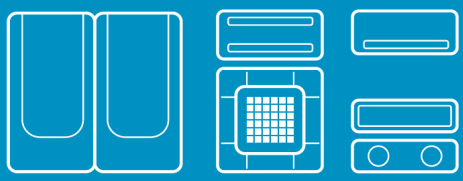
VRF

Technical Data Book

DVM S Standard for South West Asia



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

SAMSUNG

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

(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	3,4,380-415,50/60
Mode			-	HP	HP	HP
Performance	HP		HP	14.00	16.00	18.00
	Capacity (Nominal)	Cooling	kW	40.00	45.00	50.40
			Btu/h	136,500	153,500	172,000
		Heating	kW	45.00	50.40	56.70
			Btu/h	153,500	172,000	193,500
Power	Power Input (Nominal)	Cooling 1)	kW	10.25	11.40	12.45
		Heating 2)	kW	10.15	11.60	11.90
	Current Input (Nominal)	Cooling 1)	A	16.40	18.30	20.00
		Heating 2)	A	16.30	18.60	19.10
	MCA		A	25.00	32.00	39.10
	MFA		A	32.00	40.00	50.00
COP	EER (Nominal Cooling)		-	3.90	3.95	4.05
	COP (Nominal Heating)		-	4.43	4.34	4.76
	Energy Grade		-	ESEER 7.02	ESEER 6.78	ESEER 6.59
			-	-	-	-
Compressor	Type		-	SSC Scroll x 1	SSC Scroll x 2	SSC Scroll x 2
	Output		kW x n	(6.39)	(4.39 x 2)	(6.39 x 2)
	Model Name		-	DS-GB066FAVBx1	DS-GA046FAVAx2	DS-GB066FAVBx2
	Oil	Type	-	PVE	PVE	PVE
Fan	Type		-	Propeller	Propeller	Propeller
	Output x n		W	620.0x2	620.0x2	620.0x2
	Air Flow Rate		CMM	255	255	290
			l/s	4,250.00	4,250.00	4,833.33
	External Static	Max.	mmAQ	8.00	8.00	8.00
			Pa	78.40	78.40	78.40
Piping Connections	Liquid Pipe		Ø, mm	12.70	12.70	15.88
			Ø, inch	1/2"	1/2"	5/8"
	Gas Pipe		Ø, mm	28.58	28.58	28.58
			Ø, inch	1 1/8"	1 1/8"	1 1/8"
	Discharge Gas Pipe		Ø, mm	-	-	-
			Ø, inch	-	-	-
	Installation Limitation	Max. Length	m	200 (220)	200 (220)	200 (220)
		Max. Height	m	110 (40)	110 (40)	110 (40)
Field Wiring	Power Source Wire		mm²	-	-	-
	Transmission Cable		mm²	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type		-	R410A	R410A	R410A
	Factory Charging		kg	7.70	7.70	8.40
Sound	Pressure		dBA	61	63	64
	Power			81	83	86
External Dimension	New Weight		kg	239.0	269.0	307.0
	Shipping Weight		kg	249.0	279.0	317.0
	Net Dimensions (WxHxD)		mm	1,295x1,695x765	1,295x1,695x765	1,295x1,695x765
	Shipping Dimensions (WxHxD)		mm	1,363x1,887x832	1,363x1,887x832	1,363x1,887x832
Operating Temp.	Cooling		ºC	-5.0 ~ 48.0	-5.0 ~ 48.0	-5.0 ~ 48.0
	Heating		ºC	-25.0 ~ 24.0	-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

