

Solar Heating System Factsheet

CX 300/2



System model CX 300/2
System type Thermosiphon system
Manufacturer Solartech
 Sales & Service Sdn. Bhd.
Address 5, Jalan Teknologi 3/5,
 Kota Damansara
 47810 Petaling Jaya, Selangor
Phone +603 6157 4888
Fax +603 6156 8988
E-mail info@solartech.com.my
Internet www.solartech.com.my
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 load^{*)} 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)

2225 mm x 2630 mm x 1520 mm

Gross dimensions sloping roof (L x W)

n/a

Collector

Model	SUMMER CX	Total width	1020 mm
Type	Flat-plate collector	Gross area	1.977 m ²
Total length	1938 mm	Weight empty	38 kg

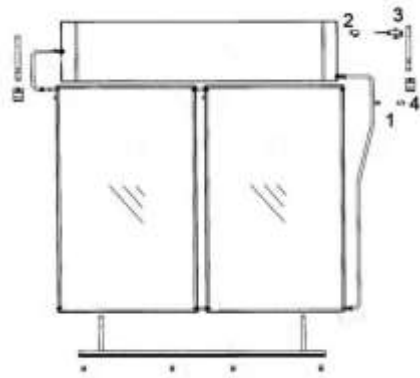
Storage tank

Model	CX 300	Outside diameter	510 mm
Type	Horizontal	Weight empty	57 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	--	Model	--
Type	Direct system, no heat transfer medium	Concentration/Freezing point	-- / --

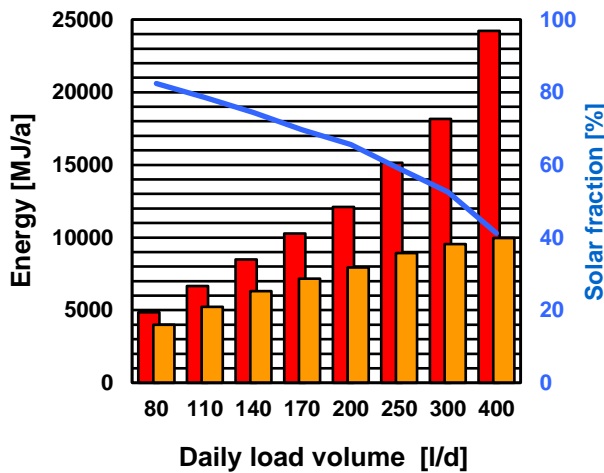
Schematic of system



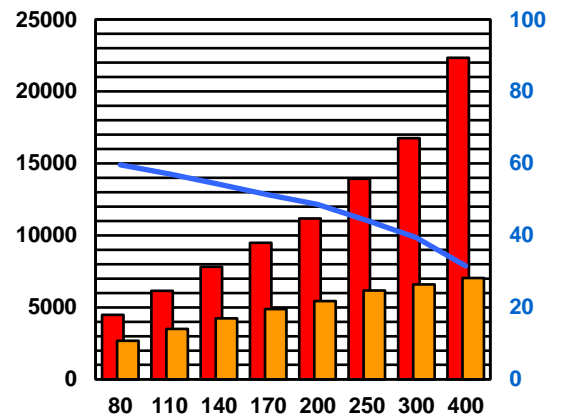
- 1 Cold water inlet
- 2 Hot water outlet
- 3 Temperature and pressure relief valve (99 °C / 8.5 bar)
- 4 Non-return valve

