GREEN 500 S NEW Monobloc heat pump water heater with domestic hot water storage and solar exchanger



Technical and construction characteristics

Following important investments in the development of new technologies aimed at the use of renewable energy and energy saving, A2B Accorroni E.G. has created a new range of high efficiency monobloc heat pump water heaters with a high content of domestic water, GREEN 500 S NEW series with integrated solar thermal exchanger.

The GREEN 500 S NEW heat pump water heater represents the ecological evolution of the traditional water heater, which uses a renewable energy thermodynamic system to absorb heat directly from the external air heated free of charge by the sun. GREEN 500 S NEW can access the Conto Termico 2.0 incentive issued to encourage all those interventions aimed at increasing the energy efficiency of existing buildings. The GREEN 500 S NEW heat pump water heater is characterized in particular by its ease of installation, silent operation and great reliability.

GREEN 500 S NEW has the following technical characteristics: -Time programming, to take advantage of any time slots

advantageous on the electricity tariff;

- Different operating modes: maximum savings with use of compressor only or maximum speed to produce large quantities of DHW in a short time, using a heat pump and integrative electric resistance at the same time;
- There is no possibility of contamination between water and fluid refrigerant, the heat exchanger is external to the tank; -
- Water sterilization programs (anti-legionella cycle: the danger of legionella bacteria is averted thanks to periodic cycles that raise the temperature of the storage water above 65

 °C);
Magnesium anode as standard which protects the tank from corrosive action. Compared to the magnesium anode solution, greater reliability is guaranteed, with lower maintenance costs.

| Model | Code | € |
|-----------------|----------|----------|
| GREEN 500 S NEW | 37030505 | 7.000,00 |

Installation methods GREEN 500 S NEW



GREEN 500 S NEW

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Net dimensions and hydraulic connections GREEN 500 S NEW





- 1 Domestic hot water utilities
- 2 Condensate drain
- 3 Magnesium anode
- 4 Hot water outlet
- 5 Electrical resistance 6 T sensor well
- 7 Solar exchanger input
- 8 Solar exchanger output
- 9 Cold water inlet
- 10 Tank drain
- 11 Expansion vessel (optional)
- 12 Non-return valve 13 "Y" mechanical filter
- 14 Recirculation pump (optional)
- 15 Mixer (optional)
- 16 Solar thermal collector

Technical data table for heat pump water heaters GREEN 500 S NEW

| Model | | U.M. | GREEN 500 S NEW |
|---|------------------------|----------------|------------------|
| Withdrawal profile (2) | | | XXL |
| Tank storage capacity | | I | 500 |
| Heating ⁽¹⁾ | Capacity | kW | 3,09 (+1,5*) |
| | Average power absorbed | kW | 0,876 |
| | Total heating time | h | 8,50 |
| | Energy consumption | kW/h | 7,068 |
| | COP at 7 °C (ENI16147) | kW/h / kW/h | 2,66 |
| | Mixed water at 40 °C | I | 596,00 |
| Heating ⁽²⁾ | Capacity | kW | 3,08 (+1,5*) |
| | Average power absorbed | kW | 0,945 |
| | Total heating time | h | 6,12 |
| | Energy consumption | kW/h | 5,784 |
| | COP | W/W | 4,02 |
| | Water mixed at 40°C | I | 596,00 |
| Average annual consumption (3) | | kW/h / anno | 1829 |
| Rated current | | A | 6,2 (+6,5) |
| Maximum energy consumption | | W | 2800 |
| Energy efficiency (heating) | | % | 109,50 |
| Power supply | | | 230V/1/50Hz |
| Max. temperature outlet water (without electrical resistance) | | °C | 60 |
| Sound power level | | dB(A) | 59 |
| Net dimensions (ØxH) | | mm | Ø 700 x 2253 |
| Packaging dimensions (LxPxH) | | mm | 755 x 755 x 2385 |
| Water tank capacity | | I | 490 |
| Nominal water yield | | l/h | 82 |
| Tank material | | | GX2CrNiMoN22-5-3 |
| Maximum operating water pressure | | Мра | 1 |
| Nominal water pressure | | Мра | 0,6 |
| Compressor | | | Rotary |
| Refrigerant (Type / Volume loaded) | | Kg | R134A / 1,60 |
| Set point relief valve | | Мра | 0,7 |
| Fan | | | Centrifugo |
| Fan air flow | | m³/h | 800 |
| Temperature range (operation only in HP) | | °C | -5 / +43 |
| LWT range | | °C | +40 / +60 |
| Solar exchanger surface | | m ² | 0,7 |
| Net weight | | Kg | 117 |

Capacity and power consumption based on the following conditions: ambient temperature 7 °C DB/6 °C WB, water temperature from 10 °C to 55 °C. Capacity and power consumption based on the following conditions: ambient temperature 20 °C DB, water temperature from 15 °C to 55 °C. Heating energy efficiency according to ERP standards under average conditions 1.5 kW auxiliary electric resistance

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