

7.6 WINDINGS THERMOSTATS

Windings protectors must be installed to measure the fastest way the temperature rise of the winding. They must not be bended or distorted during installation inside the coil. Before to be incorporated into windings that must later be impregnated by resin or varnish, ensure that these thermostats support these operations. Our office is at your disposal to give you technical advice. Calibration temperatures warning: thermal protectors are calibrated at zero current and their operating temperature is sensitive to current. In your application, depending on the current rating of your device, their set point can be shifted down. Use thermostats drift curves to define thermal drift temperatures. Many thermal protectors have metal enclosures electrically alive. Be sure to install them safely, with proper electrical insulation and not in contact with grounded or accessible parts. For these devices, class 1 and class 2 electrical insulation sleeves can be provided on request.

7.7 THERMAL CUT OUT

Thermal fuses are the components the most susceptible to wrong installations.

Their terminals are heat conductors: welding or soldering them can cause the fuse to open by thermal conductivity.

Do not make soldering at less than 15mm of the housing. The soldering duration shall not exceed 3 seconds. Terminals wires are also sensitive to strength and torsion. Be careful not to apply significant forces (1.3 N max).

Bending terminal wires should be preferably made with a wire bending machine. Do not bend or crimp at less than 5mm from the body. Do not crush the body.

Sensitivity to temperature: thermal fuses must not remain continuously exposed to temperatures that are too close to their cutoff temperature. Respect the maximum allowed permanent temperature given in technical data sheets. They are also sensitive to current and can trigger by Joule effect if the rating is too high.

7.8 VAPOR PRESSURE BULB AND CAPILLARY THERMOSTATS

These thermostats are particularly sensitive to the position of the capillary or of the bulb relative to the thermostat head. Observe the position indicated on the data sheets for each device.

7.9 EXPLOSION PROOF THERMOSTATS

The explosion-proof devices require special care during assembly. A specific mounting and assembly instruction manual is supplied with each unit.

- Explosion-proof enclosures: These housings are designed to withstand an explosion occurring within the housing. It is therefore important to take particular care that the screws of the cover (these screws cannot be replaced by others models with different mechanical resistance), to ensure the cleanliness of the sealing surfaces, not drill holes in the boxes, not to replace original cable glands by others, properly tighten the cable glands, ensuring that their gasket is adapted to the diameter of the cable used.
- Explosion proof Switches: In thermostats using this system, only the electrical part of the switch mechanism is enclosed in a flameproof enclosure. By this way, the outer casing of the thermostat does not provide explosion protection, but only requires at least IP65 ingress protection. Electrical connections must be made on the cable coming out of the unit, outside the hazardous area or in a suitable junction box.