

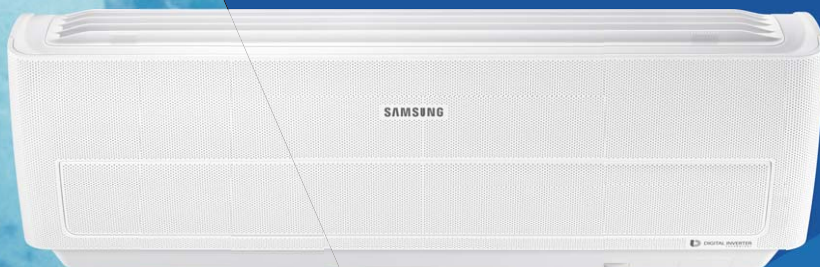
SAMSUNG

RAC

Technical

Data Book

Wind Free RAC for North America
(R410A, HP)



Model : AR**MSWXCWKNCV (Indoor Unit)
AR**MSWXCWKXCV (Outdoor Unit)

History

Version	Modification	Date	Remark
Ver.1.0	Release Wind Free RAC TDB for North America	17. 03. 30	

Nomenclature

Model Name

AR	09	M	S	W	X	C	WK	N	/	CV
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8)		Buyer

(1) Classification

AR	RAC
AF	FAC/PAC

(2) Capacity

x1000 kBtu/h

(3) Year

H	2014
J	2015
K	2016
M	2017

(4) Product Type

R	On/Off R410A CO
Q	On/Off R410R HP
V	INVERTER R410R CO
S	INVERTER R410R HP

(5) Rating Voltage

W, F	208~230V, 60Hz, 1Ø, No Virus Doctor
S	208~230V, 60Hz, 1Ø, Virus Doctor
A	115V, 60Hz, 1Ø, No Virus Doctor
Z	115V, 60Hz, 1Ø, Virus Doctor

(6) Design Segment

X	Wind-Free
D	Pearl
S	Whisper
P	Quantum

(7) Version

A-Z (1 digit)

*P : Max Heat

(8) Color

WK	DA White
WQ	DA White
GM	PM Gray

(9) Set

N	Indoor Unit
X	Outdoor Unit

Contents

1. Specification	5
2. Capacity Table	7
3. Dimensional Drawing	9
4. Electrical Wiring Diagram	11
5. Sound Data	13
6. Temperature and air flow distribution	15
7. Piping Diagram	17
8. Operation Range	18
9. Capacity Correction	19

1. Specification

Model Name		SET			AR09MSWXCWK/CV	AR12MSWXCWK/CV
		Indoor Unit			AR09MSWXCWKNCV	AR12MSWXCWKNCV
		Outdoor Unit			AR09MSWXCWKXCV	AR12MSWXCWKXCV
System	Mode			-	HEAT PUMP	HEAT PUMP
	Capacity	Cooling (Min / Std / Max)		kW	0.65/2.64/3.40	0.65/3.52/3.99
				Btu/h	2,200/9,000/11,000	2,200/12,000/13,600
				US RT	0.18/0.75/0.92	0.18/1.00/1.13
		Heating (Min / Std / Max)		kW	0.88/3.22/3.99	0.88/3.99/4.84
				Btu/h	3,000/11,000/13,600	3,000/13,600/16,500
				US RT	0.25/0.92/1.13	0.25/1.13/1.38
	Power	Power Input (Nominal)	Cooling (Min / Std / Max)	kW	0.17/0.64/0.85	0.17/1.05/1.2
			Heating (Min / Std / Max)		0.16/0.86/1.02	0.16/1.1/1.3
		Current Input (Nominal)	Cooling (Min / Std / Max)	A	1.2/3.1/4.0	1.2/4.9/5.3
			Heating (Min / Std / Max)		1.1/4.1/4.8	1.1/5.1/5.8
		MCA		A	11.1	11.1
		MOP		A	15.0	15.0
	Energy Efficiency	EER (Nominal Cooling)		-	4.12	3.35
		EER (Nominal Cooling, US)		(Btu/h)/W	14.05	11.45
		COP (Nominal Heating)		W/W	3.75	3.62
		Energy Grade		SEER	21.0	19.5
				HSPF	10.0	9.5
	Piping Connections	Liquid Pipe		Φ, mm	6.35	6.35
				Φ, inch	1/4"	1/4"
		Gas Pipe		Φ, mm	9.52	9.52
				Φ, inch	3/8"	3/8"
		Installation Limitation	Max. Length (Outdoor to indoor)	m	15	15
				ft	49.2	49.2
			Max. Height (Between ID/OD)	m	8	8
				ft	26.2	26.2
	Field Wiring	Power Source Wire		mm ²	1.5	1.5
		Transmission Cable		mm ²	1	1
	Refrigerant	Type		-	R410A	R410A
		Control Method		-	-	-
		Factory Charging		kg	1.10	1.10
				lbs	2.43	2.43
Indoor Unit	Power Supply			Φ, #, V, Hz	1,208-230,60	1,208-230,60
	Fan	Type		-	Cross Flow Fan	Cross Flow Fan
		Motor	Output	W	27	27
		Number of Unit		EA	1	1
		Air Flow Rate	Turbo / High / Mid / Low	CFM	325/290/254/212	350/314/268/226
		External Static Pressure		Pa	-	-
				In Wg	-	-
	Drain	Drain Pipe		Φ,mm	ID18 HOSE	ID18 HOSE
	Sound	Sound Pressure Level	High / Low	dB(A)	38/22	39/22
		Sound Power Level	Cooling	dB(A)	-	-
	External Dimension	Net Weight		kg	10.1	10.1
				lbs	22.26	22.26
		Shipping Weight		kg	11.7	11.7
				lbs	25.79	25.79
		Net Dimensions (WxHxD)		mm	828 x 267 x 265	828 x 267 x 265
				inch	32.60 x 10.51 x 10.43	32.60 x 10.51 x 10.43
		Shipping Dimensions (WxHxD)		mm	886 x 317 x 335	886 x 317 x 335
				inch	34.88 x 12.48 x 13.19	34.88 x 12.48 x 13.19

