

DESIGN, DEVELOPMENT
AND EUROPEAN MANUFACTURING



ENERGIE[®]
THERMODYNAMIC SOLAR ENERGY

— RENEWABLE ENERGY —



THERMODYNAMIC SOLAR ENERGY | HEAT PUMPS

ENERGIE[®]
THERMODYNAMIC SOLAR ENERGY

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2019 | 07 | 2019

GENERAL CATALOGUE

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RENEWABLE ENERGY | ECONOMY | INDEPENDENCE | ECOLOGY

www.energie.pt



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WE ARE YOUR ENERGY!



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Company certifications



Partners of the organizations





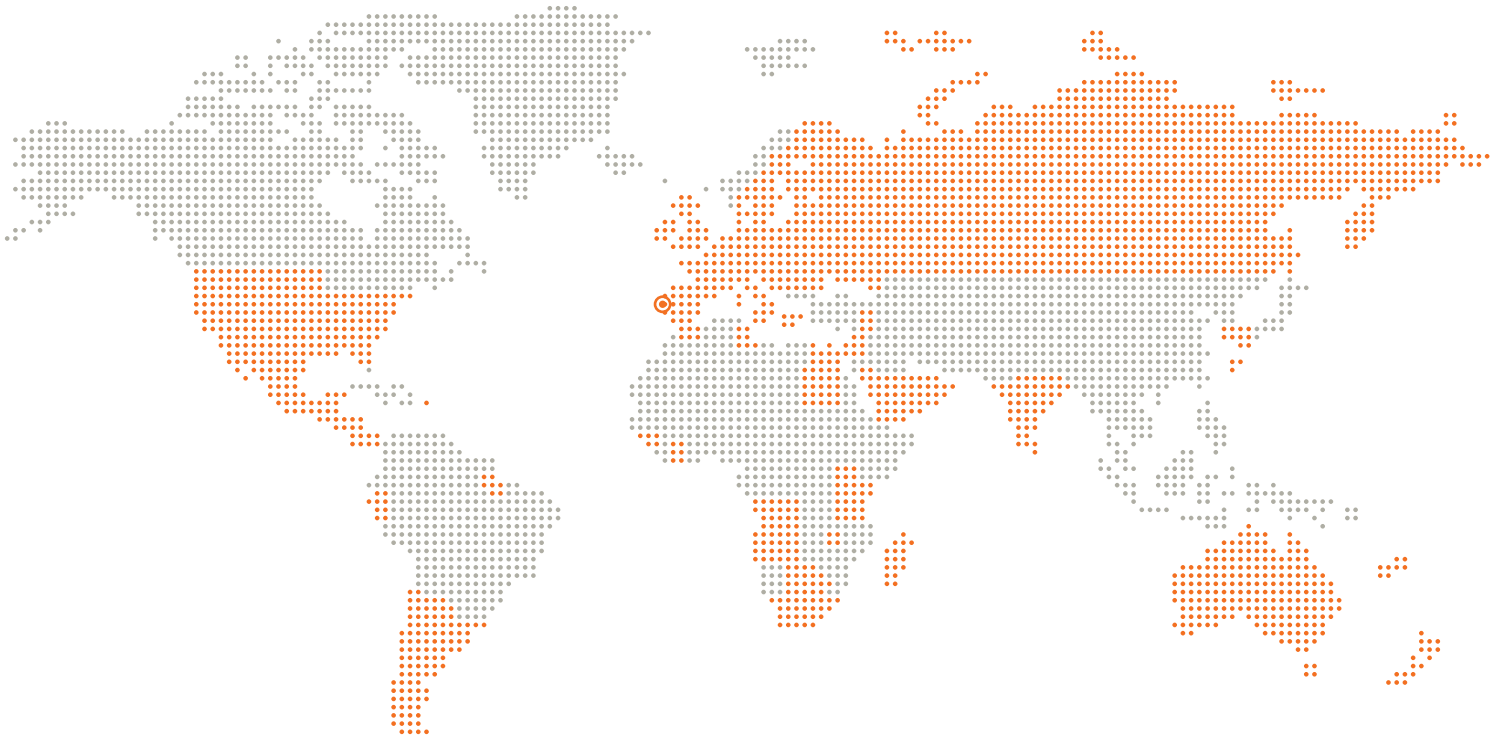
THE ENERGIE BRAND

Based on a customer satisfaction policy, the brand is synonymous with reliability, quality, innovation and efficiency. It is governed by strict standards that aim at economy, comfort and well-being of the consumers. To find out more about us go to:

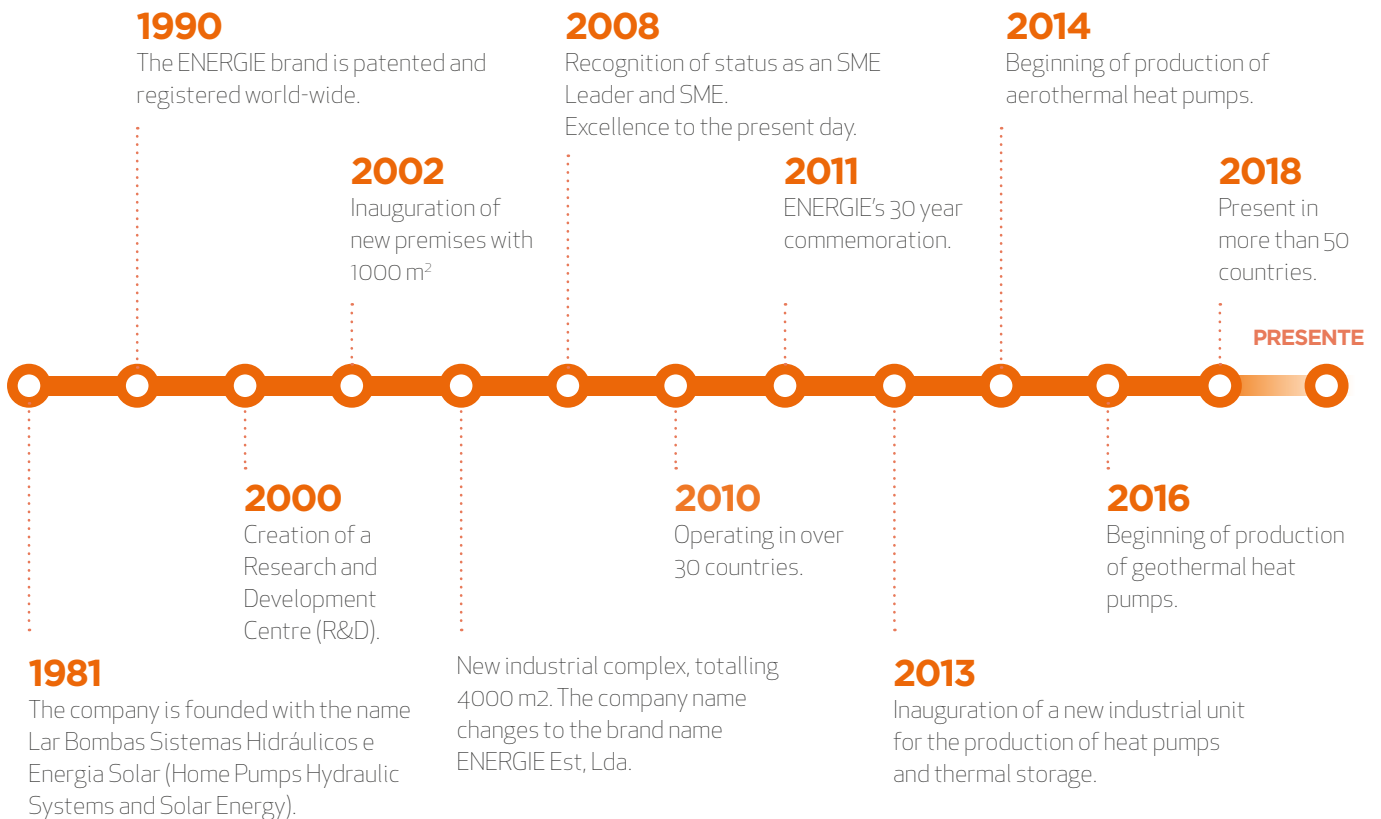
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ENERGIE AROUND THE WORLD 50 COUNTRIES 5 CONTINENTS



COMPANY CHRONOLOGY



PICTOGRAMS OF THE PRODUCT

Pictograms are icons developed to make the interpretation of key characteristics of each one of our products easier. Check our list of pictograms below and discover the meaning behind each one. When you find one in a product technical sheet you can return to this page to check the meaning if you have doubts.



SOLAR PERFORMANCE

The performance of the equipment is far higher than the COP of any aérothermal heat pump when exposed to Solar Radiation.



ANTI-LEGIONELLA

Function that allows the user to disinfect/sanitise the equipment cylinder.



EXTRA COIL

Equipment with a supplementary/extra coil that allows the other auxiliary systems to be connected.



AUTOMATIC DEFROST

Defrost function with automatic management. The equipment does defrosting to guarantee that it will function even when the temperature is below zero.



R134A

Cooling liquid that is environmentally friendly, nonflammable and non-toxic.



R407C / R410A

Cooling liquid that is environmentally friendly, nonflammable and non-toxic.



ENERGY EFFICIENCY

Efficient equipment with low energy consumption.



ENERGY EFFICIENCY +

Super Efficient Equipment with low energy consumption.



EASY TO INSTALL

The system has a small amount of installation items.



GREAT DURABILITY

The system is designed to have longevity.



ANTICORROSION

The system has magnesium anode, which carries out the cathodic protection (anticorrosion) of the cylinder.



RESPECT FOR THE ENVIRONMENT

The polyurethane used inside the cylinder is free of hydrofluorocarbons.



AMBIENT TEMPERATURE DISPLAY

The command panel display shows the temperature of the cylinder.



MADE IN EUROPE

European production.



SILENT

The equipment does not make any sound in your home.



FAST HEATING TIME

Equipment with fast heating time.

ENERGY LABELING AND DIRECTION ErP, WHY?

Halting climate change, securing energy supplies and increasing industrial competitiveness are some of the most important challenges facing the European Union. Energy saving is the best way to address them. With Directive 2009/125/EC on the ecological design of energy-related products (ErP Directive, Energy related Products) and Directive 2010/30/EC on energy labeling, the general requirements (valid for all household

products) have been set for energy savings in one of the most energy-consuming and polluting sectors in the European Union. From the provisions of the previous directives, specific legislative tools have been created for each family of products: the European regulations. The regulations indicate how to use the energy label and define the minimum energy efficiency that new products should bring to market. Once published, the

regulations are immediately applicable in all EU countries and do not require transposition into national regulations. The products for heating and hot water production also have their regulations on ErP and labeling. The energy label simplifies the process of choosing the most efficient product.

Basic Principles

- Defines the shape and content of the energy labels of products and systems for heating and storing hot water;
 - Establishes standards to inform consumers about the energy performance of products;
- Defines the responsibilities of suppliers and sellers.



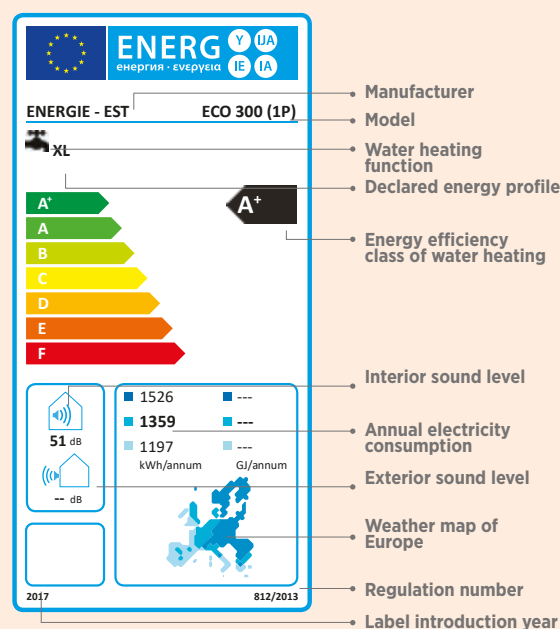
WHY WERE THE HEATING AND HOT WATER PRODUCTS CHOSEN?

The preparatory study carried out by the European Commission has confirmed that domestic heating and hot water production systems account for approximately 30% of Europe's energy consumption. It was also estimated that, by designing green products (minimum requirements) and encouraging end-users to acquire the most efficient technologies (energy label), the following could be achieved in 2020:

Total annual energy savings equivalent to 56 million tons of oil. The equivalent of erasing all heating and hot water equipment throughout the Iberian Peninsula. This would mean a reduction in CO₂ emissions by 136 Million tons, approximately what would absorb a forest the size of Portugal.

From these premises were created the regulations on ecological design and energy labeling of boilers, heat pumps, micro-co-generation units, water heaters and hot water tanks. Since September 26, 2015, the regulations have mandated these products to meet minimum efficiency and labeling requirements.

ECOLABEL EXEMPLIFICATIVE LABEL



ECODESIGN DIRECTIVE

The Ecodesign directive for heating and hot water production products establishes minimum performance requirements that all appliances must comply with. The new requirements will eliminate less efficient technologies from the market and thus raise the level of energy efficiency of the basic supply. In addition, it will be necessary to comply with those requirements in order to be able to include in the products the CE marking, which is indispensable for their commercialization in the European market. The ErP directive is only applicable to products placed on the market since 9/26/2015. Products previously purchased or already at the dealers' points of sale or warehouses may continue to be sold and installed even if they do not meet the new requirements.

HEATING / REG. 813/2013

- BOILERS (GAS, ELECTRIC, DIESEL)
- HEAT PUMPS (GAS, ELECTRIC)
- MICROCOGENERATION UNITS (WITH MAXIMUM ELECTRICAL POWER <50 KW)

HOT WATER / REG. 814/2013

- CONVENTIONAL GAS / DIESEL / ELECTRIC HEATERS
- HOT HEAT WATER PUMPS
- THERMAL SOLAR INSTALLATIONS
- HOT WATER TANKS (WITH A CAPACITY ≤ 2000 LITERS)

PERFORMANCE EFFICIENCY QUALITY

WE WORK EVERYDAY ON DELIVERING SOLUTIONS FOR YOUR COMFORT AND WELL-BEING!

THERMODYNAMIC SOLAR ENERGY

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

AIR TO WATER HEAT PUMPS

- DOMESTIC HOT WATER
- HEATING & COOLING





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DOMESTIC HOT WATER - DOMESTIC USE

ECO | ECOTOP

100 to 500 litres solutions

SOLAR BOX

Adapts to all kinds of cylinders

ECO | ECOTOP | SOLAR BOX

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DOMESTIC HOT WATER - INDUSTRIAL USE

ECO XL

1000 to 6000 litres solutions

ECO XL

47

CENTRAL HEATING

SOLAR BLOCK

6 to 40 panels solutions

SOLAR BLOCK ULTRA | ULTRA PLUS

12 and 16 panels solutions

SB | SB ULTRA | SB ULTRA PLUS

57

SWIMMING-POOL HEATING

SOLAR BLOCK

6 to 40 panels solutions

SB SWIMMING-POOL H.

65

DOMESTIC HOT WATER - DOMESTIC USE

AQUAPURA SPLIT

160 to 500 litres solutions

AQUAPURA MONOBLOC

100 to 300 litres solutions

SPLIT | MONOBLOC

79

HEATING & COOLING

INVERTER

12 and 16 kW monobloc heat pump

EVOTERM COMBI

13 kW split heat pump

X30

Monobloc heat pump from 30 to 120 kW

INVERTER | EVOTERM | X30

THERMODYNAMIC SOLAR SYSTEM

OPERATING PRINCIPLE

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.

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.

DOMESTIC HOT WATER
CENTRAL HEATING
SWIMMING-POOL HEATING

Condenser

HOT WATER
UP TO
55°C

C Compressor **X** Expansion Valve

The Thermodynamics Solar System joins two incomplete technologies, the heat pump and the solar thermal collector.

Heat pumps are quite efficient equipment but the heat they produce from their renewable component varies only according to changes in the temperature of the environment. Thermal solar collectors are the best source of heat on hot and sunny days but they are totally inefficient whenever there is no sun.

The Thermodynamic Solar Technology manages to surpass the limitations of

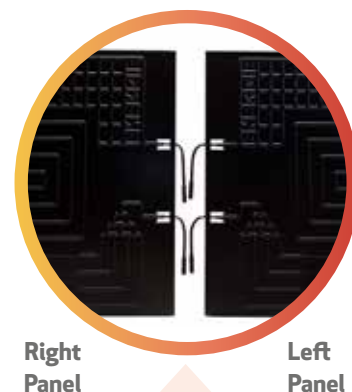
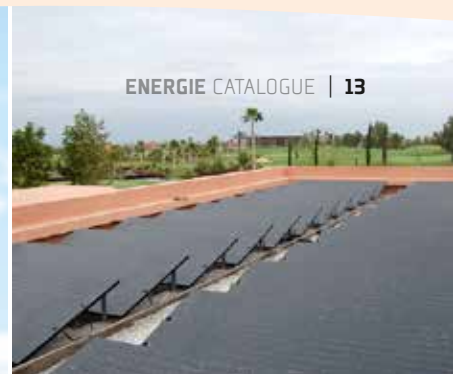
both the heat pump and solar collector technologies.

Through the cooling liquid (R134a or R407c) which covers a closed circuit, the liquid goes into the solar panel and suffers the action of sun, rain, wind, environment temperature and other climate factors. During this process the liquid gains heat in a more favourable way than a heat pump. After this stage, the heat is transferred to an exchanger with the help of a small compressor, which heats the water. The liquid cools down and the circuit is repeated.

As the fluid has a boiling temperature of approximately -30°C , the system works even when there is no sun and it even works at night, providing hot water at 55°C , day and night, hail, rain, wind or shine, unlike the traditional solar thermal system.

The energy consumption of the system is basically the same as a fridge compressor that makes the liquid circulate. There are no ventilators that help the evaporation process, or defrost cycles, which imply unnecessary energy consumption, unlike what happens with heat pumps.

THERMODYNAMIC SOLAR PANEL



Right
Panel

Left
Panel

There are left and right thermodynamic solar panels. These can be distinguished by looking at the side that has the connections, as seen in the picture.

- ANODIZED ALUMINIUM, WITH 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.
- APPROVED FOR CORROSION TEST SALINE FOG EQUIVALENT TO 20 YEARS.

THERMODYNAMIC SOLAR BLOCK



ELETRONIC EXPANSION VALVE



Solar Block



DOMESTIC HOT WATER INDUSTRIAL USE



CENTRAL HEATING



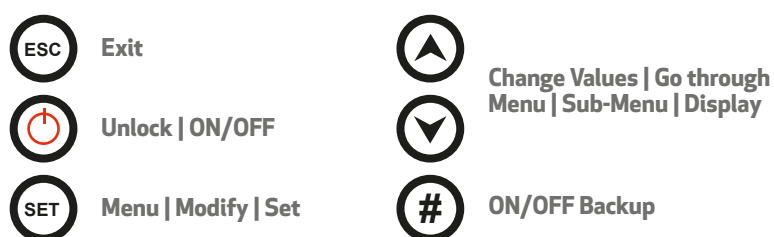
SWIMMING-POOL HEATING

SOLAR BLOCK

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.

- MOST ADVANCED SCROLL COMPRESSOR IN THE MARKET.
- OPTIMIZED SOUNDPROOFING.
- ELECTRONIC EXPANSION VALVE.
- VERSATILE ELECTRONIC CONTROLLER WITH INTUITIVE HANDLING.
- EXCELLENT QUALITY HEAT EXCHANGERS.

ELECTRONIC CONTROLLER



Electronic controller Inside



The Solar Block controller is the interface between the equipment and the user. Among other functionalities, it gives access to:

- SYSTEM STATUS
- TEMPERATURE INFORMATION THROUGH RESPECTIVE SENSOR
- PROGRAMMING (DAILY/WEEKLY/ETC)
- DATE AND TIME INFORMATION
- EASY TO CONTROL THROUGH THE INSTALLATION BOX
- SIMPLIFIED PARAMETRIZATION
- OUTLETS TEST
- 12 PREDEFINED CONFIGURATIONS
- INTEGRATION IN 3 CIRCUITS (CIRCULATOR PUMPS)
- 4 TEMPERATURE SENSORS
- CHRONO-THERMOMETRE
- 6 LANGUAGES
- OPTIONAL GTC MODULE





**Heat dissipation
through radiators,
under floor heating,
converters, among
others**



Hot water up to
60°C
Day & Night, Hail,
Rain, Wind
or Shine

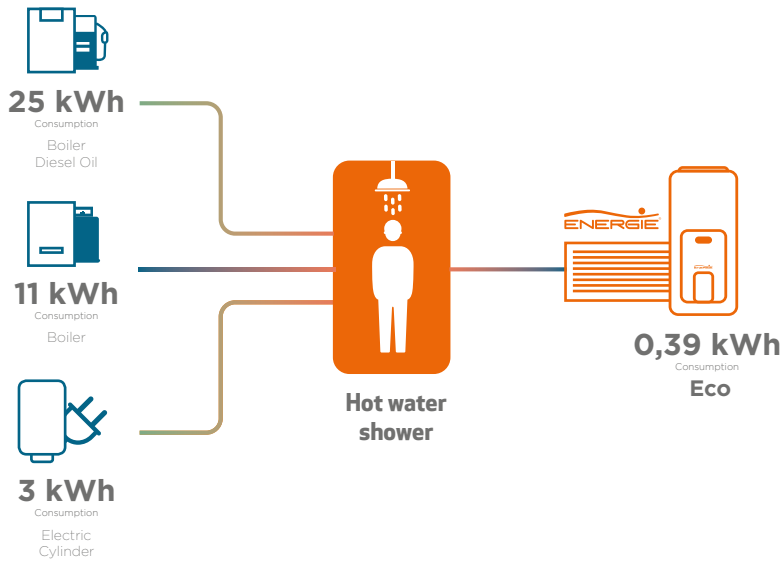
Versatility of the Solar Block application
in an installation box.

**Energy solutions in conformity with the
Paris protocol (2015).**



Heated
Swimming-pool

Distribution of consumption to different systems



DID YOU KNOW?

