ENERGIE®
THERMODYNAMIC SOLAR ENERGY

PORTUGUESE MANUFACTURING
SINCE 1981

SOLAR BLOCK ULTRA & ULTRA PLUS
HEATING

TECHNOLOGY DC INVERTER LAST GENERATION

SYSTEM SOFT START

KIT HYDRAULIC INCLUDED

WORKS -15°C UP TO

THERMODYNAMIC SOLAR SYSTEM

WORKING PRINCIPLE

The evaporation of the fluid that runs inside the closed looped circuit happens on the solar panel by capturing the heat from the sun, wind, rain and surrounding air by natural convection. The heated fluid then travels to the compressor, that will compress the fluid increasing its pressure and also it's temperature.
Then it goes to the heat exchanger where where this heat is transferred to the water. After this, an expansion valve will make the pressure and temperature drop to sub-zero values. The fluid travels up to the thermodynamic solar panel and the cycle repeats again.

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Solar Keymark

WARRANTY 10 YEARS SOLAR PANEL

See warranty conditions

PORTUGUESE MANUFACTURING

SAVING 85% UP TO

MAXIMUM RETURN ON INVESTMENT

KEY FEATURES

- Solar performance
- Simple installation "Plug and Use"
- Indoor unit requires small space (<1m²)
- Integrated DHW cylinder of 200 liters in stainless steel
- DHW production up to 70ºC in heat pump mode through heat recovery
- Maximum distance between interior unit and outside up to 20m

SOLAR PERFORMANCE

Tested and certified according to the most rigorous European standards it has achived an extraordinary coefficient of performance of 3,8 according to the EN16147. The testing was carried out without solar irradiance, wind or rain. To enhance the real operating performance even more we advise to instal the thermodynamic solar pane facing South (North on the southern hemisphere), east or west. Vertically or horizontally on a wall, roof, flat roofbut always on a landscape position.

SOLID AND ROBUST

The thermodynamic solar panel is made of anodised aluminium with a special Solokote finishing that ensures it's robust and long-lasting against corrosion, in particular when exposed to saline and/or aggressive environments. This innovative technical feature allows energie to provide a 10 years warranty against corrosion, ensuring peace of mind to the end user.

TECHNICAL DATA				ULTRA6	ULTRA12	ULTRA16	ULTRA32
Heating capacity [1]	Power supplied		kW	4,1 - 11,2	5 - 19	8 - 26	18,5 – 48,2
	Maximum power supplied		kW	11,2	18,70	25,8	48,2
Heating capacity [2]	Nominal power supplied		kW	8,5	10,30	16,2	39,6
	Nominal consumption		kW	1,7	2,15	3,45	8,1
	COP		kW	4,97	4,80	4,7	4,91
Heating energy class					A+		
Dimensions	HxWxD		mm	1060X600X800	1060X600X800	1060X600X800	1060X600X800
Weight			Kg	105	115	128	135
Maximum temperature			ºC		55		
Hydraulic connections		Inlet/Outlet		1"M	1"M	1"M	1"1/4M
Refrigerant	Type				R410a		
	Precharge		Kg	1,5	3,5	4,5	7
	Connections	Liquid		1/2"	1/2"	3/4"	7/8"
		Steam		3/4"	3/4"	7/8"	1"3/8
Sound pressure (distance 10m)			dBA	55	61	62	65
Electrical supply		Type		240V-50/60Hz	240V or 400V-50/90Hz		400V-50/60Hz
Maximum power consumed			kW	2,75	5,7	7,8	13,2

OUTSIDE UNIT - SOLAR PANELS						
Number			6	12	16	32
Dimensions	(W x H x D)	mm	2000x800x20			
Weight		Kg	8			
Type			Passive solar evaporator			
Material			Anodized aluminum			

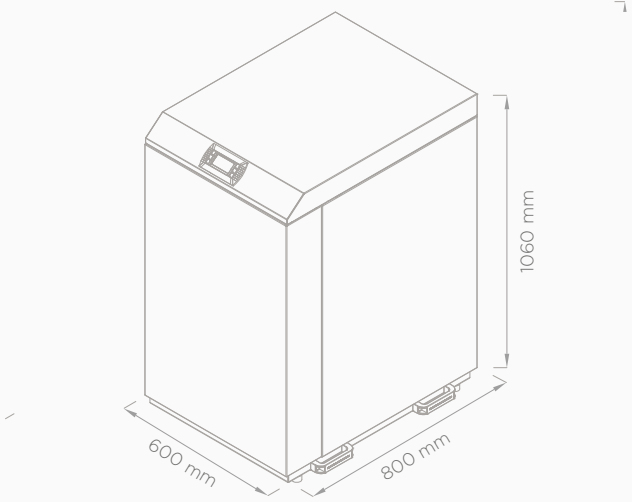
CONNECTION BETWEEN UNITS		
Maximum nominal distance	m	20
Maximum Drop	m	15

[1] According to EN14511; Air temperature DB/WB 14°C/13°C; Water temperature inlet/outlet 30°C/35°C; Solar radiation 800w/m²

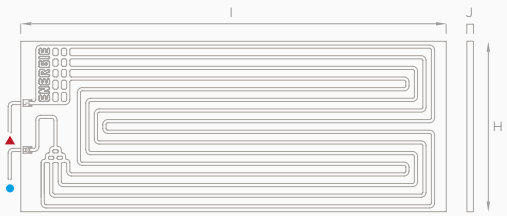
[2] According to EN14511; Air temperature DB/WB 7°C/6°C; Water temperature inlet/outlet 30°C/35°C; Solar radiation 400w/m²

Hydraulic Kit for Central Heating: Expansion vessel + safety valve

Equipment: **Ultra & Ultra Plus**



Equipment: **Thermodynamic Solar Panel**
X6 | X12 | X16 | X32



▲ Steam line ● Liquid line

H. Hot water | PT. PT Valve | R. Recirculation
C. Cold water | Mg. Magnesium anode
CF. Refrigerator Connections L | V

Project co-financed by:

NORTE2020
PROGRAMA OPERACIONAL REGIONAL DO NORTE

PORTUGAL 2020

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