

A SUNDA solar water heater with a white cylindrical tank and eight blue glass tubes. The tank has the SUNDA logo and 'HIGHTECH SOLAR TECHNOLOGY' printed on it. The tubes are mounted on a metal frame.

# SH 160 8-TF

*solar water heater*

## ***descriere generala***

general description

## ***caracteristici tehnice***

technical data-sheet

## ***montaj si punere in functiune***

installation and commissioning

## ***locatii Tehnosolar si parteneri autorizati***

our locations and authorized partners

Seriile SH cu tuburi vidate si tehnologie heat-pipe sunt realizate cu tuburi SEIDO 1 (cu suprafata de absorbtie fata-verso), au tanc de stocare de 160 de litri, din otel izolat cu spuma poliuretantica expandata, si suport din aluminiu.

Condenserul tubului vidat este inserat direct in tancul de stocare. Colectorul solar capteaza peste 92% din radiatia luminoasa si o transforma in caldura care este preluata apoi prin manifold de tancul de stocare.

In tuburile vidate nu circula un lichid de transfer termic. Sistemul devine astfel unul foarte simplu, usor de instalat si lipsit de probleme in cazul unei avarii. Daca se strica unul, doua sau mai multe tuburi acest sistem continua sa lucreze datorita tehnologiei heat-pipe.

SH series Heat Pipe Hot Water Heaters consist of SEIDO 1 with two sides coating - heat pipe vacuum tube collector, steel water tank with enamel coating and aluminum alloy or angle steel with spurted plastic coating support frame.

The condenser of the heat pipe tube is directly inserted into the non-corroding copper protection tube within the water tank. The heat pipe vacuum tubes collect heat with high efficiency transforming over 92% of the incoming solar irradiation into heat.

The condenser transfers the generated heat to the manifold where the water is heated. Thereafter, the hot water is circulating in the system until the system attains the required temperature.

The heat transfer liquid of the heat circuit does not flow through the collector itself. This allows a very simple installation and guarantees an exceptionally trouble-free operation. The operation of the system will not be interrupted even if one of the collector tubes should get damaged.



Constanta, Romania



Beijing, China



Craiova, Romania

Functionare / Working principle	Circuit închis, sub presiune (6 bar) / Close circuit, pressurized (6 bar)
Construcție / Construction	Tuburi vidate cu heat-pipe / Vacuum tubes with heat-pipe
Material tub / Glass tube material	Sticlă borosilicată (transmitanță >91%) / Borosilicate glass (transmittance >91%)
Dimensiuni tub / Tube dimension	Φ 100 mm X 2000 mm, 2,5 mm grosime/thickness
Număr de tuburi / Number of tubes	8
Suprafață absorbantă / Absorber area	1,4 m <sup>2</sup>
Greutate fără apă / Weight, empty	100 kg
Capacitatea rezervorului / Storage tank	160 Litri
Diametru racord circuit / Connection	18 mm
Material rezervor / Inner material of tank	Aliaj din oțel de înaltă calitate, grosime 2 mm, cu strat de email cuarțos High quality 2.0 mm thick alloy steel plate with quartz enamel coating
Material exterior rezervor / Cover material of tank	ABS aditivat pentru creșterea rezistenței la îmbătrânire și la acțiunea radiațiilor UV Color steel plate, 0.5mm thick
Izolația rezervorului / Insulation	Spumă poliuretanică/Polyurethane foam 40-45 kg/m <sup>3</sup> .Grosime/Thickness 50 mm
Reflector / Reflector	Foaie de aluminiu / empactic aluminum plate 0,4 mm
Suport (cadru susținere) / Frame	15/30/45 grade/degrees. Aliaj de aluminiu/Aluminum alloy
Rezistență electrică / Electric heater	1,5 KW / 220 V

## alte caracteristici

- Temperatura apei între 40-80°C
- Garnituri de metal fara risc de imbatranire
- Nu necesita costuri de intretinere
- Nu necesita spatiu mare de amplasare
- Posibilitate de conectare in serie pentru proiecte mai ample
- Durabile
- Nu ingheata
- Durata de viata mare
- Design estetic
- Cadru usor din aluminiu pentru o instalare simpla.
- Oferă apă caldă menajeră pe toată perioada anului

## other features

- Hot water temperature of 40-80°C
- Metal sealing ring with no-ageing feature
- Maintenance-free
- Little installation space required
- Series connections for larger projects possible
- Durability
- Antifreeze
- Longevity
- Aesthetical design
- Aluminium profile support frame for easy installation
- Hot water provision all year round

## Un kit SH 160-8TF contine 5 colete:

- Un colet cu tancul de stocare de 160 de litri
- Un colet cu tuburile vidate cu sistem heat-pipe
- Un colet cu suportul de aluminiu
- Un colet cu reflectorul din foaie de aluminiu
- Un colet cu elementele de fixare si garnituri

