MULTIWARM

HIGH TECH INNOVATION

2025 air conditioning general catalogue

multiwarm.it

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MULTIWARM
HIGH TECH INNOVATION

High tech innovation, total Multiwarm comfort

Multiwarm offers products capable of optimising the energy performance of buildings for heating, cooling and the production of domestic hot water.

MULTIWARM is a brand of Termal Sales, a company of the Termal Group, leader in Italy in the air conditioning sector.

Technologically advanced, MULTIWARM systems are perfectly in line with residential and commercial design needs, to achieve high quality standards.

The Multiwarm specialist installer, always one step ahead

Multiwarm guarantees full support to its installers thanks to an advanced logistics hub, for rapid deliveries of supplies and spare parts.

MULTIWARM products are marketed through the channels of **specialized sector Distributors**, present throughout the national and European territory.

The central storage center is in Bologna, at the Termal Group, and in external service logistics.

The operational hub is divided into a series of buildings dedicated to commercial, administrative and logistics activities with 4,500 m2 of storage area that guarantees rapid deliveries, a vast assortment of spare parts and accessories that can be ordered online and are available within 24 hours.

All this allows customers great operational and commercial flexibility and, therefore, strong competitiveness on the various local markets.

Those who install MULTIWARM have the certainty of working with an innovative brand.

Courses and training for professional growth

Specialists selected and certified according to the Presidential Decree 146 of 16 November 2018 and subsequent updates.

MULTIWARM organizes periodic training sessions for technical updates and improvement via **webinars** and in person at our **Academy Room**.

The training center is structured with classrooms dedicated to theoretical and practical lessons, with installed functioning products and related control systems.

The courses provide participants with in-depth knowledge of installation logic, service and maintenance techniques in the residential and commercial sectors. Here are the topics:

- new product presentation,
- insights into technological developments,
- industry regulations,
- refrigerant circuit,
- installation and fault diagnosis problems,
- assistance,
- VRF system design,
- use of system software.

At the end of the course, each participant receives a certificate of attendance and handouts on the technical topics covered.

Wi-Fi

Wi-Fi technology at the service of the Residential, Light Commercial and VRF product ranges.

Air conditioning at your fingertips

The VRF and Residential MULTIWARM air conditioning systems allow you to control the air conditioning system, both at home and away, using applications available for iOS and Android devices (standard and optional).

Through MULTIWARM applications it is possible to manage your air conditioning system, for correct comfort and attention to consumption.

Mission: environmental protection

Multiwarm products contribute to significantly improving climate comfort, achieving substantial energy savings, and safeguarding the environment.

MULTIWARM is at the forefront in the supply of efficient and innovative air conditioning systems, capable of ensuring comfort and savings on bills.

To air condition domestic and commercial environments, the systems must have at least these characteristics:

- energy efficiency and reduced consumption;
- innovation, functional standard and remote controls;
- low emissions for maximum environmental protection;
- design, the refinement of the materials and the aesthetic aspect are important elements in the choice of a product;
- silence;
- ease of use.


R32

RESIDENTIAL & LIGHT COMMERCIAL R32

MW MONOSPLIT
MW LIGHT COMMERCIAL
MW MULTISPLIT & DHW

R32, MORE PERFORMANCE, LESS ENVIRONMENTAL IMPACT

Advantages of R32

Nowadays, environmental protection is considered of primary importance by both users and professionals.

Choosing an air conditioner with the new R32 refrigerant allows you to obtain excellent comfort in both cooling and heating while reducing polluting emissions.

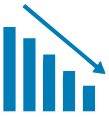
[1]The most relevant aspect of R32 gas is its GWP value, equal to 675, which allows the creation of systems containing up to 7.4 kg of gas without exceeding the threshold that requires leak control and keeping an equipment register, a threshold that for an R410A gas is already exceeded by 2.4 kg of gas.

R32 refrigerant:

- it's eco-friendly;
- **it is non-toxic**;
- it is slightly flammable;
- it is not harmful and does not pose a risk to the ozone layer;
- it is very efficient.

1

LOWER ENVIRONMENTAL IMPACT



REDUCTION OF THE GREENHOUSE EFFECT

Why choose R32

The specific name of R32 gas is difluoromethane. It is currently present among the fluorinated gases with a low GWP value, equal to 675, and used in air conditioning appliances intended for residential use.

There is no obligation to replace the current R410A gas, which therefore remains regularly on the market, except in monosplit applications with refrigerant < 3 kg where, from 2025, the use of gas with GWP < 750 will be mandatory for new installations.

There are some limitations in particular conditions of use that must be considered in accordance with the Regulations in force.

Storage, standards and design

When storing units containing R32, it may be necessary, based on the quantities stored, to review the Fire Prevention Certificate (DPR 151/2011) to ensure the validity of your insurance guarantee. The transport of dangerous goods is regulated by D.GLS 35/2010. R32 has been classified as slightly flammable by ISO 817 and as such has no stringent limitations in road transport (current ADR), maintaining strict regulations in maritime transport (current IMDG) and aeronautical transport (current IATA).

The EN 378:2016 standard also regulates the applications of appliances that use R32 gas; the maximum concentration limits of the gas in residential applications must always be verified with particular attention to multisplit systems that can potentially concentrate (in the event of leaks) high quantities of refrigerant in small spaces. **R32 gas is heavier than air and in case of leakage it accumulates at the bottom**; therefore, the indoor units follow different regulatory parameters depending on the type of application.

Installation in public buildings is regulated by specific regulations relating to the application of appliances with flammable gases, such as: hotels DM 09/04/1994, shopping centres DM 27/07/2010, buildings for entertainment DM 19/08/1996, hospitals DM 18/09/2012, schools DM 26/08/1992, offices DM 22/02/2006, children's games DM 16/07/2014, airports DM 07/07/2014, interports DM 18/07/2014.

The design, installation and maintenance of appliances with R32 gas are regulated by the following standards: DM 37/2008, provisions on the installation of systems inside buildings; DGLS 81/2008, text on health and safety at work; F-gas 517/2014, regulation of fluorinated gases; DPR 151/2011, regulation of procedures relating to fire prevention; EN 378:2016, refrigeration systems and heat pumps (requirements for the safety of systems).

With the Ministerial Decree of 10 March 2020 and the subsequent Circular DCPREV 9833 of 22 July 2020 by the Fire Brigade, the technical provisions are updated to allow the possibility of using, in air conditioning and conditioning systems, machines equipped with refrigerants classified as A1 or A2L, thus overcoming the restriction of using only non-toxic or non-flammable fluids.

However, it is recommended to carefully check the regulations in force when using equipment containing R32 gas. Failure to comply with these regulations makes designers and installers of equipment with R32 assume direct legal responsibility for the application of the equipment itself.

MW MONOSPLIT R32, THE RANGE

INDOOR UNITS

kW	2.60	3.50	5.30	7.10
ACTION	MKEGM 267 ZAL MCNGS 267 ZA	MKEGM 357 ZAL MCNGS 357 ZA	MKEGM 537 ZAL MCNGS 537 ZA	MKEGM 717 ZAL MCNGS 717 ZA
CONSOLE	MFIGM 261 ZAL MCJGS 261 ZA	MFIGM 351 ZAL MCJGS 351 ZA	MFIGM 531 ZAL MCJGS 531 ZA	

OUTDOOR UNITS

ACTION

The new Action ensures accurate control of thermal comfort while remaining silent and efficient.

Energy savings

A++

Energy class in cooling (capacities from 2.5 to 6.2 kW)

A+

Energy class in heating (capacities from 2.5 to 6.2 kW)

Operating range

up to

43°C

in cooling

down to

-15°C

in heating

Maximum silence

21 dB

Excellent silence levels in low mode

(capacity 2.5 kW)

Smart Wi-Fi integrated as standard

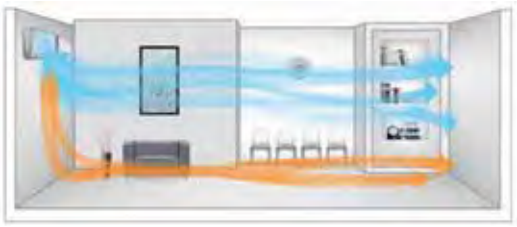
With Smart Wi-Fi technology you can turn the air conditioner on and off, as well as set the cooling or heating mode, adjust the air flow and check the proper functioning of the system.

Management via EWPE Smart app

FEATURES AND FUNCTIONS

Turbo function

With the turbo function the air flow is very powerful, in a horizontal position towards the ceiling when cold, towards the floor when hot, to quickly reach the desired temperature.



4-way air delivery

The flaps can be adjusted both horizontally and vertically, to maximize comfort.

Self-Clean function

One of the main causes of bad odors is mold and bacteria. The Self-Clean function dries the inside of the air conditioner to prevent their formation by eliminating residual humidity inside the indoor unit. This function works by significantly reducing bad odors and therefore allows you to get cleaner air from the air conditioner.

Cold Plasma Filter

The plasma purification system produces clusters of ions that collide, capture and destroy odors, bacteria, pollen and allergens, in order to reduce the symptoms of allergies and asthma.

I-Feel function

The sensor built into the remote control senses the surrounding temperature and transmits the signal to the indoor unit. This allows the indoor unit to adjust the volume and temperature of the air flow to ensure maximum comfort.

Remote control without "I FEEL", actual temperature 29° C, perceived temperature 26° C.

Remote control with "I FEEL", actual temperature 26° C, perceived temperature 26° C.

Quiet Design

This is the mode in which the indoor unit fans work at low speed and the operating sound is reduced to a minimum.

Intelligent pre-heating

The air is brought to temperature before being released into the environment.

Self-diagnosis

The controller detects the error, displays the corresponding code and stops operation.

8°C mode

It never lets the room temperature drop below 8°C, which is very useful to prevent an apartment from deteriorating due to excessive cold during the winter season.

Other functions

Timer, Auto restart, Key lock, LED lights, Turbo cooling, Low voltage start.

Quick defrost

The outdoor unit detects any freezing and activates the rapid defrosting procedure to improve heat dissipation.

Standby

When the unit finishes its operation and is turned off, the consumption is less than or equal to 1 Watt.

7 fan speeds

From super-low to turbo, choose the speed you want.

Soft Start

When power returns after an outage, the units restart gradually to avoid energy overload.

ACTION

4 CAPACITIES
2.50~6.20 kW

ELEGANT & COMPACT DESIGN
185 mm depth for the 2.50 kW model

200 mm depth for the 3.20 kW model

MAXIMUM SILENCE
solo 21 dB(A) in Low mode for the 2.50 kW model

I-FEEL FUNCTION

SELF-CLEAN FUNCTION

COLD PLASMA FILTER

REMOTE CONTROL INCLUDED

cooling A++ for all models

Wi-Fi INTEGRATED

MKEGM 267~717 ZAL

	SEER	SCOP
2.50 kW	6.60	4.10
3.20 kW	6.50	4.10
4.60 kW	7.20	4.00
6.20 kW	6.80	4.00

Indoor unit model			MKEGM 267 ZAL	MKEGM 357 ZAL	MKEGM 537 ZAL	MKEGM 717 ZAL
Outdoor unit model			MCNGS 267 ZA	MCNGS 357 ZA	MCNGS 537 ZA	MCNGS 717 ZA
Type			DC-Inverter heat pump			
Control (supplied)			Remote control			
Nominal data						
Nominal capacity (T=+35°C)	Cooling	kW	2.50 (0.50~3.25)	3.20 (0.90~3.70)	4.60 (1.00~5.40)	6.20 (1.80~6.90)
Nominal absorbed power (T=+35°C)		kW	0.68 (0.15~1.30)	0.93 (0.22~1.30)	1.35 (0.15~1.90)	1.79 (0.45~2.30)
Nominal energy efficiency coefficient		EER[1]	3.68	3.43	3.40	3.47
Nominal capacity (T=+7°C)	Heating	kW	2.80 (0.50~3.70)	3.40 (0.90~4.10)	5.20 (0.75~5.80)	6.50 (1.30~7.91)
Nominal absorbed power (T=+7°C)		kW	0.73 (0.14~1.50)	0.87 (0.22~1.50)	1.33 (0.16~1.90)	1.65 (0.45~2.30)
Nominal energy performance coefficient		COP[1]	3.84	3.90	3.89	3.95
Seasonal data						
Theoretical load (Pdesignc)	Cooling	kW	2.50	3.20	4.60	6.20
Seasonal energy efficiency index		SEER[2]	6.60	6.50	7.20	6.80
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++	A++
Annual energy consumption		kWh/y	133	172	224	319
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	2.50	2.70	3.70	4.50
Seasonal energy efficiency index		SCOP[2]	4.10	4.10	4.00	4.00
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+	A+
Annual energy consumption		kWh/y	854	922	1295	1575
Electrical data						
Power supply	Outdoor unit	Ph-V-Hz	1Ph - 220/240V - 50Hz			
Power cable		Type	3 x 1.5 mm2	3 x 1.5 mm2	3 x 2.5 mm2	3 x 2.5 mm2
Connection wires between I.U. and O.U.		no.	4	4	4	4
Nominal absorbed current	Cooling	A	3.10	4.10	6.20	7.60
	Heating	A	3.20	3.90	6.10	7.60
Maximum current		A	6.00	6.50	8.50	11.50
Maximum absorbed power		kW	1.50	1.50	1.90	2.30
Refrigerant circuit data						
Refrigerant[4]		Type (GWP)	R32 (675)	R32 (675)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	0.48	0.59	0.8	1.2
Tons of CO2 equivalent		t	0.324	0.398	0.520	0.817
Liquid/gas refrigerant pipe diameter		mm (inches)	6.35(1/4) / 9.52(3/8)	6.35(1/4) / 9.52(3/8)	6.35(1/4) / 9.52(3/8)	6.35(1/4) / 12.74(1/2)
Max split length		m	15	20	25	25
Max difference in height U.I./O.U.		m	10	10	10	10
Split length without additional charge		m	5	5	5	5
Additional charge		g/m	16	16	16	40
Indoor unit specifications						
Dimensions	LxDxH	mm	708x185x260	835x200x275	943x246x333	943x246x333
Net weight		Kg	7	9	13	13.5
Sound power level	Hi~Lo	dB(A)	55/48/46/44/40/37/33	59/50/47/45/41/38/35	60/58/56/54/48/44/41	65/56/54/52/50/46/42
Sound pressure level	Hi~Lo	dB(A)	38/36/34/32/28/25/21	42/38/35/33/29/26/23	47/45/43/41/35/30/28	50/46/44/42/40/36/32
Volume of air treated	Hi~Lo	m3/h	500/470/430/390/320/270/250	650/550/470/420/380/350/310	1000/960/870/810/720/640/600	1050/900/740/690/640/590/540
Outdoor unit specifications						
Dimensions	LxDxH	mm	732x330x555	732x330x555	732x330x555	873x376x555
Net weight		Kg	24.5	25	27.5	36.5
Sound power level		dB(A)	60	63	65	69
Sound pressure level		dB(A)	50	52	55	59
Volume of air treated	Max	m3/h	1950	1950	2100	2800
Operating limits (outdoor temperature)	Cooling	°C	-15~43			
	Heating		-15~24			
Optional parts						
Wi-Fi module			Included			
Individual wired control			M-RF-CW2-L-G			
Wired control for centralized control			M-RF-CW3-L-G			
Centralized control (only possible with wired control)			M-V-CC-T255-G			

1. Value measured according to the harmonised standard EN14511. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonised standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new energy consumption labelling of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. In case of need, always contact qualified personnel.

CONSOLE

3 CAPACITIES
2.70~5.20 kW

7 FAN SPEED levels

TOTAL TEMPERATURE CONTROL
The *I feel* function detects the room temperature in the remote control position

ELEGANT & COMPACT DESIGN
215 mm depth

DOUBLE AIR DELIVERY

X-FAN allows you to dry the evaporator to prevent the formation of mold and bacteria

COLD PLASMA purification system

8° HEATING
prevents the room temperature from falling below 8°C

REMOTE CONTROLLER INCLUDED

NEW

cooling A++ for all models

MFIGM 261~531 ZAL

Wi-Fi INTEGRATED

-22° C in heating

	SEER	SCOP
2.70 kW	7.80	4.20
3.52 kW	7.20	4.10
5.20 kW	7.20	4.00

Indoor unit model			MFIGM 261 ZAL	MFIGM 351 ZAL	MFIGM 531 ZAL
Outdoor unit model			**MCJGS 261 ZA**	**MCJGS 351 ZA**	**MCJGS 531 ZA**
Type			DC-Inverter heat pump		
Control (supplied)			Remote control		
Nominal data					
Nominal capacity (T=+35°C)	Cooling	kW	2.70 (0.50~3.40)	3.52 (0.80~4.40)	5.20 (1.20~6.20)
Nominal absorbed power (T=+35°C)		kW	0.70 (0.15~1.10)	0.93 (0.23~1.55)	1.45 (0.10~2.25)
Nominal energy efficiency coefficient		EER[1]	3.86	3.80	3.60
Nominal capacity (T=+7°C)	Heating	kW	2.90 (0.60~3.65)	3.80 (1.05~4.40)	5.33 (1.10~6.20)
Nominal absorbed power (T=+7°C)		kW	0.73 (0.16~1.20)	0.96 (0.18~1.70)	1.55 (0.20~2.40)
Nominal energy performance coefficient		COP[1]	3.97	3.96	3.45
Seasonal data					
Theoretical load (Pdesignc)	Cooling	kW	2.70	3.50	5.20
Seasonal energy efficiency index		SEER[2]	7.80	7.20	7.20
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++
Annual energy consumption		kWh/y	121	170	253
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	2.60	3.20	4.80
Seasonal energy efficiency index		SCOP[2]	4.20	4.10	4.00
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+
Annual energy consumption		kWh/y	867	1093	1680
Electrical data					
Power supply	Outdoor unit	Ph-V-Hz	1Ph - 220/240V - 50Hz		
Power cable		Type	3 x 1.5 mm²	3 x 1.5 mm²	3 x 2.5 mm²
Connection wires between I.U. and O.U.		no.	4	4	4
Nominal absorbed current	Cooling	A	3.50	4.60	6.60
	Heating	A	3.50	4.60	7.10
Maximum current		A	6.00	7.50	11.50
Maximum absorbed power		kW	1.20	1.70	2.40
Refrigerant circuit data					
Refrigerant[4]		Type (GWP)	R32 (675)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	0.51	0.75	1.00
Tons of CO2 equivalent		t	0.344	0.506	0.675
Liquid/gas refrigerant pipe diameter		mm (inches)	6.35(1/4) / 9.52(3/8)	6.35(1/4) / 9.52(3/8)	6.35(1/4) / 12.74(1/2)
Max split length		m	15	20	25
Max difference in height U.I./O.U.		m	10	10	10
Split length without additional charge		m	5	5	5
Additional charge		g/m	16	16	16
Indoor unit specifications					
Dimensions	LxDxH	mm	700x215x600	700x215x600	700x215x600
Net weight		Kg	15.5	16	16
Sound power level	Hi~Lo	dB(A)	52/48/46/44/41/38/35	55/51/49/47/44/40/36	60/58/56/53/51/48/43
Sound pressure level	Hi~Lo	dB(A)	39/36/34/32/29/26/23	44/40/38/36/33/29/25	49/47/45/42/40/37/32
Volume of air treated	Hi~Lo	m³/h	500/430/410/370/330/280/250	600/520/480/440/400/360/280	750/670/600/520/470/430/350
Outdoor unit specifications					
Dimensions	LxDxH	mm	732x330x555	802x350x555	958x402x660
Net weight		Kg	24	27.5	41
Sound power level		dB(A)	61	63	65
Sound pressure level		dB(A)	51	53	59
Volume of air treated	Max	m³/h	1950	2200	3600
Operating limits (outdoor temperature)	Cooling	°C	-15~43		
	Heating		-22~24		
Optional parts					
Wi-Fi module			Included		
Individual wired control			M-RF-CW2-L-G		
Wired control for centralized control			M-RF-CW3-L-G		
Centralized control (only possible with wired control)			M-V-CC-T255-G		

1. Value measured according to the harmonised standard EN14511. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonised standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new energy consumption labelling of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 times higher than 1 kg of CO_2, over a period of 100 years. Under no circumstances should the user attempt to intervene on the refrigerant circuit or disassemble the product. In case of need, always contact qualified personnel.

MW LIGHT COMMERCIAL R32, THE RANGE

1-PHASE INDOOR UNITS

		kW	3.50	5.30	7.10
8-WAY COMPACT CASSETTE		Wi-Fi	MTFGS 351 ZA MCKGS 351 ZA		
8-WAY BIG CASSETTE		Wi-Fi		MTBGS 531 ZA MCKGS 531 ZA	MTBGS 711 ZA MCKGS 711 ZA
DUCTED		Wi-Fi	MUDGS 351 ZA MCKGS 351 ZA	MUDGS 531 ZA MCKGS 531 ZA	MVDGS 711 ZA MCKGS 711 ZA
FLOOR/CEILING		Wi-Fi	MSFGS 351 ZA MCKGS 351 ZA	MSFGS 531 ZA MCKGS 531 ZA	MSFGS 711 ZA MCKGS 711 ZA

UNITÀ ESTERNE

3-PHASE INDOOR UNITS

		kW	10.00	14.00	16.00
8-WAY BIG CASSETTE		Wi-Fi	MTBIS 1082 ZA MCSIS 1082 ZA	MTBIS 1402 ZA MCSIS 1402 ZA	MTBIS 1602 ZA MCSIS 1602 ZA
DUCTED		Wi-Fi	MUCIS 1082 ZA MCSIS 1082 ZA	MUCIS 1402 ZA MCSIS 1402 ZA	MUCIS 1602 ZA MCSIS 1602 ZA
FLOOR/CEILING		Wi-Fi	MSFIS 1082 ZA MCSIS 1082 ZA	MSFIS 1402 ZA MCSIS 1402 ZA	MSFIS 1402 ZA MCSIS 1402 ZA

OUTDOOR UNITS

8-WAY COMPACT CASSETTE 60x60

1 CAPACITY
3.50 kW

COMPACT DESIGN
260 mm height for recessed installation in false ceilings

MEMORY FUNCTION

WASHABLE FILTER
air quality optimization

360° AIR DISTRIBUTION

DOWN TO -20°C

UP TO 52°C
In cooling

CONDENSATE DRAIN PUMP INCLUDED maximum height difference **1000 mm** from panel edge

CONTROLS
standard remote control

MTFGS 351 ZA

Wi-Fi
optional
with wired control

	SEER	SCOP
3.50 kW	7.10	4.20

Indoor unit model				**MTFGS 351 ZA**
Outdoor unit model				**MCKGS 351 ZA**
Type				DC-Inverter heat pump
Control (supplied)				Remote control
Nominal data				
Nominal capacity (T=+35°C)	Cooling		kW	3.50
Nominal absorbed power (T=+35°C)			kW	0.92
Nominal energy efficiency coefficient			EER[1]	3.80
Nominal capacity (T=+7°C)	Heating		kW	4.00
Nominal absorbed power (T=+7°C)			kW	1.00
Nominal energy performance coefficient			COP[1]	4.00
Seasonal data				
Theoretical load (Pdesignc)	Cooling		kW	3.50
Seasonal energy efficiency index			SEER[2]	7.10
Seasonal energy efficiency class			626/2011[3]	A++
Annual energy consumption			kWh/y	173
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)		kW	3.10
Seasonal energy efficiency index			SCOP[2]	4.20
Seasonal energy efficiency class			626/2011[3]	A+
Annual energy consumption			kWh/y	1033
Electrical data				
Power supply	Outdoor unit		Ph-V-Hz	1~220~240V-50/60HZ
Power cable			Type	3 x 1.5 mm²
Connection wires between I.U. and O.U.			no.	4
Nominal absorbed current	Cooling		A	4.40
	Heating		A	4.80
Maximum current			A	6.00
Maximum absorbed power			kW	1.30
Refrigerant circuit data				
Refrigerant[4]			Type (GWP)	R32 (675)
Q.ty of refrigerant pre-charge			Kg	0.57
Tons of CO2 equivalent			t	0.385
Liquid/gas refrigerant pipe diameter			mm (inches)	6.35(1/4) / 9.52(3/8)
Max split length			m	30
Max difference in height U.I./O.U.			m	15
Split length without additional charge			m	5
Additional charge			g/m	16
Indoor unit specifications				
Dimensions	LxDxH		mm	570x570x260
Net weight			Kg	16.5
Sound power level	SHi		dB(A)	47
Sound pressure level	SHi/Hi/Mi/Lo		dB(A)	36/35/33/29
Volume of air treated	SHi/Hi/Mi/Lo		m³/h	600/550/500/400
Outdoor unit specifications				
Dimensions	LxDxH		mm	675x285x553
Net weight			Kg	24.5
Sound power level	Max		dB(A)	56
Sound pressure level	Max		dB(A)	48
Volume of air treated	Max		m³/h	1800
Operating limits (outdoor temperature)	Cooling		°C	-20~52
	Heating			-20~24
Accessories				
Decorative panel				MTFPG 350 ZA
Dimensions	LxDxH		mm	620x620x47.5
Net weight			Kg	3
Optional parts				
Wired control with Wi-Fi module integrated				DMW-ZA1 WiFi
Interface for connection to centralized control				DMC-LCAC-Gateway
Centralized control[5]				M-V-CC-T255-G

1. Value measured according to the harmonized standard EN1451. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 5. DMC-LCAC-Gateway interface required.

8-WAY BIG CASSETTE 84x84

2 CAPACITIES
5.30~7.10 kW

COMPACT DESIGN
200 mm height for recessed installation in false ceilings

360° AIR DISTRIBUTION

MEMORY FUNCTION

DOWN TO -20°C

CONDENSATE DRAIN PUMP INCLUDED maximum height difference **1000 mm** from panel edge

MAXIMUM SPLITTING LENGTH 75 m

CONTROLS
standard remote control

MTBGS 531~711 ZA

Wi-Fi
optional

	SEER	SCOP
5.30 kW	7.20	4.30
7.10 kW	6.70	4.30

Indoor unit model			**MTBGS 531 ZA**	**MTBGS 711 ZA**
Outdoor unit model			**MCKGS 531 ZA**	**MCKGS 711 ZA**
Type			DC-Inverter heat pump	
Control (supplied)			Remote control	
Nominal data				
Nominal capacity (T=+35°C)	Cooling	kW	5.30	7.10
Nominal absorbed power (T=+35°C)		kW	1.54	2.03
Nominal energy efficiency coefficient		EER[1]	3.45	3.50
Nominal capacity (T=+7°C)	Heating	kW	5.80	8.00
Nominal absorbed power (T=+7°C)		kW	1.47	2.00
Nominal energy performance coefficient		COP[1]	3.95	4.00
Seasonal data				
Theoretical load (Pdesignc)	Cooling	kW	5.30	7.10
Seasonal energy efficiency index		SEER[2]	7.20	6.70
Seasonal energy efficiency class		626/2011[3]	A++	A++
Annual energy consumption		kWh/y	258	371
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	3.90	5.00
Seasonal energy efficiency index		SCOP[2]	4.30	4.30
Seasonal energy efficiency class		626/2011[3]	A+	A+
Annual energy consumption		kWh/y	1270	1628
Electrical data				
Power supply	Outdoor unit	Ph-V-Hz	1-220~240V-50HZ	
Power cable		Type	3 x 2.5 mm[2]	3 x 4 mm[2]
Connection wires between I.U. and O.U.		no.	4	4
Nominal absorbed current	Cooling	A	7.30	9.70
	Heating	A	7.00	9.60
Maximum current		A	9.50	14.00
Maximum absorbed power		kW	1.90	2.80
Refrigerant circuit data				
Refrigerant[4]		Type (GWP)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	0.85	1.5
Tons of CO2 equivalent		t	0.574	1.013
Liquid/gas refrigerant pipe diameter		mm (inches)	6.35(1/4) / 12.74(1/2)	9.52(3/8) / 15.88(5/8)
Max split length		m	30	30
Max difference in height U.I./O.U.		m	20	20
Split length without additional charge		m	5	5
Additional charge		g/m	16	20
Indoor unit specifications				
Dimensions	LxDxH	mm	840x840x200	840x840x200
Net weight		Kg	21	21
Sound power level	SHi	dB(A)	51	51
Sound pressure level	SHi/Hi/Mi/Lo	dB(A)	36/35/33/31	39/38/36/34
Volume of air treated	SHi/Hi/Mi/Lo	m[3]/h	900/800/700/600	1100/1000/900/800
Outdoor unit specifications				
Dimensions	LxDxH	mm	745x300x555	889x340x660
Net weight		Kg	30.5	41.5
Sound power level	Max	dB(A)	65	69
Sound pressure level	Max	dB(A)	52	55
Volume of air treated	Max	m[3]/h	2200	3600
Operating limits (outdoor temperature)	Cooling	°C	-20~52	
	Heating		-20~24	
Accessories				
Decorative panel			MTBPG 710 ZA	
Dimensions	LxDxH	mm	950x950x52	950x950x52
Net weight		Kg	6	6
Optional parts				
Wired control with Wi-Fi module integrated			DMW-ZA1 WiFi	
Interface for connection to centralized control			DMC-LCAC-Gateway	
Centralized control[5]			M-V-CC-T255-G	

1. Value measured according to the harmonized standard EN1451. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 5. DMC-LCAC-Gateway interface required.

8-WAY BIG CASSETTE 84x84

3 CAPACITIES
10.01~15.24 kW

-15~50°C in cooling
-20~24°C in heating

8-WAY PANEL, HOMOGENEOUS AND 360° AIR DELIVERY

PREPARATION FOR EXTERNAL AIR INLET

CONDENSATE DRAIN PUMP INCLUDED, with the possibility of raising the exhaust up to **750 mm** from the lower level

AUTO-RESTART

CONTROLS
standard remote control

NEW

cooling A++ for all models

MTBIS 1082~1602 ZA

Wi-Fi optional

	SEER	SCOP
10,01 kW	6,30	4,00
11,72 kW	6,10	4,00
15,24 kW	6,10	4,00

Indoor unit model			**MTBIS 1082 ZA**	**MTBIS 1402 ZA**	**MTBIS 1602 ZA**
Outdoor unit model			**MCSIS 1082 ZA**	**MCSIS 1402 ZA**	**MCSIS 1602 ZA**
Type			DC-Inverter heat pump		
Control (supplied)			Remote control		
Nominal data					
Nominal capacity (T=+35°C)	Cooling	kW	10.01 (2.70~11.43)	11.72 (3.52~15.83)	15.24 (4.10~16.12)
Nominal absorbed power (T=+35°C)		kW	3.04 (0.89~4.15)	3.62 (0.81~6.35)	5.70 (1.00~6.25)
Nominal energy efficiency coefficient		EER[1]	3.29	3.24	2.67
Nominal capacity (T=+7°C)	Heating	kW	11.14 (2.78~12.66)	14.07 (4.10~17.29)	18.17 (4.40~19.05)
Nominal absorbed power (T=+7°C)		kW	3.00 (0.78~4.00)	3.75 (0.91~5.90)	5.70 (1.02~6.35)
Nominal energy performance coefficient		COP[1]	3.71	3.75	3.19
Seasonal data					
Theoretical load (Pdesignc)	Cooling	kW	10.00	11.70	15.30
Seasonal energy efficiency index		SEER[2]	6.30	6.10	6.10
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++
Annual energy consumption		kWh/y	556	671	878
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	8.20	11.20	11.80
Seasonal energy efficiency index		SCOP[2]	4.00	4.00	4.00
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+
Annual energy consumption		kWh/y	2870	3920	4130
Electrical data					
Power supply	Outdoor unit	Ph-V-Hz	3Ph - 380/415V - 50Hz		
Power cable		Type	5 x 2.5 mm²	5 x 4 mm²	5 x 4 mm²
Connection wires between I.U. and O.U.		no.	4	4	4
Nominal absorbed current	Cooling	A	6.50 (1.40~6.50)	5.60 (1.80~10.30)	8.80 (2.10~10.70)
	Heating	A	5.00 (1.30~6.40)	5.70 (1.90~9.60)	8.80 (2.10~10.80)
Maximum current		A	10.00	14.00	14.00
Maximum absorbed power		kW	5.00	7.30	7.50
Refrigerant circuit data					
Refrigerant[4]		type (GWP)	R32 (675)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	2.4	2.9	3.2
Tons of CO2 equivalent		t	1.620	1.958	2.160
Liquid/gas refrigerant pipe diameter		mm (inches)	9.52(3/8") / 15.88(5/8")		
Max split length		m	75	75	75
Max difference in height U.I./O.U.		m	30	30	30
Split length without additional charge		m	5	5	5
Additional charge		g/m	24	24	24
Indoor unit specifications					
Dimensions	LxDxH	mm	830x830x245	830x830x287	830x830x287
Net weight		Kg	27.2	29.3	29.3
Sound power level	Hi	dB(A)	63	66	66
Sound pressure level	Hi/Mi/Lo/Silent	dB(A)	51/49/46/39	51.5/49/46.5/38.5	53/50.5/45.5/40
Volume of air treated	Hi/Mi/Lo	m³/h	1700/1530/1300	1900/1750/1600	2000/1850/1650
Diameter of the condensate drain pipe		mm	ø25	ø25	ø25
Outdoor unit specifications					
Dimensions	LxDxH	mm	946x410x810	980x415x975	980x415x975
Net weight		Kg	80.5	90	92
Sound power level		dB(A)	70	73	75
Sound pressure level		dB(A)	63	66	66
Volume of air treated	Max	m³/h	4000	5600	5600
Operating limits (outdoor temperature)	Cooling	°C	-15~50		
	Heating		-20~24		
Accessories					
Decorative panel			**MTBPI 1082 ZA**		
Dimensions	LxDxH	mm	950x950x55	950x950x55	950x950x55
Net weight		Kg	6	6	6
Optional parts					
Wired control with Wi-Fi module integrated			DMW-WIFI-ZA		

1. Value measured according to the harmonised standard EN14511. 2. EU Regulation No. 206/2012 -- Value measured according to the harmonised standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new energy consumption labelling of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. In case of need, always contact qualified personnel.

DUCTED

3 CAPACITIES
3.50~7.10 kW

WASHABLE FILTER
air quality optimization

MEMORY FUNCTION

cooling A++ for all models

CONDENSATE DRAIN PUMP INCLUDED maximum height difference **1000 mm** from lower profile

MAXIMUM COMPACTNESS
only **200 mm** high for the 3.50 and 5.30 kW models

MAXIMUM SPLITTING LENGTH 30 m

STATIC PRESSURE LEVEL
adjustable up to **160 Pa** (mod. 7.10 kW)

COMPATIBLE WITH SYSTEMS
AIRZONE

DOWN TO -20°C

CONTROLS
wired control included

Wi-Fi optional
Wired Control
DMW-ZA1 WiFi

MUDGS 351~531 ZA MVDGS 711 ZA

	SEER	SCOP
3.50 kW	6.50	4.00
5.30 kW	6.30	4.00
7.10 kW	6.60	4.10

Indoor unit model			**MUDGS 351 ZA**	**MUDGS 531 ZA**	**MVDGS 711 ZA**
Outdoor unit model			**MCKGS 351 ZA**	**MCKGS 531 ZA**	**MCKGS 711 ZA**
Type			DC-Inverter heat pump		
Control (supplied)			Wired control		
Nominal data					
Nominal capacity (T=+35°C)	Cooling	kW	3.50	5.30	7.10
Nominal absorbed power (T=+35°C)		kW	1.03	1.51	1.92
Nominal energy efficiency coefficient		EER[1]	3.40	3.50	3.70
Nominal capacity (T=+7°C)	Heating	kW	4.00	5.60	8.00
Nominal absorbed power (T=+7°C)		kW	1.00	1.42	2.00
Nominal energy performance coefficient		COP[1]	4.00	3.95	4.00
Seasonal data					
Theoretical load (Pdesignc)	Cooling	kW	3.50	5.30	7.10
Seasonal energy efficiency index		SEER[2]	6.50	6.30	6.60
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++
Annual energy consumption		kWh/y	188	294	377
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	3.00	3.90	4.70
Seasonal energy efficiency index		SCOP[2]	4.00	4.00	4.10
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+
Annual energy consumption		kWh/y	1050	1365	1605
Electrical data					
Power supply	Outdoor unit	Ph-V-Hz	1-220~240V-50/60HZ		
Power cable		Type	3 x 1.5 mm²	3 x 2.5 mm²	3 x 4 mm²
Connection wires between I.U. and O.U.		no.	4	4	4
Nominal absorbed current	Cooling	A	4.90	7.20	9.20
	Heating	A	4.80	6.80	9.60
Maximum current		A	6.00	9.50	14.00
Maximum absorbed power		kW	1.30	1.90	2.80
Refrigerant circuit data					
Refrigerant[4]		Type (GWP)	R32 (675)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	0.57	0.85	1.5
Tons of CO2 equivalent		t	0.385	0.574	1.013
Liquid/gas refrigerant pipe diameter		mm (inches)	6.35(1/4) / 9.52(3/8)	6.35(1/4) / 12.74(1/2)	9.52(3/8) / 15.88(5/8)
Max split length		m	30	30	30
Max difference in height U.I./O.U.		m	15	20	20
Split length without additional charge		m	5	5	5
Additional charge		g/m	16	16	20
Indoor unit specifications					
Dimensions	LxDxH	mm	700x450x200	1000x450x200	900x655x260
Net weight		Kg	18	24	29.5
Sound power level	SHi	dB(A)	56	59	58
Sound pressure level	SHi/Hi/Mi/Lo	dB(A)	35/33/32/30	36/35/33/31	37/35/33/31
Volume of air treated	SHi/Hi/Mi/Lo	m³/h	600/550/500/400	900/800/700/600	1100/1000/900/800
Fan's static pressure	Std/Max	Pa	25/80	25/80	25/160
Outdoor unit specifications					
Dimensions	LxDxH	mm	675x285x553	745x300x555	889x340x660
Net weight		Kg	24.5	30.5	41.5
Sound power level	Max	dB(A)	56	65	69
Sound pressure level	Max	dB(A)	48	52	55
Volume of air treated	Max	m³/h	1800	2200	3600
Operating limits (outdoor temperature)	Cooling	°C	-20~52		
	Heating		-20~24		
Optional parts					
Wired control with Wi-Fi module integrated			DMW-ZA1 WiFi		
Interface for connection to centralized control			DMC-LCAC-Gateway		
Centralized control[5]			M-V-CC-T255-G		

1. Value measured according to the harmonized standard EN1451. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 5. DMC-LCAC-Gateway interface required.

DUCTED

3 CAPACITIES
9.20~15.24 kW

-15~50°C in cooling
-20~24°C in heating

CONDENSATE DRAIN PUMP INCLUDED

DOUBLE INSTALLATION POSSIBILITY:
ceiling or wall recessed

AUTO-RESTART

WEEKLY TIMER

CONTROLS
wired control included

NEW

cooling A++ for all models

Wi-Fi optional

	SEER	SCOP
9.20 kW	6.10	4.00
12.40 kW	6.10	4.00
15.24 kW	6.10	4.00

MUCIS 1082~1602 ZA

Indoor unit model			**MUCIS 1082 ZA**	**MUCIS 1402 ZA**	**MUCIS 1602 ZA**
Outdoor unit model			**MCSIS 1082 ZA**	**MCSIS 1402 ZA**	**MCSIS 1602 ZA**
Type			DC-Inverter heat pump		
Control (supplied)			Wired control		
Nominal data					
Nominal capacity (T=+35°C)	Cooling	kW	9.20 (2.73~11.73)	12.40 (3.52~15.83)	15.24 (4.10~17.29)
Nominal absorbed power (T=+35°C)		kW	2.83 (0.89~4.20)	3.83 (0.81~6.45)	5.25 (1.03~6.65)
Nominal energy efficiency coefficient		EER[1]	3.25	3.24	2.90
Nominal capacity (T=+7°C)	Heating	kW	10.10 (2.78~12.84)	15.24 (4.11~17.59)	17.58 (4.40~20.52)
Nominal absorbed power (T=+7°C)		kW	2.71 (0.78~4.00)	4.10 (0.95~5.80)	4.74 (0.95~6.60)
Nominal energy performance coefficient		COP[1]	3.75	3.72	3.71
Seasonal data					
Theoretical load (Pdesignc)	Cooling	kW	9.20	12.40	15.30
Seasonal energy efficiency index		SEER[2]	6.10	6.10	6.10
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++
Annual energy consumption		kWh/y	528	711	878
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	8.80	11.50	12.50
Seasonal energy efficiency index		SCOP[2]	4.00	4.00	4.00
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+
Annual energy consumption		kWh/y	3080	4025	4375
Electrical data					
Power supply	Outdoor unit	Ph-V-Hz	3Ph - 380/415V - 50Hz		
Power cable		type	5 x 2.5 mm²	5 x 4 mm²	5 x 4 mm²
Connection wires between I.U. and O.U.		no.	4	4	4
Nominal absorbed current	Cooling	A	4.40 (1.40~6.70)	6.00 (1.80~10.50)	8.10 (3.10~11.50)
	Heating	A	4.30 (1.30~6.40)	7.10 (2.00~9.00)	7.40 (2.00~11.50)
Maximum current		A	10.00	14.00	14.00
Maximum absorbed power		kW	5.00	7.30	7.50
Refrigerant circuit data					
Refrigerant[4]		type (GWP)	R32 (675)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	2.4	2.9	3.2
Tons of CO2 equivalent		t	1.620	1.958	2.160
Liquid/gas refrigerant pipe diameter		mm (inches)	9.52(3/8") / 15.88(5/8")		
Max split length		m	75	75	75
Max difference in height U.I./O.U.		m	30	30	30
Split length without additional charge		m	5	5	5
Additional charge		g/m	24	24	24
Indoor unit specifications					
Dimensions	LxDxH	mm	1200x750x245	1200x750x245	1200x750x300
Net weight		Kg	38.4	40.4	42.9
Sound power level	Hi	dB(A)	62	65	66
Sound pressure level	Hi/Mi/Lo/Silent	dB(A)	39/37/34/29	43.5/41.5/39.5/36	44.5/43/41.5/38
Volume of air treated	Hi/Mi/Lo	m³/h	1700/1400/1100	2000/1700/1300	2200/1900/1500
Fan's static pressure	Std/Max	Pa	37/160	50/160	50/160
Diameter of the condensate drain pipe		mm	ø25	ø25	ø25
Outdoor unit specifications					
Dimensions	LxDxH	mm	946x410x810	980x415x975	980x415x975
Net weight		Kg	80.5	90	92
Sound power level		dB(A)	70	73	75
Sound pressure level		dB(A)	63	66	66
Volume of air treated	Max	m³/h	4000	5600	5600
Operating limits (outdoor temperature)	Cooling	°C	-15~50		
	Heating		-20~24		
Optional parts					
Wired control with Wi-Fi module integrated			DMW-WIFI-ZA		

1. Value measured according to the harmonized standard EN1451. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 5. DMC-LCAC-Gateway interface required.

