

VRF

Technical Data Book

DVM S Standard for South West Asia



Model : HP (AM***KXVANH/TL & AM***JXVANH/TL)

Nomenclature

Outdoor Units

Model Names

AM	240	K	X	V	A	N	H	/	TL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AM	VRF
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(2) Capacity

x 1/10 HP (3 digits)

(3) Version

F	2013
H	2014
J	2015
K	2016

(4) Product Type

X	Outdoor Unit
N	Indoor Unit

(5) Feature1

V	Inverter
M	DVM S Eco

(6) Feature2

A	Standard
H	High EER

(7) Rating Voltage

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

(8) Mode

H	Heat Pump
R	Heat Recovery

2 Specifications

Outdoor

Type			DVM S(NEW)	DVM S(NEW)	DVM S(NEW)	
Model Name			AM140JXVANH/TL	AM160JXVANH/TL	AM180JXVANH/TL	
Power Supply			Ø, #, V, Hz	3,4,380-415,50/60	3,4,380-415,50/60	
Mode			-	HP	HP	
Performance	HP		HP	14.00	16.00	
			kW	40.00	45.00	
	Capacity (Nominal)	Cooling		Btu/h	136,500	153,500
				kW	45.00	50.40
		Heating		Btu/h	153,500	172,000
			kW	45.00	56.70	
			Btu/h	153,500	193,500	
Power	Power Input (Nominal)	Cooling 1)	kW	10.25	11.40	
		Heating 2)	kW	10.15	11.60	
	Current Input (Nominal)	Cooling 1)	A	16.40	18.30	
		Heating 2)	A	16.30	18.60	
	MCA	A	25.00	32.00	39.10	
MFA	A	32.00	40.00	50.00		
COP	EER (Nominal Cooling)		-	3.90	3.95	
	COP (Nominal Heating)		-	4.43	4.34	
	Energy Grade		-	ESEER 7.02	ESEER 6.78	
Compressor	Type		-	SSC Scroll x 1	SSC Scroll x 2	
	Output		kW x n	(6.39)	(4.39 x 2)	
	Model Name		-	DS-GB066FAVBx1	DS-GA046FAVAx2	
	Oil	Type	-	PVE	PVE	
Fan	Type		-	Propeller	Propeller	
	Output x n		W	620.0x2	620.0x2	
	Air Flow Rate		CMM	255	255	
			l/s	4,250.00	4,250.00	
	External Static	Max.	mmAQ	8.00	8.00	
Pa			78.40	78.40		
Piping Connections	Liquid Pipe		Ø, mm	12.70	12.70	
			Ø, inch	1/2"	1/2"	
	Gas Pipe		Ø, mm	28.58	28.58	
			Ø, inch	1 1/8"	1 1/8"	
	Discharge Gas Pipe		Ø, mm	-	-	
			Ø, inch	-	-	
	Installation Limitation	Max. Length	m	200 (220)	200 (220)	
Max. Height		m	110 (40)	110 (40)		
Field Wiring	Power Source Wire		mm ²	-	-	
	Transmission Cable		mm ²	0.75 ~ 1.50	0.75 ~ 1.50	
Refrigerant	Type		-	R410A	R410A	
	Factory Charging		kg	7.70	7.70	
Sound	Pressure		dBA	61	63	
	Power			81	83	
External Dimension	New Weight		kg	239.0	269.0	
	Shipping Weight		kg	249.0	279.0	
	Net Dimensions (WxHxD)		mm	1,295x1,695x765	1,295x1,695x765	
	Shipping Dimensions (WxHxD)		mm	1,363x1,887x832	1,363x1,887x832	
Operating Temp.	Cooling		°C	-5.0 ~ 48.0	-5.0 ~ 48.0	
	Heating		°C	-25.0 ~ 24.0	-25.0 ~ 24.0	

* Specifications may be subject to change without prior notice.

* The nominal cooling operating range is "-5 ~ 48".

But the cooling operating range can be widen down to -20 in case of below conditions satisfy.

- 1) The combination ratio must be more than 100%.
- 2) The wind prevent duct must be installed to prevent subcooling from cold wind like 87page drawings.
- 3) The indoor heat load must be generate consistently.

