

SSM Silicone heater plate for control cabinets

Features

- Space saving thanks to its flat structure
- Good and uniform heat distribution thanks to the uniplanar structure
- Random mounting position
- Excellent resistance to chemicals

Description

The SSM heater plate can be used for frost protection and as an anti-condensation heater. Its application ensures complete operational safety as the plates prevent malfunctions often due to leakage currents on electrical installations or the corrosion of metal components. Typical applications are switchgear and controlgear cabinets, instrument housings, analyser cases, glove boxes and other enclosures.

Structure

The heater plate consists of a thin, anodised aluminium baseplate, vulcanised with silicone-impregnated glass-fibre mats with an embedded heating coil. A bimetallic switch integrated in the terminal block limits the surface temperature of the heater approx. +70 °C. An alternative version is available for adjusting the surface temperature from +30 °C to +150 °C.

Additional products

Thanks to the unusual structure of silicone heaters, it is possible to manufacture different versions for every application.

The following **parameters** can be altered for individual applications:

Geometry/Shape

Flexible large-area heaters up to a size of 2.5 m x 1.2 m and about 2.5 mm thick can be achieved. Cutouts, threads etc. can be provided at random. Heaters for cylindrical bodies (5 to 200 mm diameters) are preformed according to the required radius as a sleeve.

Fixing method

Large-area heaters can be installed with self-adhesive tape, with a special glue, by means of a clamping plate or tension springs.

Nominal voltage

6 V to 230 V; 3 N AC 100 V to 3 N AC 400 V are possible.

Power density

approx. 0.65 W/cm² for self-stabilisation; up to 2.0 W/cm² if limited by a thermostat.

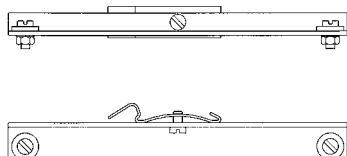
Temperature control

The surface temperature of the heater is influenced by the particular power density W/cm², temperature sensors for the control and limitation can be directly integrated in the heating system, sensor receptacles for external temperature sensors can be provided on the heater surface.

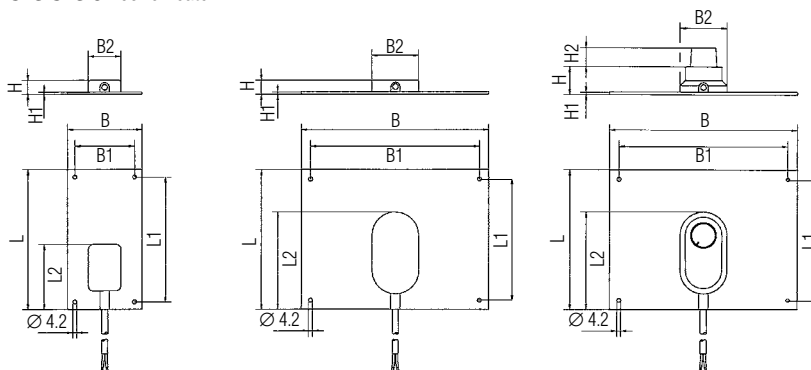
The direct contact and large area format result in a very favourable heat flow in the desired direction. This means lower temperature differences between heater and object (medium).

Dimensions

Snap-on rail mounting TS 35



Dimensions Silicone heater



Technical data

VDE certificate

License no. 101109

Norms

EN 60335-1

Min. ambient temperature

-60 °C

Max. ambient temperature

+80 °C (at Type 27-0222)

Plate temperature

+70 °C (pre-set value)
adjustable from +30 °C to +150 °C

Fixing details

- with 4 x M4 screws
- with a special glue
- with mounting rails

Materials

baseplate	aluminium sheet, anodised 1.0 or 1.5 mm thick
Insulation	silicone rubber approx. 1.5 mm thick
heating element	CrNi or constantan wire
supply cable	of silicone 2 x 0.75 mm ² , 0.5 m long

Protection class

Type 27-0212-..	IP 53
Type 27-0222-..	IP 51

Electrical data

Heat output

40 W/100 W/250 W

Nominal voltage

AC 230 V/50 Hz

Di-electric strength

up to 12 KV/mm

Dimensions in mm

L	L1	L2	B	B1	B2	H	H1	H2	Order no.
150	134	70	80	64	35	15	2.5	without	27-0212-1704
150	130	105	200	180	50	15	3	without	27-0212-2710
150	130	105	200	180	50	30	3	20	27-0222-2710
300	280	105	200	180	50	15	3	without	27-0212-3725
300	280	105	200	180	50	30	3	20	27-0222-3725

Selection chart for heater plate

Heat output	+70 °C pre-set	adjustable from +30 °C to +150 °C
	Order no.	Order no.
40 Watt	27-0212-1704	-
100 Watt	27-0212-2710	27-0222-2710
250 Watt	27-0212-3725	27-0222-3725

Selection chart for accessories - Fixing bracket for TS 35

Installation sizes L x B	Order no.
for heater 150 x 80 mm, 150 x 200 mm	05-0010-0056
for heater 300 x 200 mm	05-0010-0057

Technical data subject to change without notice.