88(5/8)	50	30	5	25
	NS1004PXEA/XSA	RC100PHXEA/XSA	9.52(3/8)	15.88(5/8)	75	30	30	* 1)
	NS1004ZXEA/XSA	RC100ZHXEA/XSA	9.52(3/8)	15.88(5/8)	75	30	30	* 1)
	NS1254PXEA/XSA	RC125PHXEA/XSA	9.52(3/8)	15.88(5/8)	75	30	30	* 1)
	NS1404PXEA/XSA	RC140PHXEA/XSA	9.52(3/8)	15.88(5/8)	75	30	30	* 1)
MSP Duct	NS071SDXEA/XSA	RC071DHXEA/XSA	6.35(1/4)	15.88(5/8)	50	30	5	25
HSP Duct	NS100HHXEH/XSA	RC100DHXEH/XSA	9.52(3/8)	19.05(3/4)	75	30	30	* 1)
	NS125HHXEH/XSA	RC125DHXEH/XSA	9.52(3/8)	19.05(3/4)	75	30	30	* 1)
	NS140HHXEH/XSA	RC140DHXEH/XSA	9.52(3/8)	19.05(3/4)	75	30	30	* 1)
	NS155HHXEH/XSA	RC155DHXEH/XSA	9.52(3/8)	19.05(3/4)	75	30	30	* 1)
	NS180HHXEH/XSA	RC180DHXGH/XSA	9.52(3/8)	19.05(3/4)	75	30	30	* 1)

*1) Additional Refrigerant Amount (10kW and over)

Pipe Length					
Below 30m	30~40m	40~50m	50~60m	60~70m	70~75m
0	+500g	+1,000g	+1,500g	+2,000g	+2,250g

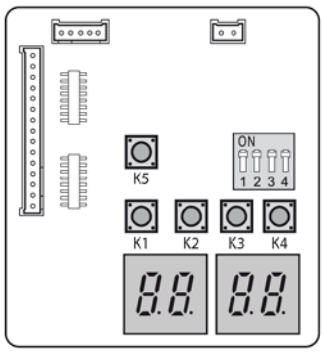
4-2. Insulation of the refrigerant pipe

Pipe	Pipe size	Insulation Type (Heating/Cooling)		Remarks
		Standard [30°C, 85%]	High humidity [30°C, over 85%]	
		EPDM, NBR		
Liquid pipe	Ø6.35 ~ Ø9.52	9t	9t	Internal temperature is higher than 120°C
	Ø12.7 ~ Ø19.05	13t	13t	
Gas pipe	Ø6.35	13t	19t	
	Ø9.52	19t	25t	
	Ø12.70			
	Ø15.88			
	Ø19.05			

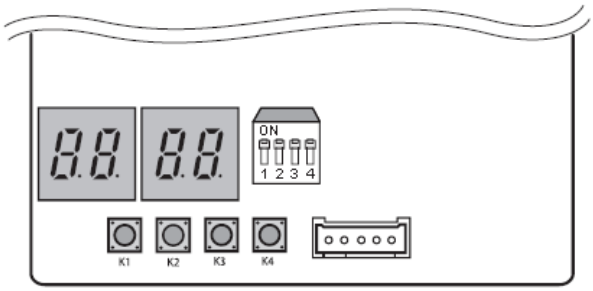
5. Option Switches & Function Keys

5-1. Key Function

● **RC026/035/052/060/071D(P)***



● **RC100/125/140/155/180D(P)***



K1 (Push Time)	Key Operation	7-Segment DIsplay
1	Heating Trial Operation	“K” “1”
2	Defrost Test Mode	“K” “2”
-	End Key Operation	-

K2 (Push Time)	Key Operation	7-Segment DIsplay
1	Cooling Trial Operation	“K” “3”
2	End Key Operation	-

