

PUFFERMAS® 2 DOMUS

BUFFER TANK FOR HEAT PUMP WITH COMPACT DHW INSTANT PREPARATION UNIT AND 1 FIXED HEAT EXCHANGER



APPLICATION

Storage by stratification of technical water and immediate production of domestic hot water (DHW) with high flow rates and performances.

MATERIAL

Mild steel painted on the outside. Buffer intended for closed circuit installation, so no anti-corrosion treatment is provided.

DHW HEAT EXCHANGER MODULE

Integrated immediate DHW production module with Stainless steel 316L brazed plate heat exchanger.

HEATING WATER HEAT EXCHANGER

The tank is equipped with 1 fixed heat exchanger in Mild steel to allow the integration with a solar thermal system.

TECHNICAL DESCRIPTION

Puffermas® 2 DOMUS combines the characteristic use of a buffer with those of a rapid DHW producer, without the accumulation of domestic hot water. The DHW heat exchanger module ensures excellent performances even at a low flow rate of domestic hot water.

INSULATION

Thermal storage: High thermal insulation with ecological polyurethane hard foam.

Dhw module: insulating PST cover.

Grey PVC external lining.

WARRANTY

5 years (tank). See general sales conditions and warranty for electrical parts.

ACCESSORIES AND SPARE PARTS

See Accessories section for the entire list.



PUFFERMAS® 2 DOMUS VB

Model	HARD FOAM INSULATION Art. Nr.
200	3251162314782
300	3251162314783
400	3251162314784

HEAT EXCHANGER SURFACE

[m²]

DHW module max/min flow rate

[l/min]

ENERGY EFFICIENCY CLASS

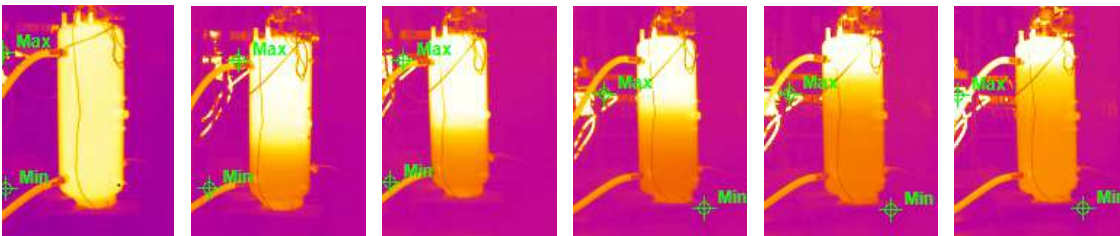


NEW

Model	HARD FOAM INSULATION Art. Nr.	HEAT EXCHANGER SURFACE [m²]	DHW module max/min flow rate [l/min]	ENERGY EFFICIENCY CLASS
200	3251162314782	1,20	2/40	B
300	3251162314783	1,40	2/40	B
400	3251162314784	1,50	2/40	C



- Suitable for any type of heat generator; ideal for heat pumps
- High exchange efficiency with high energy yield for dhw
- Optimized internal storage stratification
- Maximum comfort with constant dhw temperature at any flow rate
- High sensibility and high flow rates (from 2 up to 40 lt/min)
- Maximum safety and economicity



Series of thermographs that illustrate the perfect thermal stratification of the PUFFERMAS® DOMUS during the production of DHW through the integrated module

