THE MW 2-PIPE SYSTEM **ANTI-CORROSION** IN INDIVIDUAL OR MODULAR USE

OUTDOOR UNITS

22.40 kW	28.00 kW	33.50 kW
8HP	**10HP**	**12HP**
M-VA-OV-224-SG	M-VA-OV-280-SG	M-VA-OV-335-SG

40.00 kW	45.00 kW	50.40 kW	56.00 kW	61.50 kW
14HP	**16HP**	**18HP**	**20HP**	**22HP**
M-VA-OV-400-SG	M-VA-OV-450-SG	M-VA-OV-500-SG	M-VA-OV-560-SG	M-VA-OV-615-SG

INDOOR UNITS

Applicable indoor units for air-to-air operation on page. 93

THE **MW 2-PIPE ANTI-CORROSION** CONSISTS OF **8 INDIVIDUAL OUTDOOR UNITS**. IN COMBINATION IT REACHES A MAXIMUM OUTPUT OF **246 KW** TO WHICH UP TO **80 INDOOR UNITS** CAN BE CONNECTED

8 THREE-PHASE MODELS

The 3-phase outdoor units with vertical air discharge are available in models from 22.40 kW up to 61.50 kW. The maximum power of the combined outdoor units reaches 246 kW, the highest value in the industry.

All compressors of the 3-Phase models are Scroll DC Inverter.
The MW 2-PIPE ANTI-CORROSION system can connect up to a maximum of 80 indoor units.

POWER AND NUMBER OF CONNECTABLE INDOOR UNITS

Model	Min~Max power of connectable I.U.	Min~Max number of connectable I.U.
M-VA-OV-224-SG	50~135%	1~13
M-VA-OV-280-SG	50~135%	1~16
M-VA-OV-335-SG	50~135%	1~19
M-VA-OV-400-SG	50~135%	1~23
M-VA-OV-450-SG	50~135%	1~26
M-VA-OV-500-SG	50~135%	1~29
M-VA-OV-560-SG	50~135%	1~33
M-VA-OV-615-SG	50~135%	1~36

MAXIMUM COMPACTNESS FOR ALL OUTDOOR UNITS

22.40 - 28.00 - 33.50 kW

L 930 x H 1690 x D 775 (mm)

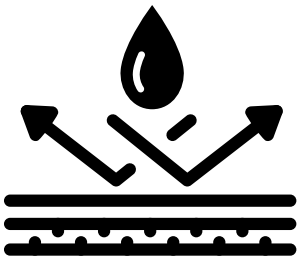
40.00 - 45.00 - 50.40 - 56.00 - 61.50 kW

L 1340 x H 1690 x D 775 (mm)

SPECIAL ANTI-CORROSION TREATMENT

With the special anti-corrosion treatment of the outdoor units, the application possibilities are increased, especially in coastal areas where the air is richer in salt and humidity, and in industrial areas where high concentrations of chemical substances are present.

The test carried out with neutral salt spray (H) found effective increases in performance compared to untreated models.



ZINC- NICKEL FASTENERS

The body uses zinc-nickel alloy screws to improve anti-corrosion performance. These screws withstand neutral salt spray test for 500 hours without rusting.

+400% anti-corrosion capacity compared to normal galvanized screws.

GRILLES

The grillles receive a phosphating and electrophoresis treatment and are coated with highly weather-resistant powder.

+100% anti-corrosion capacity compared to a standard model.

GAS-LIQUID SEPARATOR

The surface of the pressure vessel adopts phosphorizing treatment and is coated with high weather-resistant powder.

+ 400% anti-corrosion capacity compared to a standard model..

PRINTED CIRCUIT BOARD

The surface of the controller is coated with a special protective material, acting against humidity, mold and corrosion.

+ 400% anti-corrosion capacity compared to a standard model..

BODY

The surface of the roofing sheet metal is treated with highly weather-resistant powder.

+100% anti-corrosion capacity compared to a standard model..

HEAT EXCHANGER

The heat exchanger features black aluminum fins that are resistant to acids and corrosion. State-of-the-art anti-corrosion treatment.

