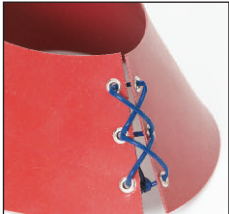
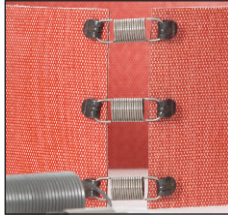




Silicone heating panels fitting Instructions



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CE Statement

WARNING:

- Before use read this manual carefully.
 - Warning label must not be removed.
 - Heating panels must only be used by qualified personnel.
 - Installation and maintenance must be carried out by qualified personnel.
 - Heating panels must be installed maintaining good contact to surface that is to be heated.
 - Ensure the use of adequate thermal control.
 - Do not use in explosive or hazardous areas.
 - Do not touch when heating panel is energised.
 - Do not exceed maximum operating temperatures.
 - Do not overlap heating panels.
 - Do not use if heating panel is damaged.
-

GENERAL:

Heating panels of the H/SR series are silicone insulated heating devices for industrial use.

Dependant on the requirement, they can be designed with:-

- adhesive backing.
- Temperature sensors and controllers.
- Various fixing methods.
- A range of operating voltages and ratings.
- UL or VDE approval.

They are used for heating up and compensation of heat losses on a variety of applications.

The maximum temperature of use is 200°C (180°C with adhesive backing). The maximum achievable temperature, however, depends on the specific operating conditions. It may be influenced by the heat conductivity of the materials and media to be heated as well as the throughput, the ambient temperature, the insulating material and the insulation thickness.

SAFETY INSTRUCTIONS:

The heating panels are intended for use in industrial electric heating apparatus.

They correspond to the BS EN 60335-1:2002.

The heating panel has to be operated in accordance with these standards and regulations.

The heating panel should be installed on an electrical system protected by a residual-current circuit breaker.

MALFUNCTION:

Heating panels or their cables that show visible signs of damage or are not operating correctly should be disconnected from the electrical supply and removed from the installation immediately.

COMMISSIONING AND OPERATION:

- The maximum temperature for using the heating panels is 200°C (180°C with adhesive backing).
- Do not allow the heating panels to exceed this temperature.
- Suitable temperature control must be used.
- Please observe the requirements of the standards listed under 'Safety Instructions'.
- Correct function of temperature control and limiting devices must be checked on first operation.

MAINTENANCE AND CARE:

Maintenance and care is performed according to the standards listed under 'Safety Instructions'.

The function of the temperature controlling and limiting safety device must be checked and the surface and connection cable should be inspected for visible damage at least once a year. The surface of the heater should be cleaned with a damp cloth. Do not use solvents.

TECHNICAL DATA:

For nominal voltage, mains frequency and nominal performance please refer to specification:-

Electrical Protection	None
System of protection	IP 64
Temperature sensor/ controller	Refer to specification
Heating conductor temperature	
Non adhesive	200 °C
Self adhesive	180 °C
Dimensions and weight	Refer to specification

INSTALLATION AND CONNECTION:

The heating panels are fitted to the component to be heated and fixed using springs, hooks, quick release fasteners, adhesive backing, silicone glues or separate straps.

When fitting with adhesive backing or silicone glue all surfaces must be clean and de-greased. Ensure there are no sharp edges that may damage the silicone insulation.

The heating panels are moisture resistant and are not suited for immersion.

Metallic components coming in contact with the heating panel have to be incorporated in the protection measures of Protection Class I (protective earthing).

A residual current device circuit breaker is recommended.

INSTALLATION OF NON-ADHESIVE HEATER MAT:

- 1 Ensure surface to be heated is clean of grease and dirt (use cleaning solvent if required).
- 2 Whilst the elements are flexible, care should be taken not to roughly handle, fold or crease them.
- 3 Ensure H/SR heating element is clean of dust and dirt. (to clean use a damp cloth).
- 4 Apply a thin layer of suitable silicone rubber adhesive to the side of the element which is to be placed in contact with the surface to be heated.
- 5 Place H/SR element into position, against surface to be heated and press firmly ensuring good, even contact.
- 6 Route and secure heater mat cold lead/cable
- 7 Visually inspect heater mat installation.
- 8 Electrically static test heater mat for correct element resistance reading and earth isolation.
- 9 Equipment that the heater mat is fitted to should provide protection against electrical shock according to relevant European standards.