SL SLIMTHERM Heater

1 Application

The SLIMTHERM electric heater has an exceptionally flat design and is to be used in hazardous areas where heating is necessary, but physical space place is scarce.

One side of the heater is flat. Suitable to be attached directly to a flat surface which conducts heat well (metal). The other side of the heater is finned, optimized to heat the surrounding air.

2 Special Features & Advantages

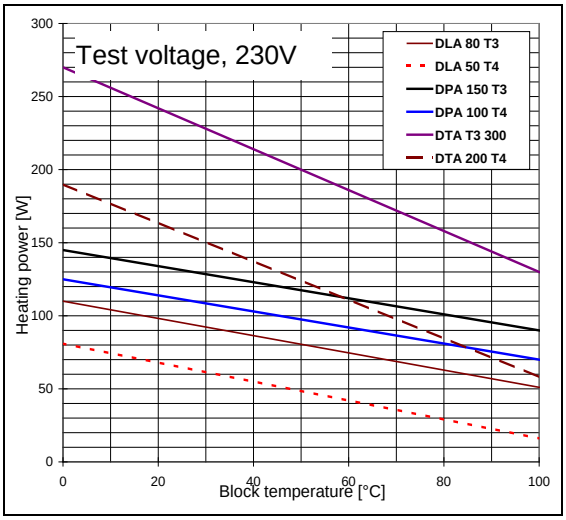
- Exceptionally flat design (30 mm)

3 Description

SLIMTHERM is powered by a PTC electrical cartridge and through its' finned side it heats the air in the enclosure by convection, through its' flat side by conduction. Ensure effective convection by observing the necessary overall clearance of 3 cm save the flat side of the heater which is to be in firm contact with a flat metal surface. Take care not to cover the fins. Explosion-proof types of heaters are equipped with a ground terminal and a different nameplate. The

SL SLIMTHERM may be installed in any position, but ideally "standing" (with cable down) and mounted in close thermal contact with a sheet metal.

4 Performance



4 Explosion Protection

EC Examination Certificate	PTB 02 ATEX 1116 X
IEC Scheme Certificate	IECEx PTB 07.0055X
IEC Scheme Type of Protection	II 2G Ex db IIC T6, T5, T4, T3
	II 2D Ex tb IIIC T85°C, T100°C, T135°C, T200°C

5 Technical Data

Protection degree	IP68
Connection cable	3 x 1.5mm², 8.1mm Ø
Nominal voltage	110 to 265 Volt
Material	seawater-proof aluminium, black anodized

6 Types

SL SLIMTHERM	DLA 50 T4	DPA 100 T4	DLA 80 T3	DPA 150 T3	DTA 250 T3
Power Watt	50 W	100W	80 W	150 W	250 W
Temperature Class	T4		T3		
Width/ Depth (mm)	206 x 30				
Height (mm)	105	225	105	225	325

7 Options

AM	Failure alarm opening at < 5 °C
3M	Connection cable 10' / 3 m long
TS	Thermostat in the cable

All INTERTEC explosion-proof heaters can also be supplied

- to North American standards (NEC/CEC)
- in a less expensive, Non-explosion-proof design
- as Bi-Standard (see datasheet HD508)

INTERTEC-Hess GmbH · Raffineriestr. 8 · 93333 Neustadt/Donau · Germany · ☎ +49 9445 9532-0 · ✉ info@intertec.info