* Nominal capacities are based on;

- 1) Cooling : IDU(27°C DB, 19°C WB), ODU(35°C DB, 24°C WB)
- 2) Heating : IDU(20°C DB, 15°C WB), ODU(7°C DB, 6°C WB)
- 3) Equivalent refrigerant piping : 7.5m, Level differences : 0m

* These products contain R410A which is fluorinated greenhouse gas.

4 Dimensional drawing

Outdoor

CF FI ERÝXOPPVŠ, CF FI ERÝXOPPVŠ, CF FI ERÝXOPPVŠ, CF GERÝXOPPVŠ, CF GERÝXOPPVŠ

Units : mm / inches

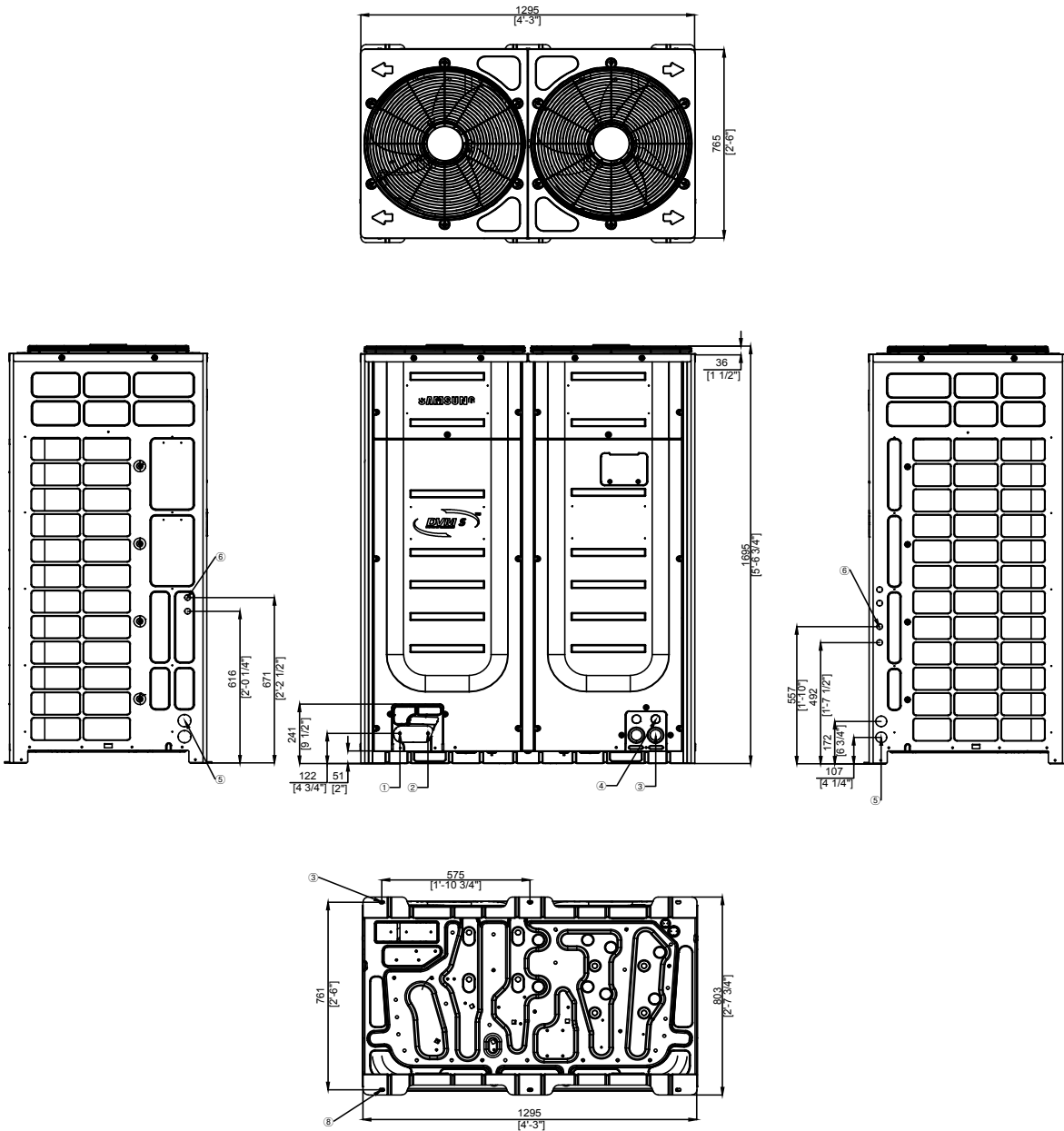


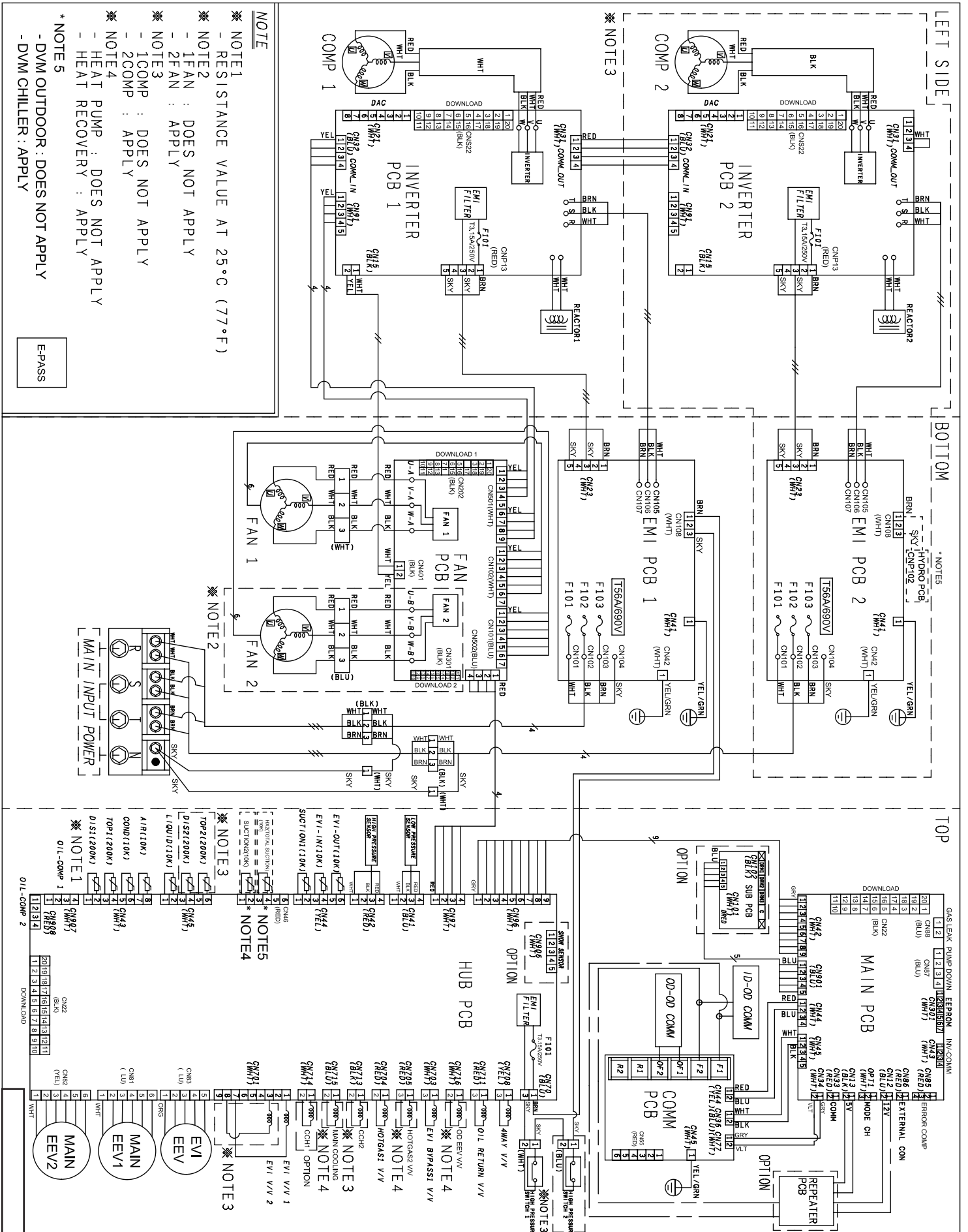
Table of descriptions

1	Gas Ref. pipe	7	Knock-out Hole for Ref. Piping
2	Liquid Ref. pipe	8	Anchor Bolt Hole
3	Power wiring conduit	9	
4	Communication wiring conduit	10	
5	Power wiring conduit	11	
6	Communication wiring conduit	12	

