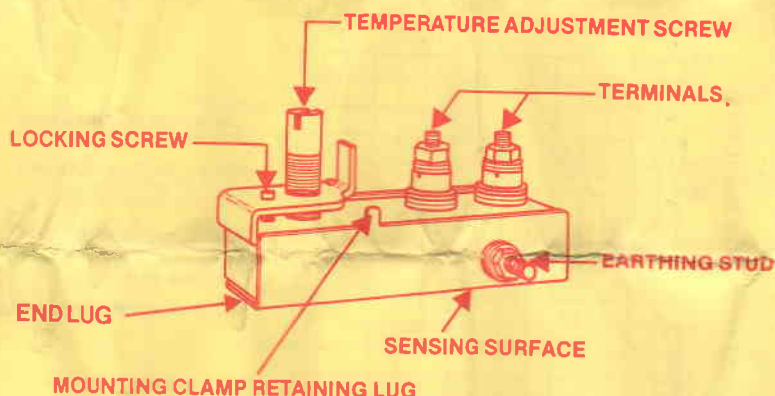




SURFACE MOUNTING THERMOSTAT

Stock No. 334-303



TECHNICAL DATA

Operating temperature range $+40^{\circ}$ to $+300^{\circ}\text{C}$
Switching differential $< \pm 2^{\circ}\text{C}$ (4A, 240V AC)
Contact rating 4A, 240V AC, 10A, 110V AC
4A, 24V DC, 2A, 110V DC

Contacts open on increase of temperature. For recommended contact suppression see below.

MODE OF OPERATION

The outer stainless steel case is the sensing element which expands or contracts with a change of temperature; this change in the case size either breaks (temperature rise) or makes (temperature fall) a pair of contacts at a pre-set temperature between $+40^{\circ}\text{C}$ and $+300^{\circ}\text{C}$.

HANDLING AND SITING

Whilst this thermostat is robustly constructed, care must be exercised during handling and installation. It should be remembered that the outer case is the sensing surface which operates the contacts; a damaged or distorted case may affect the operation of the thermostat.

This thermostat must be installed so that the expansion of the outer case is not impeded or restricted, also the thermostat should be fitted so that the whole base area is exposed to the surface being sensed.

Care should be taken to avoid the effects of radiant heat or the conduction of heat from sources, other than those being controlled.

WARNING. This thermostat is not hermetically sealed and therefore care must be taken to prevent the ingress of any medium which could produce contact contamination, arcing or shorting.

Operation in the presence of volatile liquids or vapours should be avoided.

INSTALLATION

To ensure efficient operation the chosen contact surface should be flat, free from distortion, indentations, etc. and should also be free from dust, oils and other contaminants. Silicon grease or heat sink compound may be used to minimise thermal resistance.

The thermostat should be clamped to the required surface using the supplied mounting clamp which locates over the retaining lugs on the thermostat case or using the supplied bracket which is placed over the end lugs; when using the bracket the retaining screws should not be fully tightened to allow for expansion or contract of the case.

The assembly is then mounted onto the required surface by means of two screws, through the holes in the clamp. Before installation ensure that the mounting surface is approximately at room temperature.

It is recommended that all electrical connections are made using high temperature wires, i.e. P.T.F.E. or glass fibre insulated.

The thermostat's single pole switch should be connected in series with the load.

ADJUSTMENT

This thermostat has been set to a temperature of approximately $+40^{\circ}\text{C}$ during production. To set for other temperatures the following procedure should be adopted.

1. Loosen the locking screw (but do not remove it) using a hexagon key.
2. Turn the temperature adjustment screw to the approximate required temperature setting. Note that one complete turn in a clockwise direction will increase the operating temperature by approximately 100°C .
3. Tighten the locking screw temporarily.
4. Install the thermostat in the desired location using the installation procedure previously described.
5. Check the setting under working conditions and reset the adjustment screw as necessary.
6. When the required operating setting has been obtained, fully tighten the locking screw, taking care not to apply excessive torque.

CAUTION. This thermostat must not be subjected to temperatures in excess of $+350^{\circ}\text{C}$, or less than -10°C , otherwise permanent damage may result.