

ECOLUTION
Thermosiphon Solar Water Heater



Ecotherm is the leading brand for turnkey hot water, steam and solar systems for hotels, hospitals and the industry.

Ecotherm amazes with “Individual Heat Transfer Solutions” for hot water and steam generation.

Individuality

Ecotherm produces extensive turnkey systems as well as separate components. Each plant is specifically aligned to the customer's individual requirements. The base is our own production facility in Austria and a wide product portfolio, which enables the combination of all relevant energy sources such as oil, gas, electricity and renewable energies.

Premium quality

Amongst others, our High Capacity Water Heaters are made of high-class duplex stainless steel and guarantee a long-life cycle and perfect hygiene. Ecotherm is certified to ISO 9001 : 2015 with all European standards. Our own test bench assures highest quality and reliability.

Innovation

We are always open to new ideas, we constantly investigate new technologies and we develop path-breaking and future-oriented products. Many patents are the result of the in-house innovation management. With an elaborated 3D visualization, Ecotherm systems can be guided and controlled at all times.

Premium service

Clients benefit from our extensive service at consulting, planning, engineering, supervision and training. Ecotherm regularly improves the know-how of its partners and clients with selective trainings.

Efficiency

The Ecotherm Group, managed by the owner, has slim decision-making structures. Consequent research and development work permanently optimize the energy efficiency and the durability of the products. Ecotherm turnkey solutions offer an optimal cost-benefit ratio.

Experience

With thousands of installations in the last 30 years in Europe, the Middle East, Asia, North Africa and Central America, Ecotherm has become the leading brand in technology and innovation for individual hot water, steam and solar solutions. The Ecotherm team is continuously refreshing their know-how with exceptional trainings and seminars that the Ecotherm Academy provides.

Reliability

Ecotherm systems are monitored all around the clock and can be serviced at low cost, quickly and efficiently with an advanced control panel. Our products and plants have low maintenance requirements .

Sustainability

Ecotherm products help our customers save energy and money. We save valuable resources by using renewable energies. Ecotherm high-performance plants have minimal space requirements and provide maximum energy savings. When planning new products, Ecotherm engineers take all the qualitative and economic principles into account in accordance with the ecological principles.

Partnership

We live in a partnership with all our customers, suppliers and employees. This relationship is characterized by honesty, commitment, openness, trust and reliability. The object is a joint long-term success.

Internationality

The international alignment of Ecotherm with branches in Dubai, Mexico and Hungary and further partners in more than 25 countries is the base for our flexible and efficient project implementation.



Save Energy & Protect The Environment

Following the trends and needs of the market, ECOTHERM has created a new line of thermosiphonic solar water heaters, called ECOLUTION. This brand new line will provide a solution to modern demands for even more money saving solar systems. By redesigning the product, ECOTHERM managed to reduce the cost of the tanks whilst keeping the same high quality.

The ECOLUTION tanks are entirely manufactured in Greece, according to the European standard EN 12976. The metal fixation supports of the same line have an identical production philosophy as origin, while the new design has allowed a reduction of the costs as well. The new metal fixation supports are compatible with every tank model without any special adjustment needed, apart from the 250 L and 300 L tanks, where two extra holding parts are added because of the great volume of the system.

Advantages of the ECOTHERM Thermosiphon Solar Water Heater

No pumps needed

thermosyphon effect

Easy Installation

no special know-how

Low Price

top price-performance ratio

Different Sizes

for all villas

Electric Backup

reliable hot water

Up to 70% savings

for hot water

Assemble & Play

all items included

Highest Quality

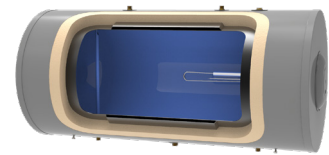
manufactured in Europe



Unit including:

- solar collector
- storage tank + heating element
- mounting system + connecting pipes

Technical Specifications



Model Name	Tanks Tape	Nominal capacity of the tank (ltr)	Collector Type	No. of Collectors in the system
ETSF-120-1.5	120L	116	ESCF-V15	1
ETSF-120-2.0	120L	116	ESCF-V20	1
ETSF-150-2.0	150L	144	ESCF-V20	1
ETSF-150-2.5	150L	144	ESCF-V25	1
ETSF-150-3.0	150L	144	ESCF-V15	2
ETSF-200-2.0	200L	199	ESCF-V20	1
ETSF-200-2.5	200L	199	ESCF-V25	1
ETSF-200-3.0	200L	199	ESCF-V15	2
ETSF-200-4.0	200L	199	ESCF-V20	2
ETSF-250-2.5	250L	242	ESCF-V25	1
ETSF-250-3.0	250L	242	ESCF-V15	2
ETSF-250-4.0	250L	242	ESCF-V20	2
ETSF-300-2.5	300L	295	ESCF-V25	1
ETSF-300-4.0	300L	295	ESCF-V20	2
ETSF-300-5.0	300L	295	ESCF-V25	2
ETSF-500-6.0	500L	478	ESCF-V20	3

Inner Tank Material: Metal steel sheet DC for the main tank (EN 10130 / 20 0 6) and for the jacket (exchanger) (EN 10130 / 20 0 6)

Internal Anti-corrosion protection: Liquid enamel (DIN 4753-3), totally safe for public health (DIN 51032 & EN 1388-2) and magnesium anode (EN 12438)

Welding: MAG

Insulation: Rigid polyurethane foam of 48 kg/m³ (DIN 53420), self-extinguishing (DIN 4102)

Maximum working pressure for the main tank: 10 bar

Test pressure for the main tank: 15 bar (EN 12976-1, 4.1.6)