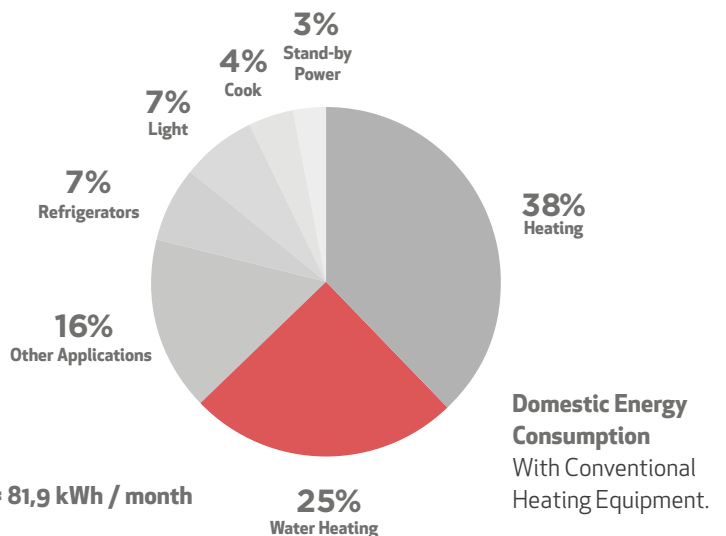
That all thermodynamic solar systems only have one mechanical element that requires electricity? This element is a low energy consumption compressor and is extremely efficient. As the capacity to capture heat from the environment is primarily ensured through solar radiation, it is superior to other equipment with the same goal ensuring saving to the maximum.

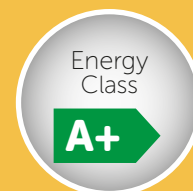
The maintenance of the system is practically non-existent and it has high longevity.

SAVE UP TO

85%

Taking into account Eco300
 7 Hours operation per day
 Consumption of 0,39 kW/h
 Energy necessary / month: $0,39 \text{ kW} \times 7 \text{ h} \times 30 \text{ days} = 81,9 \text{ kWh} / \text{month}$
 *Example family of 5 people





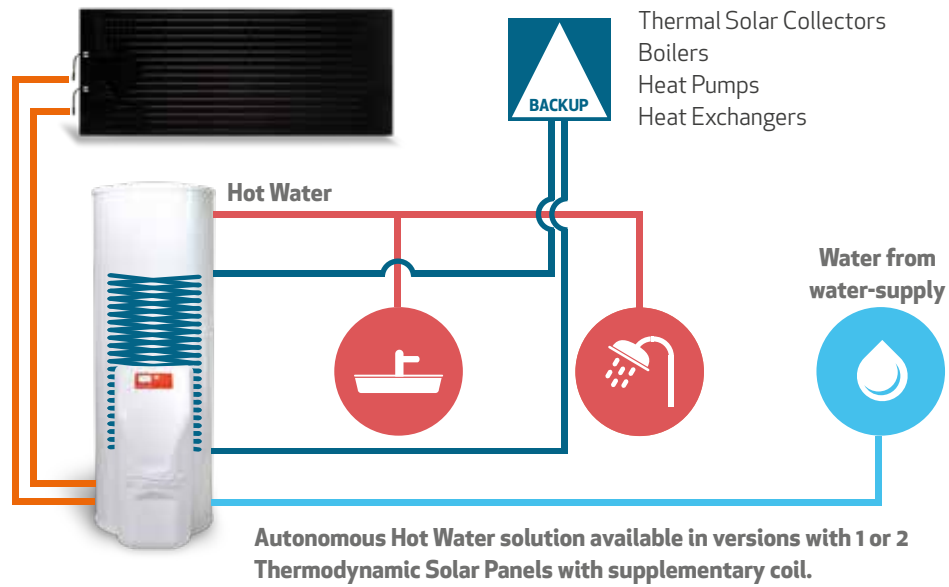
ECO

Probably the most developed solar water heater in the world

Available with capacities of 200 to 500 litres.
 Versions with one or two solar panels, with or without supplementary coil.
 Cylinder available in enamelled or stainless steel.

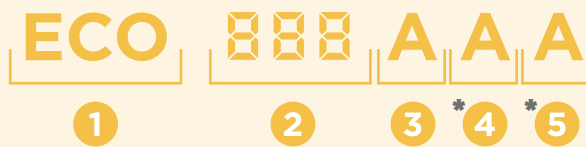
DOMESTIC HOT WATER





Thermal Solar Collectors
Boilers
Heat Pumps
Heat Exchangers

Choose your model



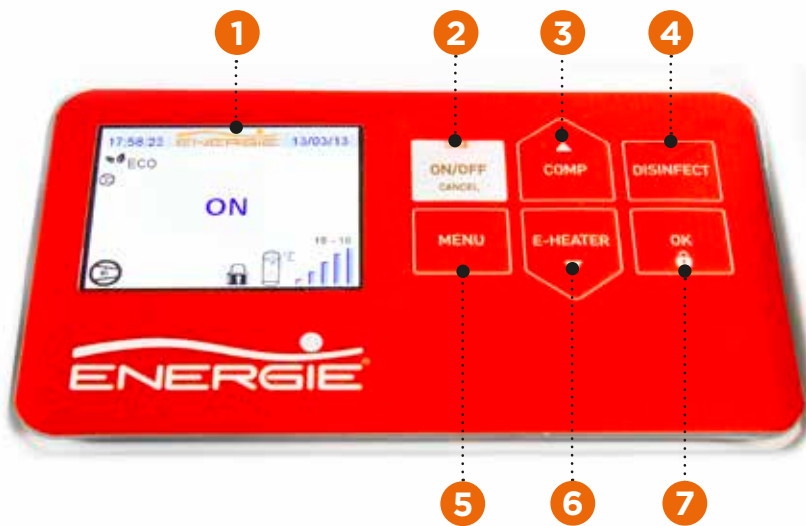
- 1 Model
Eco
- 2 Capacity (litres)
200, 250, 300, 500 litres Cylinders
- 3 Cylinder Material
esm (Enamelled)
i (Stainless)
- * 4 2 Solar Panels
S
- * 5 Supplementary Coil
X

* Optional and when applicable
888 Represents the capacity of equipment

Examples

- ECO 300esms** Eco with 300 litres capacity with enamelled cylinder and 2 solar panels
- ECO 200esm** Eco with 200 litres capacity with enamelled cylinder and 1 solar panel
- ECO 300ix** Eco with 300 litres capacity with stainless steel cylinder, supplementary coil and 1 solar panel
- ECO 300isx** Eco with 300 litres capacity with stainless steel cylinder, supplementary coil and 2 solar panels

ELECTRONIC CONTROLLER



- | | |
|----------------------------|------------------------------------|
| 1 LCD colour screen | 5 Menu |
| 2 ON / OFF General | 6 Electrical support (malfunction) |
| 3 ON / OFF Compressor | 7 Execute Lock / Unlock |
| 4 ON / OFF Anti-legionella | |

ECO Operating Mode

In the ECO operating mode, the equipment only works as a Thermodynamic Solar System to heat water in the thermal storage. Thus we can have higher efficiency, guaranteeing maximum saving for the user.

AUTO Operating Mode

In the AUTO operating mode, the equipment works as a Thermodynamic Solar System and/or electrical support, there being an automatic management between the operating of the solar system and electrical support, in order to maintain the efficiency of the equipment, thus providing a higher quantity of hot water available.

BOOST Operating mode

In the BOOST operating mode the equipment works with a Thermodynamic Solar System and electrical support simultaneously. This mode allows the user to get hot water in a shorter amount of time.



MAXIMUM PRODUCTIVITY WITH SOLAR PERFORMANCE

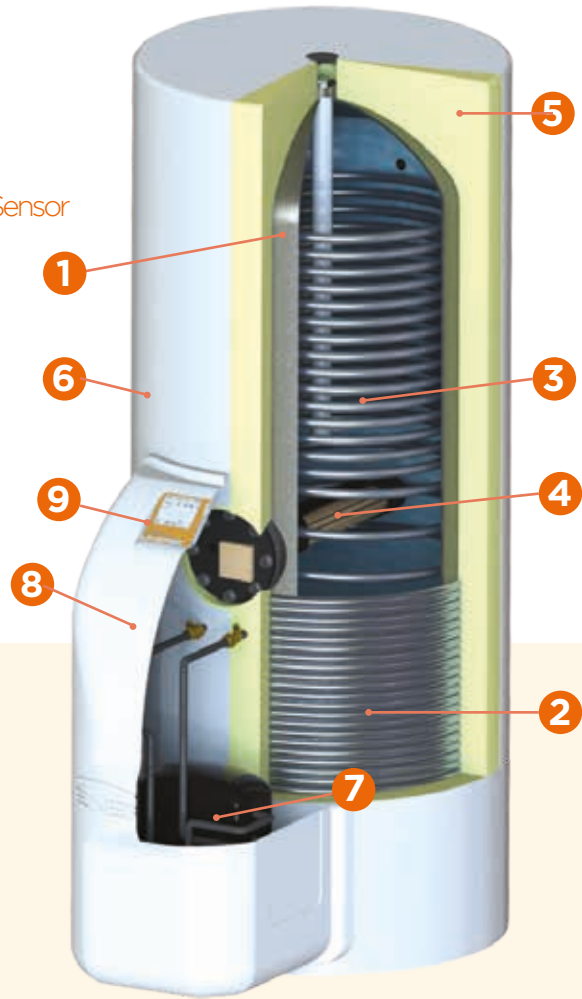


100% ENVIRONMENTALLY FRIENDLY

- HEAT IS CAPTURED UNDER THE FORM OF SOLAR RADITION, ENVIRONMENTAL TEMPERATURE, RAIN, WIND AND EVEN SNOW.
- THE HEAT PRODUCED ON COLDER DAYS, EVEN AT NIGHT IS SUFFICIENT TO ATTAIN 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.
- ALMOST NON-EXISTENT MAINTENANCE.
- THE ENERGY CONSUMPTION OF THE EQUIPMENT IS REDUCED DUE TO A SUPER EFFICIENT COMPRESSOR.
- NO DEFROST CYCLE.
- PV FUNCTION.

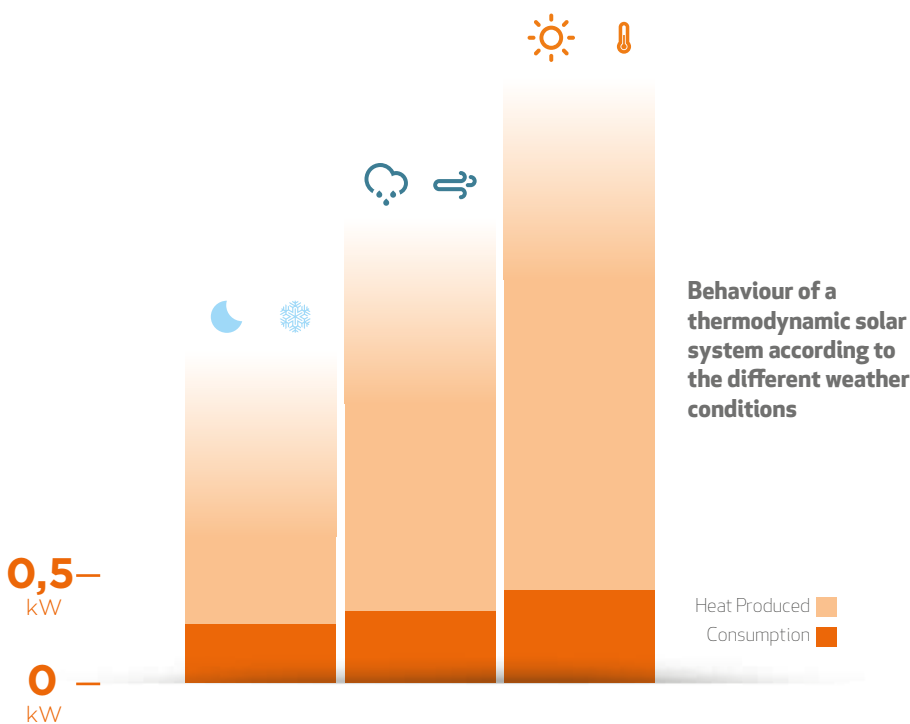
MAXIMUM
EFFICIENCY

- 1 DHW Cylinder
- 2 Condenser
- 3 Optional Supplementary Coil
- 4 Ceramic Resistance + Thermostat + Temperature Sensor
- 5 High Density Insulation
- 6 Outside Coating
- 7 Thermodynamic Block
- 8 Cover
- 9 Electronic Controller



ECO | ECOTOP | SOLAR BOX

Versions with 1 or 2 Thermodynamic Solar Panels
 Enamelled or stainless steel cylinder
 With or without Supplementary Coil



Check warranty conditions

Thermodynamic Solar System domestic hot water

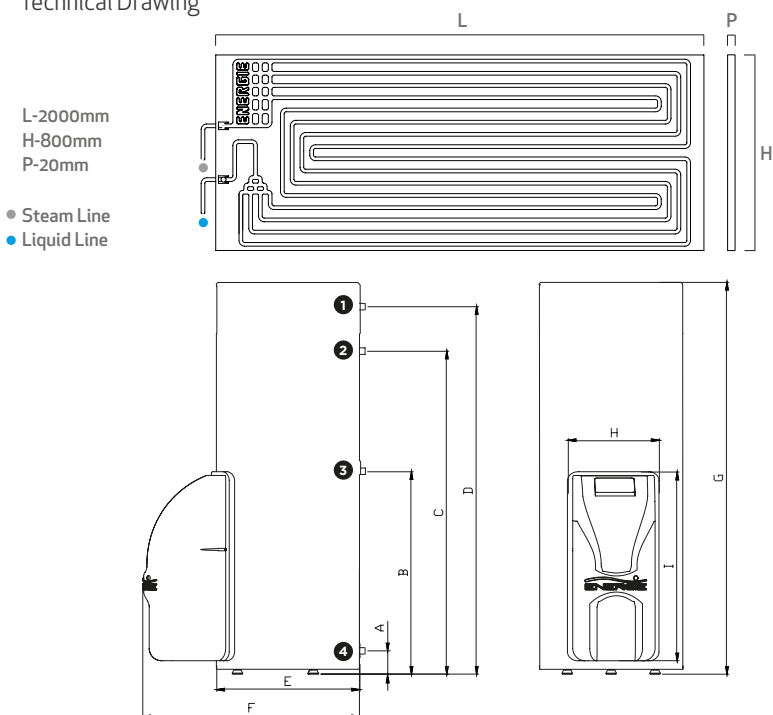


Specifications		Eco 200esm	Eco 250i Eco 250esm	Eco 300i Eco 300esm
Nominal Capacity	L	200	250	300
Thermal Power (Med/Max)	W	1690/2900	1690/2900	1690/2900
Power Consumption (Med/Max)	W	390/550	390/550	390/550
Temperature (Factory Setpoint)	°C	53	53	53
Maximum Temperature	°C	80	80	80
Max. Amount of water at 40°C in a run (St./En.)	L	-/242	317/321	369/374
Maximum Operation Pressure	bar	7	7	7
Number of Panels		1	1	1
Liquid Line	Pol.	1/4	1/4	1/4
Suction Line	Pol.	3/8	3/8	3/8
Electrical back-up power	W	1500	1500	1500
Gross Weight of Cylinder (St./En.)	Kg	-/73	62/83	74/95
Electrical Supply	V/Hz	230/50	230/50	230/50

Equipment with fluid pre-charge
Easy Install
Economic Solar Solution



Technical Drawing



Dimensions (mm)	Eco 200esm	Eco 250i Eco 250esm	Eco 300i Eco 300esm
A	92	89	92
B	830	830	772
C	1161	1333/1341	1172
D	1289	1467	1315
E	580	580	650
F	880	880	950
G	1364	1545/1543	1415
H	370	370	370
I	765	765	765

1 (Hot Water)	3/4" Male
2 (PT Valve) *	1/2" Female
3 (Recirculation)	3/4" Male
4 (Cold Water)	3/4" Male
5 (Coil Inlet)	-
6 (Coil Outlet)	-

With flares valves on the solar panel and on the thermodynamic group.
With dielectric threads for water connections enameled cylinder (esm).

*Optional

Thermodynamic Solar System

domestic hot water



Specifications		Eco 250ix	Eco 300ix
Nominal Capacity	L	250	300
Thermal Power (Med/Max)	W	1690/2900	1690/2900
Power Consumption (Med/Max)	W	390/550	390/550
Temperature (Factory Setpoint)	°C	53	53
Maximum Temperature	°C	80	80
Max. Amount of water at 40°C in a run (St./EnL)		308	360
Maximum Operation Pressure	bar	7	7
Number of Panels		1	1
Liquid Line	Pol.	1/4	1/4
Suction Line	Pol.	3/8	3/8
Electrical back-up power	W	1500	1500
Gross Weight of Cylinder (St./En.)	Kg	69	81
Electrical Supply	V/Hz	230/50	230/50

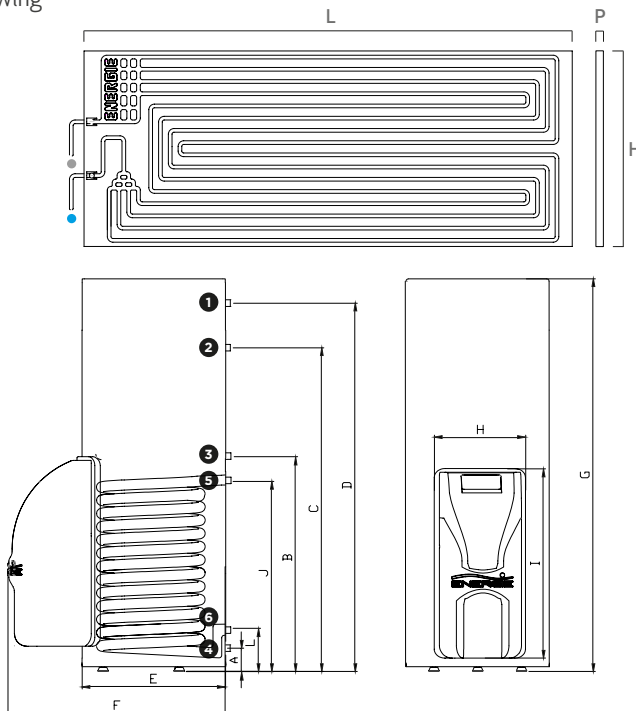
Allows the connection of another heat source
 Easy install
 Equipment with fluid pre-charge



Technical drawing

L-2000mm
 H-800mm
 P-20mm

● Steam line
 ● Liquid line



Dimensions (mm)	Eco 250ix	Eco 300ix
A	89	92
B	830	772
C	1333	1172
D	1469	1315
E	580	650
F	880	950
G	1545	1415
H	370	370
I	765	765
J	696	621
L	205	221
1 (Hot Water) 3/4" Male		
2 (PT Valve)* 1/2" Female		
3 (Recirculation) 1/2" Female		
4 (Cold Water) 3/4" Male		
5 (Coil Inlet) 1" Male		
6 (Coil Outlet) 1" Male		

With flares valves on the solar panel and on the thermodynamic group.

*Optional



Thermodynamic Solar System domestic hot water

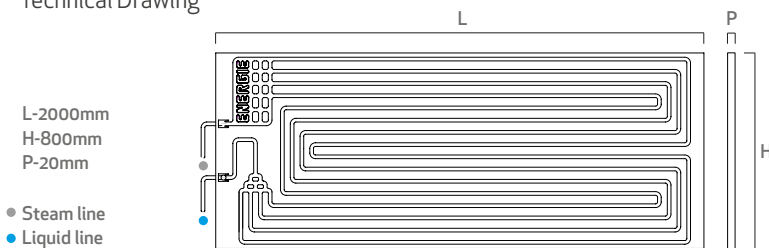


Specifications	Eco 300is		
	Eco 250is	Eco 300esms	Eco 500is
Nominal Capacity	L 250	300	455
Thermal Power (Med/Max)	W 2800/4550	2800/4550	2800/4550
Power Consumption (Med/Max)	W 595/890	595/890	595/890
Temperature (Factory Setpoint)	°C 53	53	53
Maximum Temperature	°C 80	80	80
Max. Amount of water at 40°C in a run (St./En.)	L 317	369/374	537
Maximum Operation Pressure	bar 7	7	7
Number of Panels	2	2	2
Liquid Line	Pol. 3/8	3/8	3/8
Suction Line	Pol. 1/2	1/2	1/2
Electrical back-up power	W 1500	1500	2200
Gross Weight of Cylinder (St./En.)	Kg 62	74/95	110
Electrical Supply	V/Hz 230/50	230/50	230/50

Superior Performance
Equipment with fluid pre-charge
Larger number of users

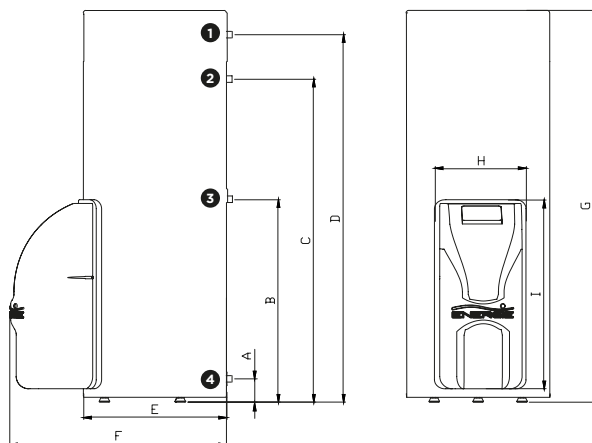


Technical Drawing



(x2)

Dimensions (mm)	Eco 300is		
	Eco 250is	Eco 300esms	Eco 500is
A	89	92	92
B	830	772	772
C	1333	1172	1784
D	1469	1315	1927
E	580	650	650
F	880	950	950
G	1545	1415	1990
H	370	370	370
I	765	765	765



	Eco 250is / 300esms		Eco 500is
1 (Hot Water)	3/4" Male	1" Male	
2 (PT Valve) *	1/2" Female	1/2" Female	
3 (Recirculation)	3/4" Male	3/4" Male	
4 (Cold Water)	3/4" Male	1" Male	
5 (Coil Inlet)	-	-	
6 (Coil Outlet)	-	-	

Includes Liquid Distributor.
With dielectric threads for water connections enameled cylinder (esm).