AM140JXVANH/TL, AM160JXVANH/TL, AM180JXVANH/TL, AM200JXVANH/TL, AM220JXVANH/TL

Units : mm / inches

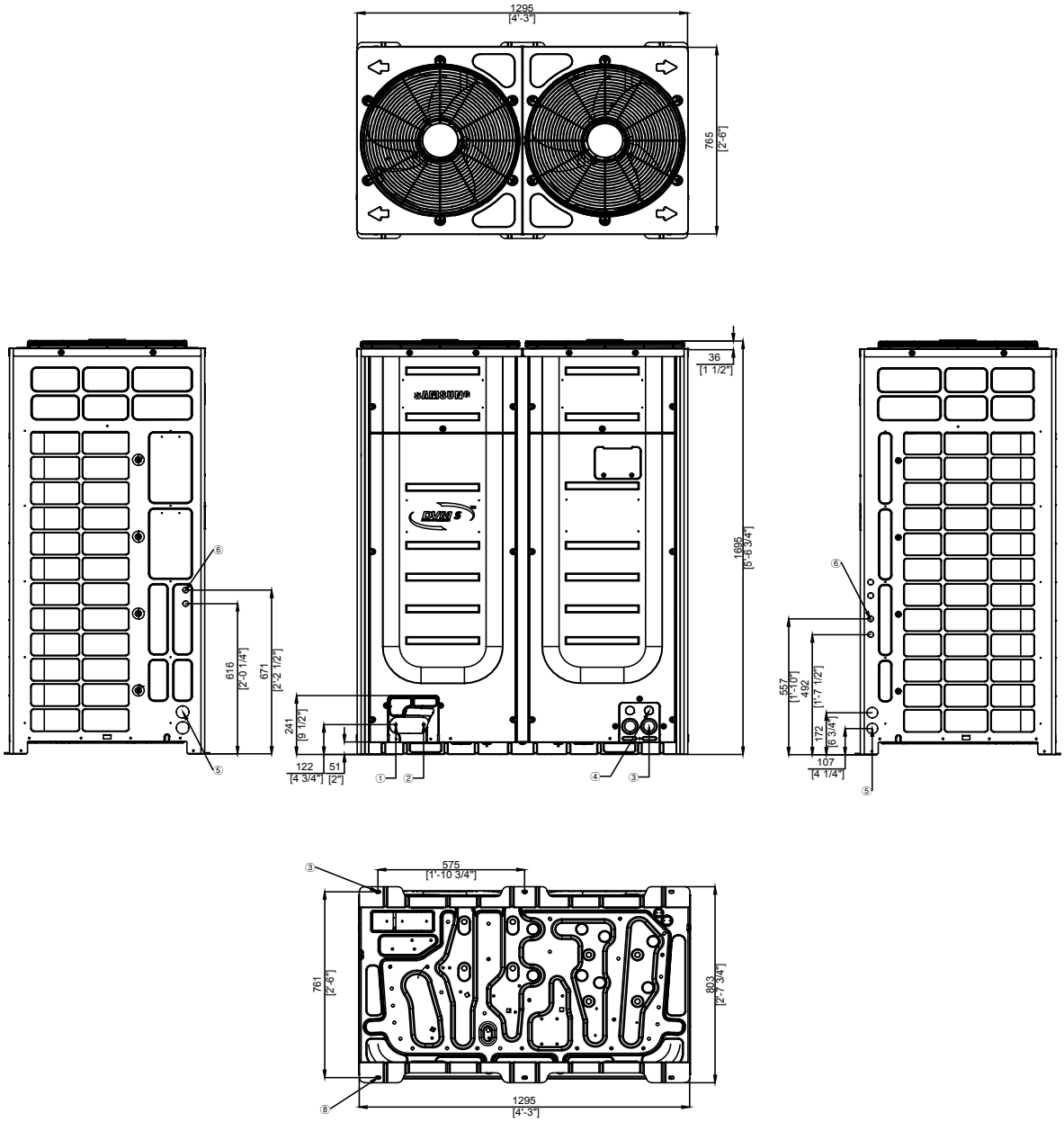
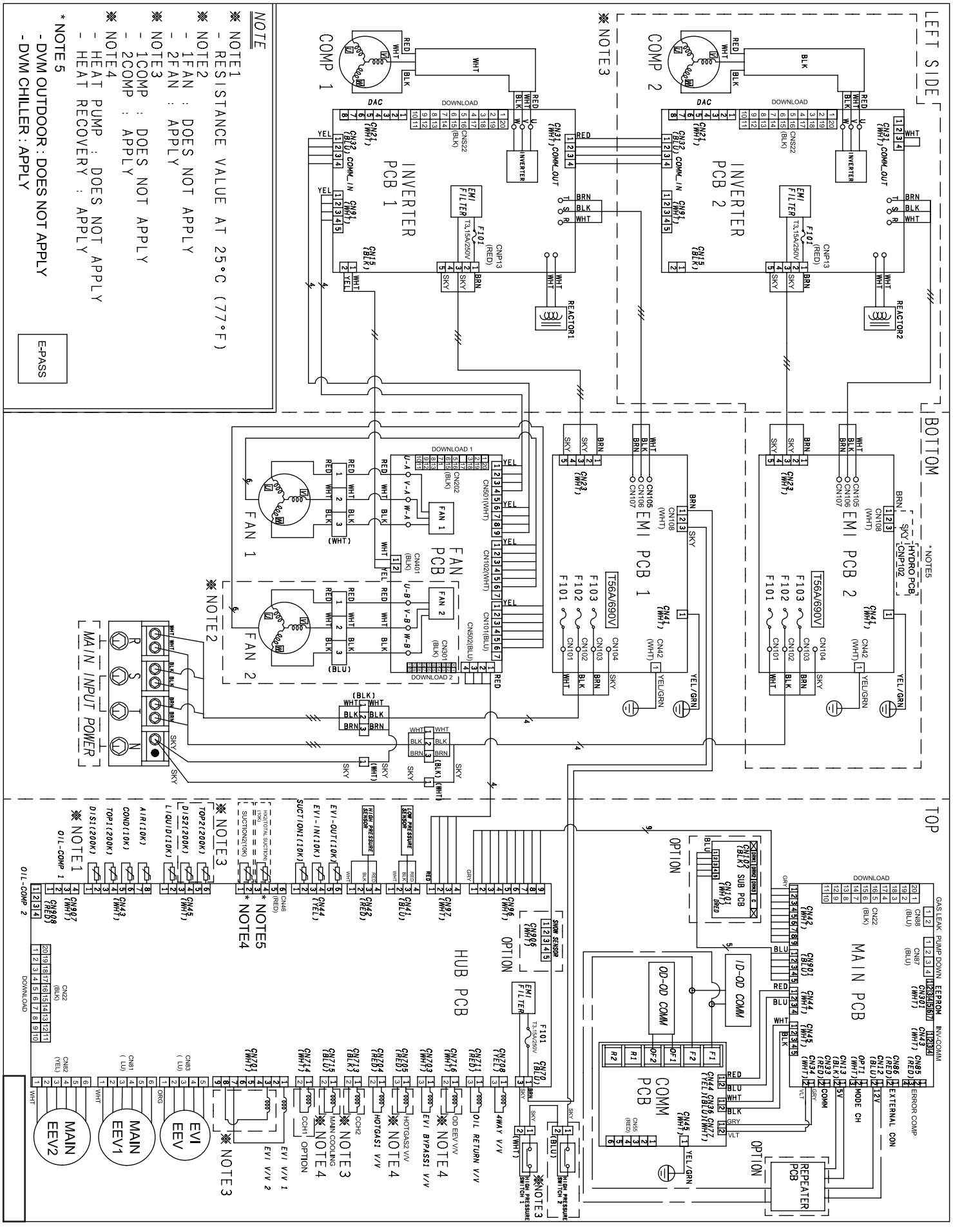


