



ENERGIE
THERMODYNAMIC SOLAR ENERGY

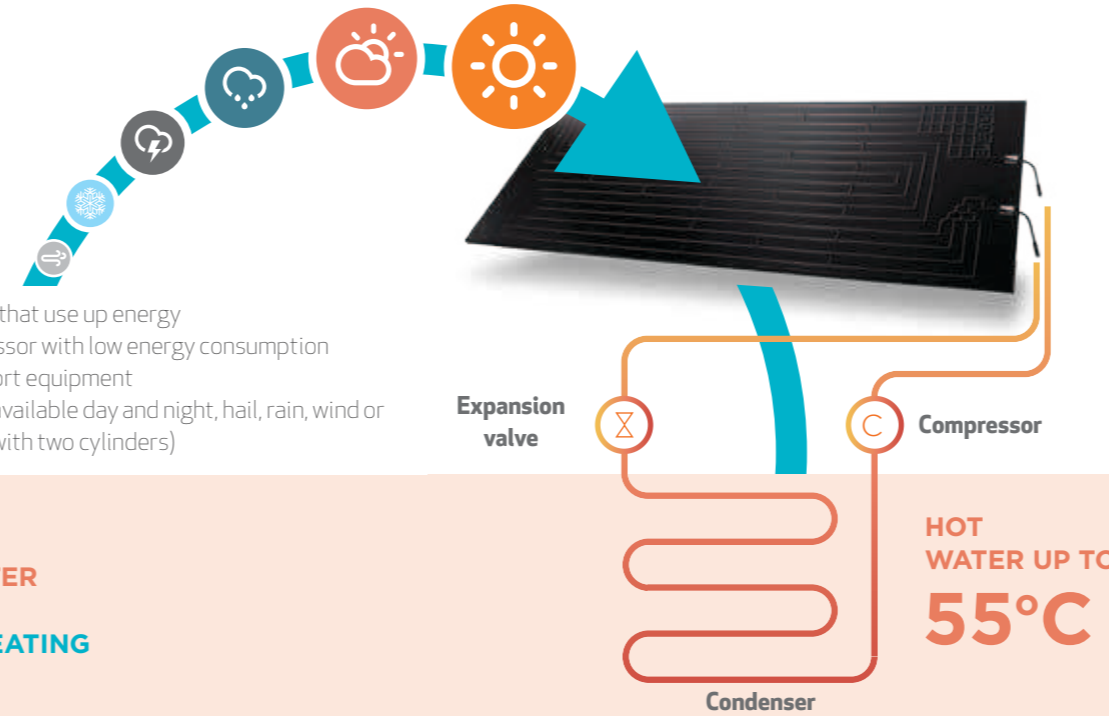
THERMODYNAMIC SOLAR SYSTEM OPERATING PRINCIPLE



Solar Panel Registration 011-75888 F

Equipment

- Without ducts
- Without ventilators
- Without defrost cycles that use up energy
- Super efficient compressor with low energy consumption
- No need to install support equipment
- Hot water guaranteed, available day and night, hail, rain, wind or shine up to 55°C (60°C with two cylinders)



**DOMESTIC HOT WATER
CENTRAL HEATING
SWIMMING-POOL HEATING**

Solar Panel

- Captures heat regardless of climate.
- Primary circuit does not need to dissipate excess heat on hotter days.
- Easy integration with architecture, versatile, no visual impact.

DESIGN, DEVELOPMENT
AND EUROPEAN MANUFACTURING

ENERGIE
THERMODYNAMIC SOLAR ENERGY

SOLAR BLOCK

**DOMESTIC HOT WATER
CENTRAL HEATING
SWIMMING-POOL HEATING SYSTEM**

ECONOMY | COMFORT | ECOLOGY



**ELECTRONIC
EXPANSION VALVE**



Solar Block



**DOMESTIC HOT WATER
INDUSTRIAL USE**



**CENTRAL
HEATING**



SWIMMING-POOL HEATING

This unit of the Thermodynamic Solar System has the following main components: a low consumption compressor, which is responsible for the circulation of the liquid throughout the whole system, a heat exchanger that dissipates heat into the water for consumption (Domestic Hot Water) or the closed heating circuit (Central Heating and Swimming-pool Heating) and an expansion component that reduces the boiling temperature from approximately -30°C so that it can go back to the thermodynamic solar panels and capture heat again.



