

Product catalogue **2015**

INNOVATIVE IDEAS FOR
SMART SAVING





Once again, the Energy Panel team has put all their excitement and enthusiasm into creating this new publication. We want to make you aware of technology, alongside innovative ideas to achieve smart saving, in the most friendly and efficient way. Welcome to the world of thermodynamics...

THANK YOU, for your trust.

The Energy Panel Team



ENERGY PANEL: A consolidated trajectory based on quality

Energy Panel SL emerged as an investment in the future of the renewable energy sector. We are dedicated to the development and production of thermodynamic solar systems and other high energy efficient equipments.

The objective of Energy Panel is the development of innovative products adapted to the current needs of the markets. In recent years, Energy Panel has exponentially increased its world presence thanks to the trust that clients have placed in our products, manufactured according to European quality standards.





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THERMODYNAMIC SOLAR PANELS

HIGH ENERGY
OUTPUT

OUR INNOVATIVE TECHNOLOGY

The thermodynamic solar systems for obtaining domestic hot water or heating are based on a heat pump system supported by solar energy harvesting. These systems are capable of harvesting both solar and environmental energy in order to heat water. Thanks to the high efficiency of the solar energy harvesting technology of our systems they optimise the heating of water per unit of electricity consumed. Therefore they heat water with lower electricity consumption than conventional energy systems.

How are solar panels different?

- > Obtain hot water under any atmospheric condition, functioning at night time as well as in wet or windy weather
- > Without glass or electrical components
- > Ventilation and de-icing unnecessary
- > No need for maintenance or cleaning
- > Cleanliness does not affect the output of the panel



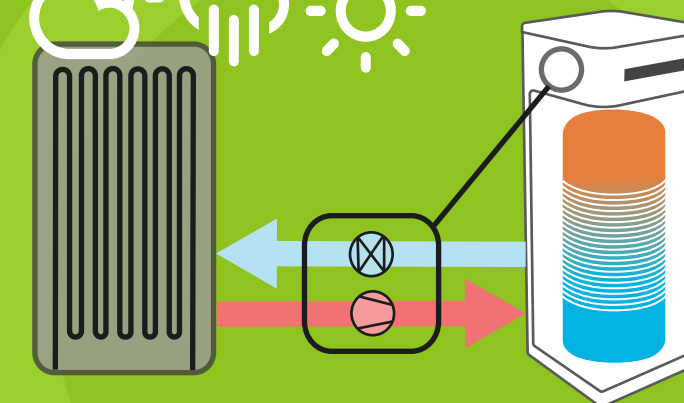
THERMODYNAMIC SOLAR TECHNOLOGY

How does it work?

A refrigerant fluid at low temperature circulates in the interior of the thermodynamic panel. The fluid captures the incidental solar radiation in the panel as well as other environmental energy. The thermodynamic cycle condenser transfers this heat to the water to heat it. The ecological refrigerant R134-A or R407C, which enters the panel at a negative temperature, runs through the closed circuit situated in the interior of the panel. The difference in temperature provoked by external agents such as the sun, rain or the wind guarantees the gasification of the fluid.

The compressor takes in the heated gas and reduces its volume, raising its temperature and transmitting it to the water circuit through a heat exchanger, managing to obtain domestic hot water up to a temperature of 65°C.

At high pressure and after having transferred a large part of its heat to the condenser, the refrigerant fluid arrives at the expansion valve again in liquid phase. Here the pressure is reduced which means the fluid is in condition to enter into the panels once again. The valve regulates the exit of the fluid on the basis of its temperature. Like this, the refrigerant will be sent again, in the form of micro drops, through the dehydrated copper piping to the panels, where it will be compressed once again, and the cycle will be repeated until the desired water temperature is reached.



Advantages:

- > Easy installation, low weight only 6.2 kg
- > High quality rust-proof materials that ensure a long and reliable life-span
- > Architectural integration: up to 12 colours available to adapt to your required location
- > Reduced dimensions 1.7 x 0.8 x 0.025 m

