## **RED 120**

#### Wall-mounted split heat pump water heater with sanitary storage



















#### **Technical and construction features**

The RED 120 heat pump water heaters by A2B Accorroni E. G. are designed for the production of domestic hot water for domestic and commercial use. Thanks to their large 120-liter accumulation, it is possible to satisfy more contemporary withdrawals such as bathroom and kitchen. The thermodynamic cycle of the heat pump allows heat to be transferred from the external air to the water contained in the storage, increasing its temperature up to 55  $^{\circ}\text{C}$ .

Only a small amount of electricity is required for the operation of the compressor, in fact the thermal energy produced by the heat pump cycle is 3/4 times higher than that used for the operation of the compressor. The RED heat pump water heater consists of two main components:

- Outdoor unit that can also be installed on the wall, including the compressor, the exchanger-evaporator and the fan
- Indoor unit, consisting of accumulation with exchanger integrated capacitor and dedicated control electronics.

The two components are connected to each other with insulated copper pipes in which the refrigerant gas of the thermodynamic cycle flows. The storage of domestic hot water is made of steel protected by a high quality enamel, inside the storage there is a sacrificial magnesium anode.

The thermal insulation for maintaining the temperature of the domestic hot water consists of a layer of polyurethane foam covered externally with a steel sheet to which a layer of epoxy material has been coupled.

The water heaters are equipped with an additional electrical resistance that can be activated in an emergency. Some advantages of the RED water heater are:

SAVINGS COMPARED TO THE TRADITIONAL WATER HEATER RED 120 has a coefficient of performance (COP) equal to 3.4 (water heating from 15 ° C to 55 ° C with 15 ° C of external temperature which allows to reach an energy saving of about 70%).

#### **EASY INSTALLATION**

Thanks to its compact size it is possible to install the new water heater in a simplified way even in the replacements of the old water heaters.

#### **ELECTRONIC LAMINATION VALVE**

This continuously adjustable valve guarantees the higher efficiency of the heat pump water heater even at the coldest outside temperatures.

#### INNOVATIVE CONDENSER

RED 120 is equipped with an aluminum heat exchanger wrapped outside the storage tank with a large exchange surface.

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#### THERMAL ANTI LEGIONELLA CYCLE

RED 120 automatically activates the electrical resistance to perform the anti-legionella heat treatment to ensure the hygiene of the domestic hot water.

#### HIGH EFFICIENCY INSULATION

Thanks to the thickness of the eco-polyurethane foam insulation, characterized by one of the best thermal resistance coefficients, RED 120 has negligible heat losses.

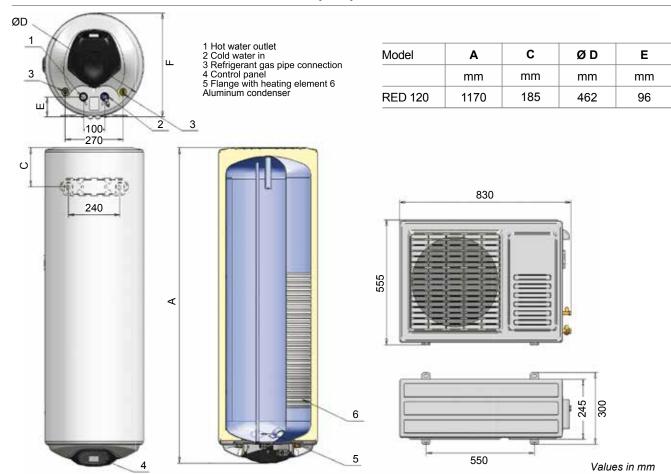
| Model   | Code     | €        |
|---------|----------|----------|
| RED 120 | 38010100 | 2.850,00 |



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## Dimensions and overall dimensions of heat pump water heater RED 120



## Heat pump water heater technical data table RED 120

| Model  | U.M.  | RED 120     |
|--|-------|-------------|
| Volumetric unit  | I     | 120         |
| Nominal heat output of the heat pump                   | W     | 1500        |
| Nominal power of the electrical resistance             | W     | 2000        |
| Nominal electrical power of the heat pump              | W     | 500         |
| Maximum electrical power of the heat pump              | W     | 850         |
| Power supply   |       | 230V/1/50Hz |
| COP*   | W/W   | 3,40        |
| Refrigerant gas charge R134a                           | kg    | 0,85        |
| Operating temperature range                            | °C    | -5 / +42    |
| Factory setting of the temperature range               | °C    | -2 / +40    |
| Max pressure with coolant                              | MPa   | 2,7         |
| Min.pressure with coolant                              | MPa   | 0,8         |
| Water accumulation nominal pressure                    | MPa   | 0,7         |
| Recovery times (da 15 °C a 55 °C)                      | min   | 105         |
| Inrush current   | A     | 21,15       |
| Degree of protection of the outdoor unit               |       | IP X4       |
| Indoor unit protection degree                          |       | IP X1       |
| Sound level of outdoor unit**                          | dB(A) | 49          |
| Hot water outlet connections                           |       | G1/2" M     |
| Cold water outlet - drain connections                  |       | G1/2" M     |
| SAE threaded connection for refrigerant gas line R134a |       | 3/8" M      |
| SAE threaded connection for coolant line R134a         |       | 1/4" M      |
| Indoor unit weight                                     | kg    | 38          |
| Outdoor unit weight                                    | kg    | 27          |

<sup>\*</sup>External air temperature 15 ° C - Domestic water temperature 15 ° C (inlet) 55 ° C (outlet) \*\* Measured in free field conditions with a reference distance of 1 meter



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mm

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