ENERGIE
THERMODYNAMIC SOLAR ENERGY

ECO

DOMESTIC HOT WATER

ECONOMY | COMFORT | EFFICIENCY

PROBABLY THE MOST ADVANCED SOLAR WATER HEATER IN THE WORLD

HOT WATER 24 HOURS A DAY

WORKS DAY AND NIGHT, RAIN OR SHINE

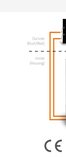
UP TO 85% ENERGY SAVINGS

THE LATEST GENERATION THERMODYNAMIC SOLAR

WORKS WITH YOUR PV SYSTEM

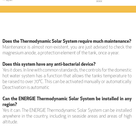
New Design

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



100% ENVIRONMENTALLY FRIENDLY

MAXIMUM PRODUCTIVITY WITH GOOD SOLAR GAIN



- HEAT IS CAPTURED IN THE FORM OF SOLAR RADIATION, ENVIRONMENTAL TEMPERATURE, RAIN, WIND AND EVEN SNOW.
- THE HEAT PRODUCED ON COLDER DAYS, EVEN AT NIGHT, IS ENOUGH TO PRODUCE THE WATER TEMPERATURE DESIRED.
- THE SOLAR PANEL IS LIGHT, DISCREET AND VERSATILE IN TERMS OF WHERE TO PUT IT.
- OUTSIDE CYLINDER CONDENSER (NO CONTACT WITH WATER).
- 3RD GENERATION THERMODYNAMIC SOLAR ENERGY.
- HOT WATER UP TO 55°C AVAILABLE 24H PER DAY.
- LOW MAINTENANCE.
- THE ENERGY CONSUMPTION OF THE EQUIPMENT IS REDUCED DUE TO A SUPER EFFICIENT COMPRESSOR.
- NO DEFROST CYCLE.
- VERSIONS WITH 1 OR 2 THERMODYNAMIC SOLAR PANELS.
- STAINLESS STEEL CYLINDER.
- AVAILABLE WITH OR WITHOUT SUPPLEMENTARY COIL.

FAQs

What is the ENERGIE Thermodynamic Solar System?
ENERGIE Thermodynamic Solar Systems use a technology based on the principle of the French physicist Nicolas Carnot, who discovered thermodynamics. Thanks to him, Thermodynamic Solar Panels are capable of capturing the heat that is present in the environment, even in adverse conditions. The SPF has a power of the innovative equipment that is exceptional, and the ENERGIE Thermodynamic Solar Panel is a solar panel, allowing a greater capture of the solar energy and a higher absorption of the environmental energy that is then released to the water through the exchanger. Thus, ENERGIE's Thermodynamic Solar Panels surpass the limitations of the traditional solar panels and make possible a more efficient and increased the water temperature.

Can I have hot water in days without sun?
Because the Thermodynamic Panels are capable of very low temperatures, it can receive more solar energy than a normal liquid, and even on days without sun, it can still do so. Even in adverse conditions, the heat panel can capture the heat present in the environment and transfer it to the water. Thus, the system always ensures hot water up to 55ºC.

Does the Thermodynamic Solar System require much maintenance?
Maintenance is almost non-existent; you are just advised to check the magnesium anode, a protective element of the tank, once a year.

Does this system have any anti-bacterial devices?
Yes! It has a function which can be activated, directly sent to the domestic hot water system has a function that allows the tanks temperature to be raised to over 60ºC. This can be activated manually or automatically. Deactivation is automatic.

Can the ENERGIE Thermodynamic Solar System be installed in any region?
Yes, it can. The ENERGIE Thermodynamic Solar System can be installed anywhere in the country, including in seaside areas and areas of high altitude.

Electronic Controller

ECO Operating Mode
The equipment only works as a Thermodynamic Solar System

AUTO Operating Mode
The equipment works as a Thermodynamic Solar System and if additional support should it be required

BOOST Operating mode
The equipment works with a Thermodynamic Solar System and electrical support simultaneously

MAXIMUM EFFICIENCY

PV 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 to heating the thermodynamic solar system working mode when there's more sun available.
- Get the balance between PV production and consumption with our intelligent controller.

With Smart PV Integration, the Energie zone system absorbs the extra power produced by the PV panels, converting it into small hydro-circuits that would be lost energy, into the water, enabling you to save even more.

1. Thermodynamic Solar Panel
2. DWH Cylinder + Thermodynamic Block
3. PV Panels
4. Inverter

System Specifications

Model	No. of Panels	Stainless	Thermal Power Produced (W/Kw)	Power Consumption (W/Kg)	Electrical Supply V/Hz	Extra Coil	Litters
Eco 250	1	x	2900	390	230/50-60		250
Eco 300	1	x	2900	390	230/50-60		300
Eco 250x	1	x	2900	390	230/50-60		250
Eco 300x	1	x	2900	390	230/50-60		300
Eco 250s	2	x	4550	595	230/50-60		250
Eco 300s	2	x	4550	595	230/50-60		300
Eco 430s	2	x	4550	595	230/50-60		430
Eco 250sx	2	x	4550	595	230/50-60		250
Eco 300sx	2	x	4550	595	230/50-60		300
Eco 430sx	2	x	4550	595	230/50-60		430

(1) Series Check | (2) 1 Solar Panel(s) | (3) Supplementary Coil

THERMODYNAMIC SOLAR SYSTEM OPERATING PRINCIPLE

Equipment

- No ducts required
- No ventilation required
- No distinct cycle reversing
- Very efficient compressor with low energy consumption
- No knock-up required
- Hot water guaranteed, available day and night, hail, rain, winter or shine up to 55ºC

DOMESTIC HOT WATER

Solar Panel

- Captures heat regardless of climate.
- Primary circuit does not need to dissipate excess heat on hotter days.
- Good architectural integration due to flexibility with panel location.

Solar Panel

- ANODIZED ALUMINUM WITH HYDROPHOBIC FLEXIBLE COATING.
- LIGHT WEIGHT – ONLY 8 KILOS, EASY TO TRANSPORT AND INSTALL.
- DIMENSIONS: 2m X 0.8m X 0.02m.
- NO GLASS, RUBBER OR FRAGILE MATERIALS.
- NO RISK OF OVER HEATING.
- PANEL IS MADE OF A NON-CORROSIVE, ANNODISED ALUMINUM.
- HIGH RESISTANCE TO HUMIDITY.
- IT CAN BE INSTALLED FROM 10º TO 85º IN A HORIZONTAL POSITION.
- PANEL CAN BE EAST, WEST, OR SOUTH FACING AND DOES NOT NEED TO SIT ON THE ROOF.
- THE PANEL DOES NOT LOSE ITS EFFICIENCY WITH TIME OR WITH DIRT.
- NO NEED TO CLEAN.
- ESTIMATED USEFUL LIFE OF 25 YEARS.

More detailed information on **energie.pt**

Distribution of consumption to different systems

DID YOU KNOW?

That all thermodynamic solar systems only have one mechanical element that requires electricity? This element is a low energy consumption compressor and is extremely efficient. Apart from this, the entire system is completely environment friendly and ensures high solar radiation, it is superior to other equipment that uses the same good offering maximum savings. The maintenance of the system is practically non-existent and it has high longevity.

SAVE UP TO 85%

Taking into account Eco300
7 Hours operation per day
Consumption of 0,39 kWh/h
Energy necessary / month = 81,9 kWh / month

Authorized Dealer

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