



## COPPER SOLAR SYSTEM

### TECHNICAL CHARACTERISTICS OF STORAGE TANKS:

1. **Storage tank:** From copper Cu specially created from 2 half cup-shaped pieces welded to each other with a single seam sealant.
2. **Second Copper Shell:** From copper without add-ons and in accordance with international standards for copper.
3. **Input of cold water and hot water output:** Copper Pipes diameter  $\varnothing 21 \times 2.2$  and threaded  $\frac{1}{2}$ .
4. **Adjusting mouth of safety valve of closed circuit:** Copper tube  $\frac{1}{2}$ .
5. **Insulation:** puffed high density polyurethane (44 kgr/m<sup>3</sup>), 60 mm thickness.
6. **Thermal conductivity of insulation:** 0.0180 W / mK.

7. **External cover:** in four types according to your needs (grey, inox, white ral 9002, brown).

8. **Side covers:** specially designed and patented laminate-fixed lids, without screw helpers.

9. **Electrical resistance:** power according to the regulations of the country of destination, with a thermostat unipolar control and bipolar protection.

The resistance is mounted on a specially formed 3 mm brass flange, threaded 8-tapping screws, for easy installation or replacement in case of damage.

10. **Receptor of the strain of the thermostat.**



## TECHNICAL CHARACTERISTICS OF SELECTIVE COLLECTORS

### Technical characteristics of collector ATLAS:

**Copper and aluminium** are the materials used, that are corrosion-resistant materials that last for many decades. No steel parts are corroded

**Frame:** aluminium profiles, lateness design with external corner aluminium links, that ensure the best possible implementation of the framework and the stability of the whole construction.

**Absorber:** of selective surface, 0,5 mm full plate, with special coating of titanium that is produced in Germany. The absorber surface of solar radiation is in absolute application on the copper pipes with high-tech laser welding for direct transmission of the heat to the thermal fluid. This ensures a very high absorption coefficient  $\alpha > 95\%$  and a very low coefficient of losses of  $< 5\%$ , which contributes to the maximum thermal efficiency of the collector.

**Back of collector:** aluminium foil, fully sealed, without screw connections.

**Glass:** security, tempered, 4 mm, of high permeability  $t > 0.94$ .

**Insulation:** Rockwool ( $d = 50\text{kg} / \text{m}^3$ ) at the back of the collector.

**Specially designed oval rubber**, adapted to copper pipes that connect the collector, to prevent the phenomenon of dilation - contraction.

### Dimensions in cm & weights of COPPER solar system with collectors Atlas

| Model     | A  | B without cover of resistance | B with cover of resistance | $\Gamma$ | $\Delta$ | E   | Z   | H  | $\Theta$ | Capacity of boiler [lt] | Surface of collector/s [m <sup>2</sup> ] | Weight of system Empty/in fuction [kg] |
|-----------|----|-------------------------------|----------------------------|----------|----------|-----|-----|----|----------|-------------------------|--|--|
| 120/1,5A  | 53 | 100                           | 112,5                      | 101,5    | 156,5    | 7,5 | 153 | 89 | 167      | 120                     | 1,59                                     | 88 / 208                               |
| 160/2,3A  | 58 | 100                           | 112,5                      | 116,5    | 196,5    | 7,5 | 183 | 89 | 200      | 160                     | 2,29                                     | 101,5 / 261,5                          |
| 160/2,3A  | 58 | 100                           | 112,5                      | 116,5    | 196,5    | 7,5 | 183 | 89 | 200      | 160                     | 2,29                                     | 105,5 / 265,5                          |
| 160/2,3HA | 58 | 100                           | 112,5                      | 196,5    | 116,5    | 7,5 | 156 | 89 | 110      | 160                     | 2,29                                     | 105,5 / 265,5                          |
| 160/3,0A  | 58 | 100                           | 112,5                      | 210      | 156,5    | 7,5 | 158 | 89 | 167      | 160                     | 3,18                                     | 125 / 285                              |
| 200/2,3A  | 58 | 100                           | 112,5                      | 116,5    | 196,5    | 7,5 | 183 | 89 | 200      | 160                     | 2,29                                     | 111,5 / 271,5                          |
| 200/3,0A  | 58 | 120                           | 132,5                      | 210      | 156,5    | 7,5 | 158 | 89 | 167      | 200                     | 3,18                                     | 120 / 320                              |
| 300/4,0A  | 58 | 170                           | 182,5                      | 205      | 196,5    | 7,5 | 183 | 89 | 200      | 300                     | 3,80                                     | 169 / 469                              |
| 300/4,6A  | 58 | 170                           | 182,5                      | 242      | 196,5    | 7,5 | 183 | 89 | 200      | 300                     | 4,58                                     | 177 / 477                              |