+33% anti-corrosion capacity compared to a standard model..

EXCELLENT PERFORMANCE

The MW 2-PIPE ANTI-CORROSION systems are characterised by high installation flexibility, thanks to the possibility of connecting internal units of different types.

The wide range of outdoor units in terms of power, modularity and dimensions also allows you to choose the optimal solution capable of meeting the requirements of occupied space, weight and handling in each application.

Possibility of using classic heat recovery units (ERV), or combined with post-treatment batteries (ERV+DX), for the introduction of renewal air. The recovery units are equipped with high efficiency filters.

Through centralized controls, Wi-Fi interfaces and multiple protocol gateways, it is possible to manage large systems remotely and from a single terminal.

ENERGY EFFICIENCY

- High efficiency low temperature enthalpy addition technology.
- New heat exchanger design.
- Smart control.
- Intelligent cooling and heating technology.
- Noise control technology.

RELIABLE AND STABLE

- Multiple corrosion protection.
- CAN+communication technology.
- Multiple safety protection.
- Self-adapting drive control technology.
- Oil quality control technology.
- Oil circuit management technology.
- Compact structure.
- Very wide operating range: thanks to its modularity, the system can be adapted to the power required by different installations.

ADAPTABLE AND FLEXIBLE

- Compact design.
- Fan static pressure: up to 110 Pa, the highest on the market.
- Very high splitting limits and height difference between units: make the system adaptable to various types of installation.
- Fast installation.
- High degree of installation adaptability.

Operating ranges of outdoor units

The **MW 2-PIPE ANTI-CORROSION** system features a very wide external temperature operating range, ensuring new design flexibility.

up to
55°C
in cooling

down to
-30°C
in heating

COOLING MODE

Outdoor temperature from -15° to 55° C

HEATING MODE

Outdoor temperature from -30° to 24° C

OUTDOOR UNITS

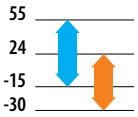
3 REFRIGERANT CAPACITIES
22.40 - 28.00 - 33.50 kW

R410A
Refrigerant gas

DC Inverter compressors guarantee total reliability thanks to high energy efficiency and silence. In addition, they allow a reduction in vibrations and accurate control of the operating frequency.

M-VA-OV-224-SG
M-VA-OV-280-SG
M-VA-OV-335-SG

OPERATION RANGE



Very wide operating limits: winter operation up to -30° C of outdoor air and summer operation up to +55° C.

Model			M-VA-OV-224-SG	M-VA-OV-280-SG	M-VA-OV-335-SG
Power		**HP**	**8**	**10**	**12**
Nominal Data					
Rated capacity	Cooling	kW	22.40	28.00	33.50
Nominal absorbed power		kW	4.99	6.26	8.00
Energy efficiency coefficient (nominal)		EER[1]	4.49	4.47	4.19
Rated capacity	Heating	kW	25.00	31.50	37.50
Nominal absorbed power		kW	4.85	7.39	8.68
Energy performance coefficient (nominal)		COP[1]	5.15	4.26	4.32
Seasonal Data					
Seasonal energy efficiency index	Cooling	SEER[2]	7.10	6.59	6.31
Seasonal performance coefficient	Heating	SCOP[2]	4.62	4.80	4.40
Seasonal energy efficiency (ns)		%	181.80	189.00	173.00
Electrical Data					
Power supply		Ph-V-Hz	3-380~415V-50Hz		
Maximum current		A	23.00	23.50	24.10
Refrigerant Circuit Data					
Refrigerant[3]		type (GWP)	R410A (2088)		
Q.ty of refrigerant pre-charge [4] (tons of CO2 equivalent)		Kg	5.5 (11.48)	5.5 (11.48)	7.5 (15.66)
Compressor		nb. / type	1 / Scroll DC Inverter		
Piping diameter	Liquid	mm (inch)	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")
	Gas	mm (inch)	19.05 (3/4")	22.2 (7/8")	25.4 (1")
Product Specifications					
Dimensions	WxHxD	mm	930x1690x775	930x1690x775	930x1690x775
Net weight		Kg	220	220	240
Sound power level	max	dB(A)	82	86	86
Sound pressure level at 1 m	max	dB(A)	56	57	59
Volume of air treated	max	m³/h	9750	10500	11100
Available static pressure	std/max	Pa	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-15~55	-15~55	-15~55
	Heating	°C	-30~24	-30~24	-30~24
Connectable air-to-air indoor units (max)		**nb.**	**13**	**16**	**19**
Capacity of connectable air-to-air indoor units		**%**	**50 ~ 135**		