ACCESSORIES

Electric immersion heaters

Available kit:	
[Kw]	Tension [V]
from 1,5 to 3	220 - MONOPHASE
See accessories	

Thermometer

Art. Nr.	
5032240000107	
5 units box	

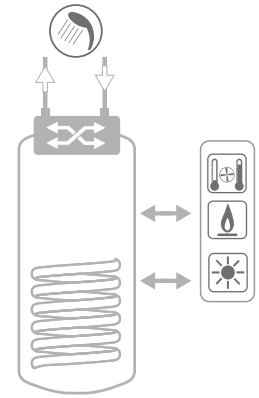
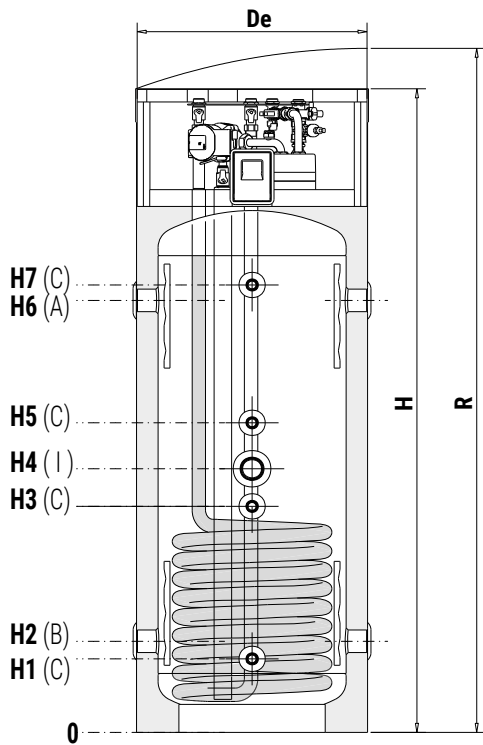
Recirculation kit for PUFFERMAS® DOMUS

Art. Nr.	
5221000000102	
DHW recirculation group	

PUFFERMAS® 2 DOMUS

BUFFER TANK FOR HEAT PUMP WITH COMPACT DHW INSTANT PREPARATION UNIT AND 1 FIXED HEAT EXCHANGER

STORAGE		EXCHANGE MODULE		FIXED HEAT EXCHANGER	
Pmax	Tmax	Pmax	Tmax	Pmax	Tmax
3 bar	99 °C	8 bar	99 °C	12 bar	110 °C



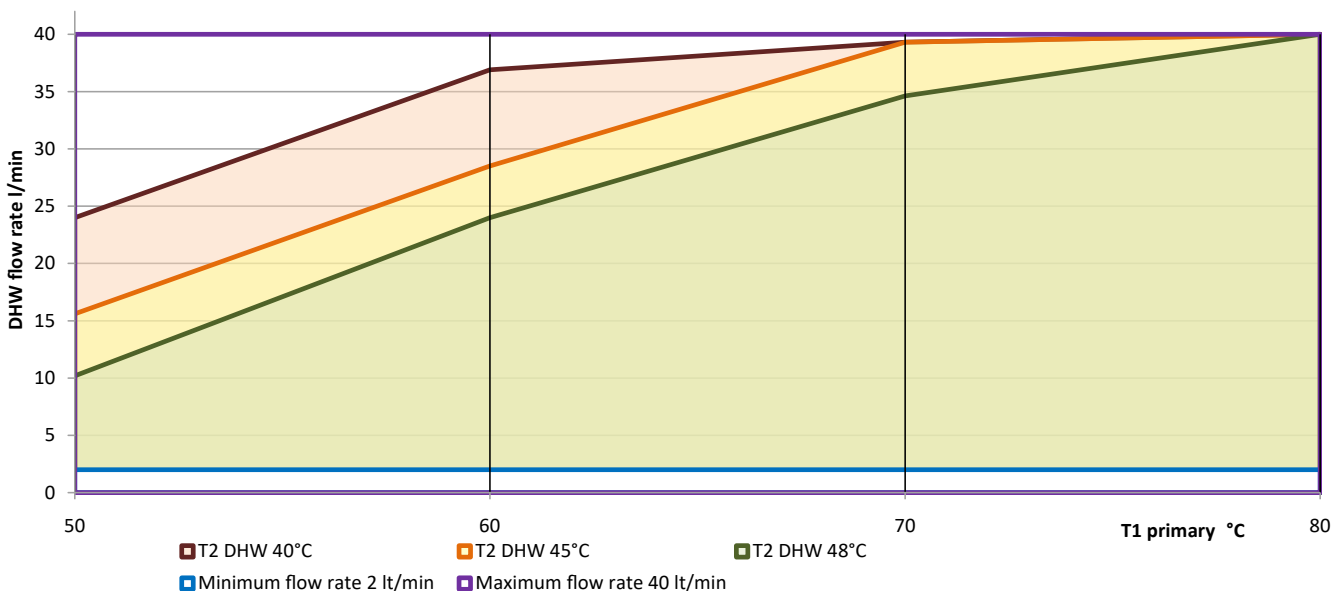
A	Heating delivery/From generator
B	Heating return/to generator
C	Probe
D	Fixed heat exchanger inlet
H	Fixed heat exchanger outlet
I	Connection for electric immersion heater
L	Domestic hot water outlet
M	Domestic cold water circuit inlet

