

SAMSUNG

VRF

Technical

Data Book

DVM S Eco for Europe
(R410A, 50Hz, HR)



Model : AM***BXMD*R/EU

2. Specification



Outdoor units

Type			DVM S Eco	DVM S Eco	
Model Name			AM060BXMDER/EU	AM060BXMDGR/EU	
Power Supply		Φ, #, V, Hz	2,2,220~240,50	3,4,380~415,50	
Mode		-	HEAT RECOVERY	HEAT RECOVERY	
Performance	HP	HP	6	6	
	Capacity(Rated)	Cooling	kW	15.5	15.5
		Heating	kW	15.5	15.5
		Heating (Max.)	kW	18.0	18.0
Maximum number of connectable indoor units		EA	10	10	
Total capacity of the connected indoor units		Min.	kW	7.80	7.80
		Max.	kW	20.20	20.20
Power	Power Input	Cooling	kW	5.74	5.74
		Heating		4.43	4.43
		Heating (Max.)		5.79	5.79
	Current Input	Cooling	A	26.3	8.7
		Heating		20.3	6.7
		Heating (Max.)		26.5	8.8
	Minimum Ssc		MVA	Equipment complying with IEC61000-3-12	3.9
MCA		A	30.0	16.1	
MFA (MOP)		A	40.0	20.0	
Energy Efficiency	Nominal Cooling		W/W	2.70	2.70
	Nominal Heating		W/W	3.50	3.50
	Nominal Heating (Max.)		W/W	3.11	3.11
	Ducted	SEER	W/W	7.20	7.20
		SCOP	W/W	4.90	4.90
		ηs,c	%	285.0	285.0
		ηs,h	%	193.0	193.0
	Non_Ducted	SEER	W/W	7.75	7.75
		SCOP	W/W	4.90	4.90
		ηs,c	%	307.0	307.0
		ηs,h	%	193.0	193.0
Pdesignh		kW	8.00	8.00	
Casing	Material	Body	-	GI Steel Plate	GI 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	Twin BLDC Rotary
	Output		kW × n	4.04 × 1	4.04 × 1
	Model Name		-	UG5TK5450FJX x 1	UG5TK5450FJX x 1
	Oil	Type	-	PVE	PVE
Initial charge		cc × n	1,700	1,700	
Fan	Type		-	Propeller	Propeller
	Output × n		W	-	-
	Discharge direction		-	Horizontal	Horizontal
	Quantity		-	2	2
	Air Flow Rate		CMM	100	100
			l/s	1,667	1,667
External Static Pressure	Max.	mmAq	3.0	3.0	
		Pa	29.4	29.4	
Fan Motor	Type		-	BLDC Motor	BLDC Motor
	Output × n		W × n	125 × 2	125 × 2

2. Specification

Outdoor units

Type			DVM S Eco	DVM S Eco	
Model Name			AM060BXMDER/EU	AM060BXMDGR/EU	
Piping Connections	Liquid Pipe	Φ, mm	9.52	9.52	
		Φ, inch	3/8"	3/8"	
		Type	Braze Connection	Braze Connection	
		Φ, mm(inch)	9.52 (3/8")	9.52 (3/8")	
	Gas Pipe	Φ, mm	15.88	15.88	
		Φ, inch	5/8"	5/8"	
		Type	Braze Connection	Braze Connection	
		Φ, mm(inch)	15.88 (5/8")	15.88 (5/8")	
	Discharge Gas Pipe	Φ, mm	19.05	19.05	
		Φ, inch	3/4"	3/4"	
		Type	Braze Connection	Braze Connection	
		Φ, mm(inch)	19.05 (3/4")	19.05 (3/4")	
	Heat Insulation		-	liquid and gas and high pressure gas pipes	liquid and gas and high pressure gas pipes
	Piping length (ODU-IDU)	Max. [Equiv.]	m	150 (175)	150 (175)
Piping length (1st Branch-IDU)	Max.	m	40	40	
Total piping length (System)	Max.	m	300	300	
Level difference (ODU in highest position)	Max.	m	50	50	
Level difference (IDU in highest position)	Max.	m	40	40	
Level difference (IDU-IDU)	Max.	m	50	50	
Field Wiring	Transmission Cable	Min.	mm'	0.75	
		Remark	-	F1, F2	
	Power supply intake			Both IDU&ODU	Both IDU&ODU
Refrigerant	Type	-	R410A	R410A	
	Factory Charging	kg	3.3	3.3	
		tCO ₂ e	6.89	6.89	
Sound	Sound Pressure	Cooling	dB(A)	53	
		Heating		55	
	Sound Power				70
External Dimension	Net Weight		kg	100	98
	Shipping Weight		kg	110	108
	Net Dimensions (WxHxD)		mm	940 x 1,210 x 330	940 x 1,210 x 330
	Shipping Dimensions (WxHxD)		mm	995 x 1,388 x 426	995 x 1,388 x 426
Operating Temp. Range	Cooling		°C	-5.0 ~ 48.0 °C	-5.0 ~ 48.0 °C
	Heating		°C	-25.0 ~ 26.0 °C	-25.0 ~ 26.0 °C