K3 (Push Time)	Key Operation	7-Segment DIsplay
1	Initializing(Reset) Operation	-

K4(Push Time)	Key Operation	F7-Segment DIsplay	
		SEG 1	SEG 2,3,4
1	Order Frequency	1	Ex) 100Hz → 1, 0 , 0
2	Current Frequency	2	Ex) 105Hz → 1, 0 , 5
3	The Number of Current Indoor Units	3	Ex) 1 → 0, 0, 1
4	The Sensor for Outdoor Air Intake	4	Ex) 30℃ → 0, 3, 0
5	Discharge Sensor	5	Ex) 30℃ → 0, 3, 0
6	Eva-Mid Sensor	6	Ex) 30℃ → 0, 3, 0
7	Cond. Sensor	7	Ex) 30℃ → 0, 3, 0
8	Current	8	Ex) 2A → 0, 0, 2
9	Fan RPM	9	Ex) 50rpm → 0, 5, 0
10	Target Discharge Temperature	A	Ex) 30℃ → 0, 3, 0
11	EEV	B	Ex) 100steps → 1, 0, 0
12	The Capacity Sum of Indoor Units	C	Ex) 14kW → 0, 1, 4

5. Option Switches & Function Keys

5-1. Key Function

K4(Push Time)	Key Operation	F7-Segment DIsplay		
		SEG 1	SEG 2,3,4	
13	Protective Control	D	SEG2	0 : Cooling 1 : Heating
			SEG3	Protective Control 0 : No Protective Control 1 : Freezing 2 : Non-Stop Defrosting 3 : Over-Load 4 : Discharge 5 : Total Electric Current
			SEG4	Frequency Status 0 : Normal 1 : Hold 2 : Down 3 : Up_limit 4 : Down_limit
14	The Temperature of Heat Radiating Plate	E	Ex) 30℃ → 0, 3, 0	
15	S/W Check	F	-	

Long Push 1	Main Micom Version	Year (Hex)	Month (Hex)	Date (10 digit)	Date (Unit Digit)
After Short Push 1	Inverter Micom Version	Year (Hex)	Month (Hex)	Date (10 digit)	Date (Unit Digit)
After Short Push 1	E2P Version	Year (Hex)	Month (Hex)	Date (10 digit)	Date (Unit Digit)

※ Long Push K4(Main Micom Ver.) → Short Push 1 more(Inv. Micom Ver.) → Short Push 1 more (E2P Ver.)

❖ How to reset the power supply for the outdoor unit and deactivate the Eco-mode(Standby-mode)

- RC026/035/052/060/071* Models;
  - Press [K3] button to reset the power supply of the outdoor unit.
  - Press [K5] button to deactivate the eco mode (standby mode)
- RC090/100/125/140* Models;
  - Press [K3] button to reset the power supply of the outdoor unit and deactivate the eco mode (Standby mode)

※ Mini 4way & 4way Cassette S models only have the Eco-mode function.

❖ DIP Switch Option

	On (Default)	Off
Switch 1	Auto Address	Manual Address
Switch 2	-	-
Switch 3	Disable Snow Prevention Control	Enable Snow Prevention Control
Switch 4	-	-

6. High Ceiling Option (4Way Cassette S only)

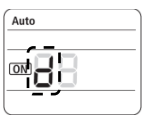
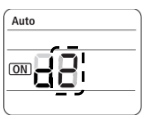
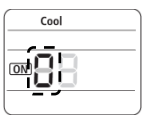
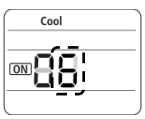
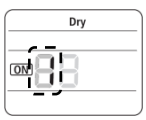
6-1. Allowable Ceiling Height

Model			**0714PX**	**1004PX** **1004ZX** **1254PX** **1404PX**
Net Dimension (W x H x D)		mm	840 x 246 x 840	840 x 288 x 840
Allowable Ceiling Height	Default	m	3.6	4.3
	High Ceiling Mode	m	3.9	4.6

6-2. Option Code of High Ceiling Mode

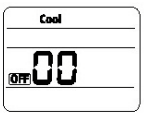
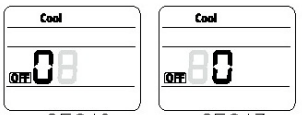
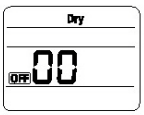
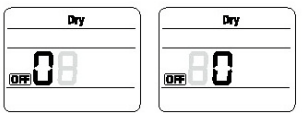
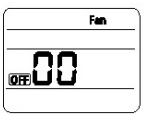
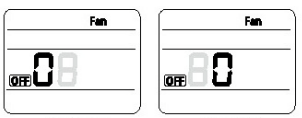
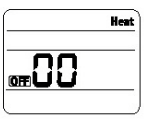
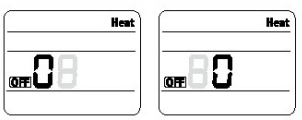
Model	All Models
Default	0D2060
High Ceiling Mode	0D2061

