

SAMSUNG
Climate Solutions

VRF



DVM S Eco Heat Recovery (3-Pipe) Mini VRF

DVM S Eco Heat Recovery (3-Pipe) Mini VRF

- Optimised for small hotels and residential buildings, it can provide cooling and heating for up to 10 indoor units simultaneously.
- An HR Changer is used to convert a DVM S Eco Heat Pump (4, 5 and 6 HP) to a Heat Recovery (HR) model, which can be connected to a multiport Mode Control Unit (MCU)

- Horizontal discharge and rear suction by means of two propeller BLDC Inverter fans.
- Each module houses one Twin BLDC Rotary compressor.
- Eurovent certified and ErP (Ecodesign) compliant.
- Four-way direction piping connection.

Specifications



Model			AM040BXMDER/EU	AM050BXMDER/EU	AM060BXMDER/EU	AM040BXMDGR/EU	AM050BXMDGR/EU	AM060BXMDGR/EU
Electrical								
Power Supply		Φ, #, V, Hz	1Φ, 2, 220~240 V, 50 Hz	1Φ, 2, 220~240 V, 50 Hz	1Φ, 2, 220~240 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	Equipment complying with IEC61000-3-12	Equipment complying with IEC61000-3-12	Equipment complying with IEC61000-3-12	3.9	3.9	3.9
MCA		A	22	24	30	16.1	16.1	16.1
MFA		A	25	32	40	20	20	20
Interconnecting Communication Cable		mm ²	Screened 0.75-1.5mm ² , 2 Core, F1 F2 Connection					
Performance¹								
Horsepower		HP	4	5	6	4	5	6
Capacity (Rated)	Nominal Cooling Capacity	kW	12.1	14	15.5	12.1	14	15.5
	Nominal Heating Capacity	kW	12.1	14	15.5	12.1	14	15.5
	Max Heating Capacity	kW	13.5	16	18	13.5	16	18
Operating Temperature Range	Cooling	°C	-5.0 ~ 48.0 °C	-5.0 ~ 48.0 °C	-5.0 ~ 48.0 °C	-5.0 ~ 48.0 °C	-5.0 ~ 48.0 °C	-5.0 ~ 48.0 °C
	Heating	°C	-25.0 ~ 26.0 °C	-25.0 ~ 26.0 °C	-25.0 ~ 26.0 °C	-25.0 ~ 26.0 °C	-25.0 ~ 26.0 °C	-25.0 ~ 26.0 °C
Maximum quantity of connectable indoor units		ea	8	9	10	8	9	10
Energy Efficiency²								
Rated Efficiency	EER (Nominal Cooling)	W/W	3.13	2.8	2.7	3.13	2.8	2.7
	COP (Nominal Heating)	W/W	3.98	3.66	3.5	3.98	3.66	3.5
Seasonal Efficiency (Ducted)	SEER	W/W	7.3	7.05	7.2	7.3	7.05	7.2
	SCOP	W/W	4.6	4.7	4.9	4.6	4.7	4.9
	η _{s,c}	%	289	279	285	289	279	285
	η _{s,h}	%	181	185	193	181	185	193
Seasonal Efficiency (Cassettes)	SEER	W/W	7.9	7.4	7.75	7.9	7.4	7.75
	SCOP	W/W	4.65	4.65	4.9	4.65	4.65	4.9
	η _{s,c}	%	313	293	307	313	293	307
	η _{s,h}	%	183	183	193	183	183	193
Fan								
Type		-	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
Discharge Direction			Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Number of Fans		ea	2	2	2	2	2	2
Fan Motor	Model	-	BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
	Output x n	W	125 x 2	125 x 2	125 x 2	125 x 2	125 x 2	125 x 2
Airflow Rate		m ³ /min	100	100	100	100	100	100
		l/s	1667	1667	1667	1667	1667	1667
Static Pressure	Max	Pa	29.4	29.4	29.4	29.4	29.4	29.4
Compressor								
Type		-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
Output x n		kW	4.04 x 1	4.04 x 1	4.04 x 1	4.04 x 1	4.04 x 1	4.04 x 1
Piping Connections								
Liquid Pipe		ø, mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
Gas Pipe		ø, mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Discharge Gas Pipe		ø, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Refrigerant								
Type			R410A (Fluorinated greenhouse gas, GWP=2088)					
Factory Charging		kg	3.2	3.2	3.3	3.2	3.2	3.3
		tCO ₂ e	6.68	6.68	6.89	6.68	6.68	6.89
Sound								
Sound Pressure Level	Cooling	dB(A)	51	52	53	51	52	53
	Heating	dB(A)	55	55	55	55	55	55
Sound Power Level		dB(A)	68	69	70	68	69	70
Dimensions								
Net Weight		kg	97.0	97.0	100.0	95.0	95.0	98.0
Net Dimensions	W x H x D	mm	940 x 1210 x 330	940 x 1210 x 330	940 x 1210 x 330	940 x 1210 x 330	940 x 1210 x 330	940 x 1210 x 330

¹ 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

² Efficiencies shown are according to EU No 2016/2281 (LOT 21) Ecodesign requirements for heat pumps/air conditioners