NOTE

- Specifications may be subject to change without prior notice.
 - Cooling capacities are based on;
 - Indoor temperature: 27°C DB, 19°C WB
 - Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 75m, Level differences: 0m
 - Heating capacities are based on;
 - Indoor temperature: 20°C DB, 15°C WB
 - Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 75m, Level differences: 0m
 - Select wire size based on the value of MCA
 - 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.
 - These products contain R410A (GWP=2,088) which is fluorinated greenhouse gas.
- Recommended combination

* Casstte

Capacity	Indoor combination
4HP	3x AM028AN4PKH + 1x AM036AN4PKH
5HP	2x AM036AN4PKH
6HP	2x AM036AN4PKH + 2x AM045AN4PKH

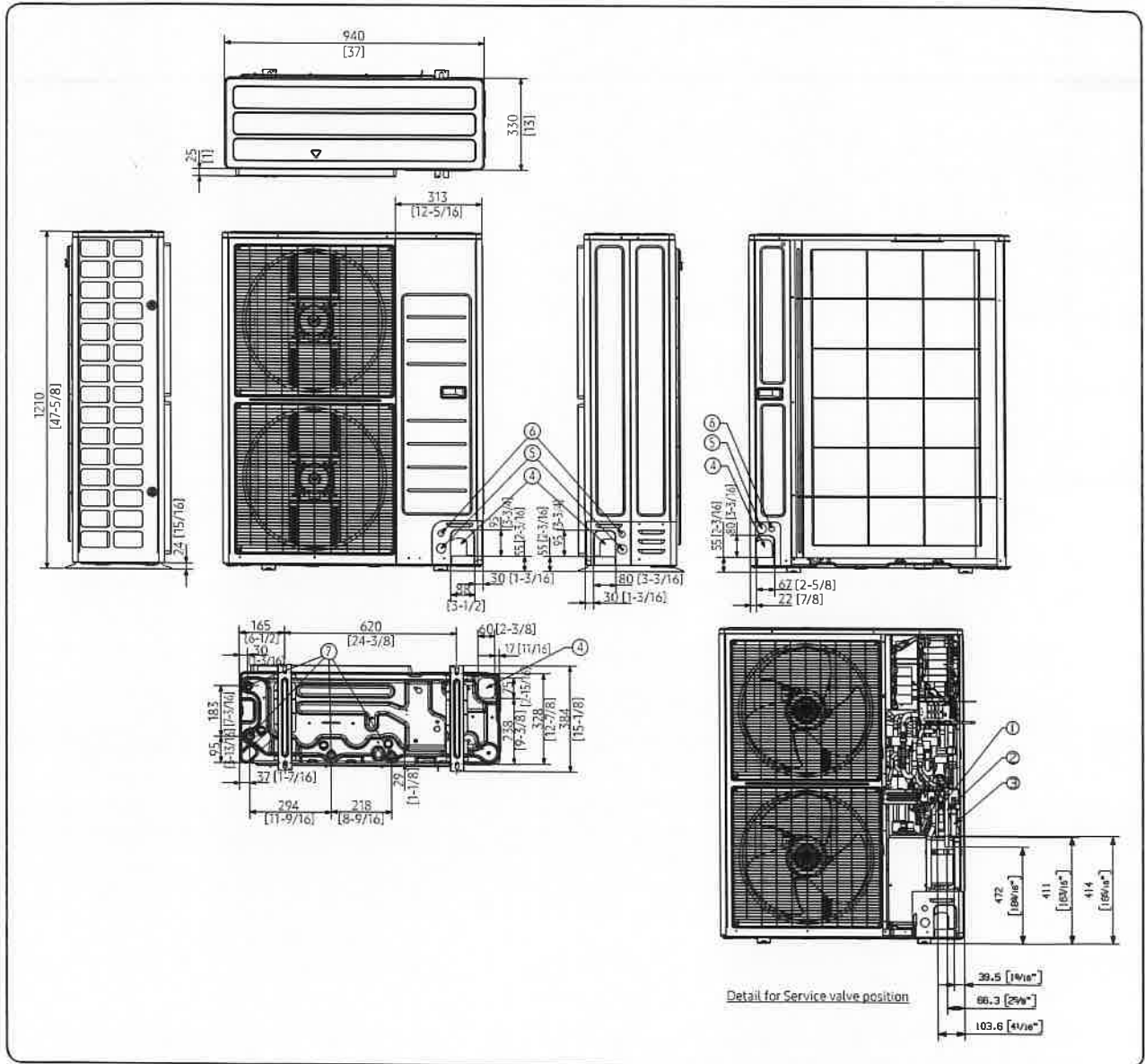
* Ducted

Capacity	Indoor combination
4HP	3x AM028ANMPKH + 1x AM036ANMPKH
5HP	4x AM036ANMPKH
6HP	2x AM036ANMPKH + 2x AM045ANMPKH

4. Dimensional Drawing

AM040BXMD*R/EU, AM05BNXMD*R/EU, AM060BXMD*R/EU

Units : mm [inches]



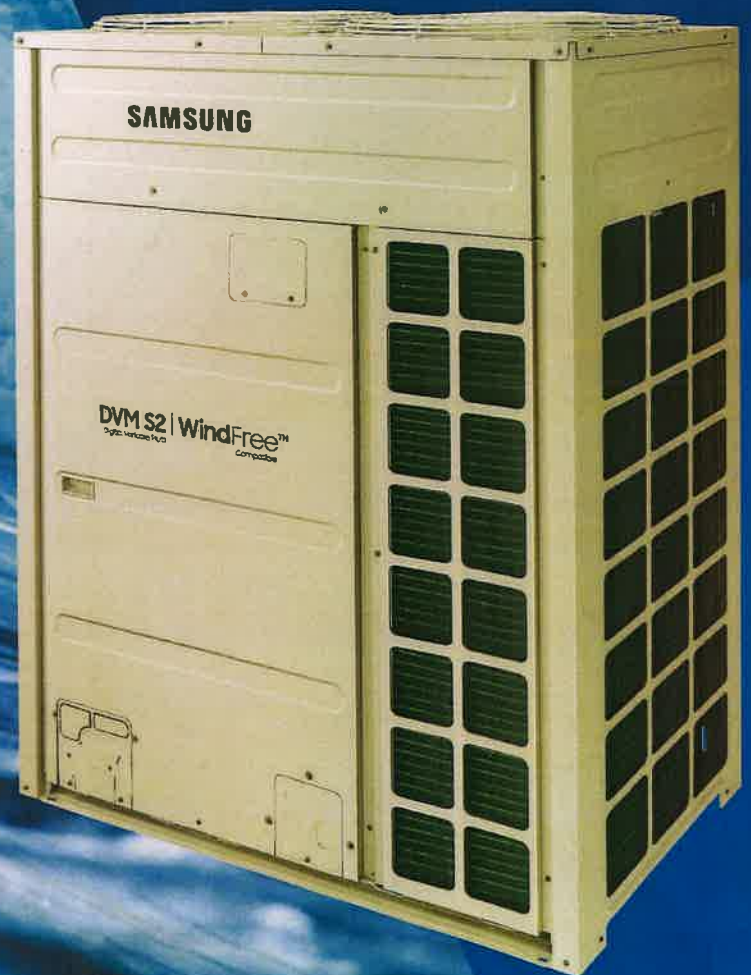
NO	Name	Description
1	Refrigerant liquid pipe	Ø9.52 (Ø3/8)
2	Refrigerant High pressure gas pipe	Ø15.88 (Ø5/8)
3	Refrigerant Low pressure gas pipe	Ø19.05 (Ø3/4)
4	Knockout hole for pipe intake	Front / Side / Rear / Bottom
5	Power wiring conduits	Front / Side / Rear, Ø34 (Ø1-3/8)
6	Communication wiring conduits	Front / Side / Rear, Ø22 (Ø7/8)
7	Drain holes	Connect with the provided drain plug.