● Display of wireless remote controller

Option	SEG 1	SEG 2	SEG 3	SEG 4	SEG 5	SEG 6
Explanation	PAGE	MODE	The Option mode you want to change	The ten's digit of an option SEG you will change	The unit digit of an option SEG you will change	The changed value
Remote Controller Display	-					
Indication and Details	0	D	2	0	6	1

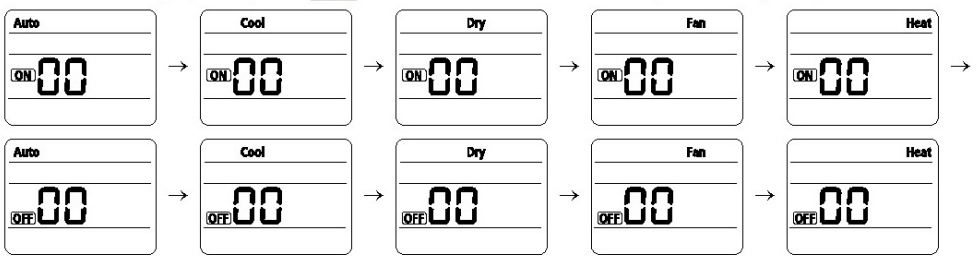
7. Setting an Indoor Unit Address & Installation Option

7-1.The Procedure of Option Setting

Option setting	Status
12. Setting Cool mode Mode Press Mode button to be change to Cool mode in the OFF status.	
13. Setting SEG16, SEG17 option Press Low Fan button(∨) to enter SEG16 value. Press High Fan button(∧) to enter SEG17 value. Each time you press the button, 0 → 1 → ··· E → F will be selected in rotation.	 SEG16 SEG17
14. Setting Dry mode Mode Press Mode button to be change to Dry mode in the OFF status.	
15. Setting SEG18, SEG20 option Press Low Fan button(∨) to enter SEG18 value. Press High Fan button(∧) to enter SEG20 value. Each time you press the button, 0 → 1 → ··· E → F will be selected in rotation.	 SEG18 SEG20
16. Setting Fan mode Mode Press Mode button to be change to Fan mode in the OFF status.	
17. Setting SEG21, SEG22 option Press Low Fan button(∨) to enter SEG21 value. Press High Fan button(∧) to enter SEG22 value. Each time you press the button, 0 → 1 → ··· E → F will be selected in rotation.	 SEG21 SEG22
18. Setting Heat mode Mode Press Mode button to be change to HEAT mode in the OFF status.	
19. Setting SEG23, SEG24 mode Press Low Fan button(∨) to enter SEG23 value. Press High Fan button(∧) to enter SEG24 value. Each time you press the button, 0 → 1 → ··· E → F will be selected in rotation.	 SEG23 SEG24

Step 3. Check the option you have set

After setting option, press Mode button to check whether the option code you input is correct or not.



Step 4. Input option

Press operation button ⏻ with the direction of remote control for set.
For the correct option setting, you must input the option twice.

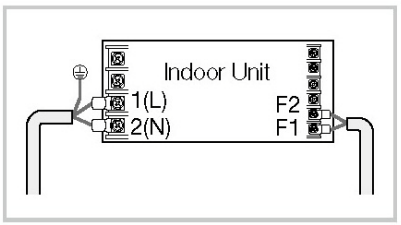
Step 5. Check operation

①. Reset the indoor unit by pressing the RESET button of indoor unit or outdoor unit.
②. Take the batteries out of the remote controller and insert them again and then press the operation button.

