TERMODINAMICO

Thermodynamic heat pump water heater with sanitary storage

RENEWABLE ENERGY

OPERATION ALL YEAR ROUND

ECOLOGIC GAS

PHOTOVOLTAIC COMBINATION

ENERGY SAVING

DHW

SIMPLE INTEGRATD PROGRAMMING

EASY INSTALLATION

Technical and construction features

THERMODYNAMIC is an innovative system for the production of domestic hot water based on the classic operation of the heat pump connected to a thermodynamic solar panel capable of capturing any type of solar and environmental energy (Carnot's principle):
- Energy from diffuse and direct solar radiation
- Convection energy of air and wind
- Conduction energy of air, rain and snow This product is able to improve both the energy performance of the traditional heat pump and the classic solar thermal collector. THERMODYNAMIC was created to work all year round in any weather condition and at any time of the day, both day and night. The thermodynamic panel is made of anti-corrosion anodized aluminum and can be installed in any position both horizontal and vertical on the roof or hung on a wall.

This particular technology allows to capture the energy on both sides of the panel thanks to the ecological gas R134A that circulates freely inside it.

However, to make the most of solar radiation, the ideal exposure remains towards the south with an inclination between 30 ° and 90 ° considering that the more direct the sun is irradiated, the more its yield will increase.

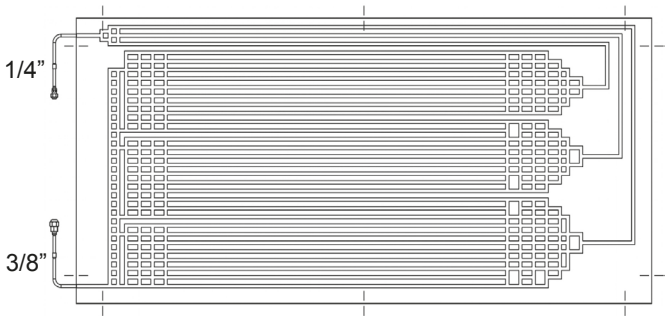
The following configurations are available:

1 Standard THERMODYNAMIC with a solar panel thermodynamic 1800 x 800 mm

2 THERMODYNAMIC S with a solar panel 1800 x 800 mm thermodynamic and auxiliary exchanger for use in combination with a wood or pellet or methane boiler

Model	Code	€
TERMODINAMICO	**37020100**	**3.140,00**
TERMODINAMICO S	**37020200**	**3.380,00**

Dimensions and overall dimensions of the thermodynamic panel



Shipping weight	kg	7,3
Dimensions	mm	1800x800x20
Suction line connection	Ø	3/8” SAE FLARE
Liquid line connection	Ø	1/4” SAE FLARE

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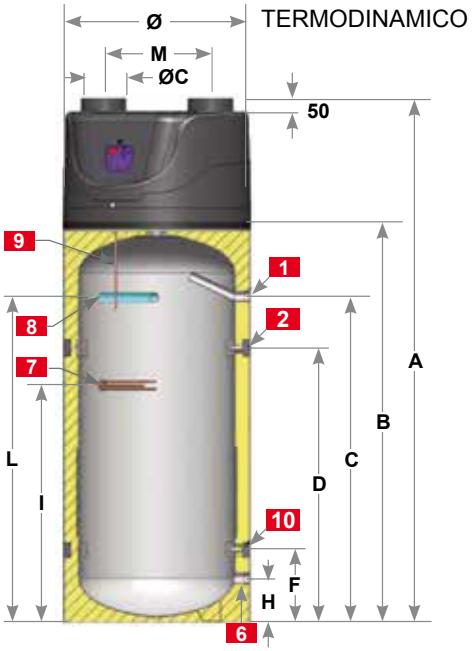
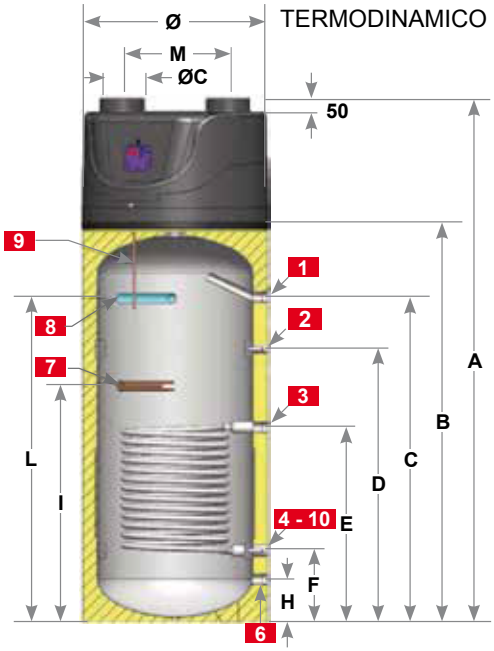
DimensionsTERMODINAMICO





MODEL	U.M.	TERMODINAMICO	TERM0DINAMICO S
A	mm	1845	1845
B	mm	1410	1410
C	mm	1150	1150
D	mm	965	965
E	mm	-	690
F	mm	-	255
G	mm	-	365
H	mm	155	155
I	mm	835	835
L	mm	1145	1145
M	mm	425	425
Øc	mm	160	160
Ø	mm	660	660

	DESCRIPTION	DIMENSIONS
1	Hot water	1”
2	Recirculation	1/2”
3	Alternative energy delivery	1”
4	Alternative energy return	1”
5	Condensate drain	Ø 20 mm
6	Cold water	1”
7	Electrical resistance	1” 1/4
8	Anode	1” 1/4
9	Control probe well	Ø 12 mm
10	Probe well	Ø 12 mm

Technical data table TERMODINAMICO - TERMODINAMICO S

DESCRIPTION	U.M.	TERMODINAMICO	TERMODINAMICO S
Capacity	l	273	268
Auxiliary coil surface	m^2	-	1,5
Flow rate needed by the coil 80/60 °C	m^3/h	-	0,9
Domestic hot water production 80/60 °C - 10/45 °C (DIN 4708)	m^3/h	-	1,6
Maximum operating pressure of the boiler	bar	6	
Max working pressure of the auxiliary coil	bar	10	
Power supply		230V/1/50Hz	
Max electrical current absorbed	A	10	
Max water temperature	°C	60 (55 di fabbrica)	
Resistance electrical power	W	1500	
Thermal power (average storage temperature 50 °C)	W	2000	
Electric power absorbed by the compressor (average)	W	520	
Electric power absorbed by the compressor (max)	W	720	
Carica gas refrigerante R134a	g	1050	
Sound level	dB(A)	46	
Maximum length of refrigerant pipes (not included)	m	8 max	
Maximum compressor height difference and thermodynamic panel	m	5 max	
Peso accumulo sanitario a vuoto	Kg	112	127
Sanitary accumulation weight in operation	Kg	385	395