ARCHITECTURAL INTEGRATION

Up to 12 colours available
to adapt to your required
location



Thermboil

DOMESTIC LINE

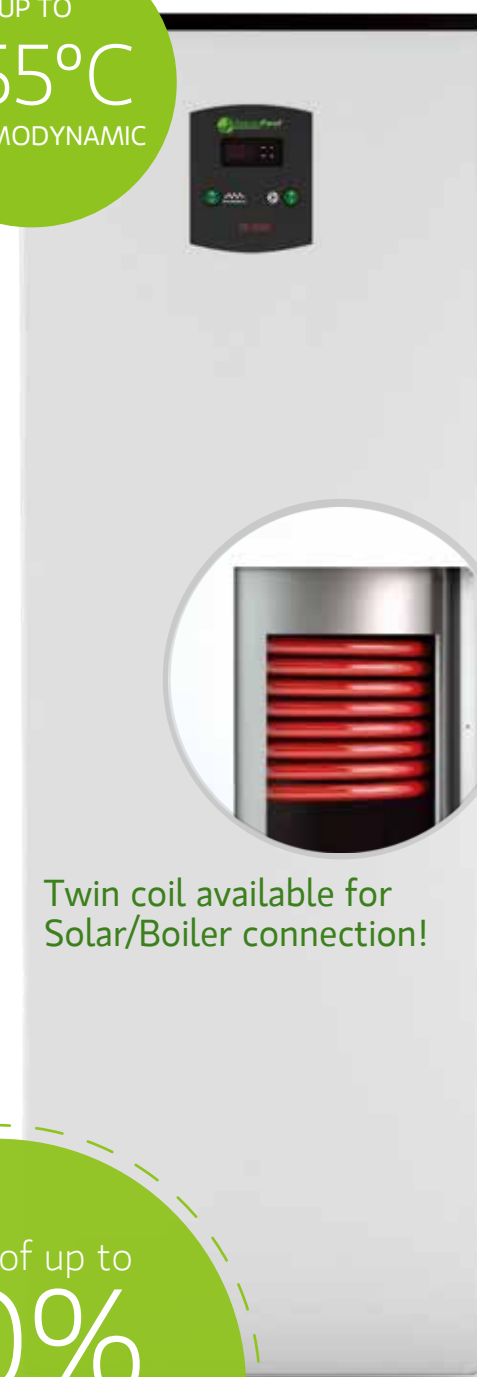
100/180/200/250/300 L

The Thermboil range is manufactured according to European quality standards, using only the best materials and components to assure the maximum reliability and durability of the equipment.

The main characteristics of the range are:

- > Stainless steel cylinder
- > External aluminium condenser
- > Ecological gas R134a
- > Auxiliary electric system for antilegionella treatment and thermal support
- > Lacquered external casing
- > Includes security elements against overpressure and high temperatures
- > Large range of capacities to satisfy any requirement
- > Thanks to its design and production, maintenance is practically nil
- > Equipment tested under European regulations: ISO 9001, ISO 14001, CE...

UP TO
55°C
THERMODYNAMIC



Twin coil available for
Solar/Boiler connection!



Savings of up to
80%
compared to
conventional systems.



Working continuously 24 h.
a day, 365 days a year under all
weather conditions.



Thermboil E Series

The new concept in thermodynamic compact systems.

The Thermboil E Series is a heat pump system supported by solar energy capture. It is characterized by the incorporation of a thermodynamic solar panel that generates a high performance thanks to the collection of incidental solar radiation as well as the energy contained in the external environment (air, rain...).



Why choose the E Series?

1

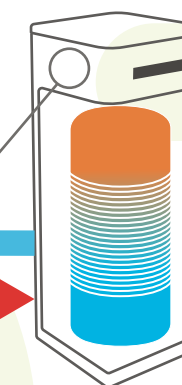
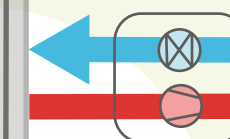
Architectural integration: the panel can be installed in any area: wall, terrace, roof...

2

It is more efficient than other heat pumps as it captures solar radiation and external environmental energy supplying a higher performance.

3

Suitable for new installation or to substitute an electric/gas/oil boiler. High efficiency system that improves the home energy rating.



MODEL

Heating capacity*, W

Maximum absorbed power, W

Absorbed power electrical support, W

Maximum water temperature °C

Capacity, L

Dimensions (Height x Width x Depth), mm

TB 100 E

TB 180 E

TB 200 E

TB 250 E

TB 300 E

2000

300-500

1500

55

100 180 200 250 300

985 x 590 x 545 1900 x 450 x 450 1435 x 590 x 545 1753 x 590 x 545 2000 x 590 x 545

*Condition: Thermodynamic functioning, T° outside 15°C / T° Water entrance 10°C



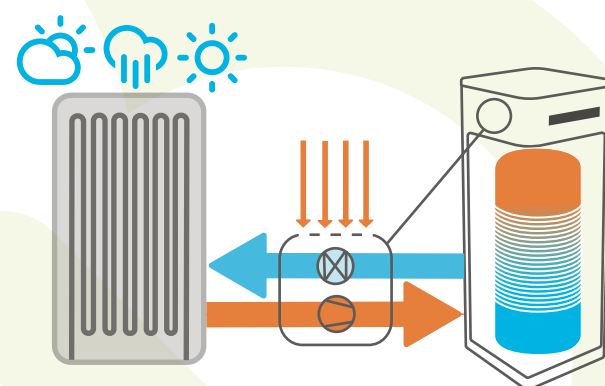
Thermboil E + I Series

The new concept in thermodynamic compact systems.

The Thermboil E+I Series is a unique technology capable of harvesting energy in two ways: combining a thermodynamic solar panel which collects solar radiation and external environmental energy and an inner heat exchanger that extracts energy from indoors. In this way, it assures a continuous output even with low temperatures.

Why choose the E+I Series?

- 1 Architectural integration: the panel can be installed in any area: wall, terrace, roof...
- 2 Suitable for cold climates: efficient even at low temperatures because it captures solar radiation and the energy coming from the external environment as well as the interior of the house, providing a continuous output.
- 3 Suitable for a new installation or to replace an electric/gas/oil boiler. High efficiency system that improves the home energy rating.



Double evaporator

Thermodynamic solar panel combined with an inner heat exchanger. Ideal for colder climates.

