

MACS® MODULE

MODULE FOR IMMEDIATE D.H.W. PRODUCTION



APPLICATION

MACS® module produces instantly D.H.W. with high flow rate even if there is installed a small power thermal generator.

HEAT EXCHANGER, MATERIAL

Copper circuitry, fittings and valves in brass
316L stainless steel brazed plate heat exchanger with a thermostatic mixer in the primary circuit inlet avoiding the plate exchanger to overheat reducing risk of formation of calcium deposit. Module's frame in PPE that protects and makes insulated the heat exchanger and the circuit.

TECHNICAL DESCRIPTIONS

MACS® module produces instantly D.H.W. with high flow rate even if there is installed a small power thermal generator.

The immediate and fast production of D.H.W. granted by the outside system steel plate exchange allow the following benefits:

- to reduce dimensions of the water heater need it
- easy maintenance

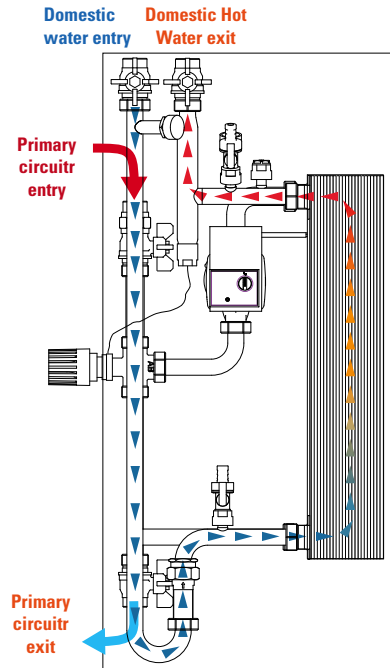
- easy maximum hygiene for anti-legionellosis bacteria's
- to produce more DHW than the quantity obtained by boiler with similar capacity because heating hot water is stored at an highest temperature than DHW.

MACS® station also reduces volumes as a single buffer tank is also producing DHW, thus eliminating the volume of traditional calorifiers. In fact, the amount of DHW that can be produced by the MACS® station is equal if not superior to those obtained from a calorifiers with same capacity of accumulation because the heating hot water is stored at a higher temperature compared to temperature of DHW.

MACS® module is equipped with a thermostatic mixer in the primary circuit inlet avoiding the plate exchanger to overheat reducing risk of formation of calcium deposit.

WARRANTY

2 years (1 year electrical parts)
See general sales conditions and warranty



MACS® is connected to the buffer tank, and its 316L stainless steel heat exchanger produce hot domestic water, using the heat energy stored in the Buffer tanks granting safety and comfort with the possibility to regulate outlet temperature.

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Output [kW]	Brazed plate heat exchanger: 316L STAINLESS STEEL	
	Art. Nr.	€
70	3316006700005	
120	3316006700006	

MACS® TECHNICAL DATA	70 Kw model	120 Kw model
Primary circuit maximum flow rate (inlet)	1.200 l/h	1620 l/h
D.H.W. maximum flow rate (outlet)	1.800 l/h ΔP 0,5 bar	3.000 l/h ΔP 0,5 bar
DHW station maximum flow rate	30 lt/min	50 lt/min
DHW production (at 10-45°C) with 70°C storage	24 lt/min	41 lt/min
Maximum working temperature	90 °C	90 °C
Maximum working pressure	6 bar	6 bar
Electrical supply	230 V AC, 93 W	230 V AC, 132 W
Minimal D.H.W. request to activate / disactivate MACS® station	1,5 l/m ± 0,5	1,5 l/m ± 0,5
Insulated D.H.W. case dimension (LxHxW)	Width 400 x Height 700 x Depth 260 mm	Width 500 x Height 905 x Depth 310 mm
Connections	¾" M	1" F / ¾" F

— Accessories on request —

Recycling kit

Art. Nr.	€
5221000000054	477,00
Control display + pump (for D.H.W.)	



The use of Cordivari's recycling kit allows to manage on the system a link of the DHW recycling.

