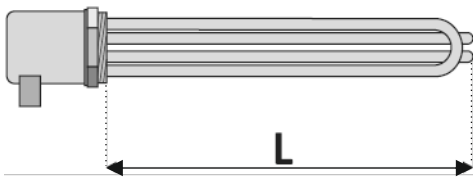


FERCOSOL

Sistemas solares térmicos

Resistencias SL

Outlet connection of electric heating element 1 ½" :
3000W/230V; 4500W/230V; 6000W/230V; 7500W/400V.



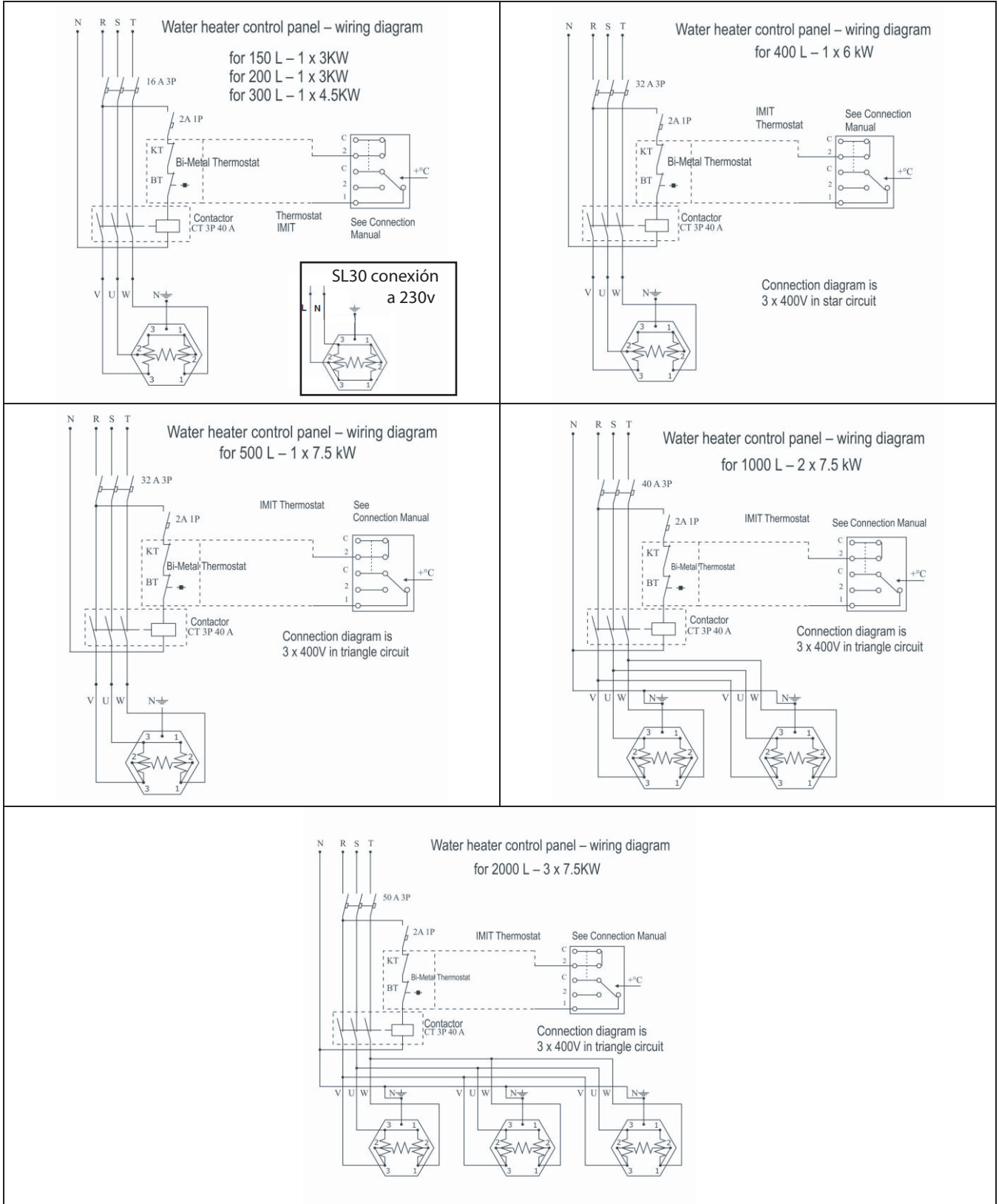
Water tank Capacity, L	Connection	Length L, mm	Current, W	Voltage, V
150 ÷ 2000	1 ½"	210	3000	230/400
300 ÷ 2000	1 ½"	320	4500	230/400
400 ÷ 2000	1 ½"	410	6000	230/400
500 ÷ 2000	1 ½"	590	7500	230/400

In the table of technical parameters is specified location for installation of electric heating element



The connection of the electric heating element to the electric power supply must be done by a qualified electricians.
When connect the heating element to the electric network, make sure that it is properly grounded.