Annual performance prediction and solar fraction for the EN locations*

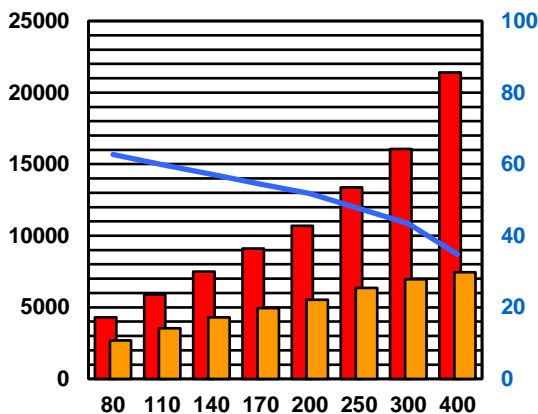
Davos



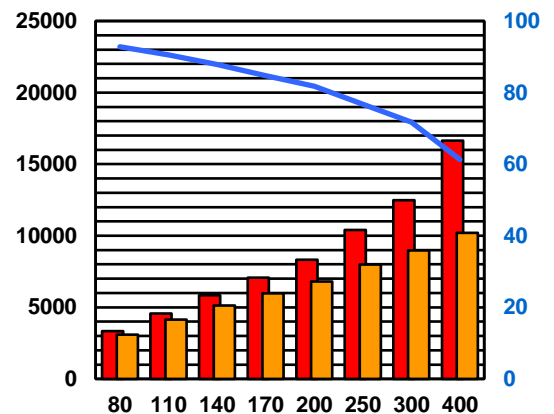
Stockholm



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

¹⁾ The reference conditions for annual performance prediction in accordance with EN 12976:2006 are described in the accompanying document to the system factsheets.

Solar Heating System Factsheet

CX 180/1 – sub system

This system configuration was tested as part of a system family according to the CEN Keymark Scheme Rules for Solar Thermal Products¹. The annual performance prediction for the system configuration has been determined using the results of the medium system of the system family. For more information about the medium system please check the factsheet of system **S178**.



General

System model	CX 180/1	Phone	+603 6157 4888
System type	Thermosiphon system	Fax	+603 6156 8988
Manufacturer	Solartech Sales & Service Sdn. Bhd.	E-Mail	info@solartech.com.my
Address	5, Jalan Teknologi 3/5, Kota Damansara 47810 Petaling Jaya, Selangor	Internet	www.solartech.com.my
		Testdatum	08.2012

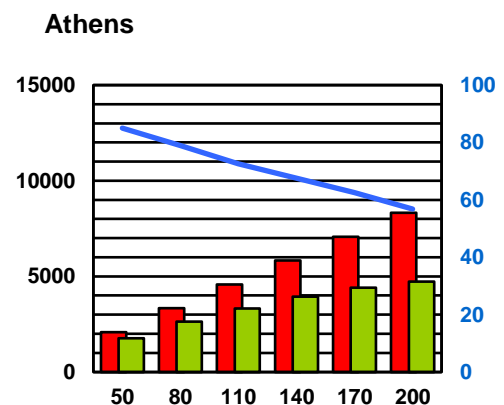
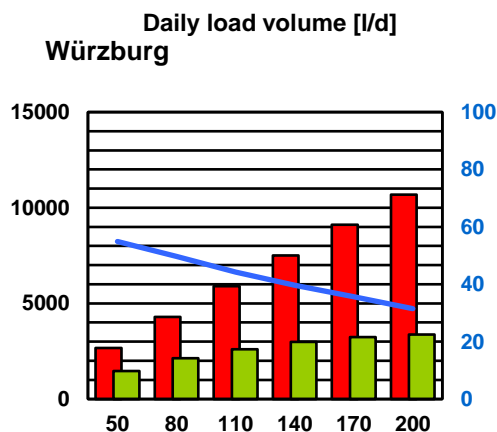
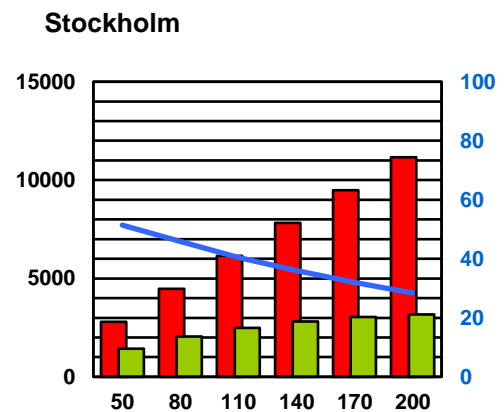
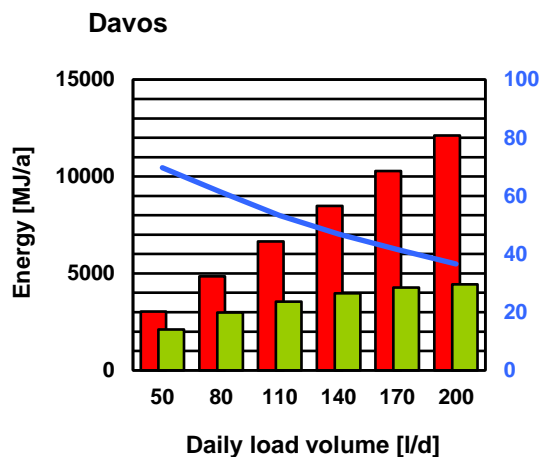
System-Data