*Optional

Thermodynamic Solar System

domestic hot water



Specifications		Eco 250isx	Eco 300isx	Eco500isx
Nominal Capacity	L	250	300	455
Thermal Power (Med/Max)	W	2800/4550	2800/4550	2800/4550
Power Consumption (Med/Max)	W	595/890	595/890	595/890
Temperature (Factory Setpoint)	°C	53	53	53
Maximum Temperature	°C	80	80	80
Max. Amount of water at 40°C in a run (St./En.)		308	360	525
Maximum Operation Pressure	bar	7	7	7
Number of Panels		2	2	2
Liquid Line	Pol.	3/8	3/8	3/8
Suction Line	Pol.	1/2	1/2	1/2
Electrical back-up power	W	1500	1500	2200
Gross Weight of Cylinder (St./En.)	Kg	69	81	121
Electrical Supply	V/Hz	230/50	230/50	230/50

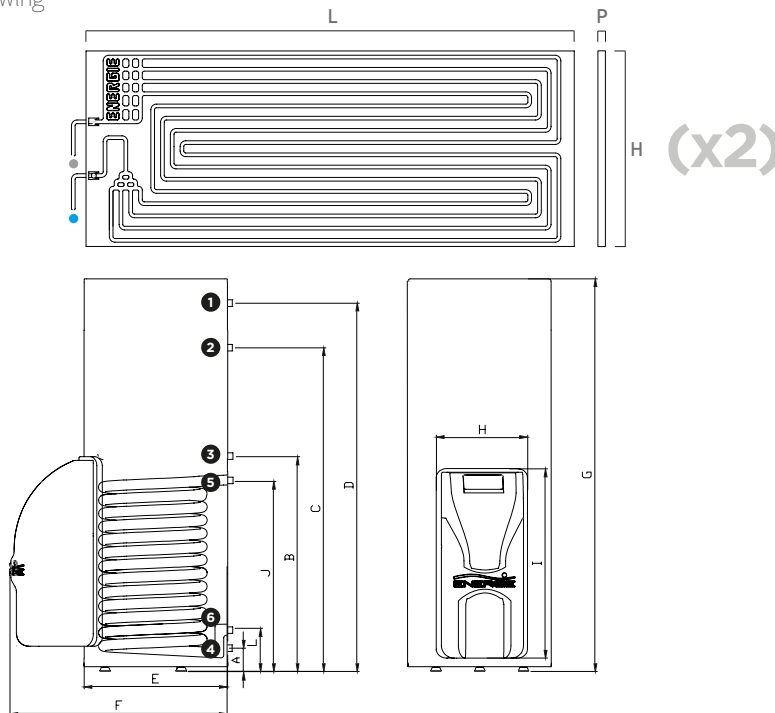
Superior Performance
Equipment with fluid pre-charge
Larger number of users
Allows the connection of another heat source



Technical Drawing

L-2000mm
 H-800mm
 P-20mm

- Steam line
- Liquid line



Dimensions (mm)	Eco 250isx	Eco 300isx	Eco 500isx
A	89	92	92
B	830	772	772
C	1333	1172	1784
D	1469	1315	1927
E	580	650	650
F	880	950	950
G	1545	1415	1990
H	370	370	370
I	765	765	765
J	696	621	1515
L	205	221	625

	Eco 250isx/300isx	Eco500isx
1 (Hot water)	3/4" Male	1" Male
2 (PT valve)*	1/2" Female	1/2" Female
3 (Recirculation)	1/2" Female	1/2" Female
4 (Cold water)	3/4" Male	1" Male
5 (Coil Inlet)	1" Male	1" Male
6 (Coil Outlet)	1" Male	1" Male

Includes Liquid Distributor.

*Optional



Accessories included in the equipment



Steel profiles to put up the panel (small and large sizes)



Safety group



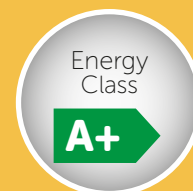
Pressure reducing valve and manometer



M6 Screws + washers + panel setting rawlplug

List of equipment from the range

Model	No. of Panels	Enamelled	Stainless	Extra Coil	Litres	No. of People
Eco 200esm	1 <input type="checkbox"/>	x			200	4
Eco 250esm	1 <input type="checkbox"/>	x			250	4
Eco 300esm	1 <input type="checkbox"/>	x			300	5
Eco 250i	1 <input type="checkbox"/>		x		250	4
Eco 300i	1 <input type="checkbox"/>		x		300	5
Eco 250ix	1 <input type="checkbox"/>		x		250	4
Eco 300ix	1 <input type="checkbox"/>		x		300	5
Eco 300esms	2 <input type="checkbox"/> <input type="checkbox"/>	x			300	6
Eco 250is	2 <input type="checkbox"/> <input type="checkbox"/>		x		250	5
Eco 300is	2 <input type="checkbox"/> <input type="checkbox"/>		x		300	6
Eco 500is	2 <input type="checkbox"/> <input type="checkbox"/>		x		455	9
Eco 250isx	2 <input type="checkbox"/> <input type="checkbox"/>		x		250	5
Eco 300isx	2 <input type="checkbox"/> <input type="checkbox"/>		x		300	6
Eco 500isx	2 <input type="checkbox"/> <input type="checkbox"/>		x		455	9



ECOTOP

Probably the most developed solar water heater in the world

Available with capacities of 100 to 250 litres.
Version with one solar panel, with or without supplementary coil.
Cylinder available in enamelled and stainless steel.

DOMESTIC HOT WATER



Thermodynamic Solar System

domestic hot water

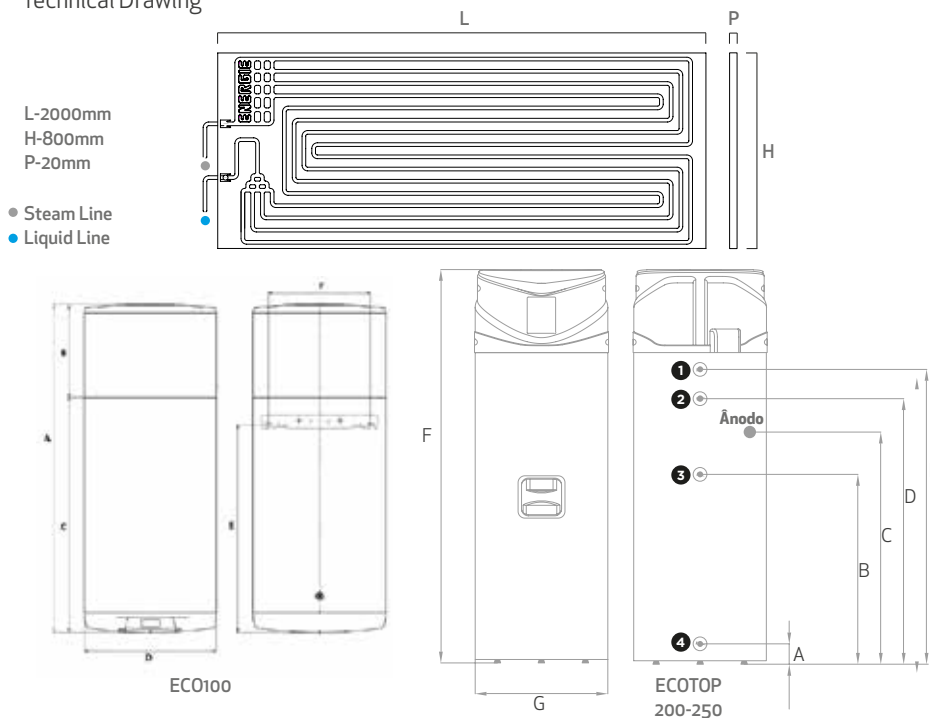


Specifications		Ecotop 100esm	Ecotop 200i	Ecotop 250i
Nominal Capacity	L	100	200	250
Thermal Power (Med/Max)	W	1250/2100	1250/2100	1250/2100
Power Consumption (Med/Max)	W	350/600	350/600	350/600
Temperature (Factory Setpoint)	°C	53	53	53
Maximum Temperature	°C	80	80	80
Max. Amount of water at 40°C in a run (St./En.)	L	120	247	343
Maximum Operation Pressure	bar	7	7	7
Number of Panels		1	1	1
Liquid Line	Pol.	1/4	1/4	1/4
Suction Line	Pol.	3/8	3/8	3/8
Electrical back-up power	W	1500	1500	1500
Gross Weight of Cylinder (St./En.)	Kg	5	87	95
Electrical Supply	V/Hz	230/50	230/50	230/50

Equipment with fluid pre-charge
 Easy Install
 Economic Solar Solution



Technical Drawing



Dimensions (mm)

	Eco100esm	Eco200i	Eco 250i
A	1275	89	89
B	420	830	830
C	855	1015	1015
D	520	1161	1341
E	724	1289	1469
F	450	1720	1900
G	---	580	580

1 (Hot Water)	3/4" Male
2 (PT Valve) *	1/2" Female
3 (Recirculation)	3/4" Male
4 (Cold Water)	3/4" Male
5 (Coil Inlet)	-
6 (Coil Outlet)	-

*Optional

With flares valves on the solar panel and on the thermodynamic group.
 With dielectric threads for water connections enameled cylinder (esm).

Thermodynamic Solar System

domestic hot water



Specifications		Ecotop 200ix	Ecotop 250ix
Nominal Capacity	L	195	245
Thermal Power (Med/Max)	W	1250/2100	1250/2100
Power Consumption (Med/Max)	W	350/600	350/600
Temperature (Factory Setpoint)	°C	53	53
Maximum Temperature	°C	80	80
Max. Amount of water at 40°C in a run (St./Erl)		240	337
Maximum Operation Pressure	bar	7	7
Number of Panels		1	1
Liquid Line	Pol.	1/4	1/4
Suction Line	Pol.	3/8	3/8
Electrical back-up power	W	1500	1500
Gross Weight of Cylinder (St./En.)	Kg	94	107
Electrical Supply	V/Hz	230/50	230/50

ECO | ECOTOP | SOLAR BOX

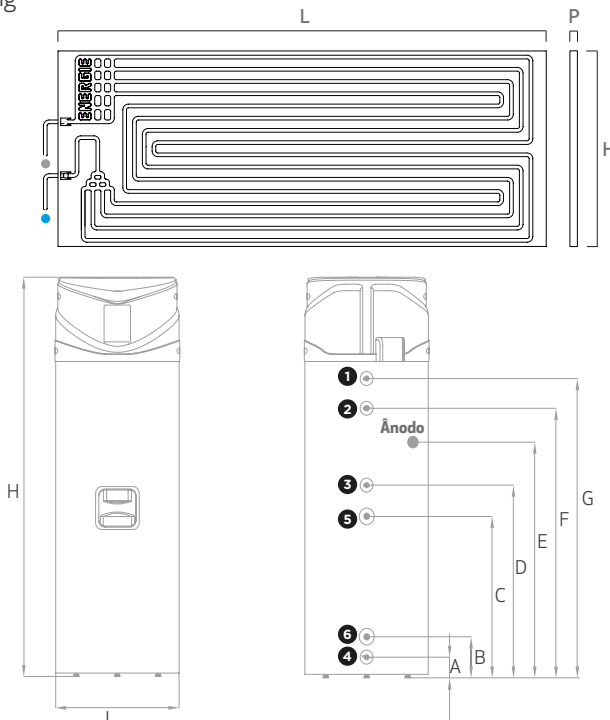
Allows the connection of another heat source
 Easy install
 Equipment with fluid pre-charge



Technical drawing

L-2000mm
 H-800mm
 P-20mm

● Steam line
 ● Liquid line



Dimensions (mm)

	Eco 200ix	Eco 250ix
A	89	89
B	177	177
C	696	696
D	830	830
E	1015	1015
F	1161	1341
G	1289	1469
H	1720	1900
I	580	580

1 (Hot Water)	3/4" Male
2 (PT Valve)*	1/2" Female
3 (Recirculation)	1/2" Female
4 (Cold Water)	3/4" Male
5 (Coil Inlet)	1" Male
6 (Coil Outlet)	1" Male

*Optional

With flares valves on the solar panel and on the thermodynamic group.

Accessories included in the equipment



Steel profiles to put up the panel (small and large sizes)



Safety group












Pressure reducing valve and manometer



M6 Screws + washers + panel setting rawlplug

List of equipment from the range

Model	No. of Panels	Enameled	Stainless	Extra Coil	Litres	No. of People
Ecotop 100esm	1 <input type="checkbox"/>	x			100	2 
Ecotop 200i	1 <input type="checkbox"/>		x		200	4 
Ecotop 250i	1 <input type="checkbox"/>		x		250	5 
Ecotop 200ix	1 <input type="checkbox"/>		x		195	4 
Ecotop 250ix	1 <input type="checkbox"/>		x		245	5 

SOLAR BOX

RETRO FITS TO THE EXISTING CYLINDER



- IDENTICAL FUNCTION PRINCIPLE OF AN ECO
- THE SOLAR BOX CAN BE HUNG ON THE WALL OR BE PLACED ON THE FLOOR
- VERY COMPACT UNIT
- LOW CONSUMPTION
- ADAPTS TO ALL KINDS OF CYLINDERS
- EQUIPMENT WITH FLUID PRE-CHARGE R134A
- AVAILABLE IN MODELS OF 1 OR 2 THERMODYNAMIC SOLAR PANELS

Check warranty conditions



KEEP YOU DHW CYLINDER
AND TURN IT INTO AN
EFFICIENT SOLAR SYSTEM

**HOT WATER DAY & NIGHT,
HAIL, RAIN, WIND OR SHINE**

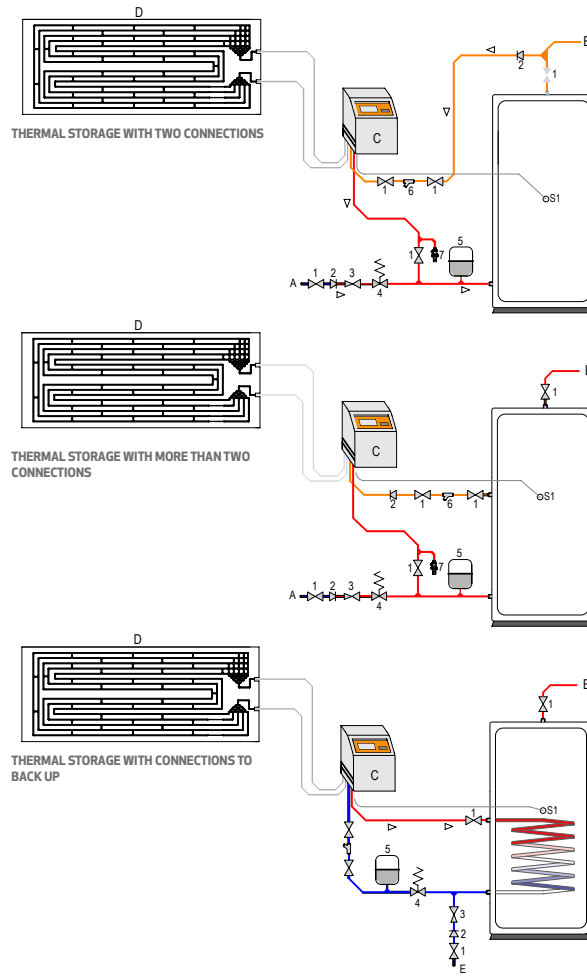
SAVINGS UP TO

80%

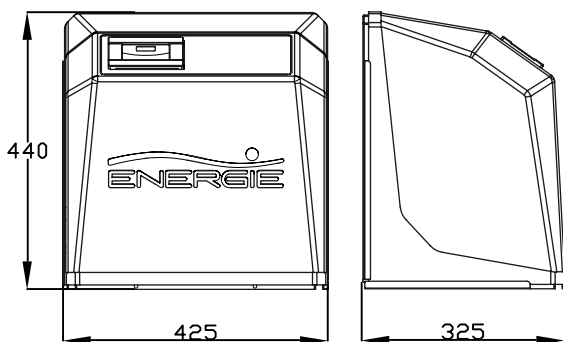
Thermodynamic Solar System domestic hot water

Diagram

Caption	
1	Sectioning Valve
2	Check Valve
3	Pressure Reducer
4	Safety Group
5	Expansion Vase
6	Filter
7	Discharge Valve
A	Network
B	Hot water Outlet
C	SolarBox
D	Thermodynamic Panel
E	Network
S1	Temperature Sensor



Technical drawing



Specifications		1 Panel	2 Panels
Provided Thermal Powera (Méd./Máx.)	W	1690/2900	2800/4550
Power Consumption (Méd./Máx.)	W	390/550	595/890
Electrical Supply	V/Hz	230/50-60	230/50-60
Cooling Fluid	-/kg	R134a / 0,8	R134a / 1,0
Maximum Temperature	°C	55	55
Maximum Operation Pressure (Water)	bar	7	7
Hydraulic Connection (Inlet/Outlet)	Pol.	1/2 1/2	1/2 1/2
Weight (Solarbox/Panel)	kg	23,5/8	23,5/2 x 8
Flare Connections (Suction/Liquid)	Pol.	3/8 1/4	1/2 3/8
Energy Class Tapping Profile		A L	A XL

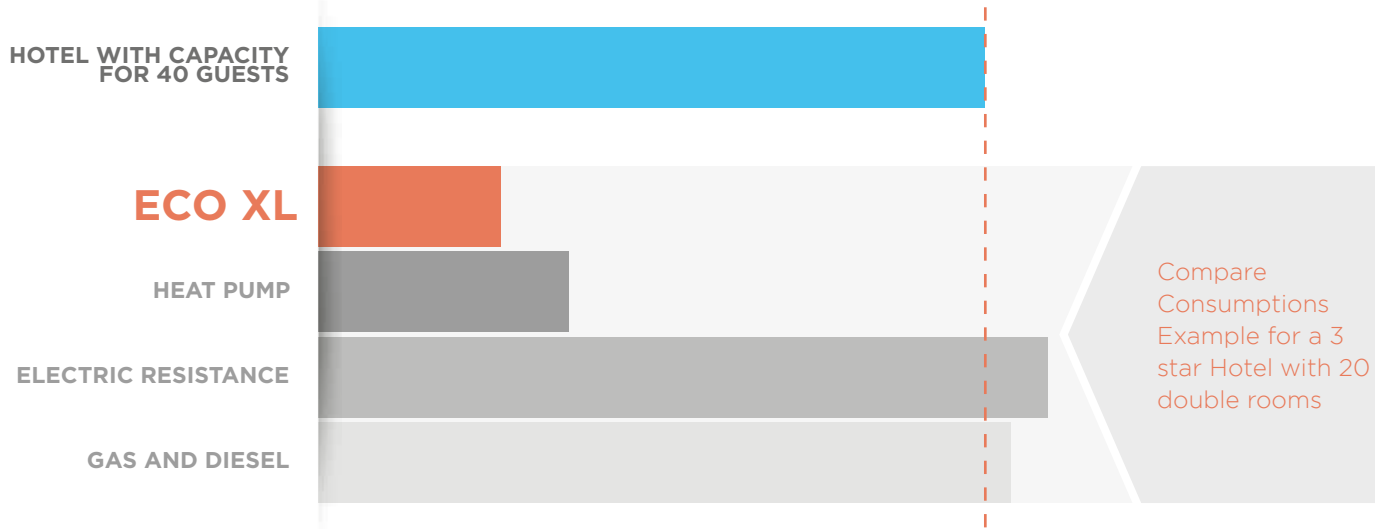
Includes hydraulic filter and anti-vibration system





Energy Diagram

Energy needed to raise the temperature of 1000L of water from 15°C to 55°C.
Calculation based on norm EN 16147.



Compare
Consumptions
Example for a 3
star Hotel with 20
double rooms



ECO XL

Thermodynamic Solar Solution to heat domestic water for industrial use

Equipment with 6 to 40 solar panels.
Capacities of 1000 to 6000 litres.
Stainless steel cylinders AISI316.

DOMESTIC HOT WATER
INDUSTRIAL USE



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



THE MOST EVOLVED INDUSTRIAL SOLUTION

- POSSIBILITY OF ADAPTING THE EXISTING INSTALLATION WITHOUT THE NEED FOR CIVIL CONSTRUCTION WORKS.
- HEAT IS CAPTURED THROUGH SOLAR RADIATION, ENVIRONMENT TEMPERATURE, RAIN, WIND AND EVEN SNOW.
- THE HEAT PRODUCED ON COLDER DAYS, EVEN AT NIGHT IS SUFFICIENT TO ATTAIN THE WATER TEMPERATURE DESIRED.
- 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.