Wiring diagrams



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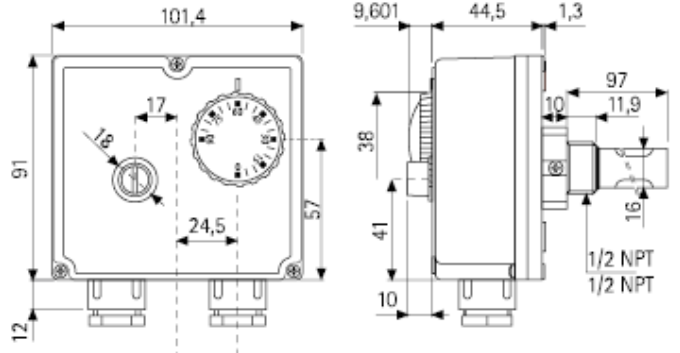
Sistemas solares térmicos

Termostato TLSC

Included at standard water tank package.

The thermostat may be adjusted by the user within the range $30^{\circ}\text{C} \div 80^{\circ}\text{C}$, and the thermal protection would go off in case the water reaches 95°C .

This is an adjustable double THERMOSTAT which is designed to regulate the water temperature and ensures safety tolerance; it can be manually adjusted (TLSC model) or automatically adjusted (TLSC/A model).

	 <p style="text-align: center;">fig 1</p>
<p>CONFORMITY TO STANDARDS This product is in conformity with:</p> <ul style="list-style-type: none"> - EN 60730-1 and subsequent editions; - EN 60730-2-9 <p>CONFORMITY TO REGULATIONS This product complies with:</p> <ul style="list-style-type: none"> - Low Voltage Directive 73/23 EEC - Electromagnetic Compatibility Directive 89/336/EC 	<p>TECHNICAL CHARACTERISTICS</p> <p>Temperature range – regulation- $0^{\circ}\text{C} \div 90^{\circ}\text{C}$; limit - $90^{\circ}\text{C} \div 110^{\circ}\text{C}$; Tolerance Regulation $\pm 5\text{k}$, limit – 15 k; -6 k (depends on the type)</p> <p>Temperature differential Regulation $6 \pm 2\text{ k}$; $4 \pm 1\text{ k}$ (depends on the type) Limit $25 \pm 8\text{ k}$; $15 \pm 8\text{ k}$ (depends on the type)</p>
<p>Automatic adjustment (TLSC/A) and manual adjustment (TLSC). Degree of protection = IP 40 Insulation class = I. Temperature change rate = $< 1\text{K}/\text{min}$. Maximal temperature point: 80°C Maximal temperature for electric lamp: 125°C Accumulation temperature: $15^{\circ}\text{C} \div 55^{\circ}\text{C}$ Maximum pressure of the cartridge: 10 bar Constant time: $< 1''$</p>	<p>Electric connection: C-1 ADJ.: $10(2,5)\text{A}/250\text{V}^{\circ}$; C-2 ADJ.: $6(2,5)\text{A}/250\text{V}^{\circ}$; C-1LIM.: $0,5\text{A}/250\text{V}^{\circ}$; C2LIM.: $10(2,5)\text{A}/250\text{V}^{\circ}$; Terminal – circuit breaker or switch-on contacts. Switch-on action – 2B. Place of installation – normal. Type of wire – M20 x 1.5.</p>



WARNING !

All installation operations, including manual adjustments, must be fulfilled by a qualified specialist following all safety conditions.

FERCOSOL

Sistemas solares térmicos

Termostato TLSC

INSTALLATION AND CONNECTION Safety instructions:

Before connecting the thermostat, make sure that THE UNIT TO BE THERMALLY CONTROLLED (water heater, pump, etc.) IS NOT CONNECTED to the power supply network, and is in compliance with the instructions in Figure

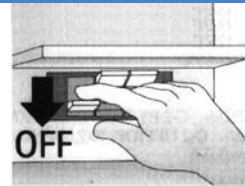


fig 2

A) See fig 3 and fig 4

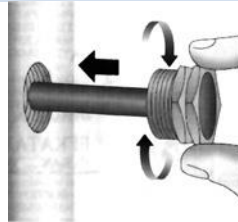


fig 3

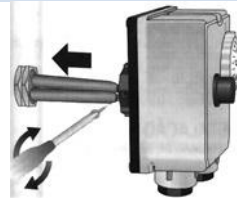


fig 4

B) Unscrew the three bolts and remove the front part of the thermostat. Unravel the power supply wires and connect them to the terminals of the thermostat (Figure 5) following the instructions.

