

PHÖNIX Classic

The proven solar water heater



- Supreme Quality
"Made in Germany"
- Maximum system performance with optimized components, tap water mixer included
- Highest solar yields using high-performance flat plate collectors with one-piece absorber (only 38 kg weight)
- Can be combined with all current heating systems
- Simple and cost-saving installation
- High energy savings by using an extra-thick insulation (100 mm) for the storage tank
- Highest solar yield using large heat exchangers
- Replaceable insulation of the storage tank makes handling easy
- Lower installation cost using a plug-in solar station
- Existing storage tank integration possible
- Over 30.000 satisfied PHÖNIX-customers



The PHÖNIX Classic solar water heater delivers solar energy for a house up to four people, providing hot water for taps, showers and bath tubs. Dishwashers and washing machines can be easily connected and integrated.

Technical data

Collectors

2 Flat plate collectors 4,36 m² gross
(4,0 m² net)

Hot water storage tank

300 litres solar storage tank, twice enameled according to German Industry Norm (DIN), with replaceable insulation

Controller DeltaSol BS

Pump-station FlowCon

Included in delivery

Collectors

Two flat plate collectors PHÖNIX Infinity 3

Collector dimensions	(Length x Width x Height) 1,87 x 1,15 x 0,095 m
Collector weight	34 kg
Gross area	2,18 m ²
Effective absorber area	2,0 m ²
Heat transfer medium capacity	1,13 litre
Absorber type	eta-plus_Al
Absorbency	95%
Optical efficiency	80,1% based on aperture area
Emissivity	5%
Efficiency factors	a ₁ : 3,65 W/ m ² K ² a ₂ : 0,0169 W/ m ² K ²
Max. stagnation temperature	203 °C
Collector material	Frame made from extruded aluminium profile with backside insulation (50 mm rock wool)
Glass cover	low-iron solar safety glass
Test reports	Collector test report by ISFH Germany acc. to European Norm (EN) No. 12975-1/2; Solar Keymark



Collector installation possibilities

Dimensions:
Width x Length,
including space for connectors

Alternatives:
Vacuum-tube collectors, CPC
type with mirrors

flat roof mounting rig for
alternatives 1 and 4 available

wall mounting rig for
alternatives 1 and 4 available

in-roof mounting rig available
for alternative 1



Alternative 1 (standard)
on edge horizontal array,
single row
dimensions of collector field:
2,32 x 2,03 m



Alternative 3
on edge vertical array, single column
(collector connectors alongside)
dimensions of collector field: 1,31 x 3,76 m



Alternative 2
transverse vertical array,
single column
dimensions of collector
field: 2,03 x 2,32 m



Alternative 4
transverse horizontal array, single row
(collector connectors alongside)
dimensions of collector field: 3,76 x 1,31 m

Storage tank

Type S-300

Storage capacity	300 Liter
Material	steel, enameled, acc. to German Industry Norm (DIN) 4753, outside primed
Heat exchangers	tube heat exchangers: solar 1,4 m ² , backup heater 1,0 m ²
Corrosion protection	magnesium sacrificial anode on top of tank
Water connection Inlet&Outlet	hot and cold water: 1" external thread, flat sealing joint screw solar supply and return: 1" external thread, back up heater: 3/4" external thread
Additional electrical heater	1 1/2 " socket with internal thread normally closed with plug
Insulation	polyurethane foam 100 mm replaceable, inspection tap on top, replaceable lid 100 mm, bottom 50 mm, $\lambda = 0,037$ W/mK
Performance number N_L	up to 2,0 depending on temperature sensor position
Dimensions with insulation	1,65 m x 0,75 m
Diameter without insulation	0,55 m
Dimension tilted	1,62 m
Total weight	160 kg incl. insulation