Check warranty conditions



More detailed information on
www.energie.pt



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.
- NO RISK OF FREEZING.
- HIGH RESISTANCE IN SALINE ENVIRONMENT.
- HIGH RESISTANCE TO HUMIDITY.
- IT CAN BE INSTALLED FROM 10° TO 85° IN A HORIZONTAL POSITION.
- IT CAN BE INSTALLED ON THE ROOF, WALL, IN THE GARDEN, ETC...
- ESTIMATED USEFUL LIFE OF 25 YEARS.

Authorized Dealer

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Day and night, rain or shine

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

ECO XL

HOTELS, HOSPITALS,
SCHOOLS, SPORTS HALLS,
INDUSTRY WITH
DOMESTIC ECONOMY

HOT WATER AT THE LOWEST COST

Reduce hot water bill in your condominium, hotel, school, gym or industry with ENERGIE Thermodynamic Solar System. The solution Eco XL is the latest generation in water heating. Uses a high performance innovative technology that allows the user to benefit from a substantial reduction in water heating costs and getting a quick payback of the investment. You can get water up to 60°C (with two cylinders) on rainy days or during the night thanks to its innovative operating principle. The maintenance of the solar system is practically non-existent. Only required to check the tank sacrificial anode. The solar system XL Eco does not lose performance over the years, always assuring optimal performance. The capabilities of deposits ranging from 1000 to 6000 liters, it is also possible to link together multiple systems to higher needs. The high performance of the systems also allows a reduction of the area of solar panels compared to traditional systems.



- THE SOLAR PANELS ARE LIGHT, DISCREET AND HAVE VERSATILITY IN TERMS OF WHERE TO PUT THEM
- THE ENERGY CONSUMPTION OF THE EQUIPMENT IS REDUCED DUE TO A VERY EFFICIENT COMPRESSOR
- LATEST GENERATION OF SOLAR ENERGY
- SOLAR HOT WATER UP TO 60°C AVAILABLE
- ALMOST NON-EXISTENT MAINTENANCE

- VERSIONS WITH 1 OR 2 CYLINDERS
- STAINLESS STEEL AISI316 CYLINDERS WITH WATER / WATER HEAT EXCHANGER (OPTIONAL) TO CONNECT A BOILER
- SOLUTIONS FROM 6 UP TO 40 THERMODYNAMIC SOLAR PANELS
- CAPACITIES FROM 1000 UP TO 6000 LITERS

Model	Eco 1000	Eco 1500	Eco 2000	Eco 3000	Eco 4000	Eco 6000
Solar Panels	6	12	12/16	16/28	28	40
Nominal Capacity	1000	1500	2000	3000	4000	6000
Maximum Thermal Power	7500	16580	16580/24210	24210/38220	38220	54600
Power Consumption	1230	2010	2010/3210	3210/5650	5650	8450
Thermal storage	1	1	1 or 2	1 or 2	2	2
Users*	22	34	45	68	90	135

*Considering an average consumption of 50 liters/persons/day

CENTRAL HEATING

COMFORT, CONVENIENCE WITH
MAXIMUM ECONOMY

LET COMFORT INHABIT YOUR SPACE

The Thermodynamic Solar System represents high levels of economy and comfort when heating your house. The cutting edge technology used allows you to obtain both high performance and high efficiency. Thanks to the ability of a Thermodynamic System to harness a variety of renewable energy sources such as sun, wind and rain; a Solar Thermodynamic Systems represents the best solution to reducing energy consumption. With no greenhouse gas emissions, Thermodynamic Solar Systems provide a major environmental benefit. A single system can efficiently and effectively provide both the space heating and domestic hot water requirements. You can also use your system to provide central heating during the colder seasons and then switch to the heating of the pool during the warmer months, maximizing your investment.