Model	Volume [lt]	De	H	R	[mm]							Connections F		
					H1	H2	H3	H4	H5	H6	H7	A-B-I	C	D-H-L-M
200	180	550	1539	1650	176	218	541	631	741	1034	1071	1 1/2"	1/2"	3/4"
300	278	650	1580	1720	190	232	555	645	755	1048	1085	1 1/2"	1/2"	3/4"
400	364	650	2000	2110	190	232	955	1045	1155	1468	1505	1 1/2"	1/2"	3/4"

FLOW RATE PERFORMANCE OF DHW

The curves shown in these graphs allow to obtain the flow rate of domestic hot water (DHW) which can be produced by the integrated DHW production module, depending on the temperature of the storage tank / primary circuit (value on the horizontal axis).

The curves are parameterized based on the desired temperature of the DHW and indicate the maximum DHW flow rate that can be produced at that temperature (with inlet temperature at 10°C). The MACS Modules are able to produce all the DHW flow rates included in the area between the minimum activation flow rate and the maximum flow curve of each temperature.

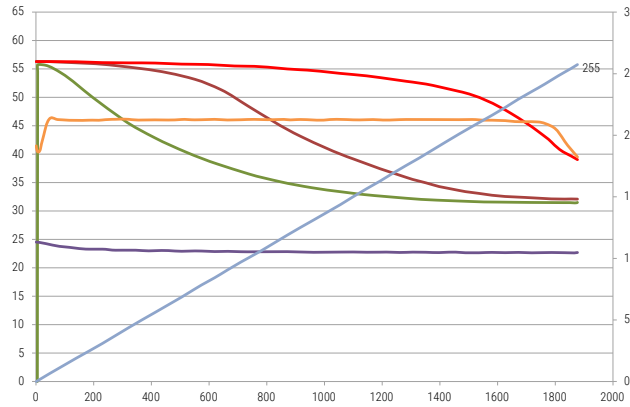


PUFFERMAS® 2 DOMUS

PERFORMANCE DURING DHW PRODUCTION PHASE



DHW WITHDRAWAL 255 lt T > 40 °C 61% of the accumulated energy



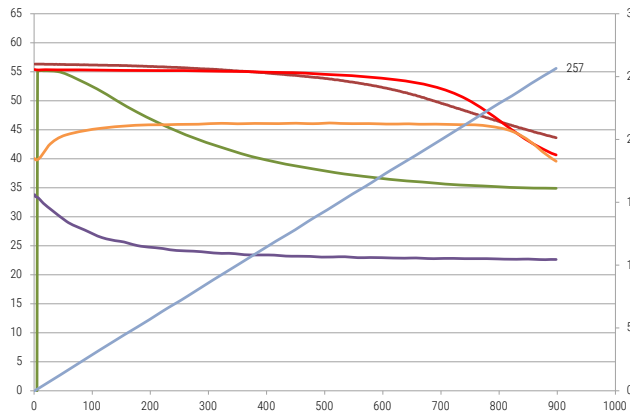
STORAGE: 55 °C
WITHDRAWAL: 45-39 °C
FLOW RATE: 8 l/min

- TC1_Low accumulation
- TC2_Medium accumulation
- TC3_High accumulation
- TC4_sanitary water inlet
- TC5_DHW outlet
- total liters

