

SAMSUNG

VRF

Technical Data Book

DVM S Eco for Latin America
(R410A, 50/60Hz, HP)



Model : AM***TXMD**/AZ

Nomenclature

Outdoor Unit

Model Name

AM	060	T	X	M	D	K	H	/	AZ
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AM	DVM
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(5) Product Notation

M	DVM S Eco
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(2) Capacity

x 1/10 HP (3 digits)

(6) Feature

N	STANDARD+PJT-BIZ+MODULE
D	ENTRY+GENERAL Temp.+ MODULE

(3) Version

T	2020
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(7) Rating Voltage

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

(4) Product Type

X	Outdoor Unit
N	Indoor Unit

(8) Mode

C	Cooling Only
H	Heat Pump
R	Heat Recovery

2. Specification

Outdoor units

Model Name				AM060TXMDKH/AZ	AM070TXMDKH/AZ
Power Supply			Φ, #, V, Hz	1,2,220-240,50/60Hz	1,2,220-240,50/60Hz
Mode			-	HEAT PUMP	HEAT PUMP
Performance	HP		HP	6	7
	Capacity (Nominal)	Cooling	kW	15.5	18.1
			Btu/h	52,900	61,800
		Heating	kW	16.0	20.0
			Btu/h	54,600	68,200
Maximum number of connectable indoor units			ea	11	13
	Total capacity of the connected Indoor Units	Min.	kW	7.75	9.05
		Max.	kW	20.15	23.53
Power	Power Input	Cooling 1)	kW	4.65	5.43
		Heating 2)		4.30	4.70
	Current Input	Cooling 1)	A	23.1	25.5
		Heating 2)		21.5	22.5
	MCA		A	30.0	32.0
	MFA		A	40.0	40.0
COP	Cooling 1)		W/W	3.33	3.33
	Heating 2)		W/W	-	-
Casing	Material	Cabinet	-	EGI steel plate	EGI steel plate
		Base	-	GI steel plate	GI steel plate
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	Anti-corrosion	Anti-corrosion
Compressor	Type		-	Twin BLDC Rotary x 1	Twin BLDC Rotary x 1
	Output		kW × n	13.34	15.47
	Model Name		-	UG5TK5450FJX	UG5TM5520FJX
	Oil	Type	-	PVE	PVE
		Initial Charge	cc	1700	1700
Fan	Type		-	Propeller	Propeller
	Discharge direction		-	Horizontal	Horizontal
	Quantity		W	1	2
	Air Flow Rate	m ³ /min		75	150
		l/s		1250	2500
Fan Motor	Model		-	BLDC Motor	BLDC Motor
	Output x n		W	139	139 x 2
Piping Connections	Liquid Pipe	Type	-	Braze connection	Braze connection
		Φ, mm	-	9.52	9.52
		Φ, inch	-	3/8	3/8
	Gas Pipe	Type	-	Braze connection	Braze connection
		Φ, mm	-	19.05	19.05
		Φ, inch	-	3/4	3/4
	Heat insulation		-	Both liquid & gas pipes	Both liquid & gas pipes

2. Specification

Outdoor units

Model Name				AM060TXMDKH/AZ	AM070TXMDKH/AZ
Piping Connections	Piping length (ODU-IDU)	Max. [Equiv.]	m	50 (65)	100 (130)
	Piping length (1st Branch-IDU)	Max.	m	40	40
	Total piping length (System)	Max.	m	150	300
	Level difference (ODU in highest position)	Max.	m	30	30
	Level difference (IDU in highest position)	Max.	m	25	30
	Level difference (IDU-IDU)	Max.	m	15	15
Wiring connections	Communication	Minimum	mm ²	0.75	0.75
		Remark	-	F1,F2	F1,F2
Refrigerant	Type			R410A	R410A
	Factory Charging			2.50	2.50
Sound 4)	Sound Pressure	Cooling	dB(A)	55	59
		Heating		-	-
External Dimension	Net Weight		kg	84	115
	Shipping Weight		kg	89.5	124
	Net Dimensions (WxHxD)		mm	940 x 998 x 330	940 x 1,420 x 330
	Shipping Dimensions (WxHxD)		mm	995 x 1,096 x 426	995 x 1,598 x 426
Operating Temp. Range	Cooling		°C	-5.0 ~ 48.0	-5.0 ~ 48.0
	Heating		°C	-20.0 ~ 24.0	-20.0 ~ 24.0

