SPF Solartechnik Prüfung Forschung

S209

Solar Heating System Factsheet
LACAZE SUNPLÉO 500L-7M-3xSUN300.25V

System model	**SUNPLÉO 500L-7M-3xSUN300.25V**
System type	Forced-circulation system
Manufacturer	LACAZE ENERGIES
Address	Z.I. BP2
	F-46120 LEYME
Phone	+33 5 65 40 39 39
Fax	+33 5 65 40 39 40
E-mail	info.lacaze-energies@groupe-cahors.com
Internet	www.lacaze-energies.com
Date of test	10.2015

☑ Performance test EN12976:2006
☑ Quality test EN12976:2006

☑ Solar Keymark

System-Data

No. of collector modules/pipes	3
Gross collector array area	7.87 m²
Storage tank volume	500 l
Design load*)	400 l/d

Types of collector mounting

☑ Construction for sloping roof
☐ Integration into sloping roof
☐ On flat roof with stand
☐ Facade

Space requirement

Gross dimensions collector array:
Sloping roof (L x W x H) 3600mm x 2160 mm x 140 mm

Storage tank:
Minimum ceiling height 2100 mm
Clearance required for installation -- mm
Footprint (W x D) 950 mm x 885 mm

Collector

Model name	SUN300.25 V	**Total width**	1180 mm
Type	Flat plate collector	**Gross area**	2.555 m²
Total length	2160 mm	**Weight empty**	47.0 kg

Control equipment

Manufacturer	PAW
Model name	SC5.14
Control function	Temperature difference controller
On-/Off-temperature difference collector loop	On : 6 K between collector and storage min. collector temperature 10°C Off: 4 K between heat exchanger in and out
Auxiliary heater: set-point/hysteresis	60 / -- °C/K
Volumetric flow rate collector loop	25 l /(h m²)

Heat transfer medium solar loop

Manufacturer	TYFOROP CHEMIE GmbH	**Product specification**	Tyfocor LS
Type	Water-Propylenglycole	**Concentration/Freeze resistance**	- 28°C

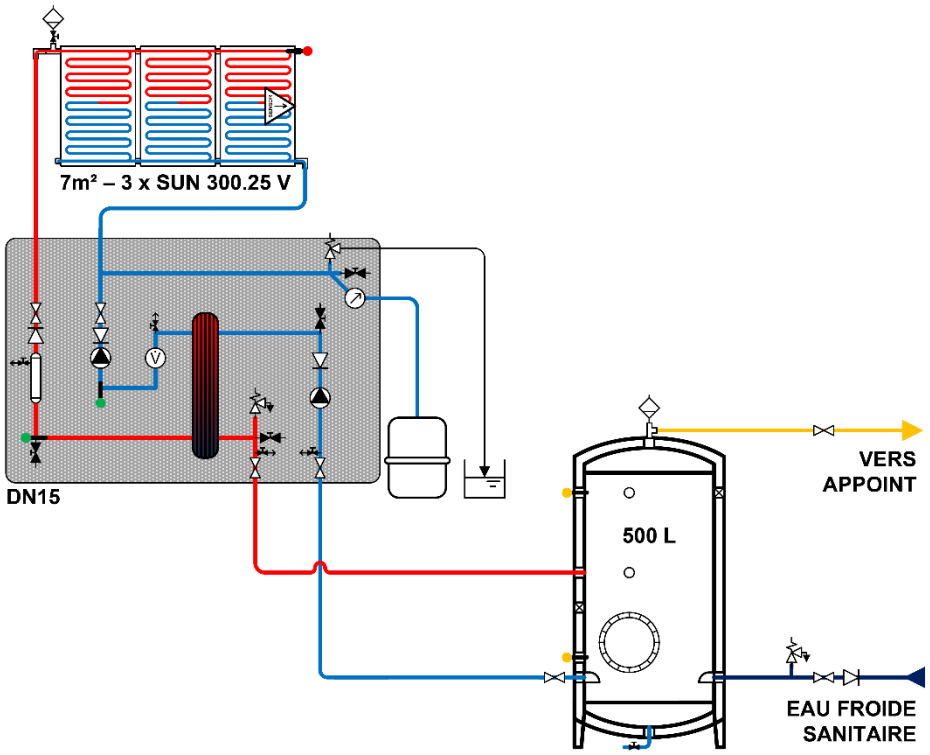
Pump

Manufacturer	Grundfos	**Model name**	SOLAR PM2-15-145 /
Input power	87/70 W		UPM2 15-75 CIL

