

# SOLAR BOX

## DOMESTIC HOT WATER

KEEP YOUR  
DOMESTIC HOT  
WATER CYLINDER AND  
TURN IT  
INTO AN EFFICIENT  
SOLAR SYSTEM



# THERMODYNAMIC SOLAR SYSTEM

## WORKING PRINCIPLE

The evaporation of the fluid that runs inside the closed looped circuit happens on the solar panel by capturing the heat from the sun, wind, rain and surrounding air by natural convection. The heated fluid then travels to the compressor, that will compress the fluid increasing its pressure and also its temperature.

Then it goes to the heat exchanger where where this heat is transferred to the water. After this, an expansion valve will make the pressure and temperature drop to sub-zero values. The fluid travels up to the thermodynamic solar panel and the cycle repeats again.

 **PORTUGUESE MANUFACTURING**

SAVING  
**75%**  
UP TO

MAXIMUM  
RETURN ON  
INVESTMENT

- Heats water up to 55°C.
- Retro fits to existing cylinder.
- Very compact unit.
- 10 year manufacturers guarantee for the solar panel.
- High performance plate heat exchanger.
- Circulation pump suitable for DHW.
- Environmentally friendly fluid.
- Significantly reduces carbon emissions.
- No glass or other fragile materials.
- Fine portuguese and internationally recognized brand

ENERGIE.PT



APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS



Solar Keymark



See warranty conditions



## THERMODYNAMIC SOLAR PANEL TECHNOLOGY

- Anodized aluminium, with waterproof and flexible paint
- Easy to transport and install, only 8 kg and 2x0,8 m
- No overheating and freezing problems
- It can be installed on the roof, wall, garden, etc.
- No need for cleaning and humidity resistance
- Estimated lifespan of 25 years
- Passed the corrosion test in a salt fog test equivalent to 20 years
- Solar Keymark Certification

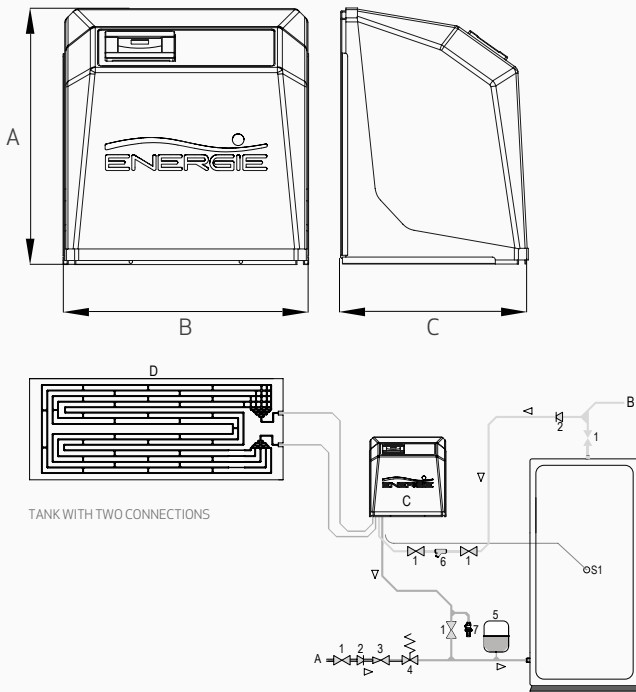
TECHNICAL DATA		1 PANEL	2 PANELS
Thermal power (Med./Max.)	W	1690 / 2900	2800 / 4550
Electric Power Consumed (Med./Max.)	W	390 / 550	595 / 890
Voltage / Frequency	V / Hz	230 / 50-60	230 / 50-60
Operating temperature	°C	-2 a 42	-2 a 42
Refrigerant Fluid / Qt.	- / kG.	R134a / 0,8	R134a / 0,8
Maximum temperature	°C	55	55
Maximum working pressure (water)	bar	7	7
Hydraulic connection (inlet/outlet)	Pol.	1/2   1/2	1/2   1/2
Weight	Kg.	23,5	23,5
Cooling connections (suction/liquid)	Pol.	3/8   1/4	1/2   3/8
ErP Class   Tapping Profile		A   L	A   XL

\* Include hydraulic filter and Silentbloccs

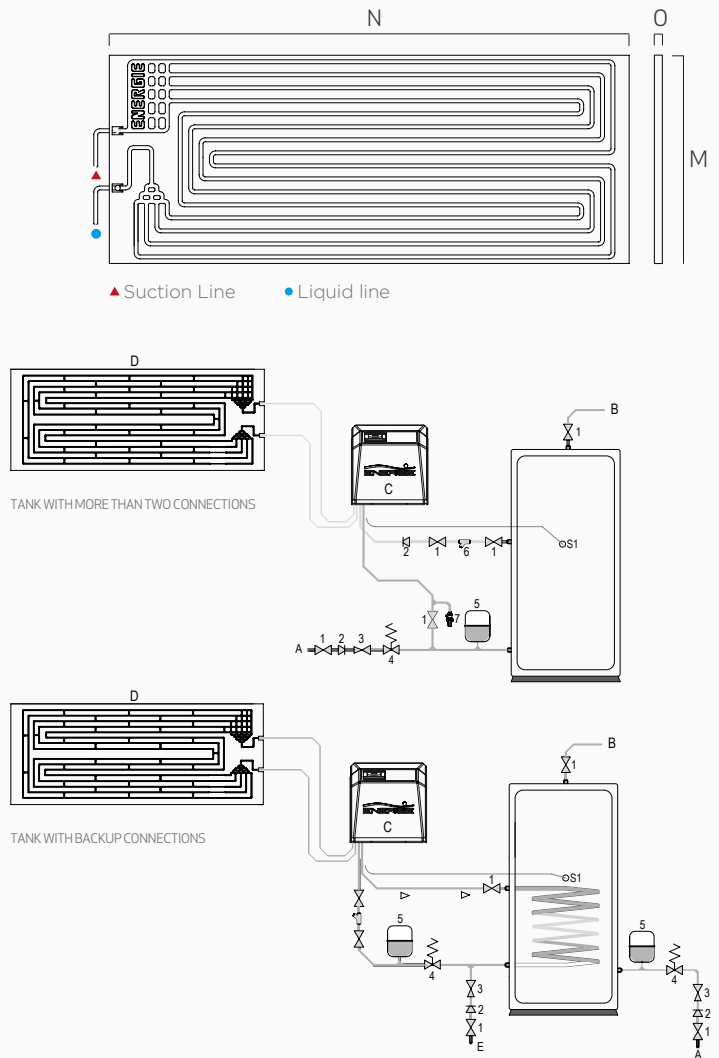
PAINEL SOLAR TERMODINÂMICO		
Material	-	Anodized aluminum solarcoat
Dimensions (W x H x D)	mm	2000 x 800 x 20
Weight	Kg.	8
Max. pressure	Bar	12
Temp. max. of exposure	°C	-40   120

DIMENSIONS mm	
A	465
B	425
C	325
M	800
N	2000
O	20

Equipment: **Solar Box**



Equipment: **Thermodynamic Solar Panel**



- 1. Open/closed valve | 2. Non return valve |
- 3. Pressure reducing valve | 4. Security group |
- 5. Expansion vessel | 6. Filter | 7. Drain |
- A. Mains Water | B. Hot Water Outlet | C. Solar Box |
- D. Thermodynamic Panel | E. Mains Water |
- S1. Water probe

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