

PUFFER 2



HEATING WATER BUFFER TANK WITH 2 FIXED HEAT EXCHANGERS



APPLICATION

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

MATERIAL

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

HEAT EXCHANGER

2 mild steel fixed heat exchangers.

TECHNICAL DESCRIPTION

Used to improve flexibility of pellets, stoves and burners. PUFFER 2 are used in units with a typically discontinuous energy source such as biomass boiler and solar thermal system. PUFFER 2 allows

the solar energy system integration as well as another thermal generator.

INSULATION

NOFIRE® soft polyester fleece 100% made of recyclable material, with high thermal insulation. Fire resistance class B-s2d0 according to EN 13501. Grey PVC external lining with top cover.

HE SERIES: High thermal insulation with ecological hard polyurethane foam.

WARRANTY

2 years

See general sales conditions and warranty



Stratification plate

Available until April 2016

PUFFER 2 VT VC

Model	Storage: Mild steel Heat exchanger: Mild steel	Art. Nr.	ENERGY EFFICIENCY CLASS 	HEAT EXCHANGER SURFACE	
				Upper [m ²]	Lower [m ²]
500		3251162282953	C	1,3	1,9
600		3251162282703	E	1,3	2,1
750		3251162282783	E	1,5	2,3
800		3251162282704	E	1,5	2,3
1000		3251162282705	E	2,5	3,1
1500		3251162282706	E	2,8	3,8
2000		3251162282707	E	2,8	4,6

PUFFER 2 HE SERIES

HIGH EFFICIENCY INSULATION TANKS

Designed according to 2009/125/CE Directive (ErP – Eco-friendly Plan Specification), HE series are already compliant with Regulation n. 814/2013, that demands C-energy efficiency class from September, 26th 2017.



PUFFER 2 VT VC HE

Model	Storage: Mild steel Heat exchanger: Mild steel	Art. Nr.	ENERGY EFFICIENCY CLASS 	HEAT EXCHANGER SURFACE	
				Upper [m ²]	Lower [m ²]
500		3251162312703	C	1,3	1,9
600		3251162312704	C	1,3	2,1
750		3251162312705	C	1,8	2,5
800		3251162312706	C	1,5	2,3
1000		3251162312707	C	2,5	3,1
1500		3251162312709	C	2,8	3,8
2000		3251162312710	C	2,8	4,6

— Accessories on request —

Electrical immersions kit

Available kit:	
[Kw]	Tension [V]
from 1,5 to 3	220 - MONOPHASE
from 4 to 12	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)	

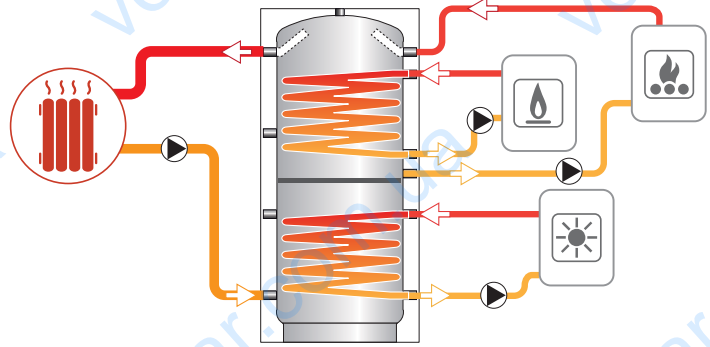
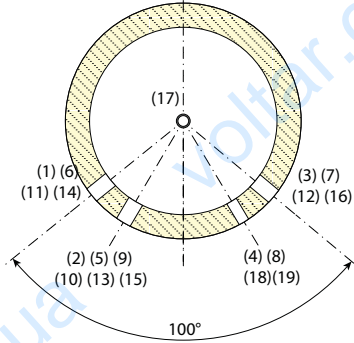
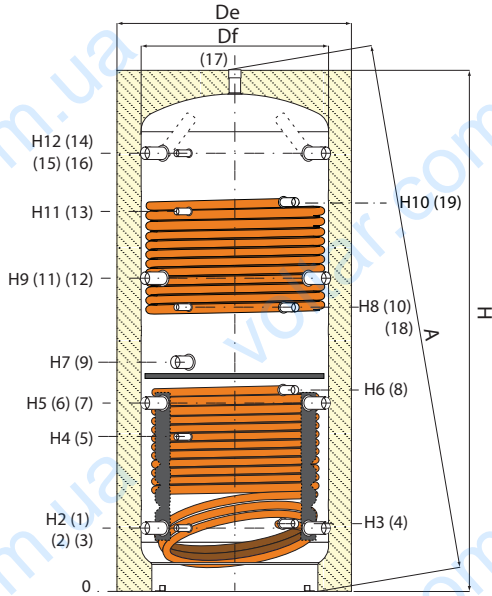


