

**SAMSUNG**  
Climate Solutions

VRF



**DVM S2 High Efficiency Heat Pump (2-Pipe)**

# DVM S2 High Efficiency Heat Pump (2-Pipe)

- Erp (Ecodesign) compliant and Eurovent certified.
- Advanced Flash Injection™ technology.
- Active AI Pressure Control.
- Active AI Defrost.

- Active AI Refrigerant analysis.
- Durafin™ Ultra Heat Exchanger Fin.
- Optional Slimmer Liquid Pipe.
- On-device Inverter Checker™.

## Specifications



Model			AM080AXVGGH/EU	AM100AXVGGH/EU	AM120AXVGGH/EU	AM140AXVGGH/EU	AM160AXVGGH/EU
<b>Electrical</b>							
Power Supply		Ø, #, V, Hz	3Ø, 4, 380–415 V, 50 Hz	3Ø, 4, 380–415 V, 50 Hz	3Ø, 4, 380–415 V, 50 Hz	3Ø, 4, 380–415 V, 50 Hz	3Ø, 4, 380–415 V, 50 Hz
Minimum SSC value		MVA	3.0	3.4	4.0	4.4	5.2
		A	18.0	21.2	25.0	27.0	32.0
MCA		A	25	32	32	32	40
Interconnecting Communication Cable		mm <sup>2</sup>	Screened 0.75-1.5mm <sup>2</sup> , 2 Core, F1 F2 Connection				
<b>Performance<sup>1</sup></b>							
Horsepower		HP	8	10	12	14	16
Capacity (Rated)	Nominal Cooling Capacity	kW	22.4	28.0	33.6	40.0	45.0
	Nominal Heating Capacity	kW	22.4	28.0	33.6	40.0	45.0
	Max Heating Capacity	kW	25.2	31.5	37.8	45.0	50.4
Operating Temperature Range	Cooling	°C	-5 – 50	-5 – 50	-5 – 50	-5 – 50	-5 – 50
	Heating	°C	-25 – 24	-25 – 24	-25 – 24	-25 – 24	-25 – 24
Maximum quantity of connectable indoor units		ea	14	18	21	26	29
<b>Energy Efficiency<sup>2</sup></b>							
Seasonal Efficiency (Ducted)	SEER	W/W	7.20	6.90	6.90	6.70	6.90
	SCOP	W/W	4.50	4.40	4.56	4.25	4.30
	η <sub>s,c</sub>	%	285.0	273.0	273.0	265.0	273.0
	η <sub>s,h</sub>	%	177.0	173.0	179.4	167.0	169.0
Seasonal Efficiency (Cassettes)	SEER	W/W	7.78	7.22	7.22	6.94	7.25
	SCOP	W/W	4.53	4.39	4.41	4.35	4.35
	η <sub>s,c</sub>	%	308.2	285.8	285.8	274.6	287.0
	η <sub>s,h</sub>	%	178.2	172.6	173.4	171.0	171.0
<b>Fan</b>							
Type		-	Propeller	Propeller	Propeller	Propeller	Propeller
Discharge Direction			Top	Top	Top	Top	Top
Number of Fans		ea	1	1	1	2	2
Fan Motor	Model	-	BLDC	BLDC	BLDC	BLDC	BLDC
	Output x n	W	630 x 1	630 x 1	630 x 1	620 x 2	620 x 2
Airflow Rate		m <sup>3</sup> /min	164	181	196	291	292
		l/s	2738	3019	3260	4852	4866
Static Pressure	Max	Pa	110	110	110	110	110
<b>Compressor</b>							
Type		-	Inverter Scroll x 1	Inverter Scroll x 1	Inverter Scroll x 1	Inverter Scroll x 1	Inverter Scroll x 1
Output x n		kW	4.60 x 1	4.60 x 1	4.60 x 1	6.67 x 1	8.93 x 1
<b>Piping Connections</b>							
Liquid Pipe		ø, mm (inch)	9.52 (3/8)	9.52 (3/8)	12.70 (1/2)	12.70 (1/2)	12.70 (1/2)
Gas Pipe		ø, mm (inch)	19.05 (3/4)	22.22 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
<b>Refrigerant</b>							
Type			R410A (Fluorinated greenhouse gas, GWP=2088)				
Factory Charging		kg	7.0	7.0	7.0	8.0	10.5
		tCO <sub>2</sub> e	14.62	14.62	14.62	16.70	21.92
<b>Sound</b>							
Sound Pressure Level	Cooling	dB(A)	53	56	61	58	58
	Heating	dB(A)	58	60	63	61	61
Sound Power Level		dB(A)	75	78	81	81	81
<b>Dimensions</b>							
Net Weight		kg	194	205	205	233	262
Net Dimensions	W x H x D	mm	930 x 1695 x 765	930 x 1695 x 765	930 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765

<sup>1</sup> 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 7.5m, Level differences 0m

<sup>2</sup> Efficiencies shown are according to EU No 2016/2281 (LOT21) Ecodesign requirements for heat pumps/air conditioners.