Table of descriptions			
1	Gas Ref. pipe	7	Knock-out Hole for Ref. Piping
2	Liquid Ref. pipe	8	Anchor Bolt Hole
3	Power wiring conduit	9	
4	Communication wiring conduit	10	
5	Power wiring conduit	11	
6	Communication wiring conduit	12	

5 Electrical wiring diagram

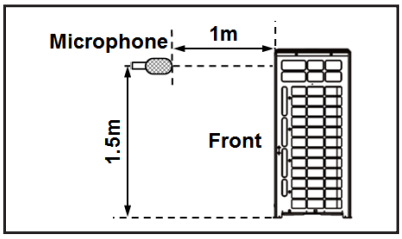
Outdoor

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



6 Sound pressure level

Outdoor

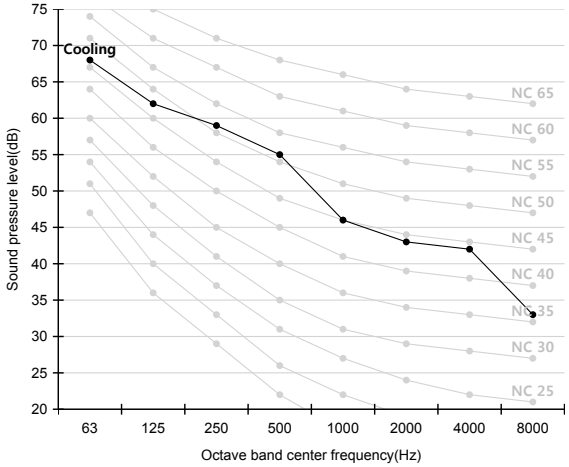


Unit: dB(A)

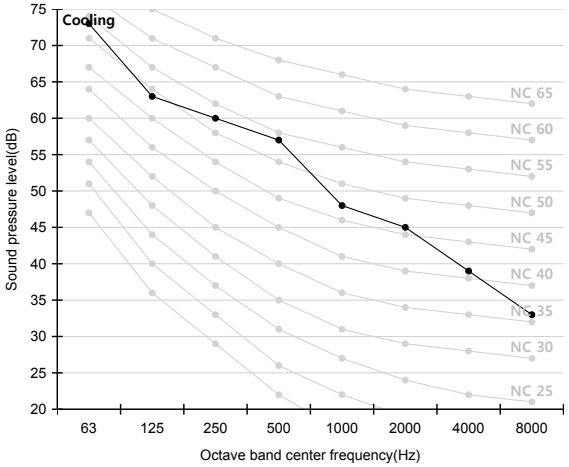
Model	Cooling
AM080JXVANH/TL	57
AM100JXVANH/TL	58
AM120JXVANH/TL	62
AM140JXVANH/TL	61