PUFFER 2

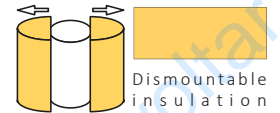
HEATING WATER BUFFER TANK WITH 2 FIXED HEAT EXCHANGERS

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

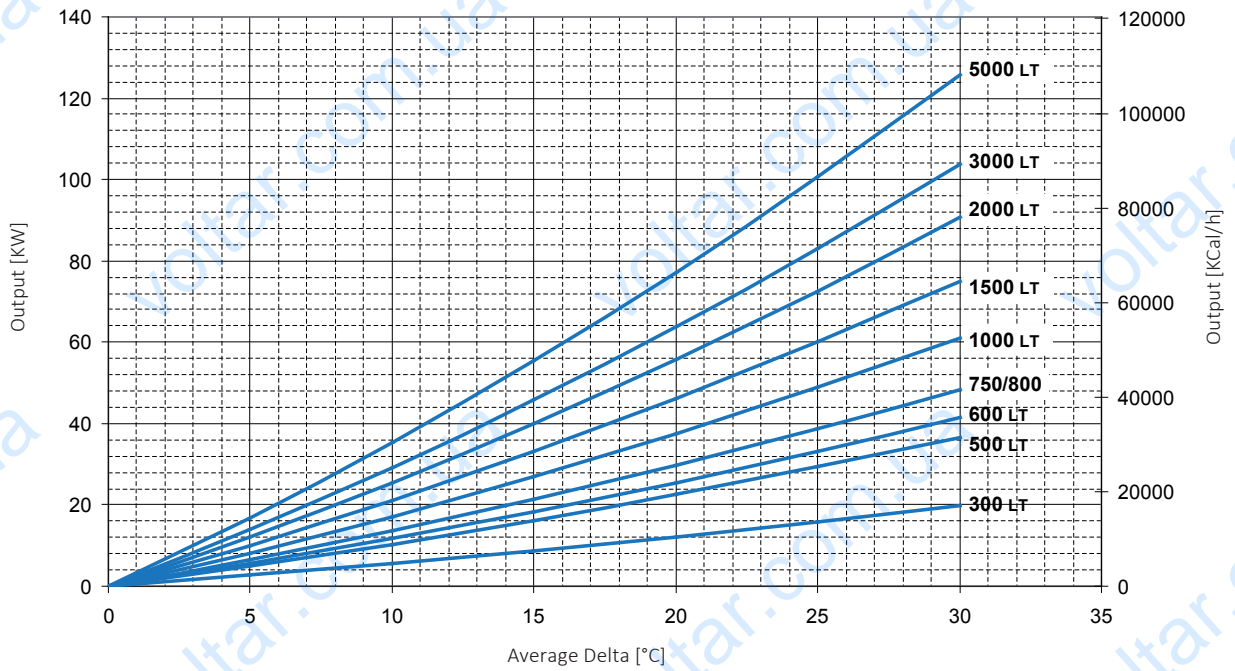


1-3-6-7	Heating return/To Generator
2-5	Connection for instrumentation 1/2" Gas F
4	Lower fixed heat exchanger outlet
8	Lower fixed heat exchanger inlet
9	Electrical immersion
10	Connection for instrumentation 1/2" Gas F
11-12-14-16	Heating delivery/From Generator
13	Connection for instrumentation 1/2" Gas F
15	Connection for instrumentation 1/2" Gas F
17	Heating delivery
18	Upper fixed heat exchanger outlet 1" Gas F
19	Upper fixed heat exchanger inlet 1" Gas F