1. Value measured according to the harmonized standard EN14511.
2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825.
3. Refrigerant leakage contributes to climate change. If released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088.
   If 1 kg of this refrigerant were released into the atmosphere, therefore, the impact on global warming would be 2088 times higher than 1 kg of CO2, over a period of 100 years.
   Under no circumstances should the user attempt to intervene on the refrigerant circuit or disassemble the product. If necessary, always contact qualified personnel.
4. To calculate the additional refrigerant charge, refer to the labels located inside and outside the unit.

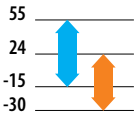
OUTDOOR UNITS

5 REFRIGERANT CAPACITIES
40.00 - 45.00 - 50.40 - 56.00 - 61.50 kW

R410A
Refrigerant gas

DC Inverter compressors guarantee total reliability thanks to high energy efficiency and silence. In addition, they allow a reduction in vibrations and accurate control of the operating frequency.

OPERATION RANGE



Very wide operating limits: winter operation up to -30° C of external air and summer operation up to +55° Cna ed estivo fino a +55° C.

M-VA-OV-400-SG
M-VA-OV-450-SG
M-VA-OV-500-SG
M-VA-OV-560-SG
M-VA-OV-615-SG

Model			M-VA-OV-400-SG	M-VA-OV-450-SG	M-VA-OV-500-SG	M-VA-OV-560-SG	M-VA-OV-615-SG
Power		**HP**	**14**	**16**	**18**	**20**	**22**
Nominal Data							
Rated capacity	Cooling	kW	40.00	45.00	50.40	56.00	61.50
Nominal absorbed power		kW	9.52	11.87	12.76	15.47	17.47
Energy efficiency coefficient (nominal)		EER[1]	4.20	3.79	3.95	3.62	3.52
Rated capacity	Heating	kW	45.00	50.00	56.50	63.00	69.00
Nominal absorbed power		kW	11.17	12.99	13.92	15.56	17.60
Energy performance coefficient (nominal)		COP[1]	4.03	3.85	4.06	4.05	3.92
Seasonal Data							
Seasonal energy efficiency index	Cooling	SEER[2]	6.68	6.17	6.06	5.97	5.97
Seasonal performance coefficient	Heating	SCOP[2]	4.80	4.84	4.19	4.11	4.11
Seasonal energy efficiency (ηs)		%	189.00	190.60	164.60	161.40	161.40
Electrical Data							
Power supply		Ph-V-Hz	3-380~415V-50Hz				
Maximum current		A	37.50	39.30	47.00	48.00	49.00
Refrigerant Circuit Data							
Refrigerant[3]		type (GWP)	R410A (2088)				
Q.ty of refrigerant pre-charge [4] (tons of CO2 equivalent)		Kg	7.5 (15.66)	7.5 (15.66)	8.3 (17.33)	8.3 (17.33)	8.3 (17.33)
Compressor		nb. / type	1 / Scroll DC Inverter		2 / Scroll DC Inverter		
Piping diameter	Liquid	mm (inch)	12.7 (1/2")	12.7 (1/2")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
	Gas	mm (inch)	25.4 (1")	28.6 (1-1/8")	28.6 (1-1/8")	28.6 (1-1/8")	28.6 (1-1/8")
Product Specifications							
Dimensions	WxHxD	mm	1340x1690x775	1340x1690x775	1340x1690x775	1340x1690x775	1340x1690x775
Net weight		Kg	300	300	350	350	355
Sound power level	max	dB(A)	90	93	93	94	94
Sound pressure level at 1 m	max	dB(A)	59	60	61	62	63
Volume of air treated	max	m3/h	13500	15400	16000	16500	16500
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-15~55	-15~55	-15~55	-15~55	-15~55
	Heating	°C	-30~24	-30~24	-30~24	-30~24	-30~24
Connectable air-to-air indoor units (max)		**nb.**	**23**	**26**	**29**	**33**	**36**
Capacity of connectable air-to-air indoor units		**%**	**50 ~ 135**				