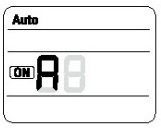
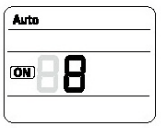
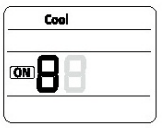
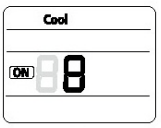
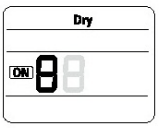
7. Setting an Indoor Unit Address & Installation Option

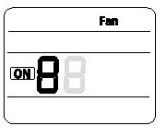
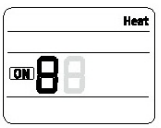
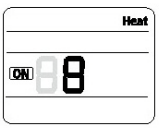
7-2. Setting an Indoor Unit Address (MAIN/RMC)

1) Check whether power is supplied or not.
   - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
2) The panel(display) should be connected to an indoor unit to receive option.
3) Before installing the indoor unit, assign an address to the indoor unit according to the air conditioning system plan.
4) Assign an indoor unit address by wireless remote controller.
   - The initial setting status of indoor unit ADDRESS(MAIN/RMC) is "0A0000-100000-200000-300000".



Option No. : 0AXXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		Setting Main address		100-digit of indoor unit address		10-digit of indoor unit		The unit digit of an indoor unit	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		A		0	No Main address	0~9	100 -digit	0~9	10-digit	0~9	A unit digit
					1	Main address setting mode						

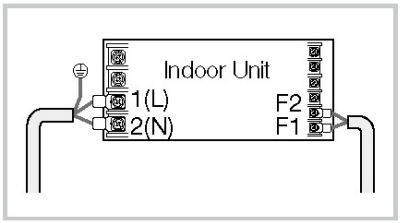
Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12	
Explanation	PAGE				Setting RMC address				Group channel(*16)		Group address	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	1				0	No RMC address			RMC1	0~2	RMC2	0~F
					1	RMC address setting mode						

CAUTION

- When "A"~"F" is entered to SEG5~6, the indoor unit MAIN ADDRESS is not changed.
- If you set the SEG 3 as 0, the indoor unit will maintain the previous MAIN ADDRESS even if you input the option value of SEG5~6.
- If you set the SEG 9 as 0, the indoor unit will maintain previous RMC ADDRESS even if you input the option value of SEG11~12.

7. Setting an Indoor Unit Address & Installation Option

7-3. Setting an Indoor Unit Installation Option (suitable for the condition of each installation location)

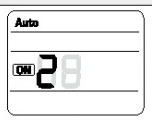
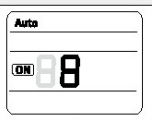
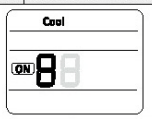
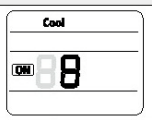
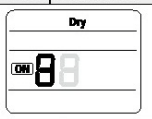


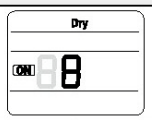
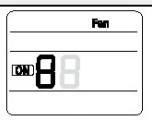
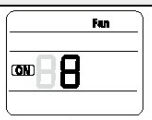
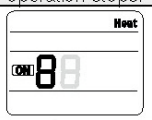
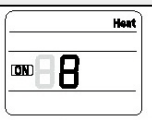
1) Check whether power is supplied or not.
   - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
2) The panel(display) should be connected to an indoor unit to receive option.
3) Set the installation option according to the installation condition of an air conditioner.
   - The default setting of an indoor unit installation option is "02000-100000-200000-300000".
   - Individual control of a remote controller(SEG20) is the function that controls an indoor unit individually when there is more than one indoor unit.
4) Set the indoor unit option by wireless remote controller.