1. Specification

Model Name		SET		AR09MSWXCWK/CV	AR12MSWXCWK/CV
		Indoor Unit		AR09MSWXCWKNCV	AR12MSWXCWKNCV
		Outdoor Unit		AR09MSWXCWKXCV	AR12MSWXCWKXCV
Outdoor Unit	Power Supply		Φ, #, V, Hz	1,208-230,60	1,208-230,60
	Compressor	Type		-	BLDC Rotary
		Model		-	UG9AJ5090FERSI
		Output		kW	2.70
		Oil	Type	-	POE
	Fan	Air Flow Rate		CFM	1400
		Sound Pressure Level		dB(A)	45
	Sound	Sound Power Level		dB(A)	-
		Cooling		-	-
	External Dimension	Net Weight		kg	33.0
				lbs	72.75
		Shipping Weight		kg	35.5
				lbs	78.26
		Net Dimensions (WxHxD)		mm	790 x 548 x 285
				inch	31.10 x 21.57 x 11.22
	Operating Temp. Range	Cooling		°C	-10~46
				°F	14~115
		Heating		°C	-15~24
				°F	5~75

NOTE

- Nominal Cooling : Indoor temperature 26.7°C DB/19.4°C WB(80°F DB/67°F WB), Outdoor temperature 35°C DB/23.9°C WB(90°F DB/75°F WB), Refrigerant pipe length 7.5m(24.6ft), Level difference 0m(0ft).
- Nominal Heating : Indoor temperature 21.1°C DB/15.6°C WB(70°F DB/60°F WB), Outdoor temperature 8.3°C DB/6.1°C WB(47°F DB/43°F WB), Refrigerant pipe length 7.5m(24.6ft), Level difference 0m(0ft).
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- Specifications may be subject to change without prior notice.

2. Capacity Table

(1) AR09MSWXCWKNCV

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
14	9.42	5.27	0.44	8.12	5.85	0.44	9.42	6.78	0.45	9.42	7.53	0.45	10.71	7.71	0.45	12.01	8.17	0.45	12.01	9.13	0.45
32	9.59	5.37	0.44	8.29	5.97	0.44	9.59	6.90	0.45	9.59	7.67	0.45	10.88	7.84	0.45	12.18	8.28	0.45	12.18	9.26	0.45
50	9.72	5.45	0.44	8.43	6.07	0.44	9.72	7.00	0.45	9.72	7.78	0.45	11.02	7.93	0.45	12.32	8.38	0.45	12.32	9.36	0.45
68	9.89	5.54	0.44	8.60	6.19	0.44	9.89	7.12	0.44	9.89	7.92	0.44	11.19	8.06	0.45	12.49	8.49	0.45	12.49	9.49	0.46
77	9.59	5.37	0.49	8.29	5.97	0.49	9.59	6.90	0.50	9.59	7.67	0.50	10.88	7.84	0.51	12.18	8.28	0.51	12.18	9.26	0.52
90	9.18	5.14	0.58	7.88	5.67	0.58	9.18	6.61	0.59	9.18	7.34	0.59	10.47	7.54	0.60	11.77	8.00	0.60	11.77	8.95	0.61
95	9.00	5.04	0.63	7.70	5.55	0.63	9.00	6.48	0.64	9.00	7.20	0.64	10.30	7.41	0.64	11.59	7.88	0.65	11.59	8.81	0.65
104	8.70	4.87	0.81	7.40	5.33	0.82	8.70	6.26	0.83	8.70	6.96	0.84	10.00	7.20	0.85	11.29	7.68	0.86	11.29	8.58	0.87
110	8.53	4.78	0.92	7.23	5.21	0.93	8.53	6.14	0.95	8.53	6.82	0.96	9.83	7.08	0.97	11.12	7.56	0.99	11.12	8.45	1.00
115	8.36	4.68	1.04	7.06	5.09	1.05	8.36	6.02	1.07	8.36	6.69	1.08	9.66	6.95	1.09	10.95	7.45	1.11	10.95	8.32	1.13

Heating

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
5	8.70	1.15	8.53	1.18	8.36	1.20	8.36	1.21	8.36	1.21	8.36	1.22
14	10.34	1.12	10.14	1.14	9.94	1.16	9.94	1.17	9.94	1.18	9.94	1.19
23	11.99	1.08	11.76	1.11	11.53	1.13	11.53	1.14	11.53	1.14	11.53	1.15
32	13.64	1.05	13.37	1.07	13.11	1.09	13.11	1.10	13.11	1.11	13.11	1.12
36	14.30	1.04	14.02	1.06	13.74	1.08	13.74	1.09	13.74	1.09	13.74	1.10
41	11.25	0.83	11.03	0.84	10.81	0.86	10.70	0.87	10.60	0.87	10.38	0.88
47	11.56	0.83	11.33	0.84	11.11	0.86	11.00	0.86	11.00	0.87	10.89	0.88
50	12.02	0.82	11.79	0.84	11.56	0.86	11.44	0.86	11.44	0.87	11.33	0.88
59	12.80	0.82	12.55	0.84	12.30	0.86	12.18	0.86	12.18	0.86	12.06	0.87
68	13.58	0.82	13.31	0.84	13.05	0.85	12.92	0.86	12.92	0.86	12.79	0.87
75	14.20	0.82	13.92	0.83	13.65	0.85	13.51	0.85	13.51	0.86	13.38	0.87

NOTE

- Capacities are based on following conditions;
- Cooling mode indoor air temperature (°F, DB/WB) : 68/57, 72/61, 77/64, 80/67, 82/70, 86/72, 90/75
- Heating mode outdoor air : 85% RH. However, the condition rated capacity is 47 DB/ 43 WB.
- Refrigerant piping length : 7.5m (24.6 ft). Level difference : 0m.
- In case of Inverter models, the cooling capacity on the capacity table can be higher than nominal capacity as inverter compressors operates with different Hz depending on outdoor and indoor temperatures.
- the specifications, designs and information in this Databook is subject to change without notice.

