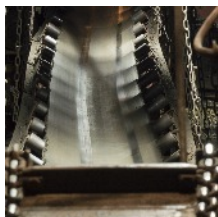




INSTALLATION & OPERATING DATA

# SURFACE THERMOSTAT

INSTALLATION & OPERATING DATA



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**INSTALLATION & OPERATING DATA**

**1 APPLICATION**



**Monitors the surface temperature on housings, machinery, vessels, castings, containers, electrical equipment, pumps, gearboxes and pipes, etc.**

**2 PRINCIPLE OF OPERATION**

**The TX2010 Surface Thermostat incorporates a bimetallic element which operates 'snap action' contacts. The contacts are normally closed and open on a rising temperature. The operating point is adjustable over the specified temperature range.**

**3 INSTALLATION**

1. The thermostat can be mounted in position by fixing screws, using the mounting feet provided on the side of the housing. Care should be taken not to over-tighten the screws. It is only necessary to ensure a good seating on the base gasket to provide an air tight seal around the copper contact pad.

The application of heat conductive grease to the contact pad will assist thermal transfer.

2. A fast curing adhesive can be used for securing the thermostat to the surface to be monitored (the mounting feet may be removed if the thermostat is being installed in a confined position).

The bottom sealing gasket should be removed and the adhesive applied to the complete underside including the copper contact pad to a thickness of about 2 – 3mm. Apply the thermostat to the surface to be monitored and retain in position for approximately 10 minutes to allow the adhesive to cure. Full hardening is complete in about 4 hours.

3. Each thermostat is individually calibrated in our factory before delivery. The dial setting will indicate the switching point of the thermostat element, but the relationship between the dial setting and the actual temperature of the medium being monitored will be affected by individual variations in thermal transfer characteristics on each installation.

We recommend the following setting procedure:-

- (a) Install the Surface Thermostat in position.
- (b) Allow its temperature to equalise to the normal running temperature of the installation.
- (c) Turn the setting knob to the point where the contacts just open, then turn it back approximately half a division on the dial.  
 (This gives an operating temperature margin of about 5°C.)

## INSTALLATION & OPERATING DATA



### 4 TECHNICAL DETAILS

Set Point Range:

TX2010	20...80°C.
TX2010.01	20...180°C.

Hysteresis: 8°C.

Accuracy: ±5°C.

Set Point Adjustment: Dial calibrated in °C.

Ambient Temp. Limits: -20...200°C.

Housing Material: Glass reinforced polyester.

Sensing Plate Material: Copper.

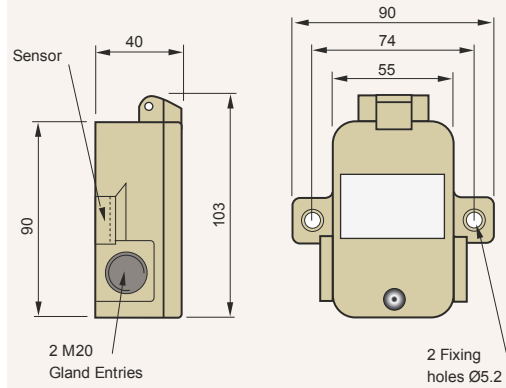
Sensing Principle: Differential expansion thermostat.

Protection Classification: Dust and waterproof to IP65.

Electrical Connections: 4mm stud terminals.

Nett Weight: 300g.

### 5 DIMENSIONS



ALL DIMENSIONS IN MM

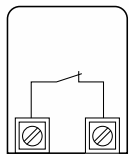
### 6 ELECTRICAL DETAILS



Normally closed contacts. Open on rising temperature.

Contact Rating: 240V ac, 10 Amps.

### 7 CONNECTIONS



Contact Operation:

Normally closed contacts. Open on rising temperature.

### 8 CALIBRATION

Each thermostat is individually calibrated at the maximum temperature setting shown on the dial. The knob is sealed on the shaft so as to be adjustable only between the minimum and maximum temperature specified. This setting range cannot be changed after leaving our factory.

### 9 MAINTENANCE

No maintenance is required.

**INSTALLATION & OPERATING DATA**



**PROTECTING THE ENVIRONMENT**

**Many of our products are often used to monitor the quality of environmental conditions consequently Trolex is also particularly aware of the need to protect human health and the environment in which we live.**

The Company has instituted a radical environment protection policy to ensure that all aspects of our manufacturing programme have the minimum possible detrimental impact on the environment. This covers all stages beginning with sustainable product design supported by careful selection of the materials used in their production, through to managed recovery and disposal at the end of the useful life of a product.

This policy also incorporates the principles of the Waste Electrical and Electronics Equipment (WEEE) directive, and the associated Restriction of Hazardous Substances (RoHS) directive, to be implemented in EU countries.

Progress is already well advanced on the introduction of a completely new range of products that maximise the central principle of sustainable design with the intention of reducing the end-of-life cost to the end user.

All Trolex products are manufactured to exacting standards in accordance with our stringent quality control ethos. Having chosen to use one of our products will, in itself, guarantee extended durability and a long operating life, endorsed by our commitment to recycling and recovery.

- All packaging materials are carefully selected to be bio-degradable or re-cyclable where possible.
- All plastic materials are identified for recycling purposes and re-cycled materials are used where it is possible to do so.

- Printing paper and material are sourced from suppliers that have a declared environmental management system.
- Product design centred around high quality and long term durability. Modular architecture both in construction and software design suitable for future upgrades and adaptability to alternative duty.
- Ease of product disassembly, minimisation of fixing devices, and clear separation of functional parts to benefit re-use and re-cycling.
- Control and monitoring of suppliers of components and sub-assemblies. Deal only with suppliers that have a defined commitment to environmental monitoring principles.
- Control the use of restricted substances within the design process. Deal only with suppliers that have a defined commitment to the control of restricted substances.
- Provide an efficient high speed service within Trolex for repair, refurbishing and conversion of products for alternative duty.
- Provision of an end-of-life product Take-back service for recovery, re-use, and recycling of electrical and electronic components. Retain the packaging of a new product and re-use it to return the device to us at the end of its working life. Trolex will guarantee to recover all materials and components, where practicable and arrange for them to be re-cycled in an appropriate and in a safe manner.