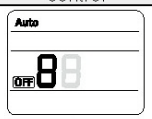
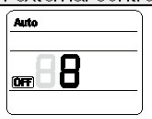
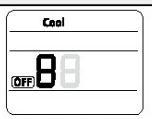
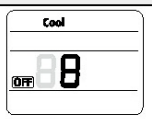
SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	RESERVED	Exterior temperature sensor	Central control	FAN RPM compensation
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	Drain pump	Hot water heater	Electronic heater	Opening the electronic expansion valve	Master / Slave
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	External control	External control output	S-Plasma ion	Buzzer	Number of hours using filter
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	Individual control of a remote controller	Heating setting compensation	EEV opening of an indoor unit stopped during oil return or Defrost operation.	-	

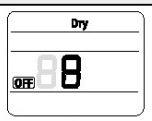
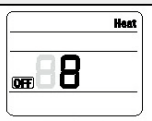
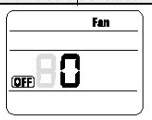
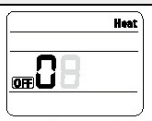
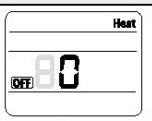
▶ 1WAY/2WAY/4WAY MODEL : Drain pump(SEG8) will be set to 'USE + 3minute delay' even if the drain pump is set to 0.
▶ 1 WAY/2WAY/4WAY,DUCT MODEL : Number of hours using filter(SEG18) will be set to '1000hour' even if the SEG18 is set to exept for 2 or 6.
▶ If you input a number other than 0~4 of the individual control of the indoor unit(SEG20), the indoor is set as "indoor 1".

Option No. : 02XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		RESERVED		Use of external temperature sensor		Use of central control		FAN RPM compensation	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		2				0	Disuse	0	Disuse	0	Disuse
											1	RPM compensation
							1	Use	1	Use		

Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12	
Explanation	PAGE		Use of drain pump		Use of hot water heater		Use of electronic heater		Opening the electronic expansion valve of an indoor unit when heating operation stops.		Master / Slave	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	1		0	Disuse	0	Disuse	0	Disuse	0	0	0	slave
			1	Use	1	Use	1	Use	1	80	1	master
			2	Use + 3minute delay								

Option	SEG13		SEG14		SEG15		SEG16		SEG17		SEG18	
Explanation	PAGE		Use of external control		Setting the output of external control		S-Plasma ion		Buzzer control		Number of hours using filter	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	2		0	Disuse	0	Thermo on	0	Disuse	0	Mixed operation control1/Use buzzer	2	1000 Hour
			1	ON/OFF Control	1	Operation on	1	Use	1	Mixed operation control1/ Disuse of buzzer	6	2000 Hour
									2	Mixed operation control2/Use buzzer		
			2	OFF Control					3	Mixed operation control2/ Disuse of buzzer		

Option	SEG19		SEG20		SEG21		SEG22		SEG23		SEG24	
Explanation	PAGE		Individual control of a remote controller		Heating setting compensation		EEV opening of an indoor unit stopped during oil return or defrost operation.					
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	3		0 or 1	channel 1	0	Disuse	0	150 step				
			2	channel 2	1	2°C	1	0 step				
			3	channel 3	2	5°C						
			4	channel 4								

7. Setting an Indoor Unit Address & Installation Option

7-4. Changing a Particular Option

You can change each digit of set option.

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		The option mode you want to change		The tens' digit of an option SEG you will change		The unit digit of an option SEG you will change		The changed value	
Remote Controller Display			Auto ON d		Auto ON 8		Cool ON 8		Cool ON 8		Dry ON 8	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		D		Option mode	0~F	Tens' digit of SEG	0~9	Unit digit of SEG	0~9	The changed value	0~F

☑ *Note*

◆ When changing a digit of an indoor unit address setting option, set the SEG3 as 'A'.

◆ When changing a digit of indoor unit installation option, set the SEG3 as '2'.

Ex) When setting the 'buzzer control' into disuse status.

Option	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
Explanation	PAGE	MODE	The option mode you want to change	The tens' digit of an option SEG you will change	The unit digit of an option SEG you will change	The changed value
Indication	0	D	2	1	7	1

