



# LSC1 Immersion thermostat ISPESL test approved

The LSC1 thermostat, with positive safety action, is used for limiting the temperature of water in heat generators.

It is a two-position thermostat, comprising a sensitive probe and a trip mechanism connected by an internal capillary.

The liquid-charged sensitive element is provided with positive safety action (breaks an electric circuit when the pre-set temperature is reached, as well as in the event of a fault due to accidental loss of thermometric liquid).

The sensor is protected by a PN10 copper pocket, suitable for temperatures up to 125°C and provided with a  $\frac{1}{2}$ " NPT threaded connection.

The electrical contacts are protected in an IP 40 housing. The LSC1 thermostat is an **automatic thermal circuit-breaker with manual reset** that is used for cutting off the heat supply when the temperature of the water in the generator reaches a value between 94 and 100°C (Art. 20 Ministerial Decree 1<sup>st</sup> December 1975).

The contact can be reactivated manually, after having checked and restored the required conditions (see following page).

In conjuntion with the TR 5037 T/E temperature controller (technical sheet 3B.501), the LSC1 constitutes a safety and control device for steam heat exchangers to heat water with a 100°C limit as specified in R - ISPESL standard (Prot. ANCC 26460 of 29/7/1982 - M.D. 1/12/75).



Model and code	LSC1	Code 7.712.1820.010
Switching temperature	Not adjustable setting: 100°C with -6°C tolerance	
Reset temperature	The manual reset can be operated with temperature lower that	in 70°C
Connection	1⁄2" NPT	
Pocket	PN10 copper made	
Sensitive element	Liquid expansion system	
Switch rate	10 A - 250 V a.c. (2.5 A d.c.)	
Contact actions	SPST	

## Installation

The LSC 1 thermostat must be installed on a heat generator or an storage heat exchanger.

On the instantaneous exchanger it can be applied on the outlet piping at a distance not greater than 0.5 m and before any of the shut-off device; in this case, continuous circulation of water must be ensured and an interconnection with the pump motor must be provided.

## Connections

The thermostat is provided with three terminals marked with the symbols C, 2 and  $\pm$ , which can be easily accessed by removing the thermostat cover.

The terminals C and 2 are those connected to the contact that opens with increase in temperature.

## Reset

The thermostat can be reset by pressing the pushbutton located under the black plastic cover visible on the cover.

The pushbutton can only be accessed by means of tools, by unscrewing the cover and it can be activated only after the temperature has fallen at least to 69-70°C.



Fig. 1- Installation of temperature controller TR 5037T/E on steam/water storage heat exchanger, for producing hot water with intermittent extraction.

Among the temperature controller accessories, note the LSC 1 thermostat that can be manually reset.

The entire assembly constitutes a "Control and Safety device" as per the "R" ISPESL ex ANCC Standard (Spec. 3B.501).

The device is also used on instantaneous heat exchangers.

#### Dimensions (mm) and weight (kg)