2. Capacity Table

(2) AR12MSWXCWKNCV

Cooling

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW
14	12.45	6.23	0.69	11.16	7.36	0.69	12.45	8.22	0.70	12.45	9.22	0.70	13.75	9.08	0.70	15.05	9.33	0.70	15.05	10.53	0.71
32	12.73	6.36	0.70	11.43	7.54	0.70	12.73	8.40	0.71	12.73	9.42	0.71	14.02	9.26	0.71	15.32	9.50	0.71	15.32	10.72	0.72
50	13.03	6.52	0.70	11.74	7.75	0.70	13.03	8.60	0.71	13.03	9.65	0.72	14.33	9.46	0.71	15.63	9.69	0.71	15.63	10.94	0.72
68	13.31	6.65	0.72	12.01	7.93	0.72	13.31	8.78	0.73	13.31	9.85	0.73	14.60	9.64	0.74	15.90	9.86	0.74	15.90	11.13	0.75
77	12.86	6.43	0.81	11.57	7.63	0.82	12.86	8.49	0.83	12.86	9.52	0.83	14.16	9.35	0.84	15.46	9.58	0.85	15.46	10.82	0.85
90	12.25	6.12	0.96	10.95	7.23	0.97	12.25	8.08	0.98	12.25	9.06	0.98	13.55	8.94	0.99	14.84	9.20	1.00	14.84	10.39	1.01
95	12.00	6.00	1.03	10.70	7.06	1.03	12.00	7.92	1.04	12.00	8.88	1.05	13.30	8.78	1.06	14.59	9.05	1.06	14.59	10.22	1.07
104	11.12	5.56	1.08	9.83	6.49	1.09	11.12	7.34	1.10	11.12	8.23	1.11	12.42	8.20	1.12	13.72	8.50	1.13	13.72	9.60	1.14
110	10.58	5.29	1.11	9.28	6.13	1.13	10.58	6.98	1.15	10.58	7.83	1.16	11.87	7.84	1.18	13.17	8.17	1.19	13.17	9.22	1.21
115	10.07	5.03	1.15	8.77	5.79	1.16	10.07	6.64	1.18	10.07	7.45	1.20	11.36	7.50	1.21	12.66	7.85	1.23	12.66	8.86	1.26

Heating

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

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
5	9.76	1.30	9.57	1.32	9.38	1.35	9.38	1.36	9.38	1.36	9.38	1.38
14	11.92	1.32	11.68	1.34	11.45	1.37	11.45	1.38	11.45	1.39	11.45	1.40
23	14.07	1.34	13.79	1.37	13.52	1.39	13.52	1.40	13.52	1.41	13.52	1.42
32	16.22	1.36	15.91	1.39	15.59	1.42	15.59	1.42	15.59	1.43	15.59	1.44
36	17.09	1.37	16.75	1.40	16.42	1.43	16.42	1.43	16.42	1.44	16.42	1.45
41	13.88	1.05	13.61	1.07	13.34	1.09	13.21	1.09	13.08	1.10	12.82	1.11
47	14.29	1.06	14.01	1.08	13.74	1.10	13.60	1.11	13.60	1.11	13.46	1.12
50	14.90	1.07	14.61	1.09	14.32	1.12	14.18	1.12	14.18	1.13	14.04	1.14
59	15.92	1.10	15.61	1.12	15.30	1.15	15.15	1.15	15.15	1.16	15.00	1.17
68	16.94	1.13	16.60	1.15	16.28	1.18	16.12	1.18	16.12	1.19	15.95	1.20
75	17.75	1.15	17.40	1.18	17.06	1.20	16.89	1.21	16.89	1.21	16.72	1.22