NOTE

- Specifications may be subject to change without prior notice.
 - 1) Cooling capacities are based on;
 - Indoor temperature : 27°C DB, 19°C WB
 - Outdoor temperature : 35°C DB, 24°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
 - 2) Heating capacities are based on;
 - Indoor temperature : 20°C DB, 15°C WB
 - Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m
 - 3) Select wire size based on the value of MCA
 - 4) Sound power level is an absolute value that a sound source generates.
 Sound pressure level is a relative value, depending on the distance and acoustic environment.
 Sound values are obtained in an anechoic room.
 Sound values of multi combination are theoretical values based on sound results of individual installed units.
 - 5) These products contain R410A which is fluorinated greenhouse gas.

3. Electrical Characteristics

Capacity		Model	Power Supply				Voltage Range		Running Current [A]		Current [A]		Fan Motor
HP	kW		Φ	#	Hz	Voltage	Min. (-10%)	Max. (+10%)	Cooling	Heating	MCA	MFA	kW
6	15.5	AM060TXMDKH/AZ	1	2	50/60	220~240	198	264	23.10	21.50	30.0	40.0	0.139
7	18.1	AM070TXMDKH/AZ	1	2	50/60	220~240	198	264	25.50	22.50	32.0	40.0	0.278

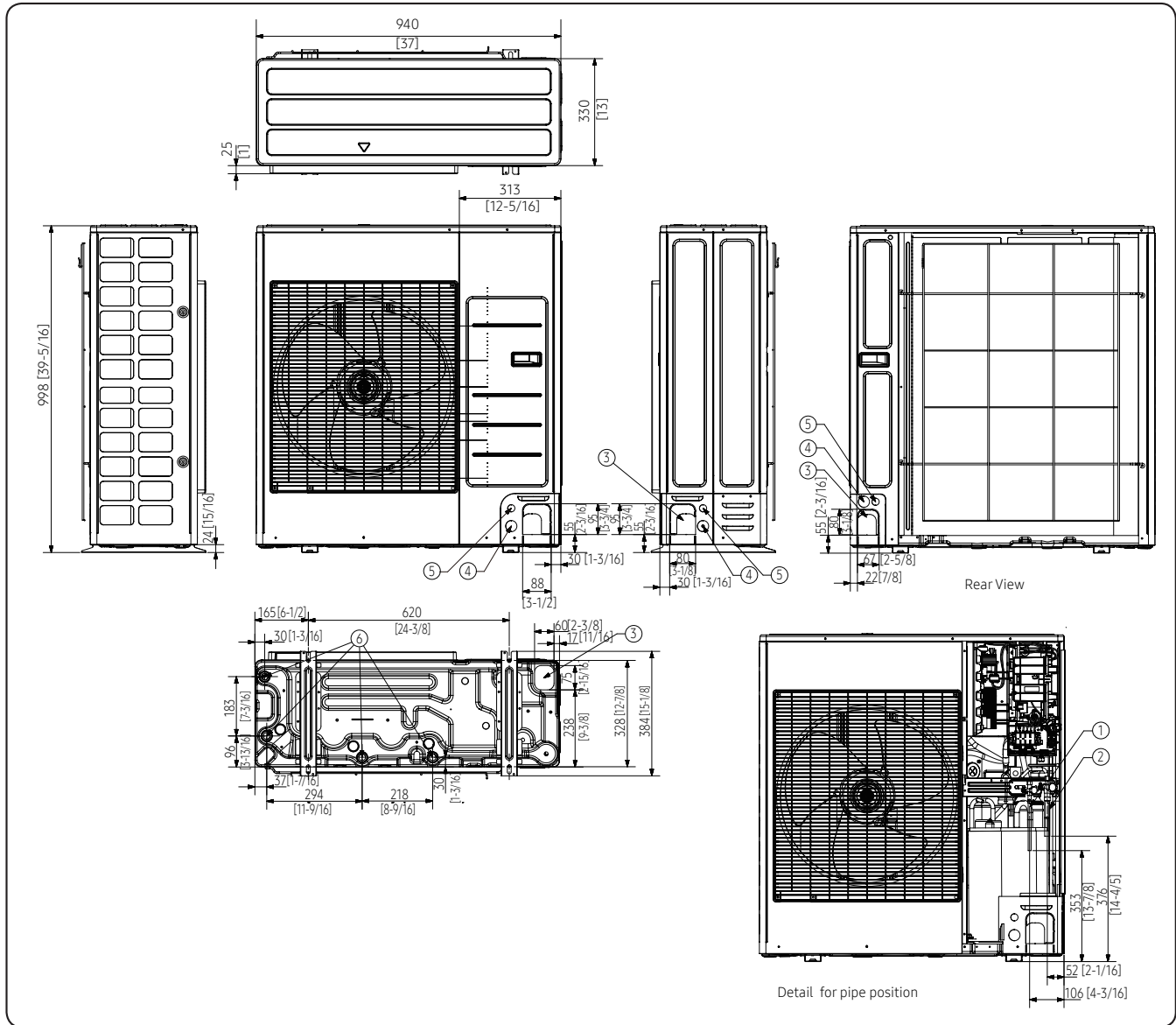
 **NOTE**

- MCA : Minimum circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

4. Dimensional Drawing

AM060TXMDKH/AZ

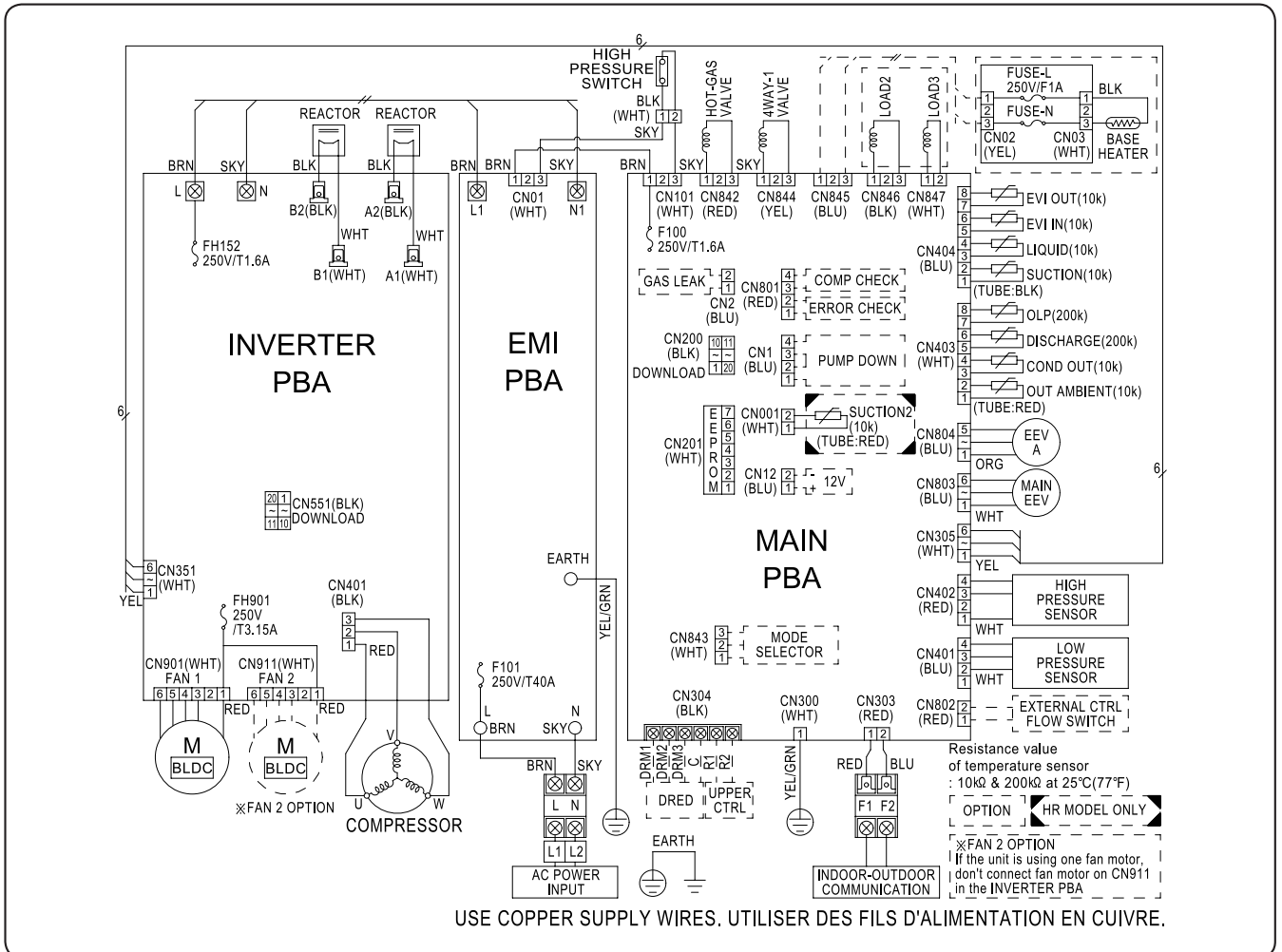
Units : mm [inches]