MODEL	TB 100 E+I	TB 200 E+I	TB 250 E+I	TB 300 E+I
Heating capacity *, W	2000			
Maximum absorbed power, W	300-500			
Absorbed power electrical support, W	1500			
Maximum water temperature °C	55			
Capacity, L	100	200	250	300
Dimensions (Height x Width x Depth), mm	985 x 590 x 545	1435 x 590 x 545	1753 x 590 x 545	2000 x 590 x 545

*Condition: Thermodynamic functioning, T° outside 15°C / T° Water entrance 10°C



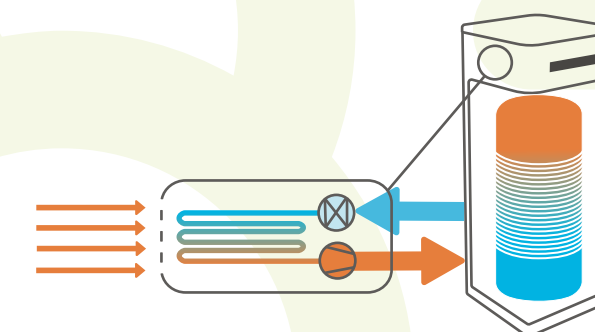
Thermboil I Series

The new concept in thermodynamic compact systems.

The Thermboil I Series is characterized by incorporating an inner heat exchanger that takes advantage of indoors energy to heat domestic hot water (DHW)

Why choose the I Series?

- 1 Easy installation: only requiring hydraulic connections.
- 2 Continuous efficiency: extracts the excess energy contained in the air from indoors. Connection allows air to be ducted outside or cooling interior spaces.
- 3 Suitable for new installation or to replace an electric/gas/oil boiler. High efficiency system that improves the home energy rating.



MODEL	TB 100 I	TB 180 I	TB 200 I	TB 250 I	TB 300 I
Heating capacity *, W	2000				
Maximum absorbed power, W	300-500				
Absorbed power electrical support, W	1500				
Maximum water temperature °C	55				
Capacity, L	100	180	200	250	300
Dimensions (Height x Width x Depth), mm	1985 x 590 x 545	1900 x 450 x 450	1435 x 590 x 545	1753 x 590 x 545	2000 x 590 x 545

*Condition: Thermodynamic functioning, T° outside 15°C / T° Water entrance 10°C



Thermboil FX Series

A thermal-thermodynamic system



The Thermboil FX is a thermal-thermodynamic system, the result of the combination of a thermal solar system with a thermodynamic heat pump. The thermal panel is directly exposed to the sun and receives its energy, transmitting it to the water in order to heat it. After giving the energy to the water, the thermal fluid still contains energy that the evaporator in the heat pump system takes advantage of.

Why choose the FX Series?

1

Double energy capture: Raises the output of the thermal solar installation, taking advantage of the remaining energy at low temperature as well as extracting the energy from the air inside the house

2

Minimum renewable contribution of 90%. The major part of the energy obtained is renewable thanks to the free capture of solar radiation and environmental energy. It can be installed in new installations that demand renewable systems without the need for a support system.

3

Huge energy and financial savings in comparison with other systems so that you obtain a reduction in energy bills, avoid CO₂ emissions and improve your home energy rating.



Easy installation, including a heat pump combined with the thermal solar panel



Thermboil 500 FX

Easy installation, including a heat pump combined with the thermal solar panel

This system is a heat pump with a solar collection, through a thermodynamic solar panel and thermal solar panel. This novel system also incorporates an inner heat exchanger that extracts the energy contained in the air from indoors.

System of rapid recuperation thanks to its greater thermal power

Incorporates two compressors of high output and two condensers



MODEL

	TB 100 FX	TB 200 FX	TB 250 FX	TB 300 FX	TB 500 FX
Heating capacity *, W	2000				4000
Maximum absorbed power, W	300-500				600-1000
Absorbed power electrical support, W	1500				
Numbers of compressors	1				2
Maximum water temperature °C	55				
Capacity, L	100	200	250	300	500
Dimensions (Height x Width x Depth), mm	985 x 590 x 545	1435 x 590 x 545	1753 x 590 x 545	2000 x 590 x 545	2000 x 710 x 695

*Condition: thermodynamic functioning, T^a outside 15°C / T^a Water entrance 10°C



Thermboil Wall-Hung

Heat pump with reduced dimensions

New
2014

The **Thermboil Wall-Hung** is a heat pump with reduced dimensions designed to be installed in the wall, allowing its architectural integration in places with reduced space.



- > Excellent recovery time
- > Storage: 110L
- > Immersion heating element
- > Ergonomic design
- > Low energy consumption
- > Adaptability, permits installation in different locations withing the home

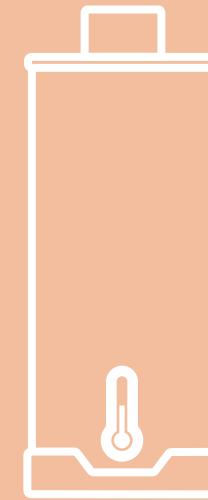


Ideal for
building with
limited space

Two solutions are possible to the arrangement of the home:

E Series: Possible to install the panel outside

I Series: When the panel cannot be installed, energy can be extracted from indoors



Thermboil Wall-Hung I

Compact wall-hung heat pump that incorporates an inner heat exchanger and a fan that uses the energy contained in the air indoors for the production of domestic hot water (DHW).

- > Uses the energy of the air
- > Easy installation, only requiring connections to DHW
- > No Maintenance



Thermboil Wall-Hung E

Compact wall heat pump with solar energy capture that incorporates a thermodynamic solar panel that collects the energy from solar radiation, as well as the energy contained in air for the production of DHW.

- > Captures both solar radiation and environmental energy
- > Easy installation, light panel
- > Low energy consumption, high performance.

