















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 it's 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



- 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





THERMODYNAMIC SOLAR PANEL **TECHNOLOGY**

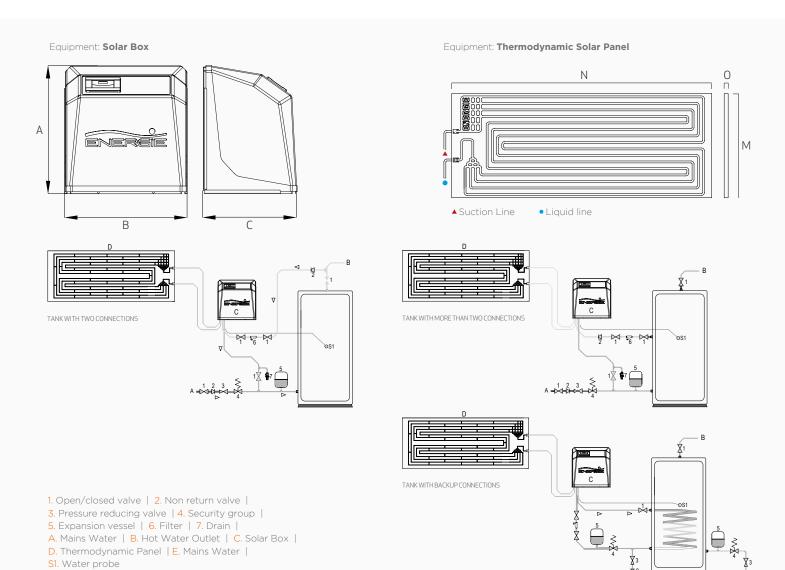
- · Anodized aluminium, with waterproof and flexible paint
- Easy to transport and install, only 8 kg and
- No overheating and freezing problems
- It can be installed on the roof, wall, garden.
- No need for cleaning and humidity resistance
- Estimated lifespan of 25 years
- Passed the corrosion test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

TECHNICAL DATA			
TECHNICAL DATA		1 PANEL	2 PANELS
Thermal power (Med./Max.)	W	1690 / 2900	2800 / 4550
Electric Power Consumed (Med./Max.)	\vee	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		AIL	AIXL

 $^{^{\}ast}$ Include hydraulic filter and Silentblocs

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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	
В		425	
С		325	



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