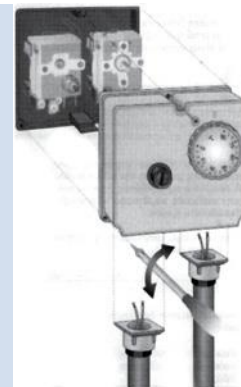


fig 5

NOTE: See Figure 6.

To close the front part, the cartridge opening must align with the coupling of the adjustment knob.

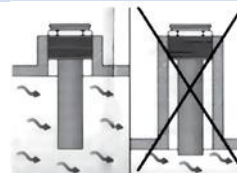


fig 6

CONNECTION (Figure 7)

LIMITATION

TERMINAL 2 – opens the circuit when the temperature rises.

TERMINAL C – common contact.

THERMOSTAT

TERMINAL 1 – opens the circuit when the temperature rises.

TERMINAL 2 – closes the circuit when the temperature rises

TERMINAL C – common contact

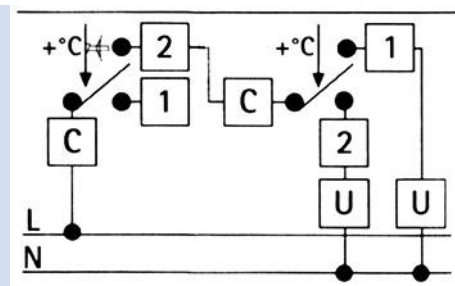


fig 7

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Sistemas solares térmicos

Termostato TLSC

TEMPERATURE ADJUSTMENT (see Figure 8)

A – Reset button (only for TLSC)

B – Knob for temperature adjustment

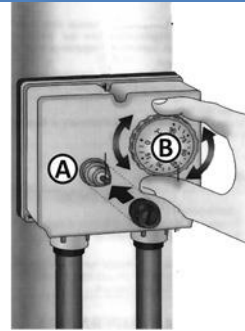


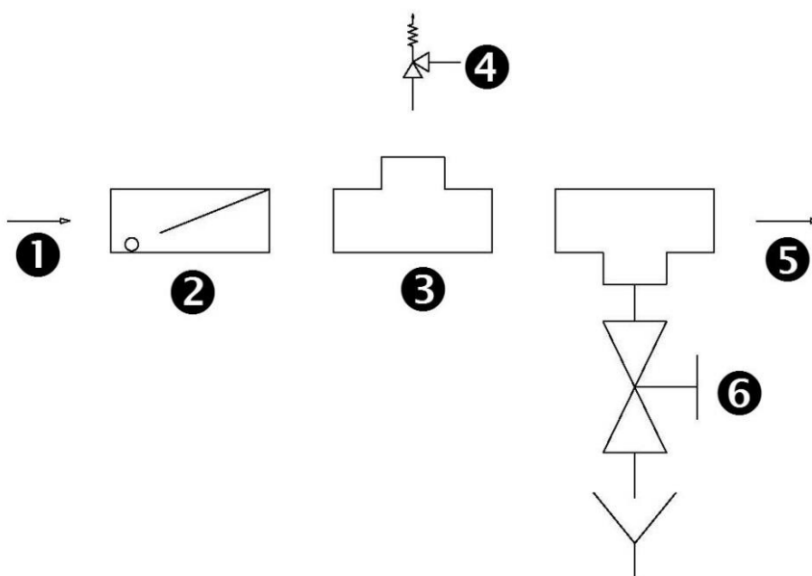
Fig 8

3.8. Screws with rubber head

Included at standard water tank package.

Screws with rubber heads are mounted at the bottom of the vertical water tank / 150 to 500 l / - use to level the tank.

4. Connecting of safety relief valve to water tank



legend:

1	Cold water inlet - water supply
2	Check (return) valve
3	Tee
4	Safety (relief) pressure valve
5	Cold water inlet - water tank
6	Stopcock (drainage)



Stop (Shut-off) valves should never be installed between a safety (relief) valve and the tank.

It is recommended once a year to check the operation of the safety valve.