# STANDARD BUFFER TANK WITH 1 FIXED COIL

## HEATING WATER - PUFFER 1

**APPLICATION**
Efficient storage of primary heating water.

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

**HEAT EXCHANGER**
N° 1 mild steel fixed heat exchanger.

**TECHNICAL DESCRIPTION**
Used to improve performance of primary water in heating systems.

PUFFER 1 are used in units with a typically discontinuous energy source such as biomass boiler and solar thermal system.
PUFFER 1 allows the solar energy system integration.

**INSULATION**
- HARD: High thermal insulation with ecological polyurethane hard foam.
- SOFT: NOFIRE® polyester fleece 100% made of recyclable material, with high thermal insulation. Fire resistance class B-s2d0 according to EN 13501.

Grey PVC external lining, complete with top and flange cover..

**WARRANTY**
5 years - See general sales conditions and warranty

**ACCESSORIES AND SPARE PARTS**
See Accessories section for the entire list.

STOCK AVAILABILITY

cordivari.com/erp

On line ErP label tool

### PUFFER 1 VB

| Model | HARD FOAM insulation Art. Nr. | Heat exchanger surface [m²] | Energy efficiency class ErP |
|---|---|---|---|
| **300** | 3251162312201 | 1,0 | **B** |
| **500** | 3251162312202 | 1,9 | **C** |
| **600** | 3251162312203 | 2,1 | **C** |
| **750** | 3251162312214 | 2,3 | **B** |
| **800** | 3251162312215 | 2,5 | **B** |
| **1000** | 3251162312216 | 3,1 | **C** |
| **1250** | 3251162312207 | 3,4 | **B** |
| **1500** | 3251162312208 | 3,8 | **C** |
| **2000** | 3251162312209 | 4,6 | **B** |

### PUFFER 1 VB

| Model | DISMOUNTABLE HARD FOAM insulation Art. Nr. | Heat exchanger surface [m²] | Energy efficiency class ErP |
|---|---|---|---|
| **750** | 3251162312204 | 2,3 | **B** |
| **800** | 3251162312205 | 2,5 | **B** |
| **1000** | 3251162312206 | 3,1 | **C** |

### PUFFER 1 VC

| Model | DISMOUNTABLE SOFT FLEECE insulation Art. Nr. | Heat exchanger surface [m²] | Energy efficiency class ErP |
|---|---|---|---|
| **750** | 3251162282814 | 2,3 | **C** |
| **800** | 3251162282815 | 2,5 | **C** |
| **1000** | 3251162282816 | 3,1 | **C** |
| **1500** | 3251162282817 | 3,8 | **C** |
| **2000** | 3251162282818 | 4,6 | **C** |
| **3000** | 3251162282308 | 6,2 | |
| **5000** | 3251162282309 | 7,5 | |

## ACCESSORIES

**THREEPHASE and MONOPHASE Electric immersion heaters**

| Available kit: | |
|---|---|
| [Kw] | Tension [V] |
| da **1,5** a **3** | 220 - MONOPHASE |
| da **4** a **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) | |