1. Value measured according to the harmonized standard EN14511.
2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825.
3. Refrigerant leakage contributes to climate change. If released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088. If 1 kg of this refrigerant were released into the atmosphere, therefore, the impact on global warming would be 2088 times higher than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user attempt to intervene on the refrigerant circuit or disassemble the product. If necessary, always contact qualified personnel.
4. To calculate the additional refrigerant charge, refer to the labels located inside and outside the unit.

COMBINATIONS

Model			M-VA-OV-680-SG	M-VA-OV-730-SG	M-VA-OV-785-SG	M-VA-OV-850-SG
Power		**HP**	**24**	**26**	**28**	**30**
Combination			**280+400**	**280+450**	**280+500**	**280+560**
Rated capacity	Cooling	kW	68.00	73.00	78.40	84.00
Nominal absorbed power		kW	15.79	18.14	19.02	21.73
Energy efficiency coefficient (nominal)		EER[1]	4.31	4.02	4.12	3.86
Rated capacity	Heating	kW	76.50	81.50	88.00	94.50
Nominal absorbed power		kW	18.56	20.38	21.31	22.95
Energy performance coefficient (nominal)		COP[1]	4.12	4.00	4.13	4.12
Electrical Data						
Power supply		Ph-V-Hz	3-380~415V-50Hz			
Maximum current		A	61.00	62.80	70.50	71.50
Refrigerant Circuit Data						
Refrigerant[2]		type (GWP)	R410A (2088)			
Q.ty of refrigerant pre-charge [3] (tons of CO2 equivalent)		Kg	13 (27.14)	13 (27.14)	13.8 (28.81)	13.8 (28.81)
Compressor		nb. / type	2 / Scroll DC Inverter		3 / Scroll DC Inverter	
Piping diameter[4]	Liquid	mm (inch)	15.9 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
	Gas	mm (inch)	28.6 (1-1/8")	31.8 (1-1/4")	31.8 (1-1/4")	31.8 (1-1/4")
Product Specifications						
Dimensions[5]	WxHxD	mm	2370x1690x775	2370x1690x775	2370x1690x775	2370x1690x775
Net weight		Kg	520	520	570	570
Volume of air treated	max	m3/h	24000	25900	26500	27000
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-15~55	-15~55	-15~55	-15~55
	Heating	°C	-30~24	-30~24	-30~24	-30~24
Connectable air-to-air indoor units (max)		**nb.**	**39**	**43**	**46**	**50**
Capacity of connectable air-to-air indoor units		**%**	**50 ~ 135**			
Accessories						
Branch pipe kit for O.U. pairing		nb. / type	1 / DOS-68-MW-VA			

