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## OWNER'S MANUAL

### LIQUID DILATATION THERMOSTAT

#### REFERENCE 9030 - 07

#### 1 - APPLICATION :

Temperature regulation or limitation for liquids, gases or solids.

#### 2 - DESCRIPTION :

- Bulb and capillary liquid dilatation thermostat of stainless steel adjustable in a range of 320-540°C.
- One potential-free inverter contact.
- Breaking capacity : 15 A / 250 VAC.
- Differential : 20°C.
- Precision : ± 6°C.
- Connection by 6.35 Faston terminals.
- Façade mounting or on support (inside case or box for instance) with the possibility of side or rear attachment.

#### 3 - PRECAUTIONS FOR USE :

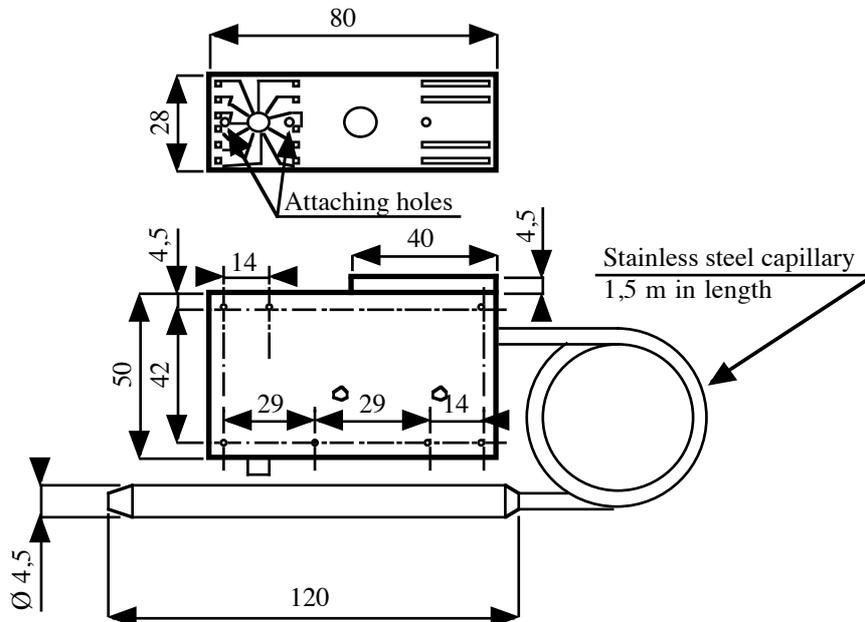
- Handle the capillary with care. It must never be pierced as this could cause the final destruction of the equipment. Allow a forming radius in excess of 8 mm.
- Check that the material of the bulb and capillary is compatible with the product being tested in the event of it being in direct contact with it.
- Check that the ambient temperature or that of the support on which the thermostat is attached is not liable to exceed 125°C.
- Maximum permissible temperature at the bulb : 550°C.

#### 4 - ASSEMBLY AND ELECTRICAL CONNECTION :

##### 4 - 1 - ASSEMBLY :

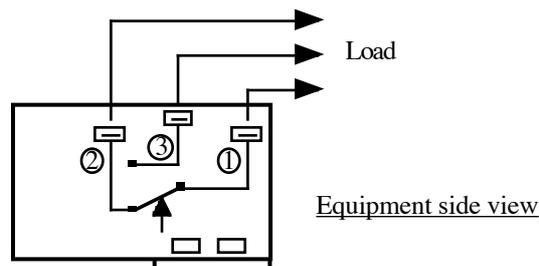
- Façade assembly :
  - On the support which will be receiving the thermostat (façade or attaching lug), form an 8 mm Ø hole for accommodating the shaft of the knob and two 5 mm Ø holes (diametrically opposed) on a 28.5 mm Ø radius centered on the shaft of the knob, ensuring that the equipment is turned as required (see diagram below).
  - Remove the two Ø M 4 attaching screws located either side of the adjusting knob shaft.
  - Insert the shaft of the knob in the hole provided for the purpose.
  - Place the panel (supplied separately) on the support receiving the equipment.
  - Install the two attaching screws. If the support thickness is greater than 3 mm, use Ø M 4 screws with a length beneath of head of 6 mm, plus the thickness of the support because the maximum depth of the case holes is 7 mm in length.
  - Place the knob in line with its shaft, ensuring that it is properly oriented so that the flat of the shaft to receive it faces the attaching screw, then secure the screw.

- Side or rear assembly :  
Smooth holes in the side opposite the side on which the connecting terminals are located, and in the base of the thermostat case, provide for side or rear attachments. These holes are not tapped and are designed to accommodate the three-lobe taptite screws  $\text{Ø M 3.5}$ .
- 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 :



- Use the 6.35 female Faston terminals preferably with protection
- Ensure that each Faston terminal is properly located and tightened.

#### 5 - COMMISSIONING PROCEDURE :

- Using the adjusting knob, set the desired temperature setpoint opposite the panel index :
  - mark 3 = 320°C
  - mark 5 = 380°C
  - mark 10 = 540°C
- 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.