5 Electrical wiring diagram

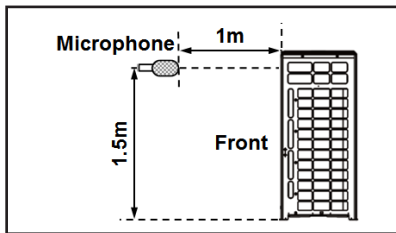
Outdoor

AM080JXVANH/TL, AM100JXVANH/TL, AM120JXVANH/TL, AM140JXVANH/TL, **AM160JXVANH/TL**, AM180JXVANH/TL, AM200JXVANH/TL, AM220JXVANH/TL



6 Sound pressure level

Outdoor

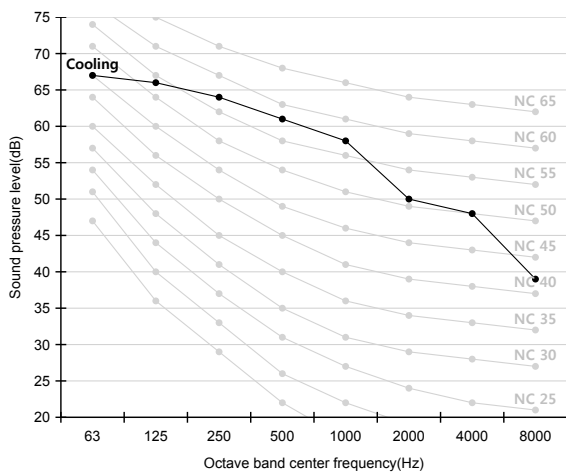


Unit: dB(A)

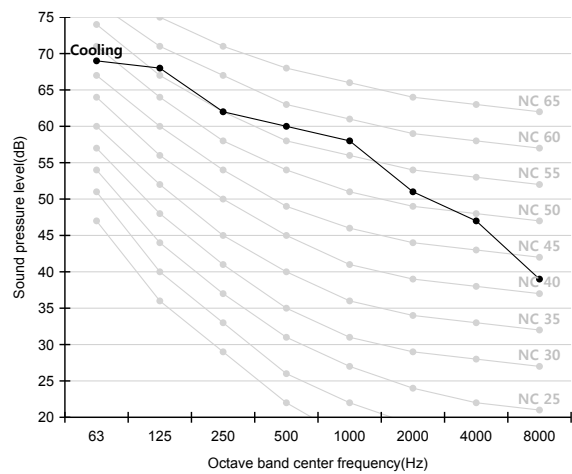
Model	Cooling
AM160JXVANH/TL	63
AM180JXVANH/TL	64
AM200JXVANH/TL	65
AM220JXVANH/TL	66

