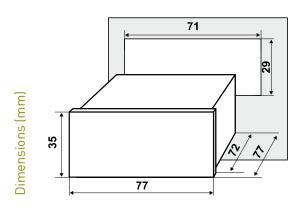
# L02B.. ON/OFF - P.I.D. thermostats with flush mounting

For 1-outlet heating or cooling systems with 1 probe.





	Sensor	Power supply	Num out-	Measur- ing range	Resolution	Probe accuracy	Degree of protection
			puts	°C	°C		
L02BI1A	1 NTC 10K* probe LS130 included	12Vac/dc	1	-40 - 105	0.1(-19.9-99.9), 1	<±0.3°C(-40-100), ±1°C	IP55 (panel)
L02BM1A	1 NTC 10K* probe LS130 included	230Vac	1	-40 - 105	0.1(-19.9-99.9), 1	<±0.3°C(-40-100), ±1°C	IP55 (panel)

## **ELECTRICAL CHARACTERISTICS**

Output on single-pole relay in deviation. Contact rating 16(4)A 240 Va.c. Power consumption 2W.

#### **REGULATIONS AND APPROVALS**

Compliant with EN60730-1, EN60730-2-9, EN55022 (CLASS B), EN50082-1.

#### INSTALLATION

Flush mounting (panel) with fixing brackets.

#### **OPERATION**

Type of control: can operate in ON/OFF or PID mode.

ON/OFF control: in ON/OFF mode, the output is ON or OFF depending on the input temperature, setpoint (1SP) and hysteresis value (1HY)

Hysteresis indicates the magnitude of the setpoint temperature deviation to reactivate the output.

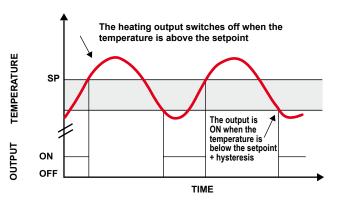
PID control: in PID mode the output is ON for a fraction of cycle time 1CT.

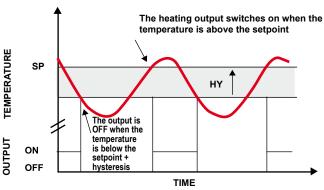
The cycle time characterises the dynamics of the system to be controlled and influences the accuracy of the control.

Proportional control.

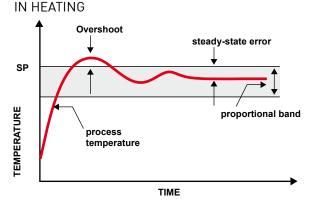
Integrative proportional control.

#### ON/OFF CONTROL IN COOLING

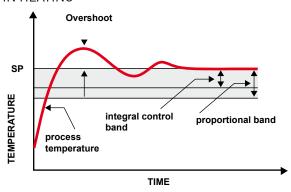




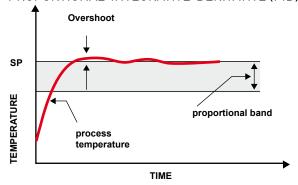
## PROPORTIONAL CONTROL (P)



## PROPORTIONAL-INTEGRATIVE CONTROL (PI) IN HEATING



#### PROPORTIONAL-INTEGRATIVE-DERIVATIVE (PID) HEATING CONTROL



### **ELECTRICAL CHARACTERISTICS**

#### NTC10k inputs.

Configurable parameters:

- cooling or heating function by assigning positive or negative sign to the differential or proportional band respectively;
- minimum or maximum setpoint limits;
- ON or OFF status of the output in the event of a defective probe.

Operating temperature -10 to 50°C.

IP55 degree of protection when properly installed in panel with sealing gasket.

ON/OFF button on the front.

## **ACCESSORIES**

LS130 NTC10k probe, scale range from -40 to 105°C, 2 wires.



LT312U Transformer 230/12V 50-60Hz 3VA