NO	Name	Description
1	Refrigerant liquid pipe	Φ9.52 (Φ3/8)
2	Refrigerant gas pipe	Φ15.88 (Φ5/8)
3	Knockout hole for pipe intake	Front / Side / Rear / Bottom
4	Power wiring conduits	Front / Side / Rear, Φ34 (Φ1-3/8)
5	Communication wiring conduits	Front / Side / Rear, Φ22 (Φ7/8)
6	Drain holes	Connect with the provided drain plug.

6. Electrical Wiring Diagram

AM060TXMDKH/AZ, AM070TXMDKH/AZ



MAIN PCB	Printed circuit board(Main)	4WAY VALVE	Solenoid valve(4WAY)	OLP-TEMP	Thermistor(Liquid)
INVERTER PCB	Printed circuit board(Inverter)	HOTGAS VALVE	Solenoid valve(Hotgas-bypass)	DISCHARGE-TEMP	Thermistor(Discharge)
EMI PCB	Printed circuit board(emi1)	MAIN EEV	Electronic expansion valve(Main)	COND-TEMP	Thermistor(Liquid)
COMP	Motor(Compressor)	EEV A	Electronic expansion valve	OUT-TEMP	Thermistor(Air)
BLDC	Motor(ODU Fan)	REACTOR	DC_Reactor	250V/T40A	FUSE

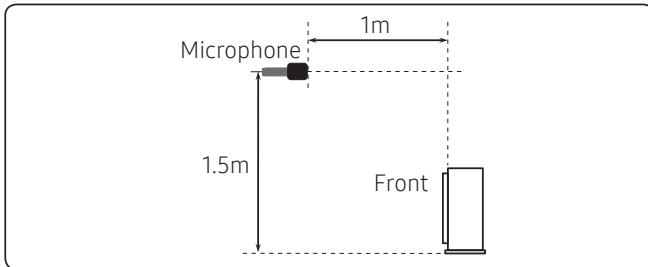
NOTE

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

7. Sound Data

Sound Pressure level

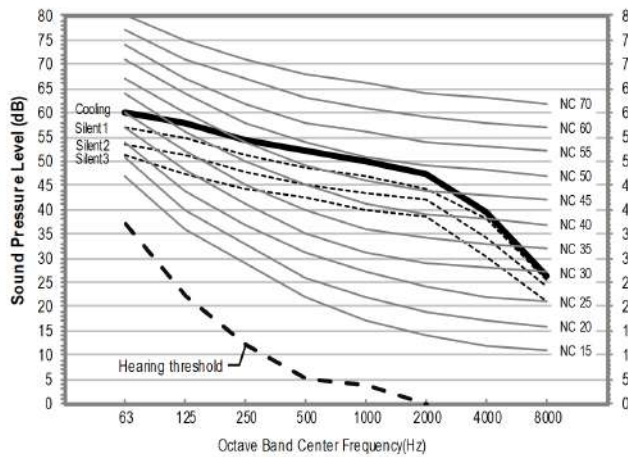
Unit: dB(A)



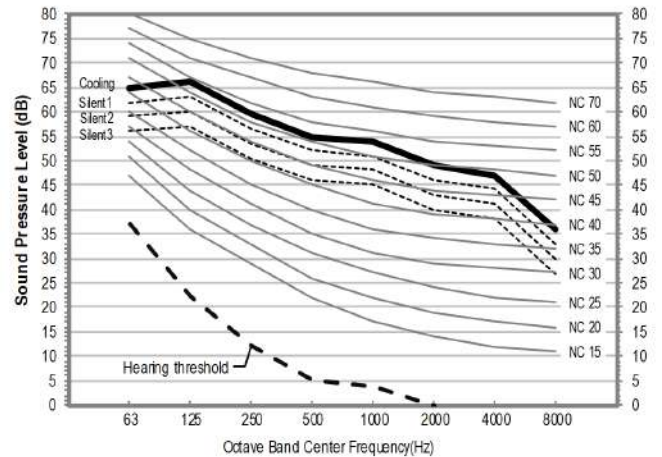
Model	Cooling	Silent1	Silent2	Silent3
AM060TXMDKH/AZ	55	52	49	46
AM070TXMDKH/AZ	59	56	53	50