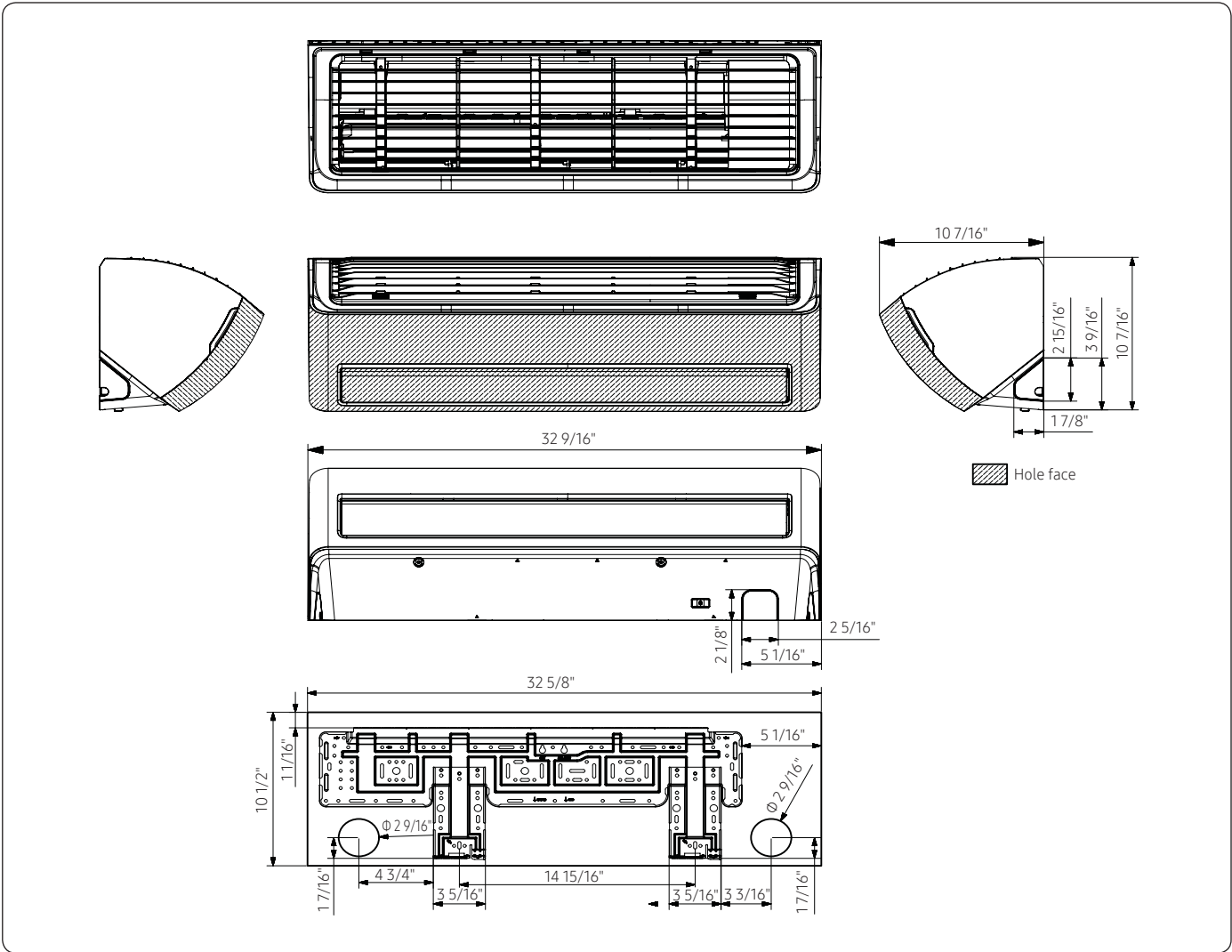
NOTE

- Capacities are based on following conditions;
- Cooling mode indoor air temperature (°F, DB/WB) : 68/57, 72/61, 77/64, 80/67, 82/70, 86/72, 90/75
- Heating mode outdoor air : 85% RH. However, the condition rated capacity is 47 DB/ 43 WB.
- Refrigerant piping length : 7.5m (24.6 ft). Level difference : 0m.
- In case of Inverter models, the cooling capacity on the capacity table can be higher than nominal capacity as inverter compressors operates with different Hz depending on outdoor and indoor temperatures.
 - The specifications, designs and information in this Databook is subject to change without notice.

3. Dimensional Drawing

Indoor unit

Unit: inch

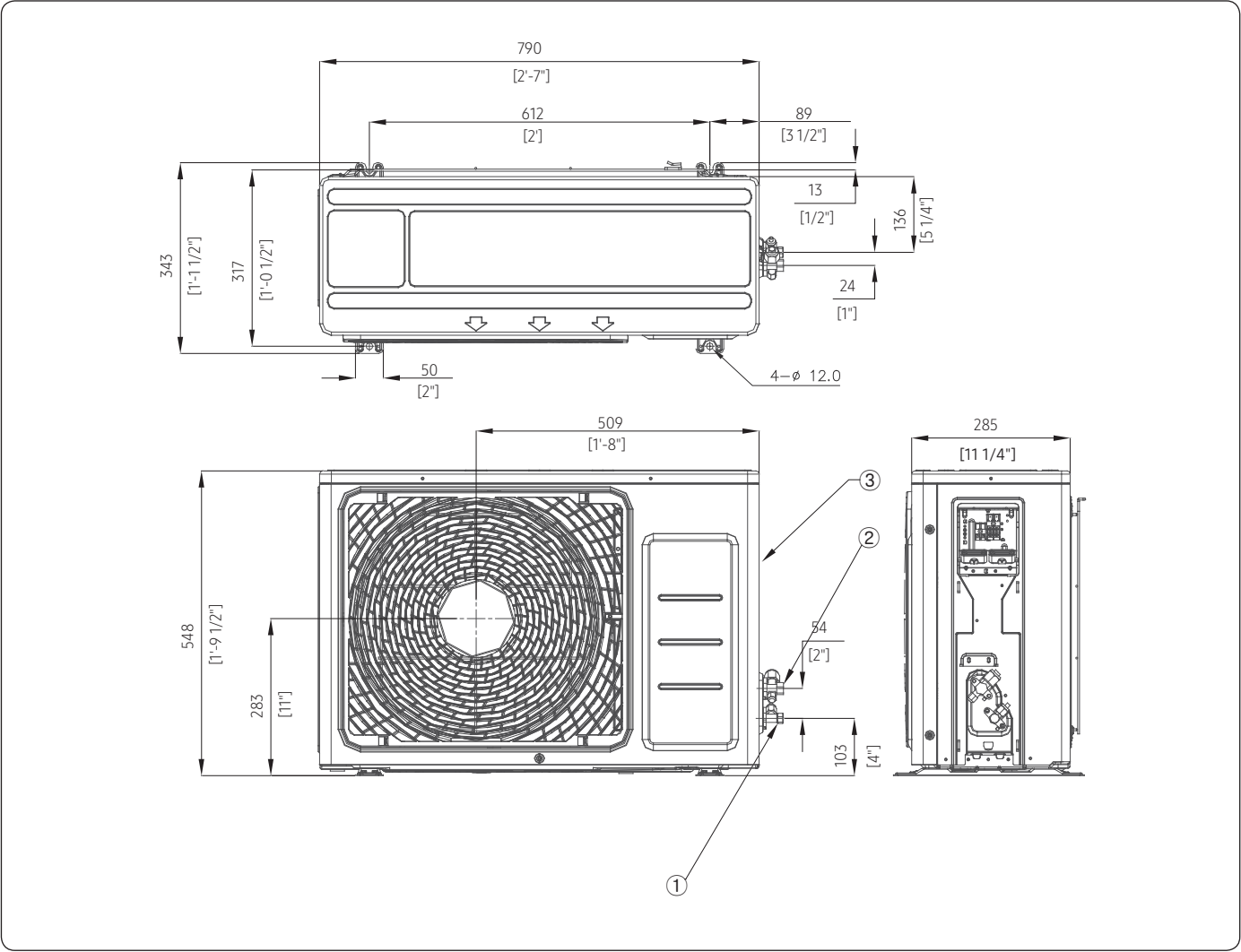


No.	Name	Description
1	Gas pipe connection	9.52 (3/8")
2	Liquid pipe connection	6.35 (1/4")
3	Drain pipe connection	ID 18 HOSE
4	Power supply & Communication wiring conduit	-

