



Design tray collector

# SKR500

## Design collector

The frameless, flat-plate collector is a real eye-catcher on any building.

## Easy installation

The plug connections and sensor sockets are already integrated in each collector. Installation is now even easier and more flexible thanks to the improved installation systems.



**EFFICIENT:**  
**82% efficiency**

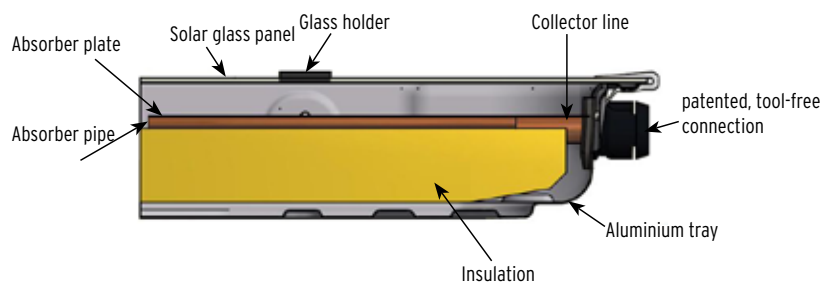
# Design tray collector

## SKR500

		SKR500	SKR500L
Collector type		Flat collector	Flat collector
Installation type		On-roof	On-roof
Gross area	m <sup>2</sup>	2.57	2.57
Aperture area	m <sup>2</sup>	2.26	2.26
Absorber area	m <sup>2</sup>	2.30	2.30
Height	mm	2079	1240
Width (incl. screws)	mm	1240	2079
Depth	mm	95	95
Weight (empty)	kg	38	38.5
Collector contents	l	1.45	1.72
max. operating pressure	bar	10	10
Stagnation temperature	°C	174	174
recommended throughput	l/m <sup>2</sup> h	10 - 35	10 - 35
Module wiring		max. 12 pcs. parallel	max. 10 pcs. parallel
min. collector angle	°	15	15
max. collector angle	°	75	75
Connections		18 mm copper blank	18 mm copper blank
Absorber		Aluminium full-surface absorber; highly selective vacuum coating	Aluminium full-surface absorber; highly selective vacuum coating
hydraulic wiring		Meander	Meander
Absorption (α) / emission (ε)		0.95 / 0.05	0.95 / 0.05
Housing		deep-drawn aluminium tray	deep-drawn aluminium tray
Heat insulation		50 mm mineral wool	50 mm mineral wool
Collector glazing		3.2 mm hardened, low-iron solar safety glass	3.2 mm hardened, low-iron solar safety glass
Efficiency / conversion factor (aperture/ absorber) $\eta_{0a} / \eta_{0A}$		0.820 / 0.806	0.794 / 0.781
Heat transfer coefficient $a_b / a_{iA}$	W / (m <sup>2</sup> K)	3.821 / 3.758	3.514 / 3.456
temperature-dependent heat transfer coefficient $a_{2a} / a_{2A}$	W / (m <sup>2</sup> K <sup>2</sup> )	0.0108 / 0.0106	0.0147 / 0.0145
Angle correction factor $K_{\theta}$ (50°)		0.96	
Solar Keymark Reg. No.		011-7S1277F	011-7S1284F
Collector efficiency as per ErP Lot1 dT 40K@1000 W/m <sup>2</sup>	%	65	63
max. power at 1,000 W/m <sup>2</sup> for Tm - Ta = 0 K	W	1794	1853

Annual collector yield in kWh/collector at mean fluid temperature 50°C, based on ISO 9806:2013, for Würzburg site: SKR500 = 1208 W, SKR500L = 1177

### CROSS-SECTION



### ROOF CONNECTION OPTIONS

Roof hook 0°



Hanger bolt 0°



Hanger bolt 20 - 50°

