

Solar Heating System Factsheet

TX 300/2



System model TX 300/2
System type Thermosiphon system
Manufacturer Solartech
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Date of test 08.2012

- Performance test EN12976:2006
- Quality test EN12976:2006

- Solar Keymark



System-Data

No. of collector modules/pipes 2
Gross collector area 3.954 m²
Storage tank volume 300 l
Design load¹⁾ 210 l/d

Types of collector mounting

- Construction for sloping roof
- Integration into sloping roof
- On flat roof with stand
- Facade

Gross dimensions flat roof (D x W x H)
Gross dimensions sloping roof (L x W)

2250 mm x 2630 mm x 1520 mm
 n/a

Collector

Model	SUMMER TX	Total width	1020 mm
Type	Flat-plate collector	Gross area	1.977 m ²
Total length	1938 mm	Weight empty	32 kg

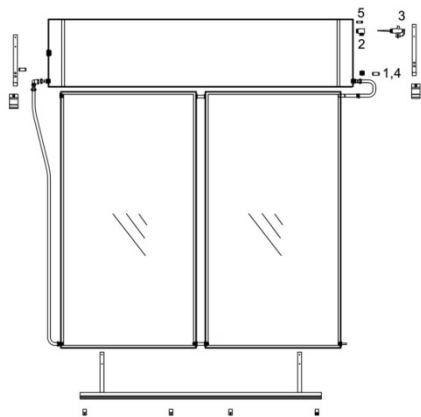
Storage tank

Model	TX 300	Outside diameter	510 mm
Type	Horizontal	Weight empty	74 kg
Insulation material	Polyurethane foam	Electrical heater	3 kW
Corrosion protection	Stainless steel	Max. operating pressure	8.5 bar
Total length	2290 mm	Max. storage temperature	99 °C

Heat transfer medium solar loop

Manufacturer	DOW	Model	Propylene Glycol
Type	Water-/Propyleneglycol mixture	Concentration/Freezing point	40% / -23°C

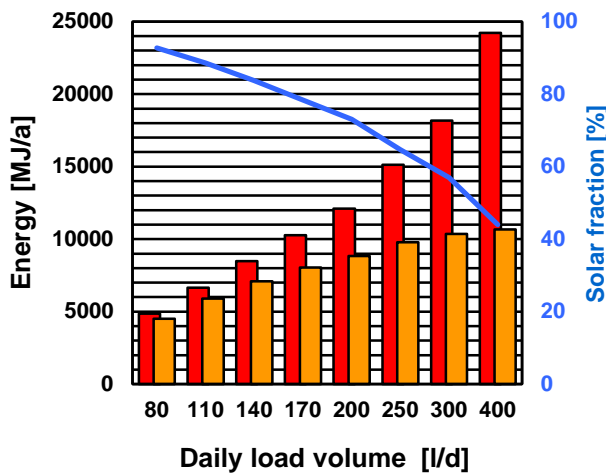
Schematic of system



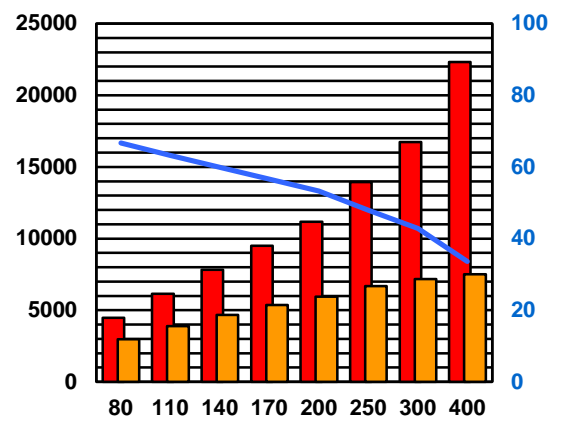
- 1 Cold water inlet
- 2 Hot water outlet
- 3 Temperature and pressure relief valve (99 °C / 8.5 bar)
- 4 Non-return valve
- 5 Pressure relief valve (0.85 bar)

Annual performance prediction and solar fraction for the EN locations*

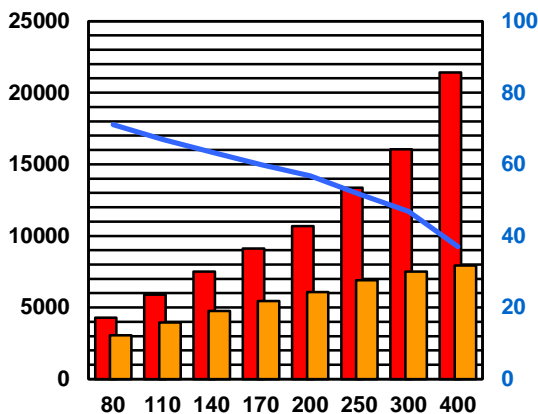
Davos



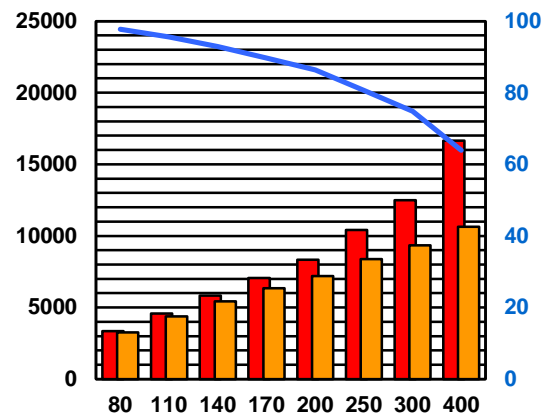
Stockholm



Würzburg



Athens



Reference conditions according to EN 12976

- Collector alignment South, tilt angle 45°
- Hot water temperature 45°C
- Draw-off 6 h after solar noon; 100 %

Performance indicators

- f_{sol} : Solar fraction in % ($f_{sol} = Q_L/Q_d$)
- Q_L : Heat delivered by the solar system (load)
- Q_d : Heat demand

^{*)} The reference conditions for annual performance prediction in accordance with EN 12976:2006 are described in the **accompanying document to the system factsheets.**