- LOW CO₂ EMISSIONS
- SUPER EFFICIENT ENVIRONMENT HEATING AT LOW TEMPERATURE
- NON-EXISTENT PROGRAMMED MAINTENANCE
- POSSIBILITY OF JOINING ALL HOUSE HEATING EQUIPMENT INTO JUST ONE SOLUTION

Model	Solar Block 6	Solar Block 12	Solar Block 16	Solar Block 28	Solar Block 40
Solar Panels	6	12	16	28	40
Maximum Thermal Power	W 7500	16580	24210	38220	54600
Power Consumption	W 1230	2010	3210	5650	8450
Water Flow	m ³ /h 0,7	1,0	1,5	3,0	5,0
Electrical Supply	1~/230V/50Hz or 3~/400V/50Hz		3~/400V/50Hz		
Area to be heated*	m ² 90	150	220	300	450

*Does not relieve the sizing of the solar system according to the building, installation and geographic location

SWIMMING-POOL HEATING

HEATED SWIMMING-POOL
EVERY DAY OF THE YEAR

THE PLEASURES OF POOL 365 DAYS A YEAR

The perfect solution for those who want to enjoy their swimming pool all year round with both economic and environmental benefits. With high levels of reliability and efficiency, ENERGIE Thermodynamic Solar Systems are not constrained by the limitations of traditional systems. The system is designed to be maintenance free, thereby reducing running costs. The Thermodynamic Solar System uses a sealed circuit that does not require the periodic addition of fluid. Additionally, the system uses a titanium heat exchanger with very high resistance to the swimming pool chlorine. Needs also less solar panels than traditional systems, being this way more economical and efficient.



- SWIMMING-POOL HEATED ALL YEAR ROUND WITH THE LOWEST COST IN THE MARKET
- NON-EXISTENT PROGRAMMED MAINTENANCE
- POSSIBILITY OF JOINING ALL HOUSE HEATING EQUIPMENT INTO JUST ONE SOLUTION
- HIGHLY EFFICIENT SCROLL COMPRESSOR

- FREE OF DEFROST CYCLES
- SMALL DIMENSION INDOOR UNIT
- HIGH PERFORMANCE ELECTRONIC EXPANSION VALVE

Model	Solar Block 6	Solar Block 12	Solar Block 16	Solar Block 28	Solar Block 40
Solar Panels	6	12	16	28	40
Maximum Thermal Power	W 7500	16580	24210	38220	54600
Power Consumption	W 1230	2010	3210	5650	8450
Electrical Supply	1~/230V/50Hz or 3~/400V/50Hz		3~/400V/50Hz		
Gross Weight	kg 48	96	128	210	320
Volume to be heated*	m ³ 16	36	53	100	120

*Does not relieve the sizing of the solar system according to the swimming pool, installation and geographic location

ECOTOP

DOMESTIC
HOT WATER



LATEST GENERATION OF SOLAR TECHNOLOGY.
WORKS WITH SUN,
WIND, RAIN OR
EVEN AT NIGHT.



LATEST GENERATION THERMODYNAMIC SOLAR TECHNOLOGY IN YOUR HOME.

EFFICIENCY & QUALITY

IN DOMESTIC
HOT WATER
PRODUCTION

 PORTUGUESE MANUFACTURING



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
- HP Keymark 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



24 HOURS A DAY / 7 DAYS A WEEK / 365 DAYS A YEAR



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.



A+

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.

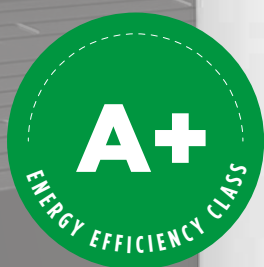


SOPHISTICATED

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.



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.

ErP
READY

APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS



Solar Keymark and HP Keymark



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



HIGH LEVEL OF EFFICIENCY

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.