**MAXIMUM
EFFICIENCY**

- 1 Magnesium Anode
- 2 High density insulation
- 3 DHW Cylinder
- 4 Water/water serpentine heat exchanger
- 5 Finned tube heat exchanger
- 6 Outside coating



Versions with 1 or 2 Cylinders

Stainless Steel AISI316 Cylinders with finned tube heat exchanger

With or without water/water heat exchanger

Equipment from 6 up to 40 Thermodynamic Solar Panels

Capacities from 1000 up to 6000 litres

- DOUBLE WALL CONDENSERS
- 3rd GENERATION SOLAR ENERGY
- SOLAR HOT WATER UP TO 60°C AVAILABLE
- ALMOST NON-EXISTENT MAINTENANCE
- UP TO 3 CYCLES OF HOT WATER REPLACEMENT SYSTEM CAPACITY PER DAY



Check warranty conditions

Thermodynamic Solar Systems for Large Volumes of Domestic Hot Water with a Cylinder



ECO 8888 I 88 and ECO 8888 IX 88

1000 to 2000



- 1 Stainless Steel Cylinder with Simple Flange
- 1 High Efficiency Finned Tube Heat Exchanger
- Optional Water/Water Serpentine Heat Exchanger
- 1 Solar Block

Model	Litres	Solar Block
Eco 1000	1000	6
Eco 1500	1500	12
Eco 2000	2000	12,16

8888 Represents the capacity of the equipment

88 Represents the number of panels

Thermodynamic Solar Systems for Big Volumes of Domestic Hot Water with two Cylinders



ECO 8888 ID 88 and ECO 8888 IXD 88

2000 to 6000



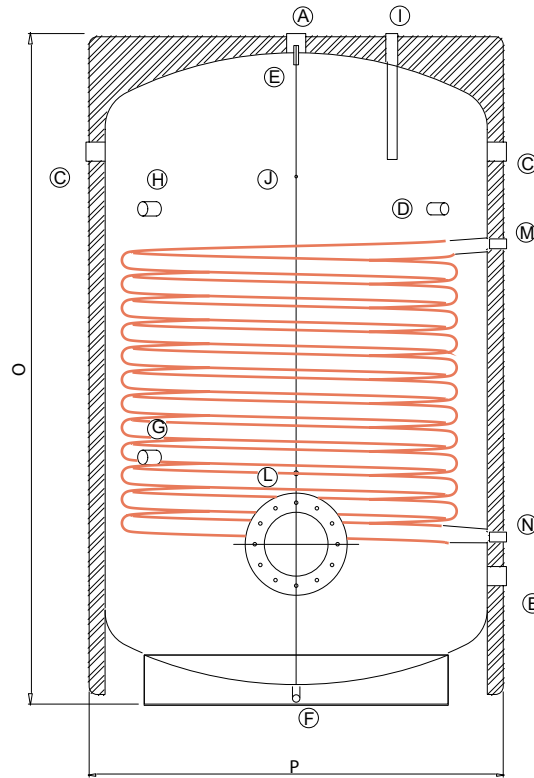
- 2 Stainless Steel Cylinders with Simple Flange
- 2 High Efficiency Finned Tube Heat Exchangers
- Optional Water/Water Serpentine Heat Exchanger
- 1 Solar Block

Model	Litres	Solar Block
Eco 2000	2x1000	12,16
Eco 3000	2x1500	16,28
Eco 4000	2x2000	28
Eco 6000	2x3000	40

8888 Represents the capacity of the equipment

88 Represents the number of panels

STAINLESS Cylinder



Letter	1000 Inox	1500 Inox	2000 Inox	3000 Inox
A	1" 1/4 F	1" 1/2 F	2" F	2" F
B	1" 1/4 F	1" 1/2 F	2" F	2" F
C	1" 1/4 F	1" 1/2 F	2" F	2" F
D	1" 1/4 F	1" 1/4 F	1" 1/4 F	1" 1/4 F
E	1/2" F	1/2" F	1/2" F	1/2" F
F	1" F	1" F	1" F	1" F
G	1/2" F	1/2" F	1/2" F	1/2" F
H	1/2" F	1/2" F	1/2" F	1/2" F
I	1" F	1" 1/4 F	1" 1/4 F	1" 1/4 F
J	1/2" F	1/2" F	1/2" F	1/2" F
L	1/2" F	1/2" F	1/2" F	1/2" F
M	1" 1/4 F	1" 1/4 F	1" 1/4 F	1" 1/4 F
N	1" 1/4 F	1" 1/4 F	1" 1/4 F	1" 1/4 F
O	2010mm	2100mm	2160mm	2300mm
P	930mm	1140mm	1300mm	1500mm

Nota Technical drawing of the Solar Block on page 62

DURATION OF THE HEATING CYCLE

Average period of time necessary for the **total volume** of water in the equipment to reach the desired temperature



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

*Considering an average consumption of 50 litres /person /day

Stainless Steel Cylinders

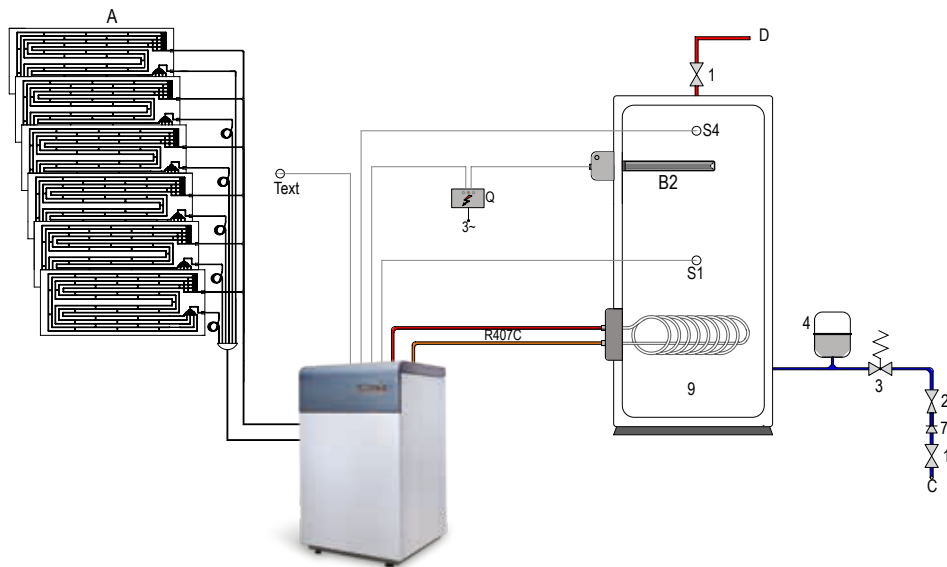
Name	Nominal Capacity	Cylinder	N. Panels	N. Flanges	Coil	Electrical Supply*
Eco 1000I6	1000	Stainless	6	1	No	S or T
Eco 1000IX6	1000	Stainless	6	1	Yes	S or T
Eco 1500I12	1500	Stainless	12	1	No	S or T
Eco 1500IX12	1500	Stainless	12	1	Yes	S or T
Eco 2000I12	2000	Stainless	12	1	No	S or T
Eco 2000IX12	2000	Stainless	12	1	Yes	S or T
Eco 2000ID12	2×1000	Stainless	12	1	No	S or T
Eco 2000IXD12	2×1000	Stainless	12	1	Yes**	S or T
Eco 2000I16	2000	Stainless	16	2	No	S or T
Eco 2000IX16	2000	Stainless	16	2	Yes	S or T
Eco 2000ID16	2×1000	Stainless	16	1	No	S or T
Eco 2000IXD16	2×1000	Stainless	16	1	Yes**	S or T
Eco 3000I16	3000	Stainless	16	2	No	S or T
Eco 3000IX16	3000	Stainless	16	2	Yes	S or T
Eco 3000ID16	2×1500	Stainless	16	1	No	S or T
Eco 3000IXD16	2×1500	Stainless	16	1	Yes**	S or T
Eco 3000I28	3000	Stainless	28	2	No	T
Eco 3000IX28	3000	Stainless	28	2	Yes	T
Eco 3000ID28	2×1500	Stainless	28	1	No	T
Eco 3000IXD28	2×1500	Stainless	28	1	Yes**	T
Eco 4000ID28	2×2000	Stainless	28	1	No	T
Eco 4000IXD28	2×2000	Stainless	28	1	Yes**	T
Eco 6000ID40	2×3000	Stainless	40	1	No	T
Eco 6000IXD40	2×3000	Stainless	40	1	Yes**	T

*The suffix Single-Phase (S) or Three-Phase (T) is added at the end of each designation.

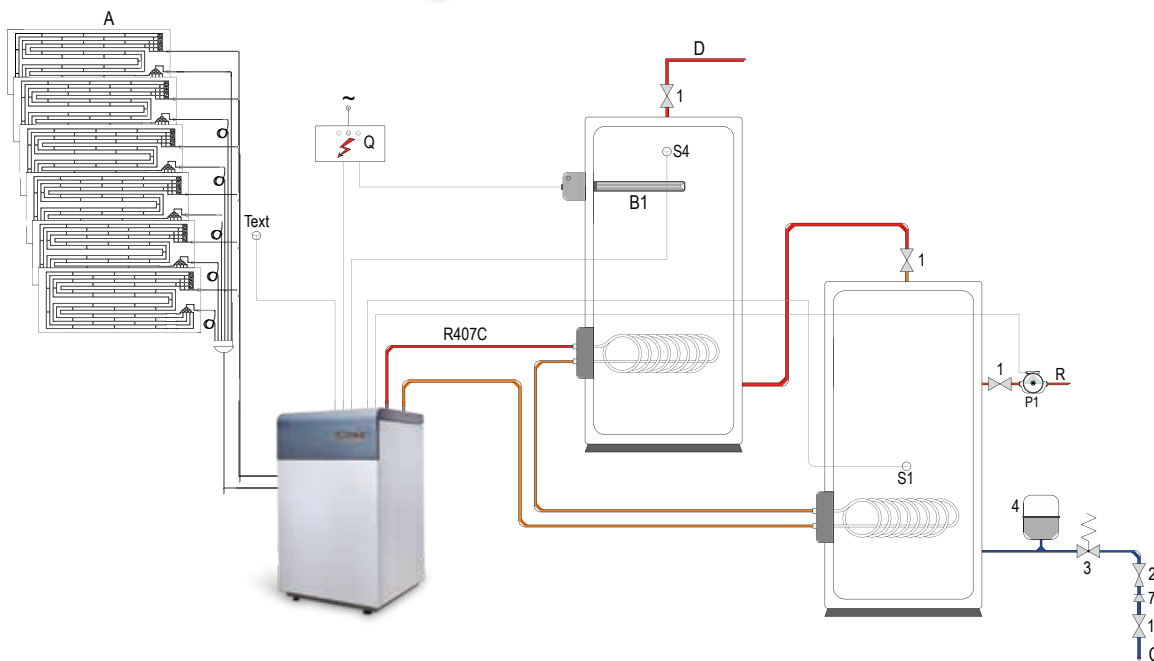
** Only one of the heaters has a serpentine.

The Thermodynamic Solar Solutions aimed at heating domestic water for industrial use have enough versatility in order for their application to meet the needs of the case at hand.

ECO XL
Standard Installation
with Electrical Support



ECO XL
Installation with
2 Cylinders
in Series with
Electrical Support



1 Shut-off Valve	7 Check Valve (non-return)	D Hot Water Outlet	Text Outside Thermostat
2 Pressure Reducer	9 Thermal Storage	P1 Circulating Pump 1	B1 Resistance Kit (Support)
3 Security Valve	A Thermodynamic Solar Panels	S1 Temperature Sensor S1	B2 Resistance Kit (Support)
4 Expansion Valve	C Cold Water Inlet	S4 Temperature Sensor S4	Q Control Box

Choose your model



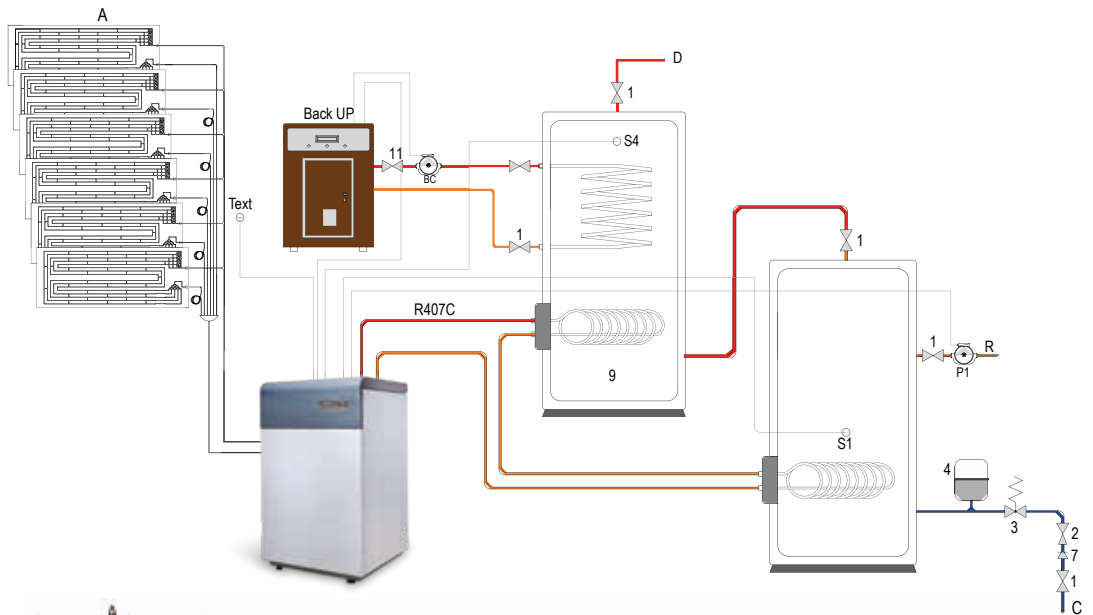
Example

ECO 3000 IXD 28 T ECO of 3000 litres capacity with 2 Stainless steel cylinders with a high productivity exchanger, 28 panels, three-phase version.

It is also in thinking about the needs of the professionals in this sector that we make an ample range of equipment available so that any new or existing installation is no longer a challenge and is simplified. The focus is always on economy and efficiency.

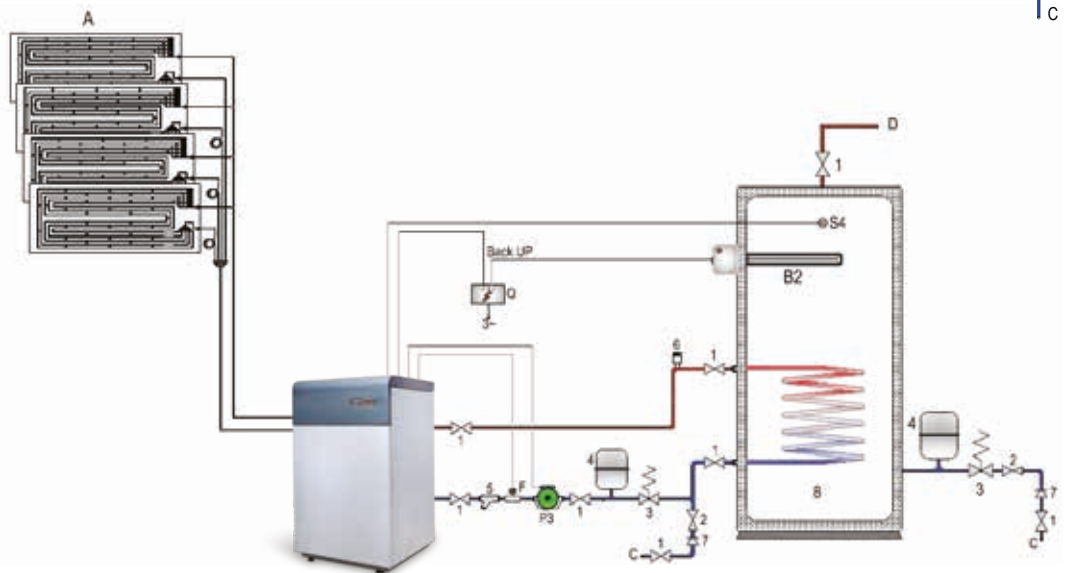
ECO XL

Installation with 2 Cylinders in Series with Boiler support



ECO XL

Use of Existing Cylinder



1 Shut-off Valve	7 Check Valve (non-return)	D Hot Water Outlet	BC Boiler Circulator Pump
2 Pressure Reducer	9 Thermal Storage	S1 Temperature Sensor S1	CA Boiler (Support)
3 Security Valve	A Thermodynamic Solar Panels	S4 Temperature Sensor S4	
4 Expansion Valve	C Cold Water Inlet	Text Outside Thermostat	

ECO XL

- 1 Model**
Eco XL
- 2 Capacity (litres)**
1000, 1500, 2000, 3000, 4000 ou 6000 litres
- 3 Cylinder Material**
i (Stainless)

- * 4 Supplementary Coil (Stainless 6 Cylinders)**
X (optional)
- * 5 2 Cylinders**
D (Available in models Eco 2000, Eco 3000, Eco 4000 e Eco 6000) (optional)

- 6 Number of Solar Panels that make up the system**
- 7 S Single-phase**
T Three-phase

* Optional and when applicable
8888 Represents the capacity of equipment



Advantages in acquiring a Solar Block for Central Heating:

- LOW CO₂ EMISSIONS
- WITH ELECTRICITY PRICES GOING UP ALL THE TIME, THE RIGHT INVESTMENT IS IN EFFICIENCY TO OBTAIN MAXIMUM SAVING
- RENEWABLE ENERGY IN YOUR HOME
- MAKE YOUR HOME ENVIRONMENTALLY FRIENDLY

Comparison of primary energy consumption between different heating systems





SOLAR BLOCK

**Thermodynamic Solar Solution
for central heating**

Equipment with 6 to 40 solar panels
Area to be heated from 90 to 450 m²
High quality stainless steel plate heat exchanger

CENTRAL HEATING



COMFORT, CONVENIENCE WITH MAXIMUM ECONOMY

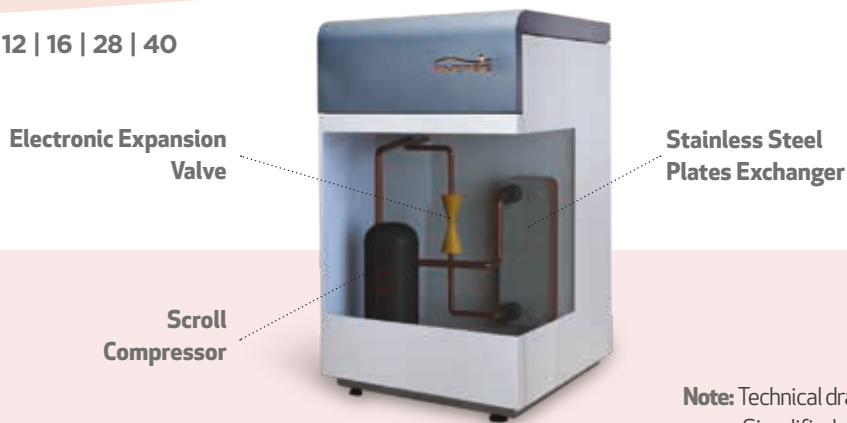


Check warranty conditions



- SUPER EFFICIENT ENVIRONMENT HEATING AT LOW.
- NON-EXISTENT PROGRAMMED MAINTENANCE.
- POSSIBILITY OF JOINING ALL HOUSE HEATING EQUIPMENT INTO JUST ONE SOLUTION.
- POSSIBILITY OF ALTERNATING BETWEEN ENVIRONMENT HEATING IN THE COLDER SEASONS AND SWIMMING-POOL HEATING IN THE WARMER SEASONS.
- ABSOLUTE GUARANTEE OF PRODUCTION OF HOT WATER FOR HEATING AT 55°C DURING THE WINTER.
- HIGHLY EFFICIENT SCROLL COMPRESSOR.
- HIGH QUALITY STAINLESS STEEL PLATES EXCHANGER.
- FREE OF DEFROST CYCLES.
- SMALL DIMENSION INDOOR UNIT.
- CENTRAL HEATING WITHOUT CHIMNEYS AND BURNT GASES, TOTALLY ENVIRONMENTALLY FRIENDLY.
- WORKS WITH UNDERFLOOR HEATING, RADIATORS, CONVECTORS OR FAN COILS.
- ELECTRONIC EXPANSION VALVE.

MAXIMUM EFFICIENCY



Note: Technical drawing of Solar Block on page 62
Simplified representative diagram

Thermodynamic Solar System central heating

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 Min.	W	1230	2010	3210	5650	8450
Water Flow	m ³ /h	0,7	1,0	1,5	3,0	5,0
Pressure Drop	kPa	3,0	9	7	11	36
Electrical Supply		1~/230V/50 Hz or 3~/400V/50 Hz			3~/400V/50 Hz	
Protection (M/T)*	A	16/6	25/10	2x16/16	20	25
Hydraulic Connections	Pol.	1	1	1	1	1
Block Gross Weight	kg	48	96	128	210	320

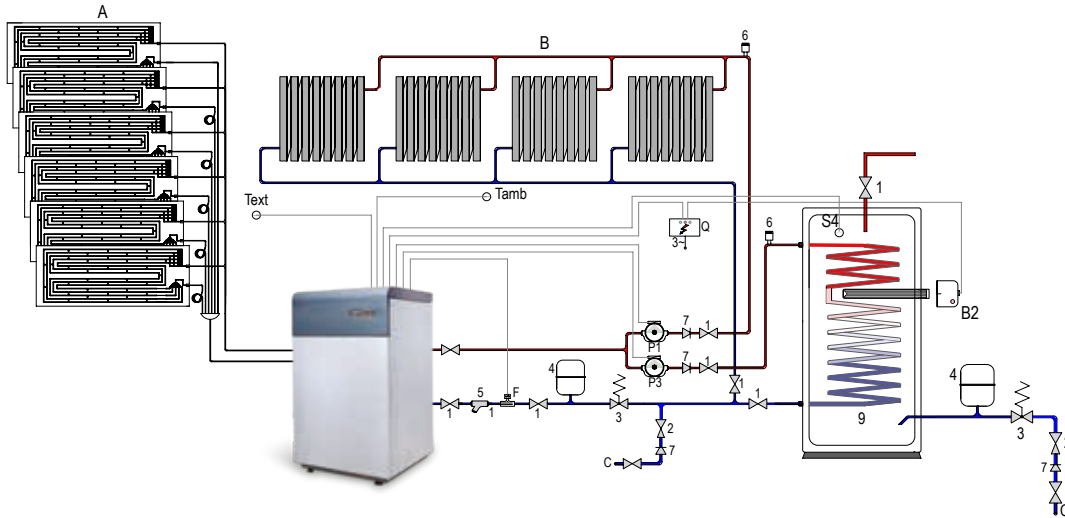
*Magnetothermic Protection Switch (S, for the Single-Phase version and T for the Three-Phase version) to be fitted by the installer.

