

# PUFFERMAS® 3 CTS POWER

HEATING WATER BUFFER TANK WITH 2 FIXED HEAT EXCHANGERS, INTEGRATED SOLAR CIRCULATION GROUP, MACS® MODULE FOR IMMEDIATE D.H.W. PRODUCTION



## APPLICATION

Storage by stratification of heating water, instantaneous production of domestic hot water (DHW) with high flows and performances and also management of the solar circulation, in solar thermal system / biomass boiler.

## MATERIAL

Mild steel construction with exterior paint. No anti-corrosion treatment required due to the buffer's closed circuit system.

## D.H.W. HEAT EXCHANGER

Plate to plate stainless steel exchanger in external MACS® module for immediate D.H.W. production.

## SOLAR STATION:

Solar station cabled components on the tank (circulation group- Professional central unit with 5 temperature probes)

## HEATING WATER HEAT EXCHANGER

2 mild steel fixed heat exchangers.

## TECHNICAL DESCRIPTION

Specific for accumulation and management of the heat produced by the thermal solar system, combines the use of the Puffer's characteristics with the ones of a fast DHW producer without the storage of domestic hot water, with the following advantages:

- to reduce dimensions of the water heater needed
- easy maintenance
- 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 higher temperature than DHW.

## INSULATION

**Buffer tank:** High thermal insulation with ecological hard polyurethane foam. Models 800-1000 available with dismountable hard foam insulation

**Macs® module and solar circulation group:** insulating PPE cover.

Grey PVC external lining

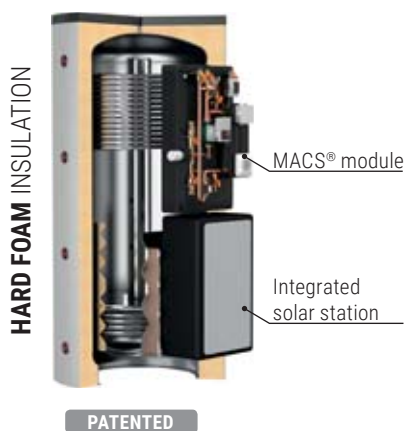
## WARRANTY

5 years (tank)

See general sales conditions and warranty for electrical parts.

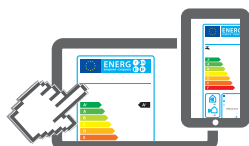
## ACCESSORIES AND SPARE PARTS

See Accessories section for the entire list.



## PUFFERMAS® 3 CTS VB

Model	MACS® module maximum output	HARD FOAM insulation Art. Nr.	SLB heat exchanger model / plates nr.	HEAT EXCHANGERS SURFACE		ENERGY EFFICIENCY CLASS
				Upper [lt]	Lower [m²]	
500	70 kW	3251162316463	SLB20 / 34	1,3	1,9	C
600		3251162316464		1,3	2,1	C
800		3251162316465		1,8	2,5	C
1000		3251162316466		2,5	3,1	C
1500	120 kW	3251162316467	SLB40/ 40	2,8	3,8	C
1000		3251162316468		2,5	3,1	C
1500		3251162316469		2,8	3,8	C



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On line ErP label tool

(\*)Data obtained under the following conditions:

- Primary water at 80°C
- DHW production from 10°C to 45°C.

Model	DHW Station max output (*)	DHW Station max flow rate (*)	Max DHW availability (10-45°C) with storage at 70°C
	[kW]	[l/min]	[litres]
500	70 kW	30	511
600		30	614
800		30	983
1000		30	1100
1500		30	1680
1000	120 kW	50	1503
1500		50	2254

## Accessories on request

### Thermometer

Art. Nr.
5032240000107
5 units box



### Recirculation kit

Art. Nr.
5221000000054
Control display + pump (for D.H.W.)



### Buffer tanks connecting kit

Art. Nr.	Connection
5006170001001	1" 1/2
Stainless steel extensible connecting kit - (200 ÷ 400 mm)	