NC curve

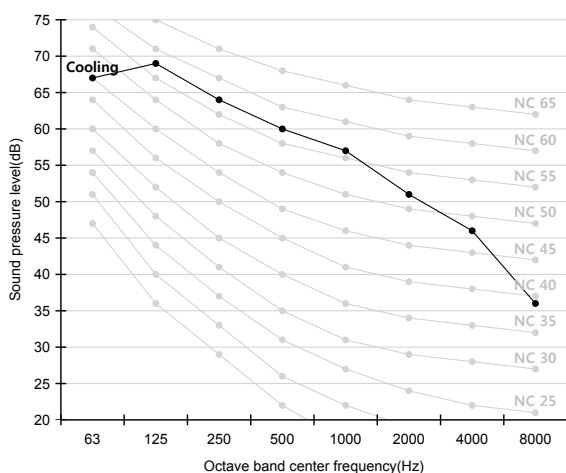
1) AM160JXVANH/TL



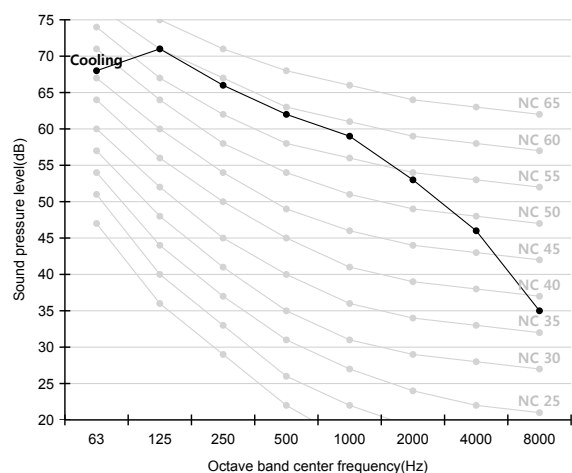
2) AM180JXVANH/TL



3) AM200JXVANH/TL



4) AM220JXVANH/TL



NOTE

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

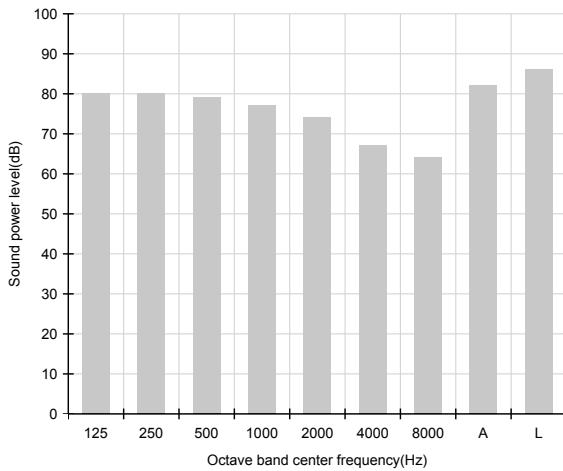
7 Sound power level

Outdoor

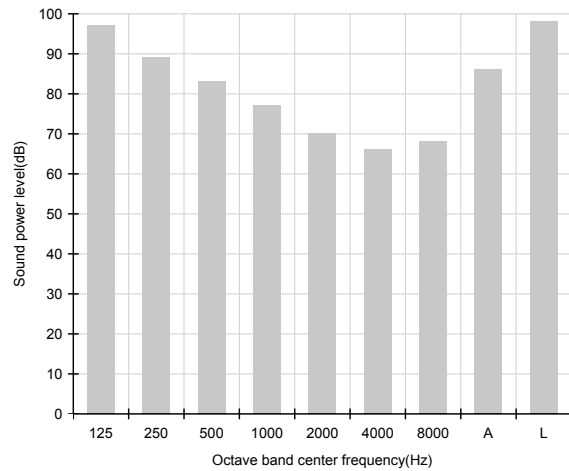
Unit: dB(A)

Model	Power
AM160JXVANH/TL	83
AM180JXVANH/TL	86
AM200JXVANH/TL	87
AM220JXVANH/TL	89

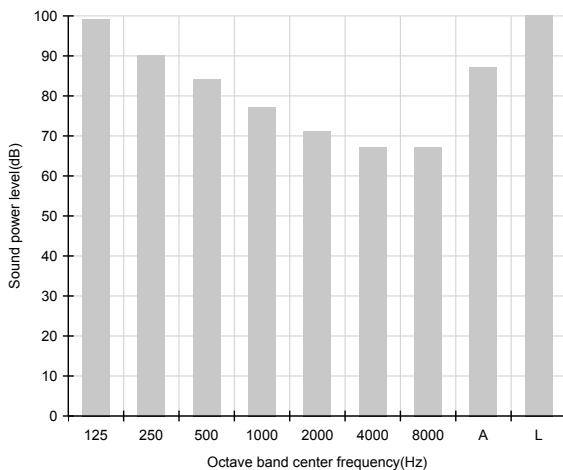
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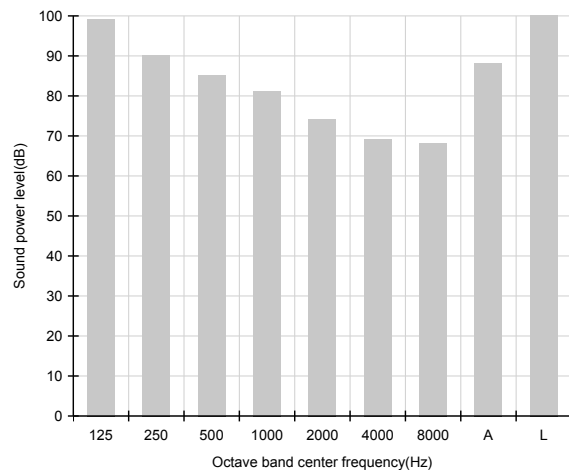
2)AM180JXVANH/TL