Model			M-VA-OV-1300-SG	M-VA-OV-1350-SG	M-VA-OV-1410-SG	M-VA-OV-1460-SG
Power		**HP**	**46**	**48**	**50**	**52**
Combination			**280+450+560**	**280+450+615**	**335+450+615**	**280+560+615**
Rated capacity	Cooling	kW	129.00	134.50	140.00	145.50
Nominal absorbed power		kW	33.61	35.61	37.34	36.50
Energy efficiency coefficient (nominal)		EER[1]	3.84	3.78	3.75	3.99
Rated capacity	Heating	kW	144.50	150.50	156.50	163.50
Nominal absorbed power		kW	35.94	37.98	39.27	38.91
Energy performance coefficient (nominal)		COP[1]	4.02	3.96	3.99	4.20
Electrical Data						
Power supply		Ph-V-Hz	3-380~415-50			
Maximum current		A	110.80	111.80	112.40	119.50
Refrigerant Circuit Data						
Refrigerant[2]		type (GWP)	R410A (2088)			
Q.ty of refrigerant pre-charge [3] (tons of CO2 equivalent)		Kg	21.3 (44.47)	21.3 (44.47)	23.3 (48.65)	22.1 (46.14)
Compressor		nb. / type	4 / Scroll DC Inverter			5 / Scroll DC Inverter
Piping diameter[4]	Liquid	mm (inch)	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
	Gas	mm (inch)	38.1 (1-1/2")	38.1 (1-1/2")	41.3 (1-5/8")	41.3 (1-5/8")
Product Specifications						
Dimensions[5]	WxHxD	mm	3810x1690x775	3810x1690x775	3810x1690x775	3810x1690x775
Net weight		Kg	870	875	895	925
Volume of air treated	max	m3/h	42400	42400	43000	43000
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-15~55	-15~55	-15~55	-15~55
	Heating	°C	-30~24	-30~24	-30~24	-30~24
Connectable air-to-air indoor units (max)		**nb.**	**64**	**64**	**66**	**69**
Capacity of connectable air-to-air indoor units		**%**	**50 ~ 135**			
Accessories						
Branch pipe kit for O.U. pairing		nb. / type	2 / DOS-68-MW-VA			

1. Value measured according to harmonized standard EN14511.
2. Refrigerant leakage contributes to climate change. Refrigerants with a lower global warming potential (GWP) contribute less to global warming when released into the atmosphere than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 2088 times greater than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user attempt to intervene on the refrigerant circuit or disassemble the product. If necessary, always contact qualified personnel.
3. To calculate the additional refrigerant charge, refer to the labels located inside and outside the unit.
4. In combinations of multiple outdoor units, the diameters indicated refer to the section up to the first branch, with an equivalent length of less than 90 m.
5. Space between the combined units = 100 mm.
6. To determine the power of the connectable hydronic modules, consult the installation manual.

COMBINATIONS

M-VA-OV-900-SG	M-VA-OV-960-SG	M-VA-OV-1010-SG	M-VA-OV-1065-SG	M-VA-OV-1130-SG	M-VA-OV-1180-SG	M-VA-OV-1235-SG
32	**34**	**36**	**38**	**40**	**42**	**44**
280+615	**335+615**	**400+615**	**450+615**	**500+615**	**560+615**	**615+615**
89.50	95.00	101.50	106.50	111.90	117.50	123.00
23.74	25.47	27.00	29.34	30.23	32.94	34.94
3.77	3.73	3.76	3.63	3.70	3.57	3.52
100.50	106.50	114.00	119.00	125.50	132.00	138.00
25.00	26.28	28.77	30.59	31.52	33.16	35.20
4.02	4.05	3.96	3.89	3.98	3.98	3.92
3~380~415V-50Hz						
72.50	73.10	86.50	88.30	96.00	97.00	98.00
R410A (2088)						
13.8 (28.81)	15.8 (32.99)	15.8 (32.99)	15.8 (32.99)	16.6 (34.66)	16.6 (34.66)	16.6 (34.66)
3 / Scroll DC Inverter				4 / Scroll DC Inverter		
19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
31.8 (1-1/4")	31.8 (1-1/4")	38.1 (1-1/2")	38.1 (1-1/2")	38.1 (1-1/2")	38.1 (1-1/2")	38.1 (1-1/2")
2370x1690x775	2370x1690x775	2780x1690x775	2780x1690x775	2780x1690x775	2780x1690x775	2780x1690x775
575	595	655	655	705	705	710
27000	27600	30000	31900	32500	33000	33000
0/110	0/110	0/110	0/110	0/110	0/110	0/110
-15~55	-15~55	-15~55	-15~55	-15~55	-15~55	-15~55
-30~24	-30~24	-30~24	-30~24	-30~24	-30~24	-30~24
53	**56**	**59**	**63**	**64**	**64**	**64**
50 ~ 135						
1 / DOS-68-MW-VA						