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

# STANDARD BUFFER TANK WITH 1 FIXED COIL

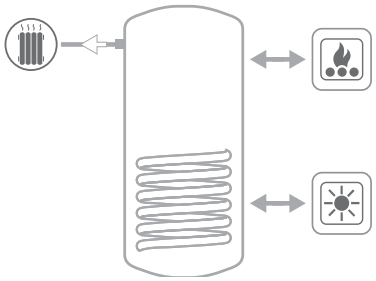
## HEATING WATER - PUFFER 1

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

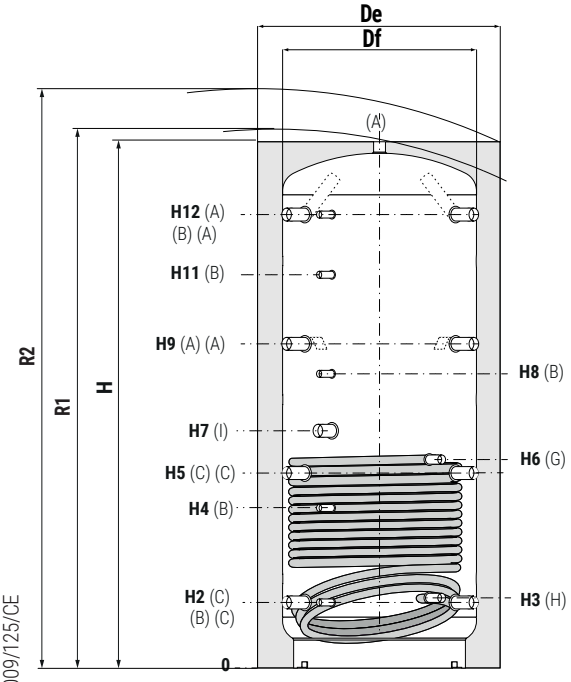
CORDIVARI Lab

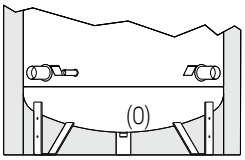
**TÜV** Rheinland Energie und Umwelt GmbH states that test procedures and Cordivari LAB are certified conforming to European standard EN 15332, as indicated by Ecodesign ErP Directive.

TESTED ErP

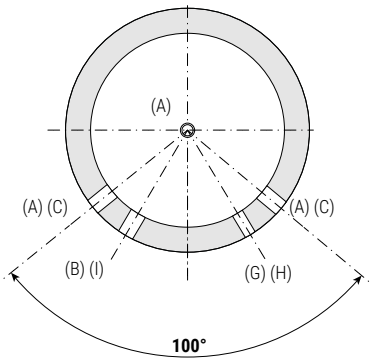


*See TECHNICAL SUPPORT chapter for example of installation*




Standard supporting feet for models 3000 and 5000. Drain welded on the bottom.




| | |
|---|---|
| **A** | Heating delivery/from generator |
| **B** | Connection for instrumentation 1/2" F |
| **C** | Heating return/to generator |
| **I** | Connection for electric immersion heater |
| **G** | Heat exchanger inlet 1" F |
| **H** | Heat exchanger outlet 1" F |
| **O** | Drain only for models 3000 and 5000 |

