ENERGIE®

PORTUGUESE MANUFACTURING
SINCE 1981

ECOTOP
DOMESTIC HOT WATER

CERTIFIED PRODUCT
REFRIGERANT R513A
MCS CERTIFIED

HOT WATER 24 HOURS A DAY

SALINE ENVIRONMENT RESISTANCE

COP 3.9 WITHOUT SOLAR RADIATION

BUILT-IN 60x60 CM

OPTIONAL WI-FI

CYLINDER INOX 444 DUPLEX 2205 STAINLESS STEEL

EFFICIENCY & QUALITY
IN DOMESTIC HOT WATER PRODUCTION

SAVING UP TO 85%

MAXIMUM RETURN ON INVESTMENT

- Stainless steel cylinder
- Minimum occupied space at home
- High level of efficiency and ecology
- Quiet operation
- Time scheduling with chrono function
- Easy installation
- Smart photovoltaic function
- Anti-legionella function
- Controller with software in 6 languages
- Optional coil
- MCS Certification

THERMODYNAMIC SOLAR PANEL TECHNOLOGY

- Anodized aluminium, with waterproof and flexible paint
- Easy to transport and install, only 8 kg and 2x0,8 m
- No glass, rubber or fragile materials
- No overheating and freezing problems
- It can be installed on the roof, wall, garden, etc.
- Panel efficiency does not decrease with age or dirt
- 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

SOLAR PERFORMANCE

Tested and certified according to the most rigorous European standards it has achived an extraordinary coefficient of performance of 3,9 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.

SIMPLE AND ERGONOMIC

The high efficiency of the hot water cylinder is achieved by using a high-density polyurethane foam that ensures a low heat loss rate, being able to keep the water heated for several days in a row even if the units is turned off.

SOPHISTICATED

The equipment's indoor unit has a stainless steel cylinder, as well as an external condenser. High density injected polyurethane insulation with cathodic protection. The thermodynamic block is equipped with a state-of-the-art compressor, with one of the lowest electrical consumptions on the market.

LATEST GENERATION TECHNOLOGY

Make the right choice when choosing the most advanced system.

See warranty conditions

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.

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

MCS CERTIFIED

See warranty conditions

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

ELECTRONIC CONTROLLER

DOMESTIC HOT WATER PRODUCTION

1. Compressor. 2. Electrical resistance. 3. Disinfect.
4. Solar function. 5. Alarm.

PHOTOVOLTAIC INTELLIGENT FUNCTION

Take Full advantage of your PV System:

- Sets new standards of smart energy management
- Maximize your PV Solar Panels production and reduce your DHW costs
- Maximize the solar irradiation available by having the thermodynamic solar system working more when there is more sun available
- Get the balance between PV production and consumption with our intelligent controller

With PV Smart Grid Ready, the ENERGIE Solar System absorbs the extra power generated by PV Panels, Wind Energy or Small Hydro storing, what would be lost energy, into the water, enabling you to save even more.

NEW APP NOW AVAILABLE SMART LIFE

Configure operating modes

Time schedule

Vacation Mode

Consumption history

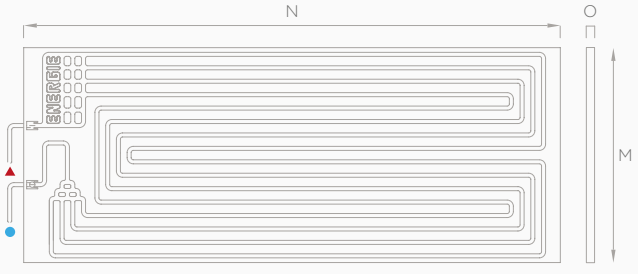
Temperature control

Anti-legionella cycle

DID YOU KNOW THAT

Any thermodynamic solar system inside has only one mechanical element with electrical consumption. This Element is a super efficient low consumption compressor. Since the capacity to capture heat from the environment is primarily ensured by solar radiation, it is superior to any other equipment intended for the same purpose, the savings are maximum.
System maintenance is practically null and longevity is very high.

