

PUFFERMAS® 2 CTS POWER

HEATING WATER BUFFER TANK WITH 1 FIXED HEAT EXCHANGER, 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

1 mild steel fixed heat exchanger.

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

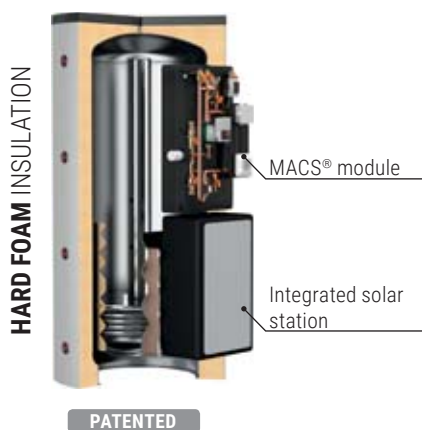
WARRANTY

5 years (tank)

See general sales conditions and warranty for electrical parts.

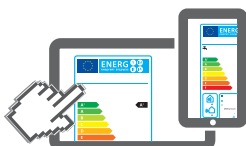
ACCESSORIES AND SPARE PARTS

See Accessories section for the entire list.



PUFFERMAS® 2 CTS POWER VB

| Model | MACS® module maximum output | HARD FOAM insulation Art. Nr. | SLB heat exchanger model / plates nr. | HEAT EXCHANGERS SURFACE [m²] | ENERGY EFFICIENCY CLASS |
|-------|-----------------------------|-------------------------------|---------------------------------------|------------------------------|-------------------------|
| 500 | 70 kW | 3251162316443 | SLB20 / 34 | 1,9 | C |
| 600 | | 3251162316444 | | 2,1 | C |
| 800 | | 3251162316445 | | 2,5 | C |
| 1000 | | 3251162316446 | | 3,1 | C |
| 1500 | | 3251162316447 | | 3,8 | C |
| 1000 | 120 kW | 3251162316448 | SLB40/ 40 | 3,1 | C |
| 1500 | | 3251162316449 | | 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 (*) [kW] | DHW Station max flow rate (*) [l/min] | Max DHW availability (10-45°C) with storage at 70°C [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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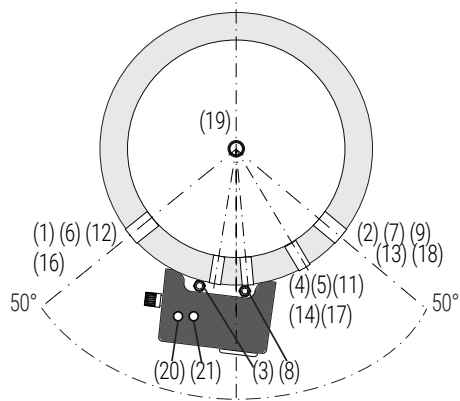
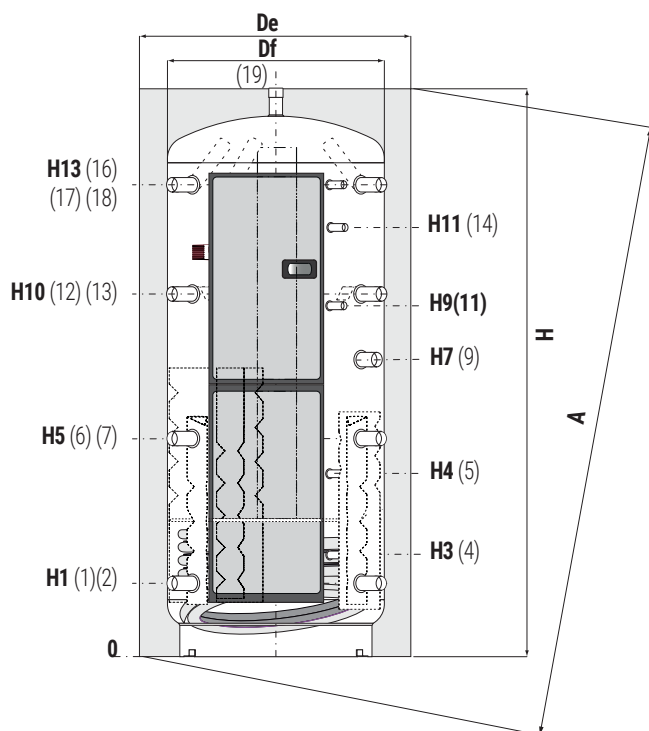
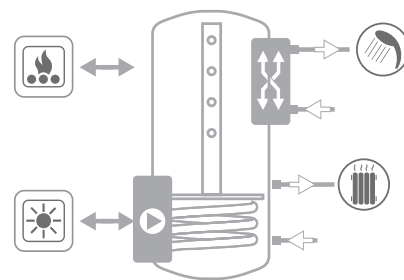
| STORAGE | | FIXED HEAT EXCHANGER | | STAINLESS STEEL PLATE HEAT EXCHANGER (MACS®) | | D.H.W. HARDNESS |
|---------|-------|----------------------|--------|--|-------|-----------------|
| Pmax | Tmax | Pmax | Tmax | Pmax | Tmax | F max |
| 3 bar | 99 °C | 12 bar | 110 °C | 6 bar | 99 °C | 30 °f |



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.



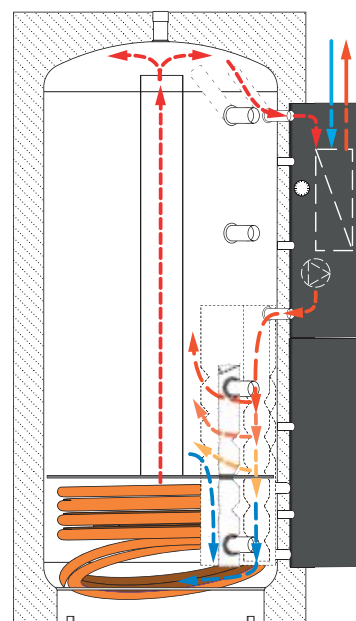
ASK ALWAYS FOR CERTIFIED LABORATORIES DATA RESULTS



| | |
|--------------------|--|
| 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 |
| 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 |
| 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 | H9 | H10 | H11 | H13 |
|-------------|-------------|------|------|------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| [mm] | | | | | | | | | | | | | | | |
| 500 | 478 | 750 | 1619 | 1784 | 247 | 215 | 360 | 533 | 629 | 425 | 870 | 1025 | 1011 | 1130 | 1343 |
| 600 | 560 | 750 | 1870 | 2015 | 247 | 215 | 360 | 582 | 695 | 425 | 970 | 1200 | 1144 | 1485 | 1593 |
| 800 | 805 | 940 | 1840 | 2066 | 265 | 233 | 378 | 584 | 690 | 443 | 918 | 1115 | 1115 | 1442 | 1541 |
| 1000 | 946 | 940 | 2130 | 2328 | 265 | 233 | 384 | 656 | 787 | 443 | 1145 | 1388 | 1309 | 1588 | 1831 |
| 1500 | 1454 | 1100 | 2250 | 2504 | 313 | 281 | 432 | 736 | 845 | 491 | 1236 | 1396 | 1377 | 1783 | 1909 |