



# THERMODYNAMIC SOLAR SYSTEM OPERATING PRINCIPLE

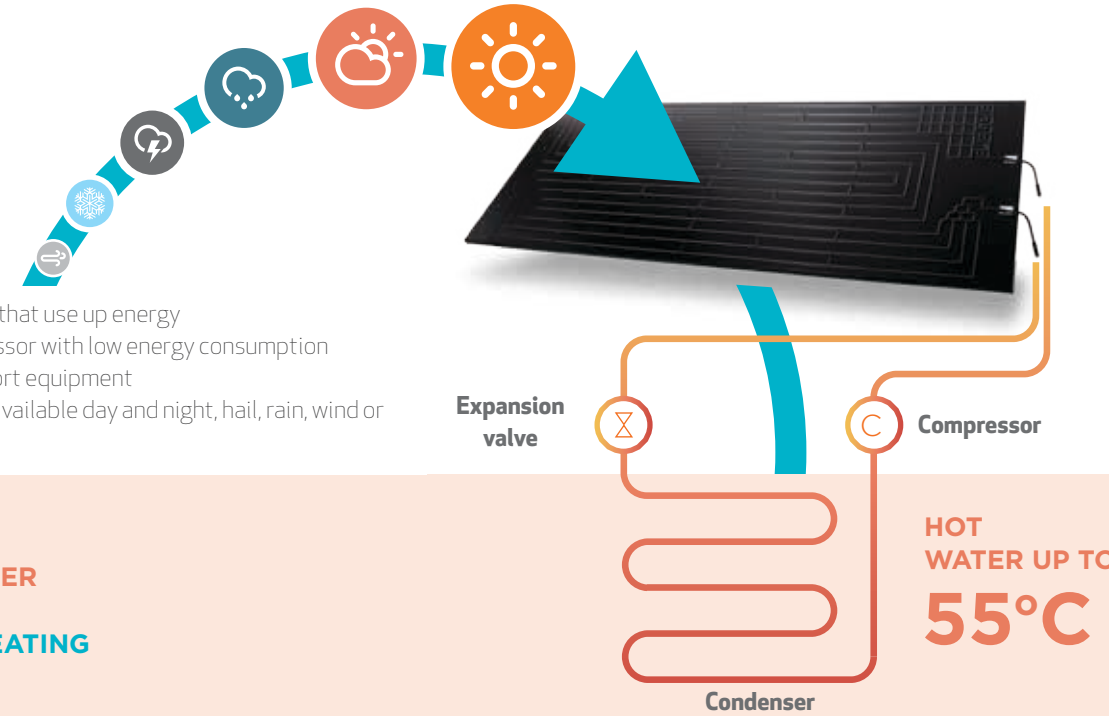
## Solar Panel

- 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.



## 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



DOMESTIC HOT WATER  
CENTRAL HEATING  
SWIMMING-POOL HEATING

DESIGN, DEVELOPMENT  
AND EUROPEAN MANUFACTURING



# 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



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## 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 55°C 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 55°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 CO<sub>2</sub> 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 <sup>3</sup> /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 <sup>2</sup> 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 <sup>3</sup> 16	36	53	100	120

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