No. of collector modules / pipes	1
Gross collector array area	1.977 m ²
Storage tank volume	180 l
Design load	126 l/d

Types of collector mounting

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

Annual performance prediction and solar fraction for the EN locations



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

¹ Homepage of Solar Keymark, URL: www.solarkeymark.org

Solar Heating System Factsheet

CX 270/2 – sub system

This system configuration was tested as part of a system family according to the CEN Keymark Scheme Rules for Solar Thermal Products¹. The annual performance prediction for the system configuration has been determined using the results of the medium system of the system family. For more information about the medium system please check the factsheet of system **S178**.



General

System model	CX 270/2	Phone	+603 6157 4888
System type	Thermosiphon system	Fax	+603 6156 8988
Manufacturer	Solartech Sales & Service Sdn. Bhd.	E-Mail	info@solartech.com.my
Address	5, Jalan Teknologi 3/5, Kota Damansara 47810 Petaling Jaya, Selangor	Internet	www.solartech.com.my
		Testdatum	08.2012

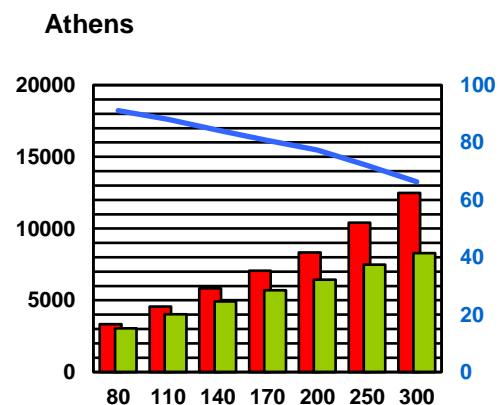
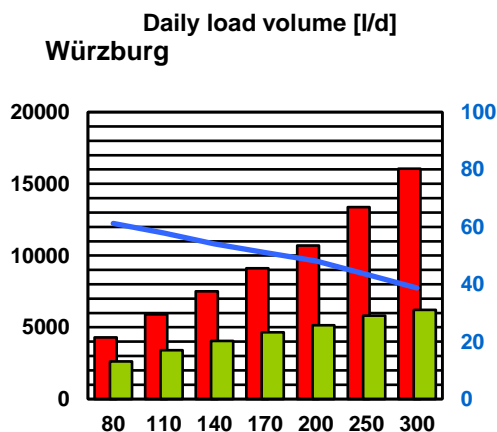
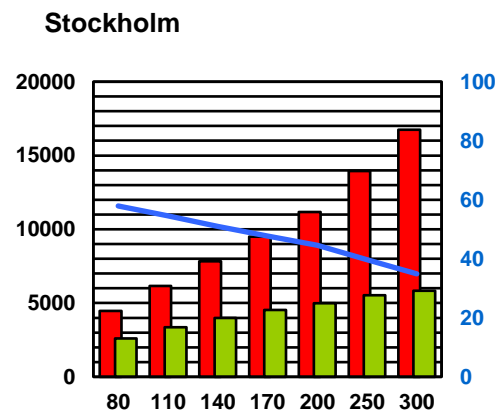
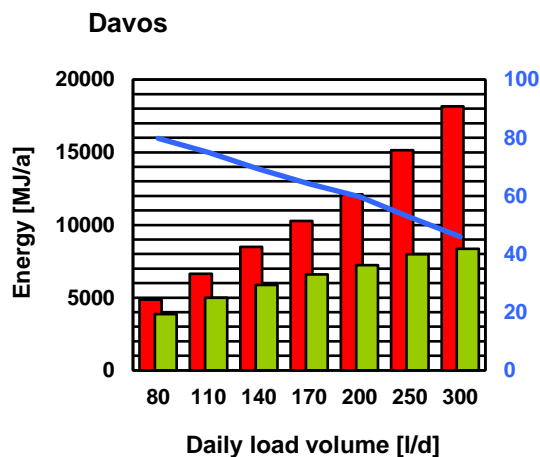
System-Data