MODEL

TB 110 WALL-HUNG I

TB 110 WALL-HUNG E

Heating capacity W*	2000
Maximum absorbed power, W	300-500
Absorbed power electrical support, W	1500
Maximum water temperature °C	55
Capacity, L	110
Dimensions (Height x Width x Depth), mm	1340 x 450 x 450

*Condition: thermodynamic functioning, T° outside 15°C / T° Water entrance 10°C

Thermboil

LINE RH: Rapid Heating 300/350/400/500L

The Thermboil HR line is especially designed to satisfy demands for greater volumes of DHW through one compact equipment that accelerates the heating time due to its greater thermodynamic power.

- > Includes two compressors connected to two independent circuits.
- > Short recovery time. Ideal for homes/ properties with high DHW demand.
- > Auxiliary electrical system
- > Anti-legionella system

Applications:

- > Commercial shops, gyms, rural houses, hostels, laundrettes...
- > The thermodynamic panels can be placed in the inside or the outside of the establishment to capture both solar and environmental energy.
- > The E+I/ I Series allow for the utilisation of inside energy and are ideal for gyms, hairdressers... As the high inside temperature of those establishments raises the output of the equipment.

DHW
55°C
THERMODYNAMICS



OPTIONAL
HT SERIES
Production of
DHW up to

80°C

Thermodynamic heating of up to 80 °C due to emersion heater. When the heat pump has surpassed 60 °C the emersion heater begins functioning to reach 80 °C.

- Ideal for industrial use
- Available in all Thermboil Rapid Heating



E Series

Compact thermodynamic equipment with double heating power and two thermodynamic panels. This system is made up of two independent circuits that assure that demand is covered in the shortest time.

E+I Series

The compact equipment in this series incorporates one thermodynamic panel and one inner heat exchanger. This system accelerates the recovery time due to its greater thermodynamic power. This power is generated thanks to the energy captured from the sun and the environment through the thermodynamic panel, and the energy extracted from the inside of the living space thanks to the inner heat exchanger.

I Series

A heat pump with double heating power that includes an inner heat exchanger that utilizes the energy in the living space in which it is installed. This equipment produces heat rapidly due to the greater thermodynamic power generated by two compressors.



MODEL

Thermic power W*

Maximum absorbed power, W*

Absorbed power electrical support, W

Maximum water temperature °C *

Capacity, L

Dimensions (Height x Width x Depth), mm

TB 300 RH

TB 350 RH

TB 400 RH

TB 500 RH

400			
600-1000			
1500			
55**			
300	350	400	500
1425 x 710 x 695	1585 x 710 x 695	1740x 710 x 695	2000x 710 x 695

*Condition: thermodynamic functioning, T^a outside 15°C / T^a Water entrance 10°C
** HT Series: up to 80°C

Thermboil Modular

100/200/250/300 L

In this configuration Thermboil is supplied in two units, one which includes water accumulator and another which Thermodynamic System.

It functions exactly the same way as Thermboil. The thermodynamic unit contains the compressor, expansion valve and all the elements for regulation and control. This unit is connected to the condenser of the accumulator tank.

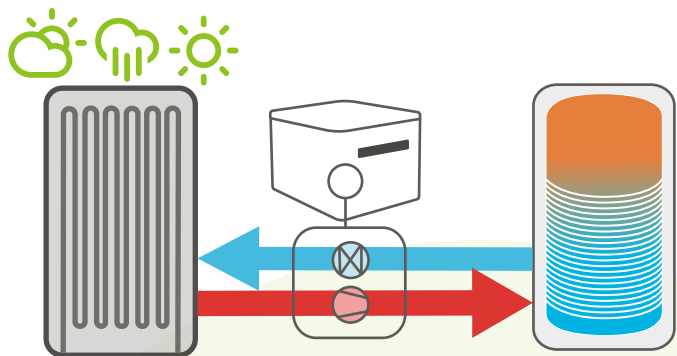
NEW
2014

All Thermboil series can be supplied in this new format



Total versability in any home or establishment, as the thermodynamic sistem can be placed in a different location to the accumulator tank..

Why choose the Thermboil Modular?



- 1 Maximum adaptability: the low height of both blocks permits their installation in unused spaces in the home.
- 2 Accessibility: In supplying the blocks separately, the thermodynamic control block can be installed in more accessible areas.
- 3 Applicable solution for all the models in the range. Accumulator tank available in two different formats.



MODEL	TB 100 M	TB 200 M	TB 250M	TB 300 M
Heating Capacity W*	2000			
Maximum absorbed power, W*	300-500			
Absorbed power electrical support, W	1500			
Maximum water temperature °C *	55			
Capacity, L	100	200	250	300
Dimensions Thermodynamic Block (H x W x D), mm	300 x 430 x 340	300 x 430 x 340	300 x 430 x 340	300 x 430 x 340
Dimensions Accumulator Block (H x W x D), mm	650 x 590 x 545	1100 x 590 x 545	1420x 590 x 545	1665 x 590 x 545
Dimensions Accumulator Block XL (H x W x D), mm	500 x 710 x 690	800 x 710 x 690	950 x 710 x 690	1100 x 710 x 690

*Condition: thermodynamic functioning, Tª outside 15°C / Tª Water entrance 10°C



GREEN E-PACK

Retro-fitting

An innovative solution to cover the demand for domestic hot water in properties and houses that already have an cylinder installed. The system is extremely easy to install, as it connects to the water tank's flow and return connections and provides hot water continuously.