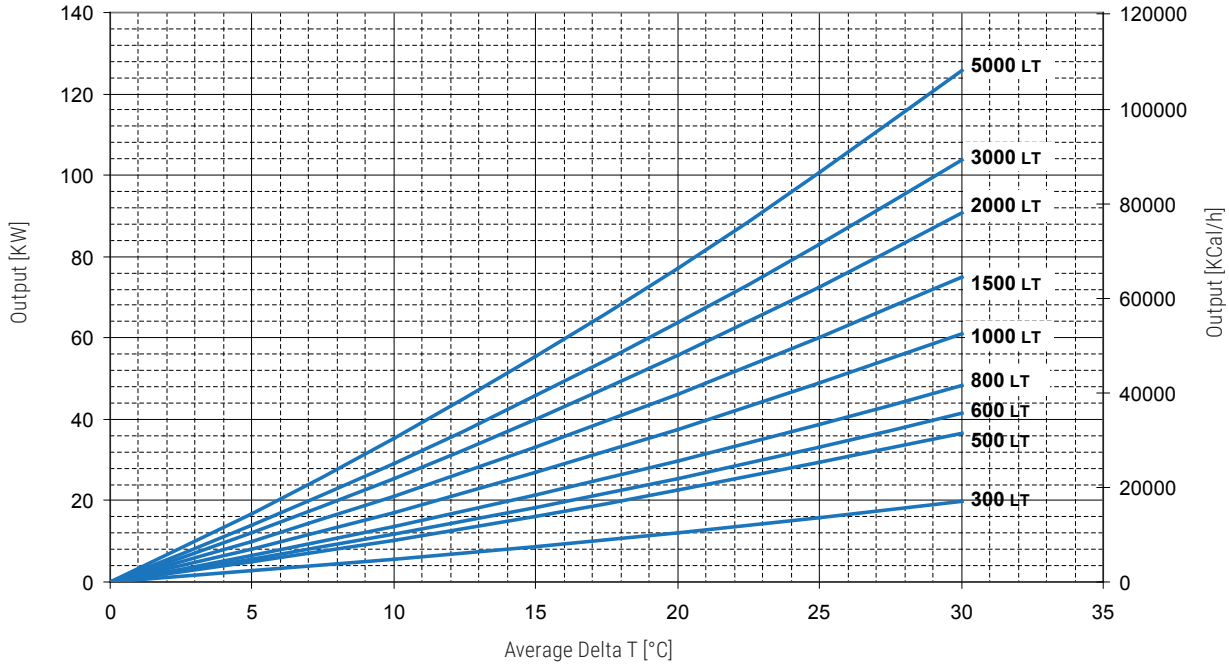
| Model | Volume | Df (vers. VC) | De (vers. VC) | De (vers. VB) | H | R1 | R2 | H2 | H3 | H4 |
|---|---|---|---|---|---|---|---|---|---|---|
| | [lt] | [mm] | | | [mm] | | | | | |
| **300** | 279 | // | // | 650 | 1340 | // | 1495 | 232 | 217 | 444 |
| **500** | 478 | // | // | 750 | 1620 | // | 1790 | 247 | 260 | 533 |
| **600** | 560 | // | // | 750 | 1870 | // | 2020 | 247 | 260 | 582 |
| **750** | 717 | 790 | 1010 | 950 | 1658 | 1665 | 1915 | 265 | 278 | 584 |
| **800** | 805 | 790 | 1010 | 950 | 1840 | 1845 | 2075 | 265 | 278 | 584 |
| **1000** | 946 | 790 | 1010 | 950 | 2130 | 2135 | 2340 | 265 | 284 | 656 |
| **1250** | 1248 | // | // | 1050 | 2201 | // | 2445 | 313 | 326 | 705 |
| **1500** | 1454 | 950 | 1210 | 1100 | 2250 | 2255 | 2510 | 313 | 336 | 736 |
| **2000** | 1973 | 1100 | 1360 | 1300 | 2320 | 2325 | 2665 | 347 | 370 | 770 |
| **3000** | 2915 | 1250 | 1450 | // | 2814 | 2820 | 3170 | 556 | 569 | 1017 |
| **5000** | 4985 | 1600 | 1800 | // | 2929 | 2935 | 3445 | 586 | 609 | 1047 |

| Model | H5 | H6 | H7 | H8 | H9 | H11 | H12 | A - C - I | O |
|---|---|---|---|---|---|---|---|---|---|
| | [mm] | | | | | | | Connections F | |
| **300** | 514 | 514 | 590 | 725 | 796 | 885 | 1078 | 1"1/2 | // |
| **500** | 629 | 745 | 841 | 930 | 1011 | 1231 | 1343 | 1"1/2 | // |
| **600** | 695 | 855 | 915 | 1060 | 1144 | 1382 | 1593 | 1"1/2 | // |
| **750** | 630 | 679 | 823 | 938 | 995 | 1180 | 1371 | 1"1/2 | // |
| **800** | 690 | 762 | 823 | 988 | 1115 | 1332 | 1541 | 1"1/2 | // |
| **1000** | 787 | 953 | 998 | 1188 | 1309 | 1588 | 1831 | 1"1/2 | // |
| **1250** | 835 | 884 | 986 | 1168 | 1357 | 1568 | 1879 | 1"1/2 | // |
| **1500** | 845 | 1006 | 1061 | 1286 | 1377 | 1653 | 1909 | 1"1/2 | // |
| **2000** | 879 | 1001 | 1060 | 1300 | 1411 | 1687 | 1943 | 1"1/2 | // |
| **3000** | 1071 | 1551 | 1693 | 1879 | 1786 | 2140 | 2402 | 2" | 1" |
| **5000** | 1101 | 1522 | 1691 | 1889 | 1816 | 2159 | 2432 | 2" | 2" |