Model	N. Panels	Area to be heated*	Cylinder	Electrical Supply
Solar Block 6	6	90 m ²	-	230V or 400V
Solar Block 12	12	150 m ²	-	230V or 400V
Solar Block 16	16	220 m ²	-	230V or 400V
Solar Block 28	28	300 m ²	-	400V
Solar Block 40	40	450 m ²	-	400V
Solar Block 6 Plus	6	90 m ²	200	230V or 400V
Solar Block 12 Plus	12	150 m ²	300	230V or 400V
Solar Block 16 Plus	16	220 m ²	300	230V or 400V
Solar Block 28 Plus	28	300 m ²	500	400V
Solar Block 40 Plus	40	450 m ²	500	400V

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

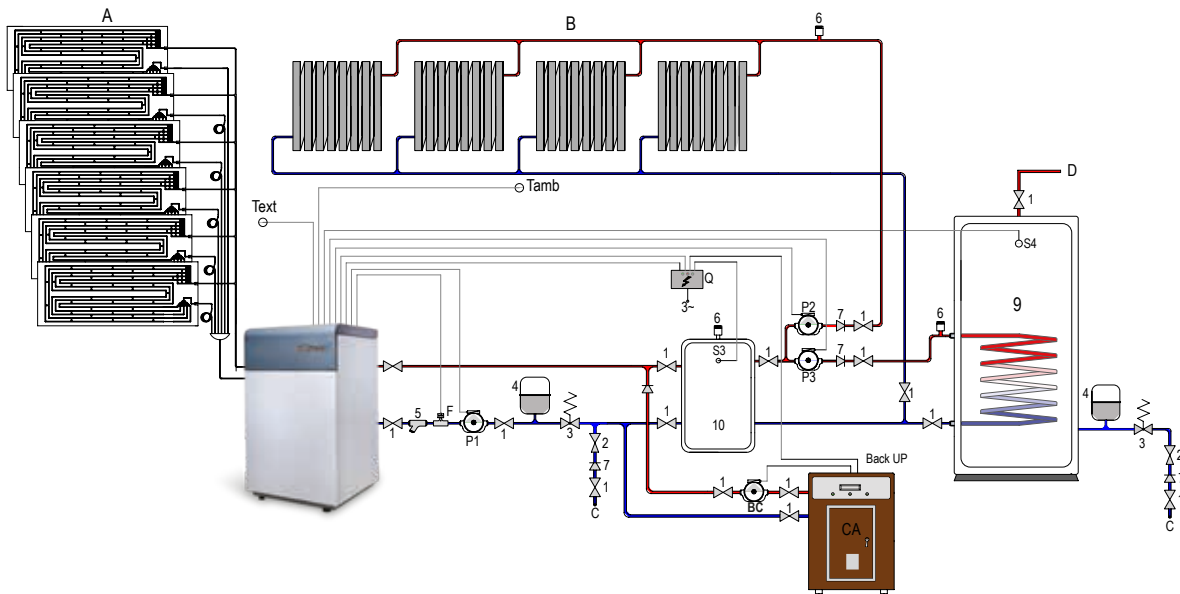
Central heating

Combined Solution (Central heating + Domestic Hot Water)



Central heating

Combined Solution with Backup (Central Heating + Domestic Hot Water with a backup boiler)



1 Shut-off Valve	7 Check Valve (non-return)	D Hot Water Outlet	S4 Temperature Sensor S4
2 Pressure Reducer	9 Thermal Storage	F Flow Switch	Tamb Environment Thermostat
3 Security Valve	10 Buffer Tank	P1 Circulating Pump 1	Text Outside Thermostat
4 Expansion Valve	A Thermodynamic Solar Panels	P2 Circulating Pump 2	BC Boiler Circulator Pump
5 Filter	B Environment Heating	P3 Circulating Pump 3	B2 Resistance Kit (Support)
6 Drain Valve	C Cold Water Inlet	S3 Temperature Sensor S3	Q Control Box

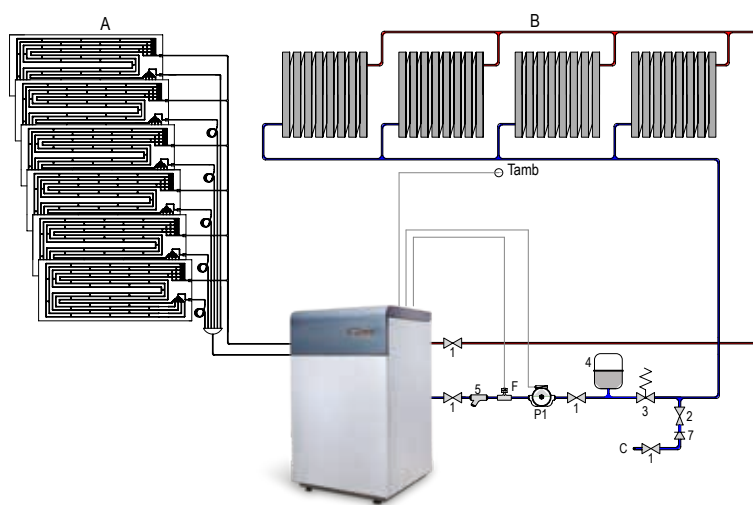
Choose your model

SOLAR BLOCK **88** **PLUS** **888** **A**

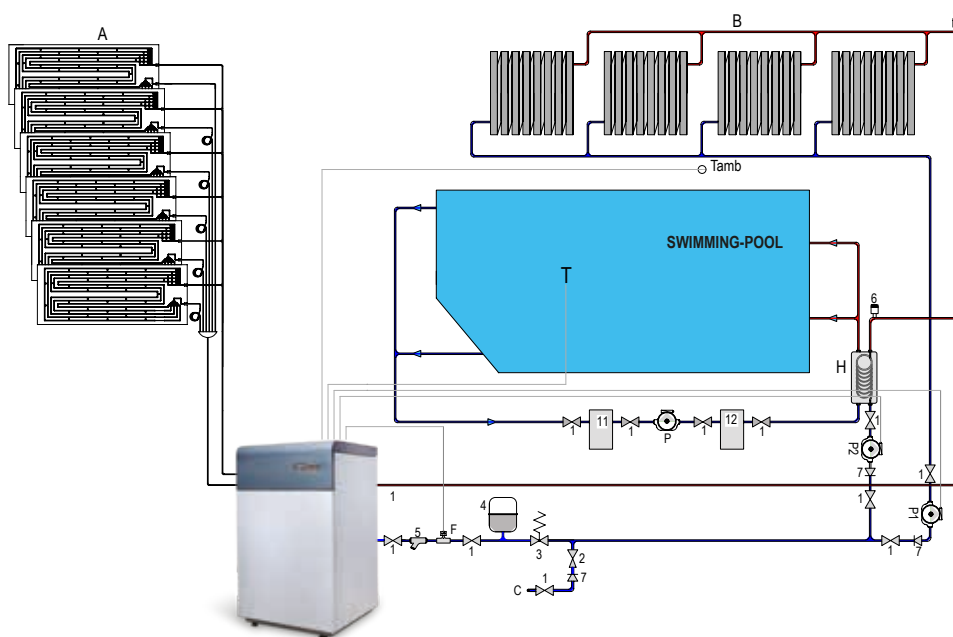
① ② * ③ * ④ ⑤

888 Represents the capacity of the equipment
88 Represents the number of panels

Central heating
Standard Installation



Central heating + Swimming-pool
Combined Installation



1 Shut-off Valve	6 Drain Valve	B Environment Heating	Tamb Environment Thermostat
2 Pressure Reducer	7 Check Valve (non-return)	C Cold Water Inlet	T Thermostat
3 Security Valve	11 Pre-filter	F Flow Switch	G Swimming-pool
4 Expansion Valve	12 Filter	P1 Circulating Pump 1	H Water/Water Titanium Heat Exchanger
5 Filter	A Thermodynamic Solar Panels	P2 Circulating Pump 2	

1 Model
Environment Heating Solar Block

2 Number of Solar Panels
6, 12, 16, 28, or 40

*** 3 Combined Solution**
A Central Heating or Central Heating + Domestic Hot Water (Plus)

*** 4 DHW Cylinder capacity of the Combined Solution**
Capacities available are 200, 300 or 500 litres

5 S Single-Phase Version
T Three-Phase Version

* Only for the Combined Solution if applicable

CENTRAL HEATING AND DOMESTIC HOT WATER





SOLAR BLOCK ULTRA | ULTRA PLUS

Thermodynamic Solar Solution
for central heating and domestic hot water

Equipment with 12 and 16 solar panels

CENTRAL HEATING AND DOMESTIC HOT WATER



SB | SB ULTRA | SB ULTRA PLUS

THERMODYNAMIC SOLAR SYSTEM CENTRAL HEATING DOMESTIC HOT WATER



Check warranty conditions



THE ULTRA SOLAR BLOCK IS AN ALL-IN-ONE SOLUTION. A THERMODYNAMIC SOLAR HEAT PUMP BUILT TO THE HIGHEST STANDARDS OF QUALITY WITH OUTSTANDING PERFORMANCE. WITH A COMPACT DESIGN, IT PERFORMS CENTRAL HEATING AND PRODUCES DOMESTIC HOT WATER, USING THE LATEST DC INVERTER TECHNOLOGY.

- ERP READY
- SOLAR PERFORMANCE
- SIMPLE INSTALLATION "PLUG AND USE"
- INDOOR UNIT REQUIRES SMALL SPACE (<math><1\text{M}^2</math>)
- INTEGRATED DHW DEPOSIT (SOLAR BLOCK ULTRA PLUS) OF 200 LITERS IN AISI 316L STAINLESS STEEL
- DHW PRODUCTION UP TO 70°C IN HEAT PUMP MODE THROUGH HEAT RECOVERY
- MAXIMUM DISTANCE BETWEEN INTERIOR UNIT AND OUTSIDE UP TO 20M.
- DC INVERTER TECHNOLOGY
- CAREL DISPLAY
- SOFT START SYSTEM
- HYDRAULIC KIT INCLUDED
- COMPLETE VERSATILITY

Thermodynamic Solar System

central heating and domestic hot water

INSIDE UNIT		ULTRA12	ULTRA PLUS12	ULTRA16	ULTRA PLUS16
Heating Capacity ⁽¹⁾	Power supplied	kW	5 - 19	8 - 26	
	Maximum power supplied	kW	18,70	25,8	
Heating Capacity ⁽²⁾	Nominal power supplied	kW	10,30	16,2	
	Nominal consumption	kW	2,15	3,45	
	COP	kW	4,80	4,7	
Heating Energy Class			A++		A++
Dimensions	HxWxD	cm	106X60X80	195x60x80	106X60X80 195x60x80
Weight		Kg	115	243	115 243
Maximum temperature		°C	60		
Hydraulic Connections	Inlet/Outlet		1" M		
Domestic Hot Water ⁽³⁾	Tank	L	-	200	- 200
	Material		-	INOX AISI 316L	- INOX AISI 316L
	Temp. max. (compressor only)	°C	-	70	- 70
	Electrical backup	W	-	1500	- 1500
	Water connections	Cold / Hot	-	3/4" M	- 3/4" M
	COP DHW ⁽³⁾		-	3,27	- 3,27
	Tapping profile		-	L	- L
	Efficiency	%	-	138	- 138
	Energy Class DHW		-	A+	- A+
	Refrigerant	Type		R410A	
Preload		Kg	3,5		
Connections		Liquid	1/2"		
	Steam	3/4"			
Sound pressure	(distance 10m)	dBA	65		
Electrical Supply	Type		230V or 400 V		
	Electric cable	230V	mm ²	3G6	
		400V	mm ²	5G4	
	Protection Circuit Breaker	230V		46A	
400V			32A		

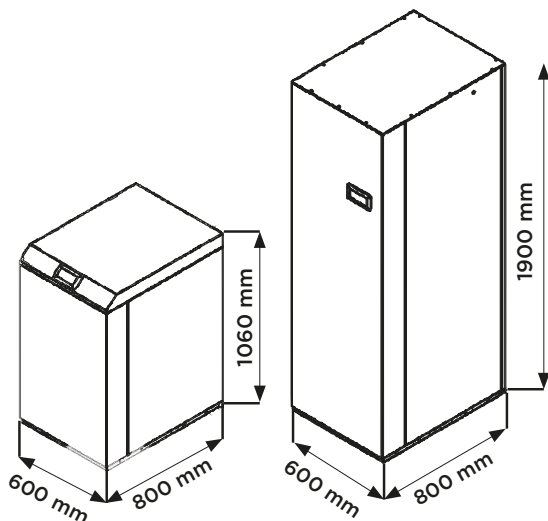
OUTSIDE UNIT - SOLAR PANELS			12	16
Number			12	16
Dimensions	HxWxD	mm	200x800x20	
Weight		Kg	8	
Type			Passive Solar Evaporator	
Material			Anodized aluminum	

CONNECTION BETWEEN UNITS			20	15
Maximum nominal distance		m	20	15
Maximum Drop		m	20	15

⁽¹⁾ According to EN14511; Air temperature DB/WB 14°C/13°C; Water temperature inlet/outlet 30°C/35°C; Solar radiation 800w/m² | ⁽²⁾ According to EN14511; Air temperature DB/WB 7°C/6°C; Water temperature inlet/outlet 30°C/35°C; Solar radiation 400w/m² | ⁽³⁾ According to EN 16147, A 14 / W 10-54

Technical Drawing

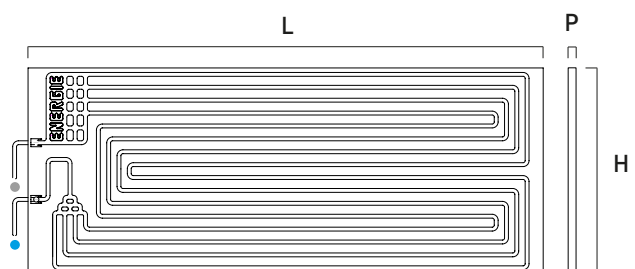
INSIDE UNIT



SOLAR PANELS

L-2000mm
H-800mm
P-20mm

- Steam line
- Liquid line



X12 or x16

SWIMMING-POOL HEATING





SOLAR BLOCK SWIMMING-POOL

Thermodynamic Solar Solution for Swimming-pools

Equipment from 6 up to 40 solar panels

SWIMMING-POOL HEATING



SB SWIMMING-POOL H.

HEATED SWIMMING-POOL EVERY DAY OF THE YEAR



Check warranty
conditions



- 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.
- POSSIBILITY OF ALTERNATING BETWEEN ENVIRONMENT HEATING IN THE COLDER SEASONS AND SWIMMING-POOL HEATING IN THE WARMER SEASONS.
- HIGHLY-RESISTANT AND DURABLE TITANIUM EXCHANGER.
- HIGHLY EFFICIENT SCROLL COMPRESSOR.
- FREE OF DEFROST CYCLES.
- SMALL DIMENSION INDOOR UNIT.
- ELECTRONIC EXPANSION VALVE.

MAXIMUM EFFICIENCY



Note: Technical drawing of the Solar Block on page 62
Simplified representative diagram

Thermodynamic solar system swimming-pool heating

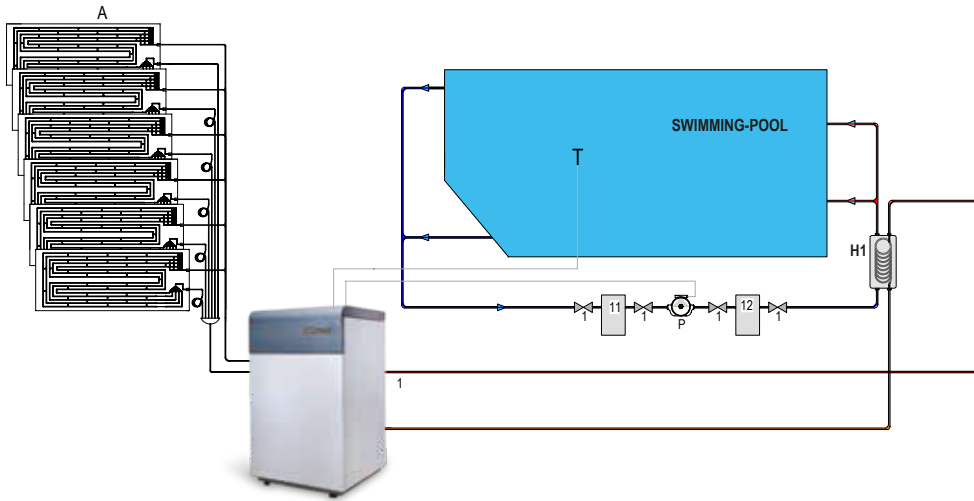
Model		Solar Block 6	Solar Block 12	Solar Block 16	Solar Block 28	Solar Block 40
Solar Panels		6	12	16	28	40
Maximum Thermal Power	W	7500	16580	24210	38220	54600
Power Consumption Min.	W	1230	2010	3210	5650	8450
Electrical Supply		1~/230V/50 Hz or 3~/400V/50 Hz				3~/400V/50 Hz
Protection (M/T)*	A	16/6	25/10	2x16/16	20	25
Gross Weight	kg	48	96	128	210	320

*Magnetothermic protection switch (S, for the Single-phase version and T, for the Three-phase version) to be fitted by the installer.

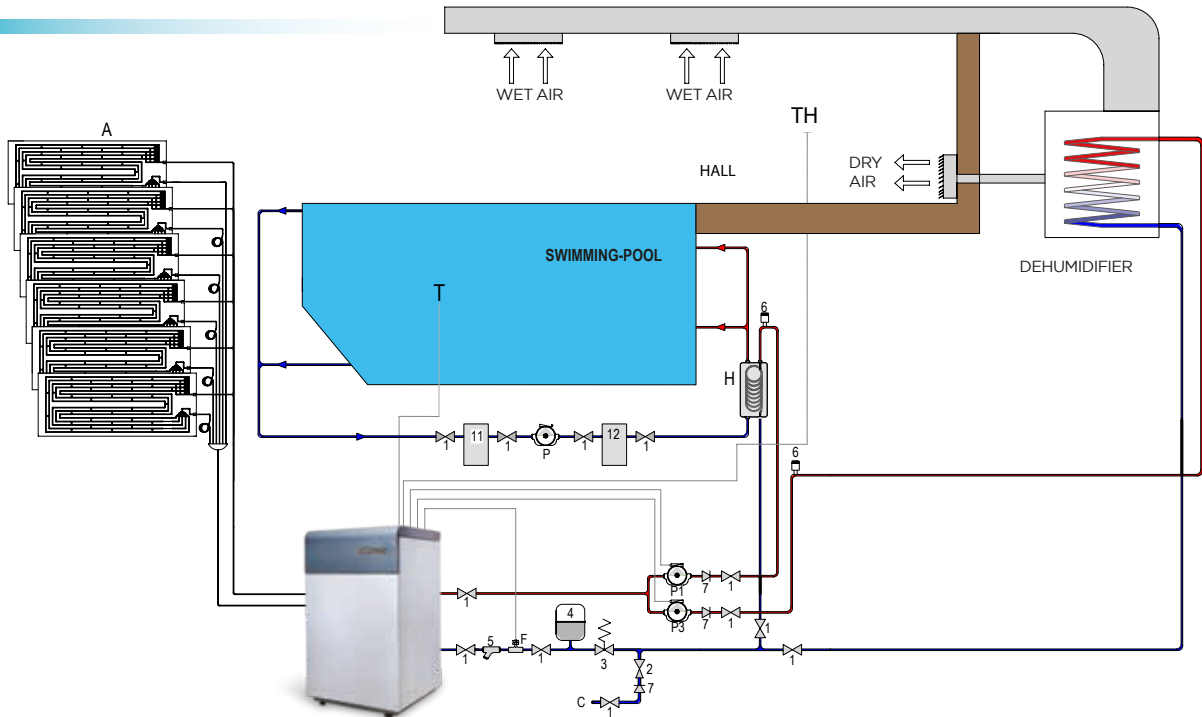
Model	N. Panels	Volume to be heated* (Water Mirror Surface)	Cylinder	Electrical Supply
Solar Block 6	6	16 m ²	-	230V or 400V
Solar Block 12	12	40 m ²	-	230V or 400V
Solar Block 16	16	60 m ²	-	230V or 400V
Solar Block 28	28	120 m ²	-	400V
Solar Block 40	40	150 m ²	-	400V
Solar Block 6 Plus	6	16 m ²	200	230V or 400V
Solar Block 12 Plus	12	40 m ²	300	230V or 400V
Solar Block 16 Plus	16	60 m ²	300	230V or 400V
Solar Block 28 Plus	28	120 m ²	500	400V
Solar Block 40 Plus	40	150 m ²	500	400V

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

Swimming-pool Heating
Standard Installation



Swimming-pool + Dehumidifier
Combined Solution



1 Shut-off Valve	6 Drain Valve	C Cold Water Inlet	T Thermostat
2 Pressure Reducer	7 Check Valve (non-return)	F Flow Switch	G Swimming-pool
3 Security Valve	11 Pre-filter	P1 Circulating Pump 1	H Water/water titanium heat exchanger
4 Expansion Valve	12 Filter	P2 Circulating Pump 2	TH Thermo-Hygrometer
5 Filter	A Thermodynamic Solar Panels	P3 Circulating Pump 3	HI Gas/Water Titanium Heat Exchanger

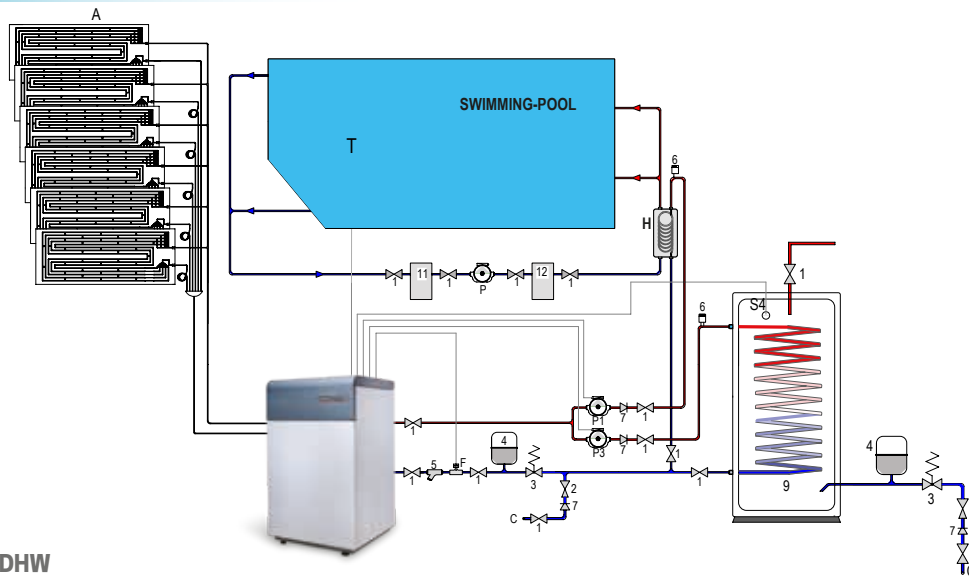
Choose your model

SOLAR BLOCK **PLUS** **A**

1 2 * 3 * 4 5

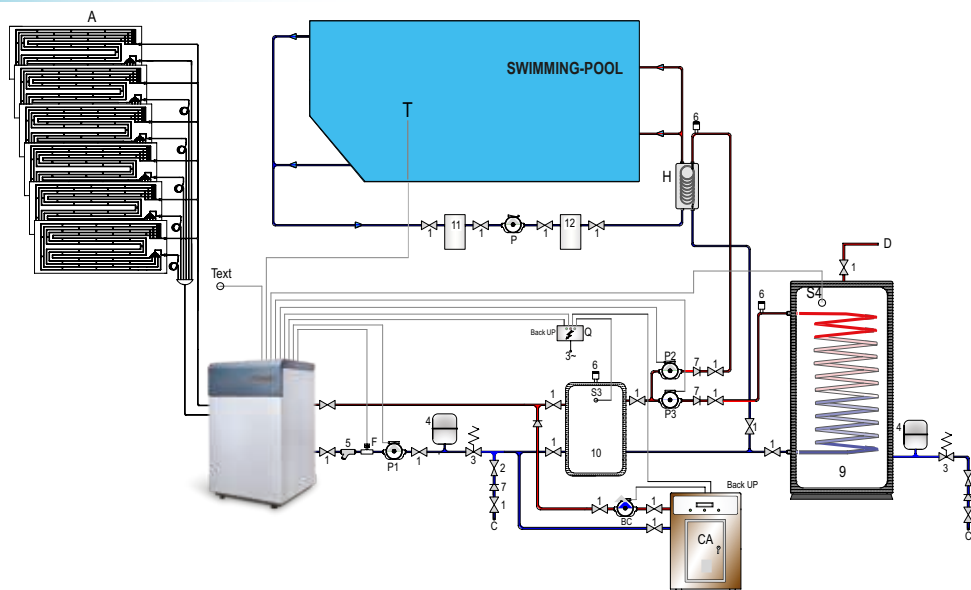
Swimming-pool + DHW

Combined Solution



Swimming-pool + DHW

Combined Solution with backup



1 Shut-off Valve	9 Thermal Storage	P1 BCirculating Pump 1	BC Boiler Circulator Pump
2 Pressure Reducer	11 Pre-filter	P2 Circulating Pump 2	Q Control Box
3 Security Valve	12 Filter	P3 Circulating Pump 3	G Swimming-pool
4 Expansion Valve	A Thermodynamic Solar Panels	S3 Temperature Sensor S3	H Water/water titanium heat exchanger
5 Filter	C Cold Water Inlet	S4 Temperature Sensor S4	
6 Drain Valve	D Hot Water Outlet	Text Outside Thermostat	
7 Check Valve (non-return)	F Flow Switch	T Thermostat	