SAMSUNG

VRF

Technical Data Book

**DVM S2 for Europe
(R410A, 50Hz, HR)**



Model : Premium energy efficiency Type



2. Specification

Premium energy efficiency

Model Name				AM080AXVGGR/EU	AM100AXVGGR/EU	AM120AXVGGR/EU	
Outdoor unit module 1				-	-	-	
Outdoor unit module 2				-	-	-	
Outdoor unit module 3				-	-	-	
Outdoor unit module 4				-	-	-	
Power Supply			Ø, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50	3, 4, 380-415, 50	
Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP	
Performance	HP		HP	8	10	12	
	Capacity	Cooling(Rated)	kW	22.4	28.0	33.6	
		Heating(Rated)	kW	22.4	28.0	33.6	
		Heating(Max)	kW	25.2	31.5	37.8	
Maximum number of connectable indoor units			EA	14	18	21	
Total capacity of the connected Indoor Units			Min.	kW	11.2	14.0	16.8
			Max.	kW	29.1	36.4	43.7
Current	Current Input (Ducted)	Cooling(Rated)	A	11.44	15.97	19.25	
		Heating(Rated)	A	9.09	11.41	14.37	
	Current Input (Non-Ducted)	Cooling(Rated)	A	9.99	13.84	17.74	
		Heating(Rated)	A	8.05	10.83	14.25	
	Current	Minimum Ssc	MVA	3.0	3.4	4.0	
		MCA	A	18.0	21.2	25.0	
MFA		A	25	32	32		
Efficiency	SEER	Ducted	W/W	7.20	6.90	6.90	
			W/W	4.50	4.40	4.56	
			%	285	273	273	
			%	177	173	179.4	
	SEER	Non_Ducted	W/W	7.78	7.22	7.22	
			W/W	4.53	4.39	4.41	
			%	308.2	285.8	285.8	
			%	178.2	172.6	173.4	
Pdesignh			kW	14	16.9	19.7	
Casing	Material	Body	-	GI Steel Plate	GI Steel Plate	GI Steel Plate	
		Base	-	GI Steel Plate	GI Steel Plate	GI Steel Plate	
Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube	
	Material	Fin	-	Al	Al	Al	
		Tube	-	Cu	Cu	Cu	
Fin Treatment			-	Anti-corrosion	Anti-corrosion	Anti-corrosion	
Compressor	Type		-	Inverter Scroll x 1	Inverter Scroll x 1	Inverter Scroll x 1	
	Output		kW x n	4.60 x 1	6.67 x 1	6.67 x 1	
	Model Name			-	DS2GR7046FV* x 1	DS4GR7066FV* x 1	DS4GR7066FV* x 1
	Oil	Type	-	PVE	PVE	PVE	
		Initial charge	cc x n	900 x 1	1,100 x 1	1,100 x 1	
Fan	Type		-	Propeller	Propeller	Propeller	
	Discharge direction		-	Top	Top	Top	
	Quantity		EA	1	1	1	
	Air Flow Rate		m ³ /min	164	181	196	
			l/s	2,738	3,019	3,260	
	External Static Pressure	Max.	mmAq	11	11	11	
Pa			110	110	110		
Fan Motor	Type		-	BLDC Motor	BLDC Motor	BLDC Motor	
	Output		W x n	630 x 1	630 x 1	630 x 1	
Piping Connections	Liquid Pipe	Type		Braze connection	Braze connection	Braze connection	
		Ø, mm (inch)		9.52 (3/8)	9.52 (3/8)	12.70 (1/2)	
	Gas Pipe	Type		Braze connection	Braze connection	Braze connection	
		Ø, mm (inch)		19.05 (3/4)	22.22 (7/8)	28.58 (1-1/8)	
	High pressure Gas Pipe(HR Only)		Type		Braze connection	Braze connection	Braze connection
			Ø, mm (inch)		15.88 (5/8)	19.05 (3/4)	19.05 (3/4)
Heat Insulation			-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes	

