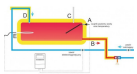
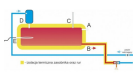
Water Heater PROECO YL-60 /1000

Price: **990.00 PLN** gross

990.00 PLN for kpl.

Manufacturer: **- Pro Eco Solutions Ltd.**

Referention number: **PROECO YL-60/1000**

Condition:: **New**

Quantity: 0 pcs.

Information:

Compact Non-pressure Water Heater PROECO JNYL-60 /1000
- Solar collector consisting of **6 vacuum tubes** 58/1000 mm
- Insulated water tank with a capacity of **63 liters** (**68 liters** the entire system).
- Versatile steel frame

Product features

Heater capacity (l.):	65
Average demand for:	for 1 person
Hot water collection:	under the influence of gravity
Surface mounting:	for flat or sloping from 21 to 35 degrees
Number of vacuum tubes (pcs):	6
Vacuum tube size (mm):	58 mm / 1000 mm
Use of Heat-Pipe:	NO
Water tank:	stainless steel SUS 304 0,4 mm
Heat exchanger in the tank:	no
Cover of the tank:	PVDF
Bracket:	galvanized steel, powder coated

Warranty period:	36 miesięcy

Full product description

Solar systems PROECO YL-60/1000 consists of:
- vacuum solar collector (6 tubes with a triple absorption layer ALN/AIN-SS/CU - 58/1000 mm)
- insulated water tank made of stainless steel with capacity of 60 liters
- steel frame

Use:

An ideal solution for obtaining utility hot water for single-family houses, guest houses, recreation centers, camping sites, farms, and construction sites.

Design:

The solar collector consists of vacuum tubes made of borosilicate glass. High operational safety of borosilicate glass has been achieved thanks to the use of an appropriate mix of SiO2 and B2O3 oxides, which results that the product has high chemical resistance as well as extraordinary purity and uniformity. Borosilicate glass is environment-friendly and can be recycled many times. The process of thermal annealing (hardening) with the low thermal expansion typical for borosilicate glass gives it a particularly high resistance to changes of temperature in comparison to standard glass. Tubes are resistant to hail size up to 25 mm. The use of tubes with a diameter of 47 mm and 58 mm allows concentric placement of one inside the other. The air between the pipes is pumped out, and the pipes are welded together.

Solar radiation on the absorber on the inner tube is converted into thermal energy and causes heating of the inside of the tube. The vacuum between the pipes is an excellent insulator and prevents heat loss. The tank is made of SUS 304-2B stainless steel and is insulated with polyurethane foam with a thickness of at least 50mm.

A small assistant tank can be installed in the tank for automatic water topping up. When the tank is full, the intake valve is automatically closed with the use of the float.

Principle of operation:

There is water in both in the tank and the tubes. Under the influence of sunlight, the water in the tubes heats up. Thanks to convective movements, it goes up to the tank. Water circulates continuously between the tank and the vacuum tubes, which causes a constant increase of temperature. of water. High efficiency of the collector results from the ability to absorb diffused radiation (for example, on cloudy days) and maximum reduction of heat loss. The collector works excellent also in winter. It obtains energy not only from direct sunlight but also from light reflected from snow.

The system is used for the gravitational draining of hot water from the tank. In addition, there is the possibility of installing a small assistant tank for automatic water topping up directly from the water supply network. The system does not require pumps or controllers for proper operation, which makes it very reliable. Thanks to the open circuit, even boiling water does not increase the pressure inside the tank. Thanks to this, the system is trouble-free and safe. Of course, if there is a need to supply hot water above the tank level, then a pump can be used.

Advantages:

- The higher efficiency of the vacuum collector in comparison to a standard, flat collector.
- Simple design, low failure rate - service life of tubes over 15 years.
- Direct connection of the collector to the tank (no heat loss).
- Excellent insulation of the tank (daily loss of water temperature from 6 to 10 degrees C)
- No need to use pumps or controllers.
- Simple installation that does not require modification of the current system.
- Easy servicing and self installation possible.

Installation and operating instructions:

Manual YL.pdf

Instructions for installation on oblique surface (annex).pdf

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Warranty: 5 years

NOTE: All prices include 23% VAT tax. The price of the installation service is not included.

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number of vacuum tubes	6
''heat pipe" use	no

size of the vacuum pipe	diameter: 58 mm. outside /47 mm. inside, thickness of wall: 1,6 ± 0,15 mm., length: 1000 mm.
type of absorber	(aluminum nitride with copper and steel layers) CU/SS-ALN(H)/SS-ALN(L)ALN
absorption efficiency	α = 0.92□0.96 (AM1.5)
lossy emission	ε = 0.04□0.06 (80℃ ± 5℃)
degree of vacuum	P. ≤5.0X10⁻³ (PA)
temperature of stagnation	260□300℃ (inside empty tube)
average heat loss	ULT 0.4□0.6 W/(m2□□℃)
resistance to hail	Φ25 mm
lifespan	> 15 years
----------	**FRAME:**
material	steel
resistance to wind	180 km/h
----------	**TANK:**
method of connecting with collector	direct
material (tank inside)	stainless steel SUS304
material (tank outside)	steel
thermal insulation of the tank	polyurethane foam min. 50 mm.
time of maintaining the temperature	about 72 hours
heat exchanger in the tank	none
max. water pressure in the tank	0 bar
additional accessories	assistant tank, electric heater, controller, pump