## One SH 160-8TF solar water heat contains:

- A box with the storage tank
- A box with 8 vacuum tubes with heat-pipe
- A box with the aluminium frame
- A smaller box with the aluminium reflector
- A box with small parts and seals



tanc de stocare / water tank

tuburi vidate heat-pipe / heat-pipe vacuum tubes

cadru din aluminiu / aluminium frame



suport pentru rezervor / water tank support

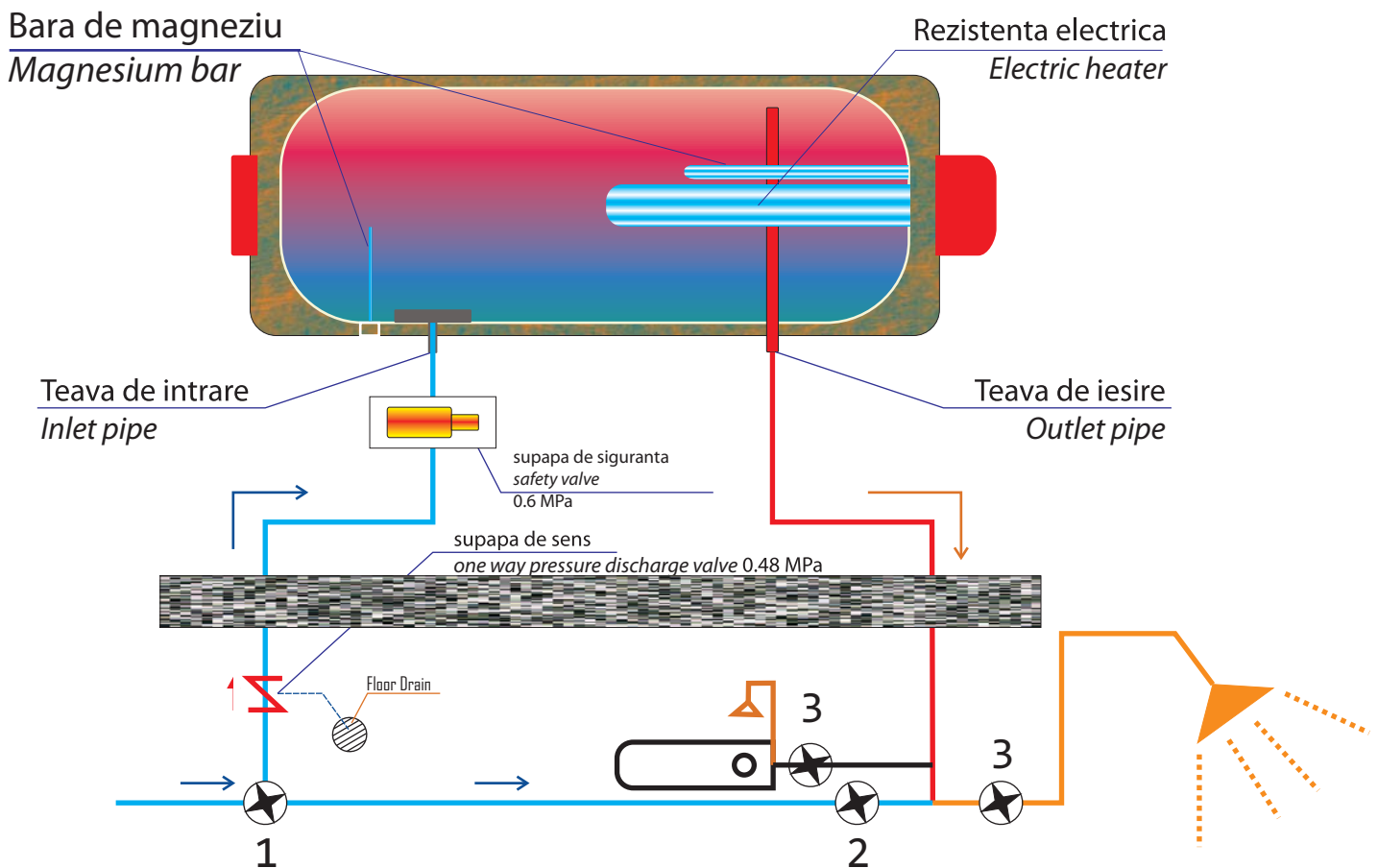
reflector aluminiu / aluminium reflector