PUFFERMAS® 2 DOMUS Model 300



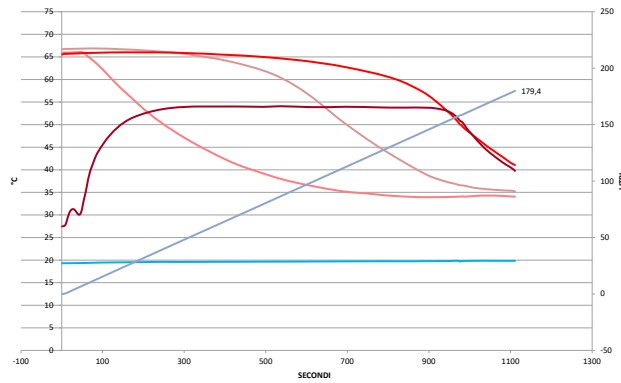
DHW WITHDRAWAL 255 lt T > 40 °C 58% of the accumulated energy



STORAGE: 55 °C
WITHDRAWAL: 45-39 °C
FLOW RATE: 16 l/min

- TC1_Low accumulation
- TC2_Medium accumulation
- TC3_High accumulation
- TC4_sanitary water inlet
- TC5_DHW outlet
- total liters

DHW WITHDRAWAL 179 lt T > 40 °C 60% of the accumulated energy



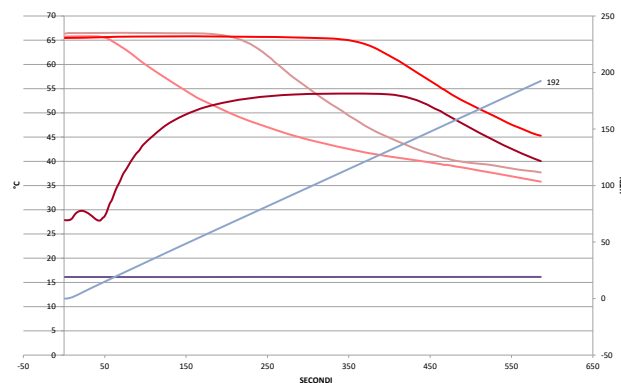
STORAGE: 65 °C
WITHDRAWAL: 55-40 °C
FLOW RATE: 10 l/min

- TC1_Low accumulation
- TC2_Medium accumulation
- TC3_High accumulation
- TC4_sanitary water inlet
- TC5_DHW outlet
- total liters