M-VA-OV-1515-SG	M-VA-OV-1580-SG	M-VA-OV-1630-SG	M-VA-OV-1685-SG	M-VA-OV-1750-SG	M-VA-OV-1800-SG	M-VA-OV-1845-SG
54	**56**	**58**	**60**	**62**	**64**	**66**
280+615+615	**335+615+615**	**400+615+615**	**450+615+615**	**500+615+615**	**560+615+615**	**615+615+615**
151.00	156.50	163.00	168.00	173.40	179.00	184.50
41.21	42.94	44.47	46.82	47.70	50.41	52.41
3.66	3.64	3.67	3.59	3.64	3.55	3.52
169.50	175.50	183.00	188.00	194.50	201.00	207.00
42.60	43.88	46.37	48.19	49.12	50.76	52.81
3.98	4.00	3.95	3.90	3.96	3.96	3.92
3~380~415-50						
121.50	122.10	135.50	137.30	145.00	146.00	147.00
R410A (2088)						
22.1 (46.14)	24.1 (50.32)	24.1 (50.32)	24.1 (50.32)	24.9 (51.99)	24.9 (51.99)	24.9 (51.99)
5 / Scroll DC Inverter				6 / Scroll DC Inverter		
19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
41.3 (1-5/8")	41.3 (1-5/8")	41.3 (1-5/8")	41.3 (1-5/8")	41.3 (1-5/8")	41.3 (1-5/8")	41.3 (1-5/8")
3810x1690x775	3810x1690x775	4220x1690x775	4220x1690x775	4220x1690x775	4220x1690x775	4220x1690x775
930	950	1010	1010	1060	1060	1065
43500	44100	46500	48400	49000	49500	49500
0/110	0/110	0/110	0/110	0/110	0/110	0/110
-15~55	-15~55	-15~55	-15~55	-15~55	-15~55	-15~55
-30~24	-30~24	-30~24	-30~24	-30~24	-30~24	-30~24
71	**74**	**77**	**80**	**80**	**80**	**80**
50 ~ 135						
2 / DOS-68-MW-VA						

1. Value measured according to harmonized standard EN14511.
2. Refrigerant leakage contributes to climate change. Refrigerants with a lower global warming potential (GWP) contribute less to global warming when released into the atmosphere than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 2088 times greater than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user attempt to intervene on the refrigerant circuit or disassemble the product. If necessary, always contact qualified personnel.
3. To calculate the additional refrigerant charge, refer to the labels located inside and outside the unit.
4. In combinations of multiple outdoor units, the diameters indicated refer to the section up to the first branch, with an equivalent length of less than 90 m.
5. Space between the combined units = 100 mm.
6. To determine the power of the connectable hydronic modules, consult the installation manual.