2. Specification

Premium energy efficiency

Model Name				AM080AXVGGR/EU	AM100AXVGGR/EU	AM120AXVGGR/EU
Outdoor unit module 1				-	-	-
Outdoor unit module 2				-	-	-
Outdoor unit module 3				-	-	-
Outdoor unit module 4				-	-	-
Piping Connections	Piping length (ODU-IDU)	Max. [Equiv.]	m	200[220]	200[220]	200[220]
	Piping length (1st Branch-IDU)	Max.	m	90	90	90
	Total piping length (System)	Max.	m	1,000	1,000	1,000
	Level difference (ODU in highest position)	Max.	m	110	110	110
	Level difference (IDU-IDU)	Max.	m	50	50	40
Wiring connections	Transmission Cable	Min.	mm ²	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2
	Power supply intake		-	Both indoor and outdoor unit	Both indoor and outdoor unit	Both indoor and outdoor unit
Refrigerant	Type		-	R410A	R410A	R410A
	Factory Charging		kg	7.0	7.0	7.0
				tCO ₂ e	14.62	14.62
Sound ⁸⁾	Sound Pressure	Cooling	dB(A)	53	56	61
		Heating	dB(A)	58	60	63
	Sound Power		dB(A)	75	78	81
External Dimension	Net Weight		kg	199	211	211
	Shipping Weight		kg	213	225	225
	Net Dimensions (WxHxD)		mm	930 x 1,695 x 765	930 x 1,695 x 765	930 x 1,695 x 765
	Shipping Dimensions (WxHxD)		mm	998 x 1,887 x 829	998 x 1,887 x 829	998 x 1,887 x 829
Operating Temp. Range	Cooling		°C	-5 ~ 50	-5 ~ 50	-5 ~ 50
	Heating		°C	-25 ~ 24	-25 ~ 24	-25 ~ 24

NOTE

- Specification may be subject to change without prior notice.
 - Specification comply with EN14825 and Eurovent test condition.
- Performances are based on the following test conditions:
 - Cooling : Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
 - Heating : Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
 - Equivalent refrigerant pipe length 5m, Level differences 0m
 - Refer to EUROVENT website(www.eurovent-certification.com) for other indoor unit combination and more detail test conditions.
 - Performance of Multiple Module Outdoor unit is weighted average of Single Module outdoor units.
 - Allowed combination ratio of the total rated indoor unit capacity over the rated outdoor unit capacity is 50~130%.
 - 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
 - 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
 - Sound values of multi combination are theoretical values based on sound results of individual installed units.
 - These products contain R410A (GWP=2,088) which is fluorinated greenhouse gas.
 - If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under.
 - If the level difference is higher than 50m, make a decision by PDM kit installation Guide software whether the PDM kit should be installed or not.)
 - PDM kit: Pressure Drop Modulation kit
 - When the outdoor unit is below the indoor unit & the level differences are 40m or more, contact your local dealer for more information.
 - In case you want to know more information regarding capacity and correction, please refer to capacity table TDB on pvi.samsung.com/site.
 - Recommended combination