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8 Temperature Limitation

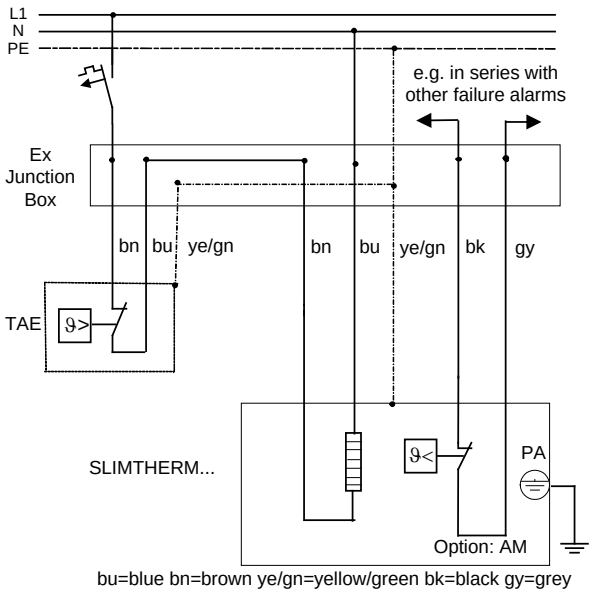
PTC-elements (**P**ositive **T**emperature **C**oefficient) raise their electric resistance with rising temperature. High resistance means low heating power. The heating power gets very low at high temperatures so that the temperature cannot exceed the maximum temperature of the respective temperature class. The PTB Certificate of Conformity stipulates that the heat transfer coefficient of the surrounding enclosure must not be less than K=0.5 W/K. All INTERTEC enclosures meet these requirements.

9 Supply Voltage

In addition to the above-mentioned temperature characteristics, the PTC-elements show a varistor effect. They control their resistance in accordance to the supply voltage. The nominal power supply voltage may be 110 V to 265 V with the same heater. The heating capacity output may deviate up to 15 % from the data shown in the performance diagram (4).

10 Electric wiring

10.1 SL SLIMTHERM…TS with TAE



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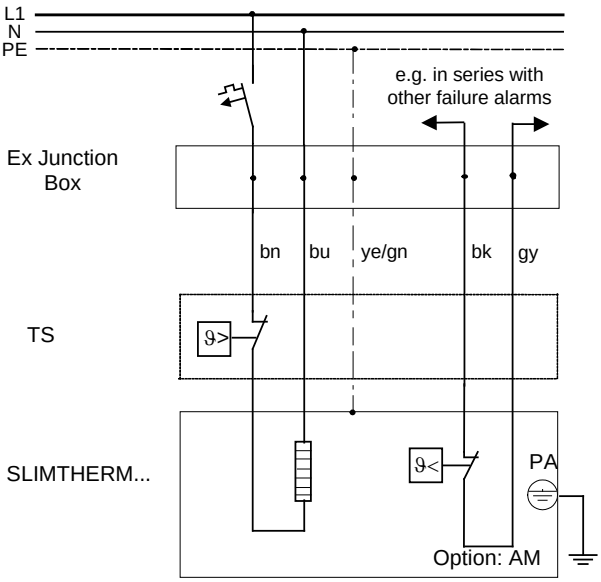
10.2 SL SLIMTHERM…TS



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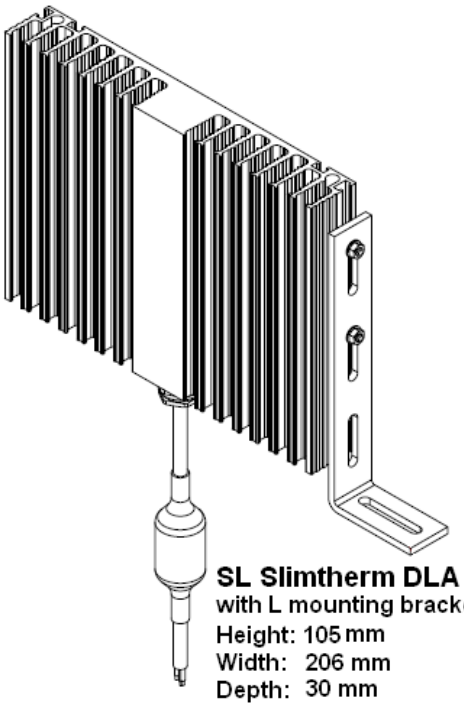
11 Dimensions



SL Slimtherm DLA 50 T4 TS20
with L mounting bracket
Height: 105 mm
Width: 206 mm
Depth: 30 mm

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