

ECONOMIC

DOMESTIC HOT WATER



**LATEST GENERATION
OF THERMODYNAMIC
SOLAR TECHNOLOGY
IN YOUR HOME.**
THE IDEAL SOLUTION
FOR MULTIFAMILY
BUILDINGS.



THERMODYNAMIC SOLAR SYSTEM

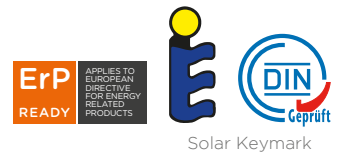
WORKING PRINCIPLE

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.



EQUIPMENT

- No ducts and no fans
- No energy-consuming defrost cycles
- Super efficient low consumption compressor
- No need to install support equipment

SOLAR PANEL

- Captures heat regardless of weather factors
- Primary circuit does not need to dissipate excess heat on hotter day
- Easy architectural integration, versatile without visual impact

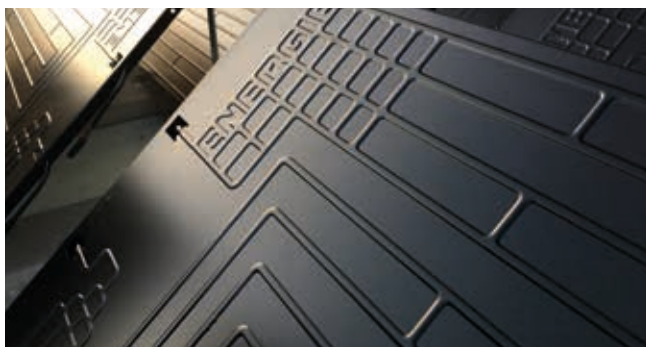


SOLAR PERFORMANCE

Tested and certified according to the most rigorous European standards it has achieved an extraordinary coefficient of performance of 3,8 according to the EN16147. The testing was carried out without solar irradiance, wind or rain. To enhance the real operating performance even more we advise to instal the thermodynamic solar pane facing South (North on the southern hemisphere), east or west. Vertically or horizontally on a wall, roof, flat roofbut always on a landscape position.

SOLID AND ROBUST

The thermodynamic solar panel is made of anodised aluminium with a special Solokote finishing that ensures it's robust and long-lasting against corrosion, in particular when exposed to saline and/or aggressive environments. This innovative technical feature allows energie to provide a 10 years warranty against corrosion, ensuring peace of mind to the end user.



TECHNICAL DATA			250i
Net Weight	Kg.		68
Volume	L		250
Water Heater	-		Stainless Steel
Cathodic Protection	-		Mg Anode (1"1/4)
Hydraulic Connections	Water - Inlet and Outlet		3/4"
	PT Valve	Pol.	1/2"
	Recirculation		3/4"
Insulation	-		High-density polyurethane 50mm
Maximum Working Pressure	bar		7
Maximum Working Temperature	°C		80
Heat Loss (EN12897)	KWh/24h		1,01
Absorbed Power (Avg/Max)	W		350 600
Thermal Power (Avg/Max)	W		1150 2100
Electric Backup	W		1500
Refrigerant Fluid / Qt. ¹	-/g		R134a / 1100
Piping Material	-		Copper (DHP ISO1337)
Liquid line Asp. line	Inches		1/4" 3/8"
Power supply	V / Hz		220-240 / Single-phase / 50 ou 60 ²
Operating Temperatures	°C		- 5 45

THERMODYNAMIC SOLAR PANEL		
Material	-	Anodized aluminum solarcoat
Dimensions (W x H x D)	mm	2000 x 800 x 20
Weight	Kg.	8

PERFORMANCE ³		
Load Profile	-	XL
Coefficient of Performance (COP)	-	3,8
Energy Efficiency Class	-	A+
Energy Efficiency	-	155
Annual Energy Consumption	KWh/Year	1078
Amount of useful water at 40°C	L	349
Interior Sound Level	dB	47

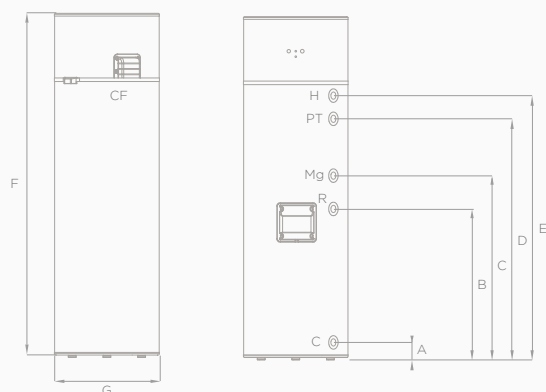
¹ The amount of fluid must be verified by the installer. In certain cases, it is necessary to adjust the amount of fluid to guarantee the correct functioning of the system.

² The 60 Hz frequency is only available upon order.

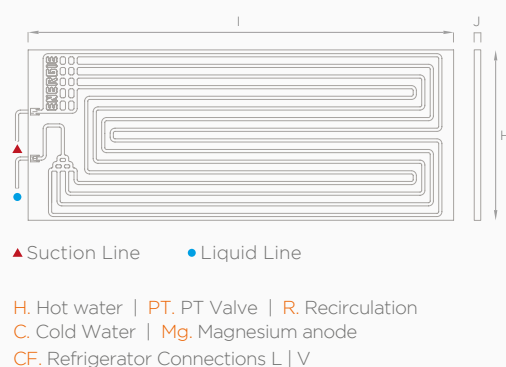
³ According to EN16147, Delegated Regulation (EU) N°812/2013 and Delegated Regulation (EU) N°814/2013.

DIMENSIONS mm		250i
A		99
B		840
C		1025
D		1343
E		1475
F		1915
G		580
H		800
L		2000
P		20

Equipment: **Storage Water Heater**



Equipment: **Thermodynamic Solar Panel**



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Project co-financed by:



Zona Industrial de Laúndos
Lote 48, 4570-311 Laúndos
Póvoa de Varzim, Portugal
EMAIL energie@energie.pt
SITE www.energie.pt

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