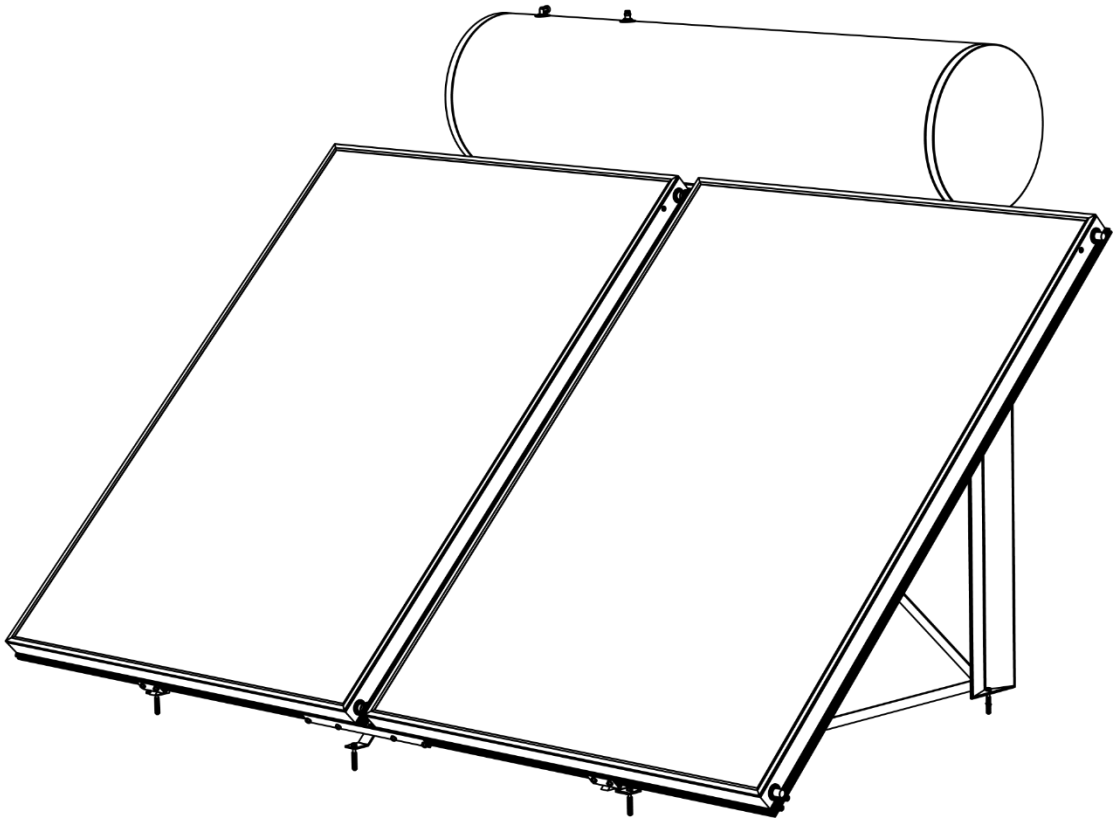
MARK5

M5



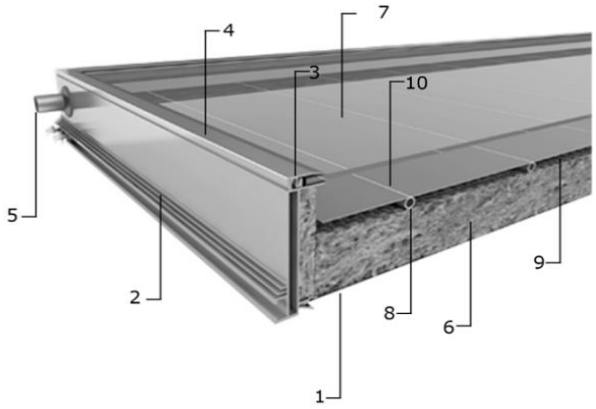
TECHNICAL DOCUMENTATION

THERMOSIPHONIC SOLAR WATER HEATER MARK5 300/6

sonnenSOL 2.0®

SMART ENERGY

TECHNICAL DOCUMENTATION M5

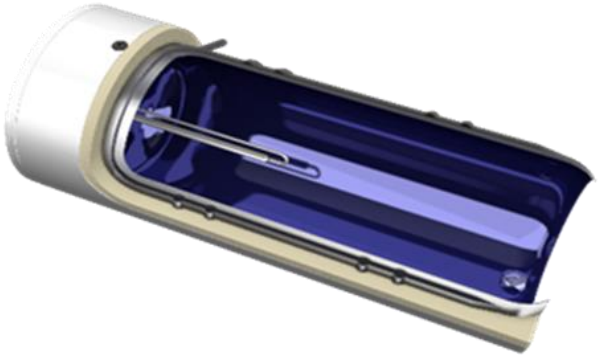


1. Base of 0,5mm aluminium sheet
2. Double wall 1.2mm/wall thick aluminium frame, painted with RAL7021 electrostatic paint
3. EPDM sealing gasket
4. Aluminium clamp painted with RAL7021 electrostatic paint
5. Absorber header of Φ22 copper pipe
6. Thermal insulation of rock wool with 50kg/m^3 density and 40mm thickness
7. Low-iron (T= 91,5%), mistlite, tempered safety glass, 3.2mm thick
8. Vertical copper Φ8 pipes
9. Full plate aluminium absorber, 0,5mm thick, with selective surface processing by Tinox (α=0,95, e=0,035).
10. Laser welding of copper pipes on the absorber

Collector type		M5 300
Total surface	m²	3,00
Window surface	m²	2,84
Absorber surface	m²	2,84
Width (α)	mm	1.500
Height (β)	mm	1.996
Thickness (γ)	mm	86
Weight (empty)	kg	48,5
Weight of thermal fluid	Kg	2,2
Maximum operation pressure	kPa/bar	1.000/10
Stagnation temperature	°C	175,7
Hydraulic connections (copper pipe)		Φ22
Time constant	sec	61,9
Incidence angle modifier at 50°		$0,955 \leq K_{\theta \leq} 0,959$
Thermal output	kW	2.364

MARKS

TANK



Cover material: Painted steel (choice of RAL-9006, RAL-9007, RAL-9010)
Anticorrosion method: Direct Enamel (complying with DIN 4753/3) - raw material by Wendel

Inner cylinder material / Outer cylinder material (jacket):
DC-03 EK steel 2,5mm / DC-03 EK steel 1,5mm (complying with EN-10130)

Magnesium anode: In accordance with DIN-12438-2.2
