

Solar Heating System Factsheet

TiSUN THSY 200 1H



System model THSY 200 1H
System type Thermosiphonsystem
Manufacturer TiSUN GmbH
Address Stockach 100
 AT-6306 Söll
 Austria
Phone +43 (0)5333 201 0
Fax +43 (0)5333 201 100
E-mail office@tisun.com
Internet www.tisun.com
Date of test 07.2010

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

- Solar Keymark



System-Data

No. of collector modules 1
Gross collector area 2.09 m²
Storage tank volume 192 l
Design load¹⁾ 140 l/d

Types of collector mounting

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

Gross dimension flat roof (DxWxH)
Gross dimension sloping roof (LxW)

2100 mm x 1280 mm x 2050 mm
 2650 mm x 1280 mm

Collector

Model ARIS2004
Type Flat plate collector
Total length 2031 mm

Total width 1027 mm
Gross area 2.086 m²
Weight empty 41 kg

Storage tank

Model BE THSY 200
Type Horizontal / Mantle HE
Insulation material Rigid polyurethane
Corrosion protection Enameled,
 Mg sacrificial anode
Total length 1275 mm

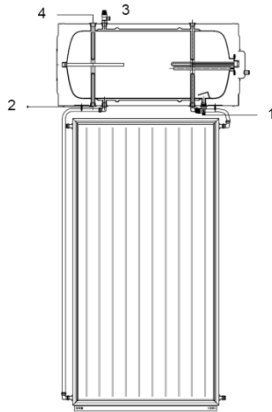
Outside diameter 580 mm
Weight empty 74 kg
Electrical heater -- kW
Max. operating pressure 6 bar
Max. storage temperature 95 °C

Heat transfer medium solar loop

Manufacturer Shell Chemicals
Type Water-Propyleneglycol

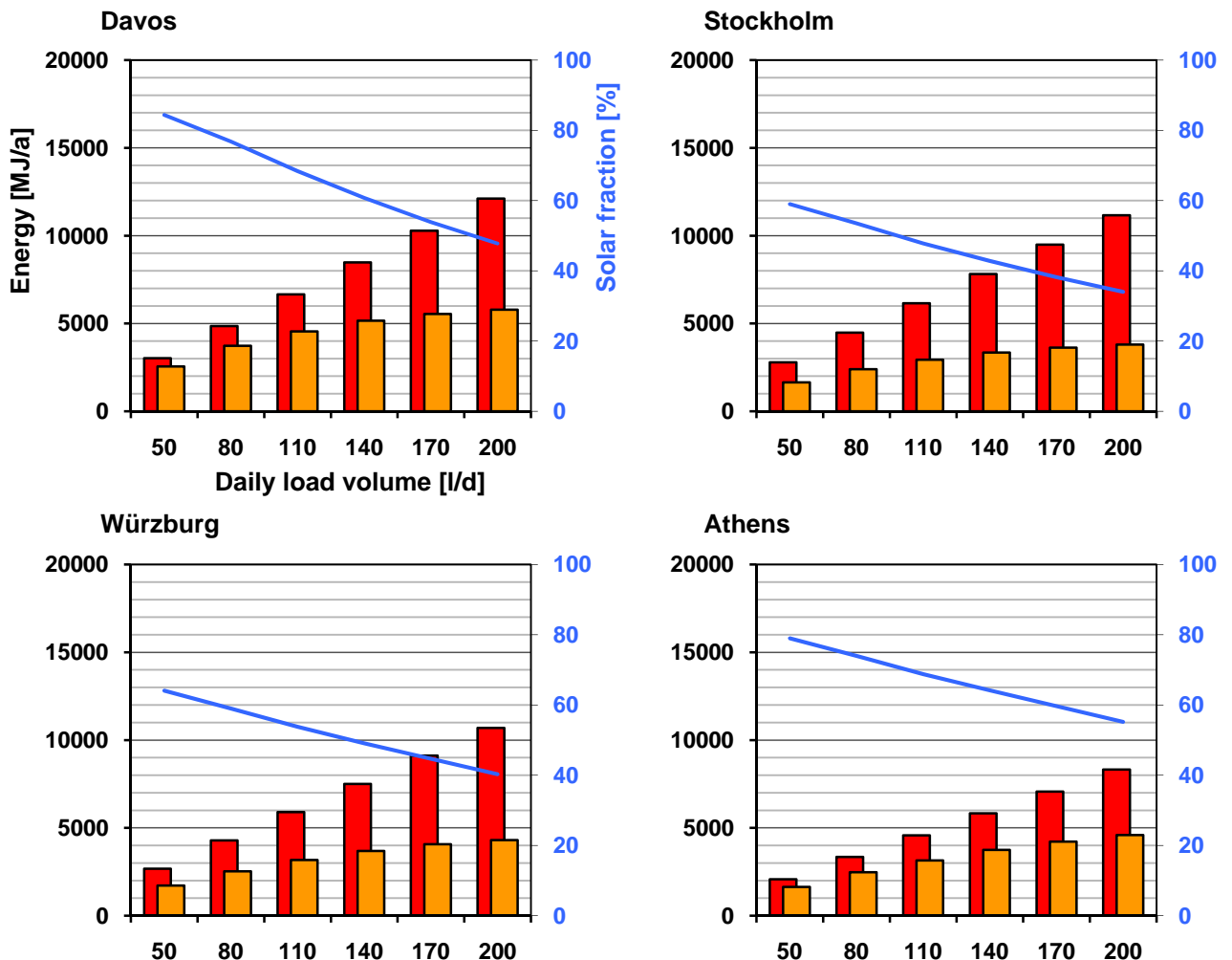
Model name MPG-Industrial
Concentration/Freezing point 38 % vol./-20°C

Schematic of system



- 1 Cold water inlet
- 2 Hot water outlet
- 3 Safety relief valve of the collector loop (3 bar)
- 4 p,T-safety relief valve (6 bar/ 93°C)

Annual performance prediction and solar fraction for the EN locations^{*)}



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 performance prediction in accordance with EN 12976:2006 is described in the accompanying document to the system factsheets.