FLOOR/CEILING

3 CAPACITIES
3.50~7.10 kW

COMPACT DESIGN
235 mm height for all models

WASHABLE FILTER
air quality optimization

SELF-DIAGNOSIS CHECK CONTROL

MEMORY FUNCTION

DAILY TIMER

MAXIMUM SPLITTING LENGTH 30 m

DOWN TO -20°C

CONTROLS
remote control included

cooling A++ for all models

MSFGS 351~711 ZA

Wi-Fi optional

	SEER	SCOP
3.50 kW	7.20	4.10
5.30 kW	6.50	4.20
7.10 kW	7.20	4.30

Indoor unit model			MSFGS 351 ZA	MSFGS 531 ZA	MSFGS 711 ZA
Outdoor unit model			**MCKGS 351 ZA**	**MCKGS 531 ZA**	**MCKGS 711 ZA**
Type			DC-Inverter heat pump		
Control (supplied)			Remote control		
Nominal data					
Nominal capacity (T=+35°C)	Cooling	kW	3.50	5.30	7.10
Nominal absorbed power (T=+35°C)		kW	0.92	1.56	2.03
Nominal energy efficiency coefficient		EER[1]	3.80	3.40	3.50
Nominal capacity (T=+7°C)	Heating	kW	4.00	5.60	7.70
Nominal absorbed power (T=+7°C)		kW	0.93	1.44	1.95
Nominal energy performance coefficient		COP[1]	4.30	3.90	3.95
Seasonal data					
Theoretical load (Pdesignc)	Cooling	kW	3.50	5.30	7.10
Seasonal energy efficiency index		SEER[2]	7.20	6.50	7.20
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++
Annual energy consumption		kWh/y	170	285	345
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	3.10	3.90	4.70
Seasonal energy efficiency index		SCOP[2]	4.10	4.20	4.30
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+
Annual energy consumption		kWh/y	1059	1300	1530
Electrical data					
Power supply	Outdoor unit	Ph-V-Hz	1~220~240V-50/60Hz		
Power cable		Type	3 x 1.5 mm²	3 x 2.5 mm²	3 x 4 mm²
Connection wires between I.U. and O.U.		no.	4	4	4
Nominal absorbed current	Cooling	A	4.40	7.30	9.70
	Heating	A	4.50	7.00	9.10
Maximum current		A	6.00	9.50	14.00
Maximum absorbed power		kW	1.30	1.90	2.80
Refrigerant circuit data					
Refrigerant[4]		Type (GWP)	R32 (675)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	0.57	0.85	1.5
Tons of CO2 equivalent		t	0.385	0.574	1.013
Liquid/gas refrigerant pipe diameter		mm (inches)	6.35(1/4) / 9.52(3/8)	6.35(1/4) / 12.74(1/2)	9.52(3/8) / 15.88(5/8)
Max split length		m	30	30	30
Max difference in height U.I./O.U.		m	15	20	20
Split length without additional charge		m	5	5	5
Additional charge		g/m	16	16	20
Indoor unit specifications					
Dimensions	LxDxH	mm	870x665x235	870x665x235	1200x665x235
Net weight		Kg	24	25	31
Sound power level	SHi	dB(A)	49	59	54
Sound pressure level	SHi/Hi/Mi/Lo	dB(A)	35/34/31/28	41/40/38/36	41/39/37/35
Volume of air treated	SHi/Hi/Mi/Lo	m³/h	650/600/500/400	900/800/700/600	1250/1100/1000/900
Outdoor unit specifications					
Dimensions	LxDxH	mm	675x285x553	745x300x555	889X340X660
Net weight		Kg	24.5	30.5	41.5
Sound power level	Max	dB(A)	56	65	69
Sound pressure level	Max	dB(A)	48	52	55
Volume of air treated	Max	m³/h	1800	2200	3600
Operating limits (outdoor temperature)	Cooling	°C	-20~52		
	Heating		-20~24		
Optional parts					
Wired control with Wi-Fi module integrated			DMW-ZA1 WiFi		
Interface for connection to centralized control			DMC-LCAC-Gateway		
Centralized control[5]			M-V-CC-T255-G		

1. Value measured according to the harmonized standard EN1451. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 5. DMC-LCAC-Gateway interface required.

FLOOR/CEILING

3 CAPACITIES
10.10~12.30 kW

-15~50°C in cooling
-20~24°C in heating

DOUBLE INSTALLATION POSSIBILITY

TURBO FUNCTION, to heat and cool the environment quickly

WIDE AIR DISTRIBUTION GRILLE
with aerodynamic fins to ensure rapid operation and reduce noise levels

CONTROLS
standard remote control

NEW

cooling A++ for all models

Wi-Fi optional

	SEER	SCOP
10.10 kW	6.20	4.00
12.10 kW	6.10	4.00
12.30 kW	6.10	4.00

MSFIS 1082~1602 ZA

Indoor unit model			**MSFIS 1082 ZA**	**MSFIS 1402 ZA**	**MSFIS 1602 ZA**
Outdoor unit model			**MCSIS 1082 ZA**	**MCSIS 1402 ZA**	**MCSIS 1602 ZA**
Type			DC-Inverter heat pump		
Control (supplied)			Remote control		
Nominal data					
Nominal capacity (T=+35°C)	Cooling	kW	10.10 (2.73~11.78)	12.10 (3.52~15.24)	12.30 (4.10~16.12)
Nominal absorbed power (T=+35°C)		kW	3.10 (0.89~4.30)	3.73 (0.91~6.20)	3.80 (1.10~6.50)
Nominal energy efficiency coefficient		EER[1]	3.26	3.25	3.24
Nominal capacity (T=+7°C)	Heating	kW	11.71 (2.81~12.78)	12.90 (4.10~17.59)	13.10 (4.40~19.35)
Nominal absorbed power (T=+7°C)		kW	3.14 (0.78~3.95)	3.47 (0.95~5.95)	3.52 (1.12~6.35)
Nominal energy performance coefficient		COP[1]	3.73	3.72	3.72
Seasonal data					
Theoretical load (Pdesignc)	Cooling	kW	10.10	12.10	12.30
Seasonal energy efficiency index		SEER[2]	6.20	6.10	6.10
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++
Annual energy consumption		kWh/y	570	694	916
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	8.60	11.20	11.80
Seasonal energy efficiency index		SCOP[2]	4.00	4.00	4.00
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+
Annual energy consumption		kWh/y	3150	4025	4165
Electrical data					
Power supply	Outdoor unit	Ph-V-Hz	3Ph - 380/415V - 50Hz		
Power cable		type	5 x 2.5 mm²	5 x 4 mm²	5 x 4 mm²
Connection wires between I.U. and O.U.		no.	4	4	4
Nominal absorbed current	Cooling	A	6.30 (1.40~6.80)	5.70 (2.10~9.60)	5.80 (3.10~10.80)
	Heating	A	5.50 (1.30~6.20)	5.30 (2.20~9.20)	5.50 (3.10~10.50)
Maximum current		A	10.00	14.00	14.00
Maximum absorbed power		kW	5.00	7.30	7.50
Refrigerant circuit data					
Refrigerant[4]		type (GWP)	R32 (675)	R32 (675)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	2.4	2.9	3.2
Tons of CO2 equivalent		t	1.620	1.958	2.160
Liquid/gas refrigerant pipe diameter		mm (inches)	9.52(3/8") / 15.88(5/8")		
Max split length		m	75	75	75
Max difference in height U.I./O.U.		m	30	30	30
Split length without additional charge		m	5	5	5
Additional charge		g/m	24	24	24
Indoor unit specifications					
Dimensions	LxDxH	mm	1650x675x235	1650x675x235	1650x675x235
Net weight		Kg	41.5	41.7	42.3
Sound power level	Hi	dB(A)	64	68	70
Sound pressure level	Hi/Mi/Lo/Silent	dB(A)	51/47.5/45/37	51/49/43/35	53/50/42/36
Volume of air treated	Hi/Mi/Lo	m³/h	1955/1728/1504	2100/1850/1600	2200/1950/1650
Diameter of the condensate drain pipe		mm	Φ25	Φ25	Φ25
Outdoor unit specifications					
Dimensions	LxDxH	mm	946x410x810	980x415x975	980x415x975
Net weight		Kg	80.5	90	92
Sound power level		dB(A)	70	73	75
Sound pressure level		dB(A)	63	66	66
Volume of air treated	Max	m³/h	4000	5600	5600
Operating limits (outdoor temperature)	Cooling	°C	-15~50		
	Heating		-20~24		
Optional parts					
Wired control with Wi-Fi module integrated			DMW-WIFI-ZA		

1. Value measured according to the harmonized standard EN1451. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 5. DMC-LCAC-Gateway interface required.

MW MULTISPLIT R32, THE RANGE

	kW	4.10	5.30	6.10	7.10	8.00	12.10
No. of connectable indoor units		1-2	1-2	2-3	2-3	2-4	2-5
							
		MCKGM 402 Z2	MCKGM 532 Z2	MCKGM 602 Z3	MCKGM 712 Z3	MCKGM 822 Z4	MCKGM 1202 Z5
 Wi-Fi	MKEGM 267 ZAL	●	●	●	●	●	●
	MKEGM 357 ZAL	●	●	●	●	●	●
	MKEGM 537 ZAL			●	●	●	●
	MKEGM 717 ZAL				●	●	●
 Wi-Fi	MKEGM 265 ZAL	●	●	●	●	●	●
	MKEGM 355 ZAL	●	●	●	●	●	●
	MKEGM 535 ZAL			●	●	●	●
	MKEGM 715 ZAL				●	●	●
 NEW	MFIGM 261 ZAL	●	●	●	●	●	●
	MFIGM 351 ZAL	●	●	●	●	●	●
	MFIGM 531 ZAL			●	●	●	●
	MTFGM 351 ZL	●	●	●	●	●	●
	MTFGM 531 ZL			●	●	●	●
	MTSGM 351 ZL	●	●	●	●	●	●
	MTSGM 531 ZL			●	●	●	●
	MUCGM 261 ZL	●	●	●	●	●	●
	MUCGM 351 ZL	●	●	●	●	●	●
	MUCGM 531 ZL			●	●	●	●
	MSEGM 260 ZL	●	●	●	●	●	●
	MSEGM 350 ZL	●	●	●	●	●	●
	MSEGM 530 ZL			●	●	●	●

MW MULTISPLIT R32 ACS NEW

OUTDOOR UNIT

TANK

MULTISPLIT OUTDOOR UNITS

Multiwarm has a wide range of outdoor units, with different power motors. Multisplit outdoor units can be connected up to 5 indoor units, for residential and commercial use.

Equipped with a DC Inverter rotary compressor, they guarantee the best performance in all seasons.

Outdoor unit	EER*	COP*	SEER*	SCOP*
MCKGM 402 Z2	3.72	4.54	7.20 / A++	4.20 / A+
MCKGM 532 Z2	3.58	4.53	7.20 / A++	4.20 / A+
MCKGM 602 Z3	4.12	4.56	7.80 / A++	4.30 / A+
MCKGM 712 Z3	3.77	3.86	7.10 / A++	4.30 / A+
MCKGM 822 Z4	3.77	4.31	7.20 / A++	4.20 / A+
MCKGM 1202 Z5	3.56	4.08	7.20 / A++	4.20 / A+

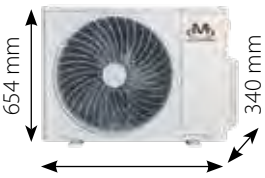
* The values reported may vary depending on the combinations chosen. For more information, refer to the technical manuals.

-15°C
High heating operating efficiency

43°C
High cooling operating efficiency

High compactness

MCKGM 402-532 Z2



MCKGM 602-712 Z3 | MCKGM 822 Z4

MCKGM 1202 Z5

OUTDOOR UNITS

6 CAPACITIES
4.10~12.10 kW

UP TO FIVE CONNECTABLE INDOOR UNITS

MAXIMUM FLEXIBILITY
ease of installation guaranteed by wide ranges of refrigerant piping splitting

ALL COMPRESSORS ARE ROTARY DC INVERTER

WIDE OPERATION RANGE
heating with outdoor temperatures down to -15° C

MCKGM 402 Z2 / MCKGM 532 Z2

MCKGM 602 Z3 / MCKGM 712 Z3 / MCKGM 822 Z4

MCKGM 1202 Z5

For the possible combinations that fall within the Eco Bonus tax deduction and the Conto Termico 2.0, it is necessary to request the tables from the MULTIWARM brand technical office.

Outdoor unit model			**MCKGM 402 Z2**	**MCKGM 532 Z2**	**MCKGM 602 Z3**	**MCKGM 712 Z3**	**MCKGM 822 Z4**	**MCKGM 1202 Z5**
Type			DC-Inverter heat pump outdoor unit					
Connectable indoor units (min - max)		no.	1 - 2	1 - 2	2 - 3	2 - 3	2 - 4	2 - 5
Nominal data								
Nominal capacity (T=+35°C)	Cooling	kW	4.10 (2.05~5.00)	5.30 (2.14~5.80)	6.10 (2.22~8.30)	7.10 (2.30~9.20)	8.00 (2.30~11.00)	12.10 (2.60~15.20)
Nominal absorbed power (T=+35°C)		kW	1.10	1.48	1.48	1.88	2.12	3.40
Nominal energy efficiency coefficient		EER[1]	3.72	3.58	4.12	3.77	3.77	3.56
Nominal capacity (T=+7°C)	Heating	kW	4.40 (2.49~5.40)	5.65 (2.58~6.50)	6.50 (3.60~8.50)	8.60 (3.65~9.20)	9.50 (3.65~10.25)	13.00 (3.00~15.50)
Nominal absorbed power (T=+7°C)		kW	0.97	1.25	1.43	2.23	2.20	3.19
Nominal energy performance coefficient		COP[1]	4.54	4.53	4.56	3.86	4.31	4.08
Seasonal data								
Theoretical load (Pdesignc)	Cooling	kW	4.10	5.30	6.10	7.10	8.00	12.10
Seasonal energy efficiency index		SEER[2]	7.20	7.20	7.80	7.10	7.20	7.20
Seasonal energy efficiency class		626/2011[3]	A++	A++	A++	A++	A++	A++
Annual energy consumption		kWh/y	199	257	273	350	388	588
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	3.80	4.10	6.10	6.10	7.20	13.00
Seasonal energy efficiency index		SCOP[2]	4.20	4.20	4.30	4.30	4.20	4.20
Seasonal energy efficiency class		626/2011[3]	A+	A+	A+	A+	A+	A+
Annual energy consumption		kWh/y	1266	1366	1986	1986	2400	4333
Electrical data								
Power supply		Ph-V-Hz	1-220~240V-50HZ					
Power cable		Type	3 x 2.5 mm2	3 x 2.5 mm2	3 x 4 mm2	3 x 4 mm2	3 x 4 mm2	3 x 4 mm2
Connection wires between each I.U. and O.U.		no.	4	4	4	4	4	4
Nominal absorbed current	Cooling	A	4.90	6.60	6.60	8.40	9.40	15.10
	Heating	A	4.40	5.60	6.30	9.90	9.80	14.20
Maximum current		A	10.00	11.00	12.90	15.00	16.00	21.70
Maximum absorbed power		kW	2.25	2.50	2.90	3.40	3.60	5.00
Refrigerant circuit data								
Refrigerant[4]		Type (GWP)	R32 (675)					
Q.ty of refrigerant pre-charge		Kg	0.75	0.90	1.60	1.70	1.80	2.40
Tons of CO2 equivalent		t	0.506	0.608	1.080	1.148	1.215	1.620
Liquid/gas refrigerant pipe diameter		mm (inches)	2 x 6.35(1/4) 2 x 9.52(3/8)	2 x 6.35(1/4) 2 x 9.52(3/8)	3 x 6.35(1/4) 3 x 9.52(3/8)	3 x 6.35(1/4) 3 x 9.52(3/8)	4 x 6.35(1/4) 4 x 9.52(3/8)	5 x 6.35(1/4) 5 x 9.52(3/8)
Total split length		m	40	40	60	60	70	100
Max length of a single refrigerant line		m	20	20	20	20	20	25
Max difference in height I.U./O.U.		m	15	15	15	15	15	25
Max difference in height between I.U.		m	15	15	15	15	15	25
Split length without additional charge		m	10	10	30	30	40	50
Additional charge		g/m	20	20	20	20	20	20
Product specifications								
Dimensions	LxDxH	mm	745x300x550	745x300x550	889x340x654	889x340x654	889x340x654	1020x427x826
Net weight		Kg	30	32	47.5	47.5	51	73
Sound power level	Max	dB(A)	62	64	68	68	68	74
Sound pressure level	Max	dB(A)	52	54	58	58	58	60
Volume of air treated		m3/h	2300	2300	3800	3800	3800	5800
Operating limits (outdoor temperature)	Cooling	°C	-15~43					
	Heating	°C	-15~24					

Seasonal energy efficiency values refer to the following combinations:
MCKGM 402 Z2 + 2 x MKEGM 265 ZAL; MCKGM 532 Z2 + 2 x MKEGM 265 ZAL; MCKGM 602 Z3 + 3x MKEGM 265Z AL; MCKGM 712 Z3 + 3 x MKEGM 265 ZAL; MCKGM 822 Z4 + 4 x MKEGM 265 ZAL; MCKGM 1202 Z5 + 5 x MKEGM 265 ZAL.

1. Value measured according to the harmonized standard EN14511. 2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners. 4. Refrigerant leakage contributes to climate change. When 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. In case of need, always contact qualified personnel.

MULTISPLIT DHW OUTDOOR UNIT

The Multisplit range from Multiwarm is expanding, with an outdoor unit to which both classic indoor units and a 200L tank for DHW production can be connected.

NEW

Heating, cooling and production of domestic hot water with a single outdoor unit.

Possibility of producing DHW for free in the summer period thanks to **heat recovery** during the cooling operation of the indoor air-to-air units.

-22°C
Wide operating range in heating

43°C
Wide operating range in cooling

-22°C
Wide operating range in DHW production

185L
Tank capacity

A++
Energy class in cooling

DMW WTGM

MCKGWM 1202 Z4W

MWTGM 200 Z4W

DHW OUTDOOR UNIT

1 CAPACITY 12.10 kW

UP TO FOUR CONNECTABLE INDOOR UNITS (including tank)

MAXIMUM FLEXIBILITY
ease of installation guaranteed by wide ranges of refrigerant piping splitting

WIDE OPERATION RANGE
heating and DHW with outdoor temperatures down to -22° C

HEAT RECOVERY
with connected tank, free DHW during cooling operation of the indoor air-to-air units.

NEW

Model		Outdoor unit	MCKGWM 1202 Z4W
Type			DC-Inverter heat pump outdoor unit
Connectable indoor units (min - max)	with tank	no.	1-4*
	without tank		2-4
* When the tank is connected. it is mandatory to install at least one indoor unit			
Nominal data			
Nominal capacity (T=+35°C)	Cooling	kW	12.10 (2.60~15.20)
Nominal absorbed power (T=+35°C)		kW	3.40
Nominal energy efficiency coefficient		EER[1]	3.56
Nominal capacity (T=+7°C)	Heating	kW	13.00 (3.00~15.50)
Nominal absorbed power (T=+7°C)		kW	3.35
Nominal energy performance coefficient		COP[1]	3.88
Nominal capacity (T=+7°C)	DHW	kW	4.20
Nominal energy performance coefficient		COP[1]	4.56
Nominal DHW production capacity		L/h	90
Seasonal data			
Theoretical load (Pdesignc)	Cooling	kW	12.10
Seasonal energy efficiency index		SEER[2]	7.20
Seasonal energy efficiency class		626/2011[3]	A++
Annual energy consumption		kWh/y	588
Theoretical load (Pdesignh) @ -10°C	Heating (average weather conditions)	kW	10.80
Seasonal energy efficiency index		SCOP[2]	4.10
Seasonal energy efficiency class		626/2011[3]	A+
Annual energy consumption		kWh/y	3600
COPDHW[4]	Sanitary Water (average weather conditions)	W/W	2.74
Test cycle profile[4]		type	L
Energy efficiency (η wh)[5]		%	115
Energy efficiency class[5]		814/2013	A+
Electrical data			
Power supply		Ph-V-Hz	1-220~240V-50HZ
Power cable		Type	3 x 6 mm²
Connection wires between each I.U. and O.U.		no.	4
Nominal absorbed current	Cooling	A	15.00
	Heating	A	14.80
Maximum current		A	29.50
Maximum absorbed power		kW	6.50
Refrigerant circuit data			
Refrigerant[6]		Type (GWP)	R32 (675)
Q.ty of refrigerant pre-charge		Kg	2.40
Tons of CO2 equivalent		t	1.620
Liquid/gas refrigerant pipe diameter		mm (inches)	5 x 6.35(1/4") 5 x 9.52(3/8")
Total split length		m	100
Max length of a single refrigerant line		m	25
Max difference in height between tank and O.U.		m	10
Max difference in height U.I./O.U.		m	25
Max difference in height between I.U.		m	25
Split length without additional charge		m	50
Additional charge		g/m	20
Poduct specifications			
Dimensions	LxDxH	mm	1020x427x826
Net weight		Kg	73.5
Sound power level	Max	dB(A)	74
Sound pressure level	Max	dB(A)	60
Volume of air treated		m³/h	5800
Operating limits (outdoor temperature)	Cooling	°C	-15~43
	Heating		-22~24
	DHW		-22~43

Seasonal energy efficiency values refer to the following combinations: **MCKGWM 1202 Z4W + 2 x MKEGM 265 ZAL + 2 x MKEGM 355 ZAL**

1. Value measured according to harmonized standard EN14511. 2. EU Regulation No. 206/2012 - - Value measured according to harmonized standard EN14825. 3. EU Delegated Regulation No. 626/2011 on the new energy labelling of air conditioners. 4. Test according to EN16147; air 7°C, water inlet 10°C [5] Directive 2009/125/EC - ERP EU No. 814/2013 [6] Refrigerant leakage contributes to climate change. When 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 675. If 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. In case of need, always contact qualified personnel.

TANK

NEW

ELECTRIC RESISTANCE INCLUDED
1.5 kW

Connectable only if at least one classic indoor unit is present

MAGNESIUM ANODE

35~55°C
Hot water regulation range

HEAT RECOVERY
Free DHW during cooling operation of the air-to-air indoor units.

Can only be used with outdoor unit MCKGWM 1202 Z4W

Model		Indoor unit	MWTGM 200 Z4W
Type			DHW Tank
Nominal capacity		kW	4.20
Electrical data			
Power supply		Ph-V-Hz	-
Connection wires between I.U. and O.U.		no.	4
Refrigerant circuit data			
Liquid/gas refrigerant pipe diameter		mm (inches)	6.35(1/4") / 9.52(3/8")
Product specifications			
Dimensions	Volume	L	185
	DxH	mm	462x2000
	Net weight	kg	72.5
Integrative electrical resistance		W	1500
DHW connections		inches	G1/2"
Anode type		-	Magnesium
Hot water Temperature regulation range		℃	35~55
Accessories			
Wired control with WiFi integrated (NOT INCLUDED)			DMW WTGM
Optional parts			
Centralized control			NOT available

WIRED CONTROL FOR DHW TANK

DMW WTGM
obligatory

Daily Timer

Setting the on and off time, it remains valid for the following days.

Holiday

Setting the absence period, the unit will activate to ensure that the DHW tank is at temperature on the day of return.

Sterilization

Anti-legionella cycle.

Temp +

Manually increase the hot water storage temperature above the maximum, to have more DHW available when needed.

Sunflower

The water is heated to a higher temperature the higher the outside temperature, in order to maximize efficiency and reduce costs. Once active, it remains valid for the following days.

Standard mode

Automatic management of the heat pump and electrical resistance for a balanced relationship between heating times and consumption.

Quick mode

Minimizes warm-up times for rapid DHW production.

Energy saving mode

Optimizes water heating while considering energy savings.

Emergency mode

In the event of a heat pump fault, the electrical resistance is automatically activated to produce DHW.

INDOOR UNITS

4 CAPACITIES
2.60~7.20 kW

7 SPEED LEVELS
of ventilation

I-FEEL FUNCTION

SELF-CLEAN FUNCTION

COLD PLASMA FILTER

REMOTE CONTROL INCLUDED

WALL **ACTION**

Wi-Fi INTEGRATED

Model			MKEGM 267 ZAL	MKEGM 357 ZAL	MKEGM 537 ZAL	MKEGM 717 ZAL
Type			Wall type indoor unit			
Control			Remote control			
Nominal capacity	Cooling	kW	2.60	3.50	5.00	7.20
	Heating	kW	2.80	3.80	5.60	8.50
Electrical data						
Power supply		Ph-V-Hz	-	-	-	-
Connection wires between I.U. and O.U.		no.	4	4	4	4
Refrigerant circuit data						
Liquid/gas refrigerant pipe diameter		mm (inches)	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø12.74(1/2")
Product specifications						
Dimensions	LxDxH	mm	708x185x260	835x200x275	943x246x333	943x246x333
	Net weight	Kg	7	9	13	13.5
Sound power level	Hi~Lo	dB(A)	55/48/46/44/40/37/33	59/50/47/45/41/38/35	60/58/56/54/48/44/41	65/56/54/52/50/46/42
Sound pressure level	Hi~Lo	dB(A)	38/36/34/32/28/25/21	42/38/35/33/29/26/23	47/45/43/41/35/30/28	50/46/44/42/40/36/32
Volume of air treated	Hi~Lo	m3/h	500/470/430/390/320/270/250	650/550/470/420/380/350/310	1000/960/870/810/720/640/600	1050/900/740/690/640/590/540
Optional parts						
Individual wired control			M-RF-CW2-L-G			
Wired control for centralized control			M-RF-CW3-L-G			
Wi-Fi module			Integrated			
Centralized control (only possible with wired control)			M-V-CC-T255-G			

4 CAPACITIES
2.60~7.20 kW

ELEGANT & COMPACT DESIGN
210 mm depth for the 2.60 and 3.50 kW models

MAXIMUM SILENCE
only 22 dB(A) in Low mode for the 2.60 kW model

I-FEEL FUNCTION

COLD PLASMA FILTER

REMOTE CONTROL INCLUDED

WALL **AIRPRO PLUS**

Wi-Fi INTEGRATED

Model			MKEGM 265 ZAL	MKEGM 355 ZAL	MKEGM 535 ZAL	MKEGM 715 ZAL
Type			Wall-mounted indoor unit			
Control			Remote control			
Nominal capacity	Cooling	kW	2,60	3,50	5,00	7,20
	Heating	kW	2,80	3,80	5,60	8,50
Electrical data						
Power supply		Ph-V-Hz	-	-	-	-
Connection wires between I.U. and O.U.		no.	4	4	4	4
Refrigerant circuit data						
Liquid/gas refrigerant pipe diameter		mm (inches)	ø6,35(1/4") / ø9,52(3/8")	ø6,35(1/4") / ø9,52(3/8")	ø6,35(1/4") / ø12,74(1/2")	ø6,35(1/4") / ø15,9(5/8")
Product specifications						
Dimensions	LxDxH	mm	865x290x210	865x290x210	996x301x225	1101x327x249
	Net weight	Kg	10,5	10,5	13	16
Sound power level	Hi~Lo	dB(A)	58/52/50/48/44/40/36	58/53/51/49/46/43/37	60/57/55/54/52/50/46	64/59/56/55/53/51/48
Sound pressure level	Hi~Lo	dB(A)	41/38/36/34/30/26/22	43/39/37/35/32/29/23	43/41/39/37/35/32/31	48/44/41/40/38/36/33
Volume of air treated	Hi~Lo	m3/h	660/590/540/490/450/420/390	680/590/540/490/450/420/390	850/750/680/610/570/520/460	1250/1100/1000/950/900/850/800
Optional parts						
Individual wired control			M-RF-CW2-L-G			
Wired control for centralized control			M-RF-CW3-L-G			
Wi-Fi module			Integrated			
Centralized control (only possible with wired control)			M-V-CC-T255-G			

INDOOR UNITS

3 CAPACITIES
2.60~5.00 kW

7 FAN SPEED levels

ELEGANT & COMPACT DESIGN
215 mm deep

MEMORY FUNCTION,
I-FEEL FUNCTION, X-FAN FUNCTION

DOUBLE AIR DELIVERY

8° C HEATING

REMOTE CONTROL INCLUDED

CONSOLE

Wi-Fi INTEGRATED

Model			MFIGM 261 ZAL	MFIGM 351 ZAL	MFIGM 531 ZAL
Type			Console type indoor unit		
Control			Remote control		
Nominal capacity	Cooling	kW	2.60	3.50	5.00
	Heating	kW	2.80	3.80	5.60
Electrical data					
Power supply		Ph-V-Hz	-	-	-
Connection wires between I.U. and O.U.		no.	4	4	4
Refrigerant circuit data					
Liquid/gas refrigerant pipe diameter		mm (inches)	ø6.35(1/4") /ø 9.52(3/8")	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø12.74(1/2")
Product specifications					
Dimensions	LxDxH	mm	700v215x600	700v215x600	700v215x600
	Net weight	Kg	15.5	16	16
Sound power level	Hi~Lo	dB(A)	52/48/46/44/41/38/35	55/51/49/47/44/40/36	60/58/56/53/51/48/43
Sound pressure level	Hi~Lo	dB(A)	39/36/34/32/29/26/23	44/40/38/36/33/29/25	49/47/45/42/40/37/32
Volume of air treated	Hi~Lo	m3/h	500/430/410/370/330/280/250	600/520/480/440/400/360/280	750/670/600/520/470/430/350
Optional parts					
Individual wired control			M-RF-CW2-L-G		
Wired control for centralized control			M-RF-CW3-L-G		
Wi-Fi module			Included		
Centralized control (only possible with wired control)			M-V-CC-T255-G		

2 CAPACITIES
3.50~5.00 kW

COMPACT DESIGN
265 mm height for recessed installation in false ceilings

MEMORY FUNCTION

WASHABLE FILTER

X-FAN

TOTAL TEMPERATURE CONTROL

REMOTE CONTROL INCLUDED

COMPACT CASSETTE

Wi-Fi **Wired remote control with optional integrated WiFi**

Model			MTFGM 351 ZL	MTFGM 531 ZL
Type			Cassette type indoor unit	
Control			Remote control	
Nominal capacity	Cooling	kW	3.50	5.00
	Heating	kW	3.80	5.60
Electrical data				
Power supply		Ph-V-Hz	-	-
Connection wires between I.U. and O.U.		no.	4	4
Refrigerant circuit data				
Liquid/gas refrigerant pipe diameter		mm (inches)	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø12.74(1/2")
Product specifications				
Dimensions	LxDxH	mm	570x570x265	570x570x265
	Net weight	Kg	17	17
Sound power level	Hi~Lo	dB(A)	57/55/52/50/48/46/44	59/55/52/50/48/46/44
Sound pressure level	Hi~Lo	dB(A)	41/39/36/34/32/30/28	43/39/36/34/32/30/28
Volume of air treated	Hi~Lo	m3/h	560/540/490/450/420/380/350	650/540/490/450/420/380/350
Accessories				
Decorative panel			MTFPG 350 ZA	
Optional parts				
Individual wired control with connection cable			M-RF-CW2-L-G + CW2-SE-TF-ADAPTOR	
Wired control for centralized control			M-RF-CW3-L-G	
Wired control with integrated Wi-Fi module			DMW-ZAL-LCAC WiFi	
Centralized control (only possible with wired control)			M-V-CC-T255-G	

INDOOR UNITS

2 CAPACITIES
3.50~5.00 kW

COMPACT DESIGN
178mm height for recessed installation in false ceilings

MEMORY FUNCTION

WASHABLE FILTER

CONDENSATE DRAIN PUMP INCLUDED max height difference **1000 mm**

REMOTE CONTROL INCLUDED

Wi-Fi **Wired control with optional integrated WiFi**

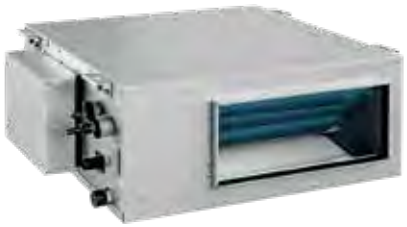
1-WAY CASSETTE

Model			MTSGM 351 ZL	MTSGM 531 ZL
Type			Cassette type indoor unit	
Control			Remote control	
Nominal capacity	Cooling	kW	3.50	5.00
	Heating	kW	3.80	5.60
Electrical data				
Power supply		Ph-V-Hz	-	-
Connection wires between I.U. and O.U.		no.	4	4
Refrigerant circuit data				
Liquid/gas refrigerant pipe diameter		mm (inches)	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø12.74(1/2")
Product specifications				
Dimensions	LxDxH	mm	987x385x178	987x385x178
	Net weight	Kg	19	20
Sound power level	Hi~Lo	dB(A)	53/50/43/41	56/53/48/45
Sound pressure level	Hi~Lo	dB(A)	42/39/35/31	43/40/35/32
Volume of air treated	Hi~Lo	m³/h	600/500/440/390	700/600/500/450
Accessories				
Decorative panel			MTSPG 351 Z	
Optional parts				
Individual wired control with connection cable			M-RF-CW2-L-G + CW2-SE-TF-ADAPTOR	
Wired control for centralized control			M-RF-CW3-L-G	
Wired control with integrated Wi-Fi module			DMW-ZAL-LCAC WiFi	
Centralized control (only possible with wired control)			M-V-CC-T255-G	

3 CAPACITIES
2.60~5.00 kW

MAXIMUM COMPACTNESS
only 200 mm high

MEMORY FUNCTION



WASHABLE FILTER

6 FAN SPEED LEVELS

DAILY TIMER

WIRED CONTROL INCLUDED

Wi-Fi **Wired remote control with built-in WiFi as standard**

DUCTED

Model			MUCGM 261 ZL	MUCGM 351 ZL	MUCGM 531 ZL
Type			Ducted type indoor unit		
Standard control			Wired control		
Nominal capacity	Cooling	kW	2.60	3.50	5.00
	Heating	kW	2.80	3.80	5.60
Electrical data					
Power supply		Ph-V-Hz	-	-	-
Connection wires between I.U. and O.U.		no.	4	4	4
Refrigerant circuit data					
Liquid/gas refrigerant pipe diameter		mm (inches)	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø12.74(1/2")
Product specifications					
Dimensions	LxDxH	mm	710x450x200	710x450x200	1010x450x200
	Net weight	Kg	18.5	19	25
Sound power level	Hi~Lo	dB(A)	57/55/54/53/52/51/50	55/53/52/51/50/49/48	57/55/55/54/54/53/50
Sound pressure level	Hi~Lo	dB(A)	41/39/38/37/36/35/34	39/37/36/35/34/33/32	41/39/39/38/38/37/34
Volume of air treated	Hi~Lo	m³/h	700/670/640/610/580/550/520	650/560/520/480/450/410/380	880/840/810/790/770/750/730
Fan's static pressure	Std/Max	Pa	25/60	25/60	25/60
Optional parts					
Wi-Fi module			Integrated in the standard wired control		
Centralized control			M-V-CC-T255-G		

INDOOR UNITS

3 CAPACITIES
2.60~5.00 kW

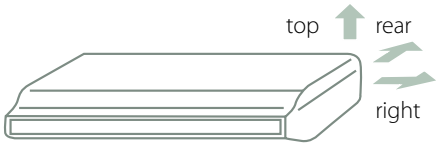
WASHABLE FILTER

MEMORY FUNCTION

X-FAN

TOTAL TEMPERATURE CONTROL

REMOTE CONTROL INCLUDED



FLOOR/CEILING

Wi-Fi **Wired remote control with optional integrated WiFi**

Model			MSEGM 260 ZL	MSEGM 350 ZL	MSEGM 530 ZL
Type			Ceiling type indoor unit		
Control			Remote control		
Nominal capacity	Cooling	kW	2.60	3.50	5.00
	Heating	kW	2.80	3.80	5.60
Electrical data					
Power supply		Ph-V-Hz	-	-	-
Connection wires between I.U. and O.U.		no.	4	4	4
Refrigerant circuit data					
Liquid/gas refrigerant pipe diameter		mm (inches)	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø9.52(3/8")	ø6.35(1/4") / ø12.74(1/2")
Product specifications					
Dimensions	LxDxH	mm	870x235x665	870x235x665	870x235x665
	Net weight	Kg	25	25	25.5
Sound power level	Hi~Lo	dB(A)	38/35/30/26	38/35/30/26	38/35/30/26
Sound pressure level	Hi~Lo	dB(A)	52/49/44/40	52/49/44/40	52/49/44/40
Volume of air treated	Hi~Lo	m3/h	700/610/540/420	700/610/540/420	680/590/520/410
Motor power	Output	W	15	15	15
Optional parts					
Individual wired control con cavetto di collegamento			M-RF-CW2-L-G + CW2-SE-TF-ADAPTOR		
Wired control for centralized control			M-RF-CW3-L-G		
Wired control with integrated Wi-Fi module			DMW-ZAL-LCAC WiFi		
Centralized control (only possible with wired control)			M-V-CC-T255-G		