3. Dimensional Drawing

Outdoor unit

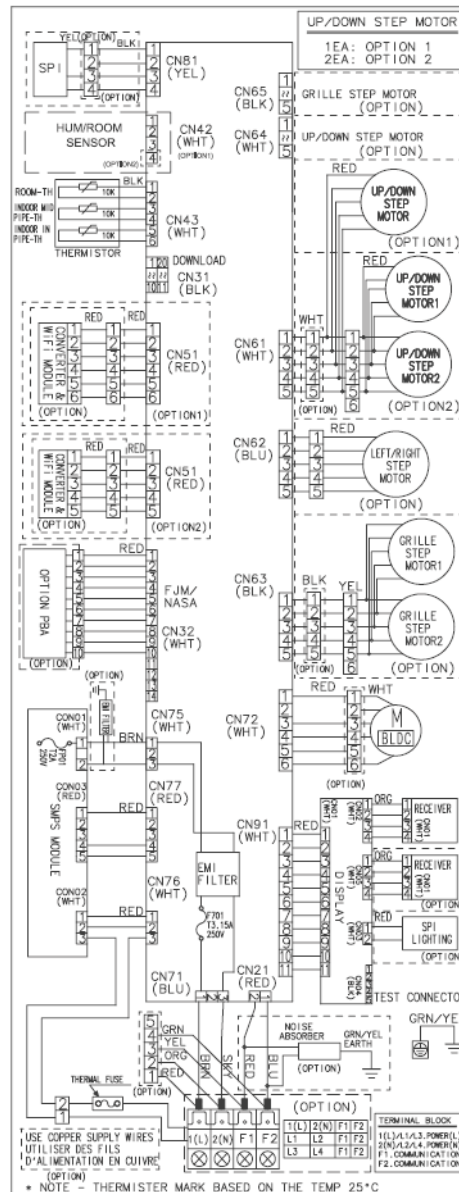
Unit: mm [inch]



No.	Name	Description
1	Liquid pipe connection	6.35 (1/4")
2	Gas pipe connection	9.52 (3/8")
3	Power supply & Communication wiring conduit	-

4. Electrical Wiring Diagram

Indoor unit



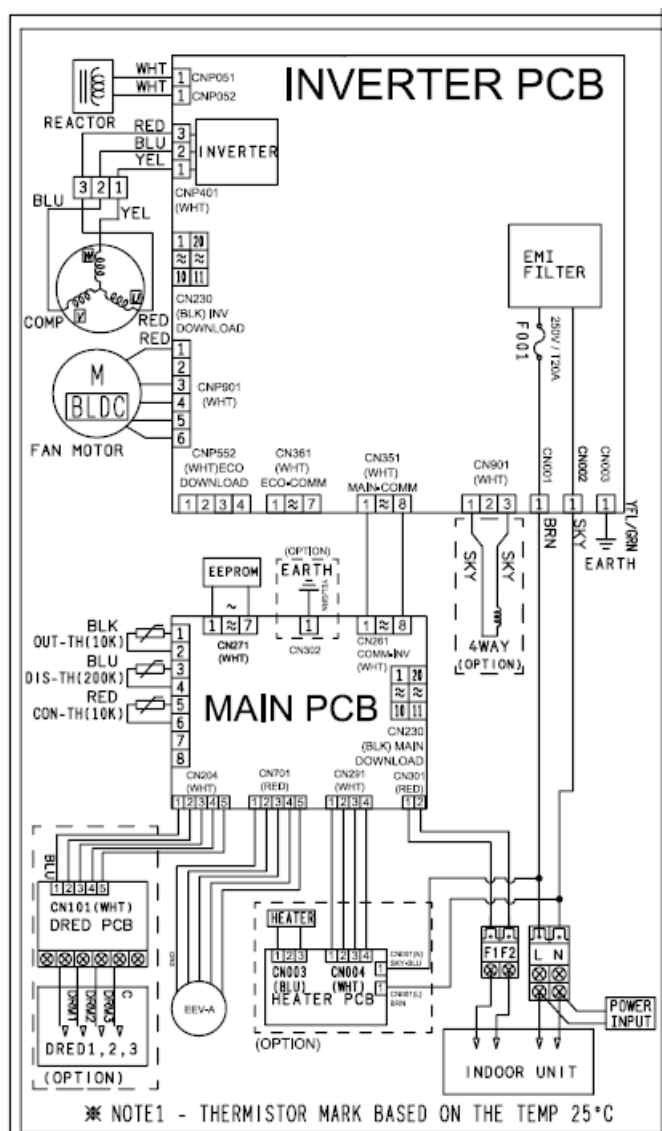
SPI	LOAD(SPI)	DISPLAY	Printed circuit board(DISPLAY BOARD)	UP/DOWN STEP MOTOR	Motor(STEP MOTOR)
ROOM TH	Thermistor(Room Temp._10Kohm)	BLDC	Motor(BLDC FAN MOTOR)	THERMAL FUSE	Terminal Block Thermal Fuse
INDOOR MID PIPE-TH	Thermistor(EVA MID Temp._10Kohm)	GRILLE STEP MOTOR	Motor(STEP MOTOR)	WIFI MODULE	LOAD(WIFI MODULE)
INDOOR IN PIPE-TH	Thermistor(EVA IN Temp._10Kohm)	LEFT/RIGHT STEP MOTOR	Motor(STEP MOTOR)	SMPS MODULE	Printed circuit board(Power Supply)
RECEIVER	Printed circuit board(RECEIVER BOARD)	HUM/ROOM SENSOR	SENSOR(HUMIDITY/ROOM)		