3)AM200JXVANH/TL



4)AM220JXVANH/TL



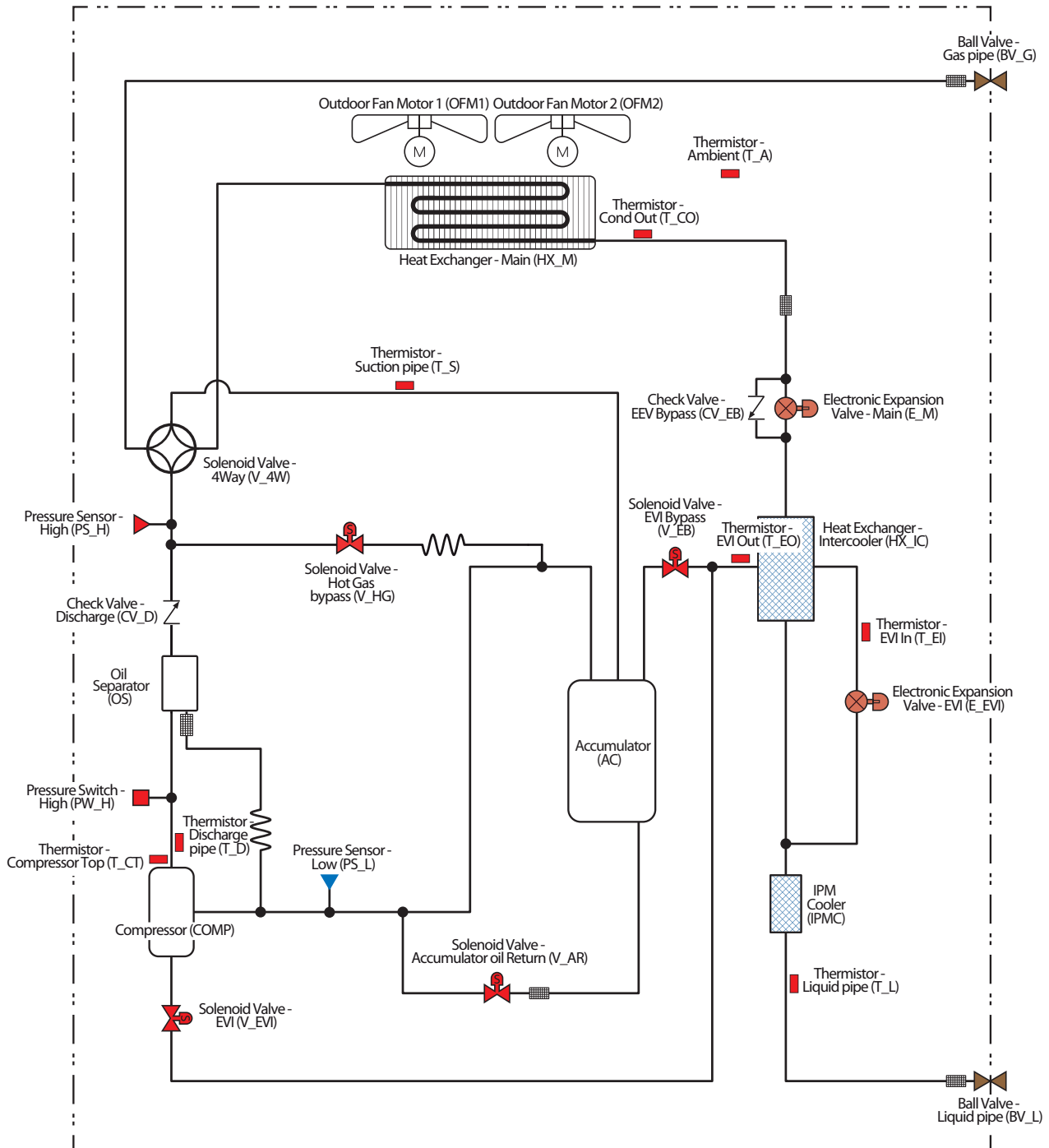
NOTE

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

8 Cycle diagram

Outdoor

AM140JXVANH/TL, AM160JXVANH/TL, AM180JXVANH/TL



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Samsung Electronics Co., LTD.
B2B PM / SE

Head Office (Suwon Korea) 129, Samsung-Ro, Yeongtong-Gu, Suwon City, Gyeonggi-Do, Korea 443-742

Website : www.samsung.com Email : airconditioner@samsung.com

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