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OWNER'S MANUAL

LIQUID DILATATION THERMOSTAT

REFERENCE 9030 - 02/03

1 - APPLICATION :

Temperature regulation or limitation for liquids, gases or solids.

2 - DESCRIPTION :

- Liquid dilatation thermostat with bulb and capillary of copper for reference 9030-02 and stainless steel for reference 9030-03.
- Potential-free inverter contact.
- Breaking capacity : 16 A / 400 VAC.
- Maximum operating voltage : 400 V.
- Differential : 2.5% of full scale.
- Connection by 6.35 Faston terminals.
- Façade mounting or on support (inside case or box for instance).

REFERENCE	Range (°C)	Bulb Ø (mm)	Bulb L (mm)	Capillary length (mm)
9030 - 02	0 +100	6	160	1000
9030 - 03	+50 +300	6	90	1000

3 - PRECAUTIONS FOR USE :

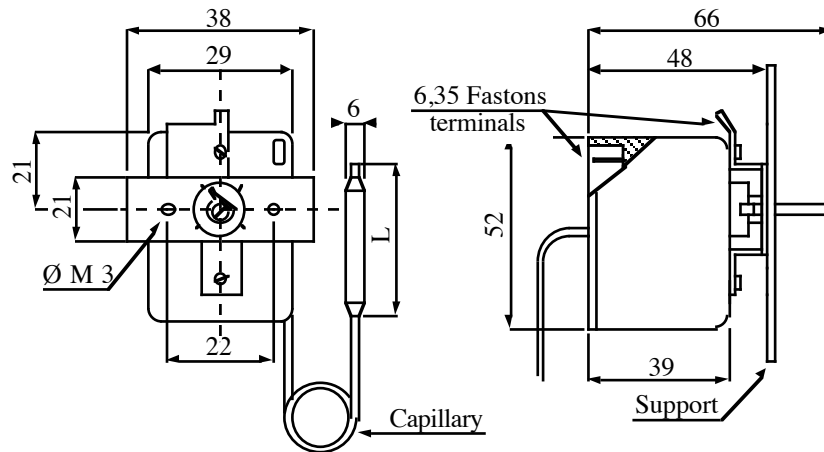
- Handle the capillary with care. It must never be pierced as this could cause the final destruction of the equipment. Allow a forming radius in excess of 5 mm.
- Check that the material of the bulb and capillary is compatible with the product being tested in the event of it being in direct contact with it.

4 - ASSEMBLY AND ELECTRICAL CONNECTION :

4 - 1 - ASSEMBLY :

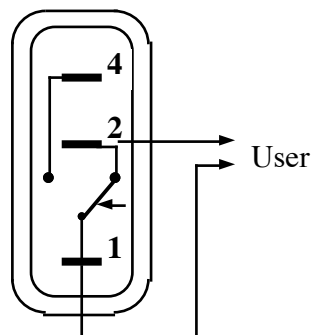
- On the support which will be receiving the thermostat (façade or attaching lug), form an 7 mm Ø hole for accommodating the shaft of the knob and two 4 mm Ø holes (diametrically opposed) on a 22 mm Ø radius centered on the shaft of the knob, ensuring that the equipment is turned as required (see diagram below).
- Insert the shaft of the knob in the hole provided for the purpose.
- Place the pierced tightening washer on the support receiving the equipment then install the dial, making sure it is properly aligned.
- Install the two attaching screws.

- Place the knob in line with its shaft.
- Install the bulb, generally in a thermometer well (for liquids and gases) or in a cylindrical housing (for solids) having an inside diameter slightly greater than that of the bulb so as to preserve good thermal conduction. It is advisable to confirm the conduction using appropriate thermal grease.



4 - 2 - ELECTRICAL CONNECTION :

Set-up the diagram shown below :



- Ensure that each Faston terminal is properly located and tightened.
- Be sure to connect the ground terminal to the installation ground.

5 - COMMISSIONING PROCEDURE :

- Using the adjusting knob, place the index to the desired temperature setpoint value of the dial.
- Energize the heating installation, first checking that the installation operating conditions are satisfied.
- Before nominal temperature is reached, make sure that the thermostat knob, when turned, turns off the heating and restarts it. Then reset the knob to the load temperature setpoint.

NOTE : The information on the vernier of the thermostat knob is not accurate enough to be sure that the temperature obtained is exact. Proceed by successive readjustments of the setpoint to obtain the desired temperature, measuring it with a thermometer.

6 - **SERVICING** :

Periodically (at least once each year) make sure that :

- The Faston terminals are tight and in place
- When testing a pollutant fluid, clean the bulb (and the thermometer well if necessary) without damaging it in the eventuality of their being a deposit in the well (fouling could distort the temperature measurement because of the obstruction of thermal exchange).

7 - **GUARANTEE** :

The guarantee is in conformity with the inter-union agreements of the Electrical Construction industry and our general conditions of sale.

Any deterioration caused by :

- use at more than 10% of the rated voltage provided for,
- an excess in the cut-off capacity of the equipment,
- wear caused by a lack of servicing, shock, clumsy handling or inexperienced users,
- failure to comply with this manual, the state-of-the-art rules and the legislation,
- phenomena of corrosion or fouling,

cannot be considered binding upon our responsibility.