Storage tank

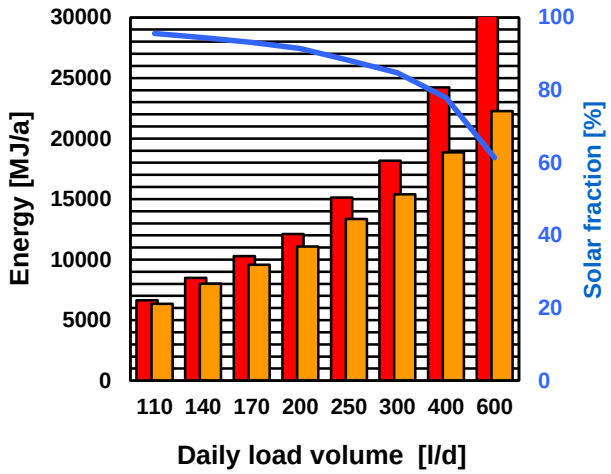
Manufacturer	LACAZE ENERGIES
Model name	PST 050 M1V
Type	Vertical
Insulation material	Glass wool
Corrosion protection	Composite resin coating, Mg sacrificial anode
Total length	1500 mm
Outside diameter	780 mm
Weight empty	142.5 kg
Electrical heater	-- kW
Max. operating pressure	7 bar
Max. storage temperature	85 °C

Schematic of system

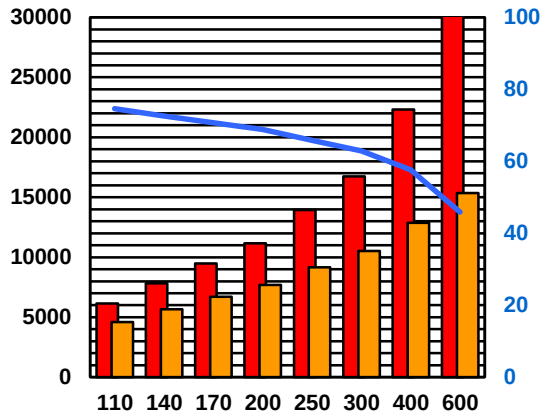


Annual performance prediction and solar fraction for the EN locations*

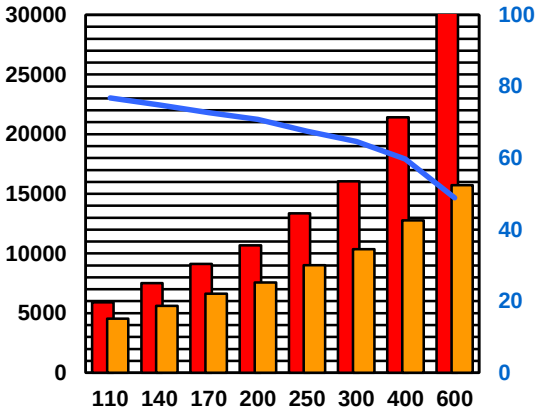
Davos



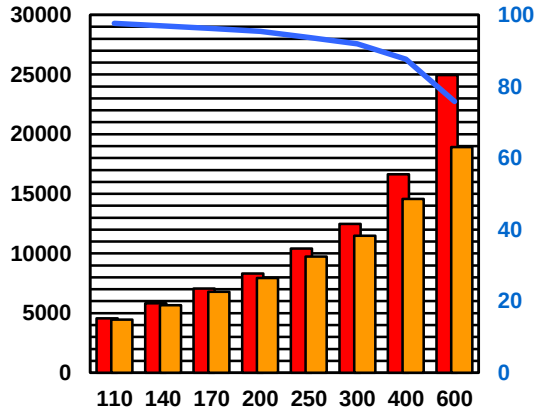
Stockholm



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} = QL/Qd)
- Q_L: Heat delivered by the solar system
- 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**.