1 Model

Swimming-pool Heating Solar Block

2 Numbers of Solar Panels

6, 12, 16, 28, ou 40

*** 3 Combined Solution**

Central Heating or Central Heating + Domestic Hot Water (Plus)

*** 4 Capacity**

Being a Plus Solution the Available Capacities are 200, 300 or 500 litres

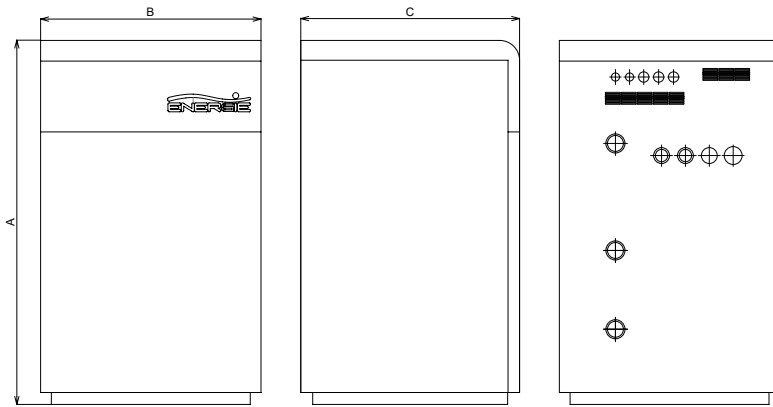
5 M Single-Phase Version

T Single-Phase Version

* Only for the Combined Solution if applicable

SOLAR BLOCK COMMON TO ECO XL, CENTRAL HEATING AND SWIMMING-POOL

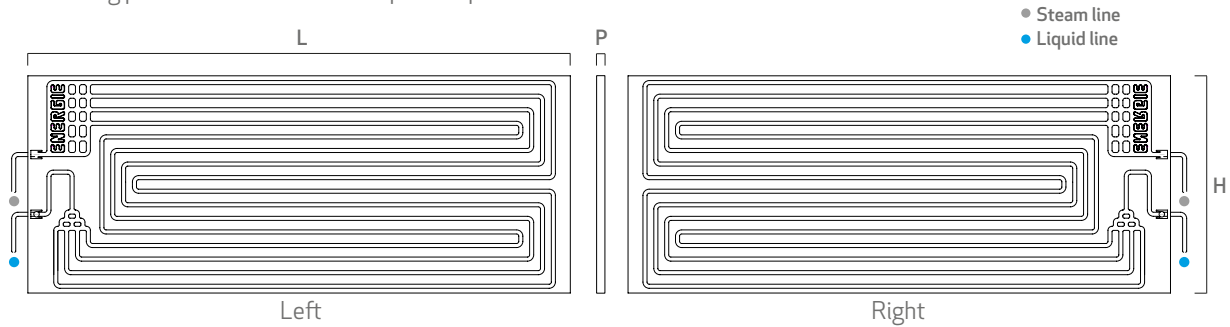
Technical drawing



	6 to 16 Panels	28 to 40 Panels
A	915	915
B	555	654
C	550	634.5

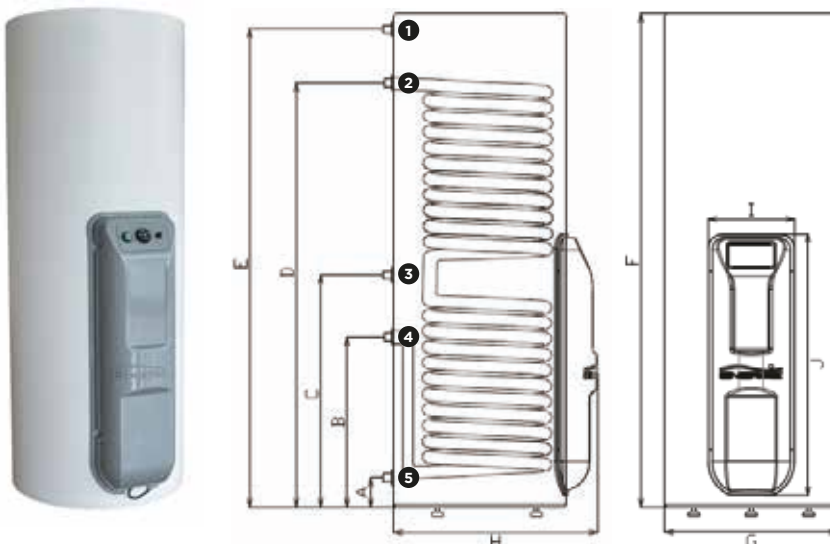
LEFT AND RIGHT THERMODYNAMIC SOLAR PANEL

Technical drawing | Measured in mm : L-2000 | H-800 | P-20



DHW CYLINDERS OF THE COMMON PLUS SOLUTIONS FOR CENTRAL HEATING AND SWIMMING-POOL

Technical drawing



	300 HP	500 HP
A	74 mm	92mm
B	681 mm	625 mm
C	815 mm	1784 mm
D	1251 mm	1515 mm
E	1671 mm	1927 mm
F	1750 mm	1990mm
G	650 mm	650 mm
H	950 mm	950 mm
I	290 mm	290 mm
J	879 mm	879 mm
1 (Hot Water)		4 (Coil Outlet)
2 (Coil Inlet)		5 (Cold Water)
3 (Recirculation)		

AQUAPURA SPLIT E MONOBLOC

HEAT PUMPS FOR DOMESTIC WATER HEATING

ENERGIE PRESENTS

AQUAPURA SPLIT
AQUAPURA MONOBLOC

Energy Class

A+



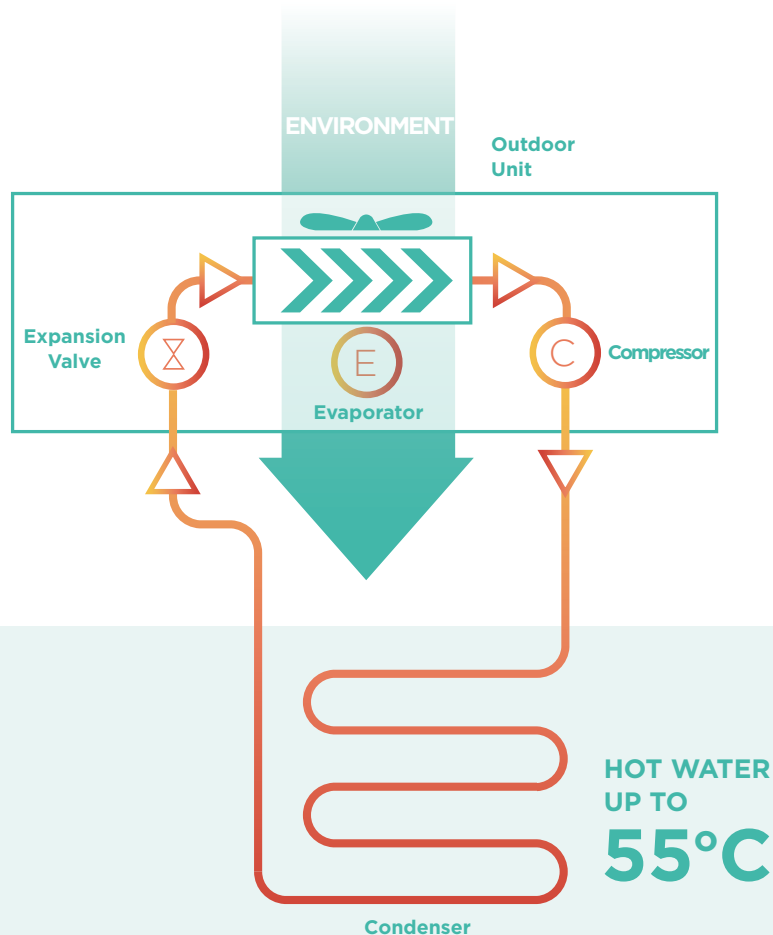
A Q U A P U R A

SPLIT | MONOBLOC

AQUAPURA

It is a system designed to get an optimal regulation of domestic water heating. The heat pump is a modern, efficient and clean solution that guarantees comfort in your home, always respecting the environment.

It is an intelligent way of using nature's resources in order to improve your quality of life. In adopting this solution you will be making a serious commitment in terms of reducing harmful emissions to our atmosphere thus contributing to the natural balance of the planet.



AQUAPURA SPLIT
AQUAPURA MONOBLOC

Operating Principle

There is a cooling liquid that is pumped to an outdoor heat exchanger (evaporator).

Here the liquid, with the help of a fan, absorbs the energy from the atmosphere to the temperature differential obtained outdoors. During this process, the liquid changes to a gaseous state.

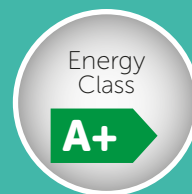
The gaseous state is sucked in by the mechanical part of the system, the compressor. Here it is compressed,

the pressure goes up and consequently the liquid temperature increases.

After this, the liquid travels to a second inside heat exchanger (condenser) and transfers heat to the water in the cylinder.

The fluid goes into liquid state by cooling down. The liquid pressure is reduced due to a strangulation that happens in the expansion valve and the process starts again.

75%
OF FREE
ENERGY



AQUAPURA SPLIT

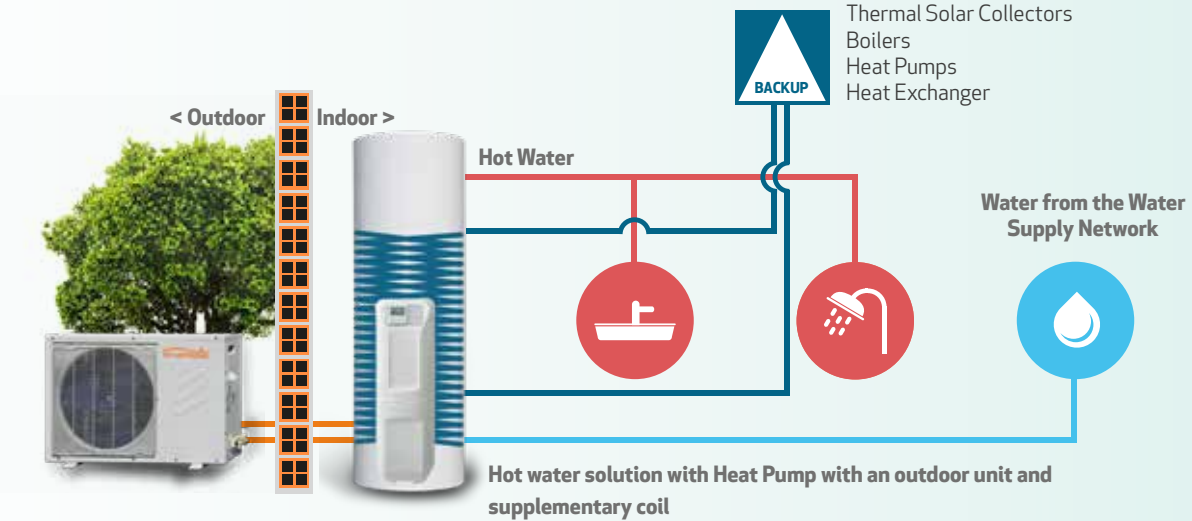
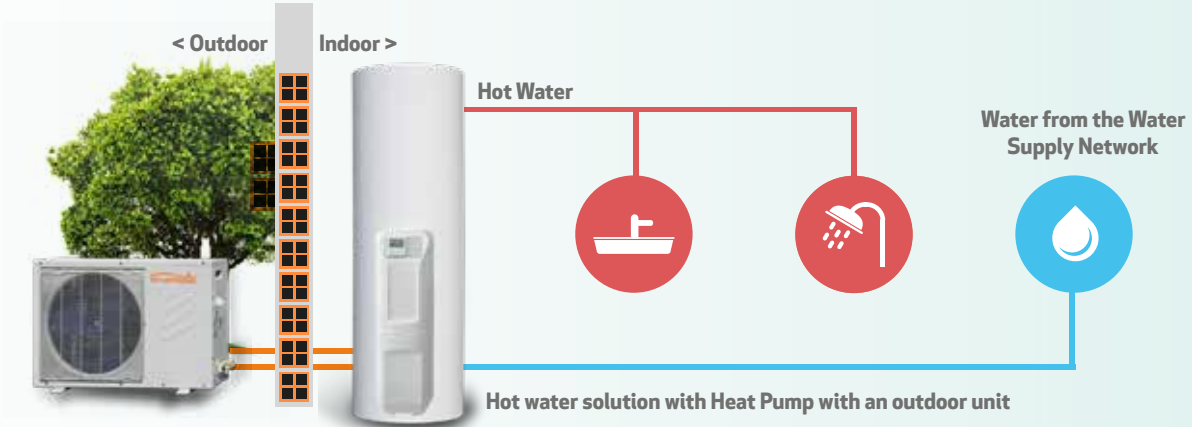
Heat Pumps for Domestic Hot Water

Available with capacities of 160, 250, 300 and 500 litres.
Cylinder in stainless steel

DOMESTIC HOT WATER



SPLIT | MONOBLOC



ELECTRONIC CONTROLLER



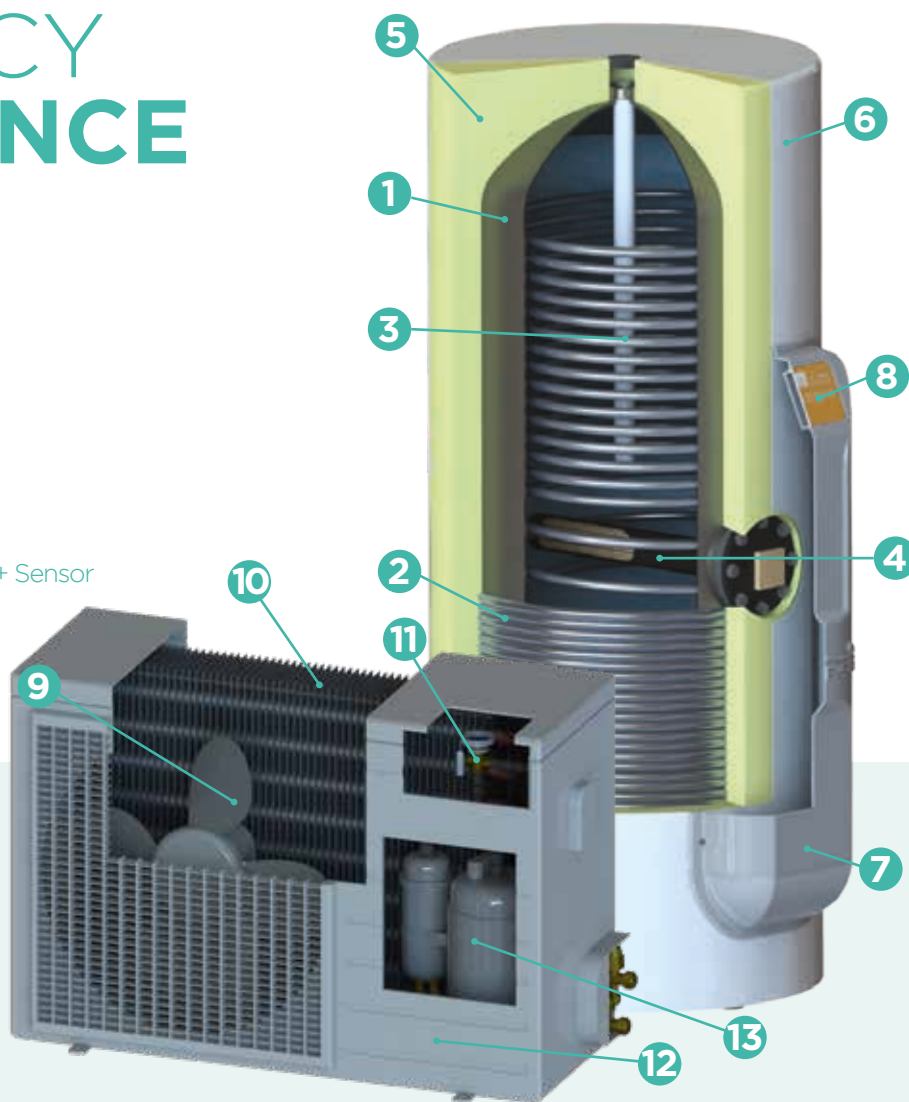
BUTTON FUNCTION

	(ON/OFF)
	(OK) Confirmation
	Clock / Programming
	ON/OFF Electrical resistance
	Change Values
	Go through Menus/ Submenus

- 3 DISTINCT OPERATING MODES
- 2 FUNCTIONALITIES
- ALLOWS TEMPERATURE DISPLAY
- ELECTRICAL SUPPORT
- TIME PROGRAMMING
- KEYBOARD LOCK

EFFICIENCY AND SILENCE

- 1 DHW Cylinder
- 2 Condenser (Coil)
- 3 Optional Supplementary Coil
- 4 Ceramic Resistance + Thermostat + Sensor
- 5 High Density Insulation
- 6 Outside Coating
- 7 Split Cover
- 8 Electronic Controller
- 9 Ventilator
- 10 Evaporator
- 11 Expansion Valve
- 12 Unit box
- 13 Compressor



- SILENCE AT HOME
- WITHOUT DUCTS
- REDUCED HEATING TIME
- LOW MAINTENANCE
- OUTSIDE THE CYLINDER CONDENSER (NO CONTACT WITH WATER)
- IMPROVEMENT OF THE ENERGY CLASSIFICATION OF THE BUILDING
- OPERATION TIME PROGRAMMING
- EFFICIENT FUNCTIONING EVEN AT LOW TEMPERATURES OUTDOORS
- EFFICIENCY AND SILENCE

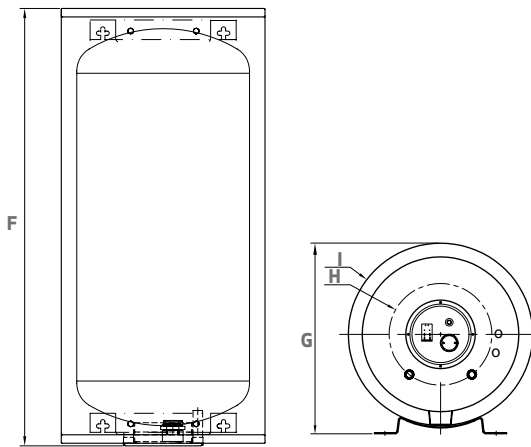


Check warranty conditions

COP 3,5
MAXIMUM EFFICIENCY



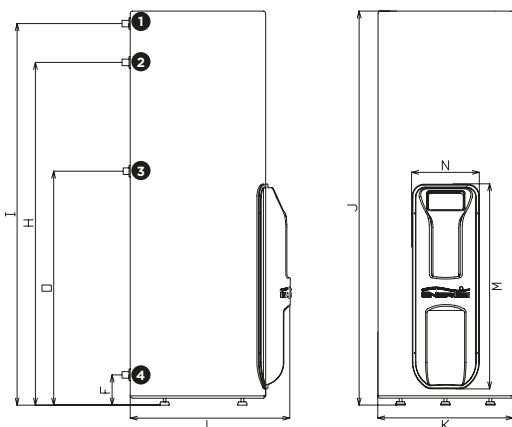
Split Heat Pump domestic hot water



Dimensions	160 i
F	1150
G	550
H	295
I	530

160i	
1 (Hot water)	1/2" Female
4 (Cold water)	1/2" Female

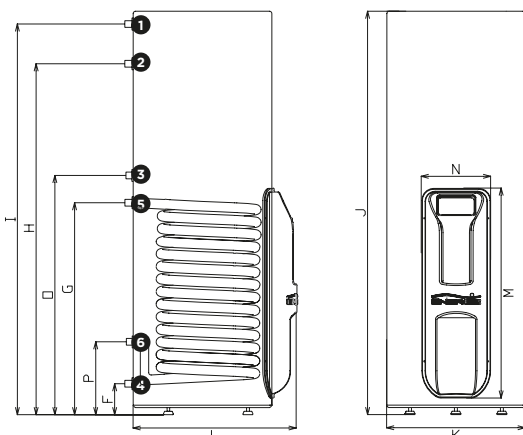
With flares valves on the split unit and on the cylinder.



Dimensions	250i*	300i	500i
F	89	92	92
O	830	772	772
H	1333	1172	1760
I	1469	1315	1927
L	685	755	755
J	1543	1415	1995
K	580	650	650
M	879	879	879
N	290	290	290

	250i 300i	500i
1 (Hot water)	3/4" Male	1" Male
2 (PT valve)	1/2" Female	1/2" Female
3 (Recirculation)	3/4" Male	3/4" Male
4 (Cold water)	3/4" Male	1" Male

With flares valves on the split unit and on the cylinder.



Dimensions	250ix*	300ix	500ix
F	89	92	92
P	203	221	625
G	696	621	1515
O	830	772	772
H	1333	1172	1760
I	1469	1315	1927
L	685	755	755
J	1543	1415	1995
K	580	650	650
M	879	879	879
N	290	290	290

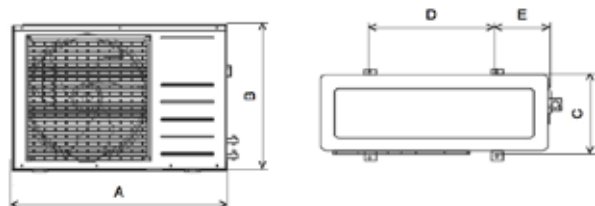
	250ix 300ix	500ix
1 (Hot water)	3/4" Male	1" Male
2 (PT valve)	1/2" Female	1/2" Female
3 (Recirculation)	1/2" Female	1/2" Female
4 (Cold water)	3/4" Male	1" Male
5 (Coil Inlet)	1" Male	1" Male
6 (Coil Outlet)	1" Male	1" Male

With flares valves on the split unit and on the cylinder.

* Hydraulic connections will be in the front of the storage tank, 45° on the right side. This change will take place from the 4th quarter of 2019.