- 1 Thermodynamic Solar Panel
- 2 Storage Water Heater
- 3 Thermodynamic Block
- 4 Photovoltaic Panels
- 5 Inverter


NEW APP NOW AVAILABLE FOR ANDROID




Configure operating modes




Time schedule




Vacation Mode



Consumption history



Temperature control



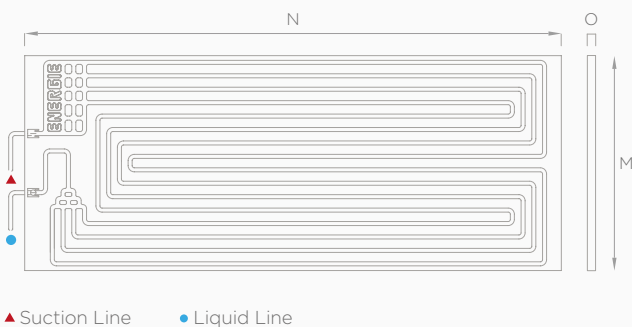
Anti-legionella cycle



DID YOU KNOW THAT

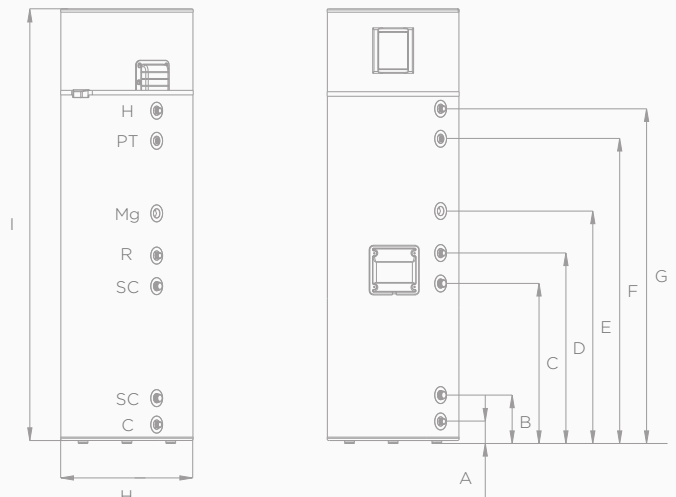
Any thermodynamic solar system inside has only one mechanical element with electrical consumption. This Element is a super efficient low consumption compressor. Since the capacity to capture heat from the environment is primarily ensured by solar radiation, it is superior to any other equipment intended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

Equipment: **Thermodynamic Solar Panel**



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

STORAGE WATER HEATER		200i	250i	300i	200ix	250ix	300ix
Net Weight	Kg	58	65	71	61	68	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

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

THERMODYNAMIC BLOCK							
Absorbed Power (Avg/Max)	W	350 600					
Thermal Power (Avg/Max)	W	1250 2100					
Electric Support Power	W	1500					
Refrigerant Fluid / Qt. ¹	-/g	R134a / 1100					
Piping Material	-	Copper (DHP ISO1337)					
Liquid line Asp.	Pol.	1/4" 3/8"					
Power Supply	V / Hz	220-240 / Single-phase / 50 or 60 ²					
Fuse (General Resistance)	A	10 10					
Operating Temperatures	°C	-5 45					

PERFORMANCE ³		200i	250i	300i	200ix	250ix	300ix
Load Profile	-	L	XL	XL	L	XL	XL
Coefficient of Performance (COP)	-	3,6	3,8	3,7	3,6	3,8	3,7
Energy Efficiency Class	-	A++	A+	A+	A++	A+	A+
Energy Efficiency	-	154	155	151	154	155	151
Annual Energy Consumption	KWh/year	664	1078	1111	664	1078	1111
Amount of useful water at 40°C	L	247	349	389	240	342	382
Temperatura de Fábrica	°C	53	53	53	53	53	53
Interior Sound Level	dB	47	47	47	47	47	47

¹The 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.

²The 60 Hz frequency is only available upon order.