Inner design of the tank: The radium of the inner metal caps and the welding method ensure perfect application of direct enamel

Welding of cylinder: Fully robotized
Insulation: Environmentally friendly polyurethane 43kg/m³ with a thickness of 45mm

Diffuser: New design for better stratification
Closed circuit inlet and outlet: 3/4'' (with the optiamal inclination for efficient circulation of the closed circuit liquid)3/4'' (with the optiamal inclination for efficient circulation)

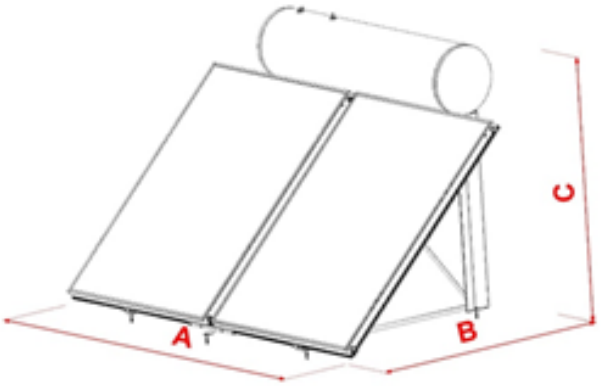
Open circuit inlet and outlet: 1/2''
Logo: Printed on the cover material
Packaging: Side caps of polystyrene foam and stretch film
Electrical resistance: **optional** inox 1,5 KW / 3,5 KW
Certifications: email, RoHS, CE

ROOF SUPPORT & SAFETY EQUIPMENT

- Heavy duty bespoke anodized aluminium profiles
- Optimized construction
- CNC production for superior accuracy and quality
- Unified system for all systems for ease of installation
- Superior anchoring to roof

- Pressure relief valve for the closed circuit mounted on tank to END 1489
- Safety non return valve for the domestic cold water line to END 1489

MARK5



Model		M5 300/ 6.0
Dimensions [45/30 degree inclination]	Length (mm) A	3097
	Depth (mm) B	1900/ 2306 2152
	Height (mm) C	1912/1538 1476
System weight empty (kg)		193
System weight full (kg)		492.2
Optional electrical resistance (kW)		3,5
Tank	Tank volume (l)	295
	Tank weight empty (kg)	96
	Tank weight full (kg)	391
	Length (mm)	1980
	Diameter (mm)	500
Collectors	Dimensions of collector (mm)	1500*1996*86
	Number of collectors	2
	Gross area per collector (m²)	3.00
	Weight per collector empty (kg)	48,5
	Max. working temp.	175,7 °C
	Thermal liquid per absorber (l)	2,1
	Max. collector circuit working pressure	2 MPa