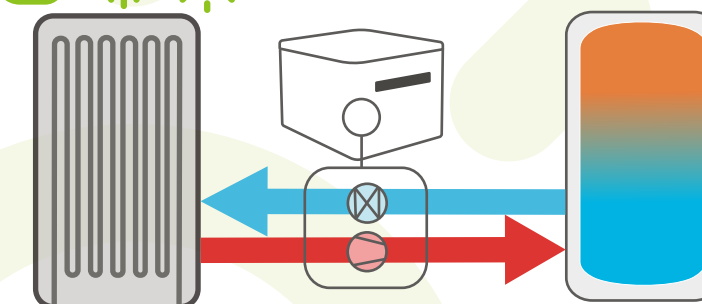
NEW
2014

- Highly efficient compressor
- Lacquered steel exterior casing
- Wall installation
- DHW water pump included
- Condenser included
- Ecological gas R134a
- Includes security elements against overpressure and high temperatures
- Due to its design and production have not maintenance
- Equipment tested under European regulations (CE)
- An external condenser for low pressure installations



Green e-Pack E

This is a compact unit which includes all the elements of the heat pump as well as the thermodynamic solar panel. The energy captured by the panel is transmitted to the water in the inside of the unit and them pumped to the Storage cylinder.



ACS

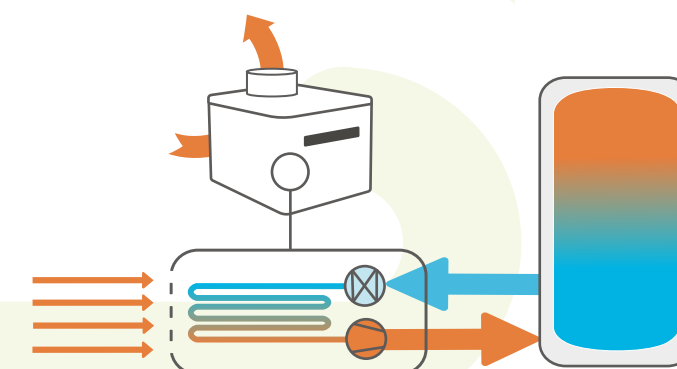


Green e-Pack I

This is a compact unit which includes all the elements of the heat pump as well as the inner heat exchanger. The built-in fan uses the air from inside the living space and transmits it to the water that pumps to storage cylinder. When leaving the air can be conducted to the outside via ventilators thanks to its connection.



NEW
2014



MODEL	GREEN-E-PACK E	GREEN-E-PACK I
Thermic power W*	2000	
Maximum absorbed power, W*	300-500	
Maximum water temperature °C *	55	
Dimensions (Height x Width x Depth), mm	380 x 430 x 340	645 x 425 x 345

*Condition: thermodynamic functioning, T° outside 15°C / T° Water entrance 10°C

THERMODYNAMIC SOLAR EQUIPMENTS

Large volume DHW/ Heating
HIGH CAPACITY

In contrast to conventional heat pumps, Energy Panel equipment includes groups of thermodynamic solar panels exposed directly to the sun and external weather conditions, allowing them to harvest all available energy.

The system's higher output is due to solar energy harvesting, ideal to cover the demand for DHW in larger installations as well as heating requirements.



GTC

Water heating of up to 55°C for large consumers of DHW and heating installations.

A range of 8 models available to satisfy the large variety of demand for DHW, and which can be identified by the number of panels associated with the model. Various systems can be combined to achieve greater power.



Water heating of up to 55°C

Why Choose Solar Thermodynamic Units?

- 1. High performance with low consumption: Solar gain of thermodynamic solar panels provides significant savings in heating large volumes of DHW and heating installations.
- 2. Wide range of models: Designed to adapt to specific user demand.
- 3. Custom design: Ideal for large projects. You can combine multiple equipments to get the required heating power.

MODEL	Units	GTC04	GTC06	GTC08	GTC12
Nominal calorific value	KW	7	8,5	13,1	15,8
Absorbed intensity	A	7,8	9,1	16,1	19,4
Nominal electric power	KW	1,7	2	3,4	4
Power supply	V/ph/Hz	230 / 1/ 50			
Compressor type		Piston		Scroll	
N° panels	ud.	4	6	8	12
MODEL	Units	GTC16	GTC24	GTC32	GTC40
Nominal calorific value	KW	23,4	32,3	46,2	54,3
Absorbed intensity	A	9,93	13,2	18,9	23,86
Nominal electric power	KW	5,8	7,8	11,3	13,8
Power supply	V/ph/Hz	380 / 3/ 50			
Compressor type		Scroll			
N° panels	ud.	16	24	32	40

* Heating: T condensation= 54.4 °C; T evaporation = 7.2 °C.



GTC HT

Heating water up to 65°C.

Water heating of up to 65°C for large consumers of DHW and heating installations. These systems are suitable for use with conventional radiators.

This compact equipment also includes an interior recirculation pump.

Range of 7 available models to satisfy the large variety of demand for DHW, and which can be identified by the number of panels associated with the model. Various systems can be combined to achieve greater power.



Heating
water up to
65°C

There are a total of 8 models to meet a wide range of SHW demand, identified by the number of panels associated. You also can combine multiple equipments to get higher power.