Split Heat Pump domestic hot water

Technical drawing



Dimensions	Unidade Exterior
A	776
B	530
C	241
D	548
E	114

TECHNICAL DATA

CYLINDER	UNIT.	160i	250 i/ix	300 i/ix	500 i/ix
Capacity	L	160	250	300	500
Dimensions (ø height)	m	0,55 1,15	0,58 1,53	0,65 1,39	0,65 1,99
Gross weight	kg	47	62/69*	72/79*	110/121*
Material	-	Stainless Steel AISI444			
Outside coating	-	Metallic slate			
Insulation	-	High density polyurethane (55mm)			
Corrosion protection	-	----	Magnesium Anode 1"1/4		
Maximum water temperature	°C	80			
Maximum operation pressure	bar	7			
Thermal loss	kWh/24h	---	1,01	1,17	1,81
Coil* (ø length)	m	---	0,025 10	0,025 10	0,025 24
Coil thermal power*	kW	---	20**		54**
Protection Index	-	IPX1			
Auxiliary coil power	W	1500			2200
Refrigerating connections	pol.	1/4" 3/8"			

*Models IX

**Primary circuit (Te = 90°C; Ts = 80°C); DHW circuit (Te = 10°C; Ts = 60°C)

OUTSIDE UNIT

Weight	kg	33			
Refrigerating connections	pol.	1/4" 3/8"			
Sound level	dB	59			
Power supply	V/Hz	230 / 50			
Protection Index	-	IPX1			
Absorbed electrical power (BC) (med / max)	W	600 / 1000			
Thermal power supplied (BC) (med / max)	W	1920 / 3200			
Maximum distance between refrigeration connections	m	20 (high max. 10)			
Outdoor operating temperature range	°C	-14 / 43			
Refrigerating fluid	type/g	R134a / 1600			
Air flow	m ³ /h	1300			

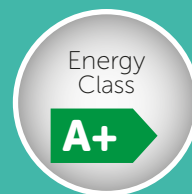
PERFORMANCE

Tapping profile	-	L	XL	XL	XXL
COP	-	3,26	3,35	3,44	3,48
Amount of water removed at 40°C	L	194	323	362	572
ErP Class	-	A+	A+	A+	A+
Energetic efficiency	%	135	139,3	143,2	139
Annual electricity consumption	kWh/year	759	1202,6	1170	2560

*A14 / W54 according to EN16147 and Delegated Regulation (EU) N°812 / 2013

DOMESTIC HOT WATER





AQUAPURA MONOBLOC

Heat Pumps for Domestic Hot Water

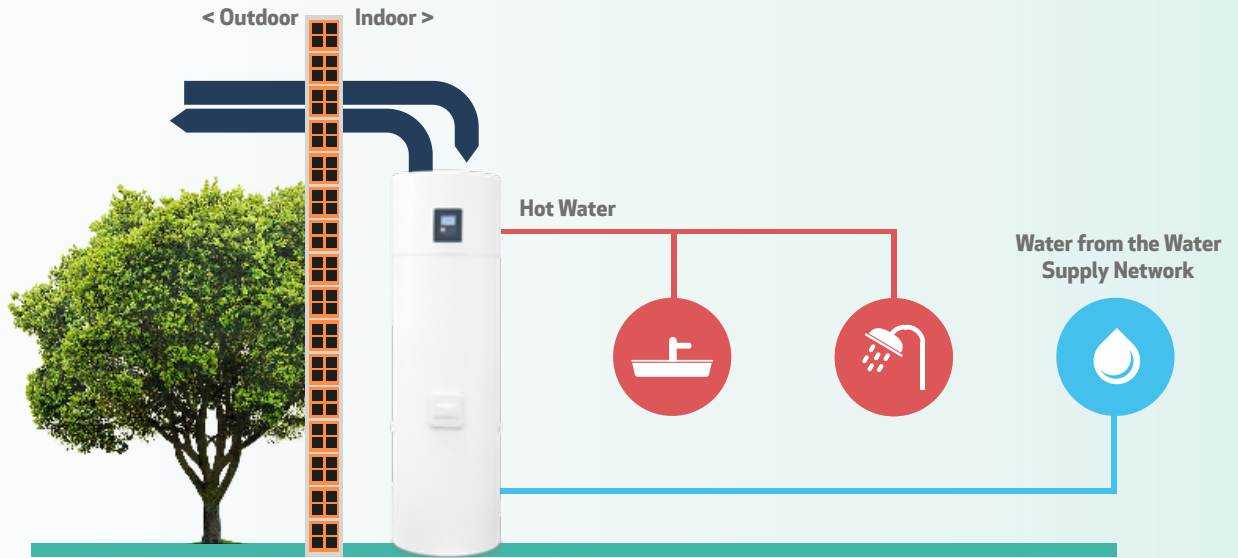
Available with capacities of 100, 200, 250 and 300 litres.
Cylinder in enamelled and stainless steel

DOMESTIC HOT WATER

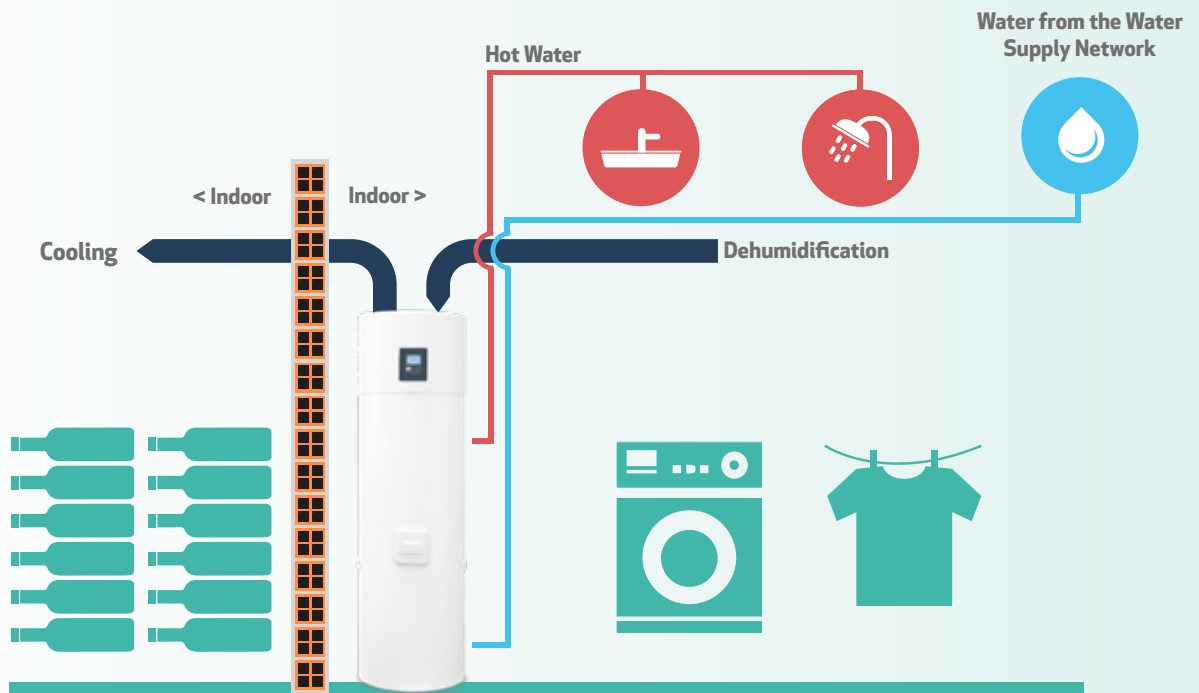


WALL APPLICATION

SPLIT | MONOBLOC



Standard Installation



Installation with dehumidification and refreshing of the space

EASY TO INSTALL



Check warranty conditions



**WALL
APPLICATION**

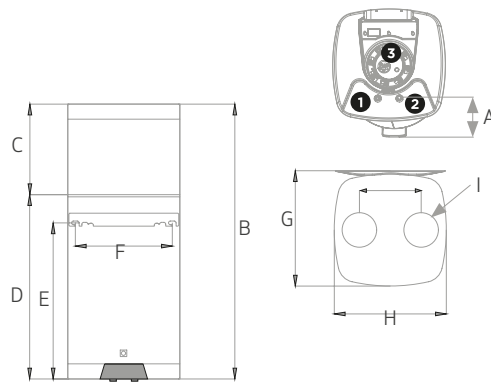


- MINIMUM SPACE INSIDE YOUR HOUSE
- HIGH EFFICIENCY LEVEL
- WORKS WITH PV SYSTEMS
- EASY TO INSTALL
- DEHUMIDIFIES THE AIR
- ANTI LEGIONELLA FUNCTION
- QUIET OPERATION

- STAINLESS STEEL CYLINDER
- FUNCTIONAL, SIMPLE AND ATTRACTIVE DESIGN
- ECONOMIC AND ECOLOGICAL
- WORK UP TO -5°C
- 55°C WATER TEMPERATURE EVEN DURING WINTER

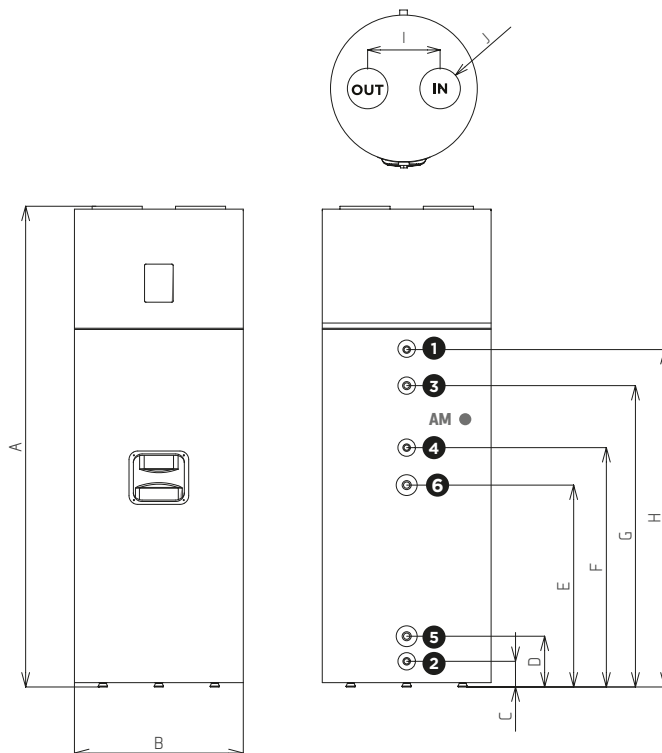
Monobloc Heat Pump domestic hot water

Technical drawing



Dimensions	100esm
A	116
B	1725
C	420
D	855
E	724
F	450
G	535
H	520
I	160
1 (Hot water)	3/4" M
2 (PT valve)	3/4" M
3 (Anode)	

Technical drawing

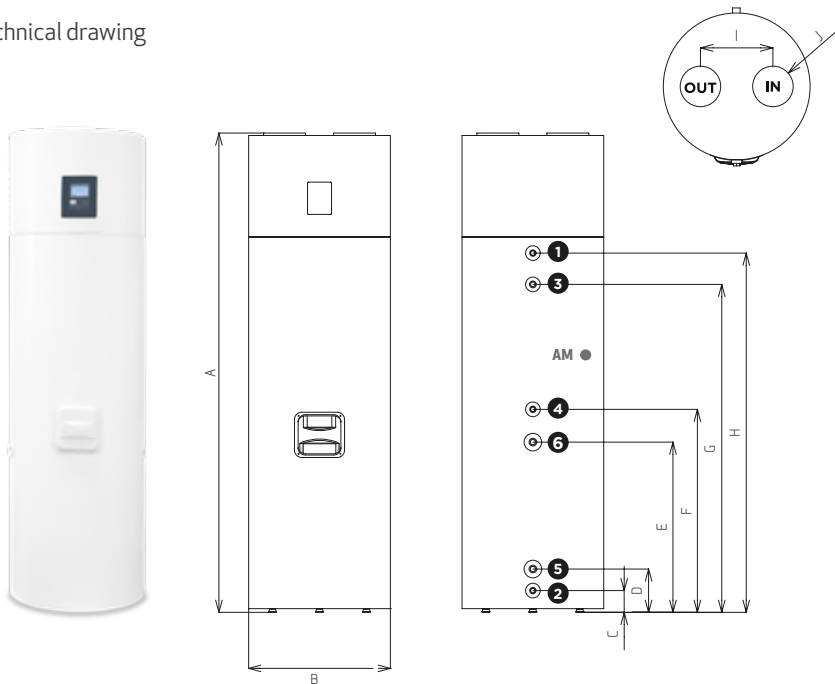


Dimensions	200i / 200ix*
A	1666
B	580
C	89
D	205
E	696
F	830
G	1034
H	1170
I	286
J	160
1 (Hot Water)	3/4" M
2 (Cold Water)	3/4" M
3 (PT valve)	1/2" F
4 (Recirculation)	1/2" F
5 (Coil Inlet)	1" M
6 (Coil Outlet)	1" M

* Hydraulic connections will be in the front of the storage tank, 45° on the right side. This change will take place from the 4th quarter of 2019.

Monobloc Heat Pump domestic hot water

Technical drawing



Dimensions	250i / 250ix*	300i / 300ix
A	1975	1835
B	580	650
C	89	92
D	205	221
E	696	621
F	830	772
G	1333	1172
H	1469	1315
I	286	286
J	160	160
1 (Hot Water)	3/4" M	
2 (Cold Water)	3/4" M	
3 (PT valve)	1/2" F	
4 (Recirculation)	1/2" F	
5 (Coil Inlet)	1" M	
6 (Coil Outlet)	1" M	

ELECTRONIC CONTROLLER

MODEL 100



- 1 ON/OFF
- 2 Unlock Keyboard | Enter Menu | Confirm Parameters
- 3 Select Operation Mode | Decrease Values
- 4 Activation Of The Defrosting Cycle | Increase Values

MODELS 200 | 250 | 300



- 1 Color LCD
- 2 ON/OFF
- 3 Menu
- 4 Compressor ON/OFF
- 5 Electrical Element
- 6 Anti-Legionella
- 7 Enter

ECO - The equipment only works as heat pump.

AUTO - The equipment works as a heat pump and with electrical elements should it be required.

BOOST - The equipment works simultaneously as a heat pump with the electrical element.

VACATIONS - Allows the user to setup a certain number of days on which the system will be off. On the last days the system will perform a anti-legionella cycle.

DISINFECT - Heating cycling at a higher temperature in order to disinfect the water (legionella) May be programed automatically or manual.

PV FUNCTION - Increases the water temperature set point when PV in producing electricity heating water for free.

Monobloc Heat Pump domestic hot water

TECHNICAL DATA

	Unid.	100esm	200i	200ix	250i	250ix	300i	300ix
Power Supply	V-/Hz				220-240/50			
Thermal Power	W				1800			
Electrical Power	W	400-650			400-700			
Electrical Element	W	1000			1500			
Cop En255-3/En16147	-	2.8	3.47	3.47	3.25	3.25	3.3	3.3
Heating Time*(EN16147)	h:m	02:20	05:23	05:23	06:46	06:46	07:01	07:31
Amount of water removed at 40 °C in one extraction (EN16147)	l	109	242	241,1	314,6	313,1	362	362
Sound Level @ 2m	dB				51			
Refrigerant Fluid	-				R134a			
 ErP Class	-				A+			
Tapping Profile	-	M	L	L	XL	XL	XL	XL

DIMENSIONS /WEIGHT / CONNECTIONS

Dimensions Ø/H	mm	520/1275	580/1667	580/1955	580/1955	580/1955	650/1820	650/1820
Weight	kg.	70	73	88	80	88	93	98
Air Vent Diameter	mm				160			
Cold Feed & Hot Water Diameters	Pol.	1/2"			3/4"			

HOT WATER CYLINDER

Nominal Capacity	l	100	200	200	250	242	300	300
Maximum Operating Pressure	bar				7			
Material	-	Enamelled			Stainless Steel***			
Insulation	-				High Density****			
Corrosion Protection	-				Magnesium Anode			
Auxiliary Coil (Comp./Ø)	m/mm	-	-	10/25	-	10/25	-	10/25
Auxiliary Coil Hydraulic Connections	-	-	-	1"	-	1"	-	1"

WORKING CONDITIONS

Outside Air Temperature Min/Max	°C				-5/40			
Maximum Water Temperature - Eco Mode	°C				55			
Maximum Water Temperature - Boost Mode	°C				70			

EN16147: Water heating from 10 °C to 54 °C

*Water temperature raised from 10°C up to 54°C. Air temperature 7°C. | ***High Corrosion Resistance | **** 60mm Thickness

INVERTER, EVOTERM E X30

HEAT PUMPS FOR HEATING AND COOLING DOMESTIC HOT WATER

ENERGIE PRESENTS

AQUAPURA INVERTER
AQUAPURA EVOTERM COMBI
AQUAPURA X30



A Q U A P U R A

HEATING AND COOLING DOMESTIC HOT WATER

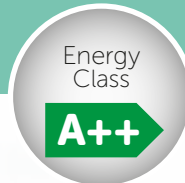
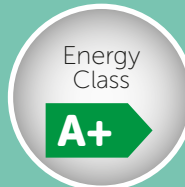




AQUAPURA INVERTER

Heat pump for heating and cooling |
domestic hot water

12 and 16 kW monobloc heat pump



HEATING AND COOLING DOMESTIC HOT WATER

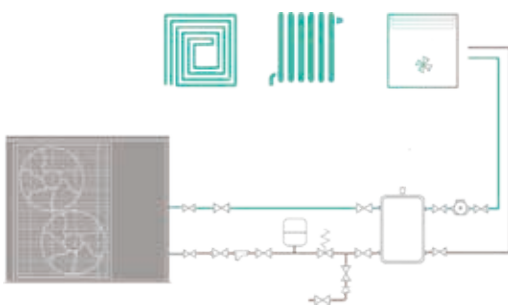


HIGH EFFICIENCY HEATING AND COOLING

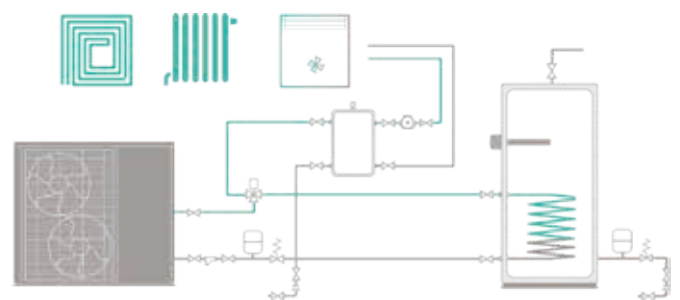


- HEATING AND/OR COOLING
- REDUCED MAINTENANCE AND LOW OPERATING NOISE
- OPERATING WITH EXTERNAL TEMPERATURES DOWN TO - 25°C
- CONSTRUCTION WITH ANODIZED COATING RESISTANT TO NATURAL CORROSION
- DOMESTIC HOT WATER FUNCTION (CONTROL BOX)
- THE IDEAL HEAT PUMP FOR UNDERFLOOR HEATING
- EFFICIENT AND QUIET SOLUTION
- ATTRACTIVE AND COMPACT DESIGN
- HEAT PUMP WITH THE CAPABILITY TO HEAT HOT WATER
- FACILITATES HEATING AND COOLING IN CERTAIN SITUATIONS

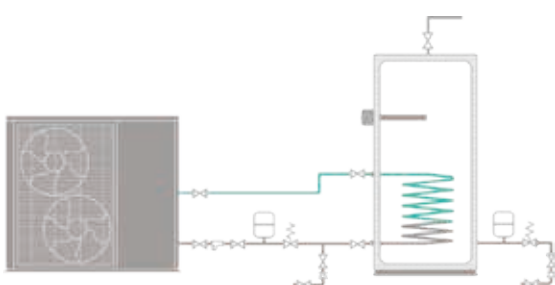
Technical drawing



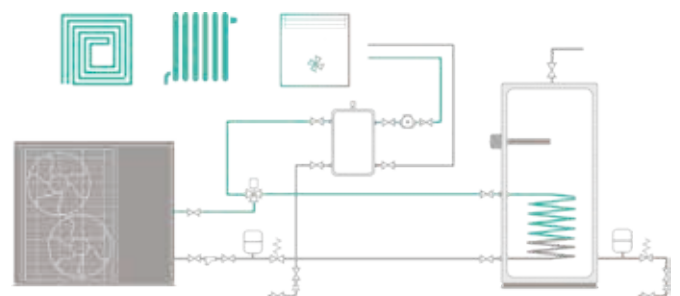
HEAT PUMP WITH BUFFER



HEAT PUMP WITH BUFFER + DHW



HEAT PUMP FOR DOMESTIC HOT WATER (DHW)



HEAT PUMP WITHOUT BUFFER + DHW

Inverter heat pump for heating and cooling | domestic hot water

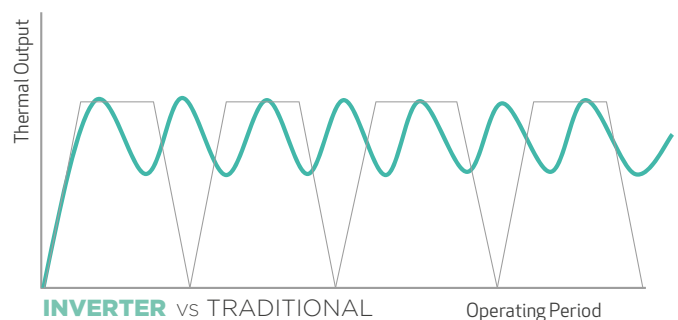
TECHNICAL CHARACTERISTICS		INVERTER 8-12	INVERTER 5-18
Power supply	/	220-240V~/50Hz	220-240V~/50Hz
Refrigerant type	/	R410A	R410A
Heating capacity	kW	4,20 – 12,30	5,40 – 18,50
Electric consumption	kW	0,80 – 3,40	1,20 – 5,10
Power supplied (heating) ¹	kW	11,60	17,30
Electrical consumption (heating) ¹	kW	2,76	4,18
COP	/	4,21	4,14
Cooling capacity	kW	2,8 – 10,0	5 – 14,5
Electrical consumption	kW	1,0 – 4,0	1,6 – 6,0
Power supplied (cooling) ²	kW	9,5	14,10
Electrical consumption (cooling) ²	kW	2,66	4,01
EER	/	3,57	3,52
Maximum water temperature	°C	55	55
Electrical heater (Backup)	/	Integrated (3kW)	No
Max current input	A	18,0 + 13,0(Electrical heater backup)	27,0
Number of Compressors	/	1	1
Compressor type	/	DC Inverter	DC Inverter
Water pump	/	Integrated	Integrated
Minimum flow	m ³ /h	1,6	2,8
Number of Fans	/	1	2
Hydraulic connections (inlet/outlet)	Pol.	1" / 1"	1" ¼ / 1" ¼
Sound	dB(A)	54	58
Net weight/Packaged weight	Kg	110/123	163/180
Net dimensions (L/ A/P)	mm	960/910/440	990/1320/395
Packaged dimensions (L/ A/P)	mm	1010/920/470	1040/1440/450
Energy efficiency (ErP 35°C)	%	153	157
Energy efficiency (ErP 55°C)	%	122	128
Energy efficiency class (ErP 35°C)	/	A++	A++
Energy efficiency class (ErP 55°C)	/	A+	A++

1) Heating Mode • Ambient temperature DB/WB 7°C / 6°C; • Outlet / inlet water temperature: 35°C / 30°C.