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

DIMENSIONS (mm)	200i	250i	300i	200ix	250ix	300ix
A	99	99	107	99	99	107
B	-	-	-	215	215	236
C	-	-	-	706	706	636
D	820	840	787	820	840	787
E	940	1025	1096	940	1025	1096
F	1044	1343	1187	1044	1343	1187
G	1180	1475	1330	1180	1475	1330
H	580	580	650	580	580	650
I	1615	1915	1775	1615	1915	1775
M	800					
N	2000					
O	20					

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PROGRAMA OPERACIONAL REGIONAL DO NORTE

PORTUGAL
2020

UNIÃO EUROPEIA
Fundo Europeu
de Desenvolvimento



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THERMODYNAMIC SOLAR SYSTEM OPERATING PRINCIPLE



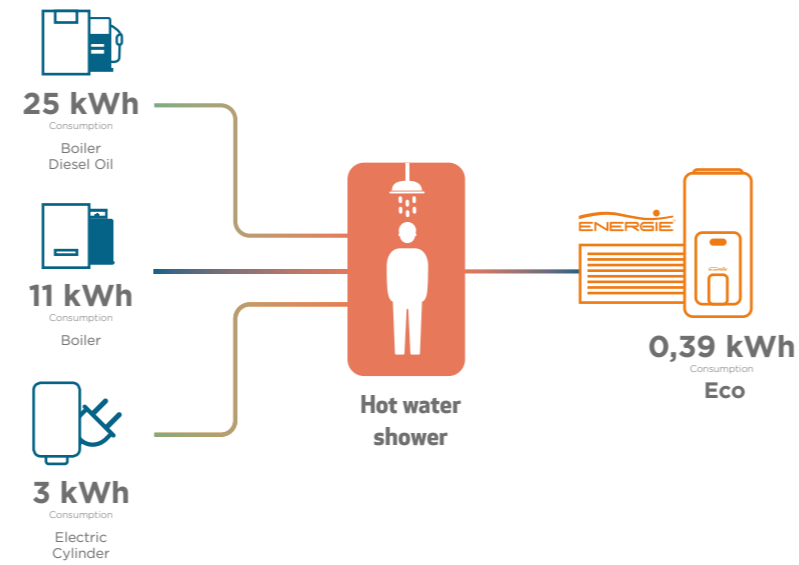
Equipement

- Without ducts
- Without ventilators
- Without defrost cycles that use up energy
- Super efficient compressor with low energy consumption
- No need to install support equipment
- Hot water guaranteed, available day and night, hail, rain, wind or shine up to 55°C

Solar Panel

- Captures heat regardless of climate.
- Primary circuit does not need to dissipate excess heat on hotter days.
- Easy integration with architecture, versatile, no visual impact.

Distribution of consumption to different systems



DOMESTIC HOT WATER



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. As the capacity to capture heat from the environment is primarily ensured through solar radiation, it is superior to other equipment with the same goal offering maximum savings. The maintenance of the system is practically non-existent and it has high longevity.



Solar Panel

- ANODIZED ALUMINIUM, 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.
- NO RISK OF FREEZING.
- HIGH RESISTANCE IN SALINE ENVIRONMENT.
- HIGH RESISTANCE TO HUMIDITY.
- IT CAN BE INSTALLED FROM 10° TO 85° IN A HORIZONTAL POSITION.
- IT CAN BE INSTALLED ON THE ROOF, WALL, IN THE GARDEN, ETC...
- 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

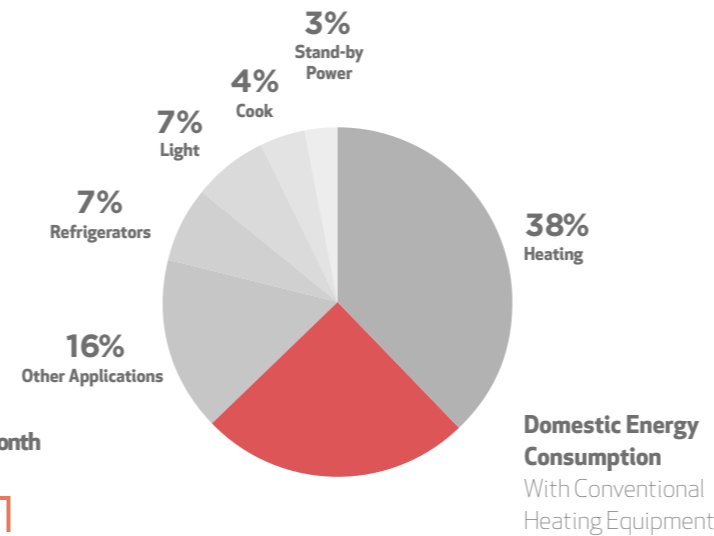
SAVE UP TO

85%

Taking into account Eco300
7 Hours operation per day
Consumption of 0.39 kW/h
Energy necessary / month: 0.39 kW x 7 h x 30 days = 81.9 kWh / month