NOTE

- This wiring diagram applies only to the indoor unit.
- Colors BLK : black, BRN : brown, SKY-BLU : sky-blue, GRN/YEL : green/yellow, RED : red, YEL : yellow, ORG : orange, BLU : blue, WHT:white
- For connection wiring indoor-outdoor transmission 3(C), refer to the installation manual
-  : Protective earth(screw)

4. Electrical Wiring Diagram

Outdoor unit



SPI	LOAD(SPI)	DISPLAY	Printed circuit board(DISPLAY BOARD)	UP/DOWN STEP MOTOR	Motor(STEP MOTOR)
ROOM TH	Thermistor(Room Temp_10Kohm)	BLDC	Motor(BLDC FAN MOTOR)	THERMAL FUSE	Terminal Block Thermal Fuse
INDOOR MID PIPE-TH	Thermistor(EVA MID Temp_10Kohm)	GRILLE STEP MOTOR	Motor(STEP MOTOR)	WIFI MODULE	LOAD(WIFI MODULE)
INDOOR IN PIPE-TH	Thermistor(EVA IN Temp_10Kohm)	LEFT/RIGHT STEP MOTOR	Motor(STEP MOTOR)	SMPS MODULE	Printed circuit board(Power Supply)
RECEIVER	Printed circuit board(RECEIVER BOARD)	HUM/ROOM SENSOR	SENSOR(HUMIDITY/ROOM)		

 NOTE

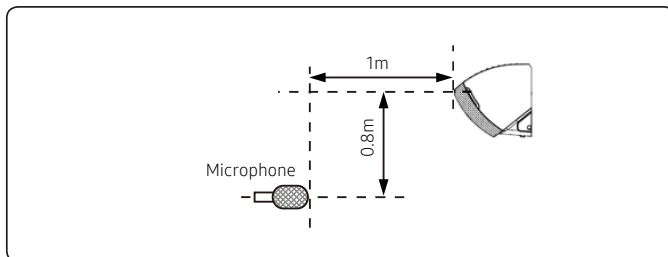
- This wiring diagram applies only to the indoor unit.
- Colors BLK : black, BRN : brown, SKY-BLU : sky-blue, GRN/YEL : green/yellow, RED : red, YEL : yellow, ORG : orange, BLU : blue, WHT:white
- For connection wiring indoor-outdoor transmission 3(C), refer to the installation manual
-  : Protective earth(screw)

5. Sound Data

Indoor unit

Sound Pressure level

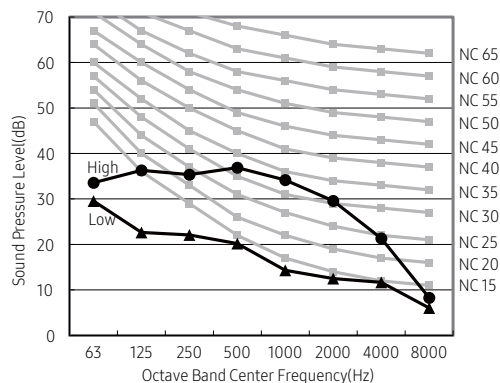
Unit: dB(A)



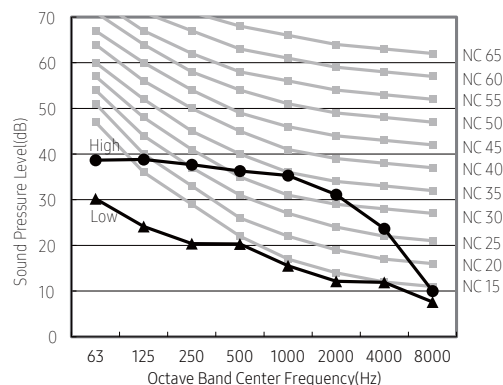
Model	High	Low
AR09MSWXCWKNCV	38	22
AR12MSWXCWKNCV	39	22

• NC Curve

1) AR09MSWXCWKNCV



2) AR12MSWXCWKNCV



NOTE

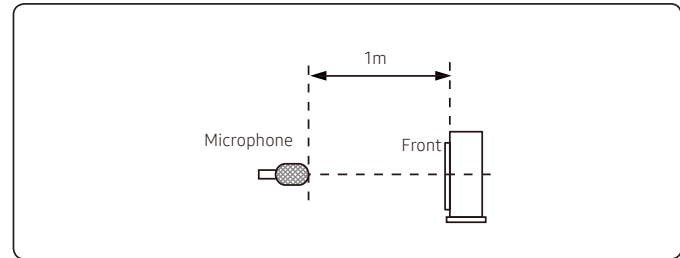
- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

5. Sound Data

Outdoor unit

Sound pressure level

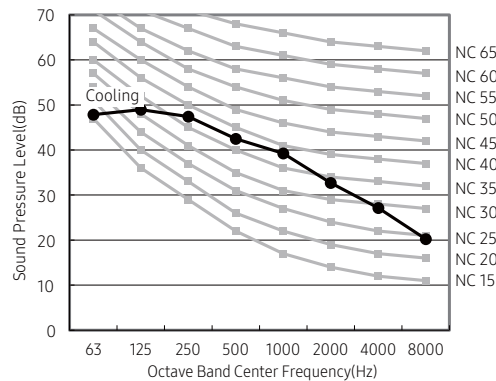
Unit: dB(A)



