

SFERASOL™ SF-A

PATENTED SOLAR THERMAL COLLECTOR WITH FORCED CIRCULATION



System Description

Product

Integrated Storage Collector SFERASOL™ made by:

- 2 external methacrylate hemispheres
- 2 internal steel 09/10 P06 hemispheres
- 1 INOX AISI 304 stainless steel basement
- 1 INOX AISI 304 stainless steel structure

System Classification

System Model: SFERASOL™
System Code: SF-A
Classification: forced circulation

Collector System

Nr. of Collectors: 1
Gross Collector Surface: 4,524 m²

Collector Data

Type:
Spherical
Gross total surface: 4,524 m²
Aperture surface: 1,130 m²
Net total surface: 0,891 m²
Nr. of coverages: 1
Coverage Material: Merthacrylate
Coverage thickness: 3 mm

Structure material: INOX AISI 304 Stainless Steel
Net mass: 80 kg
Outer dimensions: 1200*1200*1600 mm

Absorber

Material: 09/10 P06 steel
Surface treatment: black selective paint - high opacity
Connections: copper pipes Ø 8mm

Thermalconvector fluid

Type:
mixture of monopropylene glycol + water
Antifreeze protection: YES

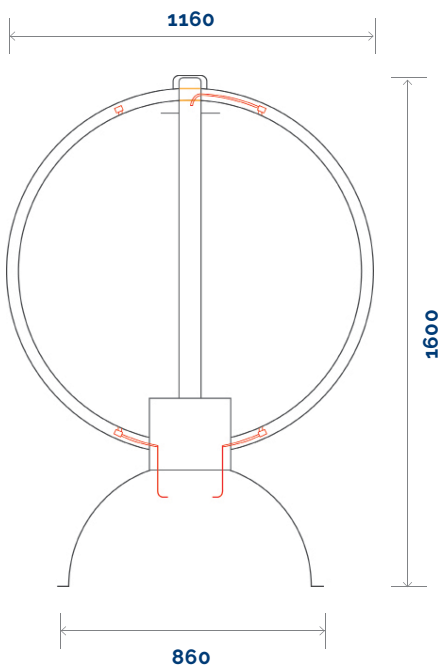
Connections

Inlet glycol: Ø 1/4"R
Outlet glycol: Ø 1/4"R

Operating pressure

Maximum: 0.5 Bar

Dimensions



Components

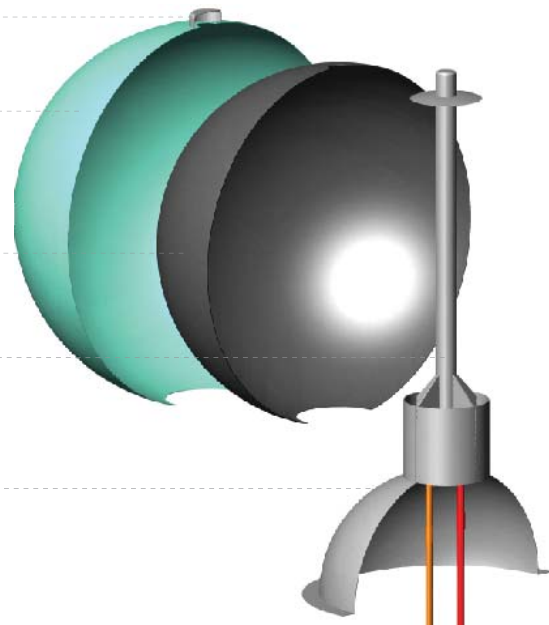
Cover
in stainless steel

Transparent coverage
in methacrylate

Absorber in painted
Fe 360 steel

Internal structure in
stainless steel

Basement in
stainless steel



100% produced in Italy.

ENEA Certified according to norm
UNI EN 12976-2:2006



Look our video



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System Thermal Performance, test results and data elaboration

Geolocalisation of test site: Lat: 40° 09'N - 16°38'E (ENEA Trisaia)

Positioning & orientation:towards SOUTH - 0° horizontal inclination

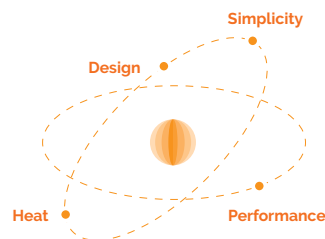
Test date:.....October

Data input on 12 hrs daily operation

12 hours test						Draw-off			Output
H	Hd	Ta (day)	Tc	DT ₁	u	Vd	Td (max)	DT ₂	Q
(MJ/m ²)	(MJ/m ²)	(°C)	(°C)	(°C)	(m/s)	(l)	(°C)	(°C)	(MJ)
17.6	-	17.2	25.5	-8.3	-	450	48.4	22.9	14.1
14.2	-	17.8	25.4	-7.6	-	450	44.0	18.6	11.5
11.1	-	17.9	25.2	-7.3	-	450	37.2	12.0	7.5
7.6	-	12.7	25.1	-12.4	-	450	32.0	6.9	5.2
7.3	-	20.1	24.5	-4.4	-	450	37.9	13.4	6.5
6.3	-	15.1	23.8	-8.7	-	450	29.5	5.7	4.2
13.2	-	17.5	23.7	-6.2	-	450	43.4	19.7	12.7
11.8	-	15.9	23.7	-7.8	-	450	41.3	17.6	11.0
6.3	-	16.0	23.7	-7.7	-	450	30.5	6.8	4.3

Due to the particular shape of the collector, all measurements have been done considering the radiation onto the horizontal surface.

Technology,
Saving & Simplicity:
All contained within a sphere.



DECLARATION OF CONFORMITY

The Manufacturer Sferasol Energy S.r.l. address: Via G. Pascoli, 1 - 10060 Scalenghe (TO) - ITALY declares under its own responsibility that the thermal solar collector named "Sferasol™"SF-A model is conform to essential specifications of safety according to the following directives:

- 2006/42/CE (machines);
- 2006/95/CE (low voltage);
- 2004/108/CE (ECM).

The product is supplied with CE mark and user manual. The person authorized to fill in the technical data sheet is the legal representative of Sferasol Energy S.r.l. being in the Company seeds.

Authorized Reseller