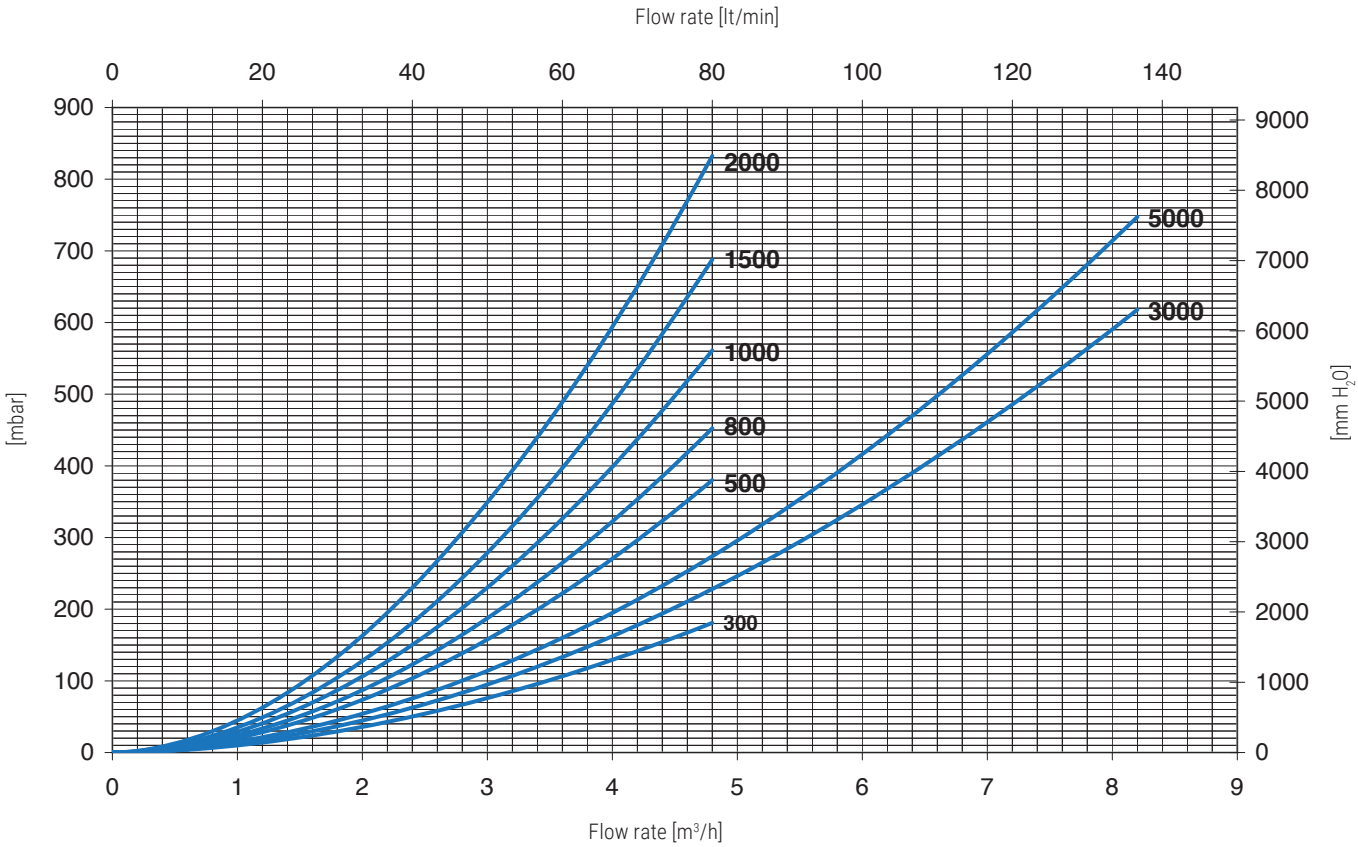
P.E.D. product designed and produced in conformity to the article 4.3 of directive 2014/68/UE - ErP Ecodesgin directive 2009/125/CE

# PUFFER **1**

## LOWER HEAT EXCHANGER POWER




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 $m^3$/h. For example, a PUFFER 1 T of 1000 liters capacity with a water flow of 3 $m^3$/h at 80 °C inlet and outlet at 70 °C, has on the storage of water an average temperature of 60 °C, the main 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 $m^3$/h.

## LOWER HEAT EXCHANGER PRESSURE LOSS