No. of collector modules / pipes	2
Gross collector array area	3.954 m ²
Storage tank volume	270 l
Design load	189 l/d

Types of collector mounting

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

Annual performance prediction and solar fraction for the EN locations



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

¹ Homepage of Solar Keymark, URL: www.solarkeymark.org

Solar Heating System Factsheet

CX 400/2 – sub system

This system configuration was tested as part of a system family according to the CEN Keymark Scheme Rules for Solar Thermal Products¹. The annual performance prediction for the system configuration has been determined using the results of the medium system of the system family. For more information about the medium system please check the factsheet of system **S178**.



General

System model	CX 400/2	Phone	+603 6157 4888
System type	Thermosiphon system	Fax	+603 6156 8988
Manufacturer	Solartech Sales & Service Sdn. Bhd.	E-Mail	info@solartech.com.my
Address	5, Jalan Teknologi 3/5, Kota Damansara 47810 Petaling Jaya, Selangor	Internet	www.solartech.com.my
		Testdatum	08.2012

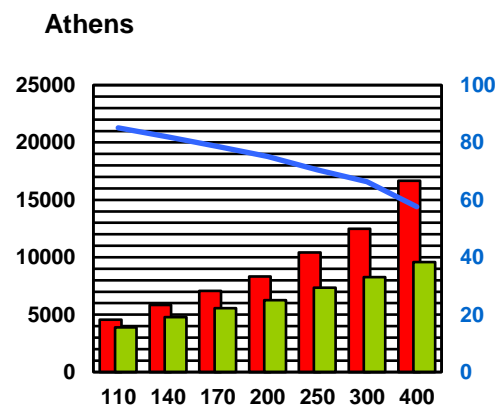
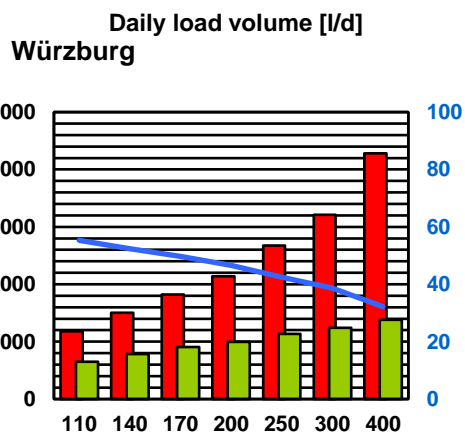
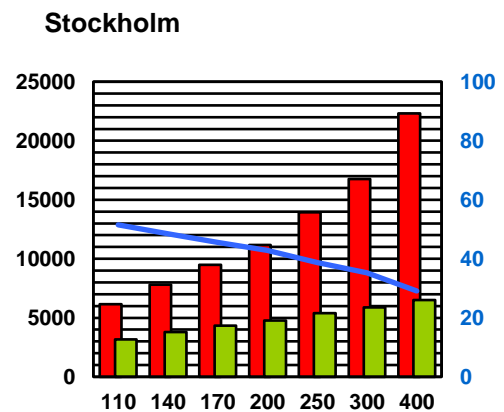
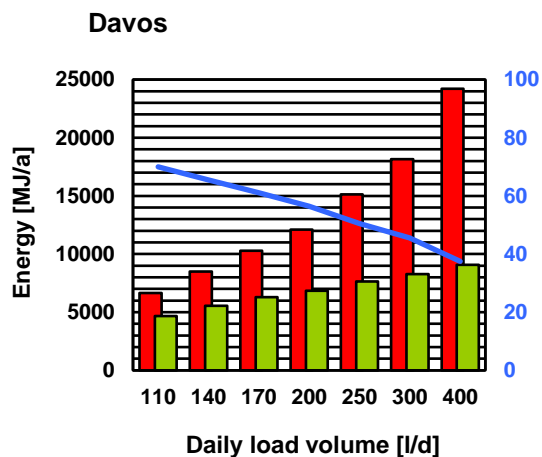
System-Data

No. of collector modules / pipes	2
Gross collector array area	3.954 m ²
Storage tank volume	400 l
Design load	280 l/d

Types of collector mounting

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

Annual performance prediction and solar fraction for the EN locations



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

¹ Homepage of Solar Keymark, URL: www.solarkeymark.org

Solar Heating System Factsheet

CX 450/3 – sub system

This system configuration was tested as part of a system family according to the CEN Keymark Scheme Rules for Solar Thermal Products¹. The annual performance prediction for the system configuration has been determined using the results of the medium system of the system family. For more information about the medium system please check the factsheet of system **S178**.



