



VULCANIC S.A. - 48, rue Louis Ampère
Zone Industrielle des Chanoux - F 93330 NEUILLY / MARNE (France)
Tél. (33) 01.49.44.49.20 - Fax (33) 01.49.44.49.41



OWNER'S MANUAL

POSITIVE SAFETY DEVICE TEMPERATURE LIMITING ROD

REFERENCE 9030-21

1 - USE :

Temperature limitation of liquids or gases.

Can be removed without draining the tank provided the protective well sheath is left in place.

2 - DESCRIPTION :

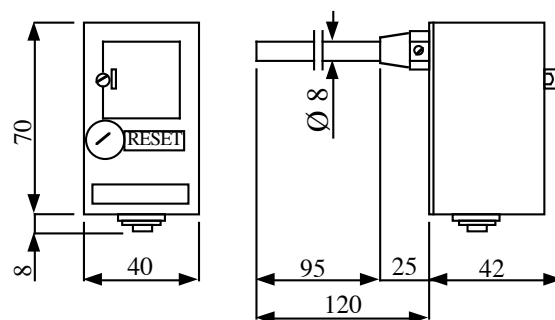
- A liquid expansion limiter with a copper bulb (diameter 6 mm) inserted in a copper protective well sheath (diameter 8 mm). The limiter is attached to the protective well sheath by a perpendicular locking screw on the threaded union.
- Preset fixed temperature cut-out device: 100°C (+0°C -6°C).
- Manual reset.
- Positive safety device : breakage of the bulb or capillary causes the circuit to break (contact opens) : the instrument therefore needs to be replaced.
- Contact with rapid power cut-out.
- Cut-out power on a resistive load: 15 amps at 250 volts a.c., 10 amps at 400 volts a.c.
- Connections to 2 screw terminals + earth, inside the box.
- Protection index: IP 40
- Comes with a copper protective well sheath (diameter 8 mm, length 120 mm on the 1/2" BSPT threaded union)
- Maximum load pressure : 10 bar.
- Load temperature : 0 - 100°C (maximum admissible temperature on the bulb : 120°C)
- Storage temperature : -35 - 120°C.

3 - PRECAUTIONS BEFORE USE : Check that :

- The boss provided to take the protective well sheath has a 1/2" BSPT thread.
- The bulb is made of a material compatible with the fluid controlled.
- Adequate clearance will allow the thermostat to be removed (tunned side: 120 mm).
- The unit must only be powered up when the box lid is in place.

4 - INSTALLATION AND ELECTRICAL CONNECTION :

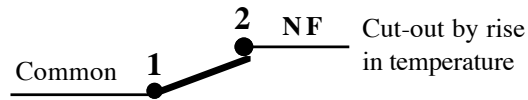
4 - 1 - INSTALLATION :



- Screw the protective well sheath (having first removed it) on to the boss provided for this purpose.
- Carefully insert the bulb into the protective well sheath and tighten the locking screw located on its union.

4 - 2 - ELECTRICAL CONNECTION :

- Remove the box lid after unscrewing the "Reset" plug and the fixing screw.
- Follow the diagram below, paying particular attention to the terminal numbers:



- Do not omit to connect the earth terminal to the earth point.
- Make sure the screws on each terminal are tight.
- Replace the lid and fasten it with its screw and replace the "Reset" plug.

5 - COMMISSIONING PROCEDURE :

- If the liquid temperature exceeds the safety temperature: 100°C (+0 -6), the contact opens, cutting out the heating irreversibly. To switch the heating elements back on, unscrew the "RESET" plug then press the accessible blue reset button (using a suitable screwdriver, for example). This operation shall only be carried out after having rectified the fault which caused the thermal safety device to trigger.

6 - MAINTENANCE:

Periodically (at least once a year, and more often if necessary) :

- Check that the terminals are tight.
- Remove the protective well sheath:
 - check that the bulbs and capillaries on the thermostat are in good condition,
 - clean it carefully, without damaging it, if sediment or lime have been deposited on it (risk of impairing regulation by obstructing measurement).

7 - GUARANTEE:

Our guarantee is in accordance with inter-union electrical construction agreements and our general conditions of sale.

We cannot be held liable for any damage caused by :

- use of the appliance over 10% above the design rating,
- exceeding the instrument's cut-out power,
- corrosion or scale,
- lack of maintenance, impact, rough handling or inexperience on the part of the user.