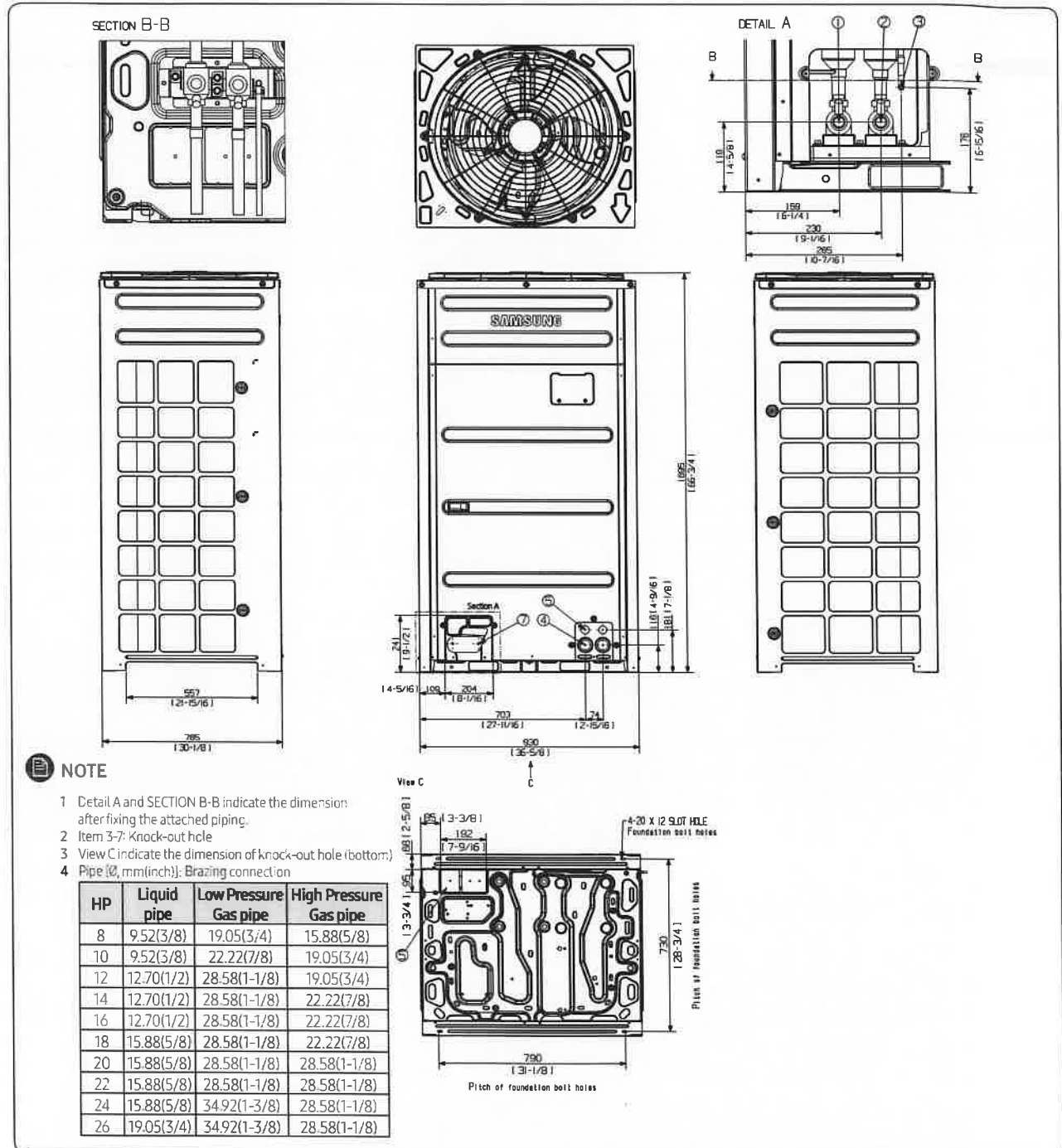
* Ducted				* Non-ducted			
Capacity	Indoor Units	Capacity	Indoor Units	Capacity	Indoor Units	Capacity	Indoor Units
8HP	AM056ANHPKH*4	18HP	AM056ANHPKH*4 + AM071ANHPKH*4	8HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2	18HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM071ANHPKH*2 + AM071ANHPKH*2
10HP	AM071ANHPKH*4	20HP	AM071ANHPKH*8	10HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2	20HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM071ANHPKH*2 + AM071ANHPKH*2
12HP	AM056ANHPKH*6	22HP	AM071ANHPKH*4 + AM090ANHPKH*4	12HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2	22HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM071ANHPKH*2 + AM071ANHPKH*2
14HP	AM056ANHPKH*1 + AM071ANHPKH*5	24HP	AM071ANHPKH*1 + AM090ANHPKH*7	14HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2	24HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM071ANHPKH*2 + AM071ANHPKH*2
16HP	AM056ANHPKH*2 + AM090ANHPKH*4	26HP	AM090ANHPKH*6 + AM12ANHPKH*2	16HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2	26HP	AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM056ANHPKH*2 + AM071ANHPKH*2 + AM071ANHPKH*2

4. Dimensional Drawing

Outdoor unit

- AM080AXVGGR/EU, AM100AXVGGR/EU, AM120AXVGGR/EU

Unit: mm (inches)



NO	Table of descriptions	Remark	NO	Table of descriptions	Remark
1	Low Pressure Gas Ref.pipe	See NOTE 4.	5	Communication wiring conduit	Ø34
2	High Pressure Ref.pipe	See NOTE 4.	6	Knock-out Hole for Ref.Piping (bottom)	
3	Liquid Ref.pipe	See NOTE 4.	7	Knock-out Hole for Ref.Piping (front)	
4	Power wiring conduit	Ø44			