General

System model	CX 450/3	Phone	+603 6157 4888
System type	Thermosiphon system	Fax	+603 6156 8988
Manufacturer	Solartech Sales & Service Sdn. Bhd.	E-Mail	info@solartech.com.my
Address	5, Jalan Teknologi 3/5, Kota Damansara 47810 Petaling Jaya, Selangor	Internet	www.solartech.com.my
		Testdatum	08.2012

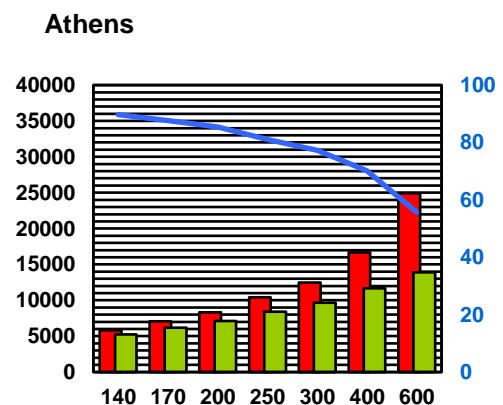
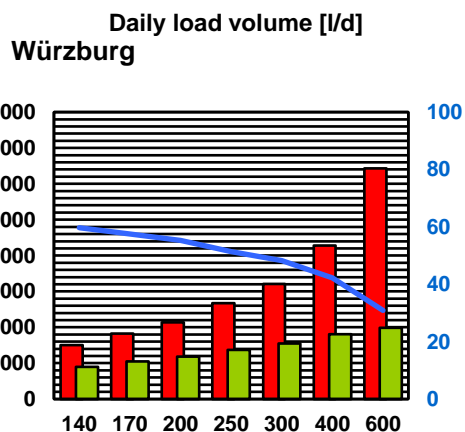
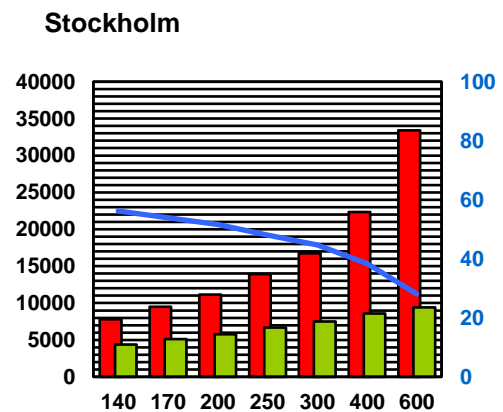
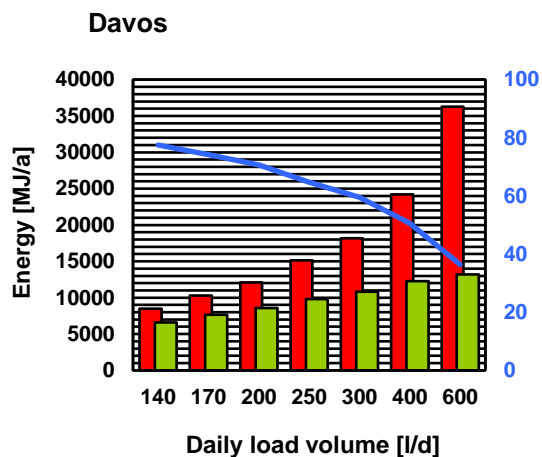
System-Data

No. of collector modules / pipes	3
Gross collector array area	5.931 m ²
Storage tank volume	450 l
Design load	315 l/d

Types of collector mounting

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

Annual performance prediction and solar fraction for the EN locations



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

¹ Homepage of Solar Keymark, URL: www.solarkeymark.org