Authorized Dealer

Energie GCC
Tel. 0561925271
Email: info@energiegcc.com
Site: www.energiegcc.com



ENERGIE GCC
THERMODYNAMIC SOLAR ENERGY



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DESIGN, DEVELOPMENT AND EUROPEAN MANUFACTURING

ENERGIE
THERMODYNAMIC SOLAR ENERGY

ECO

DOMESTIC HOT WATER

ECONOMY | COMFORT | ECOLOGY



PROBABLY THE MOST ADVANCED SOLAR WATER HEATER IN THE WORLD



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 SOLAR PERFORMANCE



- 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 SUFFICIENT 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.
- ENAMELLED OR STAINLESS STEEL CYLINDER.
- 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 from the sun, or even from the rain and wind, 24 hours a day, 365 days a year. One of the innovative aspects is that an ecological fluid at freezing temperatures circulates through the solar panel, allowing a greater uptake of the solar energy and a higher absorption of the environmental energy that is then released to the water through a heat exchanger. Thus, ENERGIE's Thermodynamic Solar Panels surpass the limitations of the traditional solar panels and make possible a more efficient increase of the water temperature.

Can I have hot water in days without sun?

Because the fluid passes inside the panel at very low temperatures, it can receive more solar energy than a normal liquid and even on days without sun or at night. Because of this thermal difference, the solar panel can capture the heat existing in the environment and transmit it to the water. Thus, the system always ensures hot water up to 55°C.

Does the Thermodynamic Solar System require extensive maintenance care?

Maintenance is almost non-existent, you are just advised to check the magnesium anode, a protection element of the tank, once a year.

Does this system have any anti-bacterial device?

Yes it does. According to the standard in force, the equipment for sanitary hot water has a function that allows the tank's temperature to be raised to over 70°C, whose activation is manual with automatic deactivation.

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 areas where it rains or snows.