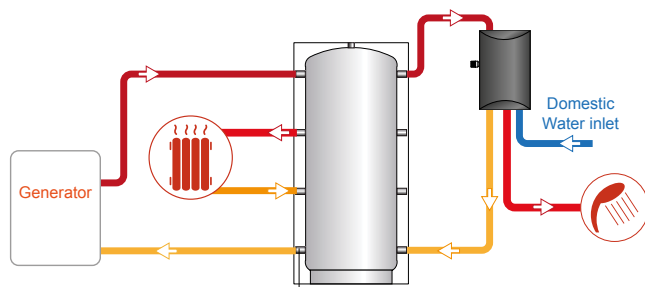
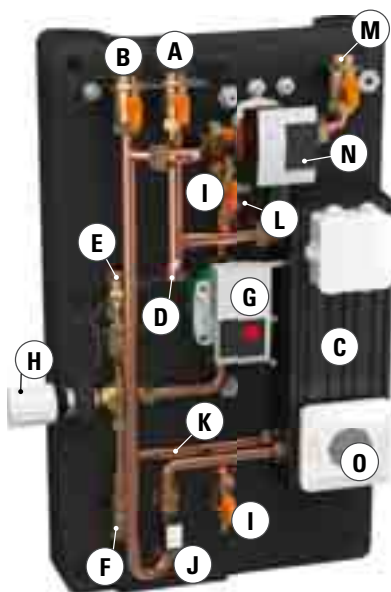
The benefit is to improve the comfort of the user and to reduce the waste and produce DHW immediately at the right temperature.

In particular, the Cordivari electronic recycling kit allows to:

- Maximize the energy saving by programming the recycling temperature on basis of our own habits.
- Daily and weekly scheduling to manage until 8 time slots for each days of the week
- Constantly monitoring the working and the efficiency of the recycle tanks to the self-diagnostics of the system
- Work also without the temperature's probe into system where the probe is not foreseen, through programmable temporary actions

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A	Domestic Hot Water exit	G	"Energy Saving" Circulation Pump
B	Domestic Water entry	H	Thermostatic Valve
C	Stainless Steel Plate Exchanger	I	Valves In/Out for DHW
D	Control for thermostatic head	J	Flow Sensor
E	Entry heating water from the buffer	K	Heating Circuit Bypass
F	Heating water back to the buffer	L	Drain

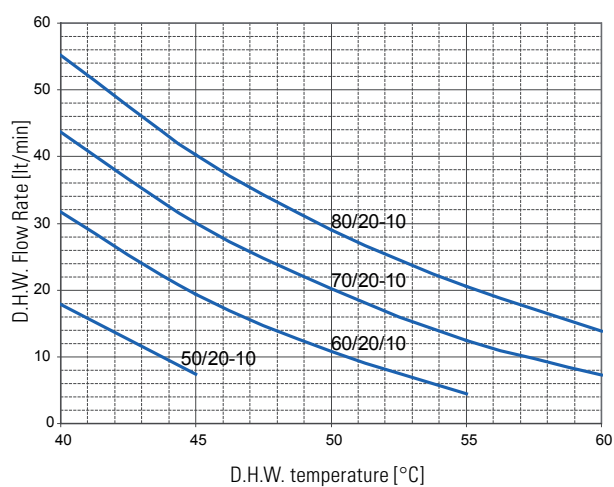
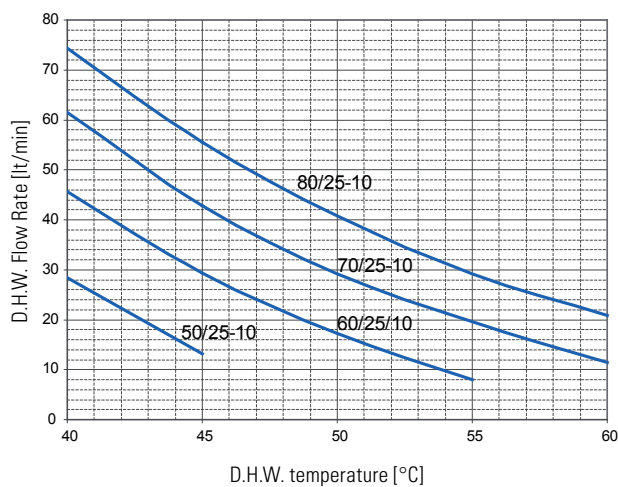
D.H.W. recirculation kit (optional)	
M	Connection for D.H.W. recirculation (optional)
N	Recirculation pump (optional)
O	D.H.W. recirculation control display (optional)

MACS[®] TECHNICAL DATA CHART

The curves in below charts are useful to calculate the flow rate of DHW product by a MACS[®] module unit depending on the DHW desired temperature (value reported on the horizontal axis)

The various curves are determined according to 3 parameters: the temperature of the storage tank; the temperature of the heating water flow returning to the storage tank and the inlet temperature of the DHW water.

120 Kw



70 Kw

