DESIGN, DEVELOPMENT
AND EUROPEAN MANUFACTURING

ENERGIE®
THERMODYNAMIC SOLAR ENERGY

Iris Hellas
Technology Innovations

SOLAR BOX

KEEP YOUR DHW CYLINDER AND TURN IT INTO AN EFFICIENT SOLAR SYSTEM

ECONOMY | ECOLOGY | COMFORT

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

RETRO FITS TO EXISTING CYLINDER

SAVE UP TO 75%

RENEWABLE ENERGY, RELIABLE HOT WATER

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

WARRANTY 10 YEARS SOLAR PANEL

Check warranty conditions

ENERGIE®
THERMODYNAMIC SOLAR ENERGY

The Working Principal

An ecological fluid passes through the solar panel at a temperature of -15ºC, 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 aluminium solar panel and the process repeats.

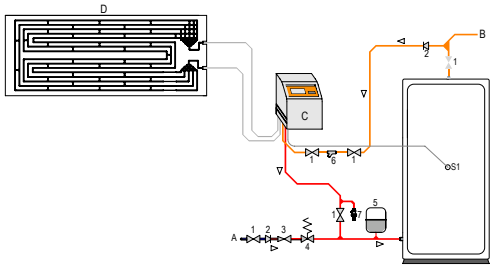
FAQ´s

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 metres.

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…



Advantages

- HEATS WATER UP TO 55ºC
- ALUMINIUM SOLAR PANEL WITH HIGH CORROSION RESISTANCE
- RETRO FITS TO EXISTING CYLINDER
- COMPATIBLE WITH BOTH VENTED AND UNVENTED SYSTEMS
- VERY COMPACT UNIT
- 5 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 PLACES ON THE FLOOR
- NO GLASS OR OTHER FRAGILE MATERIALS
- FINE EUROPEAN AND INTERNATIONALLY RECOGNIZED BRAND

Specifications		
Max Thermal Power	W	2200
Max Electric Power Consumed	W	490
Voltage / Frequency	V/Hz	230/50-60
Fluid	-/kg	R134a / 0,8
Max DHW Temperature (with Thermodynamics)	ºC	55
Maximum Working Pressure	bar	6
Therm. Unit Input / Output Connections (thread)	Pol.	1/2 | 1/2
Thermodynamic Panel Weight	kg	23,5 / 8
Therm. Panel Input / Output Connections (thread)	Pol.	3/8 | 1/4

More detailed information on
energie.pt

Iris Hellas
Technology Innovations

Address Zona Industrial de Laúndos, Lote 48
4570-311 Laúndos - Póvoa de Varzim PORTUGAL
GPS Coordinates N 41 27.215' , W 8 43.669'
Telephone + 351 252 600 230

Fax number + 351 252 600 239
E-mail geral@energie.pt
Website www.energie.pt

Project co-funded by:
ON.2 O NOVO NORTE PROGRAMA OPERACIONAL REGIONAL DO NORTE
QREN QUADRO DE REFERÊNCIA ESTRATÉGICO NACIONAL PORTUGAL 2007.2013
UNIÃO EUROPEIA Fundo Europeu de Desenvolvimento Regional