7-5. Product Option Code

Product	Indoor Unit	Option Code
Mini 4way Cassette S	ACN026NDEHH/SA	015077 - 1660F8 - 271A21 - 370000
	ACN035NDEHH/SA	015077 - 166219 - 272328 - 370040
	ACN052NDEHH/SA	015077 - 17625D - 273437 - 370040
	ACN060NDEHH/SA	015077 - 18626E - 273C40 - 370040
4way Cassette S	NS0714PXEA/XSA	014077 - 1360D9 - 274750 - 370020
	NS1004PXEA/XSA	014077 - 157239 - 276470 - 370040
	NS1004ZXEA/XSA	014077 - 156249 - 276470 - 370040
	NS1254PXEA/XSA	014077 - 15723A - 277D8C - 370040
	NS1404PXEA/XSA	014077 - 15624B - 278CA0 - 370040
MSP Duct	NS071SDXEA/XSA	011037 - 11618C - 274750 - 370010
HSP Duct	NS100HHXEH/XSA	011014 - 15624F - 276470 - 370000
	NS125HHXEH/XSA	011034 - 156123 - 277D8C - 370000
	NS140HHXEH/XSA	011034 - 116189 - 278CA0 - 370000
	NS155HHXEH/XSA	011034 - 116189 - 279BAA - 370000
	NS180HHXEH/XSA	011074 - 1660C6 - 27B4D2 - 370010

8. Error Code

Code	Explanation
E101	Indoor Unit Communication Error
E102	Indoor/Outdoor Unit Communication Time Out Error 60 Packet Over Data
E121	Indoor Temp. Sensor (Open/Short Error)
E122	Indoor Unit Eva. In Temp. Sensor (Open/Short Error)
E128	Indoor Unit Eva. In Sensor Separation
E129	Indoor Unit Eva. Out Sensor Separation.
E153	Indoor Float Switch 2nd Detection
E201	Unit Quantity Miss Matching between Indoor Unit and Outdoor Unit
E202	Abnormal state or 1 Min. Time Out Comm. between Indoor Unit and Outdoor Unit
E203	Communication Error between Outdoor Main & Inverter Micom. (Occurred after 1 minute detection in Main & Inverter)
E221	Outdoor Temp Sensor Error
E231	Cond. Temperature Sensor Error (Open/Short Error)
E237	Cond. Temperature Sensor Error (Open/Short Error)
E251	Discharge Temperature Sensor Error (Open/Short Error)
E320	OLP Sensor Error
E403	Detection of Outdoor Freezing when Comp Stop
E404	Protection of Outdoor Overload when Comp Stop
E416	Discharge Over Temperature Error when Comp Stop
E419	EEV Open Error (Self Diagnosis)
E422	EEV Close Error (Self Diagnosis)
E425	Power Cable Misconnection Error
E440	Out of Operation Temperature Range in Heating
E441	Out of Operation Temperature Range in Cooling
E458	Outdoor Fan 1 Error
E460	Outdoor unit ~ Indoor unit Communication Wire Misconnection (Connected to Power Terminal)
E461	Compressor Starting Error
E462	Current Trip Error / PFC Over Current
E463	OLP Over Heat and Comp Stop
E464	IPM Over Current(O.C) Error
E465	Compressor Over Load Error
E466	DC-Link Under/Over Voltage Error
E467	Compressor Wire Missing Error
E468	Current Sensor Error
E469	DC Link Voltage Sensor Error
E471	Outdoor EEPROM Error
E472	Inverter Micom Zero-Crossing Error
E473	Compressor Lock Error
E474	Heat-sink Sensor Error
E475	Outdoor Fan 2 Error
E483	Over AC-Voltage Error
E484	PFC Over Load Error
E485	Input-Current Sensor Error
E500	Heat-sink Over Heat Error
E554	Gas Leak Error
E556	Capacity Miss Matching between Indoor Unit and Outdoor Unit
E557	Option Code Miss Matching among the Indoor Units (for DPM only)
E601	Communication Error between Indoor unit & Wired Remote Control.
E602	Communication Error between Master & Slave Wired Remote Control.
E606	COM1/COM2 Cross-installed Error
ER	Error of Setting Option for Wired Remote Control COM2

SAMSUNG

2017.03
DB98-11086F(3)

SAMSUNG

SAMSUNG ELECTRONICS Co., Ltd.
Digital Appliances Business, Digital Air Solution Marketing Group.

Head Office (Suwon Korea) : 416, Maetan 3-dong, Yeongtong-gu, Suwon-Si, Gyeonggi-do, Korea 443-742
Website : www.dvmsystem.com Email : airconditioner@samsung.com