

FRESH WATER MODULE MACS®

MODULE FOR IMMEDIATE D.H.W. PRODUCTION WITH ELECTRONIC CONTROL UNIT



APPLICATION

MACS® module produces instantly D.H.W. with high flow rate.

HEAT EXCHANGER, MATERIAL

Copper primary pipes, Stainless steel 316L DHW sanitary circuit; brass fittings and valves.

Stainless steel 316L brazed plate heat exchanger.

PPE module case housing and insulating the exchangers circuits.

TECHNICAL DESCRIPTION

MACS® module produces instantly D.H.W. with high flow rate without storage.

Thanks to a variable flow rate on the primary the risk of limescale formation on the sanitary side is highly reduced

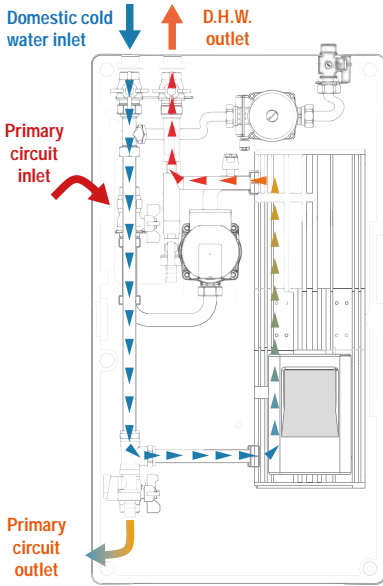
The immediate and fast production of D.H.W. granted by the external plate exchanger system allows the following benefits:

- reduced dimensions of the tank for DHW productions
- easy maintenance
- maximum hygiene for anti-legionellosis bacteria's
- to produce more DHW than the quantity obtained by water heater with similar capacity, thanks to the heating water stored at an higher temperature than DHW.

WARRANTY

2 years - 1 year on electronic parts.

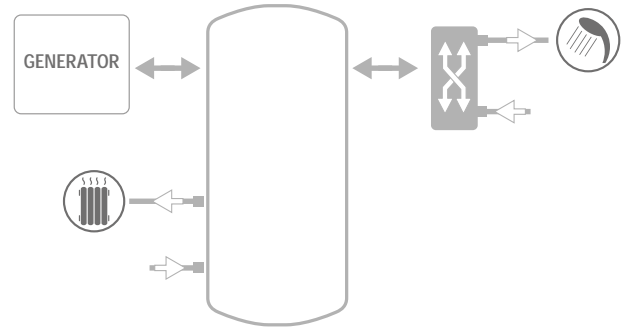
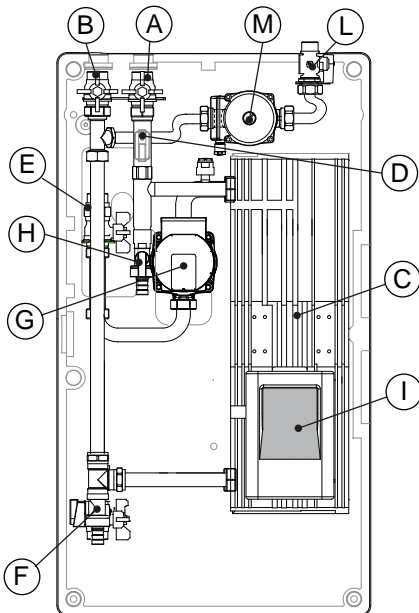
See general sales conditions and warranty



TECHNICAL DATA MODULO MACS®	MACS® 70	MACS® 120	MACS® 180 HP
D.H.W. Operation range	2-40 lt/min	5-100 lt/min	5-100 lt/min
DHW production (10-45°C) with accumulation at 80°C	40 lt/min	75 lt/min	86 lt/min
Maximum working temperature	90°C	90°C	90°C
Maximum working pressure	8 bar	8 bar	8 bar
Electric supply and characteristic	230 V AC, 43 W	230 V AC, 50 W	230 V AC, 75 W
Dimension of the case (BxHxP) mm	L 500 x H 905 x P 310	L 500 x H 905 x P 310	L 500 x H 905 x P 310
Connections	1" F/ 3/4" F	1" F/ 3/4" F	1" F/ 3/4" F

ELECTRONIC MACS® MODULE

Model	Stainless steel 316L Plate Exchanger
	Art. Nr.
70	3316006700007
120	3316006700008
180 HP	3316006700019



A	Domestic hot water outlet (DHW)	F	Primary Outlet
B	Domestic Water inlet	G	"Energy Savings" Circulation Pump
C	Stainless Steel Plate Exchanger	H	Valves In/Out for DHW
D	Flow rate/ temperature probe	I	Electronic control unit
E	Primary Inlet		

DHW recirculation kit for MACS® module (optional)

L	Connection for D.H.W. recirculation (optional)
M	D.H.W. recirculation pump (optional)

ACCESSORIES

DHW recirculation group

ART. NR.	
5221000000073	

The recirculation kit for Electronic MACS® module allows the implementation of a sanitary recirculation circuit on the system where modules are installed.