Model	Net volume [lt]	Df	De	De (HE SERIE)	H	A	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	1-3-6-7-9-11-12-14-16-17	4-8
																		[mm]	
500	478	650	850	750	1620	1784	247	260	533	629	745	841	930	1011	1231	1231	1343	1" 1/2	1"
600	560	650	850	750	1870	2014	247	260	582	695	855	915	1060	1144	1361	1382	1593	1" 1/2	1"
750	717	790	990	940	1658	1906	265	278	584	630	679	823	938	995	1196	1180	1371	1" 1/2	1"
800	805	790	950	940	1840	2064	265	278	584	690	762	823	988	1115	1332	1332	1541	1" 1/2	1"
1000	946	790	990	940	2130	2326	265	284	656	787	953	998	1188	1309	1661	1588	1831	1" 1/2	1"
1500	1435	950	1150	1100	2250	2504	313	336	736	845	1006	1061	1286	1377	1673	1653	1909	1" 1/2	1"
2000	1973	1100	1300	1300	2320	2659	347	370	770	879	1001	1060	1300	1411	1687	1687	1943	1" 1/2	1"

PUFFER 1 FIXED HEAT EXCHANGER POWERS CHART



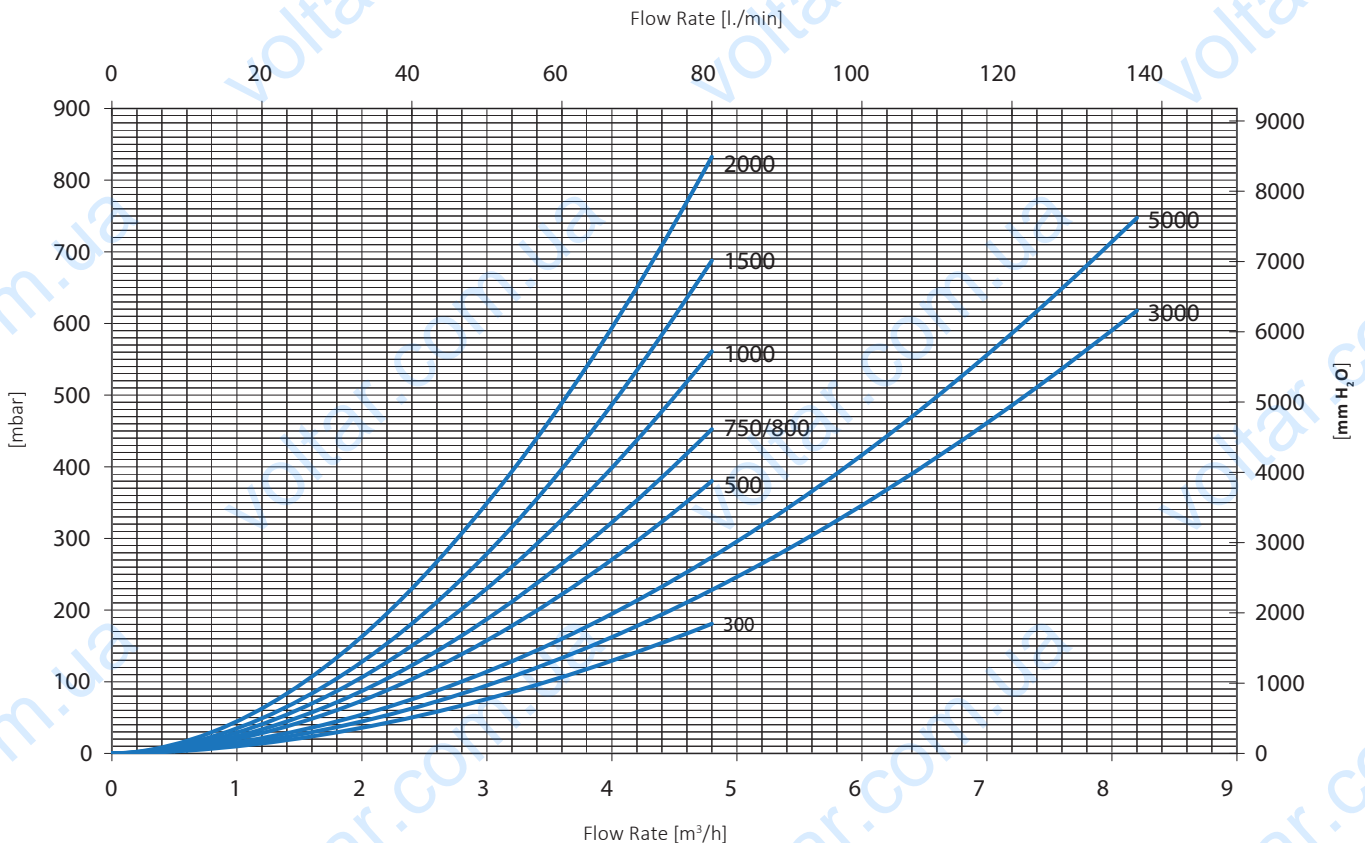
Thermal output is given in both KW or kcal/h in terms of average temperature difference between primary and secondary circuit, all for a range of primary 3 m³/h.