NC curve

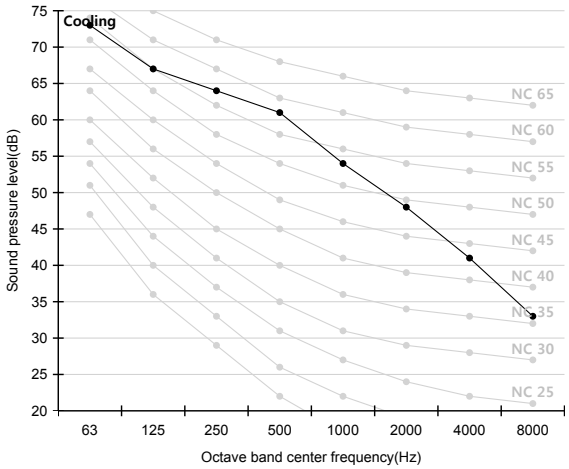
1) AM080JXVANH/TL



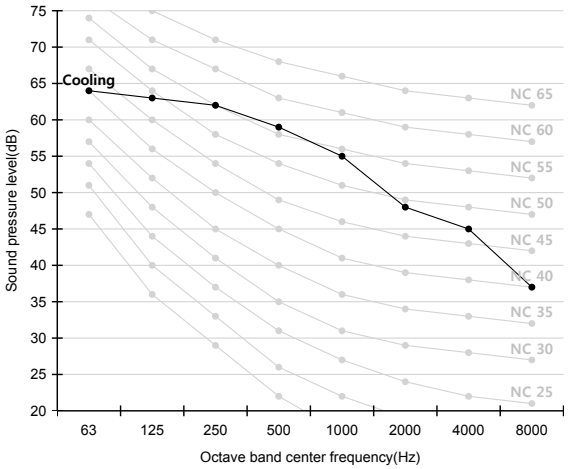
2) AM100JXVANH/TL



3) AM120JXVANH/TL



4) AM140JXVANH/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

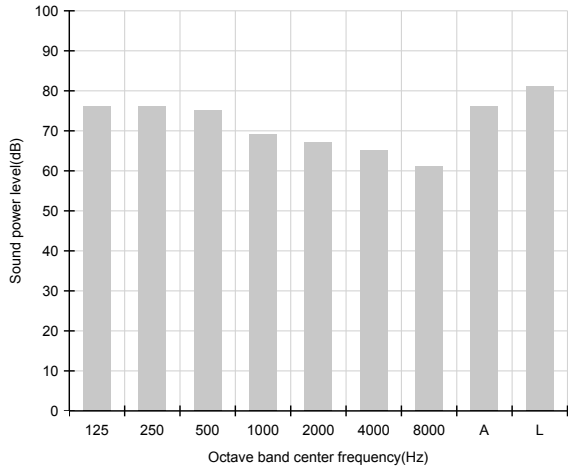
7 Sound power level

Outdoor

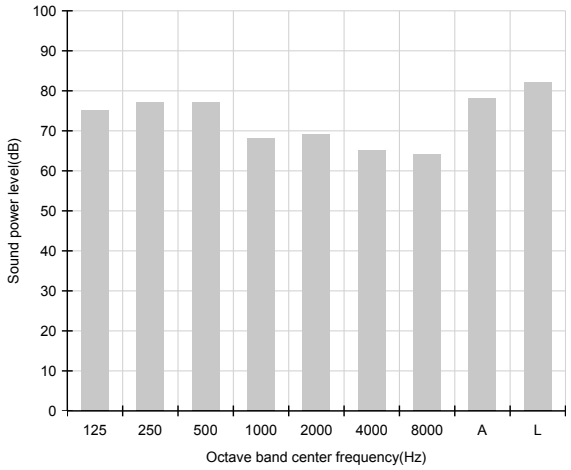
Unit: dB(A)