# Specifications



Model			AM180AXVGGH/EU	AM200AXVGGH/EU	AM220AXVGGH/EU	AM240AXVGGH/EU	AM260AXVGGH/EU
<b>Electrical</b>							
Power Supply		Φ, #, V, Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz
Minimum SSC value		MVA	6.4	7.0	7.4	9.3	10.2
MCA		A	39.2	43.0	46.0	55.0	60.0
MFA		A	50	63	63	63	75
Interconnecting Communication Cable		mm <sup>2</sup>	Screened 0.75-1.5mm <sup>2</sup> , 2 Core, F1 F2 Connection				
<b>Performance<sup>1</sup></b>							
Horsepower		HP	18	20	22	24	26
Capacity (Rated)	Nominal Cooling Capacity	kW	50.4	56.0	61.6	67.2	72.8
	Nominal Heating Capacity	kW	50.4	56.0	61.6	67.2	68.0
	Max Heating Capacity	kW	56.7	63.0	69.3	75.6	81.9
Operating Temperature Range	Cooling	°C	-5 ~ 50	-5 ~ 50	-5 ~ 50	-5 ~ 50	-5 ~ 50
	Heating	°C	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24
Maximum quantity of connectable indoor units		ea	32	36	40	43	47
<b>Energy Efficiency<sup>2</sup></b>							
Seasonal Efficiency (Ducted)	SEER	W/W	7.50	6.50	6.20	5.90	5.40
	SCOP	W/W	4.80	4.50	4.30	3.90	3.90
	η <sub>s,c</sub>	%	297.0	257.0	245.0	233.0	213.0
	η <sub>s,h</sub>	%	189.0	177.0	169.0	153.0	153.0
Seasonal Efficiency (Cassettes)	SEER	W/W	7.05	6.81	7.04	5.94	5.45
	SCOP	W/W	4.45	4.27	4.39	3.90	3.90
	η <sub>s,c</sub>	%	279	269.4	278.6	234.6	215.0
	η <sub>s,h</sub>	%	175.0	167.8	172.6	153.0	153.0
<b>Fan</b>							
Type		-	Propeller	Propeller	Propeller	Propeller	Propeller
Discharge Direction			Top	Top	Top	Top	Top
Number of Fans		ea	2	2	2	2	2
Fan Motor	Model	-	BLDC	BLDC	BLDC	BLDC	BLDC
	Output x n	W	620 x 2	620 x 2	620 x 2	620 x 2	620 x 2
Airflow Rate		m <sup>3</sup> /min	313	313	342	365	365
		l/s	5209	5209	5698	6089	6089
Static Pressure	Max	Pa	110	110	110	80	80
<b>Compressor</b>							
Type		-	Inverter Scroll x 1	Inverter Scroll x 1	Inverter Scroll x 2	Inverter Scroll x 2	Inverter Scroll x 2
Output x n		kW	8.93 x 1	8.93 x 1	6.67 x 2	6.67 x 2	6.67 x 2
<b>Piping Connections</b>							
Liquid Pipe		ø, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	19.05 (3/4)
Gas Pipe		ø, mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	34.92 (1-3/8)	34.92 (1-3/8)
<b>Refrigerant</b>							
Type			R410A (Fluorinated greenhouse gas, GWP=2088)				
Factory Charging		kg	10.5	10.5	10.5	14.0	14.0
		tCO <sub>2</sub> e	21.92	21.92	21.92	29.23	29.23
<b>Sound</b>							
Sound Pressure Level	Cooling	dB(A)	59	61	64	65	65
	Heating	dB(A)	63	63	65	67	67
Sound Power Level		dB(A)	81	84	86	87	87
<b>Dimensions</b>							
Net Weight		kg	268	268	301	325	325
Net Dimensions	W x H x D	mm	1295 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765

<sup>1</sup> 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
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