Electronic Controller

ECO Operating Mode

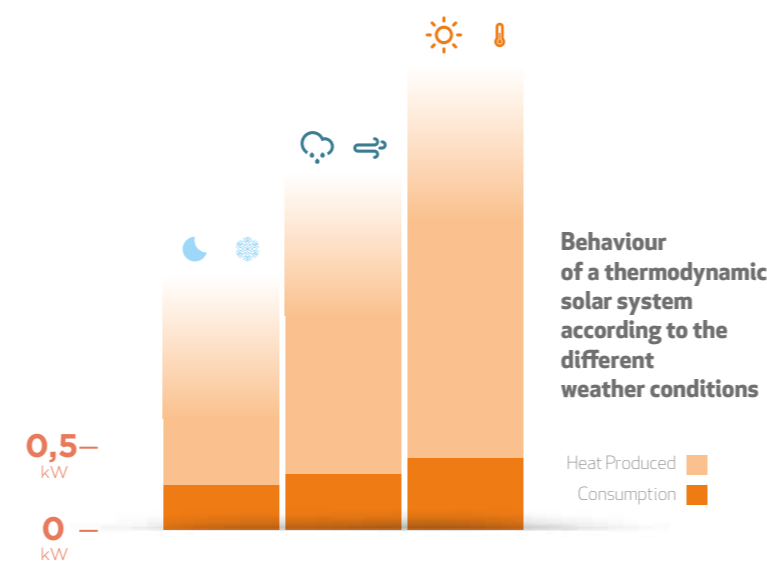
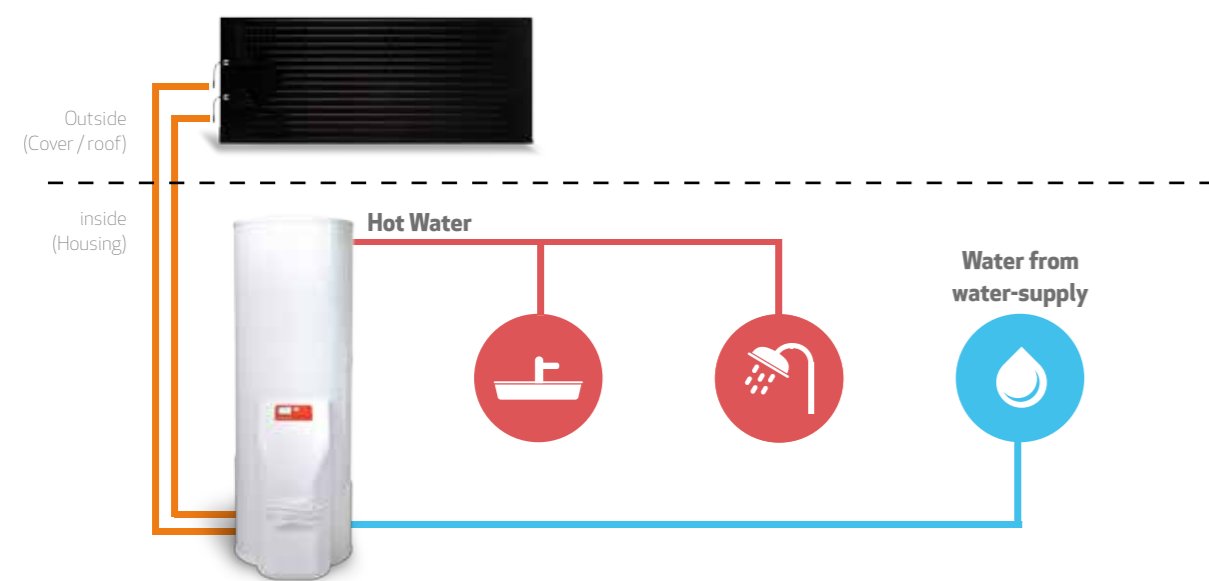
The equipment only works as a Thermodynamic Solar System.

AUTO Operating Mode

The equipment works as a Thermodynamic Solar System and/or electrical support should it be required.

BOOST Operating mode

The equipment works with a Thermodynamic Solar System and electrical support simultaneously.



WARRANTY
10 YEARS
SOLAR PANEL

WARRANTY
5 YEARS
CYLINDER

Check warranty conditions

MAXIMUM EFFICIENCY

ErP READY

APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

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 DWH 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.



Thermodynamic Solar Panel 1

DWH Cylinder + Thermodynamic Block 2

PV Panels 3

Inverter 4

List of equipment from the range

Model	No. of Panels	Esm Stainless	Thermal Power W(Max)	Power Consumption W(Avg)	Electrical Supply V/Hz	Extra Coil	Liters	No. of People	ErP Class	Tapping Profile
Eco 200esm	1	x	1690/2900	390/550	230/50		200	4	A+	L
Eco 250esm	1	x	1690/2900	390/550	230/50		250	4	A+	XL
Eco 300esm	1	x	1690/2900	390/550	230/50		300	5	A+	XXL
Eco 250i	1	x	1690/2900	390/550	230/50		250	4	A+	XL
Eco 300i	1	x	1690/2900	390/550	230/50		300	5	A+	XXL
Eco 250ix	1	x	1690/2900	390/550	230/50		250	4	A+	XL
Eco 300ix	1	x	1690/2900	390/550	230/50		300	5	A+	XXL
Eco 300esms	2	x	2800/4550	595/890	230/50		300	6	A+	XXL
Eco 250is	2	x	2800/4550	595/890	230/50		250	5	A+	XL
Eco 300is	2	x	2800/4550	595/890	230/50		300	6	A+	XXL
Eco 500is	2	x	2800/4550	595/890	230/50		455	9	A+	XXL
Eco 250isx	2	x	2800/4550	595/890	230/50		250	5	A+	XL
Eco 300isx	2	x	2800/4550	595/890	230/50		300	6	A+	XXL
Eco 500isx	2	x	2800/4550	595/890	230/50		455	9	A+	XXL

esm (Enamelled) | i (Stainless Steel) | s (2 Solar Panels) | x (Supplementary Coil)