R32 COOLING COMBINATIONS

Outdoor units	Combinations					Rated capacity (kW)					Total cooling capacity (kW)			Absorbed power (kW)			EER	SEER	Energy Class	Conto Termico 2.0*
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max				
MCKGM 402 Z2	26	-	-	-	-	2.60	-	-	-	-	2.05	2.60	3.00	0.20	0.70	1.30	3.71	6.10	A++	-
	35	-	-	-	-	3.50	-	-	-	-	2.05	3.50	4.00	0.30	1.00	1.78	3.50	6.10	A++	-
	26	26	-	-	-	2.05	2.05	-	-	-	2.05	4.10	5.00	0.40	1.10	2.20	3.73	7.20	A++	-
	26	35	-	-	-	1.76	2.34	-	-	-	2.05	4.10	5.00	0.40	1.10	2.20	3.73	7.20	A++	-
MCKGM 532 Z2	26	-	-	-	-	2.6	-	-	-	-	2.15	2.60	3.00	0.30	0.70	1.50	3.71	6.10	A++	-
	35	-	-	-	-	3.5	-	-	-	-	2.15	3.50	3.80	0.30	1.20	1.80	2.92	6.10	A++	-
	26	26	-	-	-	2.65	2.65	-	-	-	2.15	5.30	5.80	0.40	1.48	2.50	3.58	7.20	A++	-
	26	35	-	-	-	2.30	3.00	-	-	-	2.15	5.30	5.80	0.50	1.48	2.50	3.58	7.20	A++	-
	35	35	-	-	-	2.65	2.65	-	-	-	2.15	5.30	5.80	0.50	1.48	2.50	3.58	7.20	A++	-
MCKGM 602 Z3	26	26	-	-	-	2.65	2.65	-	-	-	2.20	5.30	6.00	0.40	1.20	2.60	4.42	6.10	A++	-
	26	35	-	-	-	2.60	3.50	-	-	-	2.20	6.10	7.20	0.50	1.48	2.90	4.12	6.10	A++	-
	26	53	-	-	-	2.03	4.07	-	-	-	2.20	6.10	8.30	0.60	1.48	2.90	4.12	6.10	A++	-
	35	35	-	-	-	3.05	3.05	-	-	-	2.20	6.10	8.30	0.60	1.48	2.90	4.12	6.10	A++	-
	35	53	-	-	-	2.44	3.66	-	-	-	2.20	6.10	8.30	0.60	1.48	2.90	4.12	6.10	A++	-
	26	26	26	-	-	2.03	2.03	2.03	-	-	2.20	6.10	8.30	0.60	1.48	2.90	4.12	7.80	A++	-
	26	26	35	-	-	1.83	1.83	2.44	-	-	2.20	6.10	8.30	0.60	1.48	2.90	4.12	7.80	A++	-
MCKGM 712 Z3	26	26	-	-	-	2.65	2.65	-	-	-	2.30	5.30	6.30	0.80	1.40	3.00	3.79	6.10	A++	-
	26	35	-	-	-	2.60	3.50	-	-	-	2.30	6.10	7.30	1.00	1.65	3.20	3.71	6.10	A++	-
	26	53	-	-	-	2.37	4.73	-	-	-	2.30	7.10	8.50	1.10	1.88	3.40	3.78	6.10	A++	-
	35	35	-	-	-	3.55	3.55	-	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	6.10	A++	-
	35	53	-	-	-	2.84	4.26	-	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	6.10	A++	-
	53	53	-	-	-	3.55	3.55	-	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	6.10	A++	-
	26	26	26	-	-	2.37	2.37	2.37	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	7.10	A++	-
	26	26	35	-	-	2.13	2.13	2.84	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	7.10	A++	-
	26	26	53	-	-	1.78	1.78	3.55	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	7.10	A++	-
	26	35	35	-	-	1.94	2.58	2.58	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	7.10	A++	-
	35	35	35	-	-	2.37	2.37	2.37	-	-	2.30	7.10	9.20	1.10	1.88	3.40	3.78	7.10	A++	-
MCKGM 822 Z4	26	26	-	-	-	2.65	2.65	-	-	-	2.30	5.30	6.30	0.80	1.40	2.60	3.79	6.10	A++	-
	26	35	-	-	-	2.60	3.50	-	-	-	2.30	6.10	7.30	0.80	1.60	2.80	3.81	6.10	A++	-
	26	53	-	-	-	2.60	5.00	-	-	-	2.30	7.60	8.50	1.20	2.00	2.80	3.80	6.10	A++	-
	35	35	-	-	-	3.50	3.50	-	-	-	2.30	7.00	9.20	1.20	1.80	2.80	3.89	6.10	A++	-
	35	53	-	-	-	3.20	4.80	-	-	-	2.30	8.00	10.00	1.20	2.12	3.40	3.77	6.10	A++	-
	53	53	-	-	-	4.00	4.00	-	-	-	2.30	8.00	11.00	1.20	2.12	3.60	3.77	6.10	A++	-
	26	26	26	-	-	2.67	2.67	2.67	-	-	2.30	8.00	10.00	1.30	2.00	3.40	4.00	6.50	A++	-
	26	26	35	-	-	2.40	2.40	3.20	-	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	6.50	A++	-
	26	26	53	-	-	2.00	2.00	4.00	-	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	6.50	A++	-
	26	35	35	-	-	2.18	2.91	2.91	-	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	6.50	A++	-
	26	35	53	-	-	1.85	2.46	3.69	-	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	6.50	A++	-
	35	35	35	-	-	2.67	2.67	2.67	-	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	6.50	A++	-
	35	35	53	-	-	2.29	2.29	3.43	-	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	6.50	A++	-
	26	26	26	26	-	2.00	2.00	2.00	2.00	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	7.20	A++	-
	26	26	26	35	-	1.85	1.85	1.85	2.46	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	7.20	A++	-
	26	26	35	35	-	1.71	1.71	2.29	2.29	-	2.30	8.00	11.00	1.30	2.12	3.60	3.77	7.20	A++	-
MCKGM 1202 Z5	26	35	-	-	-	2.60	3.50	-	-	-	2.60	6.10	7.50	1.60	2.30	4.60	2.65	6.10	A++	-
	26	53	-	-	-	2.60	5.00	-	-	-	2.60	7.60	9.00	1.60	2.60	4.60	2.92	6.10	A++	-
	26	71	-	-	-	2.60	7.20	-	-	-	2.60	9.80	11.00	1.60	3.40	4.60	2.88	6.10	A++	-
	35	35	-	-	-	3.50	3.50	-	-	-	2.60	7.00	9.20	1.60	2.40	4.60	2.92	6.10	A++	-
	35	53	-	-	-	3.50	5.00	-	-	-	2.60	8.50	10.00	1.60	3.00	4.60	2.83	6.10	A++	-
	35	71	-	-	-	3.50	7.10	-	-	-	2.60	10.60	12.00	1.60	3.40	4.60	3.12	6.10	A++	-
	53	53	-	-	-	5.30	5.30	-	-	-	2.60	10.60	12.00	1.60	3.40	4.60	3.12	6.10	A++	-
	53	71	-	-	-	4.55	6.05	-	-	-	2.60	10.60	12.00	1.60	3.40	4.60	3.12	6.10	A++	-
	71	71	-	-	-	5.30	5.30	-	-	-	2.60	10.60	12.00	1.60	3.40	4.60	3.12	6.10	A++	-
	26	26	26	-	-	2.67	2.67	2.67	-	-	2.60	8.00	10.00	1.60	2.80	4.60	2.86	6.10	A++	-
	26	26	35	-	-	2.60	2.60	4.20	-	-	2.60	9.40	11.00	1.60	3.40	4.60	2.76	6.10	A++	-
	26	26	53	-	-	2.60	2.60	5.00	-	-	2.60	10.20	13.02	1.60	3.00	4.60	3.40	6.10	A++	-
	26	26	71	-	-	2.60	2.60	6.90	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	35	35	-	-	2.60	3.50	3.50	-	-	2.60	9.60	11.94	1.60	3.00	4.60	3.20	6.10	A++	-
	26	35	53	-	-	2.60	3.50	5.00	-	-	2.60	11.10	14.11	1.60	3.40	4.60	3.26	6.10	A++	-
	26	35	71	-	-	2.40	3.20	6.50	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	53	53	-	-	2.50	4.80	4.80	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	53	71	-	-	2.10	4.30	5.70	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	71	71	-	-	1.90	5.10	5.10	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	35	35	-	-	3.50	3.50	3.50	-	-	2.60	10.50	13.02	1.60	3.00	4.60	3.50	6.10	A++	-

Energy Class = EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners.
SEER = EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825.
EER = Value measured according to the harmonized standard EN14511.
* For Italian market only.

R32 COOLING COMBINATIONS

Outdoor units	Combinations					Rated capacity (kW)					Total cooling capacity (kW)			Absorbed power (kW)			EER	SEER	Energy Class	Conto Termico 2.0*
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max				
MCKGM 1202 Z5	35	35	53	-	-	3.50	3.50	5.10	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	35	71	-	-	3.00	3.00	6.10	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	53	53	-	-	3.10	4.50	4.50	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	53	71	-	-	2.70	4.00	5.40	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	71	71	-	-	2.50	4.80	4.80	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	53	53	53	-	-	4.03	4.03	4.03	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	53	53	71	-	-	3.60	3.60	4.90	-	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	26	26	-	2.60	2.60	2.60	2.60	-	2.60	10.40	13.02	1.60	3.40	4.60	3.06	7.20	A++	-
	26	26	26	35	-	2.60	2.60	2.60	3.50	-	2.60	11.30	14.11	1.60	3.40	4.60	3.32	7.20	A++	-
	26	26	26	53	-	2.42	2.42	2.42	4.84	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	26	71	-	2.14	2.14	2.14	5.69	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	35	35	-	2.59	2.59	3.46	3.46	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	26	26	35	53	-	2.27	2.27	3.03	4.54	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	35	71	-	2.02	2.02	2.69	5.38	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	53	53	-	2.02	2.02	4.03	4.03	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	53	71	-	1.82	1.82	3.63	4.84	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	35	35	35	-	2.42	3.23	3.23	3.23	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	26	35	35	53	-	2.14	2.85	2.85	4.27	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	35	35	71	-	1.91	2.55	2.55	5.09	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	35	53	53	-	1.91	2.55	3.82	3.82	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	35	53	71	-	1.73	2.30	3.46	4.61	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	53	53	53	-	1.73	3.46	3.46	3.46	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	35	35	35	-	3.03	3.03	3.03	3.03	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	35	35	35	53	-	2.69	2.69	2.69	4.03	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	35	35	71	-	2.42	2.42	2.42	4.84	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	35	53	53	-	2.42	2.42	3.63	3.63	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	26	26	26	2.42	2.42	2.42	2.42	2.42	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	26	26	26	26	35	2.27	2.27	2.27	2.27	3.03	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	26	26	26	26	53	2.02	2.02	2.02	2.02	4.03	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	26	26	71	1.82	1.82	1.82	1.82	4.84	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	26	35	35	2.14	2.14	2.14	2.85	2.85	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	26	35	53	1.91	1.91	1.91	2.55	3.82	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	26	26	26	35	71	1.73	1.73	1.73	2.30	4.61	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	26	53	53	1.73	1.73	1.73	3.46	3.46	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	26	35	35	35	2.02	2.02	2.69	2.69	2.69	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	26	26	35	35	53	1.82	1.82	2.42	2.42	3.63	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	26	35	35	35	35	1.91	2.55	2.55	2.55	2.55	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-
	26	35	35	35	53	1.73	2.30	2.30	2.30	3.46	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	-
	35	35	35	35	35	2.42	2.42	2.42	2.42	2.42	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	-

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* For Italian market only.

R32 HEATING COMBINATIONS

Outdoor units	Combinations					Rated capacity (kW)					Total heating capacity (kW)			Absorbed power (kW)			COP	SCOP	Energy Class	Conto Termico 2.0*
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max				
MCKGM 402 Z2	26	-	-	-	-	2.80	-	-	-	-	2.49	2.80	3.02	0.30	0.80	1.80	3.50	4.00	A+	NO
	35	-	-	-	-	3.80	-	-	-	-	2.49	3.80	4.10	0.40	0.80	2.00	4.75	4.00	A+	YES
	26	26	-	-	-	2.20	2.20	-	-	-	2.50	4.40	5.40	0.60	0.97	2.25	4.54	4.20	A+	YES
	26	35	-	-	-	1.89	2.51	-	-	-	2.50	4.40	5.40	0.60	0.97	2.25	4.54	4.20	A+	YES
MCKGM 532 Z2	26	-	-	-	-	2.80	-	-	-	-	2.58	2.80	3.02	0.40	0.80	1.80	3.50	4.00	A+	NO
	35	-	-	-	-	3.80	-	-	-	-	2.58	3.80	4.10	0.40	0.80	2.00	4.75	4.00	A+	YES
	26	26	-	-	-	2.70	2.70	-	-	-	2.58	5.65	6.50	0.70	1.25	2.50	4.52	4.20	A+	YES
	26	35	-	-	-	2.31	3.09	-	-	-	2.58	5.65	6.50	0.70	1.25	2.50	4.52	4.20	A+	YES
	35	35	-	-	-	2.70	2.70	-	-	-	2.58	5.65	6.50	0.70	1.25	2.50	4.52	4.20	A+	YES
MCKGM 602 Z3	26	26	-	-	-	2.80	2.80	-	-	-	2.70	5.60	8.50	0.60	1.23	2.50	4.57	4.00	A+	YES
	26	35	-	-	-	2.70	3.80	-	-	-	2.70	6.50	8.50	0.80	1.43	2.90	4.55	4.00	A+	YES
	26	53	-	-	-	2.17	4.33	-	-	-	2.70	6.50	8.50	0.80	1.43	2.90	4.55	4.00	A+	YES
	35	35	-	-	-	3.25	3.25	-	-	-	2.70	6.50	8.50	0.80	1.43	2.90	4.55	4.00	A+	YES
	35	53	-	-	-	2.60	3.90	-	-	-	2.70	6.50	8.50	0.80	1.43	2.90	4.55	4.00	A+	YES
	26	26	26	-	-	2.17	2.17	2.17	-	-	2.70	6.50	8.50	0.80	1.43	2.90	4.55	4.30	A+	YES
	26	26	35	-	-	1.95	1.95	2.60	-	-	2.70	6.50	8.50	0.80	1.43	2.90	4.55	4.30	A+	YES
MCKGM 712 Z3	26	26	-	-	-	2.60	2.60	-	-	-	2.80	6.40	8.80	0.60	1.67	2.40	3.83	4.00	A+	YES
	26	35	-	-	-	2.60	3.80	-	-	-	2.80	7.50	8.80	0.60	1.95	2.60	3.84	4.00	A+	YES
	26	53	-	-	-	2.80	5.60	-	-	-	2.80	8.60	8.80	0.80	2.23	3.00	3.86	4.00	A+	YES
	35	35	-	-	-	4.25	4.25	-	-	-	2.80	8.60	8.80	0.80	2.23	3.00	3.86	4.00	A+	YES
	35	53	-	-	-	3.40	5.10	-	-	-	2.80	8.60	8.80	0.80	2.23	3.00	3.86	4.00	A+	YES
	53	53	-	-	-	4.25	4.25	-	-	-	2.80	8.60	8.80	0.80	2.23	3.00	3.86	4.00	A+	YES
	26	26	26	-	-	2.83	2.83	2.83	-	-	2.80	8.60	9.20	0.80	2.23	3.00	3.86	4.30	A+	YES
	26	26	35	-	-	2.55	2.55	3.40	-	-	2.80	8.60	9.20	0.80	2.23	3.00	3.86	4.30	A+	YES
	26	26	53	-	-	2.13	2.13	4.25	-	-	2.80	8.60	9.20	0.80	2.23	3.00	3.86	4.30	A+	YES
	26	35	35	-	-	2.32	3.09	3.09	-	-	2.80	8.60	9.20	0.80	2.23	3.00	3.86	4.30	A+	YES
	35	35	35		-	2.83	2.83	2.83		-	2.80	8.60	9.20	0.80	2.23	3.00	3.86	4.30	A+	YES
MCKGM 822 Z4	26	26	-	-	-	2.80	2.80	-	-	-	2.80	5.60	10.00	0.70	1.41	2.50	3.96	4.00	A+	YES
	26	35	-	-	-	2.80	5.43	-	-	-	2.80	8.23	10.25	0.70	1.65	2.60	4.99	4.00	A+	YES
	26	53	-	-	-	2.80	3.80	-	-	-	2.80	6.60	10.25	1.00	2.12	3.40	3.11	4.00	A+	NO
	35	35	-	-	-	3.80	3.80	-	-	-	2.80	7.60	10.25	0.90	1.89	2.80	4.03	4.00	A+	YES
	35	53	-	-	-	3.80	5.60	-	-	-	2.80	9.40	10.25	1.00	2.20	3.60	4.27	4.00	A+	YES
	53	53	-	-	-	4.75	4.75	-	-	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.00	A+	YES
	26	26	26	-	-	3.17	3.17	3.17	-	-	2.80	9.50	10.25	1.00	2.12	3.40	4.48	4.00	A+	YES
	26	26	35	-	-	2.85	2.85	3.80	-	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.00	A+	YES
	26	26	53	-	-	2.38	2.38	4.75	-	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.00	A+	YES
	26	35	35	-	-	2.59	3.45	3.45	-	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.00	A+	YES
	26	35	53	-	-	2.19	2.92	4.38	-	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.00	A+	YES
	35	35	35	-	-	3.17	3.17	3.17	-	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.00	A+	YES
	35	35	53	-	-	2.71	2.71	4.07	-	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.00	A+	YES
	26	26	26	26	-	2.38	2.38	2.38	2.38	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.20	A+	YES
	26	26	26	35	-	2.19	2.19	2.19	2.92	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.20	A+	YES
	26	26	35	35	-	2.04	2.04	2.71	2.71	-	2.80	9.50	10.25	1.00	2.20	3.60	4.32	4.20	A+	YES
MCKGM 1202 Z5	26	35	-	-	-	2.80	3.80	-	-	-	3.00	6.60	7.75	1.61	2.30	4.20	2.87	4.00	A+	NO
	26	53	-	-	-	2.80	5.60	-	-	-	3.00	8.40	9.96	1.61	2.60	4.50	3.23	4.00	A+	NO
	26	71	-	-	-	2.80	8.50	-	-	-	3.00	11.30	12.17	1.61	2.80	4.50	4.04	4.00	A+	YES
	35	35	-	-	-	3.80	3.80	-	-	-	3.00	7.60	8.85	1.61	2.60	4.50	2.92	4.00	A+	NO
	35	53	-	-	-	3.80	5.60	-	-	-	3.00	9.40	11.07	1.61	2.80	4.50	3.36	4.00	A+	NO
	35	71	-	-	-	3.80	8.50	-	-	-	3.00	12.30	13.28	1.61	2.80	4.50	4.39	4.00	A+	YES
	53	53	-	-	-	5.60	5.60	-	-	-	3.00	11.20	13.28	1.61	2.80	4.50	4.00	4.00	A+	YES
	53	71	-	-	-	5.57	7.43	-	-	-	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	71	71	-	-	-	6.50	6.50	-	-	-	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	-	-	2.80	2.80	2.80	-	-	3.00	8.40	9.96	1.61	2.60	4.50	3.23	4.00	A+	NO
	26	26	35	-	-	2.80	2.80	3.80	-	-	3.00	9.40	11.07	1.61	2.80	4.50	3.36	4.00	A+	NO
	26	26	53	-	-	2.80	2.80	5.60	-	-	3.00	11.20	13.28	1.61	2.80	4.50	4.00	4.00	A+	YES
	26	26	71	-	-	2.79	2.79	7.43	-	-	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	35	35	-	-	2.80	3.80	3.80	-	-	3.00	10.40	12.17	1.61	2.80	4.50	3.71	4.00	A+	YES
	26	35	53	-	-	2.80	3.80	5.60	-	-	3.00	12.20	14.39	1.61	3.19	5.00	3.82	4.00	A+	YES
	26	35	71	-	-	2.60	3.47	6.93	-	-	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	53	53	-	-	2.60	5.20	5.20	-	-	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	53	71	-	-	2.29	4.59	6.12	-	-	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	71	71	-	-	2.05	5.47	5.47	-	-	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	35	35	-	-	4.33	4.33	4.33	-	-	3.00	13.00	13.28	1.61	2.80	4.50	4.64	4.00	A+	YES

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COP = Value measured according to the harmonized standard EN14511.
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R32 HEATING COMBINATIONS

Outdoor units	Combinations					Rated capacity (kW)					Total heating capacity (kW)			Absorbed power (kW)			COP	SCOP	Energy Class	Conto Termico 2.0*
	Unit A	Unit B	Unit C	Unit D	Unit E	Unità A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max				
MCKGM 1202 Z5	35	35	53			3.71	3.71	5.57			3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	35	71			3.25	3.25	6.50			3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	53	53			3.25	4.88	4.88			3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	53	71			2.89	4.33	5.78			3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	71	71			2.60	5.20	5.20			3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	53	53	53			4.33	4.33	4.33			3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	53	53	71			3.90	3.90	5.20			3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	26		3.25	3.25	3.25	3.25		3.00	13.00	14.00	1.61	3.00	4.80	4.33	4.00	A+	YES
	26	26	26	35		3.00	3.00	3.00	4.00		3.00	13.00	14.39	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	53		2.60	2.60	2.60	5.20		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	71		2.29	2.29	2.29	6.12		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	35	35		2.79	2.79	3.71	3.71		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	35	53		2.44	2.44	3.25	4.88		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	35	71		2.17	2.17	2.89	5.78		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	53	53		2.17	2.17	4.33	4.33		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	53	71		1.95	1.95	3.90	5.20		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	35	35	35		2.60	3.47	3.47	3.47		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	35	35	53		2.29	3.06	3.06	4.59		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	35	35	71		2.05	2.74	2.74	5.47		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	35	53	53		2.05	2.74	4.11	4.11		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	35	53	71		1.86	2.48	3.71	4.95		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	53	53	53		1.86	3.71	3.71	3.71		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	35	35	35		3.25	3.25	3.25	3.25		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	35	35	53		2.89	2.89	2.89	4.33		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	35	35	71		2.60	2.60	2.60	5.20		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	35	53	53		2.60	2.60	3.90	3.90		3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	26	26	2.60	2.60	2.60	2.60	2.60	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.20	A+	YES
	26	26	26	26	35	2.44	2.44	2.44	2.44	3.25	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.20	A+	YES
	26	26	26	26	53	2.17	2.17	2.17	2.17	4.33	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	26	71	1.95	1.95	1.95	1.95	5.20	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	35	35	2.29	2.29	2.29	3.06	3.06	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.20	A+	YES
	26	26	26	35	53	2.05	2.05	2.05	2.74	4.11	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	35	71	1.86	1.86	1.86	2.48	4.95	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	26	53	53	1.86	1.86	1.86	3.71	3.71	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	26	35	35	35	2.17	2.17	2.89	2.89	2.89	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.20	A+	YES
	26	26	35	35	53	1.95	1.95	2.60	2.60	3.90	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	26	35	35	35	35	2.05	2.74	2.74	2.74	2.74	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.20	A+	YES
	26	35	35	35	53	1.86	2.48	2.48	2.48	3.71	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.00	A+	YES
	35	35	35	35	35	2.60	2.60	2.60	2.60	2.60	3.00	13.00	15.50	1.61	3.19	5.00	4.08	4.20	A+	YES

Energy Class = EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners.
SCOP = EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825.
COP = Value measured according to the harmonized standard EN14511.
* For Italian market only.

R32 COOLING COMBINATIONS WITHOUT DHW TANK

Outdoor units	Combinations					Rated capacity (kW)					Total cooling capacity (kW)			Absorbed power (kW)			EER	SEER	Energy Class	Bonus casa*	Conto Termico 2.0*
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max					
MCKGWM 1202 Z4W	Reserved for the tank	26	26	-	-	-	2.60	2.60	-	-	2.60	5.20	6.50	1.60	1.90	3.50	2.74	6.10	A++	NO	-
		26	35	-	-	-	2.60	3.50	-	-	2.60	6.10	7.50	1.60	2.30	3.50	2.65	6.10	A++	NO	-
		26	53	-	-	-	2.60	5.25	-	-	2.60	7.85	9.00	1.60	2.40	3.50	3.27	6.10	A++	NO	-
		26	71	-	-	-	2.60	7.10	-	-	2.60	9.70	11.00	1.60	2.60	3.60	3.73	6.10	A++	NO	-
		35	35	-	-	-	3.50	3.50	-	-	2.60	7.00	9.20	1.60	2.40	3.50	2.92	6.10	A++	NO	-
		35	53	-	-	-	3.50	5.25	-	-	2.60	8.75	10.00	1.60	2.40	3.50	3.65	6.10	A++	NO	-
		35	71	-	-	-	3.50	7.10	-	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		53	53	-	-	-	5.25	5.25	-	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		53	71	-	-	-	4.54	6.06	-	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		71	71	-	-	-	5.30	5.30	-	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		26	26	26	-	-	2.60	2.60	2.60	-	2.60	7.80	10.00	1.60	2.40	3.50	3.25	6.10	A++	NO	-
		26	26	35	-	-	2.60	2.60	3.50	-	2.60	8.70	11.00	1.60	2.60	3.60	3.35	6.10	A++	NO	-
		26	26	53	-	-	2.60	2.60	5.25	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		26	26	71	-	-	2.27	2.27	6.06	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		26	35	35	-	-	2.60	3.50	3.50	-	2.60	9.60	11.00	1.60	2.60	4.60	3.69	6.10	A++	NO	-
		26	35	53	-	-	2.45	3.26	4.89	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		26	35	71	-	-	2.12	2.83	5.65	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		26	53	53	-	-	2.12	4.24	4.24	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		26	53	71	-	-	1.87	3.74	4.99	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		35	35	35	-	-	3.50	3.50	3.50	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	7.20	A++	YES	-
		35	35	53	-	-	3.03	3.03	4.54	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		35	35	71	-	-	2.65	2.65	5.30	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		35	53	53	-	-	2.65	3.98	3.98	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		35	53	71	-	-	2.36	3.53	4.71	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		53	53	53	-	-	3.53	3.53	3.53	-	2.60	10.60	12.00	1.60	2.95	4.60	3.59	6.10	A++	YES	-
		53	53	71	-	-	3.63	3.63	4.84	-	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	26	26	26	-	2.60	2.60	2.60	2.60	2.60	10.60	13.02	1.60	3.00	4.60	3.53	6.10	A++	YES	-
		26	26	26	35	-	2.60	2.60	2.60	3.50	2.60	11.30	14.11	1.60	3.20	4.60	3.53	6.10	A++	YES	-
		26	26	26	53	-	2.42	2.42	2.42	4.84	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	26	26	71	-	2.14	2.14	2.14	5.69	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	26	35	35	-	2.59	2.59	3.46	3.46	2.60	12.10	15.20	1.60	3.40	4.60	3.56	7.20	A++	YES	-
		26	26	35	53	-	2.27	2.27	3.03	4.54	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	26	35	71	-	2.02	2.02	2.69	5.38	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	26	53	53	-	2.02	2.02	4.03	4.03	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	26	53	71	-	1.82	1.82	3.63	4.84	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	SI	-
		26	35	35	35	-	2.42	3.23	3.23	3.23	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	35	35	53	-	2.14	2.85	2.85	4.27	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	35	35	71	-	1.91	2.55	2.55	5.09	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	35	53	53	-	1.91	2.55	3.82	3.82	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	35	53	71	-	1.73	2.30	3.46	4.61	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		26	53	53	53	-	1.73	3.46	3.46	3.46	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		35	35	35	35	-	3.03	3.03	3.03	3.03	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		35	35	35	53	-	2.69	2.69	2.69	4.03	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		35	35	35	71	-	2.42	2.42	2.42	4.84	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-
		35	35	53	53	-	2.42	2.42	3.63	3.63	2.60	12.10	15.20	1.60	3.40	4.60	3.56	6.10	A++	YES	-

Energy Class = EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners.
SEER = EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825.
EER = Value measured according to the harmonized standard EN14511.
* For Italian market only.

R32 HEATING COMBINATIONS WITHOUT DHW TANK

Outdoor units	Combinations					Rated capacity (kW)					Total heating capacity (kW)			Absorbed power (kW)			COP	SCOP	Energy Class	Bonus casa*	Conto Termico 2.0*
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max					
MCKGWM 1202 Z4W	Reserved for the tank	26	26	-	-	-	2.80	2.80	-	-	3.00	5.60	7.00	1.61	1.90	3.60	2.95	4.0	A+	NO	NO
		26	35	-	-	-	2.80	3.80	-	-	3.00	6.60	8.16	1.61	2.30	3.80	2.87	4.0	A+	NO	NO
		26	53	-	-	-	2.80	5.60	-	-	3.00	8.40	10.50	1.61	2.80	4.20	3.00	4.0	A+	NO	NO
		26	71	-	-	-	2.80	8.20	-	-	3.00	11.00	12.83	1.61	3.04	5.00	3.62	4.0	A+	NO	NO
		35	35	-	-	-	3.80	3.80	-	-	3.00	7.60	9.33	1.61	2.60	4.00	2.92	4.0	A+	NO	NO
		35	53	-	-	-	3.80	5.60	-	-	3.00	9.40	11.66	1.61	2.90	4.80	3.24	4.0	A+	NO	NO
		35	71	-	-	-	3.80	8.20	-	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	SI
		53	53	-	-	-	5.60	5.60	-	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		53	71	-	-	-	5.14	6.86	-	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		71	71	-	-	-	6.00	6.00	-	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		26	26	26	-	-	2.80	2.80	2.80	-	3.00	8.40	10.50	1.61	2.80	4.20	3.00	4.0	A+	NO	NO
		26	26	35	-	-	2.80	2.80	3.80	-	3.00	9.40	11.66	1.61	2.90	4.80	3.24	4.0	A+	NO	NO
		26	26	53	-	-	2.80	2.80	5.60	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		26	26	71	-	-	2.57	2.57	6.86	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		26	35	35	-	-	2.80	3.80	3.80	-	3.00	10.40	12.83	1.61	3.04	5.00	3.42	4.0	A+	NO	NO
		26	35	53	-	-	2.77	3.69	5.54	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		26	35	71	-	-	2.40	3.20	6.40	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		26	53	53	-	-	2.40	4.80	4.80	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		26	53	71	-	-	2.12	4.24	5.65	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.0	A+	YES	YES
		35	35	35	-	-	3.80	3.80	3.80	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.2	A+	YES	YES
		35	35	53	-	-	3.43	3.43	5.14	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.2	A+	YES	YES
		35	35	71	-	-	3.00	3.00	6.00	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.2	A+	YES	YES
		35	53	53	-	-	3.00	4.50	4.50	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.2	A+	YES	YES
		35	53	71	-	-	2.67	4.00	5.33	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.2	A+	YES	YES
		53	53	53	-	-	4.00	4.00	4.00	-	3.00	12.00	14.00	1.61	3.20	5.00	3.75	4.2	A+	YES	YES
		53	53	71	-	-	3.90	3.90	5.20	-	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.0	A+	YES	YES
		26	26	26	26	-	2.80	2.80	2.80	2.80	3.00	12.00	14.00	1.61	3.20	4.80	3.75	4.1	A+	YES	YES
		26	26	26	35	-	2.80	2.80	2.80	3.80	3.00	12.50	14.39	1.61	3.20	5.00	3.91	4.1	A+	YES	YES
		26	26	26	53	-	2.60	2.60	2.60	5.20	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	26	26	71	-	2.29	2.29	2.29	6.12	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	26	35	35	-	2.79	2.79	3.71	3.71	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	26	35	53	-	2.44	2.44	3.25	4.88	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	26	35	71	-	2.17	2.17	2.89	5.78	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	26	53	53	-	2.17	2.17	4.33	4.33	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	26	53	71	-	1.95	1.95	3.90	5.20	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	35	35	35	-	2.60	3.47	3.47	3.47	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	35	35	53	-	2.29	3.06	3.06	4.59	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	35	35	71	-	2.05	2.74	2.74	5.47	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	35	53	53	-	2.05	2.74	4.11	4.11	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	35	53	71	-	1.86	2.48	3.71	4.95	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		26	53	53	53	-	1.86	3.71	3.71	3.71	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		35	35	35	35	-	3.25	3.25	3.25	3.25	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		35	35	35	53	-	2.89	2.89	2.89	4.33	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		35	35	35	71	-	2.60	2.60	2.60	5.20	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES
		35	35	53	53	-	2.60	2.60	3.90	3.90	3.00	13.00	15.50	1.61	3.35	5.00	3.88	4.1	A+	YES	YES

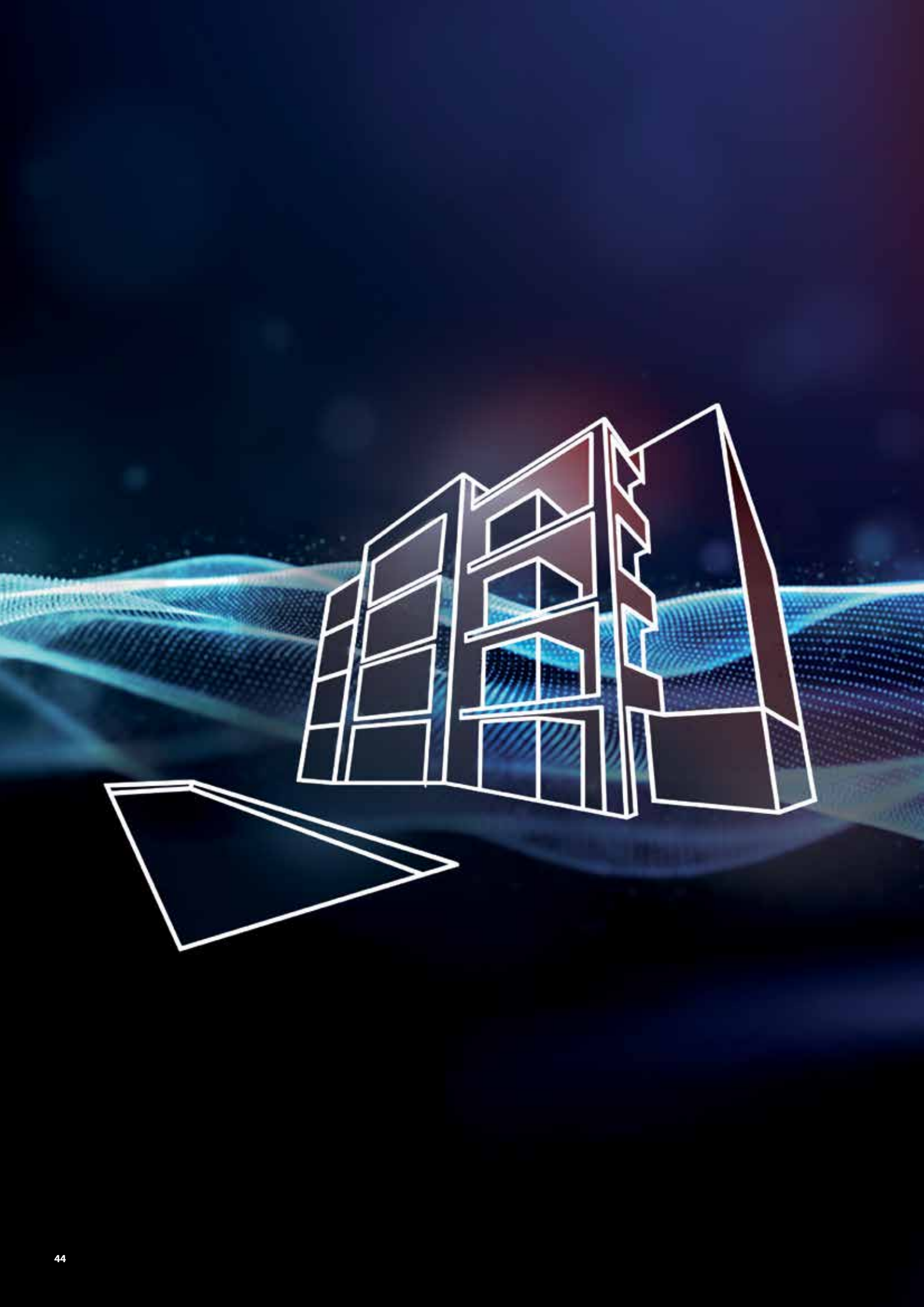
Energy Class = EU Delegated Regulation No. 626/2011 on the new labelling indicating the energy consumption of air conditioners.
SCOP = EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825.
COP = Value measured according to the harmonized standard EN14511.
* For Italian market only.

R32 COOLING COMBINATIONS WITH DHW TANK

Outdoor units	Combinations					Rated capacity (kW)					Total DHW yield (kW)			Total cooling performance (kW)			Absorbed power (kW)		
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max	Min	Nom	Max
MCKGWM 1202 Z4W	MWTGM 200 Z4W	26	-	-	-	4.20	2.60	-	-	-	2.20	4.20	4.60	2.20	2.60	3.00	1.60	2.30	3.50
		35	-	-	-	4.20	3.50	-	-	-	2.20	4.20	4.60	2.20	3.50	4.00	1.60	2.40	3.50
		53	-	-	-	4.20	5.25	-	-	-	2.20	4.20	4.60	2.20	5.25	5.80	1.60	2.40	3.50
		71	-	-	-	4.20	7.10	-	-	-	2.20	4.20	4.60	2.20	7.10	8.80	1.60	3.00	4.60
		26	35	-	-	4.20	2.60	3.50	-	-	2.20	4.20	4.60	2.60	6.10	7.50	1.60	3.10	6.10
		26	53	-	-	4.20	2.60	5.25	-	-	2.20	4.20	4.60	2.60	7.85	9.00	1.60	3.40	6.10
		26	71	-	-	4.20	2.60	7.10	-	-	2.20	4.20	4.60	2.60	9.70	11.00	1.60	4.20	6.10
		35	35	-	-	4.20	3.50	3.50	-	-	2.20	4.20	4.60	2.60	7.00	9.20	1.60	3.20	6.10
		35	53	-	-	4.20	3.50	5.25	-	-	2.20	4.20	4.60	2.60	8.75	10.00	1.60	3.80	6.10
		35	71	-	-	4.20	3.50	7.10	-	-	2.20	4.20	4.60	2.60	10.60	12.00	1.60	4.20	6.10
		53	53	-	-	4.20	5.25	5.25	-	-	2.20	4.20	4.60	2.60	10.50	12.00	1.60	4.20	6.10
		53	71	-	-	4.20	5.19	6.91	-	-	2.20	4.20	4.60	2.60	12.10	12.00	1.60	4.20	6.10
		26	26	26	-	4.20	2.60	2.60	2.60	-	2.20	4.20	4.60	2.60	7.80	10.00	1.60	3.60	6.10
		26	26	35	-	4.20	2.60	2.60	3.50	-	2.20	4.20	4.60	2.60	8.70	11.00	1.60	4.20	6.10
		26	26	53	-	4.20	2.60	2.60	5.25	-	2.20	4.20	4.60	2.60	10.45	13.02	1.60	3.80	6.10
		26	26	71	-	4.20	2.59	2.59	6.91	-	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	35	35	-	4.20	2.60	3.50	3.50	-	2.20	4.20	4.60	2.60	9.60	11.94	1.60	3.80	6.10
		26	35	53	-	4.20	2.60	3.50	5.25	-	2.20	4.20	4.60	2.60	11.35	14.11	1.60	4.20	6.10
		26	35	71	-	4.20	2.42	3.23	6.45	-	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	53	53	-	4.20	2.42	4.84	4.84	-	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	53	71	-	4.20	2.14	4.27	5.69	-	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		35	35	35	-	4.20	3.50	3.50	3.50	-	2.20	4.20	4.60	2.60	10.50	13.02	1.60	3.80	6.10
		35	35	53	-	4.20	3.46	3.46	5.19	-	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		35	35	71	-	4.20	3.03	3.03	6.05	-	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		35	53	53	-	4.20	3.03	4.54	4.54	-	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	26	26	26	4.20	2.60	2.60	2.60	2.60	2.20	4.20	4.60	2.60	10.40	13.02	1.60	4.20	6.10
		26	26	26	35	4.20	2.60	2.60	2.60	3.50	2.20	4.20	4.60	2.60	11.30	14.11	1.60	4.20	6.10
		26	26	26	53	4.20	2.42	2.42	2.42	4.84	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	26	26	71	4.20	2.14	2.14	2.14	5.69	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	26	35	35	4.20	2.59	2.59	3.46	3.46	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	26	35	53	4.20	2.27	2.27	3.03	4.54	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	35	35	35	4.20	2.42	3.23	3.23	3.23	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		26	35	35	53	4.20	2.14	2.85	2.85	4.27	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10
		35	35	35	35	4.20	3.03	3.03	3.03	3.03	2.20	4.20	4.60	2.60	12.10	15.20	1.60	4.20	6.10

R32 HEATING COMBINATIONS WITH DHW TANK

Outdoor units	Combinations					Rated capacity (kW)					Total DHW yield (kW)			Total heating capacity (kW)			Absorbed power (kW)		
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min	Nom	Max	Min	Nom	Max	Min	Nom	Max
MCKGWM 1202 Z4W	MWTGM 200 Z4W	26	-	-	-	4.20	2.80	-	-	-	2.20	4.20	4.60	2.60	2.80	3.20	1.61	2.30	3.80
		35	-	-	-	4.20	3.80	-	-	-	2.20	4.20	4.60	3.00	3.80	4.00	1.61	2.60	4.00
		53	-	-	-	4.20	5.60	-	-	-	2.20	4.20	4.60	3.00	5.60	6.00	1.61	2.90	4.80
		71	-	-	-	4.20	8.20	-	-	-	2.20	4.20	4.60	3.00	8.20	9.00	1.61	3.04	5.00
		26	35	-	-	4.20	2.80	3.80	-	-	2.20	4.20	4.60	3.00	6.60	7.75	1.61	3.10	5.70
		26	53	-	-	4.20	2.80	5.60	-	-	2.20	4.20	4.60	3.00	8.40	9.96	1.61	3.40	6.00
		26	71	-	-	3.59	2.39	7.01	-	-	2.20	3.59	4.60	3.00	9.41	12.17	1.61	3.60	6.00
		35	35	-	-	4.20	3.80	3.80	-	-	2.20	4.20	4.60	3.00	7.60	8.85	1.61	3.40	6.00
		35	53	-	-	4.01	3.63	5.35	-	-	2.20	4.01	4.60	3.00	8.99	11.07	1.61	3.60	6.00
		35	71	-	-	3.37	3.05	6.58	-	-	2.20	3.37	4.60	3.00	9.63	13.28	1.61	3.60	6.00
		53	53	-	-	3.55	4.73	4.73	-	-	2.20	3.55	4.60	3.00	9.45	13.28	1.61	3.60	6.00
		53	71	-	-	3.17	4.21	5.61	-	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	26	26	-	4.20	2.80	2.80	2.80	-	2.20	4.20	4.60	3.00	8.40	9.96	1.61	3.40	6.00
		26	26	35	-	4.01	2.68	2.68	3.63	-	2.20	4.01	4.60	3.00	8.99	11.07	1.61	3.60	6.00
		26	26	53	-	3.55	2.36	2.36	4.73	-	2.20	3.55	4.60	3.00	9.45	13.28	1.61	3.60	6.00
		26	26	71	-	3.17	2.11	2.11	5.61	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	35	35	-	3.74	2.49	3.38	3.38	-	2.20	3.74	4.60	3.00	9.26	12.17	1.61	3.60	6.00
		26	35	53	-	3.33	2.22	3.01	4.44	-	2.20	3.33	4.60	3.00	9.67	14.39	1.61	3.99	6.50
		26	35	71	-	3.17	1.97	2.62	5.24	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	53	53	-	3.17	1.97	3.93	3.93	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	53	71	-	3.17	1.73	3.47	4.62	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		35	35	35	-	3.50	3.17	3.17	3.17	-	2.20	3.50	4.60	3.00	9.50	13.28	1.61	3.60	6.00
		35	35	53	-	3.17	2.81	2.81	4.21	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		35	35	71	-	3.17	2.46	2.46	4.91	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		35	53	53	-	3.17	2.46	3.68	3.68	-	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	26	26	26	3.55	2.36	2.36	2.36	2.36	2.20	3.55	4.60	3.00	9.45	14.00	1.61	3.80	6.30
		26	26	26	35	3.33	2.22	2.22	2.22	3.01	2.20	3.33	4.60	3.00	9.67	14.39	1.61	3.99	6.50
		26	26	26	53	3.17	1.97	1.97	1.97	3.93	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	26	26	71	3.17	1.73	1.73	1.73	4.62	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	26	35	35	3.17	2.11	2.11	2.81	2.81	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	26	35	53	3.17	1.84	1.84	2.46	3.68	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	35	35	35	3.17	1.97	2.62	2.62	2.62	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		26	35	35	53	3.17	1.73	2.31	2.31	3.47	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50
		35	35	35	35	3.17	2.46	2.46	2.46	2.46	2.20	3.17	4.60	3.00	9.83	15.50	1.61	3.99	6.50



VRF SYSTEMS

MW MINI, MW 2-PIPE, MW 3-PIPE

MW MINI SYSTEM

COMPACT OUTDOOR UNITS

10.00 kW	12.10 kW	14.10 kW
1-Phase	1-Phase	1-Phase
M-VMC-OV-100-NG	M-VMC-OV-121-NG	M-VMC-OV-141-NG

SLIM OUTDOOR UNITS

16.00 kW	22.40 kW	28.00 kW	33.50 kW
3-Phase	3-Phase	3-Phase	3-Phase
M-VM-OV-160-SG	M-VS-OV-224-SG	M-VS-OV-280-SG	M-VS-OV-335-SG

INDOOR UNITS

Applicable indoor units for air-to-air operation on page 101

MW MINI COMPACT & **SLIM** IS COMPOSED OF **7** SINGLE **OUTDOOR UNITS** TO WHICH MAX **20 INDOOR UNITS** CAN BE CONNECTED

1-PHASE, SINGLE FAN: 3 MODELS

The 1-Phase outdoor units with horizontal air discharge are available in 10.00 kW, 12.10 kW and 14.10 kW models.
All the compressors of the 1-Phase models are Rotary DC Inverter and Inverter fans.