MODEL	Units	GTCHT04	GTCHT06	GTCHT08	GTCHT12
Nominal calorific value	KW	6,79	8,78	9,11	11,35
Absorbed intensity	A	9,66	13,68	15,92	20,08
Nominal electric power	KW	2,45	3,11	3,24	4,07
Power supply	V/ph/Hz	230 / 1 / 50			
Compressor type		Scroll			
N° panels	ud.	4	6	8	12

MODEL	Units	GTCHT12	GTCHT16	GTCHT24	GTCHT32
Nominal calorific value	KW	13,20	23,90	29,9	36,5
Absorbed intensity	A	8,06	14,84	17,16	21,38
Nominal electric power	KW	4,48	7,88	9,82	11,85
Power supply	V/ph/Hz	380 / 3 / 50			
Compressor type		Scroll			
N° panels	ud.	12	16	24	32

* Heating: T condensation=70 °C; T evaporation = 7.2 °C.



GTC Plus & GTC HT Plus

The new concept in thermodynamic compact systems

Compact system that includes on a single unit, the thermodynamic equipment and the buffer tank. These units are supplied with an electric auxiliary system for increased power when demand so requires.



GTC Plus: Hot water up to 55°C.

GTC HT Plus: Hot water up to 65°C

- > Compact or modular system: according to the equipment power, the buffer tank is supplied in the same or in a separate casing
- > Electrical auxiliary system that increases the power with independent control for monitoring
- > Water pump included
- > Stainless steel buffer tank 150

LARGE VOLUME DHW / HEATING



GTP

SWIMMING POOL HEATING

HIGH CAPACITY

The GTP systems are designed to heat swimming pools, extending the bathing season for outdoor pools and Jacuzzis and to heat covered pools throughout the year with a low energy consumption due to the use of solar energy.

The panels exposed to the sun and outdoor weather conditions harvest the required energy to heat water, with an extremely high energy output.



MODEL	Units	GTC04	GTC06	GTC08	GTC12
Nominal calorific value*	KW	8,6	10,4	14	16,8
Absorbed intensity*	A	6,8	7,9	12,8	15,2
Nominal electric power	KW	1,4	1,7	2,7	3
Power supply	V/ph/Hz	230 / 3 / 50			
N° panels	ud.	4	6	8	12
Compressor type		Pison		Scroll	

*Condition: Evaporating temp. 7.2°C / Condensing temp. 40°C



Characteristics

- ☀ Highly energy efficient Scroll compressor
- ☀ Electronic expansion valve, provides a precise and continuous control of the evaporation processo
- ☀ Rust-proof titanium heat exchanger
- ☀ Includes advanced protection and control components

Our swimming pool heating systems include a high efficiency Scroll compressor and a titanium heat exchanger, as well as a system which protects against high and low pressure, overheating and high discharge temperatures.

We use a high output ecological refrigerant, R407c and an electronic expansion valve that guarantees optimum functionality and the excellent efficiency of our products.



MODEL	Units	GTC16	GTC24	GTC32	GTC40
Nominal calorific value*	KW	26	36,1	52	59,8
Absorbed intensity*	A	7,5	10,2	14,3	20,2
Nominal electric power	KW	4,2	5,8	8,3	11
Power supply	V/ph/Hz	380 / 3 / 50			
N° panels	ud.	16	24	32	40
Compressor type		Scroll			

*Condition: Evaporating temp. 7.2°C / Condensing temp. 40°C

DHW Accumulator tanks

100/180/200/250/300/350/400/500L

Accumulator tanks for DHW produced from an external heat source. The systems include a emersion heater of 1500W by default to assure the supply of DHW.

Made out of stainless steel with the market's best insulation. In the most unfavourable conditions the minimum heat loss is 20-30W/h.

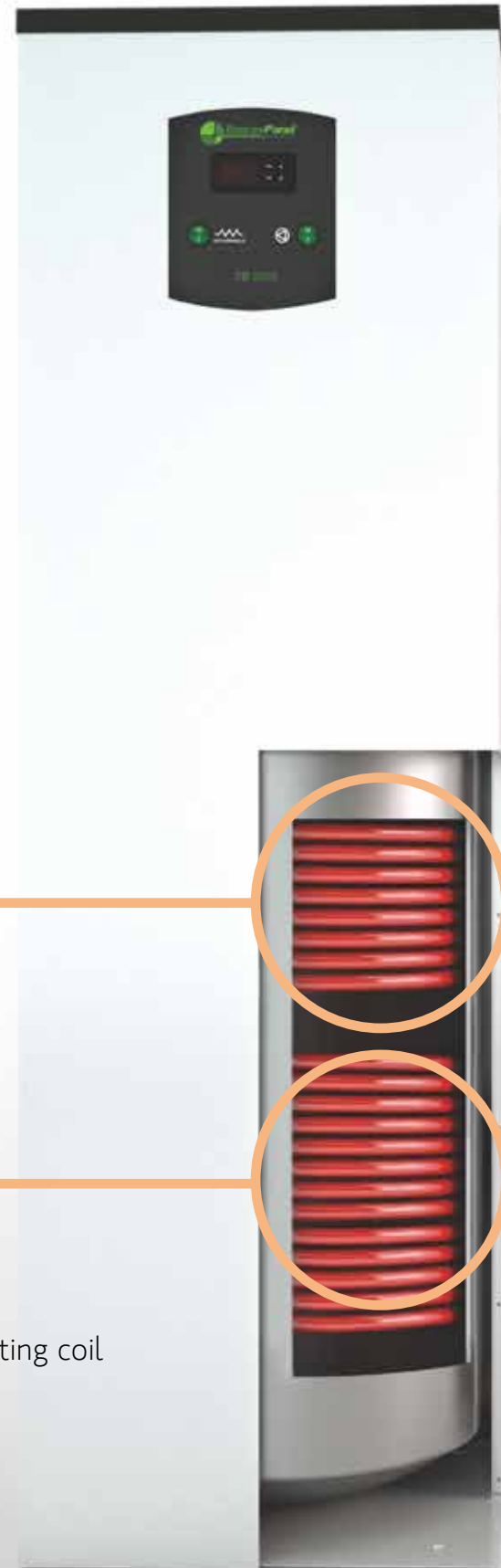
Incorporated controller that shows the water temperature in the inside of the tank. Allows for the control of the maximum temperature of the electrical resistance.

