MODULAR MONOBLOC R32

Air-to-water heat pump

	kW	60	100	130
MCWSGS-ZP Big Chiller Pump included Cooling/Heating Modularity up to 3 units of the same size	NEW 	✓		
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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 three sizes - 60, 100 and 130 kW cooling capacity - modularity is one of its key strengths: up to three modules **of the same size** can be combined for a maximum of 390 kW cooling capacity.
Circulation pump included on all models.

High power in combination

60-100-130 kW

Outdoor units' capacities

390 kW

Maximum capacity combining 3 units of 130 kW

Energy efficiency

A++

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

R32

30% less charge than R410A gas.

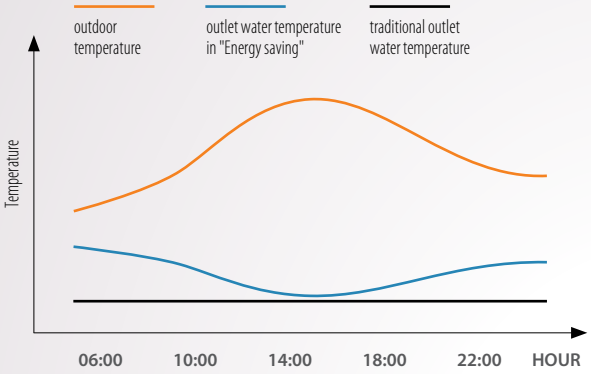
Modbus

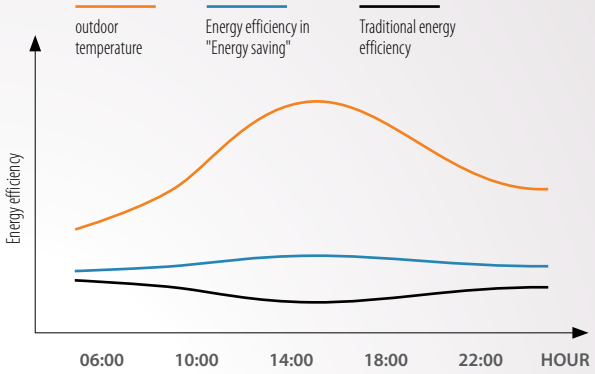
The system is equipped with Modbus protocol as standard.

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





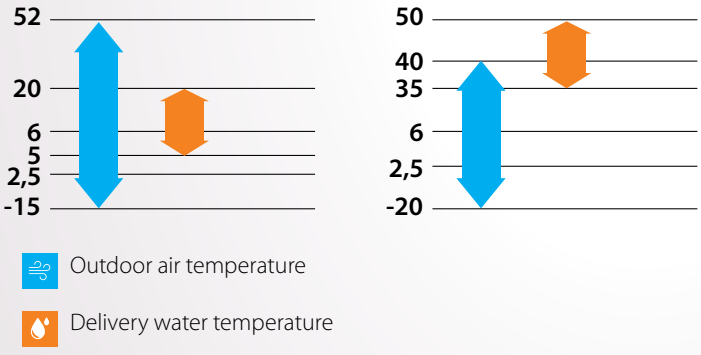
Wide operating range

COOLING MODE

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

HEATING MODE

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



-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

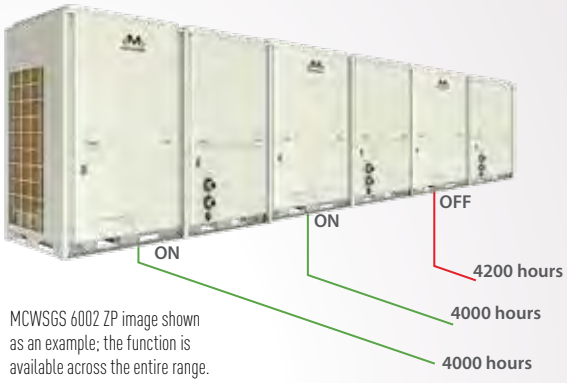
- Wide plastic fan blades
- «Quiet mode» function
- Compressor sound insulation
- Special design of the fan area

High-efficiency plate heat exchanger

New stainless-steel plate heat exchanger that maximises heat transfer efficiency, reducing footprint and weight thanks to its ultra-compact dimensions.

Extended operating life through load balancing

Smart Control distributes compressor operating hours evenly, preventing overuse of individual compressors and increasing system reliability and service life.



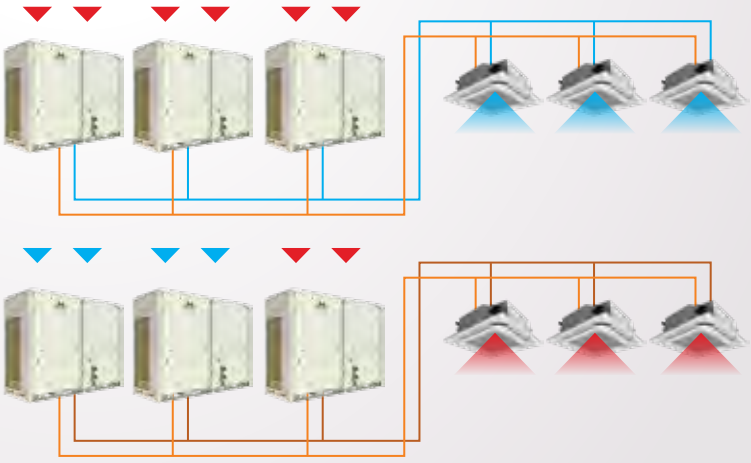
MCWSGS 6002 ZP image shown as an example; the function is available across the entire range.