3-PHASE, DOUBLE FAN: 4 MODELS

The 3-Phase outdoor units with horizontal air discharge are available in 16.00 kW, 22.40 kW, 28.00 kW and 33.50 kW models.

Rotary DC Inverter compressor for the 16.00 kW and 22.40 kW models.
Scroll Inverter compressor for the 28.00 kW and 33.50 kW models.

CAPACITY AND NUMBER OF CONNECTABLE INDOOR UNITS

Modello	Min~Max power of connectable I.U.	Min~Max number of connectable I.U.	Conto Termico 2.0	Ecobonus
M-VMC-OV-100-NG	50~135%	1~5	✓	✓
M-VMC-OV-121-NG	50~135%	1~6	✓	✓
M-VMC-OV-141-NG	50~135%	1~8	✓	✓
M-VM-OV-160-SG	50~135%	1~9	✓	✓
M-VS-OV-224-SG	50~135%	1~13	✓	✓
M-VS-OV-280-SG	50~135%	1~17	✓	✓
M-VS-OV-335-SG	50~135%	1~20	✓	✓

OPERATING RANGE

up to
52°C
in cooling

down to
-20°C
in heating

MAXIMUM COMPACTNESS FOR ALL OUTDOOR UNITS

COMPACT
10.00 - 12.10 - 14.10 kW

L 980 x H 790 x D 360 (mm) 10~12.1 kW
L 940 x H 820 x D 460 (mm) 14.1 kW

SLIM
16.00 - 22.40 - 28.00 - 33.50 kW

L 900 x H 1345 x D 340 (mm) 16 kW
L 940 x H 1430 x D 320 (mm) 22.4 kW
L 940 x H 1615 x D 460 (mm) 28~33.5 kW

COMPACT OUTDOOR UNITS

3 REFRIGERANT CAPACITIES
10.00 - 12.10 - 14.10 kW

R410A
Refrigerant gas

GOLD FIN PROTECTION

USE IN SINGLE MODE
(not in combination)

COMPACT DESIGN

COOLING OPERATING RANGE
-5~+52° C

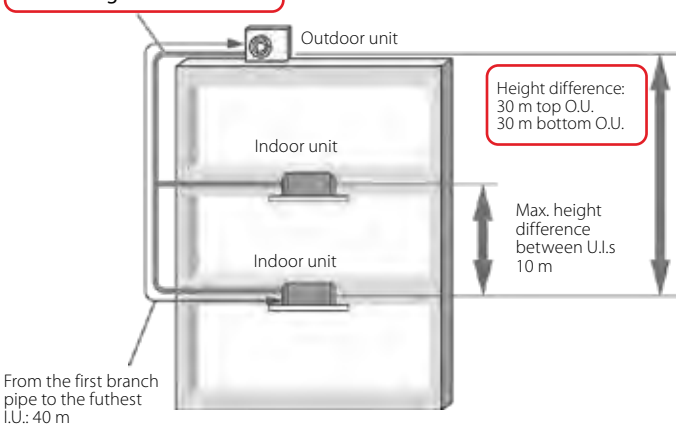
HEATING OPERATING RANGE
-20~+27° C

M-VMC-OV-100-NG
M-VMC-OV-121-NG
M-VMC-OV-141-NG

Model			M-VMC-OV-100-NG	M-VMC-OV-121-NG	M-VMC-OV-141-NG
Nominal Data					
Rated capacity	Cooling	kW	10.00	12.10	14.10
Nominal absorbed power		kW	2.70	3.50	3.92
Energy efficiency coefficient (nominal)		EER1	3.70	3.51	3.60
Rated capacity	Heating	kW	11.00	13.00	16.00
Nominal absorbed power		kW	2.50	2.70	4.16
Energy performance coefficient (nominal)		COP1	4.40	4.81	3.85
Seasonal Data					
Seasonal energy efficiency index	Cooling	SEER2	6.60	7.28	6.76
	Heating	SCOP2	3.80	4.45	3.67
Electrical Data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Maximum current		A	22.40	24.00	35.80
Refrigerant Circuit Data					
Refrigerant3		type (GWP)	R410A (2088)		
Q.ty of refrigerant pre-charge 4 (tons of CO2 equivalent)		Kg	1.8 (3.76)	2 (4.18)	3.3 (6.89)
Compressor		nb. / type	1 / Rotary DC Inverter		
Piping diameter	Liquid	mm (inch)	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
	Gas	mm (inch)	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
Product Specifications					
Dimensions	WxHxD	mm	980x790x360	980x790x360	940x820x460
Net weight		Kg	80	85	98
Sound power level	max	dB(A)	69	70	73
Sound pressure level at 1 m	max	dB(A)	-	-	-
Volume of air treated	max	m3/h	4000	4400	5200
Operating range (outdoor temperature)	Cooling	°C	-5~52	-5~52	-5~52
	Heating	°C	-20~27	-20~27	-20~27
Connectable indoor units (min - max)		**nb.**	**1 - 5**	**1 - 6**	**1 - 8**
Capacity of connectable indoor units		%	50 ~ 135		

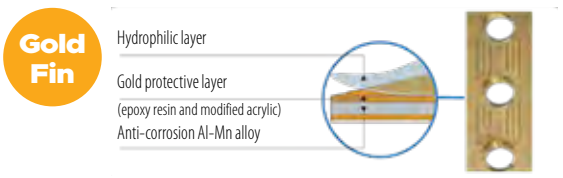
1. Value measured according to the harmonized standard EN14511.
2. EU Regulation No. 206/2012 - - Value measured according to the harmonized standard EN14825.
3. Refrigerant leakage contributes to climate change. If released into the atmosphere, refrigerants with a lower global warming potential (GWP) 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.

Total length 250 m



ALUMINIUM LOUVERS WITH ANTI-CORROSION COATING (GOLD FIN)

The louvers' coating lasts over time and ensures greater resistance to salt corrosion.



SLIM OUTDOOR UNITS

4 REFRIGERANT CAPACITIES
16.00 - 22.40 - 28.00 - 33.50 kW

R410A
Refrigerant gas

GOLD FIN PROTECTION

USE IN SINGLE MODE
(not in combination)

COMPACT DESIGN

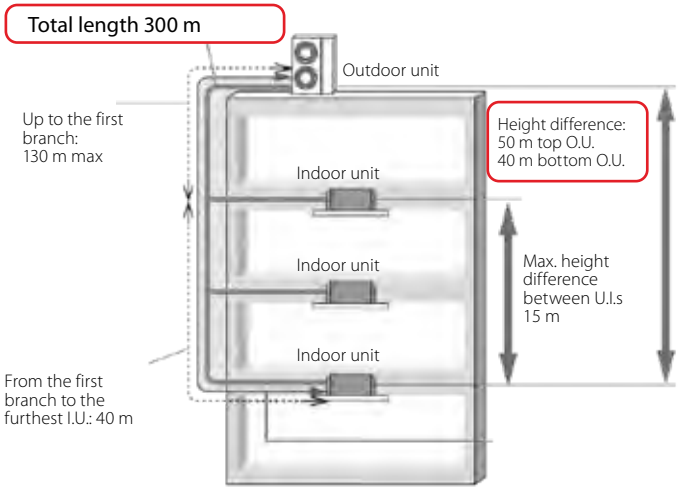
COOLING OPERATING RANGE
-5~+52° C

HEATING OPERATION RANGE
-20~+27° C

M-VM-OV-160-SG
M-VS-OV-224-SG
M-VS-OV-280-SG
M-VS-OV-335-SG

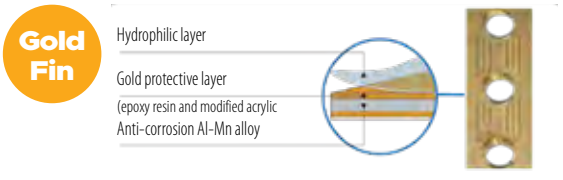
Model			M-VM-OV-160-SG	M-VS-OV-224-SG	M-VS-OV-280-SG	M-VS-OV-335-SG
Dati Nominali						
Rated capacity	Cooling	kW	16.00	22.40	28.00	33.50
Nominal absorbed power		kW	4.75	6.12	7.78	9.57
Energy efficiency coefficient (nominal)		EER[1]	3.37	3.66	3.60	3.50
Rated capacity	Heating	kW	18.00	24.00	30.00	35.00
Nominal absorbed power		kW	4.65	4.90	6.12	7.14
Energy performance coefficient (nominal)		COP[1]	3.87	4.90	4.90	4.90
Seasonal Data						
Seasonal energy efficiency index	Cooling	SEER[2]	6.96	7.27	6.98	7.10
	Heating	SCOP[2]	4.04	4.08	3.92	4.06
Electrical Data						
Power supply		Ph-V-Hz	3-380~415V-50Hz			
Maximum current		A	12.50	17.20	2.40	24.50
Refrigerant Circuit Data						
Refrigerant[3]		type (GWP)	R410A (2088)			
Q.ty of refrigerant pre-charge [4] (tons of CO2 equivalent)		Kg	3.3 (6.89)	5.5 (11.48)	7.1 (14.82)	8 (16.7)
Compressor		nb. / type	1 / Rotary DC Inverter		1 / Scroll DC Inverter	
Piping diameter	Liquid	mm (inch)	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")
	Gas	mm (inch)	19.05 (3/4")	19.05 (3/4")	22.2 (7/8")	25.4 (1")
Product Specifications						
Dimensions	WxHxD	mm	900x1345x340	940x1430x320	940x1615x460	940x1615x460
Net weight		Kg	122	133	166	177
Sound power level	max	dB(A)	69	74	74	76
Sound pressure level at 1 m	max	dB(A)	-	-	-	-
Volume of air treated	max	m3/h	6000	8000	11000	11000
Operating range (outdoor temperature)	Cooling	°C	-5~52	-5~52	-5~52	-5~52
	Heating	°C	-20~27	-20~27	-20~27	-20~27
Connectable indoor units (min - max)		**nb.**	**1 - 9**	**1 - 13**	**1 - 17**	**1 - 20**
Capacity of connectable 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.



ALUMINIUM LOUVERS WITH ANTI-CORROSION COATING (GOLD FIN)

The louvers' coating lasts over time and ensures greater resistance to salt corrosion.



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 101

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.	Conto Termico 2.0	Ecobonus
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)

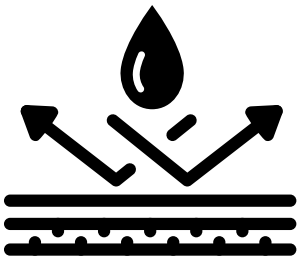
40.00 - 45.00 - 50.40 - 56.00 - 61.50 kW

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

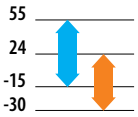
OUTDOOR UNITS

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.

OPERATION RANGE



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

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

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	Cooling	kW	4.99	6.26	8.00
Energy efficiency coefficient (nominal)	Cooling	EER[1]	4.49	4.47	4.19
Rated capacity	Heating	kW	25.00	31.50	37.50
Nominal absorbed power	Heating	kW	4.85	7.39	8.68
Energy performance coefficient (nominal)	Heating	COP[1]	5.15	4.26	4.32
Seasonal Data					
Seasonal energy efficiency index	Cooling	SEER[2]	7.10	6.59	6.31
	Heating	SCOP[2]	4.62	4.80	4.40
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 indoor units (max)		**nb.**	**13**	**16**	**19**
Capacity of connectable 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.

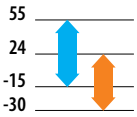
OUTDOOR UNITS

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	Cooling	kW	9.52	11.87	12.76	15.47	17.47
Energy efficiency coefficient (nominal)	Cooling	EER[1]	4.20	3.79	3.95	3.62	3.52
Capacità nominale	Heating	kW	45.00	50.00	56.50	63.00	69.00
Nominal absorbed power	Heating	kW	11.17	12.99	13.92	15.56	17.60
Energy performance coefficient (nominal)	Heating	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
	Heating	SCOP[2]	4.80	4.84	4.19	4.11	4.11
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	m^3/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 indoor units (max)		**nb.**	**23**	**26**	**29**	**33**	**36**
Capacity of connectable 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 indoor units (max)		**nb.**	**39**	**43**	**46**	**50**
Capacity of connectable 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 indoor units (max)		**nb.**	**64**	**64**	**66**	**69**
Capacity of connectable 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.

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.

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	Cooling	kW	51.08	51.96	54.67	56.68
Energy efficiency coefficient (nominal)	Cooling	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	Heating	kW	53.54	54.47	56.11	58.15
Energy performance coefficient (nominal)	Heating	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 indoor units (max)		**nb.**	**80**	**80**	**80**	**80**
Capacity of connectable 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.
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.

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.
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.

THE MW 3-PIPE SYSTEM **HEAT RECOVERY** IN INDIVIDUAL OR MODULAR USE

OUTDOOR UNITS

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

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

FLOW CONTROLLERS

Nb. of connections	Nb. of connections	Nb. of connections	Nb. of connections
1	**2**	**4**	**8**
M-VR-ME-1-NG	M-VR-ME-2-NG	M-VR-ME-4-NG	M-VR-ME-8-NG

HYDRONIC MODULE

16.00 kW
1-Phase
M-VR-HM-16-NG
30.00 kW
1-Phase
M-VR-HM-30-NG

INDOOR UNITS

Applicable indoor units for air-to-air operation on page 101

MW 3-PIPE HEAT RECOVERY 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 maximum power of the single outdoor unit reaches 61.5 kW (22 HP); the maximum power of the combined outdoor units reaches 246 kW (88 HP), the highest value in the industry.

The MW 3-PIPE system is able to create combinations of 4 external units, to which up to 80 internal units can be connected, thanks to the most advanced CAN+ technology.

POWER AND NUMBER OF CONNECTABLE INDOOR UNITS

Model	Min~Max power of connectable I.U.	Min~Max number of connectable I.U.	Max power of connectable hydronic modules [kW]	Max number of connectable hydronic modules	Conto Termico 2.0	Ecobonus
M-VR-OV-224-SG	50~135%	1~13	32	2	✓	✓
M-VR-OV-280-SG	50~135%	1~16	32	2	✓	✓
M-VR-OV-335-SG	50~135%	1~19	32	2	✓	✓
M-VR-OV-400-SG	50~135%	1~23	32	2	✓	✓
M-VR-OV-450-SG	50~135%	1~26	46	2	✓	✓
M-VR-OV-500-SG	50~135%	1~29	46	2	✓	✓
M-VR-OV-560-SG	50~135%	1~33	46	2	✓	✓
M-VR-OV-615-SG	50~135%	1~36	60	2	✓	✓

MAXIMUM COMPACTNESS FOR ALL OUTDOOR UNITS

Compactness is another important plus. There are two aesthetics proposed, with a single fan (from 22.4 to 33.5 kW) and with a double fan (from 40 to 61.5 kW).

22.40 - 28.00 - 33.50 kW

L 930 x H 1690 x D 775 (mm)

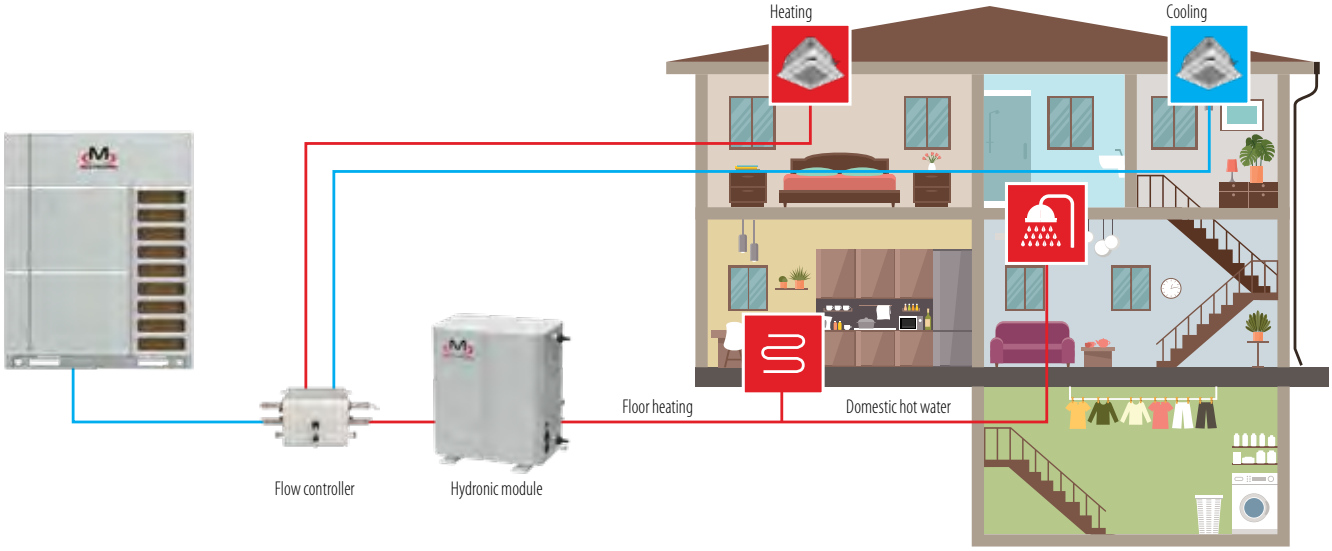
40.00 - 45.00 - 50.40 - 56.00 - 61.50 kW

L 1340 x H 1690 x D 775 (mm)

MIX OF TECHNOLOGIES TO ENSURE MAXIMUM EFFICIENCY AND ENERGY SAVINGS

The MULTIWARM 3-PIPE system with heat recovery can simultaneously meet the needs of air conditioning, heating and hot water production.

The MULTIWARM 3-PIPE range is particularly suitable for many types of applications: villas, shops, offices, shopping centres, hotels, hospitals, banks, museums, schools.



All DC Inverter Compressors

The use of All DC Inverter compressors guarantees excellent system efficiency both at full load and partial load. The high efficiency permanent magnet synchronous motor produces a better performance than the traditional DC Inverter compressor.

The system can directly absorb gas to reduce superheat loss.

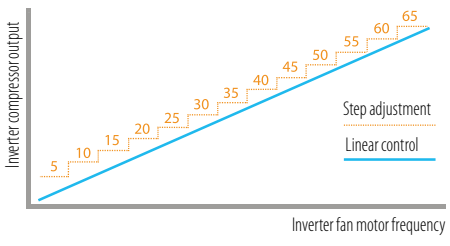
+ medium and high frequency performance, thanks to the new structure of the high pressure chamber

+ low frequency efficiency, with the new concentrated winding motor

DC Inverter Sensorless Fan Motor

Linear speed regulation ranges from 5 to 65 Hz. Compared with traditional Inverter motors, operation is more efficient.

Sensorless control technology ensures quieter operation, less vibration and smoother operation.



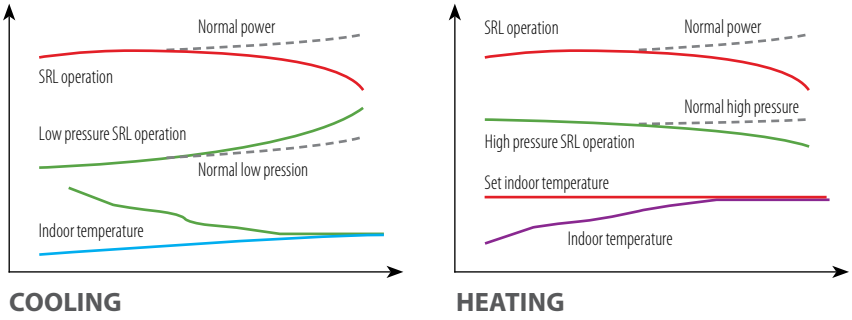
Enhanced Vapour Injection "EVI" technology

This special technology applied to the compressor uses part of the refrigerant to maximize performance while improving energy efficiency.

Automatic load control

The unit intelligently detects and controls system parameters, adapting them to actual cooling/ heating needs.

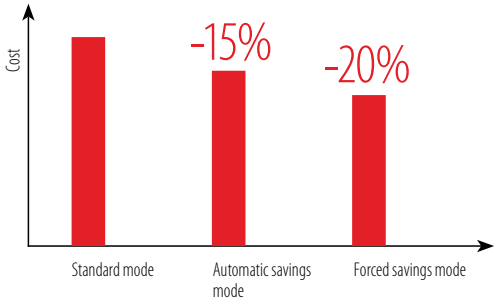
Automatically adjusts the refrigerant heat exchange temperature according to the increase or decrease in ambient temperature.



Control technology with energy savings of up to 20%

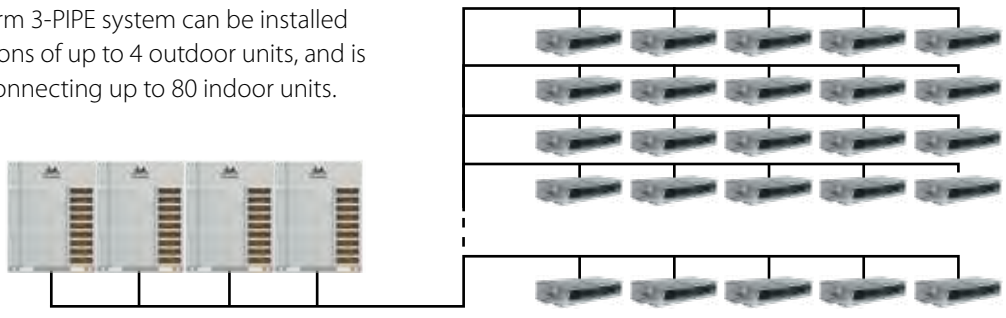
The MW 3-PIPE system has two energy saving modes:

- **Automatic energy saving**: automatically adjusts the parameters according to the working status, thus reducing the cost of electricity. It can save up to 15% energy.
- **Forced energy saving**: forcedly limits the output power. Depending on the power consumption and user needs, a capacity ratio of 90% or 80% can be selected.



Up to 80 connectable indoor units

The Multiwarm 3-PIPE system can be installed in combinations of up to 4 outdoor units, and is capable of connecting up to 80 indoor units.

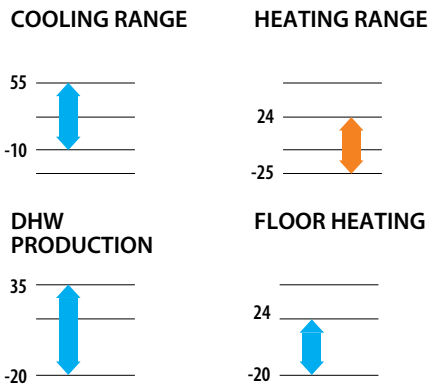


SILENT COMFORT THAT LASTS OVER TIME

Wide operating range, from -25°C to 55°C, fast start-up times, rapid defrosting without performance drops. Reduced noise for maximum comfort in all environments.

Wide range of operation and operating conditions

Operation is possible for voltages from 380 to 415V, at 50Hz.



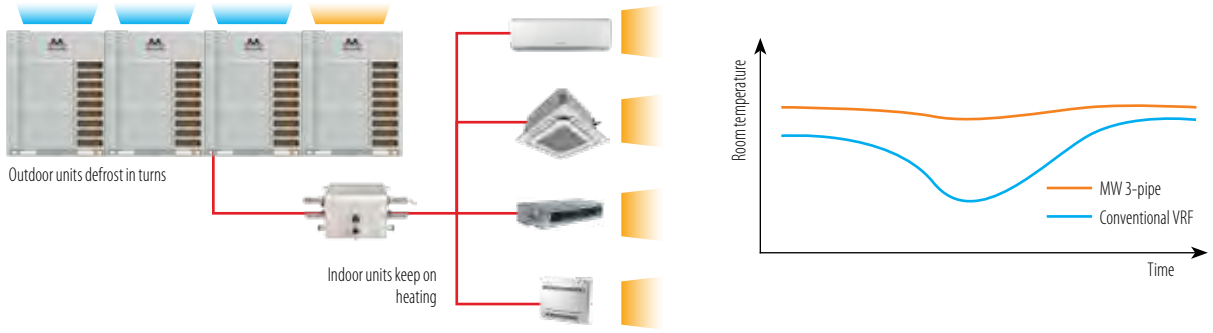
up to **55°C** in cooling

down to **-25°C** in heating

down to **-20°C** in DHW production and floor heating

Heat storage defrosting technology (optional module)

The heat storage module is optional and offers the advantage of an innovative and intelligent defrosting mode, allowing you to accelerate heat transfer, defrost quickly and maintain constant comfort.



Reduction of pre-heating time

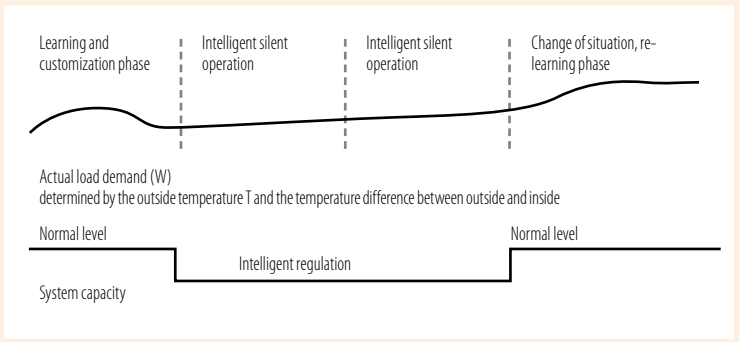
The motor's electric winding and the heating belt are activated simultaneously, heating the oil and ensuring rapid and complete evaporation of the coolant.
This allows the pre-heating time to be reduced by 75%, from 8 to 2 hours.

Intelligent defrosting and auto-adaptive control

It occurs with variable cycles and capacities based on the system temperature, pressure and speed of the workload. The MW 3-PIPE system can automatically change the compressor capacity during defrosting by evaluating the parameters in real time, so as to obtain stable or fast defrosting.

Outdoor unit silent mode and sound level control

The system can learn, define and remember user habits. It can automatically determine the system capacity in the next 24 hours to achieve automatic silent operation.

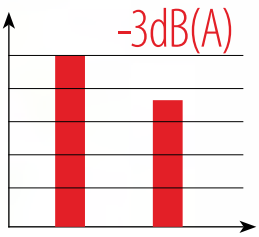


Optimized fan housing design

The fan housing structure reduces vibrations during operation. This allows a reduction in noise level of up to 3 dB(A).

3D aerodynamic axial fan

Its special inverted S-shape, while ensuring a significant increase in air flow, has the advantage of containing noise emissions.



Sound absorption and insulation

The use of high-quality sound-absorbing materials ensures optimum insulation of the compressor and other components. The use of sound-absorbing cotton + insulation box allows the unit's noise level to be controlled.

Sound-absorbing cotton

Insulation box

Intelligent control of the refrigeration circuit

The system intelligently judges whether the refrigerant circulation amount is sufficient based on the system parameters (pressure, temperature, speed, etc.). The refrigerant transfer is performed automatically.

EXCELLENT PERFORMANCE

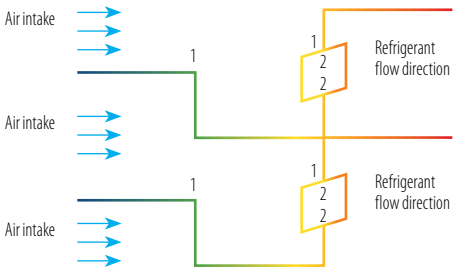
The new generation intelligent management control system and healthy fresh air solution ensure excellent energy saving, comfort and reliability.

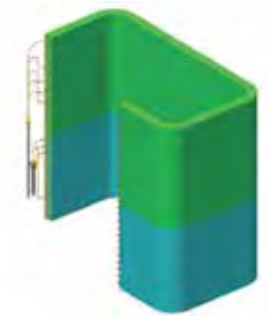
Highly efficient heat exchanger

The heat exchanger has a design such that the battery has been divided into two distinct areas (upper and lower) to improve the flow of the refrigerant: the flow scheme adopted (1-2-2-1), compared to the traditional one, guarantees a better heat exchange.

Its characteristics:

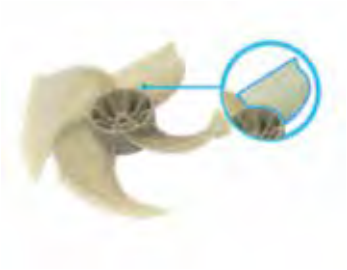
- corrugated heat exchange fins with reduced pitch;
- reduced fin section, increased corrosion resistance;
- wavy hydrophilic design, easier defrosting.





Wide airflow

The inverted S-shaped fan blade design allows for a larger action area and consequently a greater volume of air treated at the same rpm.



HPAC function - intelligent switching control

The MW 3-PIPE system adopts a brand new modular control method that ensures not only the operating life of the entire unit, but also the overall operating energy efficiency through intelligent switching, modulated according to the load demands of the indoor unit.

VRF traditional system

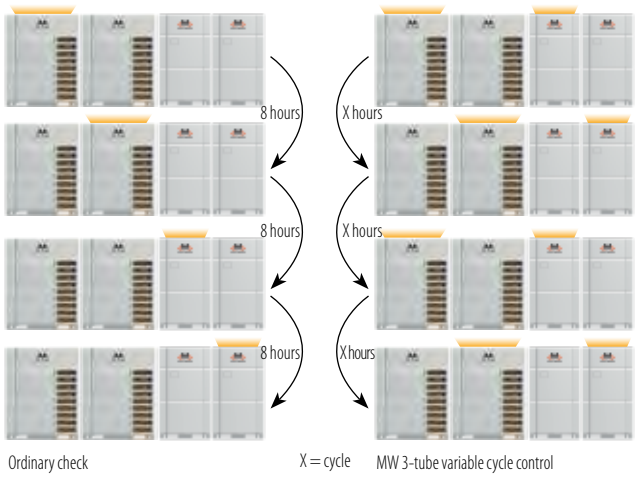
MW 3-pipe

RELIABILITY OVER TIME AND EASY MAINTENANCE

Heat exchanger with Golden Fin treatment against corrosion. Protects against atmospheric phenomena and the effects of aggressive environments.

Alternating control of variable cycle modules

The HPAC function, with intelligent switching between outdoor units according to a variable control cycle based on the load demands of the indoor unit, helps to increase the reliability of the system over time.

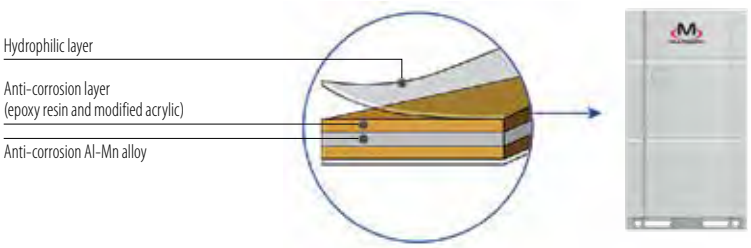


Compressor rotation control

The overall life of the modular units is considered in the system control. When there is more than one compressor, the internal compressors will operate in turn to balance the life of each compressor.

Golden Fin Anti-Corrosion Protection

The main material of the Golden Fin is a rust-proof aluminum-manganese (Al-Mn) alloy, coated with the Golden Protection Layer (anti-corrosion layer composed of epoxy resin and modified acrylic, without silicone) whose anti-corrosion performance in the salt spray test is 200-300% higher than that of normal Blue Fins.



FLEXIBILITY AND SIMPLICITY OF INSTALLATION

The maximum overall pipe length available on the market, equal to 1,000 m, allows installation in a wide range of buildings, with maximum flexibility.

High split length

Maximum effective length of a single pipe = 200 m

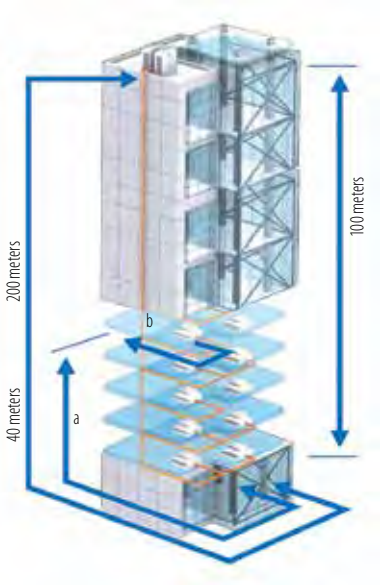
Maximum equivalent length of a single pipe = 240 m

Maximum length of pipes = 1000 m

Maximum length after first branch = 120 m

Maximum height difference of indoor and outdoor units = 110 m

Maximum height difference between indoor units = 30 m



Smart Start

QUICK INSTALLATION

- Automatic address assignment to indoor units, no DIP switch required for start-up.
- Five-sided outlet pipe connection method: maximum installation versatility.
- No external oil balance tube thanks to advanced oil balance control.
- Highly versatile design.

EFFICIENT MULTIPLE STARTS

Quick start with just one button.

Clear interface, detailed data and professional analysis.

Multifunctional debugger, quick connection, no special PC needed, automatic data storage, no external memory.
Debugging without installation wired control.

Air ducting - maximum versatility

The design of the outdoor unit fan allows for a very high static pressure of the outdoor unit, with a range from 0 to 110 Pa. This makes the installation of the machine more versatile and suitable for different types of environments, especially in cases where it is necessary to position the outdoor units inside the rooms.

Large spaces for easy maintenance

The MW 3-PIPE system is designed with integrated electric control and reserved maintenance space, to facilitate after-sales service.

Excellent emergency operation

EMERGENCY FUNCTION

The system can realize a combination of 4 modules with outdoor units. When an error occurs in one of the modules, the other modules take over the emergency operation to continue the service.

EMERGENCY OPERATION OF THE FAN

Thanks to the dual fan design, one of the two fans can continue to operate if the other one fails.

COMPRESSOR EMERGENCY OPERATION

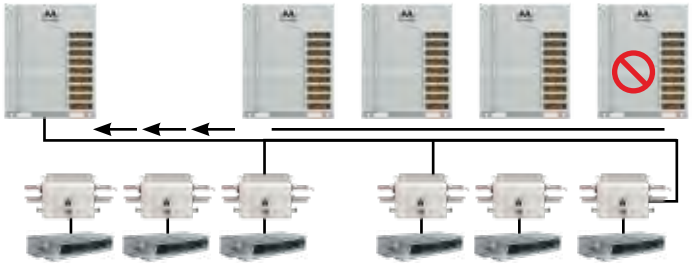
All compressors in each module are DC Inverter and when one compressor fails, the others take over the emergency operation.

EMERGENCY OPERATION OF THE SENSOR

If there is a sensor problem on one indoor unit, it can be turned off while the other units continue to operate. A maximum of 3 indoor units can be turned off at the same time.

Automatic refrigerant recovery

The advanced automatic refrigerant recovery function from the indoor and outdoor units allows the refrigerant to be effectively recovered from the units in the event of a malfunction, avoiding gas dispersion and reducing intervention times.



Emergency function of the indoor unit

When an indoor unit needs to be turned off for maintenance, the other indoor units connected to the same system remain in operation.

Auto-positioning function of indoor units

If multiple indoor units are installed in large spaces such as exhibition halls, conference rooms and offices, the auto-positioning function enables the indoor unit buzzers to sound so you can quickly locate them.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OUTDOOR UNITS

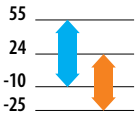
3 REFRIGERANT CAPACITIES
22.40 - 28.00 - 33.50 kW

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-VR-OV-224-SG
M-VR-OV-280-SG
M-VR-OV-335-SG

OPERATION RANGE



Very wide operating limits: winter operation up to -25° C of external air and summer operation up to +55° C.

Model			M-VR-OV-224-SG	M-VR-OV-280-SG	M-VR-OV-335-SG
Power		HP	8	10	12
Nominal Data					
Rated capacity	Cooling	kW	22.40	28.00	33.50
Nominal absorbed power		kW	4.98	6.48	8.19
Energy efficiency coefficient (nominal)		EER[1]	4.50	4.32	4.09
Rated capacity	Heating	kW	25.00	31.50	37.50
Nominal absorbed power		kW	5.10	7.24	8.91
Energy performance coefficient (nominal)		COP[1]	4.90	4.35	4.21
Seasonal Data					
Seasonal energy efficiency index	Cooling	SEER[2]	7.00	6.70	6.55
	Heating	SCOP[2]	4.32	4.58	4.74
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	8.2 (17.12)	8.5 (17.75)	9.6 (20.04)
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 HP	mm (inch)	15.9 (5/8")	19.05 (3/4")	19.05 (3/4")
	Gas LP	mm (inch)	19.05 (3/4")	22.2 (7/8")	25.4 (1")
Product Specifications					
Dimensions	WxHxD	mm	930x1690x775	930x1690x775	930x1690x775
Net weight		Kg	243	243	256
Sound power level	max	dB(A)	80	82	84
Sound pressure level at 1 m	max	dB(A)	60	61	63
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	-10~55	-10~55	-10~55
	Heating	°C	-25~24	-25~24	-25~24
	Hydronic heating	°C	-20~24	-20~24	-20~24
	Domestic hot water (DHW)	°C	-20~35	-20~35	-20~35
Connectable air-to-air indoor units (max)		nb.	13	16	19
Connectable air-to-water hydronic modules (max)[5]		nb.	2	2	2
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.
5. To determine the power of the connectable hydronic modules, consult the installation manual.

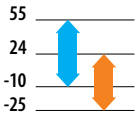
OUTDOOR UNITS

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 -25° C of external air and summer operation up to +55° C.