DESIGN, DEVELOPMENT
AND EUROPEAN MANUFACTURING



NOMIC

ECONOMY | COMFORT | ECOLOGY



HOT WATER
24 HOURS
A DAY

WORK DAY
AND NIGHT,
RAIN OR
SHINE

UP TO
85%
ECONOMY

THE LATEST
GENERATION
OF ENERGY
SOLAR

NEW DESIGN

We select the best components and subject our products to rigorous quality testing ensuring maximum customer satisfaction

Solar Panel

- ANODIZED PAINTED ALUMINIUM
- HYDROPHOBIC FLEXIBLE COATING
- ONLY 8 KG, EASY TO TRANSPORT AND INSTALL
- DIMENSIONS: 2m X 0,8m X 0,02m
- NO GLASS, RUBBER OR FRAGILE MATERIALS
- NO RISK OF OVER HEATING
- NO RISK OF FREEZING
- NO STAGNATION
- NO CONDENSATION PROBLEMS
- HIGH RESISTANCE IN SALINE ENVIRONMENT
- HIGH RESISTANCE TO HUMIDITY
- CAN BE INSTALLED ON THE ROOF OR WALL
- DOES NOT LOSE ITS EFFICIENCY WITH TIME OR WITH DIRT
- NO NEED TO CLEAN
- ESTIMATED USEFUL LIFE OF 25 YEARS



FAQ's

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 from the sun, or even from the rain and wind, 24 hours a day, 365 days a year. One of the innovative aspects is that an ecological fluid at freezing temperatures circulates through the solar panel, allowing a greater uptake of the solar energy and a higher absorption of the environmental energy, which is then released to the water through a heat exchanger. Thus, ENERGIE's Thermodynamic Solar Panels surpass the limitations of the traditional solar panels and make possible a more efficient increase of the water temperature.

Can I have hot water in days without sun? Because the fluid runs inside the panel at negative temperatures, it can capture more energy, than a normal liquid, even on days without sun or at night. Because of this thermal difference, the solar panel can capture the heat existing in the environment and transmit it to the water. Thus, the system always ensures hot water up to 55°C.

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



Model	Solar Panels (un)	Cylinder Type	Max. Power (W)	Absorbed Power (W)	Feed (V/Hz)	Capacity (l)	Cylinder (mm)	Height (mm)
ECO-Nomic	1	Stainless Steel	2900	390	230/50	250	580	1880



THERMODYNAMIC SOLAR BLOCK

Most advanced scroll compressor in the market
Optimized soundproofing
Electronic expansion valve
Versatile electronic controller with intuitive handling
Excellent quality heat exchangers

**MAXIMUM
EFFICIENCY**



Requirements for sizing DHW Large Volumes

Hotel

- Star-Rating
- Number of rooms
- Occupancy – Rooms and guests per month for the past 12 months
- Hot water consumption per month for the past 12 months (if submeter in place)
- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months
- Number of Restaurants, Spa, Gym, Laundry?

Gym

- Average number of users per day
- Showers with standard faucet or timer faucet?
- Consumption peaks (number of users during a certain number of hours)
- Hot water consumption per month for the past 12 months (if submeter in place)
- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months

Laundry

- Hot water consumption per month for the past 12 months (if submeter in place) or equipment requirement
- Peak needs per equipment
- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months

Restaurant

- Number of meals served at lunch and dinner
- Working hours
- Hot water consumption per month for the past 12 months (if submeter in place)
- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months

Buildings

- Maximum occupancy of the building
- Is the DHW centralized?
- Does it have recirculation?

- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months

Hospital

- Number of rooms and beds
- Average consumption per person per day
- Hot water consumption per month for the past 12 months (if submeter in place)
- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months

Requirements for sizing Private Indoor Swimming Pools

- Width
- Length
- Average Depth
- Required water temperature
- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months

Requirements for sizing Private Outdoor Swimming Pools

- Width
- Length
- Average Depth
- Required water temperature
- Location of the Swimming Pool
- Existing DHW system – Location, Power, tank capacity
- Consumption costs for existing heating solution per month for the past 12 months