- NC Curve

1) AM060TXMDKH/AZ



2) AM070TXMDKH/AZ

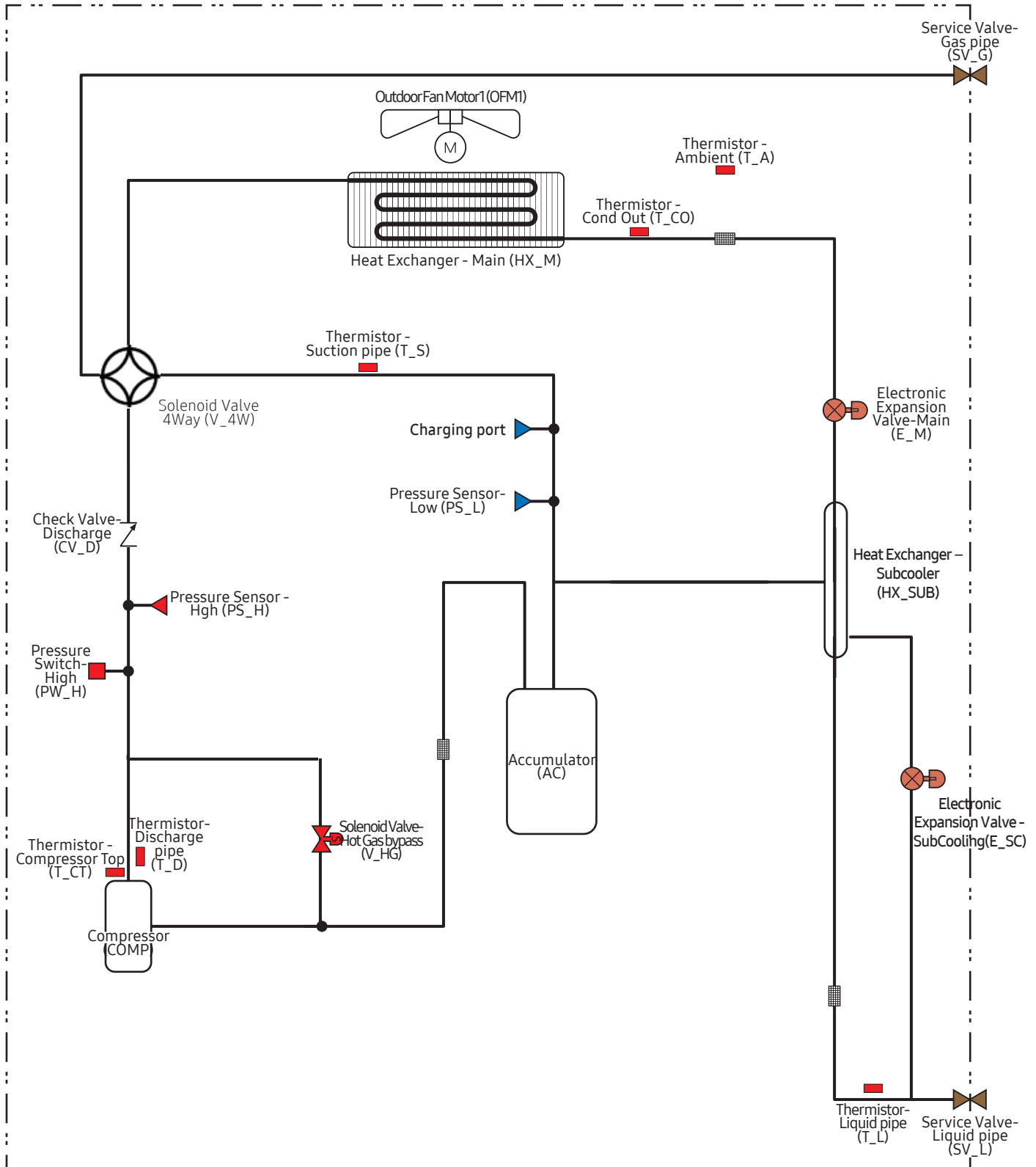


NOTE

- 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.
 - dB(A) = A weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa
- Silent mode available by option setting.
 - In cooling mode can be choose depending outdoor temperature/external contact signal
 - In heating mode can be choose only external contact signal

9. Piping Diagram

AM060TXMDKH/AZ



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