COMBINATIONS

Model			M-VA-OV-1908-SG	M-VA-OV-1962-SG	M-VA-OV-2016-SG	M-VA-OV-2072-SG
Power		**HP**	**68**	**70**	**72**	**74**
Combination			**280+450+560+615**	**280+500+560+615**	**280+560+560+615**	**280+560+615+615**
Rated capacity	Cooling	kW	190.50	195.90	201.50	207.00
Nominal absorbed power		kW	51.08	51.96	54.67	56.68
Energy efficiency coefficient (nominal)		EER[1]	3.73	3.77	3.69	3.65
Rated capacity	Heating	kW	213.50	220.00	226.50	232.50
Nominal absorbed power		kW	53.54	54.47	56.11	58.15
Energy performance coefficient (nominal)		COP[1]	3.99	4.04	4.04	4.00
Electrical Data						
Power supply		Ph-V-Hz	3-380~415-50			
Maximum current		A	159.80	167.50	168.50	169.50
Refrigerant Circuit Data						
Refrigerant[2]		type (GWP)	R410A (2088)			
Q.ty of refrigerant pre-charge [3] (tons of CO2 equivalent)		Kg	29.6 (61.8)	30.4 (63.47)	30.4 (63.47)	30.4 (63.47)
Compressor		nb. / type	6 / Scroll DC Inverter	7 / Scroll DC Inverter		
Piping diameter[4]	Liquid	mm (inch)	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")
	Gas	mm (inch)	44.5 (1-3/4")	44.5 (1-3/4")	44.5 (1-3/4")	44.5 (1-3/4")
Product Specifications						
Dimensions[5]	WxHxD	mm	5250x1690x775	5250x1690x775	5250x1690x775	5250x1690x775
Net weight		Kg	1225	1275	1275	1280
Volume of air treated	max	m^3/h	58900	59500	60000	60000
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-15~55	-15~55	-15~55	-15~55
	Heating	°C	-30~24	-30~24	-30~24	-30~24
Connectable air-to-air indoor units (max)		**nb.**	**80**	**80**	**80**	**80**
Capacity of connectable air-to-air indoor units		%	**50 ~ 135**			
Accessories						
Branch pipe kit for O.U. pairing		nb. / type	3 / DOS-68-MW-VA			

1. Value measured according to harmonized standard EN14511.
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3. To calculate the additional refrigerant charge, refer to the labels located inside and outside the unit.
4. In combinations of multiple outdoor units, the diameters indicated refer to the section up to the first branch, with an equivalent length of less than 90 m.
5. Space between the combined units = 100 mm.
6. To determine the power of the connectable hydronic modules, consult the installation manual.

COMBINATIONS

M-VA-OV-2128-SG	M-VA-OV-2184-SG	M-VA-OV-2240-SG	M-VA-OV-2295-SG	M-VA-OV-2350-SG	M-VA-OV-2405-SG	M-VA-OV-2460-SG
76	**78**	**80**	**82**	**84**	**86**	**88**
280+615+615+615	**335+615+615+615**	**400+615+615+615**	**450+615+615+615**	**500+615+615+615**	**560+615+615+615**	**615+615+615+615**
212.50	218.00	224.50	229.50	234.90	240.50	246.00
58.68	60.41	61.94	64.29	65.17	67.88	69.89
3.62	3.61	3.62	3.57	3.60	3.54	3.52
238.50	244.50	252.00	257.00	263.50	270.00	276.00
60.20	61.49	63.97	65.79	66.72	68.36	70.41
3.96	3.98	3.94	3.91	3.95	3.95	3.92
3-380~415-50						
170.50	171.10	184.50	186.30	194.00	195.00	196.00
R410A (2088)						
30.4 (63.47)	32.4 (67.65)	32.4 (67.65)	32.4 (67.65)	33.2 (69.32)	33.2 (69.32)	33.2 (69.32)
7 / Scroll DC Inverter				8 / Scroll DC Inverter		
22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")
44.5 (1-3/4")	44.5 (1-3/4")	44.5 (1-3/4")	44.5 (1-3/4")	44.5 (1-3/4")	44.5 (1-3/4")	44.5 (1-3/4")
5250x1690x775	5250x1690x775	5660x1690x775	5660x1690x775	5660x1690x775	5660x1690x775	5660x1690x775
1285	1305	1365	1365	1415	1415	1420
60000	60600	63000	64900	65500	66000	66000
0/110	0/110	0/110	0/110	0/110	0/110	0/110
-15~55	-15~55	-15~55	-15~55	-15~55	-15~55	-15~55
-30~24	-30~24	-30~24	-30~24	-30~24	-30~24	-30~24
80	**80**	**80**	**80**	**80**	**80**	**80**
50 ~ 135						
3 / DOS-68-MW-VA						

1. Value measured according to harmonized standard EN14511.
2. Refrigerant leakage contributes to climate change. Refrigerants with a lower global warming potential (GWP) contribute less to global warming when released into the atmosphere than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 2088 times greater than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user attempt to intervene on the refrigerant circuit or disassemble the product. If necessary, always contact qualified personnel.
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