Boiler coil

Solar coil

OPTIONAL:

- Incorporation of a superior or inferior heating coil
- Recirculation point
- 1500W Secondary emergency heater



Thermboil Thermal Solar



Accumulator tank especially designed for thermal solar panel installations.

- Water pump circuit
- Solar heating coil
- Control Temperature
- 1500W emergency heater



HYBRID THERMODYNAMIC PANEL

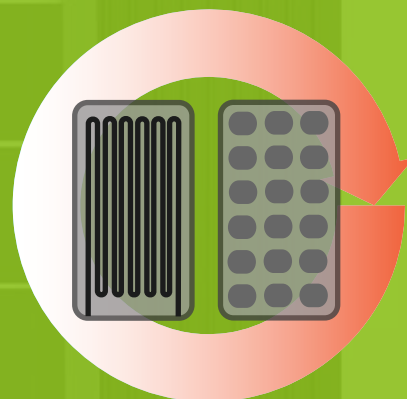
PERFORMANCE AND EFFICIENCY

The hybrid thermodynamic photovoltaic panel is a revolutionary system which combines a photovoltaic panel for the production of electricity alongside a thermodynamic panel connected to a heat pump.

The photovoltaic panel is found directly exposed to the sun and receives solar radiation to produce electricity. It is common knowledge that the electricity output of the photovoltaic panels diminishes when temperatures are higher, which usually coincides with periods of greater solar radiation. This system solves this problem, as it reduces the temperature of the photovoltaic panel through withdrawing heat via the thermodynamic panel, using this for the evaporation of a refrigerant fluid that forms part of a heat pump circuit. The reduction in temperature of the photovoltaic panel is translated into the increased output of the panel itself.

In this way, this innovative system takes advantage of solar radiation for the production of electricity and environmental energy for the production of DHW and/or heating.

HYBRID
SYSTEM



Photovoltaic panel

Thermodynamic panel



Thermodynamic-Photovoltaic system

How it works?

Combines our systems with the Hybrid Panel for maximum solar harvesting!

Innovative systems which include the Hybrid Panel alongside the heat pump. The photovoltaic solar panel produces electricity that can be discharged to the electricity network or accumulated in batteries. The thermodynamic panel takes advantage of the calorific energy of the photovoltaic and environmental energy, allowing it to cover the DHW demand even without solar radiation.

With the electricity produced the thermodynamic system can be supplied directly and produce the maximum output.



This technology is available for the Thermboil systems (E Series and E+I Series), Green e-Pack and GTC.

- Adaptable number of panels according to the installation's required power
- Inverter included
- Batteries included in case of isolated installation
- Appropriate for micro generation installations.



Retro-Fitting Thermodynamic kit for photovoltaic installations

This kit enables the incorporation of thermodynamic technology into already installed photovoltaic solar panels. This increases the output of the photovoltaic installation and supports the provision of hot water in the establishment or home.

In the absence of solar radiation, the thermodynamic system continues providing hot water due to its use of environmental energy.

The thermodynamic solar panel is provided with a special circuit adaptable to the rear of the majority of models of photovoltaic panels available on the market, as well as the bolts for the correct adaptation of both panels. The kit can also include the Thermboil if accumulation is needed or the Green e-Pack in the case of an already installed tank.

