



DESIGN, DEVELOPMENT  
AND EUROPEAN MANUFACTURING



# SOLAR BOX

DOMESTIC HOT WATER  
ECONOMY | COMFORT | ECOLOGY



**WORKS DAY  
AND NIGHT, IN  
HAIL, RAIN, WIND  
OR SHINE**

**RETRO FITS  
TO EXISTING  
CYLINDER**

**SAVE UP TO  
75%**

RENEWABLE ENERGY,  
RELIABLE HOT WATER

**Keep your domestic hot water cylinder and turn it  
into an efficient solar system**

We select the best components and subject our systems to rigorous quality testing to ensure maximum customer satisfaction



Check warranty conditions



## The Working Principle

An ecological fluid passes through the solar panel at a temperature of -15°C, thereby allowing the collection of the energy from the sun, rain and wind. As the fluid is running at negative temperatures, it collects the heat from the air by natural convection, working also at night. The fluid is then compressed, in the Solar Box which causes the fluid temperature to increase. The heat is then released into the circulating water by way of a high performance plate heat exchanger. Finally, the fluid goes through an expansion valve and will evaporate into the aluminum solar panel and the process repeats.

## FAQ's

### Will I have hot water when there is no sun?

Yes. The fluid passes through the panel at very low temperatures. It can therefore receive more solar energy than a normal liquid, even on days without sun or at night. Because of this thermal difference, the solar panel can capture the heat existing in the environment and transmit it to the water.

### Does the Solar Box require extensive maintenance care?

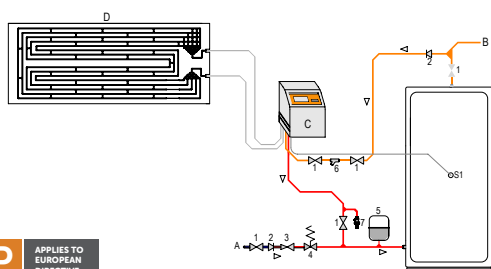
Maintenance is non-existent and the fluid does not need to be recharged.

### At what distance must the panel be from the Solar Box?

At a maximum distance of 12 meters.

### Do the panels have to be installed on the roof?

They can be installed on the roof, on the wall, on a flat roof, terrace, on the ground, etc...



More detailed information on [energie.pt](http://energie.pt)



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## Advantages

- HEATS WATER UP TO 55°C.
- ALUMINUM SOLAR PANEL WITH HIGH CORROSION RESISTANCE.
- RETRO FITS TO EXISTING CYLINDER.
- COMPATIBLE WITH BOTH VENTED AND UNVENTED SYSTEMS.
- VERY COMPACT UNIT.
- 10 YEAR MANUFACTURERS GUARANTEE FOR THE SOLAR PANEL.
- HIGH PERFORMANCE PLATE HEAT EXCHANGER SUITABLE FOR DHW.
- CIRCULATION PUMP SUITABLE FOR DHW.
- NO MAINTENANCE REQUIRED.
- ENVIRONMENTALLY FRIENDLY FLUID.
- SIGNIFICANTLY REDUCES CARBON EMISSIONS.
- THE SOLAR PANEL CAN BE MOUNTED ON THE WALL, OR ROOF.
- THE SOLAR BOX CAN BE HUNG ON THE WALL OR BE PLACED ON THE FLOOR.
- NO GLASS OR OTHER FRAGILE MATERIALS.
- FINE EUROPEAN AND INTERNATIONALLY RECOGNIZED BRAND.

Specifications	1 Panel	2 Panels
Max Thermal Power (Med./Max.)	1690/2900	2800/4550
Max Electric Power Consumed (Med./Max.)	390/550	595/890
Voltage / Frequency	230/50-60	230/50-60
Fluid	R134a / 0,8	R134a / 1,0
Max DHW Temperature (with Thermodynamics)	55	55
Maximum Working Pressure	7	7
Therm. Unit Input   Output Connections (thread)	1/2   1/2	1/2   1/2
Solar Box / Thermodynamic Panel Weight	23,5/8	23,5/2 x 8
Therm. Panel Input   Output Connections (thread)	3/8   1/4	1/2   3/8
ErP Class   Tapping Profile	A   L	A   XL

Include hydraulic filter and Silentblocs

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