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

Model			M-VR-OV-400-SG	M-VR-OV-450-SG	M-VR-OV-500-SG	M-VR-OV-560-SG	M-VR-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	Cooling	kW	9.76	11.45	12.99	15.82	18.52
Energy efficiency coefficient (nominal)	Cooling	EER[1]	4.10	3.93	3.88	3.54	3.32
Rated capacity	Heating	kW	45.00	50.00	56.50	63.00	69.00
Nominal absorbed power	Heating	kW	10.84	12.47	14.49	16.71	18.40
Energy performance coefficient (nominal)	Heating	COP[1]	4.15	4.01	3.90	3.77	3.75
Seasonal Data							
Seasonal energy efficiency index	Cooling	SEER[2]	6.91	6.46	6.48	6.32	6.32
	Heating	SCOP[2]	4.44	4.42	4.25	4.15	4.15
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	11.1 (23.18)	11.6 (24.22)	12.8 (26.73)	12.8 (26.73)	13.3 (27.77)
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 HP	mm (inch)	22.2 (7/8")	22.2 (7/8")	25.4 (1")	25.4 (1")	25.4 (1")
	Gas LP	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	325	325	385	385	385
Sound power level	max	dB(A)	91	91	88	88	88
Sound pressure level at 1 m	max	dB(A)	63	63	63	63	64
Volume of air treated	max	m3/h	13500	15400	16500	16500	16500
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-10~55	-10~55	-10~55	-10~55	-10~55
	Heating	°C	-25~24	-25~24	-25~24	-25~24	-25~24
	Hydronic heating	°C	-20~24	-20~24	-20~24	-20~24	-20~24
	Domestic hot water (DHW)	°C	-20~35	-20~35	-20~35	-20~35	-20~35
Connectable air-to-air indoor units (max)		**nb.**	**23**	**26**	**29**	**33**	**36**
Connectable air-to-water hydronic modules (max)[5]		**nb.**	**2**	**2**	**2**	**2**	**2**
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.
5. To determine the power of the connectable hydronic modules, consult the installation manual.

COMBINATIONS

Model			M-VR-OV-680-SG	M-VR-OV-730-SG	M-VR-OV-785-SG	M-VR-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	Cooling	kW	16.24	17.93	19.47	22.30
Energy efficiency coefficient (nominal)	Cooling	EER[1]	4.19	4.07	4.03	3.77
Rated capacity	Heating	kW	76.50	81.50	88.00	94.50
Nominal absorbed power	Heating	kW	18.08	19.71	21.73	23.95
Energy performance coefficient (nominal)	Heating	COP[1]	4.23	4.13	4.05	3.95
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	19.6 (40.93)	20.1 (41.97)	21.3 (44.48)	21.3 (44.48)
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")
Piping diameter[4]	Gas HP	mm (inch)	25.4 (1")	28.6 (1-1/8")	28.6 (1-1/8")	28.6 (1-1/8")
Piping diameter[4]	Gas LP	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	568	568	628	628
Volume of air treated	max	m3/h	24000	25900	27000	27000
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-10~55	-10~55	-10~55	-10~55
Operating range (outdoor temperature)	Heating	°C	-25~24	-25~24	-25~24	-25~24
Operating range (outdoor temperature)	Hydronic heating	°C	-20~24	-20~24	-20~24	-20~24
Operating range (outdoor temperature)	Domestic hot water (DHW)	°C	-20~35	-20~35	-20~35	-20~35
Connectable air-to-air indoor units (max)		**nb.**	**39**	**43**	**46**	**50**
Connectable air-to-water hydronic modules (max)[6]		**nb.**	**4**	**4**	**4**	**4**
Capacity of connectable air-to-air indoor units		**%**	**50 ~ 135**			
Accessories						
Branch pipe kit for O.U. pairing		nb. / type	1 / DOS-68-MW-VR			

Model			M-VR-OV-1300-SG	M-VR-OV-1350-SG	M-VR-OV-1410-SG	M-VR-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	Cooling	kW	33.75	36.46	38.17	40.82
Energy efficiency coefficient (nominal)	Cooling	EER[1]	3.82	3.69	3.67	3.56
Rated capacity	Heating	kW	144.50	150.50	156.50	163.50
Nominal absorbed power	Heating	kW	36.42	38.11	39.78	42.35
Energy performance coefficient (nominal)	Heating	COP[1]	3.97	3.95	3.93	3.86
Electrical Data						
Power supply		Ph-V-Hz	3-380~415-50			
Maximum current		A	110.80	111.80	112.40	120.50
Refrigerant Circuit Data						
Refrigerant[2]		type (GWP)	R410A (2088)			
Q.ty of refrigerant pre-charge [3] (tons of CO2 equivalent)		Kg	32.9 (68.70)	33.4 (69.74)	34.5 (72.03)	34.6 (72.25)
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")
Piping diameter[4]	Gas HP	mm (inch)	31.8 (1-1/4")	31.8 (1-1/4")	38.1 (1-1/2")	38.1 (1-1/2")
Piping diameter[4]	Gas LP	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	953	953	966	1013
Volume of air treated	max	m3/h	42400	42400	43000	43500
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-10~55	-10~55	-10~55	-10~55
Operating range (outdoor temperature)	Heating	°C	-25~24	-25~24	-25~24	-25~24
Operating range (outdoor temperature)	Hydronic heating	°C	-20~24	-20~24	-20~24	-20~24
Operating range (outdoor temperature)	Domestic hot water (DHW)	°C	-20~35	-20~35	-20~35	-20~35
Connectable air-to-air indoor units (max)		**nb.**	**64**	**64**	**66**	**69**
Connectable air-to-water hydronic modules (max)[6]		**nb.**	**6**	**6**	**6**	**6**
Capacity of connectable air-to-air indoor units		**%**	**50 ~ 135**			
Accessories						
Branch pipe kit for O.U. pairing		nb. / type	1 / DOS-68-MW-VR + 1 / DOS-246-MW-VR			

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-VR-OV-900-SG	M-VR-OV-960-SG	M-VR-OV-1010-SG	M-VR-OV-1065-SG	M-VR-OV-1130-SG	M-VR-OV-1180-SG	M-VR-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
25.01	26.71	28.28	29.97	31.51	34.34	37.05
3.58	3.56	3.59	3.55	3.55	3.42	3.32
100.50	106.50	114.00	119.00	125.50	132.00	138.00
25.64	27.31	29.24	30.87	32.89	35.11	36.80
3.92	3.90	3.90	3.86	3.82	3.76	3.75
3-380~415V-50Hz						
72.50	73.10	86.50	88.30	96.00	97.00	98.00
R410A (2088)						
21.8 (45.52)	22.9 (47.81)	24.4 (50.95)	24.9 (51.99)	26.1 (54.50)	26.1 (54.50)	26.6 (55.54)
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")
28.6 (1-1/8")	28.6 (1-1/8")	28.6 (1-1/8")	31.8 (1-1/4")	31.8 (1-1/4")	31.8 (1-1/4")	31.8 (1-1/4")
31.8 (1-1/4")	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")
2370x1690x775	2370x1690x775	2780x1690x775	2780x1690x775	2780x1690x775	2780x1690x775	2780x1690x775
628	641	710	710	770	770	770
27000	27600	30000	31900	33000	33000	33000
0/110	0/110	0/110	0/110	0/110	0/110	0/110
-10~55	-10~55	-10~55	-10~55	-10~55	-10~55	-10~55
-25~24	-25~24	-25~24	-25~24	-25~24	-25~24	-25~24
-20~24	-20~24	-20~24	-20~24	-20~24	-20~24	-20~24
-20~35	-20~35	-20~35	-20~35	-20~35	-20~35	-20~35
53	**56**	**59**	**63**	**64**	**64**	**64**
4	**4**	**4**	**4**	**4**	**4**	**4**
50 ~ 135						
1 / DOS-68-MW-VR	1 / DOS-246-MW-VR					

M-VR-OV-1515-SG	M-VR-OV-1580-SG	M-VR-OV-1630-SG	M-VR-OV-1685-SG	M-VR-OV-1750-SG	M-VR-OV-1800-SG	M-VR-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
43.53	45.24	46.80	48.50	50.04	52.87	55.57
3.47	3.46	3.48	3.46	3.47	3.39	3.32
169.50	175.50	183.00	188.00	194.50	201.00	207.00
44.04	45.71	47.64	49.27	51.29	53.51	55.20
3.85	3.84	3.84	3.82	3.79	3.76	3.75
3-380~415-50						
121.50	122.10	135.50	137.30	145.00	146.00	147.00
R410A (2088)						
35.1 (73.29)	36.2 (75.58)	37.7 (78.72)	38.2 (79.76)	39.4 (82.27)	39.4 (82.27)	39.9 (83.31)
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")
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")	38.1 (1-1/2")	38.1 (1-1/2")
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
1013	1026	1095	1095	1155	1155	1155
43500	44100	46500	48400	49500	49500	49500
0/110	0/110	0/110	0/110	0/110	0/110	0/110
-10~55	-10~55	-10~55	-10~55	-10~55	-10~55	-10~55
-25~24	-25~24	-25~24	-25~24	-25~24	-25~24	-25~24
-20~24	-20~24	-20~24	-20~24	-20~24	-20~24	-20~24
-20~35	-20~35	-20~35	-20~35	-20~35	-20~35	-20~35
71	**74**	**77**	**80**	**80**	**80**	**80**
6	**6**	**6**	**6**	**6**	**6**	**6**
50 ~ 135						
1 / DOS-68-MW-VR + 1 / DOS-246-MW-VR	2 / DOS-246-MW-VR					

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-VR-OV-1908-SG	M-VR-OV-1962-SG	M-VR-OV-2016-SG	M-VR-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	2070
Nominal absorbed power		kW	52.28	53.81	56.64	59.35
Energy efficiency coefficient (nominal)		EER[1]	3.64	3.64	3.56	3.49
Rated capacity	Heating	kW	213.50	220.00	226.50	232.50
Nominal absorbed power		kW	54.82	56.84	59.06	60.75
Energy performance coefficient (nominal)		COP[1]	3.89	3.87	3.83	3.83
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	46.2 (96.47)	47.4 (98.98)	47.4 (98.98)	47.9 (100.02)
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 HP	mm (inch)	41.3 (1-5/8")	41.3 (1-5/8")	41.3 (1-5/8")	41.3 (1-5/8")
	Gas LP	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	1338	1398	1398	1398
Volume of air treated	max	m^3/h	58900	60000	60000	60000
Available static pressure	std/max	Pa	0/110	0/110	0/110	0/110
Operating range (outdoor temperature)	Cooling	°C	-10~55	-10~55	-10~55	-10~55
	Heating	°C	-25~24	-25~24	-25~24	-25~24
	Hydronic heating	°C	-20~24	-20~24	-20~24	-20~24
	Domestic hot water (DHW)	°C	-20~35	-20~35	-20~35	-20~35
Connectable air-to-air indoor units (max)		**nb.**	**80**	**80**	**80**	**80**
Connectable air-to-water hydronic modules (max)[6]		**nb.**	**6**	**6**	**6**	**6**
Capacity of connectable air-to-air indoor units		**%**	**50 ~ 135**			
Accessories						
Branch pipe kit for O.U. pairing		nb. / type	1 / DOS-68-MW-VR + 2 / DOS-246-MW-VR			

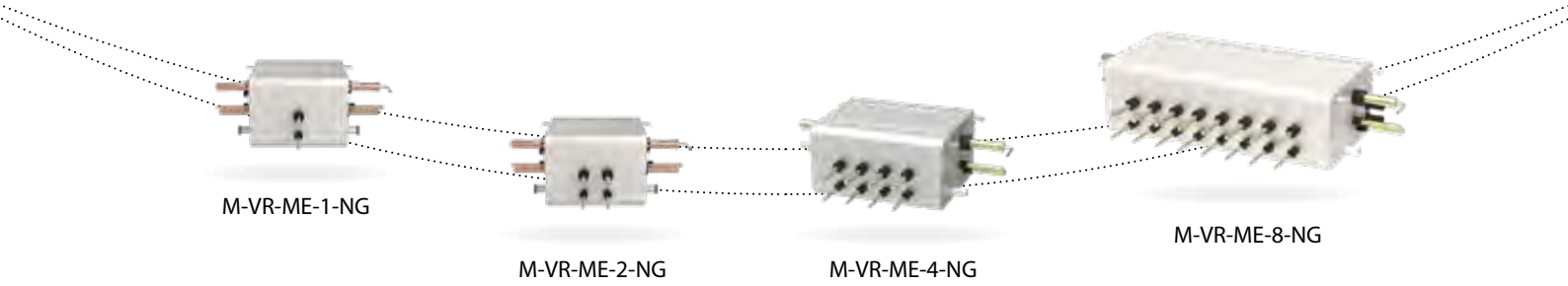
1. Value measured according to harmonized standard EN14511.
2. Refrigerant leakage contributes to climate change. Refrigerants with a lower global warming potential (GWP) contribute less to global warming when released into the atmosphere than those with a higher GWP. This appliance contains a refrigerant 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-VR-OV-2128-SG	M-VR-OV-2184-SG	M-VR-OV-2240-SG	M-VR-OV-2295-SG	M-VR-OV-2350-SG	M-VR-OV-2405-SG	M-VR-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
62.05	63.76	65.33	67.02	68.56	71.39	74.10
3.42	3.42	3.44	3.42	3.43	3.37	3.32
238.50	244.50	252.00	257.00	263.50	270.00	276.00
62.44	64.11	66.04	67.67	69.69	71.91	73.60
3.82	3.81	3.82	3.80	3.78	3.75	3.75
3-380~415-50						
170.50	171.10	184.50	186.30	194.00	195.00	196.00
R410A (2088)						
48.4 (101.06)	49.5 (103.35)	51 (106.49)	51.5 (107.53)	52.7 (110.04)	52.7 (110.04)	53.2 (111.08)
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")
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")
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
1398	1411	1480	1480	1540	1540	1540
60000	60600	63000	64900	66000	66000	66000
0/110	0/110	0/110	0/110	0/110	0/110	0/110
-10~55	-10~55	-10~55	-10~55	-10~55	-10~55	-10~55
-25~24	-25~24	-25~24	-25~24	-25~24	-25~24	-25~24
-20~24	-20~24	-20~24	-20~24	-20~24	-20~24	-20~24
-20~35	-20~35	-20~35	-20~35	-20~35	-20~35	-20~35
80	**80**	**80**	**80**	**80**	**80**	**80**
6	**6**	**6**	**6**	**6**	**6**	**6**
50 ~ 135						
1 / DOS-68-MW-VR + 2 / DOS-246-MW-VR		3 / DOS-246-MW-VR				

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.

FLOW CONTROLLERS



M-VR-ME-1-NG

M-VR-ME-2-NG

M-VR-ME-4-NG

M-VR-ME-8-NG

Model				M-VR-ME-1-NG	M-VR-ME-2-NG	M-VR-ME-4-NG	M-VR-ME-8-NG
Pairs of connections for indoor units			**q.ty**	**1**	**2**	**4**	**8**
Max. number of connectable indoor units	for each pair of connections[1]			8	8	8	8
	for each flow controller			8	16	32	64
Max. capacity of connectable indoor units	for each pair of connections[2]		kW	16.00	16.00	16.00	16.00
	for each flow controller[3]		kW	16.00	28.00	45.00	85.00
Electrical Data							
Power supply			Ph-V-Hz	1-220~240V-50Hz			
Refrigerant Circuit Data							
Piping diameter (a saldare)	Outdoor unit side	Liquid	mm (inch)	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")	12.7 (1/2")
		Gas HP	mm (inch)	19.05 (3/4")	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")
		Gas LP	mm (inch)	22.2 (7/8")	22.2 (7/8")	28.6 (1-1/8")	28.6 (1-1/8")
	Indoor uni side	Liquid	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52
		Gas	mm	12.7 / 15.9	12.7 / 15.9	12.7 / 15.9	12.7 / 15.9
Product Specifications							
Dimensions		WxHxD	mm	340x250x388	340x250x388	460x250x388	784x250x388
Net weight			Kg	12	14.5	20.6	33
Condensate drain				Necessary	Necessary	Necessary	Necessary

1. Any indoor units connected to the same pair of connections must operate in the same operating mode.
2. I.U.s with capacities from 16 to 30 kW can be connected to the heat cost allocators with 2 to 8 connections, using the DIS-180-1 branch kit which occupies 2 pairs of connections.
3. In case of connection of hydronic modules, the maximum capacity increases to 32 kW (2 connections), 64 kW (4 connections) and 96 kW (8 connections).

HYDRONIC MODULE

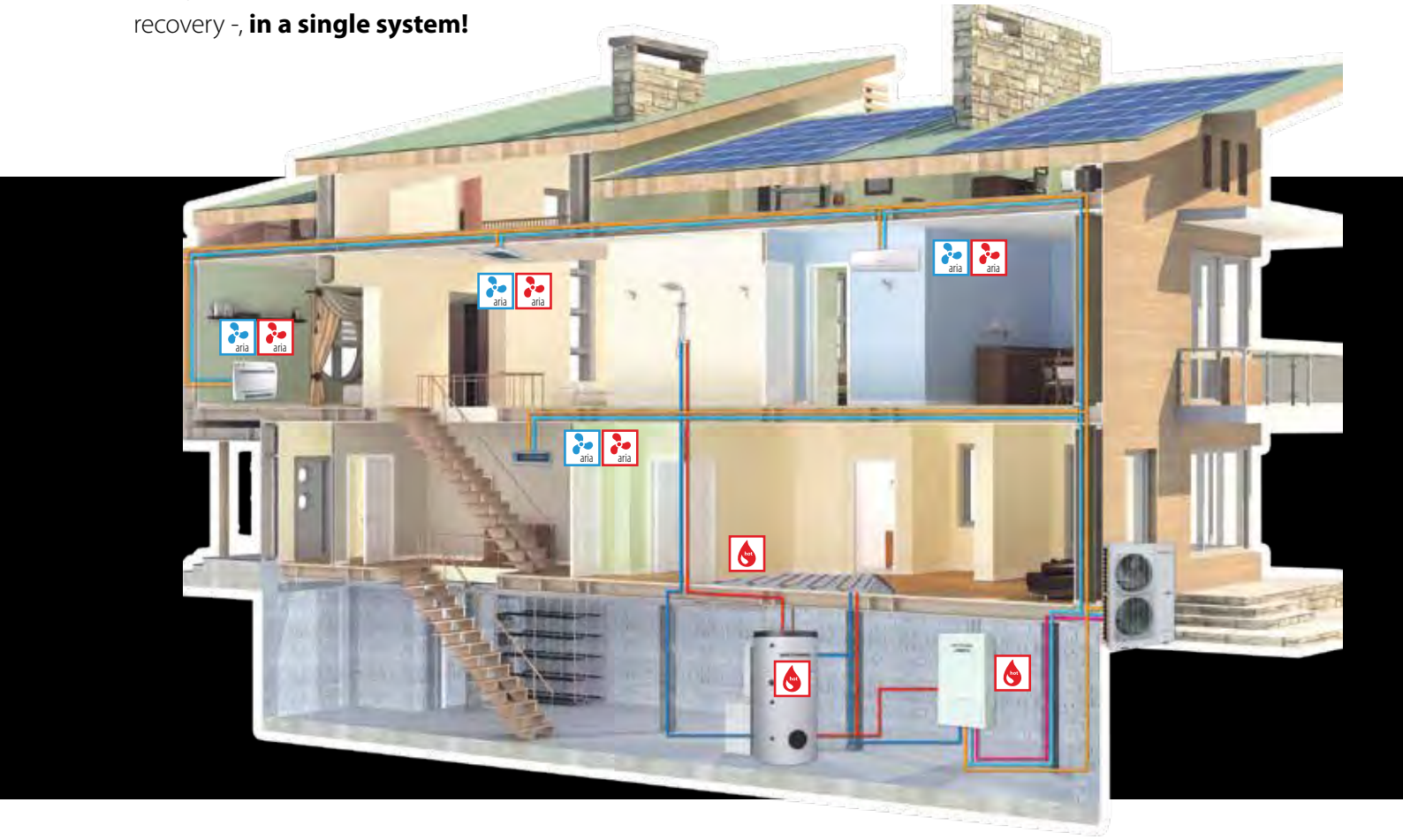
M-VR-HM-16-NG
M-VR-HM-30-NG

Model			M-VR-HM-16-NG	M-VR-HM-30-NG
Rated capacity	Domestic hot water	kW	4.50 (3.60~16.00)	4.50 (3.60~30.00)
	Hydronic heating	kW	16.00	30.00
Maximum delivery water temperature		℃	55	55
Electrical Data				
Power supply		Ph-V-Hz	1-220~240-50Hz	
Hydraulic Dats				
Water/freon heat exchanger	Brand	type	Braze-welded plates	Braze-welded plates
	Water flow	m^3/h	2.76	5.16
	Pressure drop	kPa	27.5	38.5
Circulation pump			Not included	
Water connections	Diameter	mm	25	25
	Thread	Inch	G1	G1
Operating pressure Min/Max	Max	bar	3	3
Expansion vessel			Not included	
Refrigerant Circuit Data				
Piping diameter	Liquid	mm (inch)	9.52 (3/8″)	9.52 (3/8″)
	Gas		15.9 (5/8″)	22.2 (7/8″)
Product Specifications				
Dimensions	WxHxD	mm	515x606x330	515x606x330
Net weight		kg	36	40
Condensate drain			Necessary	
Controls	Wired control		Included	
	Climate curve		Available	
Accessories				
Branch pipe kit for connection to flow divider			-	DIS-180-1

MW HYBRID VRF SYSTEM

MW HYBRID VRF HEAT PUMP SYSTEM

Heating, cooling and domestic hot water
e acqua calda sanitaria - even with heat
recovery -, **in a single system!**



no more traditional systems

MW HYBRID (VRF system + hydronic module) is a combination that replaces a traditional system consisting of two separate systems (air conditioning + traditional boiler).

free hot water

In cooling mode, heat is recovered to produce viene **free** domestic hot water.

hybrid system

MW HYBRID is born from the innovative union of two technologies:

1. Direct expansion technology, cools or heats rooms thanks to the MW HYBRID indoor units.

2. Hydronic technology, heating occurs through the hydronic module that powers low temperature systems such as radiant panels and high efficiency radiators. The MW HYBRID system is able to produce domestic hot water.

Air - to - Air

Direct expansion cooling and heating.

The air-to-air mode with the use of direct expansion indoor units ensures rapid achievement of the desired comfort.

Air - to - Water

Heating and domestic hot water production with hydromodule, cooling with direct expansion units (mandatory installation).

FLOOR HEATING

HIGH-EFFICIENCY RADIATORS

DOMESTIC HOT WATER

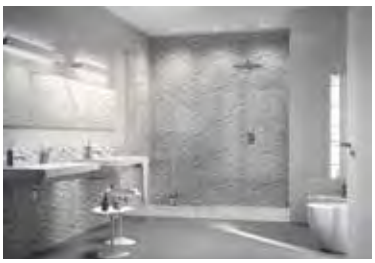
In this configuration, the MW HYBRID system can be used in the winter to produce domestic hot water and to heat internal environments using radiant panels (or high-efficiency radiators). In the summer, when the indoor direct expansion units work in cooling mode, it is possible to produce domestic hot water by recovering the heat that would otherwise be dispersed by the outdoor unit.

Air - to - Air & Air - to - Water

Combined use of the two technologies.

FLOOR HEATING

HEATING OR COOLING



DOMESTIC HOT WATER

MW HYBRID heats using both indoor direct expansion units and by powering a radiant panel system (or high efficiency radiators) and produces domestic hot water. The operating priority can be selected by the user.

OUTDOOR UNITS

These units allow to recover, in the summer period, the condensation heat that would normally be dissipated in the environment. This heat is directed to the hydromodule, which produces domestic hot water for free.

HYDRONIC MODULE

Heat exchanger for the production of domestic hot water and water for low temperature heating systems.

360° comfort **all year round**

MW HYBRID guarantees a complete solution for climate control of all environments all year round.

It is an economical system, which reduces CO2 emissions, is able to guarantee internal comfort and produce domestic hot water.

MW HYBRID uses 1-Phase and 3-Phase outdoor units, of different capacities, to which up to 13 indoor units and 2 hydronic modules can be connected.

HYDRONIC MODULE CONTROL

Multifunction control panel for managing the hydronic part (remote control).

RADIANT PANELS

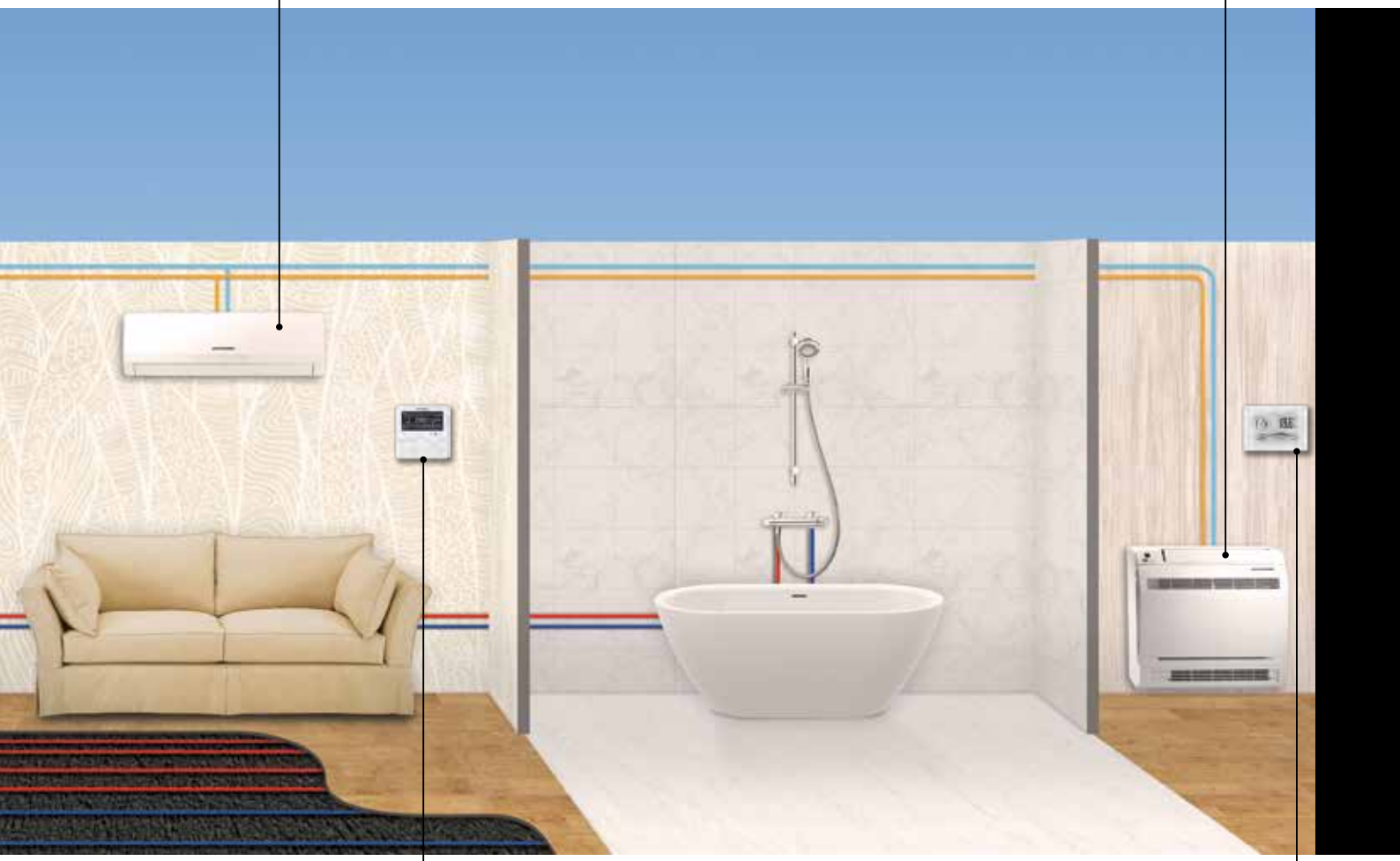
They heat the home with a pleasant thermal gradient *(not provided by MULTIWARM).*

DOMESTIC HOT WATER TANK

Accumulates and supplies domestic hot water produced by the system.

DIRECT EXPANSION INDOOR UNITS

Wall-mounted, cassette, ducted, console, floor/ceiling, recessed floor models.



CONTROL PANEL

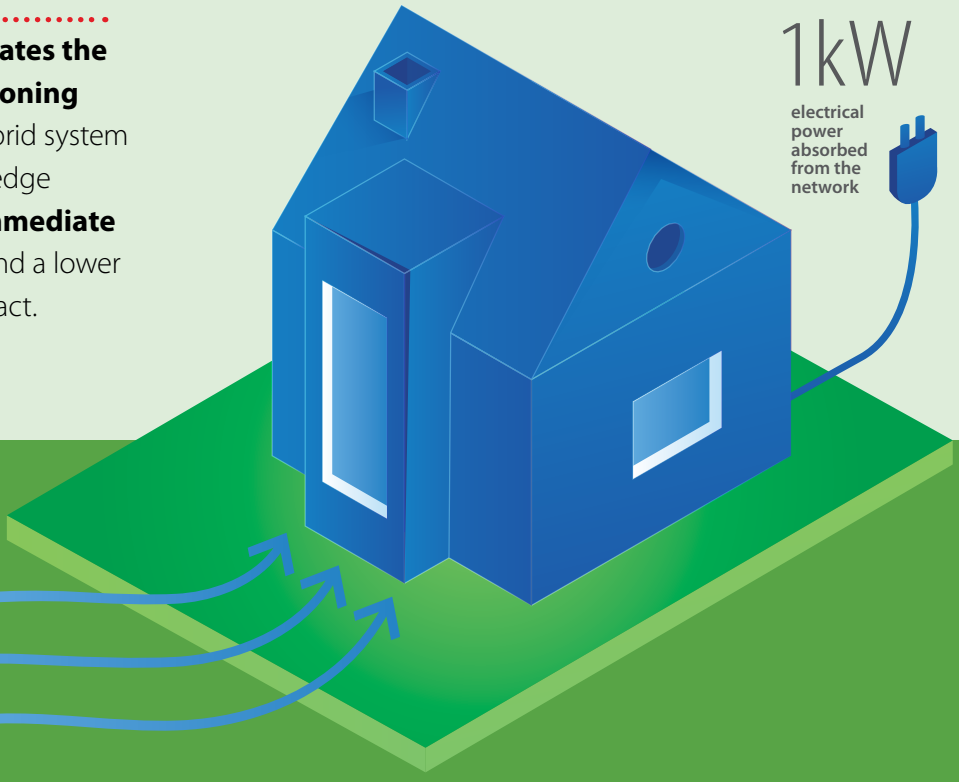
Control panel for managing direct and hydronic expansion with integrated temperature sensor.

ROOM THERMOSTAT

Possibility of integration with third-party room thermostat (*not supplied by MULTIWARM).*

ENERGY SAVING

Multiwarm innovates the way of air conditioning the home. The hybrid system combines cutting-edge technologies for **immediate savings on bills** and a lower environmental impact.



MW HYBRID runs on free renewable energy!

Being a highly energy efficient heat pump system, MW HYBRID takes 75-80% of the energy it uses from the outside air.

For every kW of electricity consumed, 3 kW are taken for free from the outside air.

The thermal power released into the environment is 4 times the electrical power absorbed.

MW HYBRID does not waste energy but uses it to heat water, how?

During the summer season, while the indoor unit are working in cooling mode, **the condensation heat** is not dispersed into the external environment; **it is recovered inside the hydromodule to produce FREE domestic hot water**.

3kW FREE + 1kW ELECTRICAL CURRENT = 4kW HEATING POWER IN YOUR HOME!

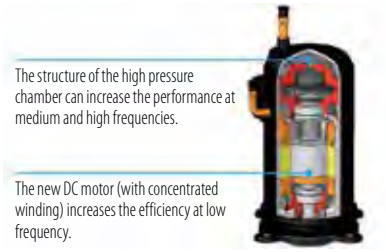
FREE DHW
IN SUMMER WITH CONDENSING HEAT RECOVERY

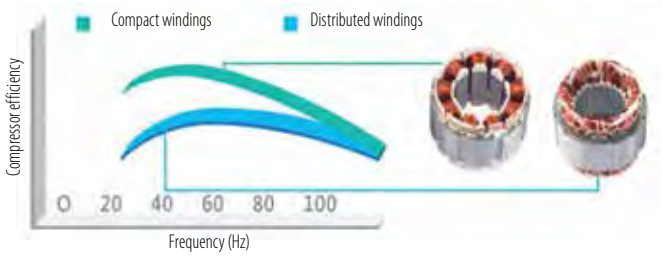
TOTAL INVERTER TECHNOLOGY

DC Inverter Compressors and Fans

ADVANTAGES

- Maximizing efficiency performance.
- Reduction of energy consumption and operating costs.





EASY INSTALLATION AND MAINTENANCE

Automatic addressing of units

The indoor and outdoor units are addressed automatically and not manually. The outdoor unit, through a particular setting, recognizes the various indoor units present in the system reducing possible risks of error.

Can-bus communication system

MW HYBRID adopts a faster, more reliable and anti-interference communication system (between outdoor unit, indoor units and hydromodule).

Maintenance

Maintenance of MW HYBRID is simple thanks to the 3 self-diagnosis functions:

1. automatic detection of unit error type;

2. automatic start of diagnostic operation;

3. real-time anomaly detection.

360° COMFORT

Ultra-fast comfort

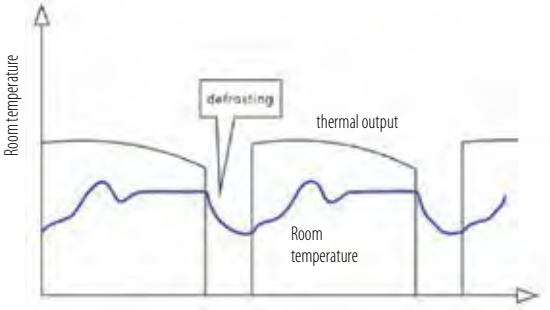
By using direct expansion technology and radiant floor heating at the same time, you can achieve maximum winter comfort by heating rooms quickly and economically.

"Continuous heating" effect

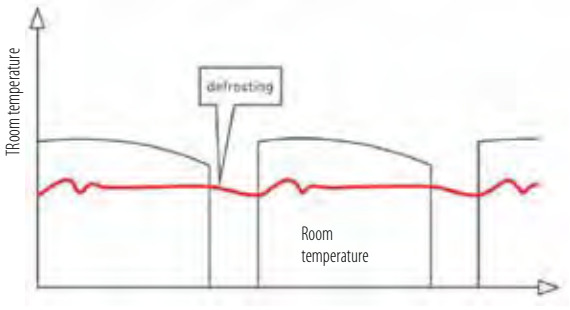
MW HYBRID is equipped with intelligent defrosting as it uses, when possible, the thermal energy of the domestic hot water tank.

This generates the "**continuous heating**" effect with the following advantages:

- the ambient temperature is stable;
- there is no draft (skin effect).



COMPETITORS' HEAT PUMP



MW HYBRID HEAT PUMP

Quiet operation

The MW HYBRID system is able to establish when to activate the "night silent mode" (based on the outdoor temperature and the internal load): the outdoor unit operates with **noise emissions lower than 45 dB(A)**.

Silent mode can be activated in:

AUTOMATIC

Under low load conditions, at night, the system automatically activates silent mode.

MANUAL

In particular applications where low noise is required, the system can force the unit to operate at reduced speeds, thus containing noise emissions.

DHW PRODUCTION

Range of use

- **Eco Function (recommended)**: max water temperature 48° C.
- **Power Function**: max water temperature 55° C.
- **Fast Power Function**: required water temperature higher than 55° C (through integration with electric resistance).

Special applications

- **Sunflower**: domestic hot water is heated during the hottest hours of the day (based on the highest outside temperature recorded the previous day) to achieve maximum energy savings.
- **Auto**: sets the set point temperature automatically based on the outside temperature.
- **Sterilize**: anti-legionella cycle 65-70° C.
- **Rapid**: it starts the compressor and the electric resistance at the same time to heat, in a short time, water for sanitary use or for hydronic heating.

WATER TEMPERATURE

48°C
ECO function

55°C
POWER function

55°C+
FAST POWER function

Sterilize function

Through the hydronic module of MW HYBRID system, with a simple function settable from the wired control, it is possible to program sterilization cycles at regular intervals (from 1 to 60 days, it is recommended to carry out at least one cycle per month) **or carry out a single cycle**.

With a thermal shock, temperatures between 60~70° C are reached which guarantee the elimination of any bacteria.

THE RANGE OF MW HYBRID VRF SYSTEM

OUTDOOR UNITS

12.10 kW	14.00 kW	16.00 kW
1-Phase	1-Phase	1-Phase
M-VH-OV-120-NG	M-VH-OV-140-NG	M-VH-OV-160-NG

22.40 kW	28.00 kW
3-Phase	3-Phase
M-VH-OV-224-SG	M-VH-OV-280-SG

HYDRONIC MODULE

16.00 kW
1-Phase
M-VH-HM-160-NG

TANKS

200 Liters	300 Liters	500 Liters
WT-XL-DW1-200 C-1	WT-XL-DW1-300 C-1	WT-XL-DW1-500 C-1

NOTE: Third party tanks can also be used.

INDOOR UNITS

Applicable indoor units for air/air operation on page 101

MW HYBRID IS MADE UP OF **5 OUTDOOR UNITS** TO WHICH UP TO MAX **13 INDOOR UNITS** AND **2 HYDRONIC MODULES** CAN BE CONNECTED, DEPENDING ON THE CAPACITY OF THE OUTDOOR UNIT

3 SINGLE PHASE MODELS

The 1-Phase outdoor units with horizontal air discharge are available in 12.10 kW, 14.00 kW and 16.00 kW models.
All the compressors of the 1-Phase models are Rotary DC Inverter.

2 THREE-PHASE MODELS

The 3-Phase outdoor units with vertical air discharge are available in 22.40 kW and 28.00 kW models. All the compressors of the 3-Phase models are Scroll DC Inverter.

POWER AND NUMBER OF CONNECTABLE INDOOR UNITS

Model	Min~Max power of connectable I.U.	Min~Max number of connectable I.U.	Max nb. of connectable hydronic modules	Conto Termico 2.0*	Ecobonus*
M-VH-OV-120-NG	80~110%	1~6	1	✓	✓
M-VH-OV-140-NG	80~110%	1~7	1	✓	✓
M-VH-OV-160-NG	80~110%	1~8	1	✓	✓
M-VH-OV-224-SG	80~110%	1~10	2	✓	✓
M-VH-OV-280-SG	80~110%	1~13	2	✓	✓

* For Italian market only.

MAXIMUM COMPACTNESS FOR ALL OUTDOOR UNITS

12.10 - 14.00 - 16.00 kW

L 900 x H 1345 x D 340 (mm)

22.40 - 28.00 kW

L 1340 x H 1605 x D 765 (mm)

Operating ranges of outdoor units

The **VRF MW HYBRID** system features a very wide external temperature operating range, ensuring new design flexibility.

up to
50°C
in cooling

down to
-15°C
in heating

COOLING MODE

Outdoor temperature from -5° to 50° C

HYDRONIC HEATING MODE

Outdoor temperature from -15° to 21° C
Water temperature from 25° to 52° C

HEATING MODE

Outdoor temperature from -15° to 24° C

DOMESTIC HOT WATER PRODUCTION

Outdoor temperature from -15° to 43° C
Water temperature from 35° to 55° C

OUTDOOR UNITS

5 CAPACITIES
12.10~28.00 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-VH-OV-120-NG
M-VH-OV-140-NG
M-VH-OV-160-NG

M-VH-OV-224-SG
M-VH-OV-280-SG

Model			M-VH-OV-120-NG	M-VH-OV-140-NG	M-VH-OV-160-NG	M-VH-OV-224-SG	M-VH-OV-280-SG
Nominal Data							
Rated capacity	Cooling	kW	12.10	14.00	16.00	22.40	28.00
Rated absorbed power		kW	3.05	3.98	4.85	5.35	7.70
Energy efficiency coefficient (rated)		EER[1]	3.97	3.52	3.30	4.19	3.64
Rated capacity	Heating	kW	14.00	16.50	18.50	25.00	31.50
Rated absorbed power		kW	3.30	4.10	4.67	5.80	7.60
Energy performance coefficient (rated)		COP[1]	4.24	4.02	3.96	4.31	4.14
Seasonal Data							
Seasonal energy efficiency index	Cooling	SEER[2]	8.08	7.79	7.73	8.46	7.58
	Heating	SCOP[2]	4.17	4.11	4.04	5.50	5.58
Electrical data							
Power supply		Ph-V-Hz	1-220~240V-50Hz				
Maximum current		A	27.00	31.00	33.00	16.10	20.90
Refrigerant circuit data							
Refrigerant[3]		type (GWP)	R410A (2088)				
Q.ty of refrigerant pre-charge[4] (tons of CO2 equivalent)		Kg	5 (10.4)	5 (10.4)	5 (10.4)	10.5 (21.9)	11 (23)
Compressor		nb. / type	1 / Rotary DC Inverter			1 / Scroll DC Inverter	
Piping diameter	Liquid	mm (inch)	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
	Gas	mm (inch)	15.9 (5/8")	15.9 (5/8")	19.05 (3/4")	19.05 (3/4")	22.2 (7/8")
	High pressure gas	mm (inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	15.9 (5/8")	15.9 (5/8")
Product Specifications							
Dimensions	LxHxD	mm	900x1345x340	900x1345x340	900x1345x340	1340x1605x765	1340x1605x765
Net weight		Kg	113	113	113	295	295
Sound power level	max	dB(A)	72	72	72	81	81
Sound pressure level at 1 m	max	dB(A)	55	56	58	57	58
Volume of air treated	max	m3/h	6000	6300	6600	14000	14000
	Cooling	°C	-5~50				
	Air heating	°C	-15~24				
	Hydronic heating	°C	-15~21				
	Domestic hot water (DHW)	°C	-15~43				
	Cooling + DHW	°C	-5~43				
	Air heating + DHW	°C	-15~24				
Water circuit operating limits	Hydronic heating	°C	25~52				
	Domestic hot water (DHW)	°C	35~55				
Connectable air-to-air indoor units (min - max)[5]		**nb.**	**1~6**	**1~7**	**1~8**	**1~10**	**1~13**
Connectable hydronic modules (max)		**nb.**	**1**	**1**	**1**	**2**	**2**
Capacity of connectable air-to-air indoor units		**%**	**80~110**				

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.
5. At least 1 direct expansion indoor unit is mandatory.