The main advantage of such sanitary recirculation circuit is to improve comfort and speed in achieving and enjoying the desired DHW temperature, reducing energy waste.

The control unit included as standard with the electronic MACS® modules allow the complete management of all settings of the recirculation circuit, such as temperature, setting etc.

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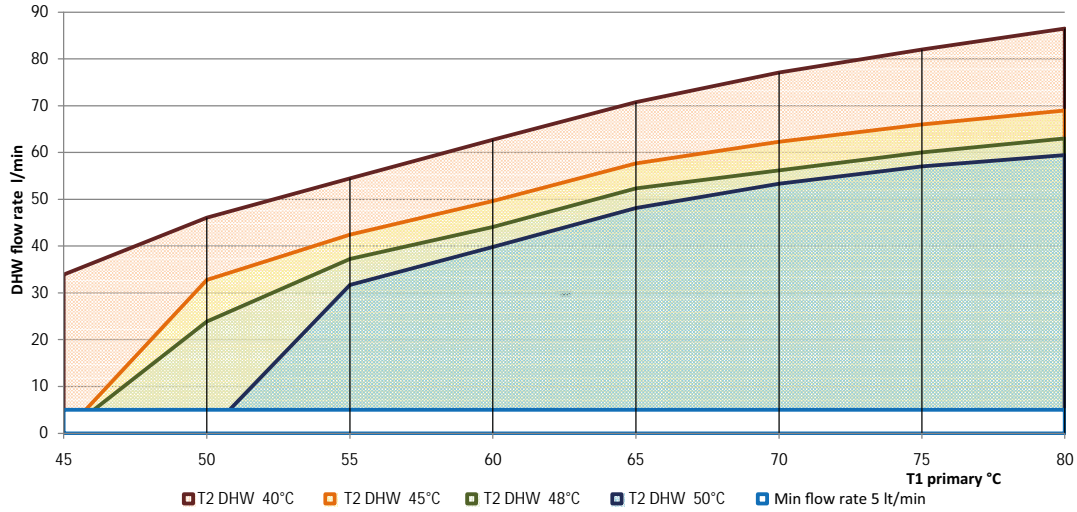
MODULE FOR IMMEDIATE D.H.W. PRODUCTION WITH ELECTRONIC CONTROL UNIT

ELECTRONIC MACS® TECHNICAL DATA CHART

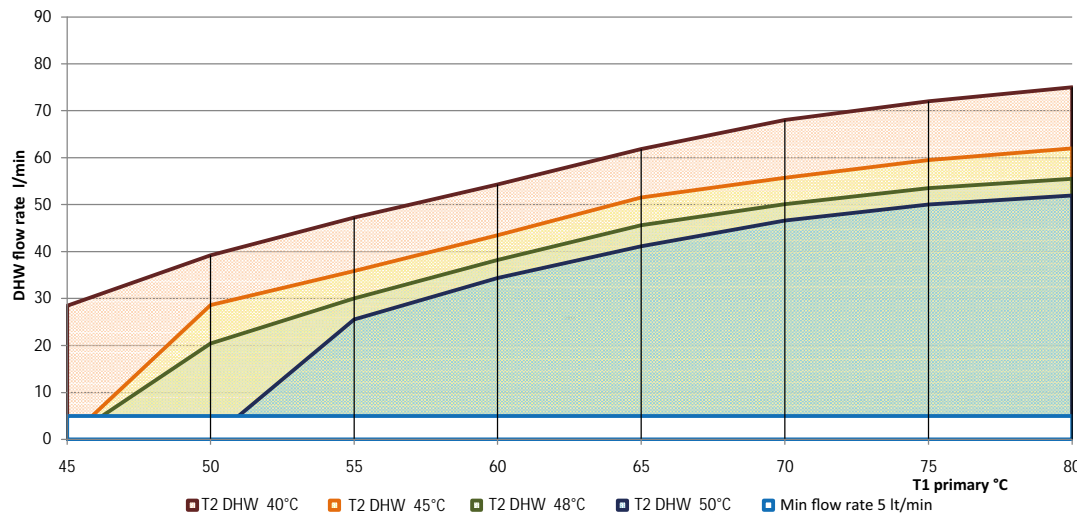
The curves shown in these charts allow to obtain the DHW flow rate that can be produced by the individual MACS® module according to the storage / primary circuit temperature (value on the horizontal axis). The curves are parameterized based on the desired DHW temperature and indicate the maximum DHW flow rate that can be produced at that

temperature (with cold water inlet temperature at 10°C) The MACS modules can produce all the DHW flow rates included in the area between the minimum activation flow rate and maximum flow curve of each temperature.

MACS® 180 HP



MACS® 120



MACS® 70