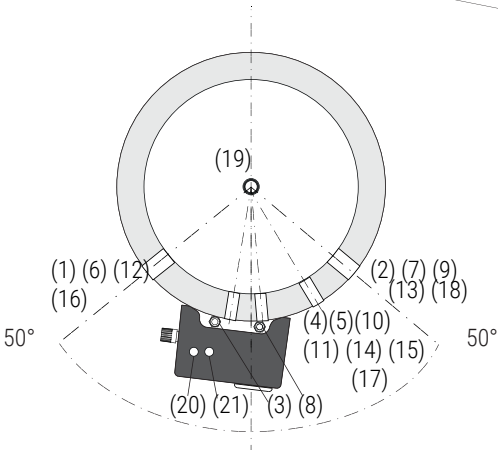
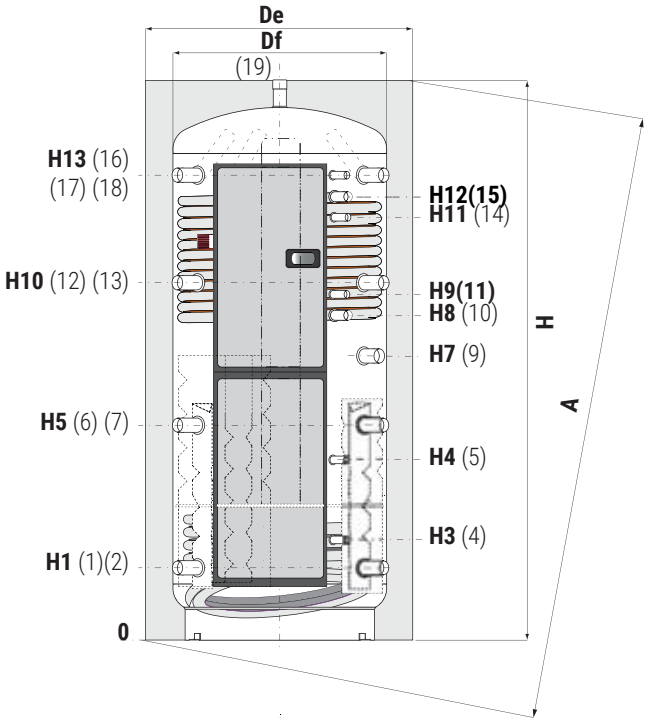
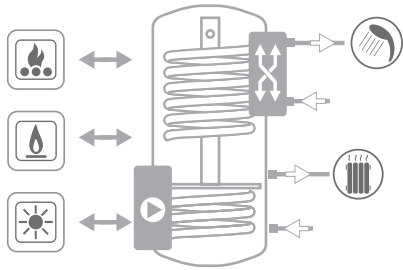


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STORAGE		FIXED HEAT EXCHANGER		STAINLESS STEEL PLATE HEAT EXCHANGER (MACS®)		D.H.W. HARDNESS
Pmax	Tmax	Pmax	Tmax	Pmax	Tmax	F max
3 bar	99 °C	12 bar	110 °C	6 bar	99 °C	30 °f

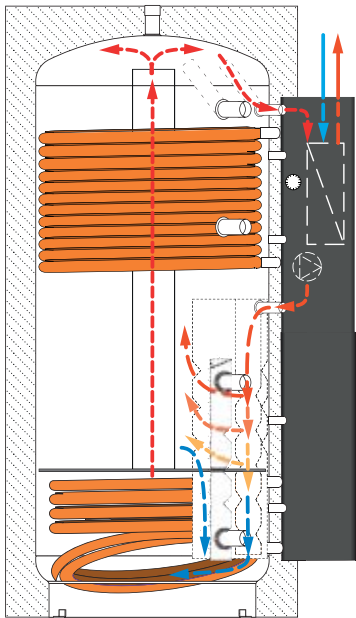
**CORDIVARI® Lab**  
TÜV Rheinland Energie und Umwelt GmbH states that test procedures and Cordivari LAB are certified conforming to European standard EN 15332, as indicated by Ecodesign ErP Directive.



1-2-6-7	Heating return/To Generator 1" 1/2 Gas F
3	Lower heat exchanger outlet 1" Gas F
4 - 5	Connection for instrumentation 1/2" Gas F
8	Lower heat exchanger inlet 1" Gas F
9	Electrical immersion 1" 1/2 Gas F
10	Upper heat exchanger outlet 1" Gas F
11	Connection for instrumentation 1/2" Gas F
12-13-16-18	Heating delivery/ Heating return 1" 1/2 Gas F
14 - 17	Connection for instrumentation 1/2" Gas F
15	Upper heat exchanger inlet 1" Gas F
19	Heating delivery/Air purge 1" 1/2 Gas F
20	Domestic cold water circuit inlet 3/4" Gas M (1" Gas M for models 120kW)
21	Domestic hot water circuit outlet 3/4" Gas M (1" Gas M for models 120kW)

SUITABLE FOR THERMAL SOLAR SYSTEMS

THE ILLUSTRATION UNDERLINES THE STRATIFICATION PROCESS (FROM TOP TO BOTTOM) THAT ALLOWS TO HAVE ALL ENERGY NEEDED RAPIDLY AVAILABLE



Model	Volume [lt]	De	H	A	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13
[mm]																	
500	478	750	1619	1784	247	215	360	533	629	425	870	930	1025	1011	1130	1231	1343
600	560	750	1870	2015	247	215	360	582	695	425	970	1090	1200	1144	1485	1391	1593
800	805	940	1840	2066	265	233	378	584	690	443	918	1003	1115	1115	1442	1347	1541
1000	946	940	2130	2328	265	233	384	656	787	443	1145	1188	1388	1309	1588	1661	1831
1500	1454	1100	2250	2504	313	281	432	736	845	491	1236	1286	1396	1377	1783	1673	1909

P.E.D. product designed and produced in conformity to the article 4.3 of directive 2014/68/UE - ErP Ecodesign directive 2009/125/CE

EXTRA-BOLLY® CALORIFIERS  
BOLLYTERM® CALORIFIERS  
STAINLESS STEEL CALORIFIERS  
CALORIFIERS FOR HEAT PUMP  
MULTIFUEL ENERGY CYLINDERS - PUFFER  
HYDRONIC  
INERTIAL TANKS  
WATER PRESSURE TANKS  
COMPRESSED AIR RECEIVERS  
ACCESSORIES AND SPARE PARTS  
TECHNICAL SUPPORT