For example, a PUFFER 1 T of 1000 liters Capacity with a water flow of 3 m³/h at 80 °C inlet and outlet at 70 °C, has on the storage of water an average temperature of 60 °C, the mean difference of temperature will be:

$(80 + 70) / 20 - 60 = 15$ °C and therefore you can exchange up to approximately 34 KW.

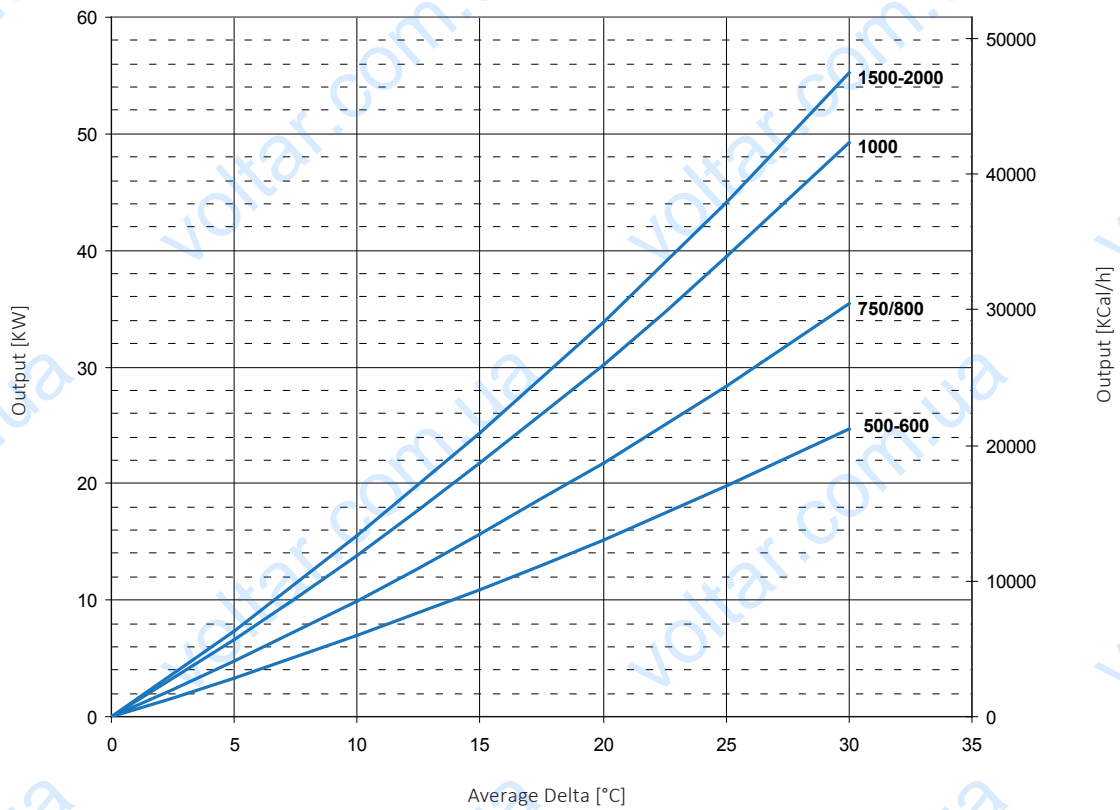
Output of the lower heat exchangers PUFFER 1 depending on the average DeltaT between primary and accumulation considering flow rate 3 m³/h.

PUFFER 1 FIXED HEAT EXCHANGER PRESSURE LOSS



PUFFER 2- UPPER FIXED HEAT EXCHANGER POWERS CHART

FOR LOWER EXCHANGER POWER DATA SEE PUFFER 1



Output of the lower heat exchangers PUFFER 2 depending on the average DeltaT between primary and accumulation considering flow rate 3 m³/h.

PUFFER 2 UPPER FIXED HEAT EXCHANGER PRESSURE LOSS

FOR LOWER EXCHANGER POWER DATA SEE PUFFER 1