2) Cooling mode • Ambient temperature DB/WB 35°C / 24°C; • Water temperature (inlet / outlet): 7°C / 12°C.

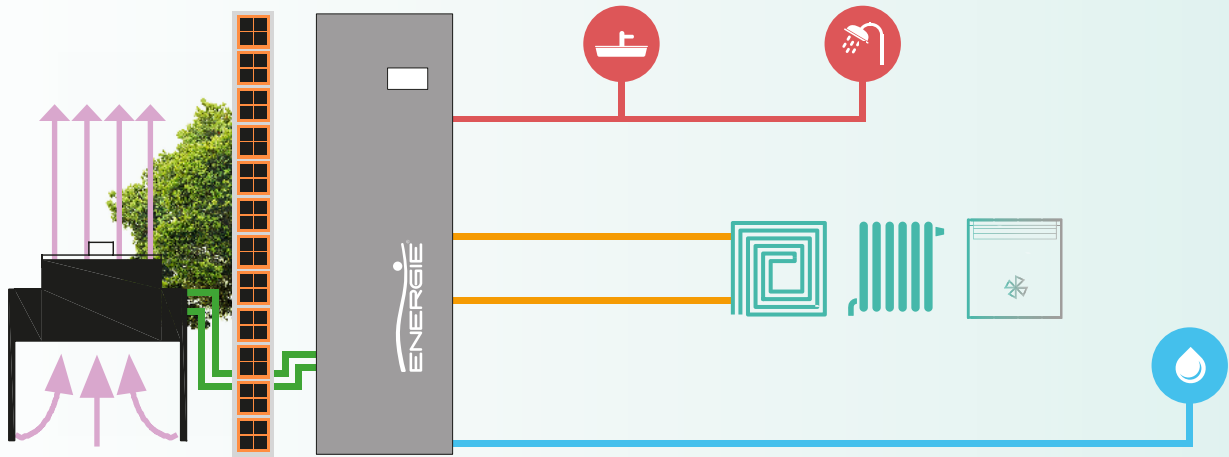
DC INVERTER Technology

The DC INVERTER technology differs from many other existing technologies in the market since it possesses compressors with the capacity to vary the frequency of operation according to the exact comfort needs of the house HVAC. There is therefore lower energy consumption.

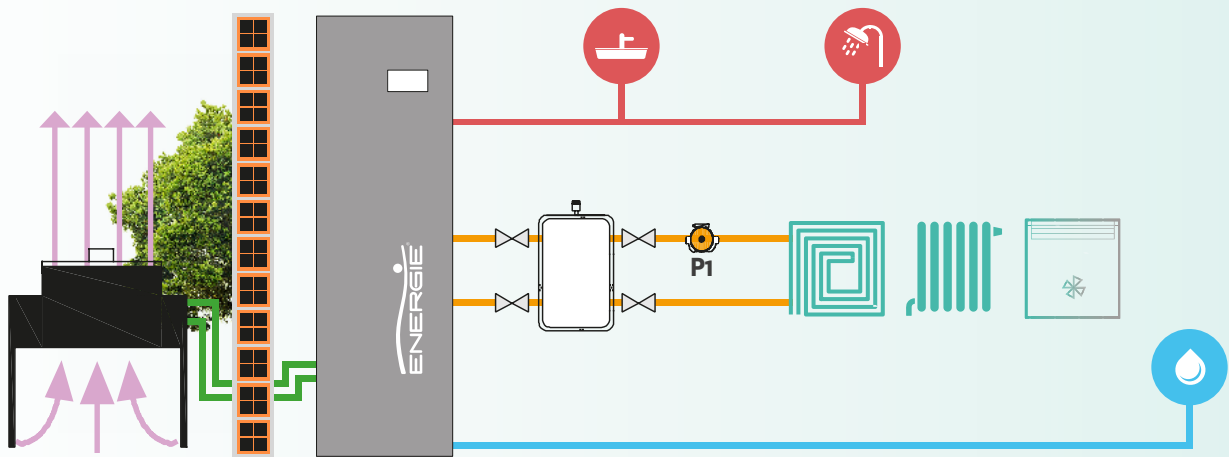


EVOTERM COMBI 3-13

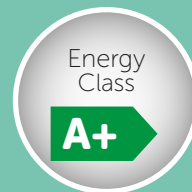
NEW INSTALATION



INSTALLATION WITH INERTIA



- Refrigerant
- Primary Climatization
- Domestic Hot Water Circuit
- Cold Water



EVOTERM COMBI 3-13

Heat pump for heating and cooling |
domestic hot water

13 kW split heat pump

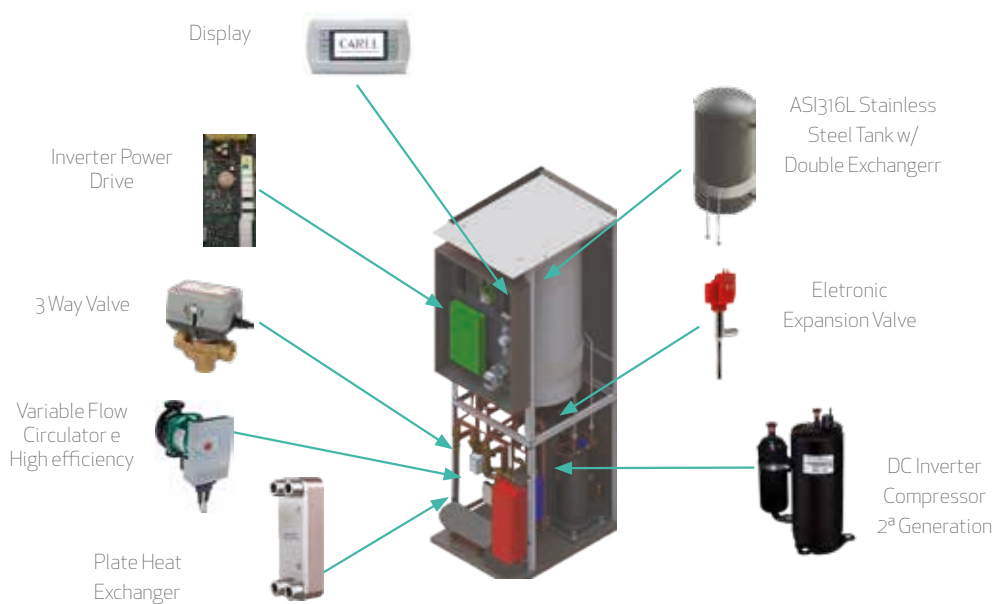
HEATING AND COOLING | DOMESTIC HOT WATER



HIGH EFFICIENCY HEATING AND COOLING



- INTEGRATED DHW TANK OF 200 L IN STAINLESS STEEL AISI 316L
- DHW PRODUCTION UP TO 70°C IN BC MODE WITH HEAT RECOVERY
- MAXIMUM DISTANCE BETWEEN UNITS UP TO 20M
- ErP READY
- DC INVERTER 2ND GENERATION TECHNOLOGY
- INDOOR UNIT OF REDUCED CLADDING (<1M²)
- OUTDOOR UNIT CABLE OF HORIZONTAL OR VERTICAL INSTALLATION
- CAREL CONTROL
- SOFT START SYSTEM
- TUV MANUFACTURING QUALITY
- DYNAMIC ANTI-FREEZE EVAPORATOR
- SIMPLE "PLUG AND PLAY" INSTALLATION
- DC INVERTER AXIAL FAN
- COMPACT DESIGN UNITS
- EQUIPPED WITH HYDRAULIC KIT FOR CLIMATIZATION AND DHW.



CAREL

wilo

Danfoss

TOSHIBA

Honeywell

Inverter heat pump for heating and cooling | domestic hot water

TECHNICAL CHARACTERISTICS

INDOOR UNIT

Heating Capacity		kW	3 - 13
	Nominal (1)	kW	6,00
	Maximum	kW	13,00
Nominal Consumption		kW	1,34
COP (1)			4,5
Cooling Capacity (2)		kW	3 - 12,7
	Nominal (2)	kW	4,70
	Maximum	kW	12,70
Nominal Consumption		kW	1,12
EER (2)			4,2
Energy Class - Environment Heating			A++
Dimensions	AxLxP	mm	1900x600x840
Weight	Kg		243
Maximum Temperature		°C	60
Hydraulic Connections		Outlet / Inlet	1" M
Domestic Hot Water (DHW)	Tank	L	200
	Material		INOX AISI 316L
	Máx. Temp. (compressor only)	°C	70
	Electrical Backup	W	1500
	DHW Connections	Cold / Hot	3/4" M
	COP DHW (3)		3,27
	Consumption Profile		L
	Efficiency ^a	%	138
	DHW Energy Class		A+
Refrigerant	Type		R410A
	Preload	Kg	3,5
	Connections	Liquid	1/2"
		Vapor	3/4"
Sound Pressure	(distance 1m)	dBA	42
Electrical Supply	Type		230V or 400 V
	Electrical Cable	230V	mm ² 3G6
		400V	mm ² 5G4
	Protection Circuit Breaker	230V	40A
		400V	32A

OUTDOOR UNIT

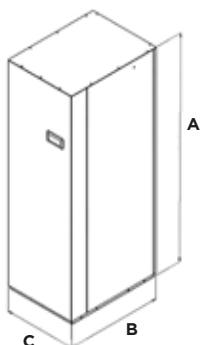
Dimensions	AxLxP	mm	700x940x600
Weight		Kg	37
Sound Pressure	(distance 10m)	dBA	34
Type			Evaporator + Fan
Fan			Silent Axial Fan

INTERCONNECTION BETWEEN UNITS

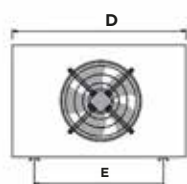
Electrical wiring		mm ²	3G1,5 + 4 x 0,5
Maximum distance without addition of refrigerant		m	10
Maximum distance with addition of refrigerant		m	20
Maximum drop		m	15

(1) According to the standard EN 14511, A 7 / W 30/35 | (2) According to the standard EN 14511, A 35 / W 18/23 | (3) According to the standard EN 16147, A 14 / W 10/54

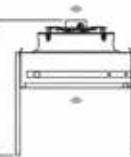
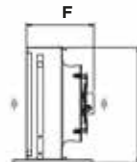
INDOOR UNIT



OUTDOOR UNIT



HORIZONTAL POSITION

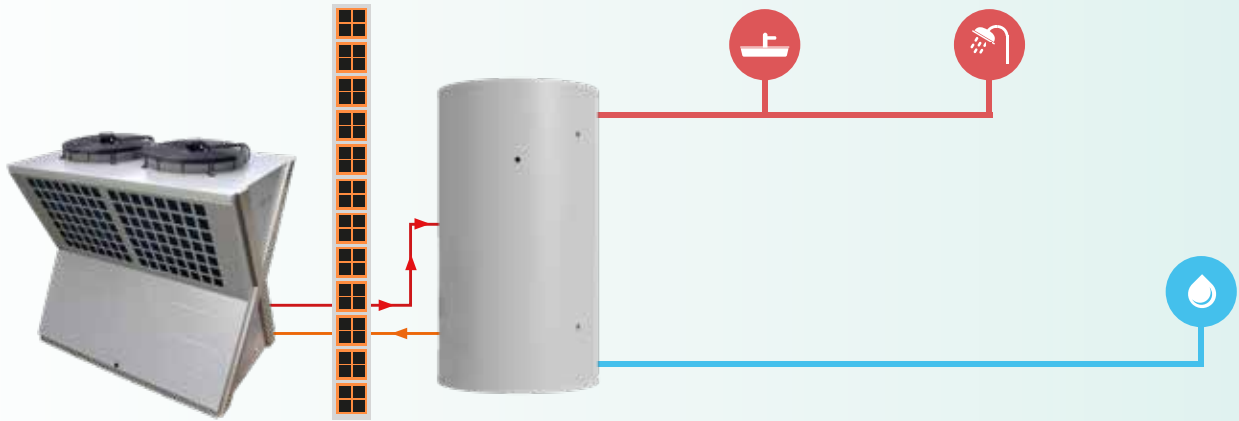


VERTICAL POSITION

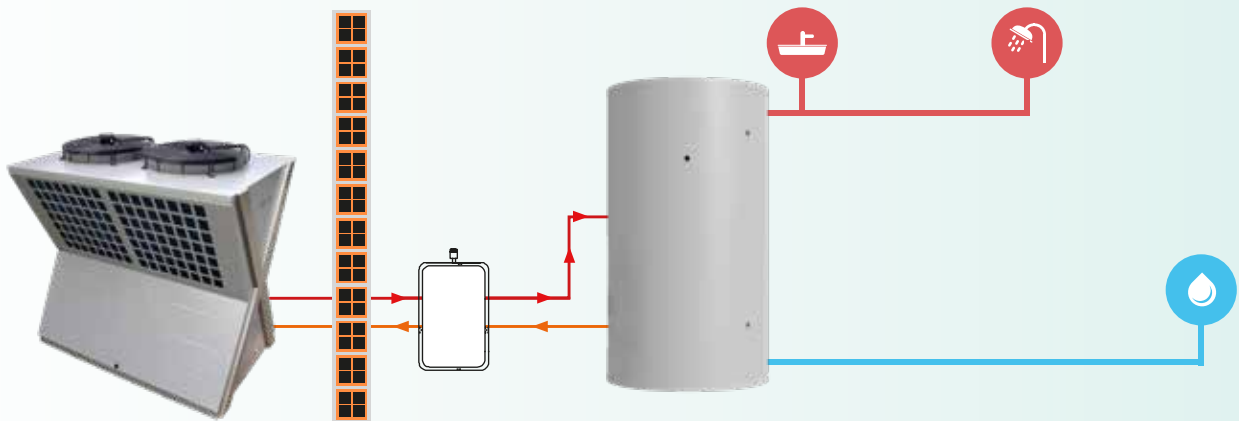
- A** 1900 mm
- B** 810 mm
- C** 600 mm
- D** 950 mm
- E** 790 mm
- F** 404 mm
- G** 684 mm
- H** 804 mm

AQUAPURA X30

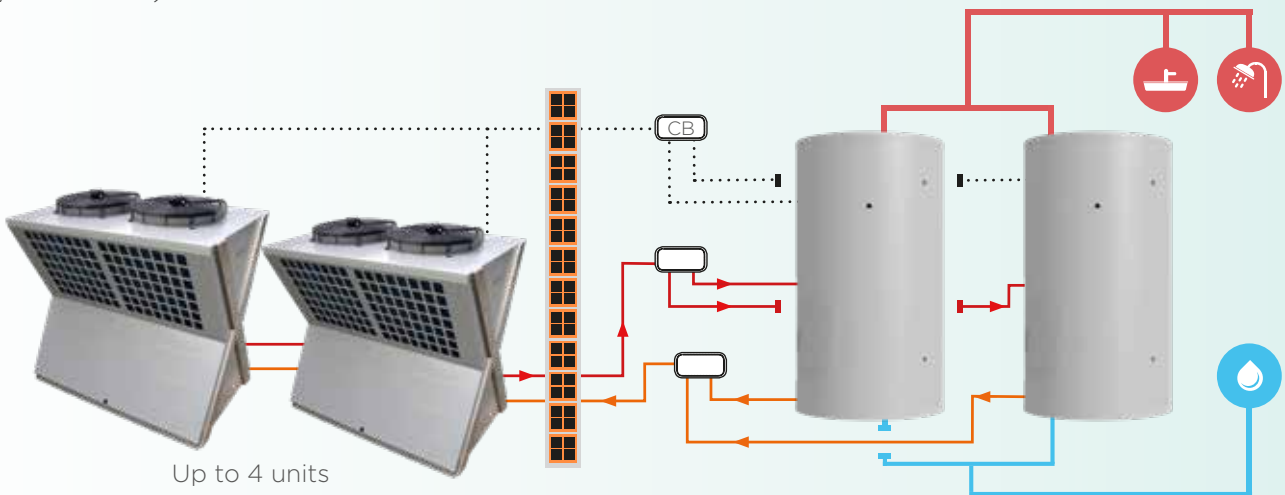
STANDARD INSTALATION



INSTALLATION WITH BUFFER TANK (cold weather regions)



INSTALLATION MODULAR SYSTEM (W/ control box)





AQUAPURA X30

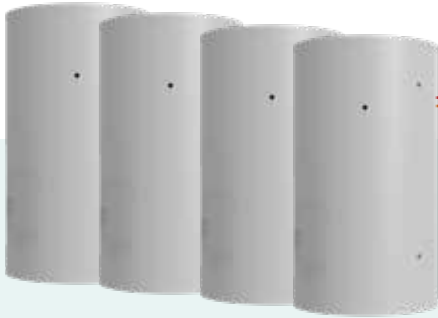
Heat pump for heating and cooling |
domestic hot water

From 30 to 120 kW monobloc heat pump

HEATING AND COOLING
| DOMESTIC HOT WATER



UP TO 120 KW OF CAPACITY



- DHW PRODUCTION UP TO 80°C
- ONLY 1 COMPRESSOR
- COMPACT DESIGN
- INTEGRATED WATER PUMP
- CAREL CONTROL
- SIMPLE INSTALLATION "PLUG & USE"
- MODULAR SYSTEM UP TO 120 KW
- CONTROL BOX (OPTIONAL)
- EVI SCROLL TECHNOLOGY
- UP TO 120 KW OF CAPACITY CONNECTING 4 UNITS OF 30 KW EACH

CONSUMPTION OF PRIMARY ENERGY

The heat pumps are capable of heating and cooling as well as domestic hot water. Those solutions stand out for their high energy efficiency. They can reach an energy classification up to A++ for heating. They also stand out for their ease of integration with other heating systems and easy installation.

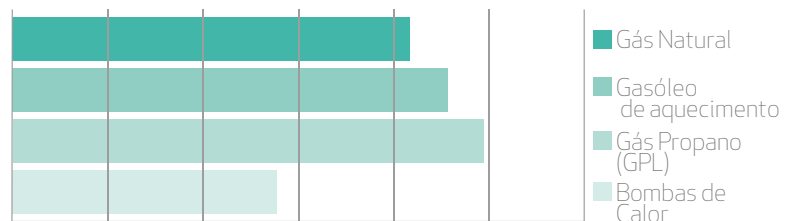
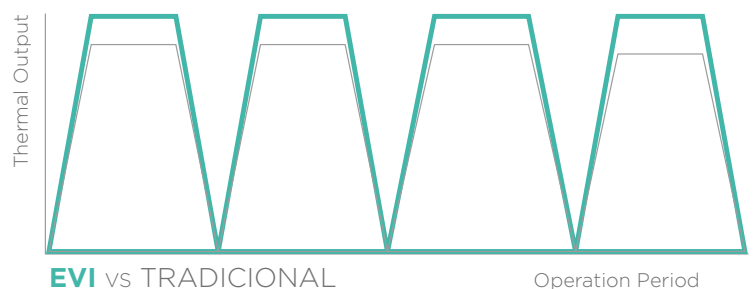


GRAFICO DE CONSUMO ENERGÉTICO

EVI TECHNOLOGY

Optimized vapor injection EVI technology gives superior efficiency to conventional technology. This is achieved with an intermediate vapor injection during the compression cycle thereby reducing the high-speed working frequency of the compressors, obtaining an increase in the heat production capacity with lower energy consumption.



Monobloc heat pump for heating and cooling | domestic hot water

TECHNICAL CHARACTERISTICS

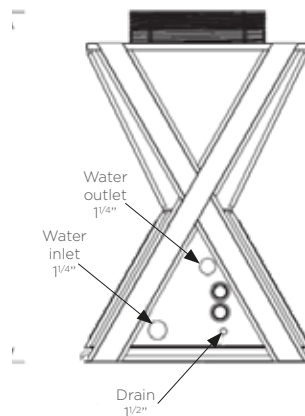
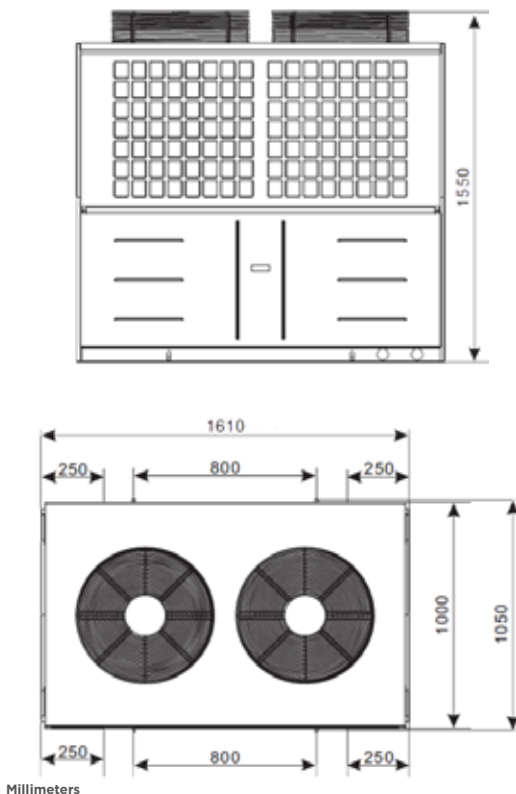
OUTDOOR UNIT

Equipment	Air-Water Heat Pump
Model	Energie AQUAPURA X30
Refrigerant	R134a
Power supply	380V/3N-/50Hz
Maximum heating capacity	40,00 kW *
Heating capacity	26,50 kW **
COP	3,70 **
Heating capacity	32,00 kW ***
COP	3,48 ***
Domestic Hot Water production	550 l/h ***
Compressor	EVI Scroll
Number of compressors	1
Compression stages to reach max. temperature	1
Water pump	GRUNDFOS
Nominal flow	5,00 m ³ /h
Exchanger	DHW Helical Encapsulated
Number of fans	2
Fan orientation	Vertical
Noise level	62 dB(A)
Dimensions (L×W×H)	1610×1050×1550 mm
Weight	362 kg
Outdoor temperature	-7°C to 45°C
Maximum operating temperature	80°C
Recommended operation temperature	75°C
Hydraulic connections	1 1/4"

* DHW production (A35/ -0°C W15-75°C, COP 3,74) |

** according to EN 14511 (A7/6°C W30/35°C) |

*** DHW production (A14°C W15-65°C)



CAREL DISPLAY





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