HYDRONIC MODULE

HIGH EFFICIENCY
A+ in combination with any size of outdoor unit

DHW PRODUCTION
105 L/h nominal
75-140 (min.-max. L/h) outdoor

DHW THERMAL POWER
4.50 kW nominal for DHW production
3.60-16.00 (min.-max. kW)

HEATING THERMAL POWER
16.00 kW for hydronic heating

CONTROLS
wired control included

M-VH-HM-160-NG

Model			M-VH-HM-160-NG
Rated capacity	Domestic hot water[1]	kW	4.50 (3.60~16.00)
	Hydronic heating	kW	16.00
Maximum delivery water temperature		℃	55
Electrical data			
Power supply		Ph-V-Hz	1-220~240-50Hz
Electrical integration power (2 steps)		kW	1.50+1.50
Hydraulic data			
Water/freon heat exchanger		type	Braze-welded plates
Circulation pump	Brand	-	Wilo
	Water flow	m3/h	1.7
	Static pressure	m	6
Water connections	Diameter	mm	25
	Thread	Inch	G1
Expansion vessel	Volume	L	10
	Pre-load	bar	1
Refrigerant circuit data			
Piping diameter	Liquid	mm (inch)	9.52 (3/8")
	Gas		15.9 (5/8")
	High pressure gas		12.7 (1/2")
Product Specifications			
Dimensions	LxHxD	mm	500x919x328
Net weight		kg	56

1. Conditions: outdoor air 20°C DB (15°C WB), water inlet 15°C / outlet 52°C.

Hydronic module control

The hydronic module is equipped with a control that allows you to manage hydronic heating and provides various functions for managing domestic hot water.

SOME FUNCTIONS

- **Sunflower**: domestic hot water is heated during the hottest hours of the day (based on the highest outside temperature recorded the previous day) to achieve maximum energy savings.
- **Auto**: sets the set point temperature automatically based on the outside temperature.
- **Sterilize**: anti-legionella cycle 65-70° C.
- **Rapid**: it starts the compressor and the electric resistance of the tank at the same time to heat, in a short time, water for sanitary use or for hydronic heating.

DHW STORAGE TANKS

Tanks for storage of domestic hot water

MULTIWARM offers a complete range of fixed coil tanks for the production of domestic hot water.

The Polywarm coated steel structure and the included magnesium anode, proportionate to the volume to be protected, ensure high protection against corrosion.

In the 200, 300 and 500 litre models the insulation, which is not removable, is made of expanded polyurethane (50 mm thick).

All tanks are externally coated in flexible PVC, which ensures excellent insulation, reducing heat loss to a minimum.

WT-XL-DW1-200 C-1
WT-XL-DW1-300 C-1
WT-XL-DW1-500 C-1

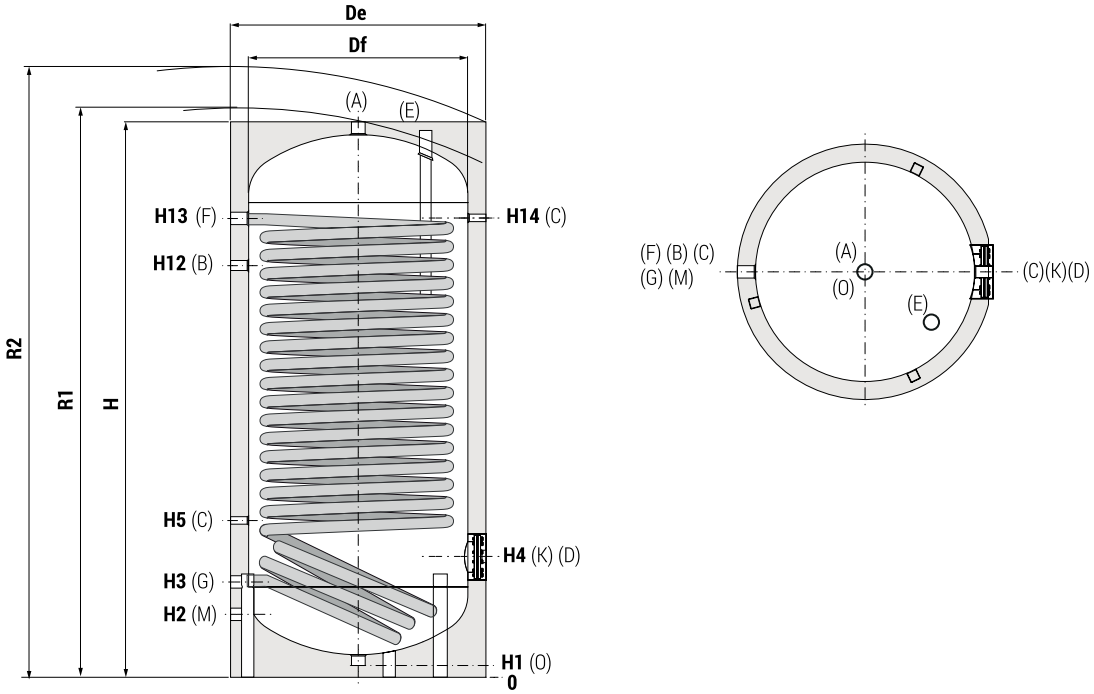
Model			WT-XL-DW1-200 C-1	WT-XL-DW1-300 C-1	WT-XL-DW1-500 C-1
Net storage volume		liters	189	291	498
Storage material		-	Polywarm-coated steel		
Heating element power (optional)		kW	1.50		
Exchanger surface		m2	2.00	3.40	5.40
Insulation thickness		mm	50		
Maximum water temperature		°C	90		
Dimensions	Diameter	mm	550	650	750
	Height	mm	1440	1500	1800
Net weight		kg	96	130	174
Connections	Domestic water inlet	inch	3/4"	1"	1"
	Domestic hot water outlet	inch	1"1/4	1"1/4	1"1/4
	Recirculation	inch	3/4"	1"	1"
	Drain	inch	1"1/4	1"1/4	1"1/4
Energy efficiency class *			B	B	C

* ERP ready 2017 (EU regulation n.814/2013).

STORAGE		EXCHANGER	
Maximum pressure	Maximum temperature	Maximum pressure	Maximum temperature
10 bar	90° C	12 bar	110° C

TANK FEATURES

- **USE**
  Production and storage of domestic hot water (DHW).
  All hydraulic connections on the back, front connections and flange are aligned for quick and easy installation.
- **MATERIALS AND FINISHES**
  Steel coated in Polywarm® (ACS - SSICA - EN 16421 certifications) suitable for drinking water pursuant to Ministerial Decree no. 174 of 06.04.04.
- **HEAT EXCHANGER**
  Fixed heat exchanger in steel coated in Polywarm®
- **RIGID INSULATION**
  Highly insulating expanded polyurethane.
- **CATHODIC PROTECTION**
  Magnesium anode.
- **DRAIN**
  Drain through sleeve at the bottom.
- **COUNTERFLANGE - GASKETS**
  Gaskets in food-grade silicone rubber (Ministerial Decree no. 174 of 2004); operating resistance up to 200° C.
  Carbon steel head with Polywarm® treatment and provision for electrical resistance.



TANK DIAGRAMS AND DIMENSIONS

Model	Volume	Weight	Df	H	De	R2	H1	H2	H3	H4	H5	H12	H13	H14	K	M	B	A	D
	[lt]	[Kg]	[mm]													Gas Connections F (inch)			
200	188.8	96	//	1440	550	1560	71	215	285	325	405	1055	1190	1190	Øi120/Øe180	3/4"	3/4"	1" 1/4"	1" 1/2"
300	290.5	130	//	1500	650	1650	71	241	321	381	431	1091	1211	1211	Øi120/Øe180	1"	1"	1" 1/4"	1" 1/2"
500	497.4	174	//	1800	750	1960	71	266	346	411	466	1326	1486	1486	Øi120/Øe180	1"	1"	1" 1/4"	1" 1/2"

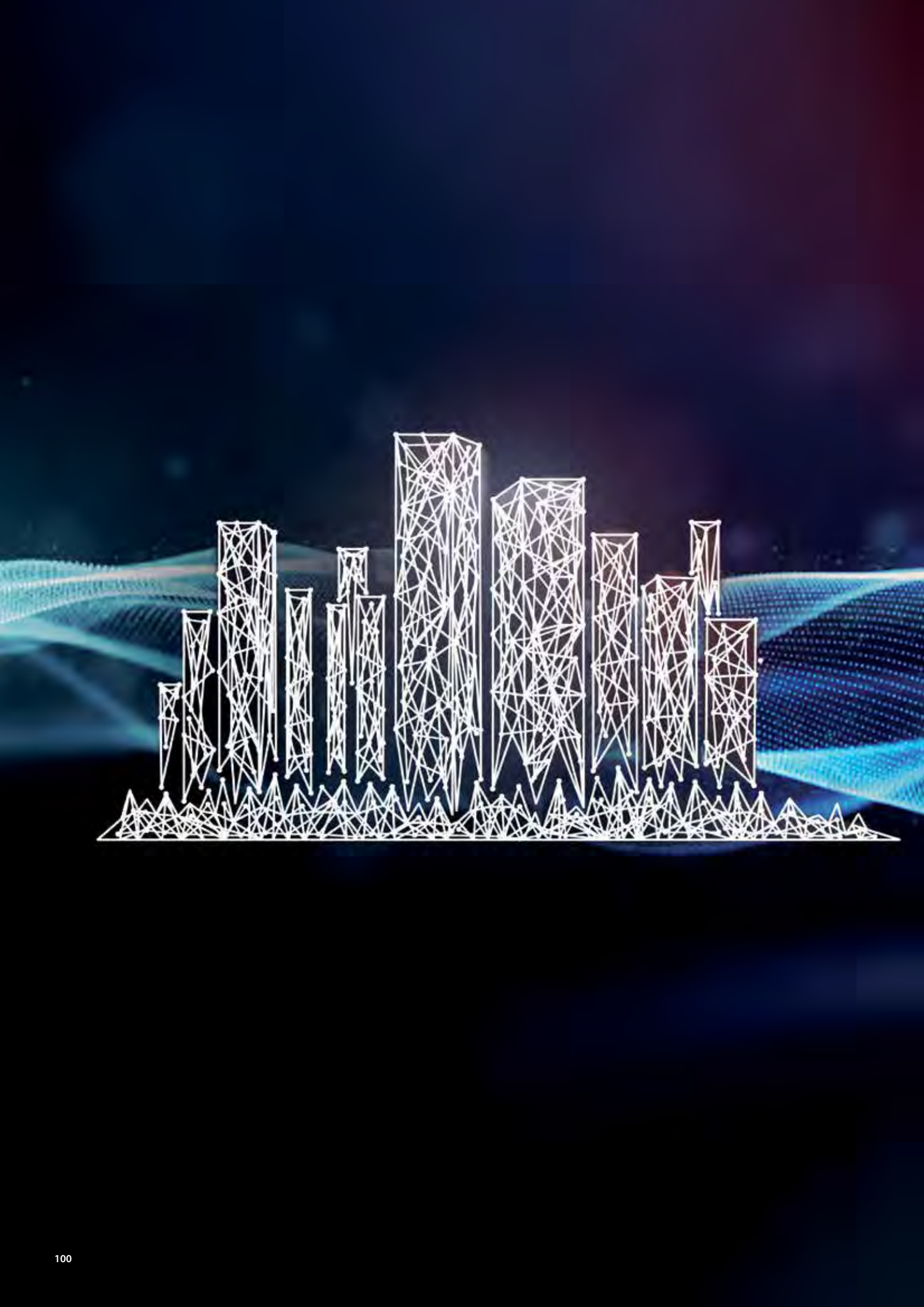
CONNECTIONS

A	Domestic hot water outlet	**G**	Primary circuit outlet 1" 1/4" Gas F
B	Recirculation connection	**K**	Inspection flange
C	Connection for instrumentation 1/2" Gas F	**M**	Domestic water inlet
D	Connection for electrical integration	**N**	Connection for instrumentation 1/2" Gas F
E	Connection for magnesium anode 1" 1/4" Gas F	**O**	Drain 1" 1/4" Gas F
F	Primary circuit inlet 1" 1/4" Gas F		

OPTIONAL ACCESSORIES

- 1.5 Kw integrative electric resistance (**WT-EH-15-C**).
- Titanium anode for 200 and 300-liter tanks (**WT-AT-2-4-C**).
- Titanium anode for 500-liter tanks (**WT-AT-5-C**).

NOTE: Third-party accessories can also be used.



INDOOR UNITS

MW MINI, MW 2-PIPE, MW 3-PIPE, MW HYBRID

WALL

7 CAPACITIES
1.50~7.10 kW

ELEGANT & COMPACT DESIGN
209 mm depth for models from 1.50 to 3.60 kW

WASHABLE FILTER
better air quality

SELF-DIAGNOSIS

CONTROLS
standard remote control
optional wired control

M-V-WLA-151~711-G

Wi-Fi
(optional)

Model			M-V-WLA-151-G	M-V-WLA-221-G	M-V-WLA-281-G
Control (included)			Remote control		
Rated capacity	Cooling	kW	1.50	2.20	2.80
	Heating	kW	1.80	2.50	3.20
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	20	20	20
Product specifications					
Dimensions	WxHxD	mm	845x289x209	845x289x209	845x289x209
Net weight		Kg	10.5	10.5	10.5
Sound pressure level at 1 m	H/M/L	dB(A)	35/33/30	35/33/30	35/33/30
Volume of air treated	H/M/L	m³/h	500/440/300	500/440/300	500/440/300
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 9.52 (3/8")		
	Condensate	mm	20	20	20
Optional parts					
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)		
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

Model			M-V-WLA-361-G	M-V-WLA-451-G	M-V-WLA-561-G	M-V-WLA-711-G
Control (included)			Remote control			
Rated capacity	Cooling	kW	3.60	4.50	5.60	7.10
	Heating	kW	4.00	5.00	6.30	7.50
Electrical data						
Power supply		Ph-V-Hz	1-220~240V-50Hz			
Power absorption		W	25	35	50	65
Product specifications						
Dimensions	WxHxD	mm	845x289x209	970x300x224	1078xx325x246	1078xx325x246
Net weight		Kg	10.5	12.5	16	16
Sound pressure level at 1 m	H/M/L	dB(A)	38/35/31	43/40/37	43/41/37	44/41/37
Volume of air treated	H/M/L	m³/h	630/460/320	850/580/500	1100/850/650	1200/850/650
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 12.74 (1/2")		9.52 (3/8") / 15.9 (5/8")	
	Condensate	mm	20	20	20	20
Optional parts						
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)			
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)			

8-WAY COMPACT CASSETTE 60x60

6 CAPACITIES
1.50~5.60 kW

COMPACT DESIGN
265 mm height for recessed installation in false ceilings

360° AIR DISTRIBUTION

INDIVIDUAL DEFLECTORS CONTROL
for better airflow management

WASHABLE FILTER
better air quality

CONDENSATE DRAIN PUMP INCLUDED
maximum height difference **1200 mm** from panel edge

CONTROLS
standard remote control
optional wired control

M-V-CSA-151~561-G

Wi-Fi
(optional)

Model			M-V-CSA-151-G	M-V-CSA-221-G	M-V-CSA-281-G
Control (included)			Remote control		
Rated capacity	Cooling	kW	1.50	2.20	2.80
	Heating	kW	1.80	2.50	3.20
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	30	30	30
Product specifications					
Dimensions	WxHxD	mm	570x265x570	570x265x570	570x265x570
Net weight		Kg	17.5	17.5	17.5
Sound pressure level at 1 m	H/M/L	dB(A)	33/30/25	36/31/25	36/33/28
Volume of air treated	H/M/L	m3/h	460/420/370	500/460/370	570/480/420
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 9.52 (3/8")		
	Condensate	mm	25	25	25
Accessories					
Decorative panel			M-V-CGR-608-G		
Panel dimensions	WxHxD	mm	620x47.5x620	620x47.5x620	620x47.5x620
Net weight		Kg	3	3	3
Optional parts					
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)		
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

Model			M-V-CSA-361-G	M-V-CSA-451-G	M-V-CSA-561-G
Control (included)			Remote control		
Rated capacity	Cooling	kW	3.60	4.50	5.60
	Heating	kW	4.00	5.00	6.30
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	30	45	45
Product specifications					
Dimensions	WxHxD	mm	570x265x570	570x265x570	570x265x570
Net weight		Kg	17.5	17.5	17.5
Sound pressure level at 1 m	H/M/L	dB(A)	39/37/35	43/41/39	43/41/39
Volume of air treated	H/M/L	m3/h	620/550/480	730/650/560	730/650/560
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 12.74 (1/2")		9.52 (3/8") / 15.9 (5/8")
	Condensate	mm	25	25	25
Accessories					
Decorative panel			M-V-CGR-608-G		
Panel dimensions	WxHxD	mm	620x47.5x620	620x47.5x620	620x47.5x620
Net weight		Kg	3	3	3
Optional parts					
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)		
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

8-WAY CASSETTE 84x84

4 CAPACITIES
7.10~14.00 kW

ULTRA COMPACT DESIGN
only **200 mm** high for the 7.10 kW model
for installation in false ceilings

WASHABLE FILTER
better air quality

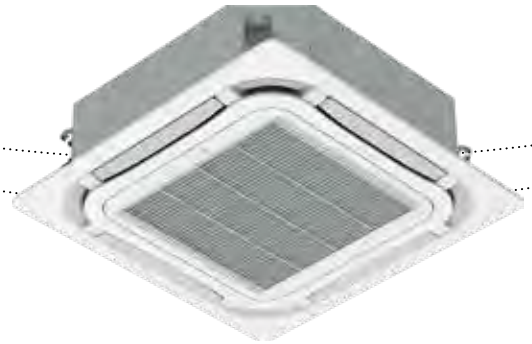
INDIVIDUAL DEFLECTORS CONTROL
for better airflow management

CONDENSATE DRAIN PUMP INCLUDED
maximum height difference **1200 mm**
from panel edge

CONTROLS
standard remote control
optional wired control

NEW

M-V-CBA-712~1402-G



Wi-Fi
(optional)

Model			M-V-CBA-712-G	M-V-CBA-902-G
Control (included)			Remote control	
Rated capacity	Cooling	kW	7.10	9.00
	Heating	kW	8.00	10.00
Electrical data				
Power supply		Ph-V-Hz	1~220~240V-50Hz	
Power absorption		W	60	75
Product specifications				
Dimensions	WxHxD	mm	840x200x840	840x240x840
Net weight		Kg	21	22.5
Sound pressure level at 1 m	H/M/L	dB(A)	37/35/32	40/36/31
Volume of air treated	H/M/L	m^3/h	1100/935/850	1400/1000/900
Connection diameter	Liquid/Gas	mm (inch)	9.52 (3/8") / 15.9 (5/8")	
	Condensate	mm	25	25
Accessories				
Decorative panel			M-V-CGR-848-G	
Panel dimensions	WxHxD	mm	950x65x950	950x65x950
Net weight		Kg	6	6
Optional parts				
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB2-G (simplified)	
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)	

Model			M-V-CBA-1122-G	M-V-CBA-1402-G
Control (included)			Remote control	
Rated capacity	Cooling	kW	11,20	14,00
	Heating	kW	12,50	16,00
Electrical data				
Power supply		Ph-V-Hz	1~220~240V-50Hz	
Power absorption		W	100	160
Product specifications				
Dimensions	WxHxD	mm	840x240x840	840x290x840
Net weight		Kg	22,5	25
Sound pressure level at 1 m	H/M/L	dB(A)	43/39/35	46/41/35
Volume of air treated	H/M/L	m^3/h	1550/1200/1000	1800/1450/1150
Connection diameter	Liquid/Gas	mm (inch)	9,52 (3/8") / 15,9 (5/8")	
	Condensate	mm	25	25
Accessories				
Decorative panel			M-V-CGR-848-G	
Panel dimensions	WxHxD	mm	950x65x950	950x65x950
Net weight		Kg	6	6
Optional parts				
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB2-G (simplified)	
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)	

DUCTED LOW/MEDIUM STATIC PRESSURE

5 CAPACITIES
2.20~5.60 kW

WASHABLE FILTER
better air quality

CONDENSATE DRAIN PUMP INCLUDED
maximum height difference **850 mm** from the exit hole

Ideal for cooling and heating small and medium-sized rooms

COMPACT MODEL
only **200 mm** high, **710 mm** wide and **462 mm** deep (2.20~3.60 kW)

CONTROLS
wired control included

NEW

M-V-DLA-222~562-G

Wi-Fi
(optional)

Model			M-V-DLA-222-G	M-V-DLA-282-G	M-V-DLA-362-G
Control (included)			Wired control		
Rated capacity	Cooling	kW	2.20	2.80	3.60
	Heating	kW	2.50	3.20	4.00
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	78	78	78
Product specifications					
Dimensions	WxHxD	mm	710x200x462	710x200x462	710x200x462
Net weight		Kg	18.5	18.5	19.0
Sound pressure level at 1 m	H/M/L	dB(A)	30/25/22	30/25/22	31/27/25
Volume of air treated	H/M/L	m³/h	450/350/200	450/350/200	550/400/300
Fan static pressure	Std/Max	Pa	15/30	15/30	15/30
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 9.52 (3/8")		6.35 (1/4") / 12.74 (1/2")
	Condensate	mm	25	25	25
Optional parts					
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

Model			M-V-DLA-452-G	M-V-DLA-562-G
Control (included)			Wired control	
Rated capacity	Cooling	kW	4.50	5.60
	Heating	kW	5.00	6.30
Electrical data				
Power supply		Ph-V-Hz	1-220~240V-50Hz	
Power absorption		W	78	117
Product specifications				
Dimensions	WxHxD	mm	1010x200x462	1010x200x462
Net weight		Kg	24.0	25.0
Sound pressure level at 1 m	H/M/L	dB(A)	33/29/27	35/31/29
Volume of air treated	H/M/L	m³/h	750/550/400	850/700/550
Fan static pressure	Std/Max	Pa	15/30	15/30
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 12.74 (1/2")	9.52 (3/8") / 15.9 (5/8")
	Condensate	mm	25	25
Optional parts				
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)	

DUCTED HIGH STATIC PRESSURE

8 CAPACITIES
7.10~28.00 kW

ULTRA COMPACT DESIGN
only **300 mm** high for the 7.10 and 18.00 kW models

WASHABLE FILTER
better air quality

CONDENSATE DRAIN PUMP INCLUDED maximum height difference **1100 mm** from the outlet hole for models from 7.10 to 18.00 kW

Ideal for cooling and heating medium and large sized rooms

5 FAN SPEEDS
auto, low, med, high, turbo

CONTROLS
wired control included

Wi-Fi
(optional)

M-V-DHA-711~1801-G

M-V-DHA-224~280-G

Model			M-V-DHA-711-G	M-V-DHA-901-G	M-V-DHA-1121-G	M-V-DHA-1401-G
Control (included)			Wired control			
Rated capacity	Cooling	kW	7.10	9.00	11.20	14.00
	Heating	kW	8.00	10.00	12.50	16.00
Electrical data						
Power supply		Ph-V-Hz	1-220~240V-50Hz			
Power absorption		W	100	140	160	220
Product specifications						
Dimensions	WxHxD	mm	1000x300x700	1400x300x700	1400x300x700	1400x300x700
Net weight		Kg	43	57	57	58
Sound pressure level at 1 m	H/M/L	dB(A)	38/36/34	40/37/35	40/38/36	42/39/37
Volume of air treated	H/M/L	m³/h	1250/1050/950	1800/1450/1250	2000/1600/1400	2350/1900/1650
Fan static pressure	Std/Max	Pa	90/200	90/200	90/200	90/200
Connection diameter	Liquid/Gas	mm (inch)	9.52 (3/8") / 15.9 (5/8")			
	Condensate	mm	25	25	25	25
Optional parts						
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)			

Model			M-V-DHA-1601-G	M-V-DHA-1801-G	M-V-DHA-224-G	M-V-DHA-280-G
Control (included)			Wired control			
Rated capacity	Cooling	kW	16.00	18.00	22.40	28.00
	Heating	kW	18.00	20.00	25.00	31.00
Electrical data						
Power supply		Ph-V-Hz	1-220~240V-50Hz			
Power absorption		W	230	350	800	900
Product specifications						
Dimensions	WxHxD	mm	1400x300x700	1400x300x700	1483x385x791	1686x450x870
Net weight		Kg	58	58	82	105
Sound pressure level at 1 m	H/M/L	dB(A)	44/41/38	49/47/44	54/52/49	55/52/50
Volume of air treated	H/M/L	m³/h	2500/2000/1750	3000/2600/2000	4000/3600/3200	4400/4000/3600
Fan static pressure	Std/Max	Pa	90/200	90/170	100/200	100/200
Connection diameter	Liquid/Gas	mm (inch)	9.52 (3/8") / 19.05 (3/4")			9.52 (3/8") / 22.2 (7/8")
	Condensate	mm	25	25	25	25
Optional parts						
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)			

CONSOLE

5 CAPACITIES
2.20~5.00 kW

LOW SOUND IMPACT
only **27 dB(A)** for the 2.20 and 2.80 kW models

SELF-DIAGNOSIS

I FEEL FUNCTION

CONTROLS
remote control included
optional wired control

M-V-CNA-22~50-G

Wi-Fi
(optional)

Model			M-V-CNA-22-G	M-V-CNA-28-G
Control (included)			Remote control	
Rated capacity	Cooling	kW	2.20	2.80
	Heating	kW	2.50	3.20
Electrical data				
Power supply		Ph-V-Hz	1-220~240V-50Hz	
Power absorption		W	15	15
Product specifications				
Dimensions	WxHxD	mm	700x600x215	700x600x215
Net weight		Kg	16	16
Sound pressure level at 1 m	H/M/L	dB(A)	38/33/27	38/33/27
Volume of air treated	H/M/L	m3/h	400/320/270	400/320/270
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4) / 9.52 (3/8)	
	Condensate	mm	28	28
Optional parts				
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)	
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)	

Model			M-V-CNA-36-G	M-V-CNA-45-G	M-V-CNA-50-G
Control (included)			Remote control		
Rated capacity	Cooling	kW	3.60	4.50	5.00
	Heating	kW	4.00	5.00	5.50
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	20	40	40
Product specifications					
Dimensions	WxHxD	mm	700x600x215	700x600x215	700x600x215
Net weight		Kg	16	16	16
Sound pressure level at 1 m	H/M/L	dB(A)	40/37/32	46/43/39	46/43/39
Volume of air treated	H/M/L	m3/h	480/400/300	680/600/500	680/600/500
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4) / 12.74 (1/2)		
	Condensate	mm	28	28	28
Optional parts					
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)		
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

FLOOR/CEILING

6 CAPACITIES
3.60~14.00 kW

COMPACT DESIGN
235 mm height for all models

WASHABLE FILTER
better air quality

I FEEL FUNCTION

SELF-DIAGNOSIS

CONTROLS
remote control included
optional wired control

M-V-FCA-361~1401-G

Wi-Fi
(optional)

Model			M-V-FCA-361-G	M-V-FCA-561-G	M-V-FCA-711-G
Control (included)			Remote control		
Rated capacity	Cooling	kW	3.60	5.60	7.10
	Heating	kW	4.00	6.30	8.00
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	40	75	75
Product specifications					
Dimensions	WxHxD	mm	870x235x665	870x235x665	1200x 235x665
Net weight		Kg	25	31	31
Sound pressure level at 1 m	H/M/L	dB(A)	36/32/28	44/41/38	44/41/38
Volume of air treated	H/M/L	m³/h	650/610/530/460	850/800/700/600	1300/1220/1090/940
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 12.74 (1/2")	9.52 (3/8") / 15.9 (5/8")	
	Condensate	mm	17	17	17
Optional parts					
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)		
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

Model			M-V-FCA-901-G	M-V-FCA-1121-G	M-V-FCA-1401-G
Control (included)			Remote control		
Rated capacity	Cooling	kW	9.00	11.20	14.00
	Heating	kW	10.00	12.50	16.00
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	140	160	160
Product specifications					
Dimensions	WxHxD	mm	1200x235x665	1570x235x665	1570x235x665
Net weight		Kg	31	40	42
Sound pressure level at 1 m	H/M/L	dB(A)	47/43/39	47/44/42	50/48/44
Volume of air treated	H/M/L	m³/h	1500/1380/1200/1020	1800/1700/1540/1400	2100/2000/1800/1480
Connection diameter	Liquid/Gas	mm (inch)	9.52 (3/8") / 15.9 (5/8")		
	Condensate	mm	17	17	17
Optional parts					
Wired control			M-V-CW-SD1-G (LCD) / M-V-CW-TW1-G (touch) / M-V-CW-HB1-G (simplified)		
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

RECESSED FLOOR

6 CAPACITIES
2.20~7.10 kW

COMPACT DESIGN
200 mm depth on all capacities

WASHABLE FILTER
better air quality

M-V-FYA-221~711-G

Wi-Fi
(optional)

Model			M-V-FYA-221-G	M-V-FYA-281-G	M-V-FYA-361-G
Control (included)			Wired control		
Rated capacity	Cooling	kW	2.20	2.80	3.60
	Heating	kW	2.50	3.20	4.00
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	35	35	43
Product specifications					
Dimensions	WxHxD	mm	700x615x200	700x615x200	700x615x200
Net weight		Kg	23	23	23
Sound pressure level at 1 m	H/M/L	dB(A)	30/28/25	30/28/25	33/31/28
Volume of air treated	H/M/L	m³/h	450/350/250	450/350/250	550/450/350
Fan static pressure	Std/Max	Pa	10/40	10/40	10/40
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4) / 9.52 (3/8)		6.35 (1/4) / 12.74 (1/2)
	Condensate	mm	25	25	25
Optional parts					
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

Model			M-V-FYA-451-G	M-V-FYA-561-G	M-V-FYA-711-G
Control (included)			Wired control		
Rated capacity	Cooling	kW	4.50	5.60	7.10
	Heating	kW	5.00	6.30	8.00
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	45	80	90
Product specifications					
Dimensions	WxHxD	mm	900x615x200	1100x615x200	1100x615x200
Net weight		Kg	27	32	32
Sound pressure level at 1 m	H/M/L	dB(A)	33/31/28	35/33/30	37/35/33
Volume of air treated	H/M/L	m³/h	650/500/400	900/750/600	1100/900/700
Fan static pressure	Std/Max	Pa	15/60	15/60	15/60
Connection diameter	Liquid/Gas	mm (inch)		9.52 (3/8) / 15.9 (5/8)	
	Condensate	mm	25	25	25
Optional parts					
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

100% OUTDOOR AIR DUCTED

2 CAPACITIES
12.50~14.00 kW

WASHABLE FILTER
better air quality

All-air ducting allows fresh outside air to be introduced into the rooms without causing fluctuations in internal temperature.

CONTROLS
wired control included

M-V-DFA-12520~14020-G

Wi-Fi
(optional)

Model			M-V-DFA-12520-G	M-V-DFA-14020-G
Control (included)			Wired control	
Rated capacity	Cooling[1]	kW	12.50	14.00
	Heating[2]	kW	8.50	10.00
Electrical data				
Power supply		Ph-V-Hz	1-220~240V-50Hz	
Power absorption		W	200/350	200/350
Product specifications				
Dimensions	WxHxD	mm	1400x300x700	1400x300x700
Net weight		Kg	54	54
Sound pressure level at 1 m	H/M/L	dB(A)	46/50	46/50
Volume of air treated	H/M/L	m3/h	1200/2000	1200/2000
Fan static pressure	Std/Max	Pa	150/200	150/200
Connection diameter	Liquid/Gas	mm (inch)	9.52 (3/8") / 15.9 (5/8")	
	Condensate	mm	25	25
Application field (suctioned air temp.)		°C	-7~45 BS	
Optional parts				
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G	

1. Conditions: intake air 35°C DB (28°C WB), delivery air 18°C.
2. Conditions: intake air 7° C DB (6° C WB), delivery air 22° C.

ENTHALPY HEAT RECOVERY WITH COIL

3 CAPACITIES
500~1000 m³/h

COMPACT DESIGN
880 mm wide, **340 mm** high and **1700 mm** deep for the 500 m3/h model

LOW SOUND IMPACT
55 dB(A) for the 500 m3/h model

FAN SPEED
5 + automatic

DAILY TIMER

FILTER AND HEAT EXCHANGER
easily removable

FILTER CLEANING
filter cleaning and replacement reminder

HIGH degree of filtration

M-V-THE-DX-500~1000-NG

Model			M-V-THE-DX-500-NG	M-V-THE-DX-800-NG	M-V-THE-DX-1000-NG
Control (included)			Wired control		
Rated capacity	Cooling[1]	kW	8.50	12.00	14.50
	Heating[2]	kW	4.00	10.60	12.00
Heat exchange efficiency		%	73	74	73
Electrical data					
Power supply		Ph-V-Hz	1-220~240V-50Hz		
Power absorption		W	270	440	640
Product specifications					
Dimensions	WxHxD	mm	880x340x1700	1185x390x1800	1185x390x1800
Net weight		Kg	120	158	158
Sound power level	Hi	dB(A)	55	59	62
Sound pressure level at 1 m		dB(A)	41.4	46.1	50.1
Volume of air treated		m³/h	500	800	1000
Fan static pressure		Pa	150	150	150
Ducting flange	Diameter	mm	200	250	250
Connection diameter	Liquid/Gas	mm (inch)	6.35 (1/4") / 12.74 (1/2")	9.52 (3/8") / 15.9 (5/8")	9.52 (3/8") / 15.9 (5/8")
	Condensate	mm	25	25	25
Application field (suctioned air temp.)		°C	-25~48 BS		
Optional parts					
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)		

1. Conditions: indoor air 27° C DB/19.5° C WB; outdoor air 35° C DB/28° C WB.
2. Conditions: indoor air 20° C DB/12° C WB; outdoor air 7° C DB/6° C WB.

CONNECTIVITY LIMITATIONS

50-100%
The sum of the power of the indoor units + the power of the heat recovery unit must be between 50 and 100% of the nominal power of the outdoor unit.

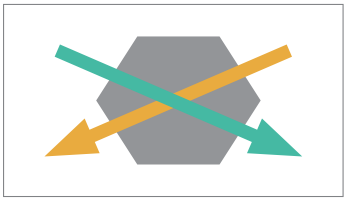
30%
The maximum power of the recovery unit must not exceed 30% of the nominal power of the outdoor unit.

FUNCTIONS AVAILABLE FROM THE CONTROL

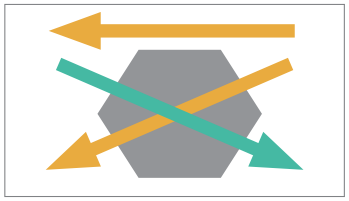
Linkage control
Automatic activation of the heat recovery unit via CAN-BUS communication if at least one indoor unit is active; shutdown if all indoor units are off.

Free cooling with automatic bypass
Available when the outside temperature drops below the inside temperature (e.g. during night hours). This function reduces the fan's energy consumption, prolonging the life of the exchanger.

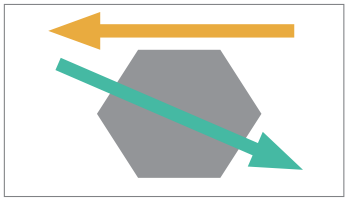
OPERATING MODES



Heat exchange mode
In this mode, the exhaust air and the fresh air enter the exchanger.



Automatic mode
In this mode the unit automatically regulates the heat exchange.



By-pass mode
In this mode the exhaust air does not pass through the exchanger.

AHU CONNECTION KIT

MECHANICAL VENTILATION

AHU EEV CONNECTION KIT

5 MODELS
3.60~56.00 kW

CLEAN CONTACT

HIGH EFFICIENCY
fewer start & stop cycles of the outdoor unit thanks to VRF technology

ENERGY SAVINGS
using DC Inverter technology

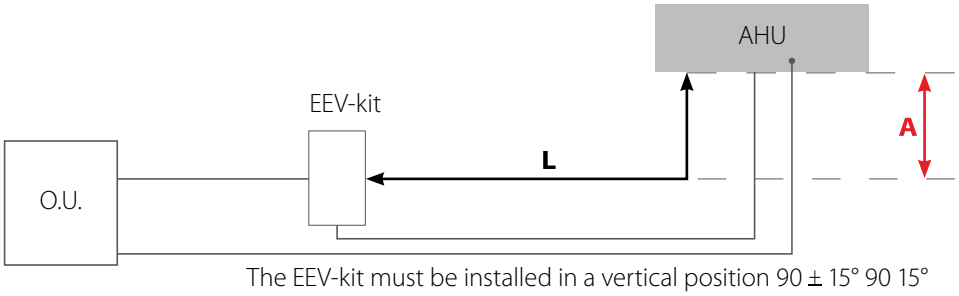
CONTROL
wired control included

M-V-AHU-362~5602-G

Model			M-V-AHU-362-G		M-V-AHU-712-G			M-V-AHU-1402-G		
Control (included)			Wired control		Wired control			Wired control		
Rated capacity	Cooling	kW	3.60		7.10			14.00		
	Heating	kW	4.00		8.00			16.00		
Settable capacity	Cooling	kW	2.80	3.60	4.50	5.60	7.10	9.00	11.20	14.00
	Heating	kW	3.20	4.00	5.00	6.30	8.00	10.00	12.50	16.00
Electrical data										
Power supply		Ph-V-Hz	1-220~240V-50Hz		1-220~240V-50Hz			1-220~240V-50Hz		
Power absorption		W	8		8			8		
Product specifications										
EEV kit dimensions	WxHxD	mm	203x85x326		203x85x326			203x85x326		
Control box dimensions	WxHxD	mm	334x111x284		334x111x284			334x111x284		
Net weight		Kg	10		10.5			10.5		
Connection diameter	Liquid from O.U. to kit	mm (inch)	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
	Liquid from kit to AHU	mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
	Gas from O.U. to AHU	mm (inch)	9.52 (3/8")	12.7 (1/2")	12.7 (1/2")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
Optional parts										
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)							

Model			M-V-AHU-2802-G					M-V-AHU-5602-G		
Control (included)			Wired control					Wired control		
Rated capacity	Cooling	kW	28.00					56.00		
	Heating	kW	31.50					63.00		
Settable capacity	Cooling	kW	22.40	28.00	33.50	40.00	45.00	50.40	56.00	84.00
	Heating	kW	25.00	31.50	37.50	45.00	50.00	56.50	63.00	94.50
Electrical data										
Power supply		Ph-V-Hz	1-220~240V-50Hz					1-220~240V-50Hz		
Power absorption		W	8					8		
Product specifications										
EEV kit dimensions	WxHxD	mm	203x85x326					246x120x500		
Control box dimensions	WxHxD	mm	334x111x284					334x111x284		
Net weight		Kg	10.5					13		
Connection diameter	Liquid from O.U. to kit	mm (inch)	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
	Liquid from kit to AHU	mm (inch)	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	15.9 (5/8")	15.9 (5/8")	19.05 (3/4")
	Gas from O.U. to AHU	mm (inch)	19.05 (3/4")	22.2 (7/8")	25.4 (1")	25.4 (1")	28.6 (9/8")	28.6 (9/8")	28.6 (9/8")	31.8 (1-1/4")
Optional parts										
Centralized control			M-V-CC-T255-G / M-V-CC-T32-G (simplified)							

L'**EEV-KIT** allows, through an electronic expansion valve regulated by an electronic control system (Control Box), the connection of an AHU to the outdoor unit of a VRF system. In this way, you can take advantage of the benefits of VRF technology.



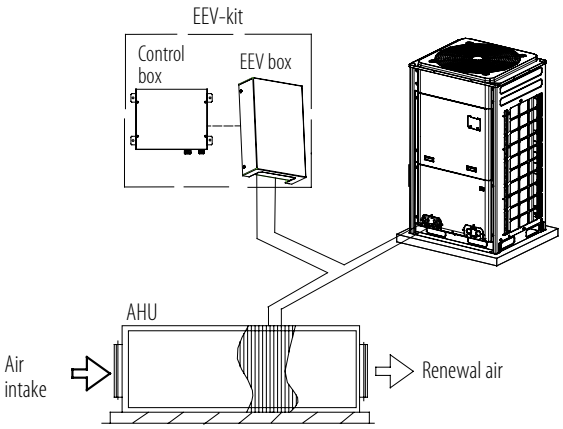
The EEV-kit must be installed in a vertical position 90 ± 15° 90 15°

A The maximum height difference between EEV-kit and AHU is 2 metres.