PUFFERMAS® 2 DOMUS MODEL 200



DHW WITHDRAWAL 192 lt T > 40 °C 58% of the accumulated energy

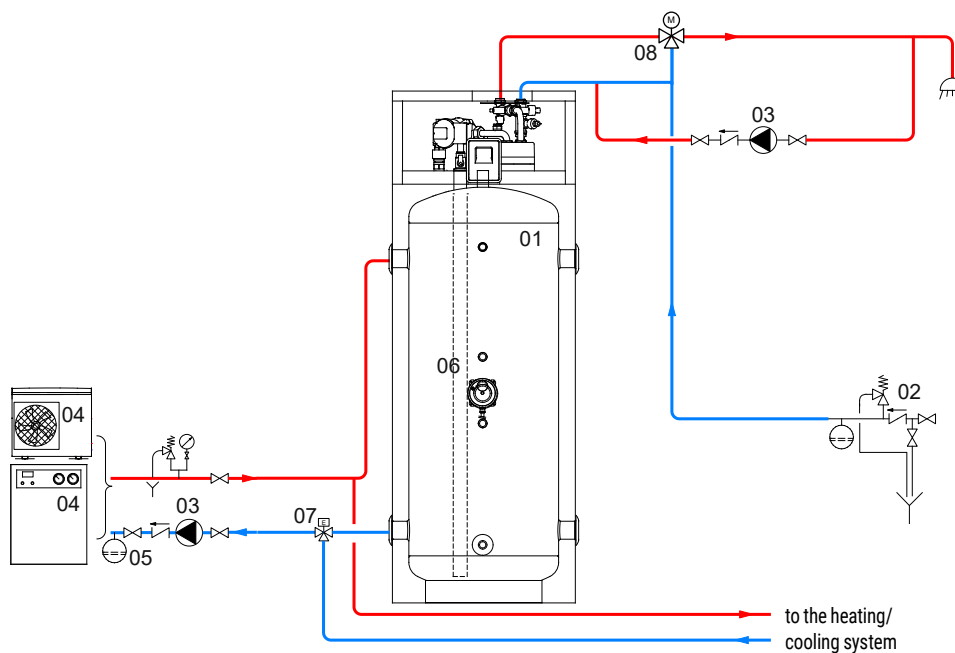


STORAGE: 65 °C
WITHDRAWAL: 55-40 °C
FLOW RATE: 20 l/min

- TC1_Low accumulation
- TC2_Medium accumulation
- TC3_High accumulation
- TC4_sanitary water inlet
- TC5_DHW outlet
- total liters

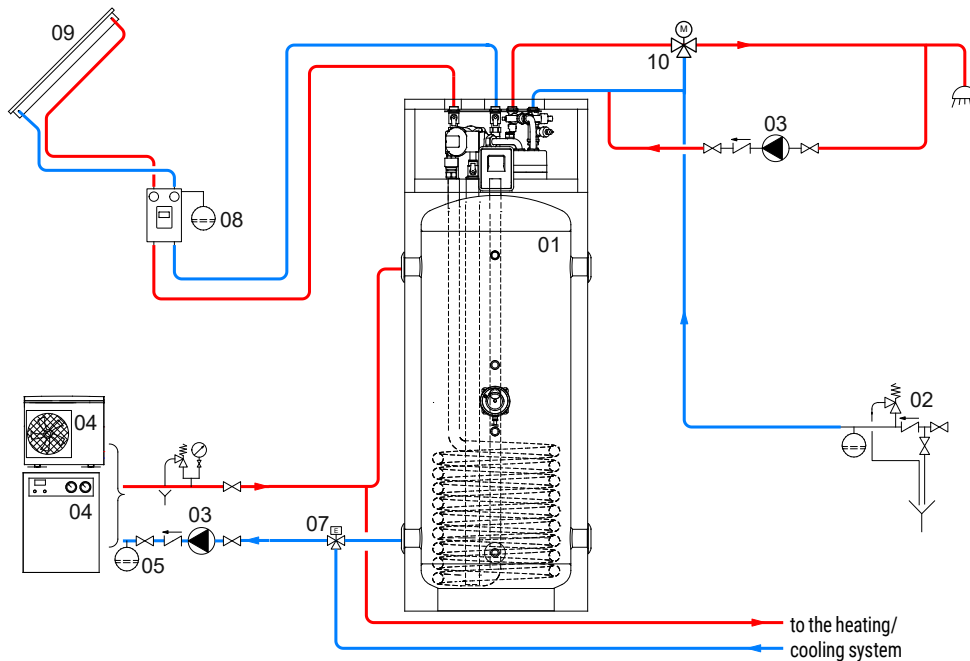


EXAMPLE OF INSTALLATION WITH PUFFERMAS® 1 DOMUS



1	PUFFERMAS® 1 DOMUS	4	Generator	7	3-way valve
2	Hydraulic safety group	5	Expansion vessel	8	Thermostatic mixing valve
3	Circulation group	6	Electric immersion heater (optional)		

EXAMPLE OF INSTALLATION WITH PUFFERMAS® 2 DOMUS



1	Serbatotio PUFFERMAS® 2 DOMUS	4	Generator	7	3-way valve	10	Thermostatic mixing valve
2	Hydraulic safety group	5	Expansion vessel	8	Solar system circulation group		
3	Circulation group	6	Electric immersion heater (optional)	9	Solar panels		

The following schemes are purely illustrative. To realize the installation, always refer to a qualified technician.