## Pasii de baza pentru a pune in functiune un kit solar SH

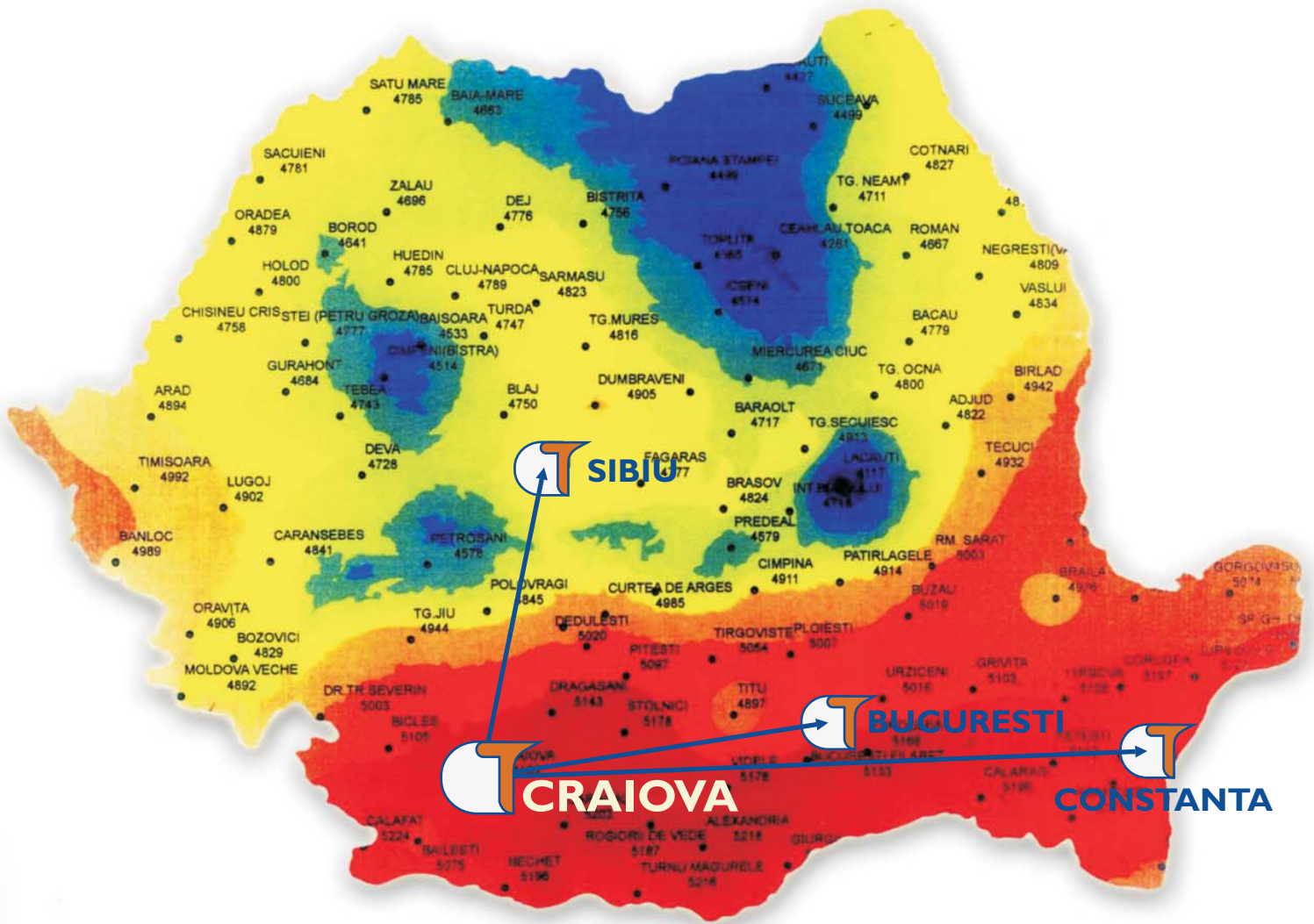
1. Montarea suportului
2. Montarea tancului de stocare
3. Montarea tuburilor vidate
4. Montarea supapelor de siguranta
5. Montarea rezistentei electrice
6. Izolarea traseului de teava

## The main steps before using the solar water heater

1. Install the frame
2. Install the water tank
3. Install the vacuum tubes
4. Install and check the safety valves
5. Install and check the electric heater
6. Insulate the water pipes




- ⊛ 1: supapa apa rece / cold water valve
- ⊛ 2: vana de amestec / water mixing valve
- ⊛ 3: supapa apa calda / hot water valve



## Locatii TEHNOSOLAR

### Our locations

-  **CRAIOVA**  
sediul central *headquarters*
-  **BUCURESTI**  
punct de lucru *subsidiary*
-  **CONSTANTA**  
punct de lucru *subsidiary*
-  **SIBIU**  
punct de lucru *subsidiary*

## Firme autorizate TEHNOSOLAR

### Authorized partners

- |                  |                   |
|------------------|-------------------|
| <b>CRAIOVA</b>   | <b>BUCURESTI</b>  |
| CSC Group        | PAL GROUP         |
| AB Instal        | <b>SIBIU</b>      |
| Aqauterm         | Thermic Point     |
| Euro Climatherm  | MLK Import Export |
| Aldaro Construct | <b>FOCSANI</b>    |
| Polystart Clima  | <b>CNS Instal</b> |
| AS International | <b>CONSTANTA</b>  |
|                  | Rapid Instal      |
|                  | Termoinvest       |
|                  | Don Termo Instal  |
|                  | <b>BOTOSANI</b>   |
|                  | ELSAKO Brunata    |



Alexandru  
6 ani

simplu. profesional. eficient.



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