Model	Power
AM080JXVANH/TL	77
AM100JXVANH/TL	79
AM120JXVANH/TL	81
AM140JXVANH/TL	81

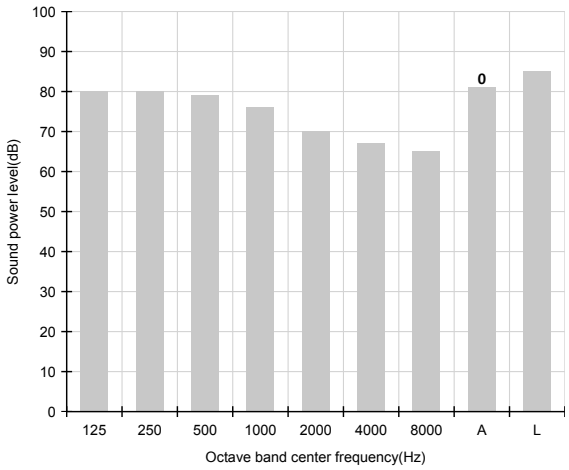
1)AM080JXVANH/TL



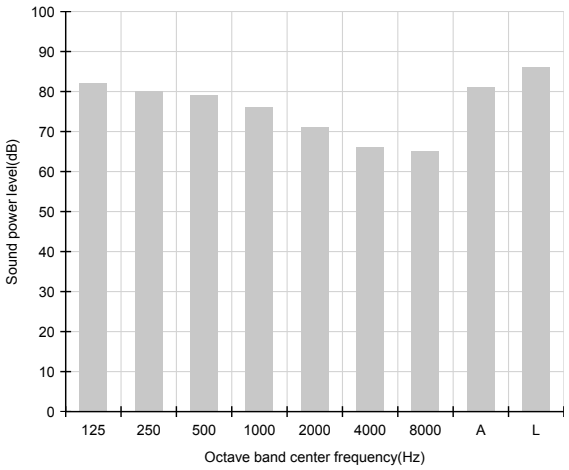
2)AM100JXVANH/TL



3)AM120JXVANH/TL



4)AM140JXVANH/TL



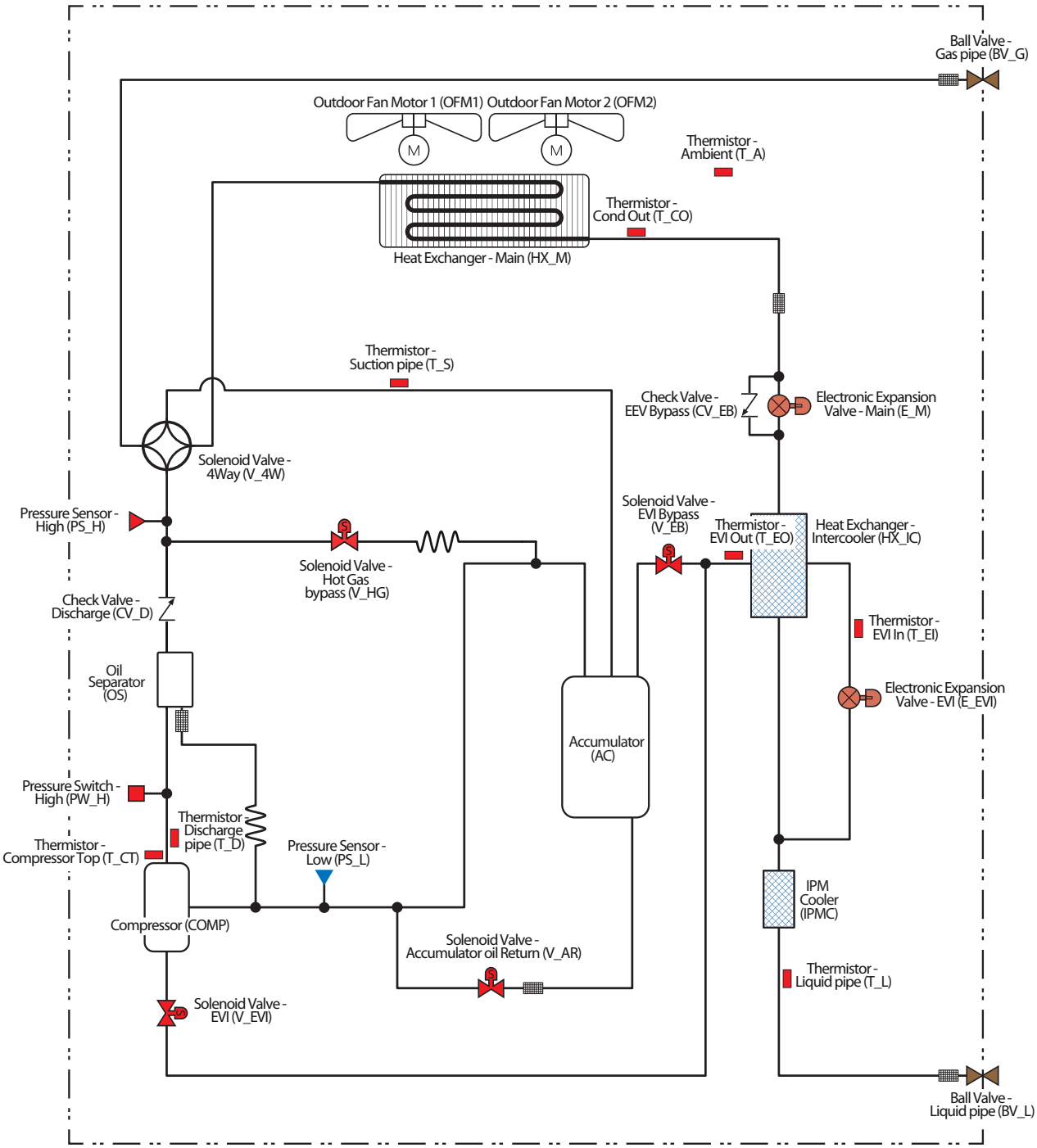
NOTE

- 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



SAMSUNG

2016. 09

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

SAMSUNG