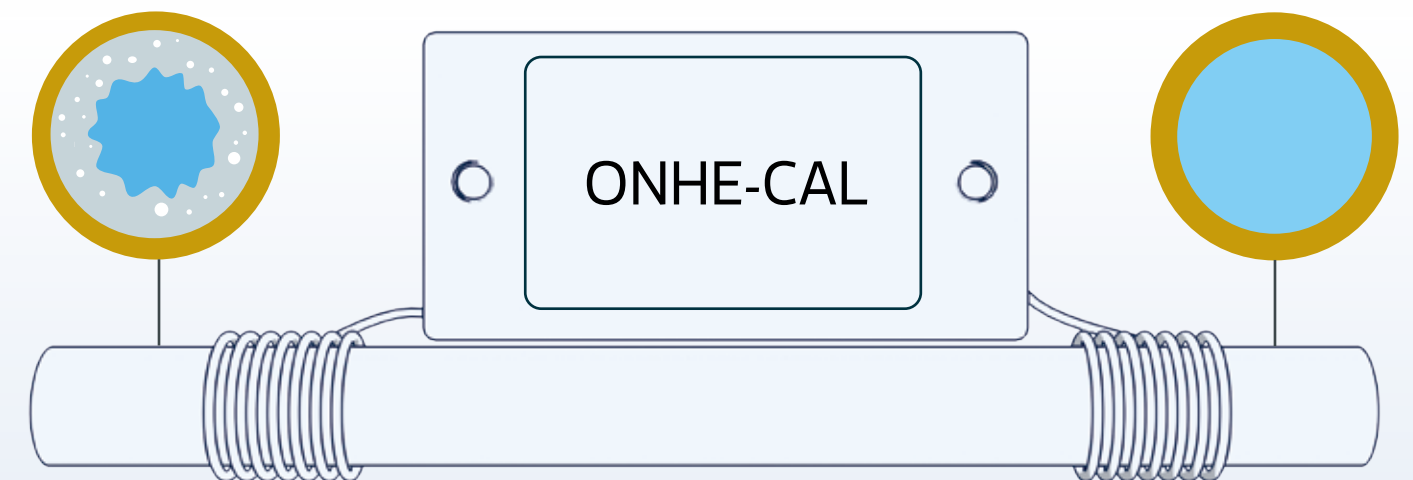
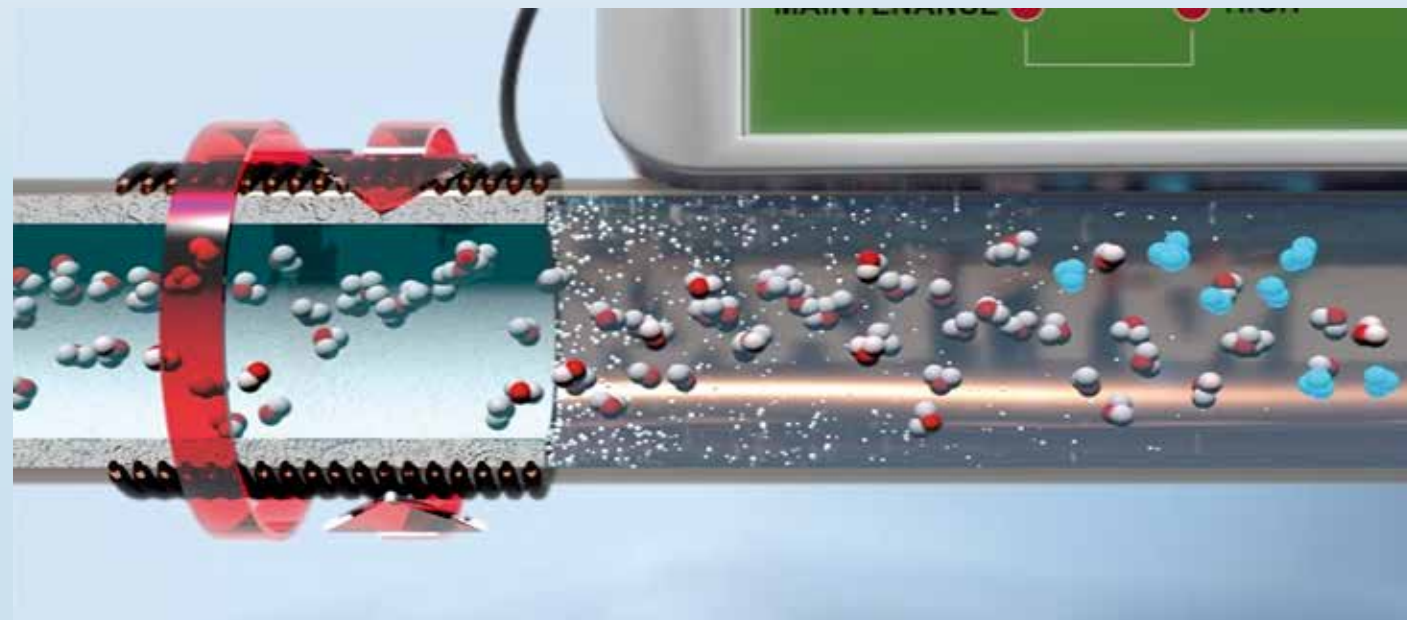


OHNE CAL

Electronic Limescale Remover



Lime scale in water installations is due to the precipitation of calcium carbonate crystals, which form deposits in water pipe systems and electrical appliances. These deposits cause poor water flow and increase energy consumption since lime scale acts as a thermal insulation in electric heating elements. The OHNE-CAL system transmits low frequency radio signals that modify the way in which calcium carbonate crystallizes, losing its adherence. For this reason, calcium carbonate remains dissolved without generating deposits. In addition to inhibiting the formation of new deposits, this system eliminates the previously existing deposits.



OHNE CAL

ADVANTAGES

Safe and efficient system

Unlike chemical treatments, which alter the composition of the water, the PH or salt levels and makes it undrinkable, this treatment respects water's organoleptic properties and maintains its levels of calcium and magnesium, so necessary for good health.

Ecological

No chemical substances added to the water, so does no damage to the environment,

Don't complicate things

No need to worry: easy installation that occupies very little space and once installed doesn't require any maintenance.

The best of the best

Includes a micro-controller capable of transmitting radio signals at different frequencies and that varies at different times. This allows it to be more efficient than other systems which generate radio waves at a constant frequency.



A large white rectangular area containing horizontal green lines, resembling a notepad or a space for writing.



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