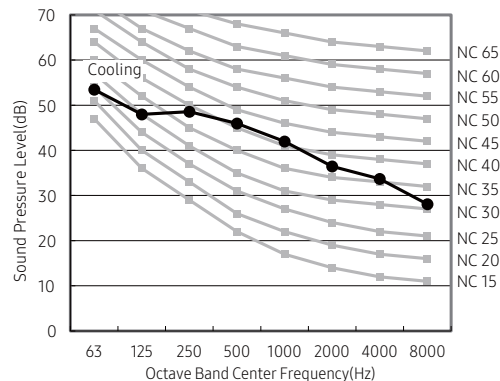
Model	Cooling
AR09MSWXCWKXCV	45
AR12MSWXCWKXCV	47

- NC Curve

1) AR09MSWXCWKXCV



2) AR12MSWXCWKXCV



NOTE

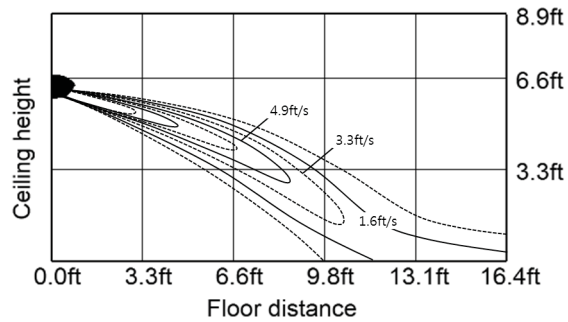
- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