L The maximum distance of the liquid pipe between EEV-kit and AHU is 2 meters. To be considered in the maximum length of the refrigerant pipes.

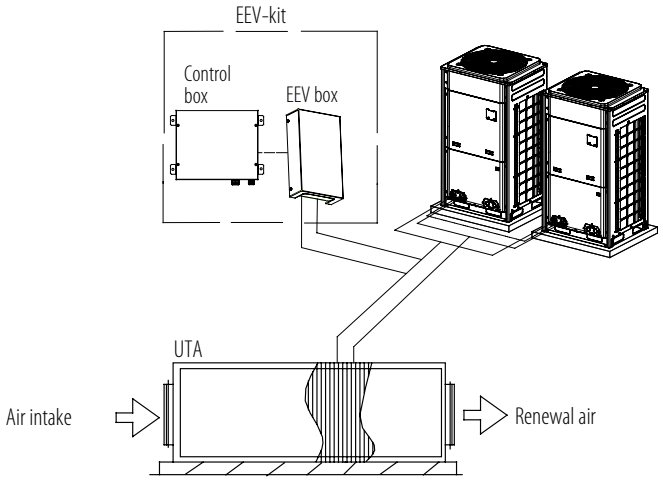
EEV-KIT

Connectivity



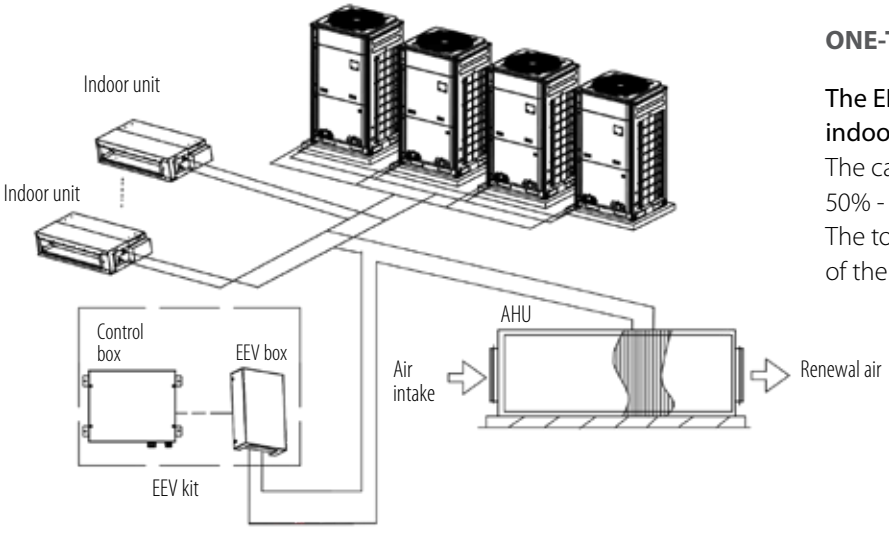
ONE-TO-ONE

An EEV-kit connected with a VRF outdoor unit.
The capacity of the EEV-kit must be between 80% - 110% of the capacity of the outdoor unit.



ONE-TO-MORE

An EEV-kit connected with multiple VRF outdoor units.
The capacity of the EEV-kit must be between 50% - 110% of the external capacity.



ONE-TO-MORE (MIXED CONNECTION)

The EEV-kit is connected to a VRF system including indoor units.
The capacity of the EEV-kit must be between 50% - 110% of the capacity of the outdoor unit.
The total capacity of the EEV-kit must not exceed 30% of the capacity of the outdoor unit.

ENTHALPY RECOVERY UNIT

4 CAPACITIES
150~500 m³/h

COMPACT DESIGN
1160 mm wide, **220 mm** high and **700 mm** deep for models from 150 to 250 m3/h

LOW SOUND IMPACT
43 dB(A) for the 150 m3/h model

VENTILATION SPEED
5 + automatic

DAILY TIMER

FILTER AND HEAT EXCHANGER
easily removable

FILTER CLEANING
filter cleaning and replacement reminder

HIGH degree of filtration (F7)

CONTROL
wired control included

M-V-THE-150~500-NG2

Model			M-V-THE-150-NG2	M-V-THE-250-NG2	M-V-THE-350-NG2	M-V-THE-500-NG2
Control (included)			Wired control			
Heat exchange efficiency[1]		%	80	75	76	73
Electrical data						
Power supply		Ph-V-Hz	1-220~240V-50Hz			
Power absorption		W	50	105	155	250
Product specifications						
Dimensions	WxHxD	mm	1160x220x700	1160x220x700	1200x240x785	1358x240x785
Net weight		Kg	50	50	60	71,5
Sound power level		dB(A)	43	50	55	57
Volume of air treated		m³/h	150	250	350	500
Fan static pressure		Pa	100	100	100	100
Ducting flange	Diameter	mm	150	150	150	185
Application field (suctioned air temp.)		°C	-15~50 DB (max UR 80%)			
Specific energy consumption[2]	SEC	kWh/m2.a	-35,1	-28,7	-	-
SEC[2] Class			A	B	-	-

Reference standards: Ecodesign Directive EU 1253/2014 for Non-residential ventilation units (NRVU) and residential ventilation units (RVU). Energy Labelling EU 1254/2014 Residential ventilation units (RVU).
1. Values relating to the following conditions: cooling efficiency: indoor air 27° C DB/20° C WB; outdoor air 35° C DB/29° C WB. Heating efficiency: indoor air 20° C DB/14° C WB; outdoor air 5° C DB/2° C WB.
2. Mandatory data only for residential ventilation units (RVU).

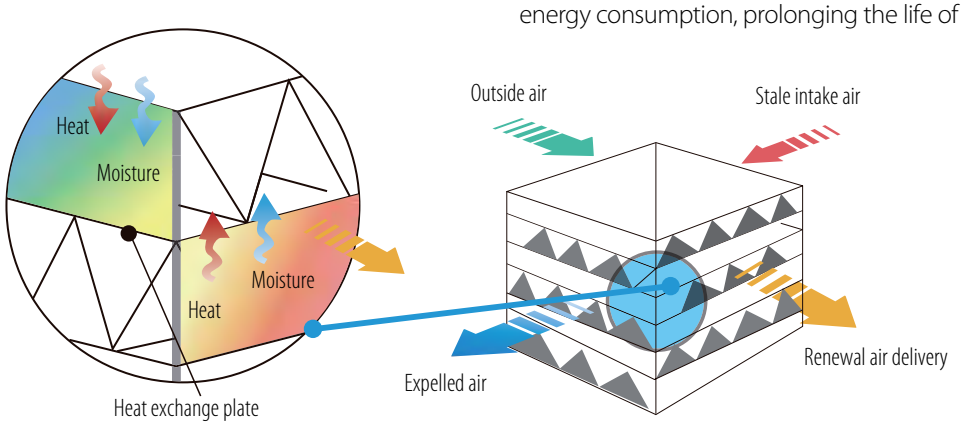
INDIVIDUAL USE ENTHALPY HEAT RECOVERY UNIT

Ventilation system that allows the enthalpic recovery of heat from the indoor air. Suitable for residential and commercial applications, it makes the environment healthy and the air clean.

The recovery unit generates energy savings, thanks to the heat and humidity of the expelled air, which are recovered.

Recovery unit operation in winter-summer

The energy contained in the fresh air expelled from the rooms, which would otherwise be dispersed into the atmosphere, is recovered; this is used to pre-heat/pre-cool the air entering from outside.



FUNCTIONS AVAILABLE FROM THE CONTROL

Linkage control

Automatic activation of the heat recovery unit via CAN-BUS communication if at least one indoor unit is active; shutdown if all indoor units are off.

Auto control

4 selectable air filtration level settings (excellent, good, moderate, sufficient).

Free cooling with automatic bypass

Available when the outdoor temperature drops below the inside temperature (e.g. during night hours). This function reduces the fan's energy consumption, prolonging the life of the exchanger.

DHW R32 AIR-TO-WATER HEAT PUMP

MW MONOBLOC
MW MODULAR MONOBLOC
MW R32 SPLIT WITH HYDROMODULE AND BUILT-IN TANK

MW MONOBLOC R32

Air-to-water heat pump

OUTDOOR UNITS

5.00 kW	6.00 kW	8.00 kW
1-Phase	1-Phase	1-Phase
MCWNGS 402 Z	MCWNGS 602 Z	MCWNGS 802 Z

10.20 kW	12.00 kW	14.20 kW	15.70 kW
1-Phase	1-Phase	1-Phase	1-Phase
MCWNGS 1002 Z	MCWNGS 1202 Z	MCWNGS 1402 Z	MCWNGS 1602 Z

10.20 kW	12.00 kW	14.20 kW	15.70 kW
3-Phase	3-Phase	3-Phase	3-Phase
MCWSGS 1002 Z	MCWSGS 1202 Z	MCWSGS 1402 Z	MCWSGS 1602 Z

AIR-TO-WATER HEAT PUMP MW MONOBLOCCO R32

MW MONOBLOC by MULTIWARM is the reliable and advantageous solution for heating, cooling and producing DHW in micro-condominiums, single homes and apartments.
The latest generation Full DC Inverter technology guarantees top-of-the-class performance and energy savings, with the added guarantee of the MULTIWARM brand.

65° **Delivery temperature, withoutintegrations**

Management via EWPE Smart app

Wi-Fi e Modbus integrati

SG Ready

SMART GRID
Reading the trend of the electricity grid, energy savings guaranteed

Heating via radiant floors, fan coils, radiators

Thanks to MULTIWARM's MW MONOBLOC it is possible to heat all rooms, powering low-temperature hydronic terminals such as radiant floors, and medium-temperature ones, such as fan-coils and high-efficiency radiators.

Main operating modes

- Cooling, heating, DHW production.
- Cooling + DHW production (with selectable priority).
- Heating + DHW production (with selectable priority).
- DHW production.

Project climate zones for heating

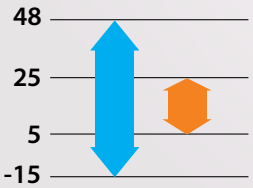
Outside design temp.	Max delivery temp.	Climate zones
+10°C	65°C	WARMER
+5°C	62°C	
+2°C	60°C	
0°	59°C	AVERAGE
-5°C	56°C	
-10°C	53°C	
-15°C	50°C	COLDER
-20°C	47°C	
-25°C	44°C	

MW MONOBLOC is the R32 heat pump that operates in the following modes:

COOLING MODE

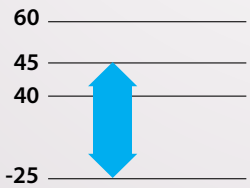
from -15° C to 48° C

from 5° C to 25° C (delivery temp.)



DHW PRODUCTION

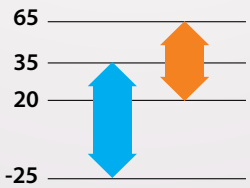
from -25° C to 45° C



HEATING MODE

from -25° C to 35° C

from 20° C to 65° C (delivery temp.)



Legend

Outdoor air temperature

Water temperature

MW MONOBLOC R32

Product benefits

SILENT MODE

Silent mode operation reduces the noise of the heat pump compressor and fan.

CONNECTION WITH OTHER HEAT SOURCES

If the outdoor temperature is lower than the set-point, the external heat source will start operating.

CLIMATE CURVE

Automatically adjusts the water flow temperature and the room temperature based on the outdoor temperature.

EMERGENCY MODE

In the event of a heat pump malfunction, the auxiliary electrical resistors are activated.

ANTI-LEGIONELLA CYCLES

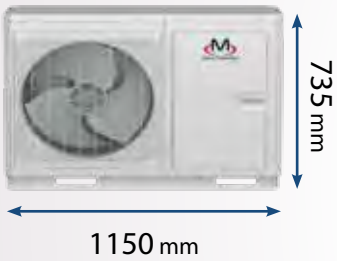
Increase the water temperature up to 70°C using the electric resistance in the DHW storage tank, thus eliminating legionella bacteria and sterilizing the water.

WEEKLY TIMER

Possibility to set up to three daily operating programs (both in heating and cooling).

Compact dimensions

5.00~8.00 kW



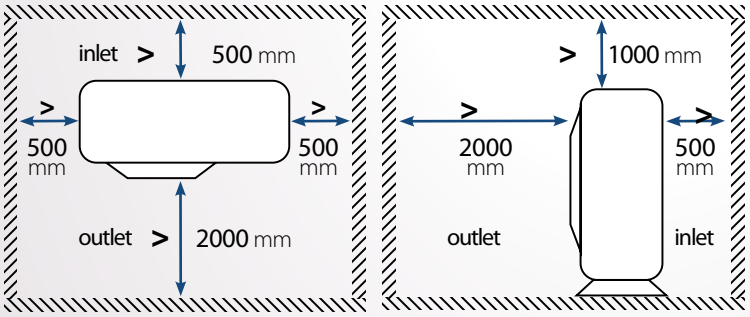
10.20~15.70 kW

Aluminum fins with anti-corrosion coating (Gold Fin)

Gold Fin

The fin coating lasts over time and ensures greater resistance to salt corrosion.

Ease of installation



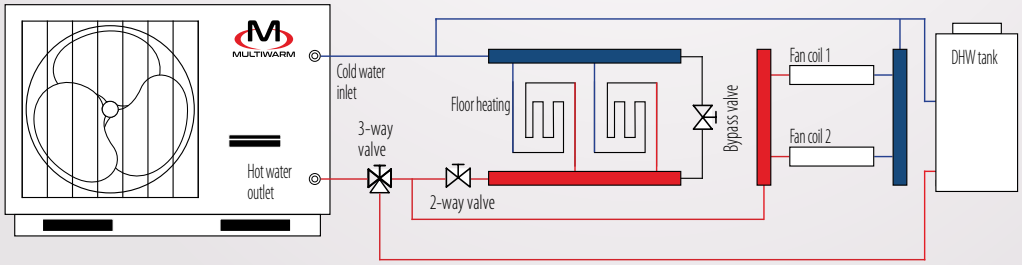
It is not necessary to make any connection to the refrigeration circuit, the hydraulic connections are sufficient.

DMC-HP-Z control

Group control, connect up to four R32 Monobloc or Split Series units, even combined together. Main functions:

- Silent mode;
- fast hot water;
- Holiday mode;
- Climate;
- Child lock;
- anti-legionella programming via electrical resistance in the tank;
- Error reset;
- Weekly timer.

System diagram



OUTDOOR UNITS

MCWNGS 402 - 602 - 802 Z
1-Phase

ENERGY CLASS

A+++
In heating mode with **35° C** delivery water temperature.

A++
In heating mode with **55° C** delivery water temperature.

Model				MCWNGS 402 Z	MCWNGS 602 Z	MCWNGS 802 Z
Heating	Rated power	A7//W35	kW	5.00	6.00	8.00
	Electrical absorption			0.93	1.11	1.63
	Performance coefficient		COP	5.40	5.40	4.90
	Rated power	A7/W45	kW	4.90	6.80	8.00
	Electrical absorption			1.17	1.66	2.11
	Performance coefficient		COP	4.20	4.10	3.80
Cooling	Rated power	A35//W18	kW	5.00	6.50	8.00
	Electrical absorption			0.96	1.27	1.65
	Energy efficiency		EER	5.20	5.10	4.85
	Rated power	A35//W7	kW	4.90	5.70	7.20
	Electrical absorption			1.40	1.75	2.25
	Energy efficiency		EER	3.50	3.25	3.20
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	35/55	kW	5/5	6/5	7/7
	Seasonal energy efficiency (ηs)		%	192/137	199/137	184/145
	Energy efficiency class		-	A+++/A++	A+++/A++	A+++/A++
	Annual energy consumption		kWh/y	2306/2882	2386/2882	2979/3996
Operating range	Outdoor air temperature	Heating	°C	-25~35		
		Cooling		-15~48		10~48
		DHW		-25~45		
	Delivery water temperature	Heating	°C	20~65		
		Cooling		5~25		
Refrigerant circuit data	Refrigerant[1]		type (GWP)	R32 (675)		
	Quantity (tons CO2)		kg (t)	0.95 (0.641)		1.23 (0.830)
	Control system			Electronic expansion valve		
	Compressor		type	Rotary - DC Inverter		
Hydraulic data	Heat exchanger	Type		With brazed stainless steel plates		
		Flow rate	m³/h	0.7	1.1	1.4
	Circulation pump	Brand		Shinhoo		
		Static pressure[2]	kPa	84	76	60
	Water connections	Type		Threaded		
		Dimension	Inch	1"F BSP		
	Operating pressure Min/Max		bar	0.5/2.5		
	Expansion vessel	Volume	L	2		
		Pre-load	bar	1		
Electrical data	Power supply		Ph/V/Hz	1ph-230V-50Hz		
	Maximum current	Heating	A	11.00	11.00	17.00
		Cooling		8.00	8.00	10.60
	Power cable (recommended)		type	3x2.5 mm²		3x4 mm²
Product specifications	Fan	Type	q.ty	DC Inverter x 1		
		Air flow	m³/h	3200		
	Sound power level		dB(A)	58		64
	Sound pressure level	Heating	dB(A)	53		56
		Cooling		51	52	55
	Dimensions	WxDxH	mm	1150x365x735		
	Weight	Net	kg	90		95
	Control (supplied)			Wired remote control		

1. 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 2. Values net of exchanger pressure drops.

GENERAL NOTE:
The above data refers to the following standards: EN 14511:2018; EN 14825:2019; EN50564:2011; EN12102-1:2018; EN12102-2:2019; (EU)No:811:2013; (EU)No:813:2013; OJ 2014/C 207/02:2014.

OUTDOOR UNITS

MCWNGS 1002 - 1202 - 1402 - 1602 Z
1-Phase

ENERGY CLASS

A+++
In heating mode with **35° C** delivery water temperature.

A+++
In heating mode with **55° C** delivery water temperature.
10.20 kW model

A++
In heating mode with **55° C** delivery water temperature.
12.00-15.70 kW models

Model					MCWNGS 1002 Z	MCWNGS 1202 Z	MCWNGS 1402 Z	MCWNGS 1602 Z
Heating	Rated power	A7//W35		kW	10.20	12.00	14.20	15.70
	Electrical absorption				2.02	2.43	2.99	3.45
	Performance coefficient			COP	5.05	4.94	4.75	4.55
	Rated power	A7/W45		kW	10.20	13.00	14.20	16.20
	Electrical absorption				2.50	3.45	3.84	4.49
	Performance coefficient			COP	4.08	3.77	3.70	3.61
Cooling	Rated power	A35//W18		kW	10.20	12.00	13.70	15.50
	Electrical absorption				2.00	2.45	3.00	3.60
	Energy efficiency			EER	5.10	4.90	4.57	4.31
	Rated power	A35//W7		kW	9.00	11.10	13.30	13.80
	Electrical absorption				2.65	3.58	4.75	5.09
	Energy efficiency			EER	3.40	3.10	2.80	2.71
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	35/55		kW	9/10	12/12	13/13	14/14
	Seasonal energy efficiency (ηs)			%	176/152	188/149	185/147	184/146
	Energy efficiency class			-	A+++/A+++	A+++/A++	A+++/A++	A+++/A++
	Annual energy consumption			kWh/y	4163/5486	5194/6388	5682/7352	6072/7675
Operating range	Outdoor air temperature	Heating		°C	-25~35			
		Cooling			-15~48			
		DHW			-25~45			
	Delivery water temperature	Heating		°C	20~65			
		Cooling			5~25			
Refrigerant circuit data	Refrigerant[1]			type (GWP)	R32 (675)			
	Quantity (tons CO2)			kg (t)	1.6 (1.080)	2.2 (1.485)		
	Control system				Electronic expansion valve			
	Compressor			type	Rotary - DC Inverter			
Hydraulic data	Heat exchanger	Type			With brazed stainless steel plates			
		Flow rate		m³/h	1.7	2.1	2.4	2.8
	Circulation pump	Brand			Shinhoo			
		Static pressure[2]		kPa	57	50	36	20
	Water connections	Type			Threaded			
		Dimension		Inch	1"F BSP			
	Operating pressure Min/Max			bar	0.5/2.5			
	Expansion vessel	Volume		L	2	3		
		Pre-load		bar	1			
load	Power supply			Ph/V/Hz	1ph-230V-50Hz			
	Maximum current	Heating		A	25.00	29.00	30.00	30.00
		Cooling			17.50	17.00	21.00	23.00
	Power cable (recommended)			tipo	3x6 mm²			
Product specifications	Fan	Type		q.ty	DC Inverter x 1			
		Air flow		m³/h	5800	5015		
	Sound power level			dB(A)	68			
	Sound pressure level	Heating		dB(A)	56		58	59
		Cooling			54		55	56
	Dimensions	WxDxH		mm	1206x445x878			
	Weight	Net		kg	114	132		
	Control (supplied)				Wired remote control			

1. 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 2. Values net of exchanger pressure drops.

GENERAL NOTE:
The above data refers to the following standards: EN 14511:2018; EN 14825:2019; EN50564:2011; EN12102-1:2018; EN12102-2:2019; (EU)No:811:2013; (EU)No:813:2013; OJ 2014/C 207/02:2014.

OUTDOOR UNITS

MCWSGS 1002 - 1202 - 1402 - 1602 Z
3-Phase

ENERGY CLASS

A+++
In heating mode with **35° C** delivery water temperature.

A+++
In heating mode with **55° C** delivery water temperature.
12.00-15.70 kW models

A++
In heating mode with **55° C** delivery water temperature.
10.20 kW model

Model				MCWSGS 1002 Z	MCWSGS 1202 Z	MCWSGS 1402 Z	MCWSGS 1602 Z
Heating	Rated power	A7//W35	kW	10,20	12.00	14.20	15.70
	Electrical absorption			2.06	2.49	3.09	3.57
	Performance coefficient		COP	4.95	4.82	4.60	4.40
	Rated power	A7/W45	kW	10.20	13.00	14.20	16.20
	Electrical absorption			2.60	3.45	3.84	4.49
	Performance coefficient		COP	3.92	3.77	3.70	3.61
Cooling	Rated power	A35//W18	kW	10.20	12.00	13.90	15.40
	Electrical absorption			2.13	2.61	3.32	4.05
	Energy efficiency		EER	4.79	4.60	4.19	3.80
	Rated power	A35//W7	kW	9.10	11.10	13.30	13.80
	Electrical absorption			2.80	3.58	4.75	5.09
	Energy efficiency		EER	3.25	3.10	2.80	2.71
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	35/55	kW	9/10	12/12	13/13	13/14
	Seasonal energy efficiency (ηs)		%	189/140	180/150	179/150	179/150
	Energy efficiency class		-	A+++/A++	A+++/A+++	A+++/A+++	A+++/A+++
	Annual energy consumption		kWh/y	4069/5907	5517/6391	5927/7176	5927/7404
Operating range	Outdoor air temperature	Heating	°C	-25~35			
		Cooling		-15~48			
		DHW		-25~45			
	Delivery water temperature	Heating	°C	20~65			
		Cooling		5~25			
Refrigerant circuit data	Refrigerant[1]		type (GWP)	R32 (675)			
	Quantity (tons CO2)		kg (t)	1.6 (1.080)	2.2 (1.485)		
	Control system			Electronic expansion valve			
	Compressor		type	Rotary - DC Inverter			
Hydraulic data	Heat exchanger	Type		With brazed stainless steel plates			
		Flow rate	m³/h	1.7	2.1	2.4	2.8
	Circulation pump	Brand		Shinhoo			
		Static pressure[2]	kPa	57	50	36	20
	Water connections	Type		Threaded			
		Dimension	Inch	1"F BSP			
	Operating pressure Min/Max		bar	0.5/2.5			
	Expansion vessel	Volume	L	3			
		Pre-load	bar	1			
Electrical data	Power supply		Ph/V/Hz	3ph-400V-50Hz			
	Maximum current	Heating	A	9.00	11.50	12.00	12.50
		Cooling		6.00	5.00	8.00	8.50
	Power cable (recommended)		type	5x2.5 mm²			
Product specifications	Fan	Type	q.ty	DC Inverter x 1			
		Air flow	m³/h	5800	5015		
	Sound power level		dB(A)	68			
	Sound pressure level	Heating	dB(A)	56		58	59
		Cooling		54		55	56
	Dimensions	WxDxH	mm	1206x445x878			
	Weight	Net	kg	124	138		
	Control (supplied)			Wired remote control			

1. 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 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 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. 2. Values net of exchanger pressure drops.

GENERAL NOTE:
The above data refers to the following standards: EN 14511:2018; EN 14825:2019; EN50564:2011; EN12102-1:2018; EN12102-2:2019; (EU)No:811:2013; (EU)No:813:2013; OJ 2014/C 207/02:2014.

MW MODULAR MONOBLOC R32

Air-to-water heat pump

OUTDOOR UNITS

36.02 kW	62.60 kW
3-Phase	3-Phase
MCWSGS 3501 Z	MCWSGS 6001 Z

MW MONOBLOC MODULAR AIR-TO-WATER HEAT PUMP R32

The new range of modular Full DC Inverter heat pumps is ideal for cooling and heating residential and commercial buildings. Available in two sizes, 35 and 60 kW of cooling capacity, modularity is one of its most important advantages; in fact, it is possible to combine the two models up to 16 units, for a maximum of 960 kW of capacity.

High power in combination

35 & 60 kW

Outdoor units' capacities

960 kW

Maximum capacity combining 16 units of 60 kW

Energy efficiency

A++

In heating mode with **35° C** delivery water temperature.

R32

30% less charge than R410A gas.

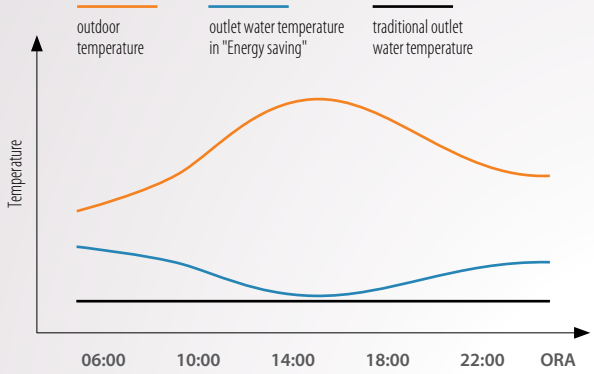
Modbus

The system is equipped with Modbus protocol as standard.

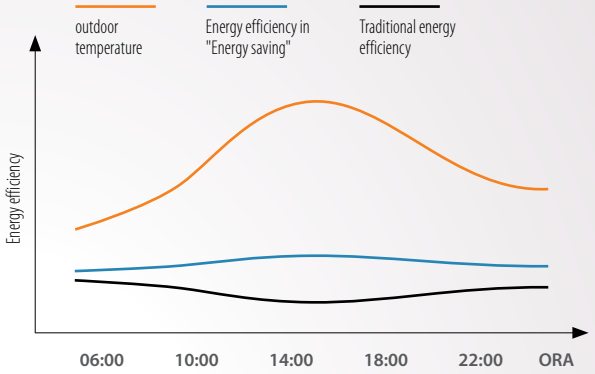
Control consumption with the "Energy saving" mode

The unit is able to estimate the thermal load of the building based on the outside air temperature, consequently modifying the flow water temperature set in order to reduce energy consumption.

OUTLET WATER TEMPERATURE



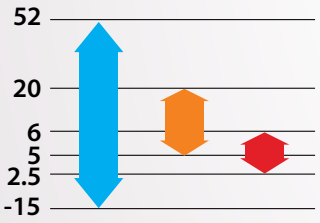
ENERGY EFFICIENCY TREND



Wide operating range

COOLING MODE

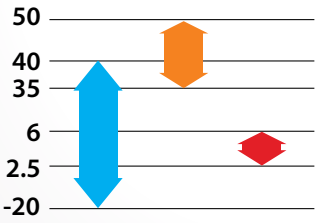
- from -15° C to 52° C
- from 5° C to 20° C (delivery temp.)
- from 2.5° C to 6° C



- Outdoor air temperature
- Delivery water temperature

HEATING MODE

- from -20° C to 40° C
- from 35° C to 50° C (delivery temp.)
- from 2.5° C to 6° C



- Water delivery temperature difference

-15°C
Minimum outside temperature in cooling mode

52°C
Maximum outside temperature in cooling mode

-20°C
Minimum outside temperature in heating mode

40°C
Maximum outside temperature in heating mode

Very quiet operation

- Wide plastic fan blades
- «Quiet mode» function
- Compressor sound insulation
- Special design of the fan area

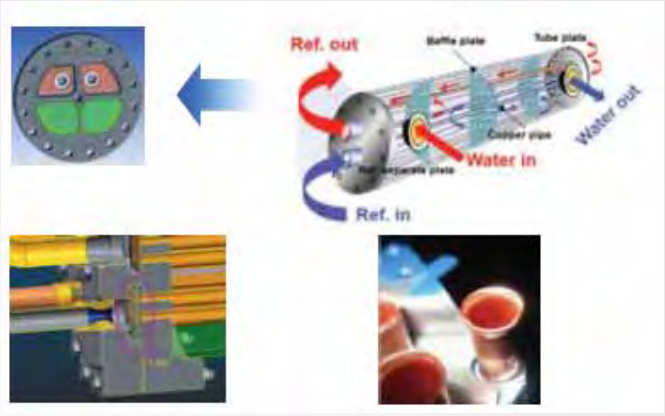
52dB(A)
sound level at partial loads

High efficiency with shell and tube heat exchanger

Heat .exchanger with "Dual flow" design, to increase the efficiency and capacity of the unit.

The special design of the plate and the related constriction at the exchanger inlet maintain a regular and uniform flow of refrigerant in order to improve exchange efficiency.

The U-thread inside the copper pipes improves the laminar flow of the fluid and facilitates heat exchange.



Longer service life with balanced work function

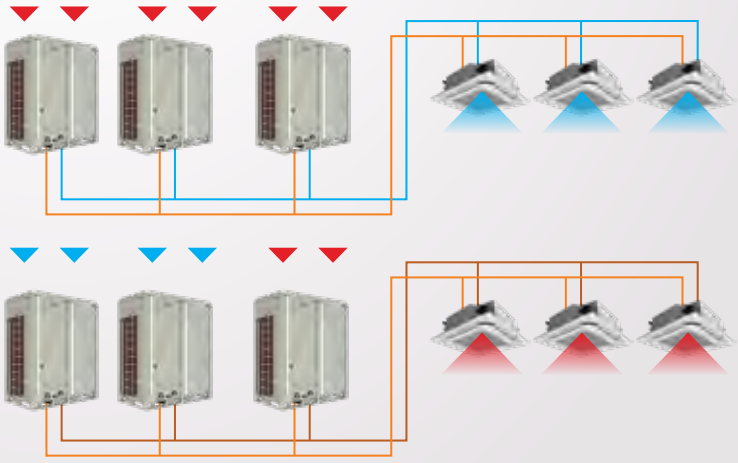
Thanks to smart control it is possible to balance the working time of the compressors in order to avoid excess work for only some, this improves the reliability of the system and its service life.

Greater reliability with the rotation function of the hydronic pumps

The units do not have hydronic pumps, which must therefore be provided externally, even in pairs. The pump rotation function can be activated automatically in order to increase their service life.

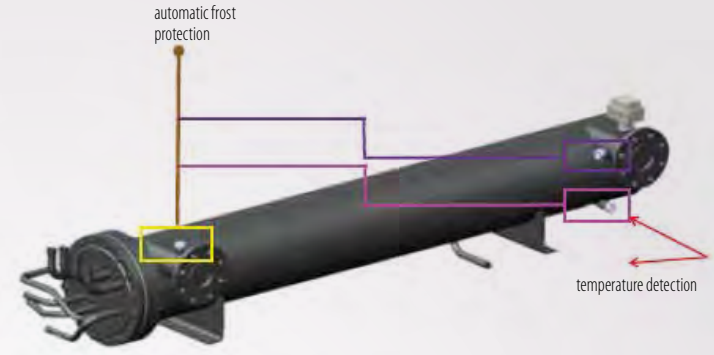
Winter comfort with selective machine defrosting

Only a third of the outdoor units are allowed to defrost simultaneously, thus reducing fluctuations in the outlet water temperature and, consequently, improving room comfort.



Frost protection for temperatures below 5°C

Anti-freeze protection is automatically activated by the unit when the outside temperature drops below 5°C, both in cooling and heating.



Operational continuity with free master unit

Each unit can be a master. In the event of a malfunction of a master unit, communication between the units of the same system is timely. A possible problem on one unit does not affect the normal functioning of the others, ensuring operational continuity.

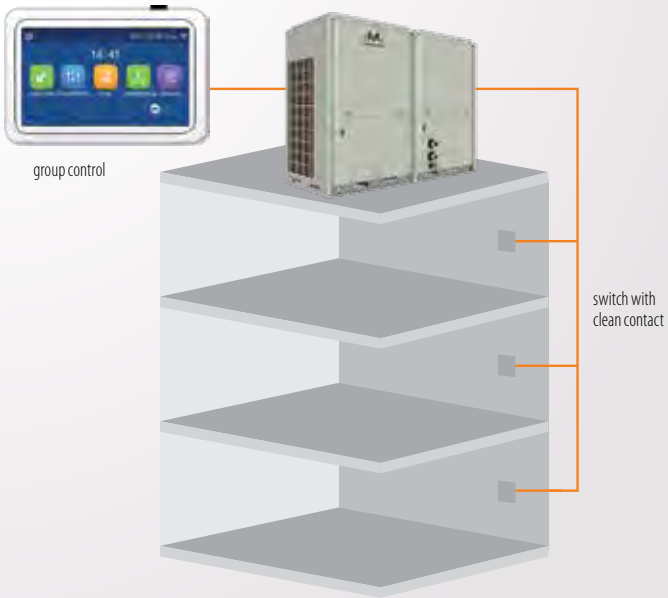
Centralized control up to 16 units

The wired remote control allows you to control up to 16 units.

- It is equipped with a 4.3-inch backlit LCD touch screen display.
- Allows the display of parameters and operating status in real time.
- It features anti-corrosion structure.
- Touch screen, allows easy and quick operations.
- It can show up to 10 error codes on the same page.

Remote on/off thanks to the clean contact

The unit (or group of units) can be put into standby/ON by means of a clean external contact.



OUTDOOR UNITS

MCWSGS 3501 Z

MCWSGS 6001 Z

ENERGY CLASS

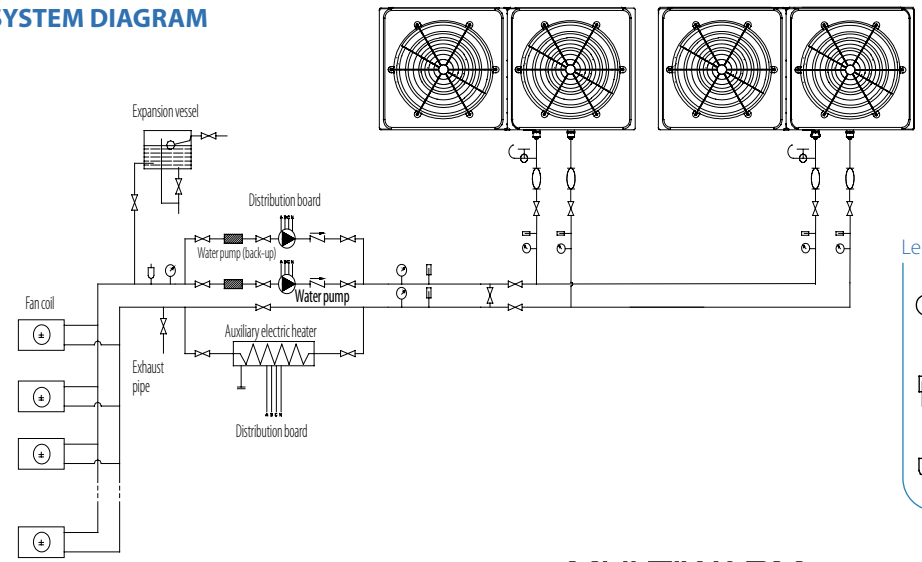
A++

In heating mode with **35° C** delivery water temperature.

Model				MCWSGS 3501 Z	MCWSGS 6001 Z
Heating	Rated power	A7//W35	kW	36.02	62.60
	Electrical absorption			8.81	15.08
	Performance coefficient		COP	4.09	4.15
	Rated power	A7/W45	kW	35.00	65.00
	Electrical absorption			10.60	19.90
	Performance coefficient		COP	3.30	3.27
Cooling	Rated power	A35//W7	kW	32.00	60.00
	Electrical absorption			11.70	20.80
	Energy efficiency		EER	2.74	2.88
	Potenza massima	A35//W18	kW	41.38	72.18
	Electrical absorption			11.18	18.60
	Energy effciency		EER	3.70	3.88
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	W35	kW	24.00	51.00
	Seasonal energy efficiency (ηs)		%	153.0	153.0
	Energy efficiency class		-	A++	A++
	Annual energy consumption		kWh/y	12504	25964
Operating range	Outdoor air temperature	Heating	°C	-20~40	
		Cooling		-15~52	
	Delivery water temperature	Heating	°C	35~50	
		Cooling	°C	5~20	
Refrigerant circuit data	Refrigerant type (GWP)			R32 (675)	
	Quantity (tons CO2)		kg (t)	5.5 (3.713)	5.5 x 2 (7.425)
	Control system			Electronic expansion valve	
	Compressor		type	Twin Rotary DC Inverter x 1	Twin Rotary DC Inverter x 2
Hydraulic data	Heat exchanger	Type		Shell and tube	
		Flow rate	m³/h	5.5	10.3
		Load loss	kPa	80	55
	Circulation pump			Not included	
	Water connections	Type		Threaded	Threaded
		Dimension	Inch	G1" 1/4 M (DN32)	G2" M (DN50)
	Operating pressure Min/Max		bar	0.6/16	
	Expansion vessel			Not included	
Electrical data	Power supply		Ph-V-Hz	3-380~415V-50Hz	
	Maximum current		A	22.00	52.00
	Power cable (recommended)		type	5x6 mm²	5x16 mm²
Product specifications	Fan	Type	q.ty	DC Inverter x 2	DC Inverter x 2
		Air flow	m³/h	12600	24000
	Sound pressure level		dB(A)	62	68
	Sound power level		dB(A)	78	86
	Dimensions	WxDxH	mm	1340x845x1605	2200x965x1675
	Weight	Net	kg	405	686
	Controls	Wired control (NOT included)		DMWZ-CWG-BIG	
		Climate curve		NOT available	
		Modbus		Integrated	

GENERAL NOTE: The above data refers to the following standards: EN 14511:2018; EN 14825:2019; EN50564:2011; EN12102-1:2018; EN12102-2:2019; (EU)No:811:2013; (EU)No:813:2013; OJ 2014/C 207/02:2014

SYSTEM DIAGRAM



MW R32 SPLIT WITH HYDROMODULE AND BUILT-IN TANK

Air-to-water heat pump

OUTDOOR UNITS

MCENGS 600 Z

MCENGS 800~1200 Z
MCESGS 1400~1600 Z

HYDROMODULE TYPE INDOOR UNIT

MHNGS 400~1600 Z
MHSGS 1200~1600 Z

INDOOR UNIT WITH BUILT-IN TANK

MHANGS 401~1601 Z
MHASGS 1201~1601 Z

MW R32 SPLIT AIR-TO-WATER HEAT PUMP WITH HYDROMODULE AND BUILT-IN TANK

The new range of MW R32 Split air-to-water heat pumps with hydromodule and integrated tank with latest-generation DC Inverter technology is ideal for cooling, heating and DHW production. It is available in a single-phase version from 6 to 12 kW and in a three-phase version from 14 to 15.5 kW of thermal power. It achieves very high levels of efficiency in heating, up to 5 of COP.

Energy efficiency

A+++

In heating mode with **35° C** delivery water temperature.

A++

In heating mode with **55° C** delivery water temperature.

R32

30% less charge than R410A gas.

Design flexibility

6~15.5 kW

Capacities

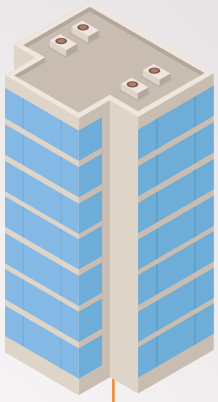
Features of the MW R32 Split heat pump with hydromodule and built-in tank

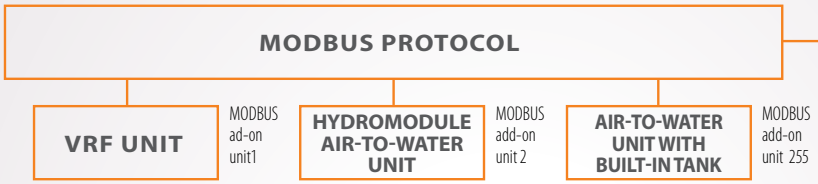
- DC Brushless Axial fans are designed for aerodynamic optimization, guaranteeing low noise levels, but high efficiency and large air flow.
- It is equipped with an electric resistance on the base, to prevent ice formation during winter operation.
- The outdoor unit is equipped with an electronic expansion valve.
- The system is equipped with Modbus protocol as standard: control via WiFi is possible.

