

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.

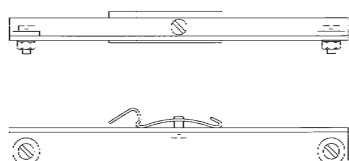
#### Technical data

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 <sup>2</sup> , 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 Snap-on rail mounting TS 35



#### 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.

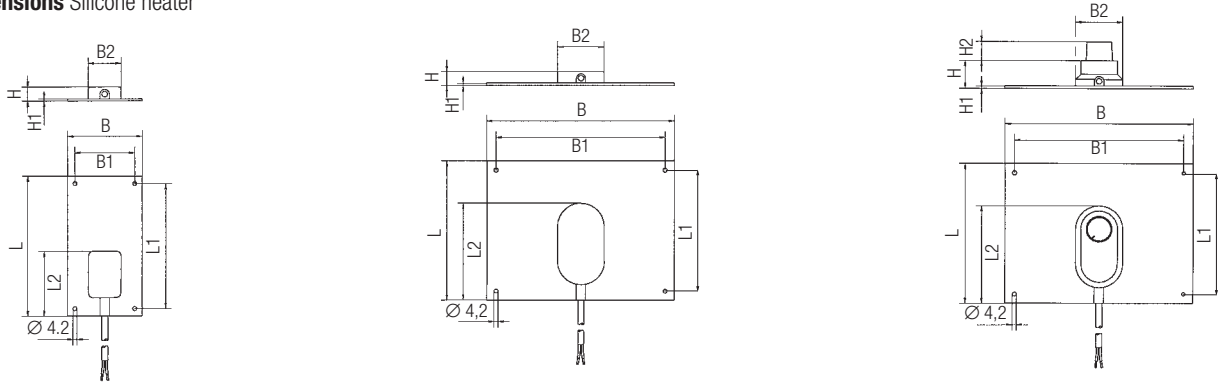
#### Power density

approx. 0.65 W/cm<sup>2</sup> for self-stabilisation; up to 2.0 W/cm<sup>2</sup> if limited by a thermostat.

#### Temperature control

The surface temperature of the heater is influenced by the particular power density W/cm<sup>2</sup>, 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** Silicone heater



**Ordering information** Dimensions in mm

L	L1	L2	B	B1	B2	H	H1	H2	Order no.
150	134	70	80	64	35	15	2,5	without	<b>27-0212-1704</b>
150	130	105	200	180	50	15	3	without	<b>27-0212-2710</b>
150	130	105	200	180	50	30	3	20	<b>27-0222-2710</b>
300	280	105	200	180	50	15	3	without	<b>27-0212-3725</b>
300	280	105	200	180	50	30	3	20	<b>27-0222-3725</b>

**Ordering information** Heater plate

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

**Ordering information** Fixing bracket for TS 35

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

Technical data subject to change without notice.