6. Temperature and air flow distribution

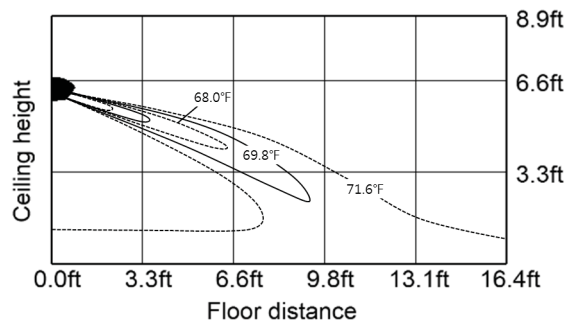
AR09MSWXCWKNCV

1) Cooling air velocity distribution

Cooling Discharge angle : 16°

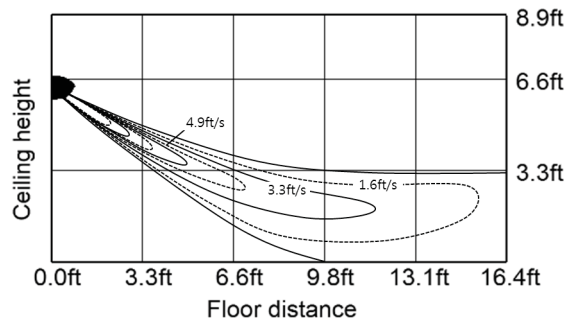


2) Cooling Temperature distribution

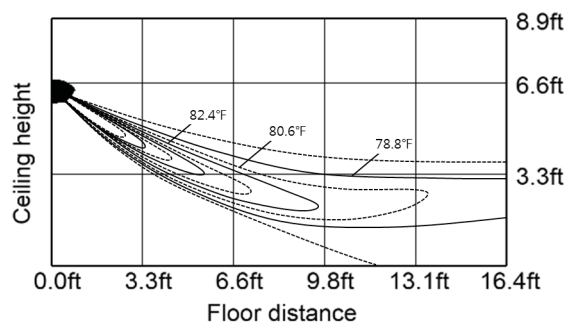


3) Heating air velocity distribution

Heating Discharge angle : 46°



4) Heating Temperature distribution

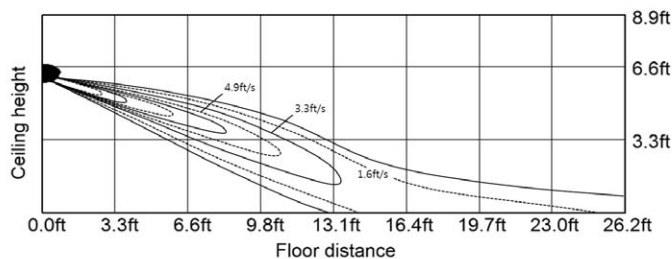


6. Temperature and air flow distribution

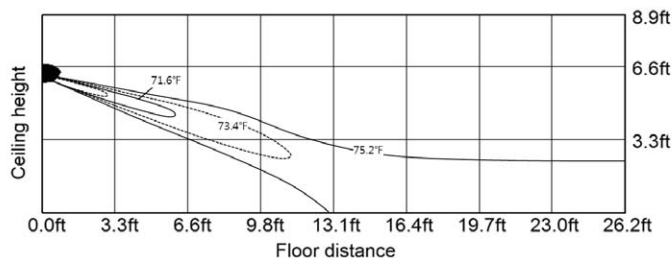
AR12MSWXCWKNCV

1) Cooling air velocity distribution

Cooling Discharge angle : 16°

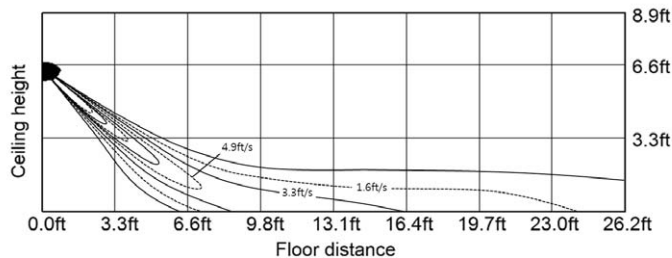


2) Cooling Temperature distribution

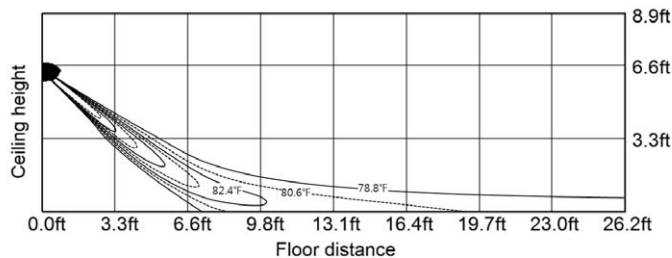


3) Heating air velocity distribution

Heating Discharge angle : 46°

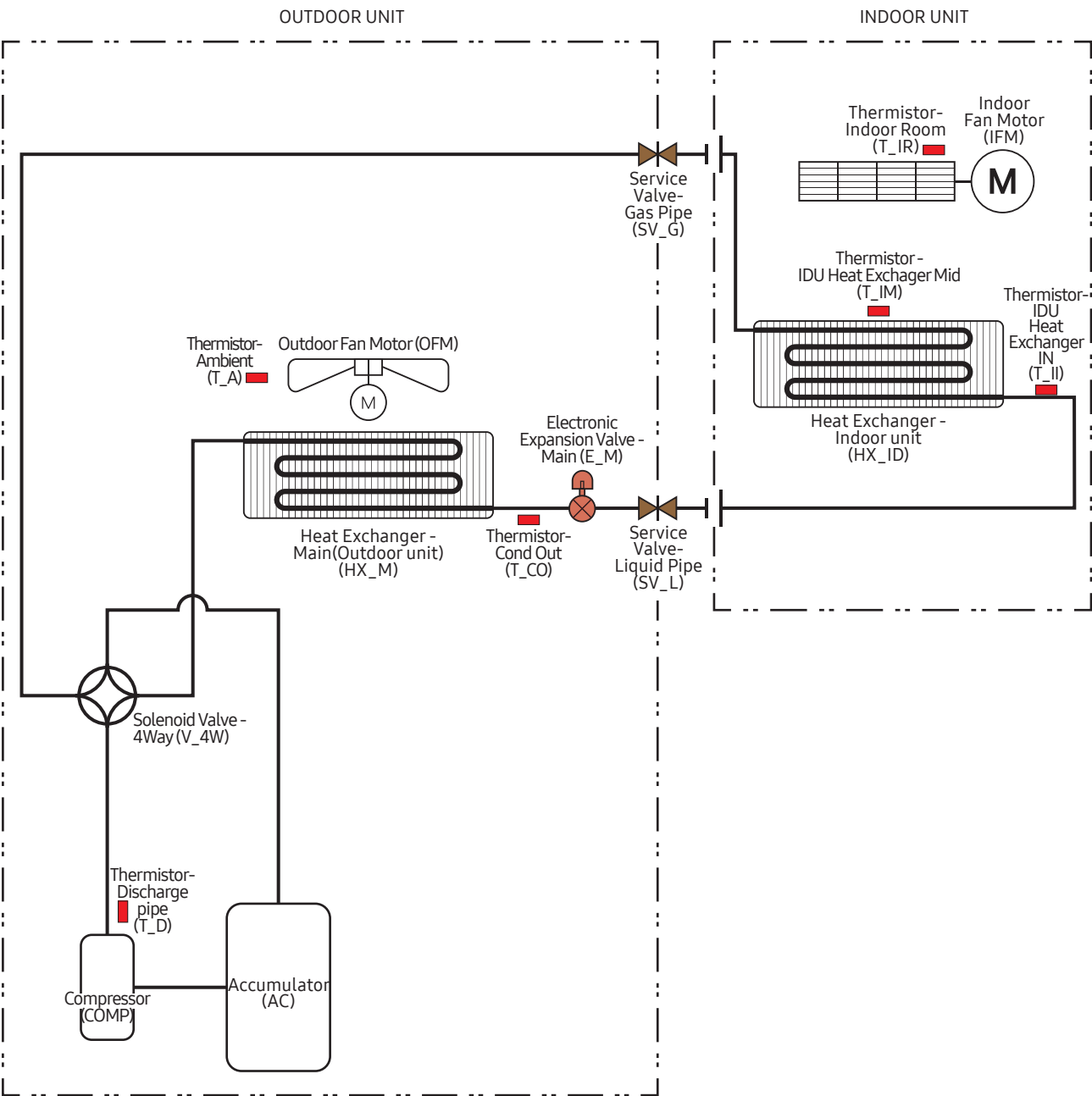


4) Heating Temperature distribution



7. Piping Diagram

AR09MSWXCWKNCV + AR09MSWXCWKXCV, AR12MSWXCWKNCV + AR12MSWXCWKXCV



8. Operation Range

Mode	Outdoor Unit	Indoor Unit	Indoor Unit
	Temperature(DB)	Temperature(DB)	Humidity(RH)
COOL	14 ~ 115°F	61~90°F	80% or less
HEAT	5 ~ 75°F	61~86°F	-
DRY	14 ~ 115°F	61~90°F	80% or less

NOTE

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

9. Capacity Correction

AR09MSWXCWKNCV + AR09MSWXCWKXCV, AR12MSWXCWKNCV + AR12MSWXCWKXCV

Cooling



		Pipe Length (ft)			
		16.4	32.8	41.0	49.2
Level Difference (ft)	26.2	-	0.96	0.94	0.91
	16.4	0.99	0.97	0.95	0.92
	0	1.00	0.98	0.96	0.93
	-16.4	0.99	0.97	0.95	0.92
	-26.4	-	0.96	0.94	0.91

Heating



		Pipe Length (ft)			
		16.4	32.8	41.0	49.2
Level Difference (ft)	26.2	-	0.96	0.94	0.91
	16.4	0.99	0.97	0.95	0.92
	0	1.00	0.98	0.96	0.93
	-16.4	0.99	0.97	0.95	0.92
	-26.4	-	0.96	0.94	0.91



2017. 03
Ver. 1.0

Samsung Electronics Co., LTD.
B2B PM / SE

Head Office (Suwon Korea) 129, Samsung-Ro, Yeongtong-Gu, Suwon City, Gyeonggi-Do, Korea 16677
Website : www.samsung.com, <http://btsp.samsungsbn.com> Email : airconditioner@samsung.com
Images and data in this book may subject to change without prior notice.