

# PUFFER 1 CTS®

STORAGE BUFFER TANKS FOR HEATING WATER WITH STRATIFICATION DEVICE AND 1 FIXED HEAT EXCHANGER



## APPLICATION

Efficient storage of heating hot water mostly using biomass, heat pumps or solar thermal energy sources.

## MATERIAL

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

## HEAT EXCHANGER

N° 1 mild steel fixed heat exchanger with CTS® stratificator system.

## TECHNICAL DESCRIPTION

Used to improve flexibility of pellets, stoves and burners. PUFFER 1 CTS® are used in units with a typically discontinuous energy source such as biomass boiler and solar thermal systems.

PUFFER 1 CTS® is characterized by multiple stratification system based on the combination of Cordivari Labyrinth spreader for returning heating water with a new stratification device that conveys in the upper part of the tank the heated water up by the lower fixed exchanger. This combination ensures a perfect natural stratification inside the tank with no valve or additional external device.

The lower fixed exchanger can be connected with a solar system. Positioned at the bottom lower part of the buffer tank and with very small footprint, it increases the volume available for the storage.

## INSULATION

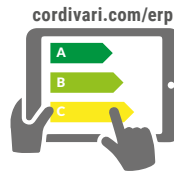
High thermal insulation with ecological hard polyurethane foam. Dismountable hard foam insulation available for 800-1000. Grey PVC external lining.

## WARRANTY

5 years - See general sales conditions and warranty

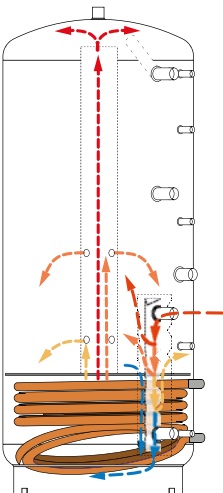
## ACCESSORIES AND SPARE PARTS

See Accessories section for the entire list.



On line ErP label tool

CTS® stratificator system



## SUITABLE FOR SOLAR THERMAL SYSTEMS

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



## PUFFER 1 CTS® VB

Model	HARD FOAM insulation		HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS
	Art. Nr.			
<b>500</b>	3251162313002		1,9	<b>C</b>
<b>600</b>	3251162313003		2,1	<b>C</b>
<b>800</b>	3251162313014		2,5	<b>B</b>
<b>1000</b>	3251162313015		3,1	<b>C</b>
<b>1500</b>	3251162313006		3,8	<b>C</b>
<b>2000</b>	3251162313007		4,6	<b>B</b>



## PUFFER 1 CTS® VB


Model	DISMOUNTABLE HARD FOAM insulation		HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS
	Art. Nr.			
<b>800</b>	3251162313004		2,5	<b>B</b>
<b>1000</b>	3251162313005		3,1	<b>C</b>

## ACCESSORIES


### Electric immersion heaters

	
Available kit:	
[Kw]	Tensione [V]
from <b>1,5 to 3</b>	220 - MONOPHASE
from <b>4 to 9</b>	400 - THREEPHASE
See accessories	

### Thermometer

Art. Nr.	
5032240000107	
5 units box	

### Buffer tanks connecting kit

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

# PUFFER 1 CTS®

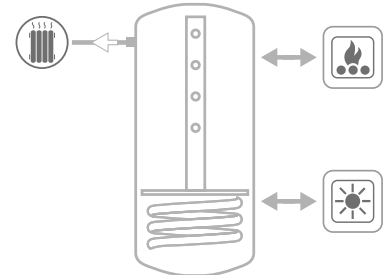
STORAGE BUFFER TANKS FOR HEATING WATER WITH STRATIFICATION DEVICE AND 1 FIXED HEAT EXCHANGER

STORAGE		HEAT EXCHANGER	
Pmax	Tmax	Pmax	Tmax
3 bar	99 °C	12 bar	110 °C

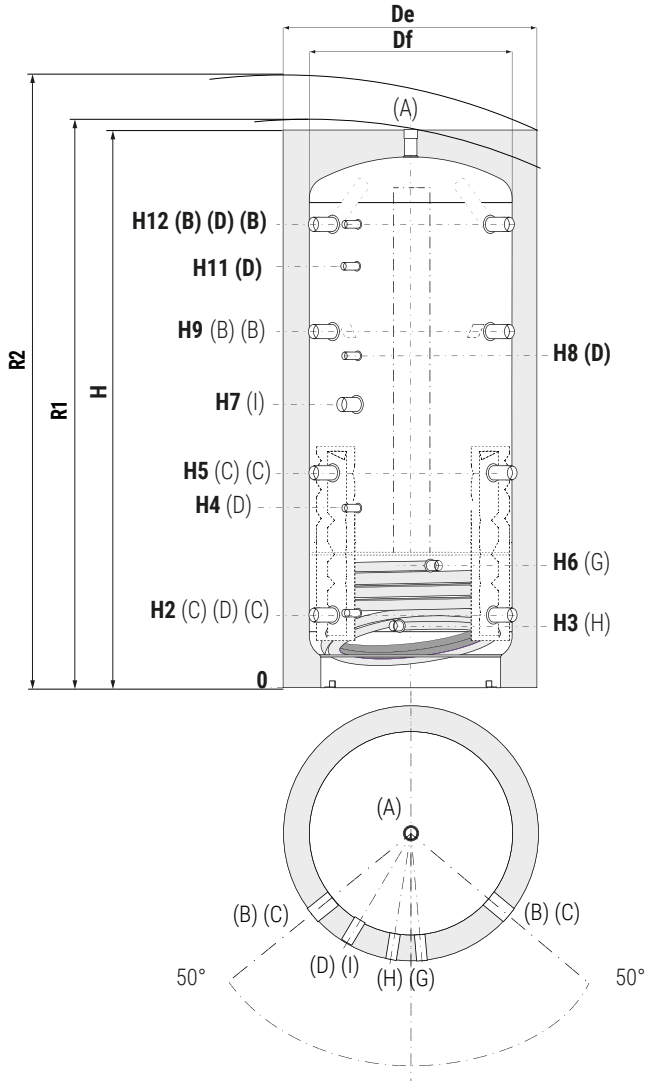


**CORDIVARI** Lab

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.



See TECHNICAL SUPPORT chapter for example of installation



- A** Heating delivery/From generator / vent 1"1/2 G F
- B** Heating delivery/From generator 1"1/2 G F
- C** Heating return/to generator 1"1/2 G F
- D** 1/2 °G probe F
- G** Fixed heat exchanger inlet 1" G F
- H** Fixed heat exchanger outlet 1" G F
- I** Connection for for electric immersion heater 1"1/2 F

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

Model	Volume [lt]	De	Df	H	R1	R2	H2	H3	H4	H5	H7	H8	H9	H11	H12
		[mm]													
<b>500</b>	478	750	//	1620	//	1790	247	215	533	629	841	930	1011	1231	1343
<b>600</b>	560	750	//	1870	//	2020	247	215	582	695	915	1060	1144	1382	1593
<b>800</b>	805	950	790	1840	1890	2075	265	233	584	690	823	988	1115	1332	1541
<b>1000</b>	946	950	790	2130	2175	2340	265	233	656	787	998	1188	1309	1588	1831
<b>1500</b>	1435	1100	//	2250	//	2510	313	281	736	845	1061	1286	1377	1653	1909
<b>2000</b>	1973	1300	//	2320	//	2665	347	315	770	879	1060	1300	1411	1687	1943