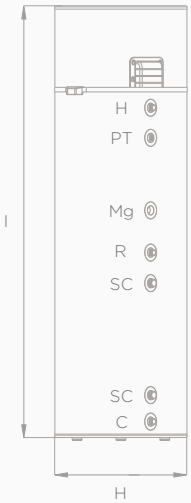
Equipment: **Thermodynamic Solar Panel**



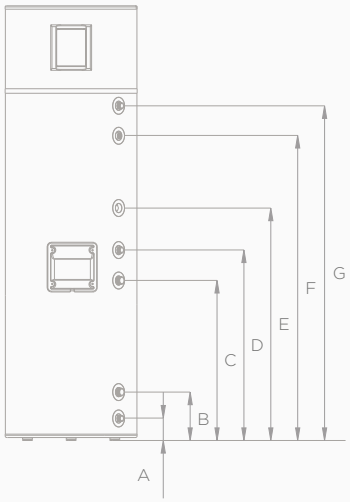
▲ Suction Line ● Liquid Line

H. Hot water | PT. PT Valve | R. Recirculation |
C. Cold Water | Mg. Magnesium anode | Sc. Solar Coil

Equipment: **Storage Water Heater**



rear connections
300 i / 300 ix



front connections
200I / 200IX /250I /250 IX

TECHNICAL DATA			200I	250I	300I	200IX	250IX	300IX
Net weight		Kg	60	68	71	63	71	74
Volume		L	200	250	300	195	245	295
Water heater		-	Stainless Steel					
Cathodic protection		-	Mg Anode (1"1/4)					
Hydraulic connections	Water - inlet and outlet		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	PT Valve	Pol.	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	Recirculation		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Coil - entrance and exit		-	-	-	1"	1"	1"
Insulation		-	High density polyurethane 50mm					
Maximum pressure		bar	7	7	7	7	7	7
Maximum temperature		°C	80	80	80	80	80	80
Heat loss (EN12897)		kWh/24h	0.99	1.01	1.17	0.99	1.01	1.17
Coil thermal capacity [1]		kW	Not Applicable	Not Applicable	Not Applicable	a)20 ; b)12	a)20 ; b)12	a)20 ; b)12

THERMODYNAMIC SOLAR PANEL		
Material	-	Anodized aluminum solarcoat
Dimensions (W x H x D)	mm	2000 x 800 x 20
Weight	Kg	8
Maximum Working Pressure	Bar	12
Maximum Exposure Temperature	°C	-40 | 120

THERMODYNAMIC BLOCK		
Absorbed Power (Avg/Max)	W	350 | 600
Thermal Power (Avg/Max)	W	1250 | 2100
Electric Support Power	W	1500
Refrigerant Fluid / Qt. [2]	-/g	R513a / 1300
Piping Material	-	Copper (DHP ISO1337)
Liquid line | Asp.	Pol.	1/4" | 3/8"
Power Supply	V / Hz	220-240 / Single-phase / 50 or 60 [3]
Fuse (General | Resistance)	A	10 | 10

PERFORMANCE [4]			200I	250I	300I	200IX	250IX	300IX
Load profile		-	L	XL	XL	L	XL	XL
Coefficient of performance (COP)	Air 14°C	-	3,7	3,8	3,9	3,7	3,8	3,9
Energy efficiency class	Air 14°C	-	A++	A+	A++	A++	A+	A++
Energy efficiency	Air 14°C	-	154	158	162	154	158	162
Annual energy consumption	Air 14°C	KWh/year	664	1060	1037	664	1060	1037
Amount of useful water at 40°C		L	261	349	363	256	344	358
Set point		°C	54	54	54	54	54	54
Interior sound level		dB	47	47	47	47	47	47

[1] a) Primary Circuit (Te = 90°C; Ts = 80°C); Domestic Hot Water Circuit (Te = 10°C; Ts = 60°C) | b) Primary Circuit (Te = 70°C; Ts = 60°C); Domestic Hot Water Circuit (Te = 10°C; Ts = 60°C)
[2] The fluid quantity must be checked by the installer. In some cases, it is necessary to adjust the amount of fluid to ensure proper system operation.
[3] The 60 Hz frequency is only available on request.
[4] In accordance with EN 16147, Commission Delegated Regulation (EU) No 812/2013 and Commission Delegated Regulation (EU) No 814/2013.

DIMENSIONS (mm)	200I	250I	300I	200IX	250IX	300IX
A	131	131	102	131	131	102
B	-	-	-	231	231	231
C	-	-	-	690	690	631
D	-	840	840	-	850	850
E	-	-	-	-	-	-
F	905	1205	1060	905	1205	1060
G	1030	1325	1185	1030	1325	1185
H	580	580	650	580	580	650
I	1623	1923	1783	1623	1923	1383
M			800			
N			2000			
O			20			

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