Connectivity and remote control

The unit allows connection to a BMS supervision system using the Modbus protocol as standard.

By installing the MULTIWARM Ewpe Smart APP application on your smartphone, you will be able to remotely control the most significant parameters of the heat pump via integrated WiFi.





Dual stage compressor with vapor injection

Under low outside temperature conditions, the dual-stage compressor with vapor injection reduces heat capacity losses and has higher energy efficiency than the conventional compressor.

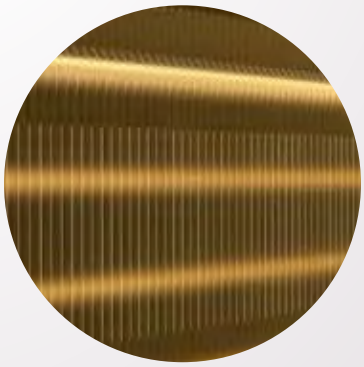
Under the same conditions, high compressor discharge temperatures and other problems can be completely avoided and the compressor reliability is significantly higher.

Double-stage compression, double-stage lamination and steam injection increase the outlet water temperature and improve control accuracy.

Golden fin anti-corrosion protective treatment

The heat exchanger coils are subjected to a special protective anti-corrosion treatment "Golden Fin". The heat exchanger fins, made of aluminum-manganese, are coated with a special layer of epoxy resin, which gives them the typical golden color, and with an additional hydrophilic layer.

This special treatment is able to protect the exchanger from rust and corrosion in areas with air with a high salt concentration, typical of marine areas.



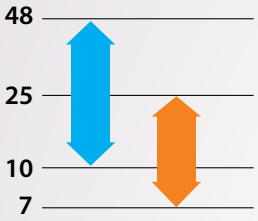
Wide operating range

The outlet water temperature range is from 20°C to 60°C: this allows use with radiant floors, hydronic terminals and medium temperature radiators.

COOLING MODE

from 10° C to 48° C

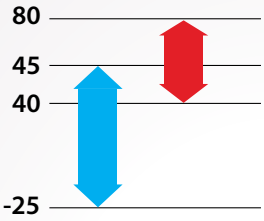
from 7° C to 25° C (delivery temp.)



DHW PRODUCTION

from -25° C to 45° C

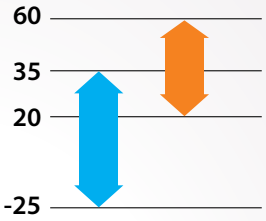
from 40° C to 80° C (tank temp.)



HEATING MODE

from -25° C to 35° C

from 20° C to 60° C (delivery temp.)



Outdoor air temperature

Delivery water temperature

DHW tank temperature

48°C
Maximum outside temperature in cooling mode

-25°C
Minimum outside temperature in heating mode

Touch screen control panel

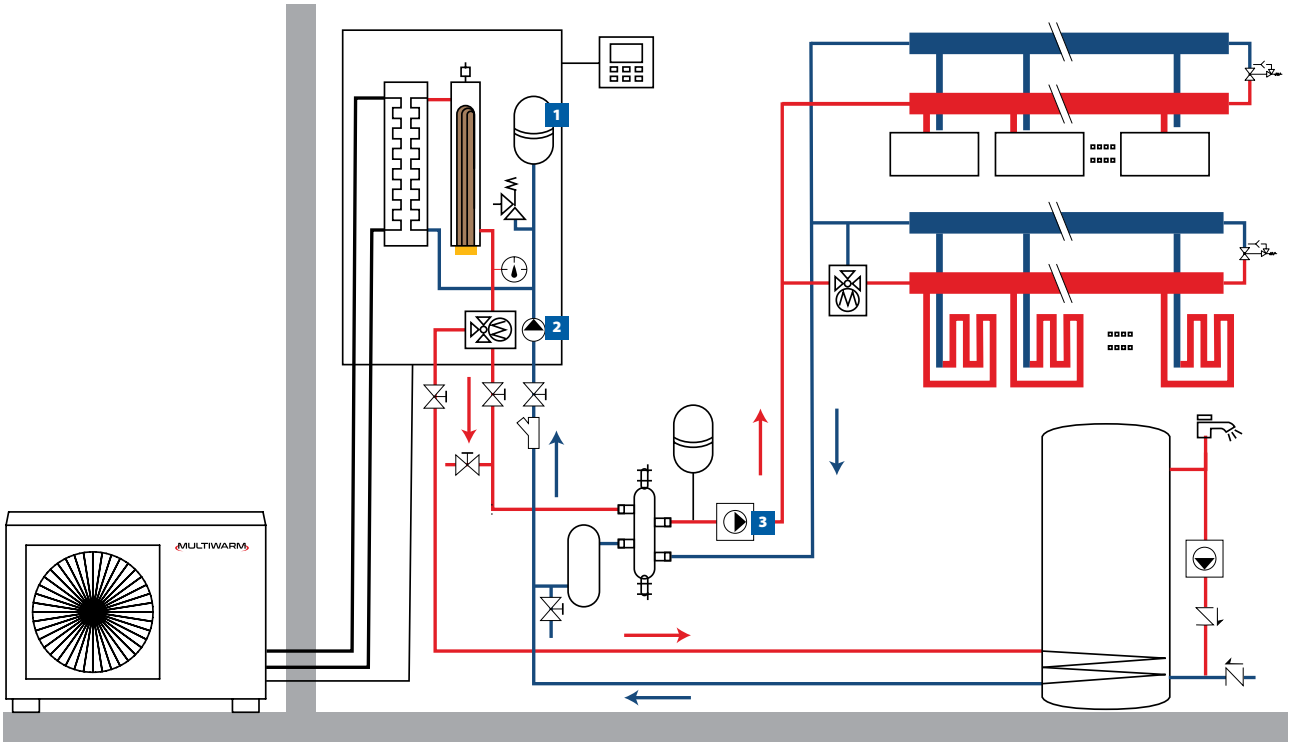
The control panel, supplied as standard and integrated into the indoor unit, allows you to:

- define the operating mode of the heat pump and its priorities (heating, cooling, production of domestic hot water);
- set all the main operating parameters (set point, hysteresis, etc.);
- activate external or internal systems for integration or replacement of the heating and domestic hot water production unit;
- manage the unit commissioning activity;
- view the status of the operating parameters of the main components of the heat pump;
- manage the unit remotely by connecting to a Modbus network or via the Wi-Fi integrated into the control panel.

Specific auxiliary functions are also available in the control panel, including:

- automatic management of the fluid delivery temperature based on the external temperature (climate curve);
- weekly and time-band operation programming;
- activation of silent operation;
- emergency management in case of unit malfunction;
- programmable activation of the anti-legionella cycle via electric resistance in the tank;
- automatic activation of frost protection.

SPLIT MODEL WITH HYDROMODULE - SYSTEM DIAGRAM



NOTE: 1. Expansion vessel referred to the system circuit. Check that what is included in the unit is sufficient for the purpose. 2. Primary circulator on the system side. 3. Secondary circulator on the system side.

DMC-HP-Z control

Group control, connect up to four R32 Monobloc or Split Series units, even combined together. Main functions:

- Silent mode;
- fast hot water;
- Holiday mode;
- Climate;
- Child lock;
- anti-legionella programming via electrical resistance in the tank;
- Error reset;
- Weekly timer.

SPLIT MODEL WITH HYDROMODULE

MCENGS 600 Z

MCENGS 800~1200 Z
MCESGS 1400~1600 Z

MHNGS 400-1600 Z
MHSGS 1200~1600 Z

ENERGY CLASS

A+++

In heating mode with **35° C** delivery water temperature.

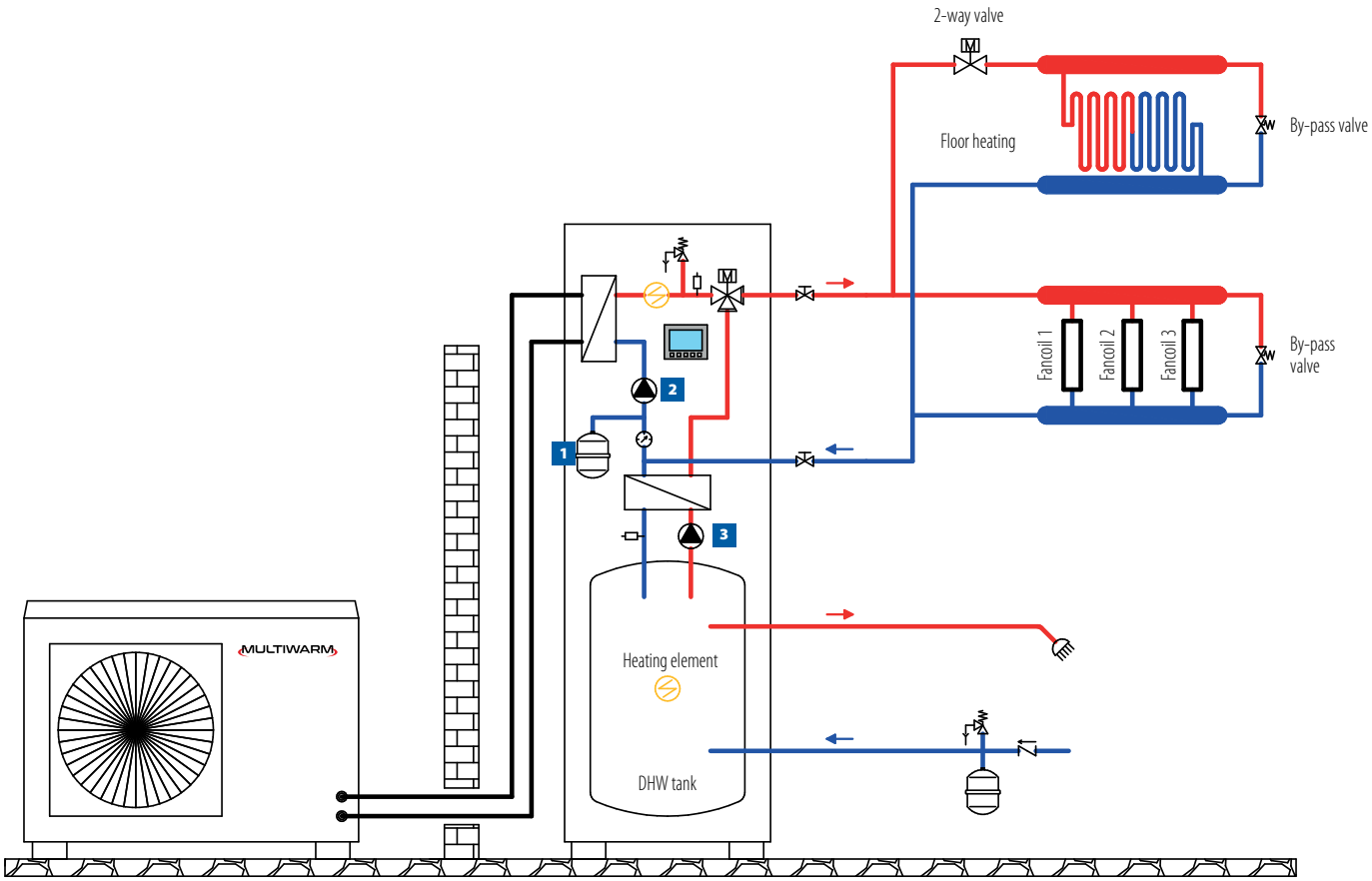
A++

In heating mode with **55° C** delivery water temperature.

Outdoor unit model				MCENGS 600 Z	MCENGS 800 Z	MCENGS 1000 Z	MCENGS 1200 Z	MCESGS 1400 Z	MCESGS 1600 Z
Riscaldamento	Rated power	A7//W35	kW	6.00	8.00	10.00	12.00	14.00	15.50
	Electrical absorption			1.20	1.61	2.10	2.40	2.98	3.44
	Performance coefficient		COP	5.00	4.97	4.76	5.00	4.70	4.51
	Rated power	A7/W45	kW	5.80	8.00	9.85	12.40	14.44	16.13
	Electrical absorption			1.52	2.07	2.69	3.29	3.63	4.16
	Performance coefficient		COP	3.82	3.86	3.66	3.77	3.98	3.88
Cooling	Rated power	A35//W18	kW	5.80	7.70	9.35	11.00	12.60	13.00
	Electrical absorption			1.13	1.72	2.36	2.50	3.41	3.6
	Energy efficiency		EER	5.15	4.48	3.96	4.40	3.70	3.61
	Rated power	A35//W7	kW	4.00	7.15	7.60	10.59	11.24	11.52
	Electrical absorption			1.16	2.49	2.77	3.79	4.13	4.38
	Energy efficiency		EER	3.45	2.87	2.74	2.79	2.72	2.63
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	35/55	kW	6/5	7/7	9/8	11/11	12/13	13/13
	Seasonal energy efficiency (ηs)		%	178.7/127.4	181/129	181/127	182/126	175/131	175/131
	Energy efficiency class		-	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
	Annual energy consumption		kWh/y	2729/3169	3149/4371	4038/5091	4967/6985	5552/7958	6027/7958
Operating range	Outdoor air temperature	Heating	°C	-25~35					
		Cooling		10~48					
		DHW		-25~45					
Refrigerant circuit data	Refrigerant type (GWP)			R32 (675)					
	Q.ty of pre-charge (tons CO2)		kg (t)	1.1 (0.743)	1.84 (1.242)	1.84 (1.242)		1.84 (1.242)	
	Piping diameter Liquid/Gas		mm (inch)	6.35(1/4") / 12.74(1/2")		6.35(1/4") / 12.74(1/2")	6.35(1/4") / 15.88(5/8")	6.35(1/4") / 15.88(5/8")	
	Max splitting length		m	20	15	15	15	15	15
	Max height diffrence O.U-I.U. / I.U.-O.U.		m	15	15	15	15	15	15
	Splitting length without additional charge		m	10	15	15	15	15	15
	Additional charge		g/m	16	0	0	0	0	0
	Refrigerant control system			Electronic expansion valve					
	Compressor		type	Rotary - DC Inverter					
Electrical data	Power supply		Ph-V-Hz	1ph-230V-50Hz				3ph-400V-50Hz	
	Maximum current	Heating	A	10.00	13.50	15.00	17.80	8.00	8.50
		Cooling		11.00	20.00	22.00	25.60	11.50	11.50
	Power cable (recommended)		type	3x2.5 mm²		3x4 mm²		5x2.5 mm²	
Product specifications	Fan	Type	q.ty	DC Inverter		DC Inverter		DC Inverter	
		Air flow	m³/h	3200	3300	3300	5015	5015	5015
	Sound power level		dB(A)	62	67	68	68	68	68
	Sound pressure level		dB(A)	52	55	55	57	58	58
	Dimensions	WxDxH	mm	975x396x702	982x427x787	982x427x787	940x460x820	940x460x820	940x460x820
	Weight	Net	kg	55	82	82	104	110	110
Indoor unit model				**MHNGS 400-600 Z**	**MHNGS 800-1000 Z**		**MHNGS 1200-1600 Z**	**MHSGS 1200-1600 Z**	
Operating range	Delivery water temperature	Heating	°C	20~60	20~60		20~60	20~60	
		Cooling	°C	7~25	7~25		7~25	7~25	
	DHW temperature (tank)			40~80	40~80		40~80	40~80	
Hydraulic data	Water/freon heat exchanger	Type		Brazed plate					
	Circulation pump	Brand		Shinhoo					
	Water connections	Type		Threaded					
		Dimension	Inch	1"M BSP	1"M BSP		1"M BSP	1"M BSP	
	Operating pressure	Min/Max	bar	0.5/2.5	0.5/2.5		0.5/2.5	0.5/2.5	
	Expansion vessel	Volume	L	10	10		10	10	
		Pre-load	bar	1	1		1	1	
Electrical data	Power supply		Ph-V-Hz	1ph-230V-50Hz				3ph-400V-50Hz	
	Electrical integration		kW	3.00	6.00		6.00	6.00	
	Electrical absorption	Max	kW	3.10	6.10		6.10	6.1	
	Power cable (recommended)		type	3x2.5 mm²	3x6 mm²		3x6 mm²	5x4 mm²	
Product specifications	Sound power level		dB(A)	42	42		42	42	
	Sound pressure level		dB(A)	29	29		29	29	
	Dimensions	WxDxH	mm	460x318x860	460x318x860		460x318x860	460x318x860	
	Weight	Net	kg	58	58		58	60	
	Control (supplied)			On-board machine control					
	Integrated remote control			Wifi. Modbus					

GENERAL NOTE: The above data refers to the following standards: EN 14511:2018; EN 14825:2019; EN50564:2011; EN12102-1:2018; EN12102-2:2019; (EU)No:811:2013; (EU)No:813:2013; OJ 2014/C 207/02:2014.

SPLIT MODEL WITH BUILT-IN TANK - SYSTEM DIAGRAM



NOTE: 1. Expansion vessel referred to the system circuit. Check that what is included in the unit is sufficient for the purpose. 2. System side circulator. 3. Sanitary water side circulator.

DMC-HP-Z control

Group control, connect up to four R32 Monobloc or Split Series units, even combined together. Main functions:

- Silent mode;
- fast hot water;
- Holiday mode;
- Climate;
- Child lock;
- anti-legionella programming via electrical resistance in the tank;
- Error reset;
- Weekly timer.

SPLIT MODEL WITH BUILT-IN TANK

MCENGS 600 Z

MCENGS 800~1200 Z
MCESGS 1400~1600 Z

MHANGS 401-1601 Z
MHASGS 1201-1601 Z

ENERGY CLASS

A+++

In heating mode with **35° C** delivery water temperature.

A++

In heating mode with **55° C** delivery water temperature.

Outdoor unit model				MCENGS 600 Z	MCENGS 800 Z	MCENGS 1000 Z	MCENGS 1200 Z	MCESGS 1400 Z	MCESGS 1600 Z
Heating	Rated power	A7//W35	kW	6.00	8.00	10.00	12.00	14.00	15.50
	Electrical absorption			1.20	1.61	2.10	2.40	2.98	3.44
	Performance coefficient		COP	5.00	4.97	4.76	5.00	4.70	4.51
	Rated power	A7/W45	kW	5.80	8.00	9.85	12.40	14.44	16.13
	Electrical absorption			1.52	2.07	2.69	3.29	3.63	4.16
	Performance coefficient		COP	3.82	3.86	3.66	3.77	3.98	3.88
Cooling	Rated power	A35//W18	kW	5.80	7.70	9.35	11.00	12.60	13.00
	Electrical absorption			1.13	1.72	2.36	2.50	3.41	3.60
	Energy efficiency		EER	5.13	4.48	3.96	4.40	3.70	3.61
	Rated power	A35//W7	kW	4.00	7.15	7.60	10.59	11.24	11.52
	Electrical absorption			1.16	2.49	2.77	3.79	4.13	4.38
	Energy efficiency		EER	3.45	2.87	2.74	2.79	2.72	2.63
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	35/55	kW	6/5	7/7	9/8	11/11	12/13	13/13
	Seasonal energy efficiency (ηs)		%	182/128	181/129	181/127	182/126	175/132	175/132
	Energy efficiency class		-	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
	Annual energy consumption		kWh/y	2685/3152	3149/4371	4038/5091	4967/6985	5552/7958	6027/7958
Operating range	Outdoor air temperature	Heating	°C	-25~35					
		Cooling		10~48					
		DHW		-25~45					
Refrigerant circuit data	Refrigerant type (GWP)			R32 (675)					
	Q.ty of pre-charge (tons CO2)		kg (t)	1.1 (0.743)	1.84 (1.242)	1.84 (1.242)		1.84 (1.242)	
	Piping diameter Liquid/Gas		mm (inch)	6.35(1/4") / 12.74(1/2")		6.35(1/4") / 12.74(1/2")	6.35(1/4") / 15.88(5/8")	6.35(1/4") / 15.88(5/8")	
	Max splitting length		m	20	25	25	15	15	15
	Max height diffrence O.U-I.U. / I.U.-O.U.		m	15	15	15	15	15	15
	Splitting length without additional charge		m	10	25	25	15	15	15
	Additional charge		g/m	16	0	0	0	0	0
	Refrigerant control system			Electronic expansion valve					
	Compressor		type	Two-stage rotary- DC Inverter					
Electrical data	Power supply		Ph-V-Hz	1ph-230V-50Hz				3ph-400V-50Hz	
	Maximum current	Heating	A	10.00	13.50	15.00	17.80	8.00	8.50
		Cooling		11.00	20.00	22.00	25.60	11.50	11.50
	Power cable (recommended)		type	3x2.5 mm2		3x4 mm2		5x2.5 mm2	
Product specifications	Fan	Type	q.ty	DC Inverter		DC Inverter		DC Inverter	
		Air flow	m3/h	3200	3300	3300	5015	5015	5015
	Sound power level		dB(A)	62	67	68	68	68	68
	Sound pressure level		dB(A)	52	55	55	57	58	58
	Dimensions	WxDxH	mm	975x396x702	982x427x787	982x427x787	940x460x820	940x460x820	940x460x820
	Weight	Net	kg	55	82	82	104	110	110

Indoor unit model				MHANGS 401-601 Z	MHANGS 801-1001 Z	MHANGS 1201-1601 Z	MHASGS 1201-1601 Z
Operating range	Delivery water temperature	Heating	°C	20~60	20~60	20~60	20~60
		Cooling	°C	7~25	7~25	7~25	7~25
	DHW temperature (tank)			40~80	40~80	40~80	40~80
Hydraulic data	DHW tank capacity		L	190	190	190	190
	Water/freon heat exchanger	Type		Brazed plate			
	Circulation pump	Brand		Shinhoo			
	Water connections	Type		Threaded			
		Dimension	Inch	1"M BSP	1"M BSP	1"M BSP	1"M BSP
	Operating pressure	Min/Max	bar	0.5/2.5	0.5/2.5	0.5/2.5	0.5/2.5
	Expansion vessel	Volume	L	10	10	10	10
		Pre-load	bar	1	1	1	1
Electrical data	Power supply		Ph-V-Hz	1ph-230V-50Hz			3ph-400V-50Hz
	Electrical integration	Heating	kW	3.00	6.00	6.00	6.00
		Serbatoio ACS		3.00	3.00	3.00	3.00
	Electrical absorption	Max	kW	3.175	6.10	6.10	6.1
	Power cable (recommended)		type	3x4 mm2	3x6 mm2	3x6 mm2	5x4 mm2
Product specifications	Sound power level		dB(A)	47	47	47	47
	Sound pressure level		dB(A)	29	29	29	29
	Dimensions	WxDxH	mm	600x650x1800	600x650x1800	600x650x1800	600x650x1800
	Weight	Net	kg	195	195	195	195
	Control (supplied)			On-board machine control			
	Integrated remote control			Wifi. Modbus			

GENERAL NOTE: The above data refers to the following standards: EN 14511:2018; EN 14825:2019; EN50564:2011; EN12102-1:2018; EN12102-2:2019; (EU)No:811:2013; (EU)No:813:2013; OJ 2014/C 207/02:2014.

CONTROLS

FOR MW RESIDENTIAL & LIGHT COMMERCIAL MONOSPLIT/LIGHT COMMERCIAL/MULTISPLIT R32

FOR VRF SYSTEMS MW MINI - MW 2-PIPE - MW 3-PIPE

STANDARD INDIVIDUAL CONTROLS R32

INFRARED REMOTE CONTROL

Action
Remote control included

MONOSPLIT/MULTISPLIT **R32**

FEATURES

- Temperature setting & display.
- Clock.
- 7 fan speed levels.
- ON/OFF Timer.
- Air distribution with automatic vertical and/or horizontal flaps' swinging.
- Autorestart: restart after blackout with restoration of the previous state.

FUNCTIONS

- I-Feel: optimal control of the room temperature based on the temperature detected by the sensor built into the remote control.
- Sleep: automatic control of room temperature during night hours (3 functions).
- X-fan: allows you to dry the evaporator to avoid the formation of mold and bacteria (Airpro Plus).
- Turbo: rapid reaching of room temperature.
- Light: activation/deactivation of display brightness (Airpro Plus).
- Quiet: Silent mode
- Energy saving (Airpro Plus).
- WiFi.
- Cold Plasma: ionizer.

Airpro Plus
Remote control included

MULTISPLIT **R32**

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

Remote control included

MULTISPLIT **R32**
8-way compact cassette

LIGHT COMMERCIAL **R32**
8-way compact cassette
(up to 3.50 kW)
8-way big cassette floor/ceiling
(up to 7.10 kW)

FEATURES

- Clock.
- ON/OFF Timer.
- 4 fan speed levels + Turbo function.
- Air distribution with automatic vertical and/or horizontal flaps' swinging.
- Setting the room temperature and displaying the indoor and outdoor temperature.

FUNCTIONS

- I-Feel.
- Sleep.
- Energy saving (cooling).
- Absence (heating).
- Key lock.
- X-fan: only cooling and dehumidifying.
- Light: enables/disables display lighting.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

STANDARD INDIVIDUAL CONTROLS R32

INFRARED REMOTE CONTROL

Remote control included

MULTISPLIT **R32**
1-way cassette
ceiling

FEATURES

- Temperature setting & display.
- Clock.
- ON/OFF Timer.
- 4 fan speed levels: auto, low, medium or high.
- 6 fan speed levels with console remote control: auto, low, medium-low, medium, medium-high or high.
- Air distribution with automatic vertical flaps' swinging.
- Autorestart: restart after blackout with restoration of the previous state.

FUNCTIONS

- I-Feel: optimal control of the room temperature based on the temperature detected by the sensor built into the remote control.
- Sleep: automatic control of room temperature during night hours.
- X-fan: only in cooling and dehumidification.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- Light: display brightness on/off.
- Quiet: Silent mode.
- Energy saving.
- Key lock.

Remote control included

MONOSPLIT **R32**
console

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

Remote control included

LIGHT COMMERCIAL **R32**
8-way big cassette
floor/ceiling
(from 10 to 16 kW)

FEATURES

- Temperature setting & display.
- Clock.
- ON/OFF Timer.
- 4 fan speed levels: auto, low, medium or high.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

FUNCTIONS

- Follow me: adjusts the room temperature according to that detected by the remote control to obtain maximum comfort.
- Sleep: automatic control of room temperature during night hours.
- Self Clean: allows the evaporator to dry to avoid the formation of mold and bacteria.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- Led: brightness adjustment.
- Breeze Away: in cooling, ventilation and dehumidification mode, it allows you to avoid a direct air flow.

STANDARD INDIVIDUAL CONTROLS R32

WIRED CONTROL

Wired control

STANDARD (included) for the models
LIGHT COMMERCIAL **R32**
ducted
(up to 7.10 kW)

FEATURES

- Temperature setting & display.
- ON/OFF Timer.
- 5 fan speed levels + auto.

FUNCTIONS

- Sleep: automatic control of room temperature during night hours.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- X-fan: after the unit has been turned off, it allows the evaporator to dry to prevent the formation of mold and bacteria.
- Key lock.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

WIRED CONTROL

DMW-W2-ZA
Wired control

STANDARD (included) for the models
LIGHT COMMERCIAL **R32**
ducted
(from 10 to 16 kW)

FEATURES

- LCD Display.
- Error codes display.
- Room temperature display.
- Weekly Timer.

FUNCTIONS

- Follow me.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- Auto Restart.
- ON/OFF Timer.
- Weekly Timer.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

INDIVIDUAL CONTROLS R32

WIRED CONTROL WITH BUILT-IN WI-FI MODULE

DMW-ZA1-WiFi
Wired control

Optional for the models
LIGHT COMMERCIAL **R32**
8-way compact cassette

Up to 7.10 kW:
8-way big cassette
floor/ceiling,
ducted

CARATTERISTICHE

- Impostazione e visualizzazione della temperatura.
- Timer ON/OFF.
- 5 livelli di velocità del ventilatore + auto.

FUNCTIONS

- Sleep: automatic control of room temperature during night hours.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- X-fan: after the unit has been turned off, it allows the evaporator to dry to prevent the formation of mold and bacteria.
- Key lock.

MODES

- Heating.
- Raffrescamento.
- Dehumidification.
- Ventilation.
- Automatic.

WIRED CONTROL WITH BUILT-IN WI-FI MODULE

DMW-ZAL-LCAC WiFi
Wired control

STANDARD (included) for the models
MULTISPLIT **R32**
ducted

Optional for the models
MULTISPLIT **R32**
8-way compact cassette
1-way cassette
ceiling

FEATURES

- Integrated ambient temperature sensor.
- 6 levels of fan speed.
- Error display.
- ON/OFF Timer.
- Memory: restart after blackout with restoration of previous state.

FUNCTIONS

- Sleep: automatic control of room temperature during night hours.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- Quiet: Silent mode.
- X-fan: it allows the evaporator to dry to prevent the formation of mold and bacteria.
- Absence (heating only): prevents the room temperature from falling below 8° C.
- Key lock.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

OPTIONAL CONTROLS R32

WIRED CONTROL

M-RF-CW2-L-G

Optional for the models
MULTISPLIT **R32**
wall (Airpro Plus & Action)
console
1-way cassette
compact cassette
ceiling

CARATTERISTICHE

- 4 livelli di velocità del ventilatore: auto, bassa, media o alta.
- Distribuzione dell'aria con oscillazione verticale e orizzontale automatica,
- Visualizzazione errori.
- Timer giornaliero, settimanale o bi-settimanale.
- Memory: restart after blackout with restoration of previous state.

FUNCTIONS

- Sleep: automatic control of room temperature during night hours.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- Quiet: Silent mode.
- X-Fan: after the unit has been turned off, it allows the evaporator to dry to prevent the formation of mold and bacteria.
- Absence (heating only): prevents the room temperature from falling below 8° C.
- Key lock.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

WIRED CONTROL WITH BUILT-IN WIFI MODULE

DMW-WIFI-ZA
Wired control

optional for the models
LIGHT COMMERCIAL **R32**
ducted 10-16 kW
floor/ceiling 10-16 kW
big cassette 84x84 10-16 kW

FEATURES

- LCD Display.
- Error codes display.
- Room temperature display.
- Weekly Timer.

FUNCTIONS

- Follow me.
- Turbo: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- Auto Restart.
- ON/OFF Timer.
- Weekly Timer.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

WI-FI CONTROLS FOR VRF SYSTEMS

WI-FI MODULE

Wi-Fi

M-V-WiFi-2-IDU

EWPE SMART

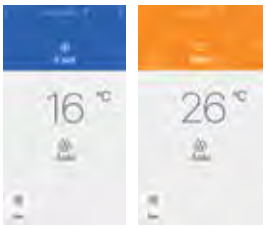
Available for Android and iOS smartphones and tablets

Some examples of screenshots from iOS devices

M-V-WiFi-2-IDU module for VRF systems

All the main air conditioning settings at your fingertips on your smartphone

MULTIWARM presents the new M-V-WiFi-2-IDU module which allows access to remote control of the air conditioner via an app downloadable on a smartphone.
The MULTIWARM Wi-Fi kit can connect up to 80 indoor units.
Thanks to the M-V-WiFi-2-IDU app, you can manage the main operating parameters from your home with a simple domestic Wi-Fi connection, or away from home, with a simple Internet connection. With EWPE SMART by MULTIWARM, you can turn the air conditioner on, off, adjust the room temperature and air flow, and operate in cooling or heating mode, with just a few "touches" on your mobile phone. An intelligent app that controls comfort and energy savings with a beneficial effect on your bill.



MAIN FUNCTIONS OF THE APP

- Access security with account protected by credentials (User ID and PWD).
- Individual control of individual units.
- Turning on and off.
- Selecting the operating mode.
- Adjusting the set temperature.
- Fan speed.
- Weekly timer.
- Heating activation 8° C (function that prevents the room temperature from falling below 8° C).
- Silent mode.

VRF STANDARD INDIVIDUAL CONTROLS

INFRARED REMOTE CONTROL

M-V-CI-NB1-G

Standard for the following units:

wall, 8-way compact cassette, 8-way cassette, console, floor/ceiling

FEATURES

- Clock.
- Timer.
- 4 fan speed levels + Turbo function.
- Air distribution with vertical or horizontal flaps' swinging.
- Setting the room temperature and displaying the indoor and outdoor temperature.

FUNCTIONS

- I-Feel.
- X-fan.
- Sleep.
- Light.
- Energy saving (cooling).
- Absence (heating).
- Key lock.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

WIRED CONTROL

M-V-CW-SD1-G

Standard for the following units:

ducted:
low/high static pressure, 100% outdoor air ducted, enthalpy recovery unit, recovery unit with coil, recessed floor unit and EEV kit for AHU

Optional for other units

Touch key panel. Monochrome LCD display with white backlighting, soft touch buttons. Modern design, square lines. Intuitive remote control for the user and versatile thanks to the different functions.

FEATURES

- Clock.
- 24 hour timer for on/off.
- 6 fan speed levels + Turbo function.
- Air distribution with vertical or horizontal flaps' swinging
- Integrated ambient temperature sensor.
- View and set project parameters.
- Receiving infrared signal from the remote control.

FUNZIONI

- Sleep.
- Quiet.
- Auto Quiet.
- X-fan.
- Light.
- Defrost.
- Save.
- Absence (heating).
- Key lock.
- Memory.
- Filter cleaning reminder.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

UP TO 16 INDOOR UNITS CAN BE CONNECTED, WHICH WILL OPERATE WITH THE SAME SETTINGS

See details of functions and application types, *page 148*

VRF OPTIONAL INDIVIDUAL CONTROLS

WIRED CONTROL FOR HOTEL

M-V-CW-HB2-G

Optional for all types of indoor units

Simplified panel particularly suitable for hotel applications. Backlit monochrome LCD display, mechanical buttons. Modern design, square lines, with glossy glass effect front panel. Very simple and intuitive remote control for the user and with simplified functions. Possible connection with automatic access management systems.

FEATURES

- 6 fan speed levels + Turbo function.
- Air distribution with vertical flaps' swinging.
- Setting and displaying the room temperature.
- Receiving infrared signal from the remote control.

FUNCTIONS

- Defrost.
- Key lock.
- Memory.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

UP TO 16 INDOOR UNITS CAN BE CONNECTED, WHICH WILL OPERATE WITH THE SAME SETTINGS

SMART WIRED CONTROL

M-V-CW-TW1-G

Optional for all types of indoor units

Smart touch screen panel with high resolution LCD display. Elegant design, square lines. Very advanced remote control complete with various functions, each viewable on a single interactive screen and easy to manage.

FEATURES

- Clock.
- 3 types of Weekly Timer.
- 6 fan speed levels + Turbo function.
- Air distribution with vertical or horizontal flaps' swinging.
- Detection and display of ambient temperature.
- Receiving infrared signal from the remote control.
- Various customizations possible such as light regulation and stand-by time.

FUNCTIONS

- Sleep.
- Quiet.
- Auto Quiet.
- X-fan.
- Light.
- Defrost.
- Save.
- Absence (heating).
- Key lock.
- Memory.
- Filter cleaning reminder.

MODES

- Heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

UP TO 16 INDOOR UNITS CAN BE CONNECTED, WHICH WILL OPERATE WITH THE SAME SETTINGS

See details of functions and application types, *page 148*

Application types for VRF wired controls

M-V-CW-SD1-G
M-V-CW-HB2-G
M-V-CW-TW1-G

pag. 146-147

SINGLE CONTROL FOR THE MANAGEMENT OF A SINGLE INDOOR UNIT
Each indoor unit has its own independent control.

TWO CONTROLS FOR MANAGING A SINGLE UNIT
An indoor unit can be controlled by two wired controllers placed in different locations (Master/Slave mode).

SINGLE CONTROL FOR MANAGING MULTIPLE INDOOR UNITS (GROUP CONTROL)
A single wired controller can control up to 16 indoor units simultaneously.

TWO CONTROLS FOR MANAGING DIFFERENT INDOOR UNITS
The indoor units (maximum 16) can be managed by two wired controllers simultaneously.

Appendix

DETAIL OF CONTROL FUNCTIONS

- **Absence (heating only)**: prevents the room temperature from falling below 8° C.
- **Defrost**: defrost function.
- **Energy saving/Save**: energy saving.
- **I Feel**: adjusts the room temperature according to that detected by the remote control to obtain maximum comfort.
- **Light**: brightness adjustment.
- **Memory**: in the event of a blackout, when the power is restored, it automatically restarts with the previous settings.
- **Quiet/Auto Quiet**: Silent mode.
- **Rapid**: when the unit is turned on, in direct expansion cooling or heating mode, it allows the set temperature to be reached quickly, improving indoor comfort.
- **Sleep**: night operation.
- **Turbo**: the unit operates at very high speed to quickly reach the cooling or heating temperature.
- **X-Fan**: allows the evaporator to dry to avoid the formation of mold and bacteria.

VRF OPTIONAL CENTRLALIZED CONTROLS

M-V-CC-T32-G

Simplified centralized panel with 4.3" LCD touch screen display. Modern and elegant design. Small footprint: recessed wall installation with a protrusion of only 11 mm.

You can manage up to 32 groups of indoor units (32 indoor units in total) distributed across up to 16 systems*. Possibility to: assign names to indoor units, select icons and create custom settings (background, backlight).

FEATURES

- View and set project parameters.
- Fault recording and access management.

FUNCTIONS

- Single unit control: temperature setting, timer, fan speed, air distribution control with vertical or horizontal flaps' swinging and advanced functions (sleep, quiet, auto quiet, auxiliary heating, save, rapid, absence in heating).
- Group management.
- Centralized control of all indoor units.

MODES

- Heating.
- Hydronic heating.
- 3D heating.
- Ambient heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

M-V-CC-T255-G

Centralized Touch Screen Panel. High resolution 1280x800 7" touch screen LCD display. Modern and elegant design. User-friendly operation. Small footprint: recessed wall installation with a protrusion of only 11 mm.

You can manage up to 255 groups of indoor units (255 indoor units in total) distributed across up to 16 systems*. Possibility to: assign names to indoor units, select icons and create custom settings (background, backlight).

FEATURES

- View and set project parameters.
- Fault recording and access management.
- Programming (setting different programs).
- Maintain settings in the event of a blackout.

FUNCTIONS

- Single unit control: temperature setting, timer, fan speed, air distribution control with vertical or horizontal flaps' swinging and advanced functions (sleep, quiet, auto quiet, auxiliary heating, save, rapid, absence in heating).
- Group management.
- Centralized control of all indoor units.

MODES

- Heating.
- Hydronic heating.
- 3D heating.
- Ambient heating.
- Cooling.
- Dehumidification.
- Ventilation.
- Automatic.

* When the centralized controls are connected to multiple outdoor units in combination, insert the 120Ω electrical resistance and use a twisted and shielded cable.

OTHER VRF OPTIONAL CONTROLS

WEB-BASED MONITORING SOFTWARE

M-V-SOFT-Mon

Optional for all types of indoor units

(requires Gateway M-V-Gateway-Mon)

Remote control of on, off, temperature setting, operating mode and other parameters of any type of indoor unit or group of indoor units.

- Real-time monitoring of system status and output of data for any errors and malfunctions.
- Programming of units according to user needs and the intended use of the building.
- Visualized graphical representation of the system structure and control modes of individual devices and/or groups of the entire project.
- Consumption accounting.

M-V-Gateway-Mon

TCP/IP Network Gateway

GATEWAY FOR BACNET/IP AND MODBUS RTU/TCP MAX 255 I.U.

M-V-Gateway-LAN/Bacnet

Optional for all types of indoor units

(max. 16 systems or 255 indoor units)

- Network gateway that supports connection to a building management system (BMS).
- This network gateway features BACnet and Modbus communication protocols.
- The high-efficiency, large-data communication system can monitor unit operation in real time and control up to 255 indoor units simultaneously.

MINI GATEWAY FOR MODBUS RTU

M-V-Gateway-Modbus

Optional for all types of indoor units

(max. 16 systems or 128 indoor units)

- The mini Modbus network gateway enables connection to a building management system (BMS).
- Remote control for single unit or groups of units for switching on, off, setting temperature, operating mode, fan speed, control lock with individual remote controls and real-time monitoring of operating parameters and error codes of the units.

OTHER
VRF OPTIONAL CONTROLS

GATEWAY FOR CONNECTING LIGHT COMMERCIAL UNITS TO THE CENTRALIZED CONTROL

DMC-LCAC-Gateway

For light commercial units up to 7.1kW ducted, compact cassette, cassette 84x84, floor/ceiling.

One gateway is required for each indoor unit (up to 255 gateways for each centralized control).

Interface to control light commercial R32 units up to 7.1kW via the M-V-CC-T255-G centralized control.

MULTIWARM

Due to the continuous technological evolution of the products, we reserve the right to change the technical specifications in this catalogue at any time and without prior notice.
The products shown are only examples of the application types. The energy efficiency values refer to measurements carried out according to the following harmonised standards: EN14511; EN14825; EN16147.

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05/2025