

Collector description:

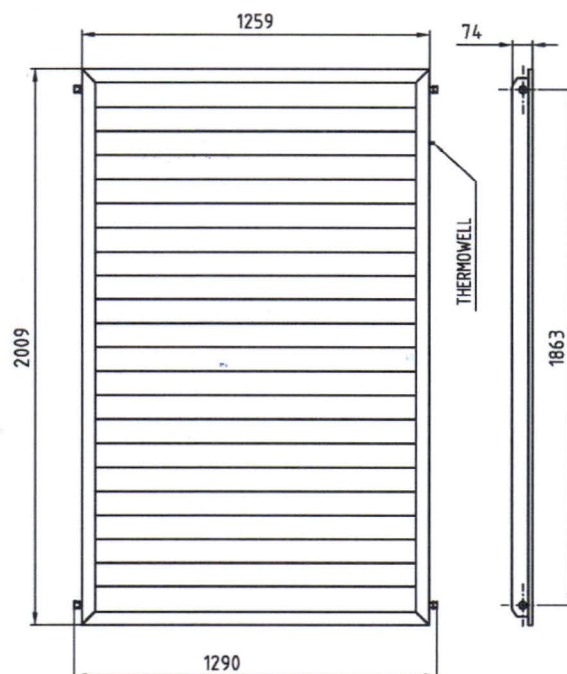
Flat-plate collector designed for solar systems with circulating pumps.

It is installed in vertical position. Collectors are connected parallelly to each other. Maximum 8 collectors can be connected in one row.

It is supplied with flanged pipe connections, which are connected to hydraulic circuit by $\varnothing 26$ mm quick couplers.

Construction: Compact pressed metal casing made of Al-Mg sheet, to which a solar safety glass is attached by a frame made of non-corrosive aluminium profiles.

Absorber: Specially shaped aluminium sheet with selective conversion layer spans a copper pipe meander.



Technical specifications:

Gross area	2,53 m ²
Absorbing area	2,26 m ²
Linkage dimension	1290 mm
Weight	44,6kg
Liquid content	1,72 l
Max. operation pressure of heat transfer fluid	600 kPa
Recommended flow rate of heat transfer fluid	30-100 l/h per one collector
Connection	flanged pipes
Thermowell	for sensor $\varnothing 6$ mm
Cover glass	4mm thick solar safety glass
Collector casing	stamping made of non-corrosive Al-Mg sheet
Thermal insulation	mineral felt
Selective absorber coating	ALOX (black)
Solar absorptivity $\alpha_{AM1.5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ\text{C}}$	13 %
Optical efficiency	81%
Recommended operation temperature	below 100°C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	196°C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	*525 kWh/m ² year

Pressure drop of TS 500 collector vs. water flow rate (at 20°C)