Maximum working pressure for the Jacket (Exchanger): 3,2 bar

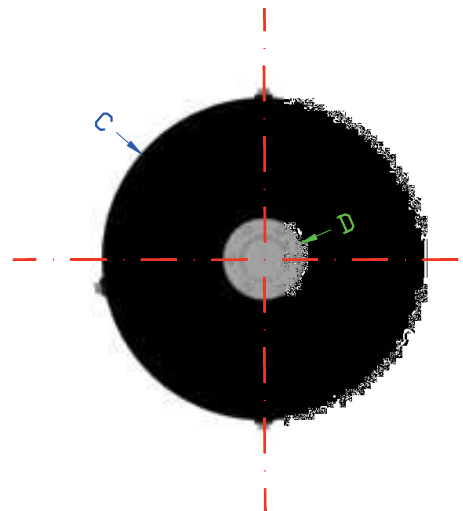
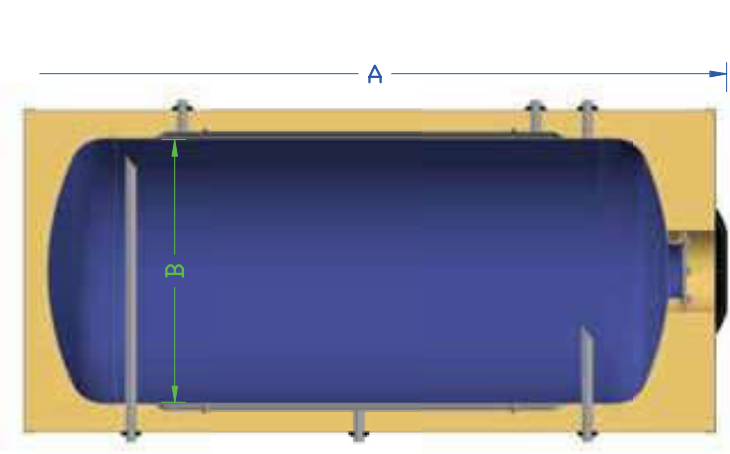
Test Pressure for the Jacket (Exchanger): 5 bar (EN 12976-1 / 20 0 6, 4.1.6)

Maximum Working Temperature of the main tank: 95°C

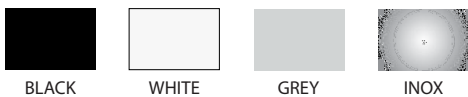
Heating element: 3,5 kW

External cover: Pre-painted, galvanized steel sheet 0,5 mm (EN 10204/2.2)

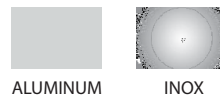
	Type	120	150	200	250	300	500
	Nominal Capacity (lt)	116	144	199	242	295	478
A	Tank's Length (mm)	1065	1285	1285	1555	1785	1737
B	Main Tank's Diameter (mm)	Ø400	Ø400	Ø480	Ø480	Ø480	Ø640
C	External Diameter (mm)	Ø500	Ø500	Ø580	Ø580	Ø580	Ø750
	Jacket's Surface (m ²)	0,54	0,64	0,81	1,01	1,55	2
	Jacket 's Capacity (lt)	6	8	9	12	19	24
D	Flange Diameter (mm)	Ø140	Ø140	Ø140	Ø140	Ø140	Ø140
	Weight	44	54	68	84	100	140



Available Colors

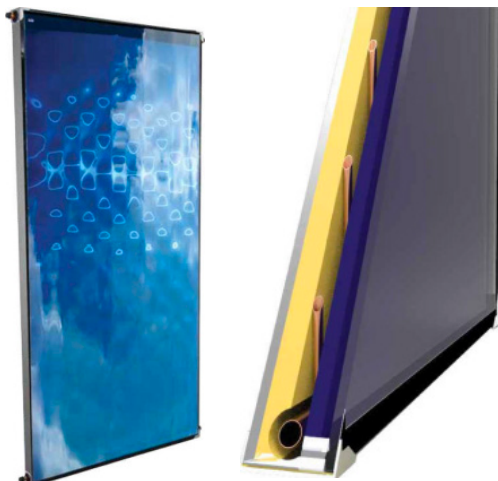


Additional materials



Technical Specifications: Collector

Technical Features	Unit of	Collector's Technical Standards			
Type		ESCF-V12	ESCF-V15	ESCF-V20	ESCF-V25
Outer dimensions (height x width x thickness)	mm	1250x960x80	1455x960x80	1960x960x80	1960x1210x80
Total surface	m ²	1,20	1,40	1,88	2,38
Window surface	m ²	1,15	1,35	1,83	2,33
Absorber capacity	m ²	1,15	1,35	1,83	2,33
	L	1,1	1,3	1,6	1,9
Frame / Thickness	mm	Pre-painted galvanized steel sheet 0,5 mm			
Glass panel		Tempered			
Thermal insulation (shoulders) Thickness/Density	mm / kg / m ³	Stone wool / 30 / 50 A material properly designed for collectors, chemically inert, its qualities remain unchanged over time and it does not allow parasites to evolve			
Absorber		Harp-shaped bronze frame, aluminum selective coating on a panel (Full face) - laser welding			
• Absorption capacity	%	95			
• Transmission	%	5			
• Header Cu Ø / Thickness	mm	22 / 0,7			
• Riser Cu Ø / Thickness	mm	8 / 0,40			
• Risers	pcs	8	10	10	11
• Cu welding Ø 22		4 or 2			
• Maximum operation pressure	bar	10			
Means of heat transmittal		Mixture of water and anti-freeze (monopropylene-glycol)			
Layout		vertical			
Weight (Dry & Packaged)	kg	21,5	24,5	32,5	40,5



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