Full DC Inverter as standard

Compressor, fan motor and circulation pump are all DC Inverter components: this ensures maximum operating efficiency and controlled energy consumption.

Winter comfort with staggered defrost

Modular units perform defrost in turns rather than simultaneously, reducing fluctuations in outlet water temperature and, as a result, improving indoor comfort.



MCWSGS 6002 ZP image shown as an example; the function is available across the entire range.

Multiple anti-freeze protections

By monitoring temperature, pressure and water flow rate, the system prevents plate heat exchanger freezing and always guarantees the best heat transfer efficiency.

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.

MCWSGS 6002 ZP image shown as an example; the function is available across the entire range.

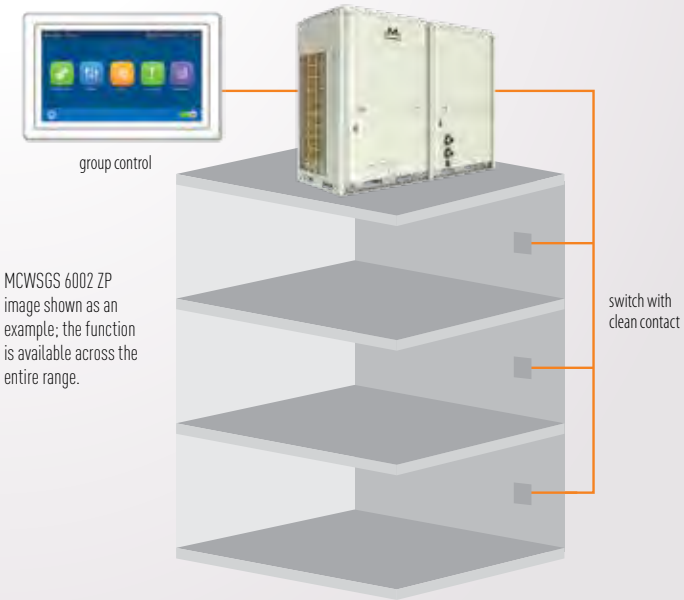
Centralized control up to 3 units

The wired remote control allows you to control up to 3 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.



MCWSGS 6002 ZP image shown as an example; the function is available across the entire range.

OUTDOOR UNITS

MCWSGS 6002 ZP

MCWSGS 10002 ZP
MCWSGS 13002 ZP

ENERGY CLASS

A++

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

Model				MCWSGS 6002 ZP	MCWSGS 10002 ZP	MCWSGS 13002 ZP
Heating	Rated power	A7//W35	kW	62.00	100.00	126.00
	Electrical absorption			15.97	25.38	32.72
	Performance coefficient		COP	3.88	3.94	3.85
	Rated power	A7/W45	kW	65.00	105.00	131.00
	Electrical absorption			19.70	30.20	41.58
	Performance coefficient		COP	3.30	3.48	3.15
Cooling	Rated power	A35//W7	kW	60.00	100.00	130.00
	Electrical absorption			21.13	31.95	44.07
	Energy efficiency		EER	2.84	3.13	2.95
	Rated power	A35//W18	kW	64.00	130.00	150.00
	Electrical absorption			18.00	33.00	39.00
	Energy effciency		EER	3.56	3.94	3.85
Seasonal heating data	Prated @ -10°C	W35	kW	52.00	74.00	90.00
	Seasonal performance coefficient		SCOP	4.01	4.12	4.17
	Seasonal energy efficiency (ηs)		%	157.50	161.90	163.90
	Energy efficiency class		-	A++	A++	A++
	Annual energy consumption		kWh/y	26825	37471	44570
Operating range	Outdoor air temperature	Heating	°C	-20~40		
		Cooling		-15~52		
	Delivery water temperature	Heating	°C	35~50		
		Cooling		5~20		
Refrigerant circuit data	Refrigerant1 type (GWP)			R32 (675)		
	Refrigerant1 - Pre-charge (tons CO2)		kg (t)	5.35x2 (7.223)	10.0x2 (13.501)	10.0x2 (13.501)
	Control system			Electronic expansion valve		
	Compressor		Type	Rotary DC Inverter x 2	Scroll DC Inverter x 2	Scroll DC Inverter x 2
Hydraulic data	Heat exchanger	Type		Plate		
		Flow rate	m³/h	10.30	17.20	22.36
	Circulation pump (included)		Type	Inverter		
	Water connections	Type		Threaded		
		Dimension	Inch	G2" M (DN50)	2-1/2" (DN65)	2-1/2" (DN65)
	Operating pressure Min/Max		bar	2/6	2/6	2/6
	Expansion vessel (included)	Volume	L	12	24	24
Electrical data	Power supply		Ph-V-Hz	3-380~415V-50Hz		
	Maximum current		A	52.00	94.00	103.00
	Power cable (recommended)		Type	5x16 mm2	5x25 mm2	5x35 mm2
Product specifications	Fan	Type	q.ty	DC Inverter x 2		
		Air flow	m³/h	12000 x 2	22500 x 2	22500 x 2
	Sound pressure level		dB(A)	68	69	72
	Sound power level		dB(A)	70	70	72
	Dimensions	WxDxH	mm	2200x937x1675	2235x1283x2355	2235x1283x2355
	Weight	Net	kg	609	1016	1016
	Controls	Wired control (NOT included)		DMWZ-CWG-BIG		
		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

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.