SL BLOCKTHERM DPA... T.

1 Application

The self-limiting electric conduction heater is designed to be attached directly to manifolds, measuring instruments, control valves and similar equipment installed in hazardous areas. It heats the device by direct conduction. This is the easiest, safest and most economical method of freeze protection or temperature maintenance.

2 Special Features & Advantages

- Energy saving
- Self limiting, no fusible link or limiter
- Requires little space
- Hole pattern according to the SP SP76.00.02 Standard. The heater is specially designed to fitted the NeSSI Generation II Standard, for example Parker IntraFlow™

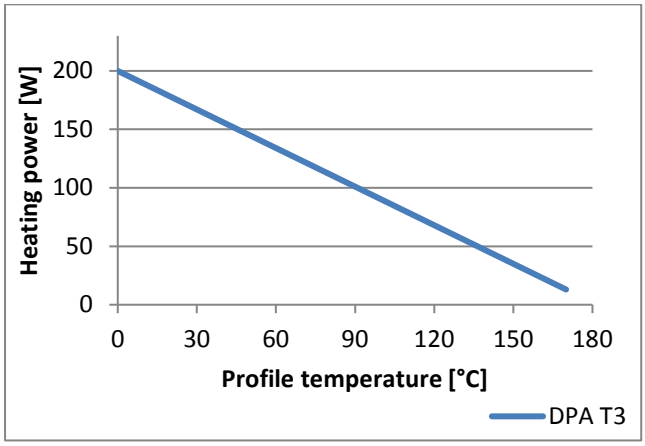
3 Description

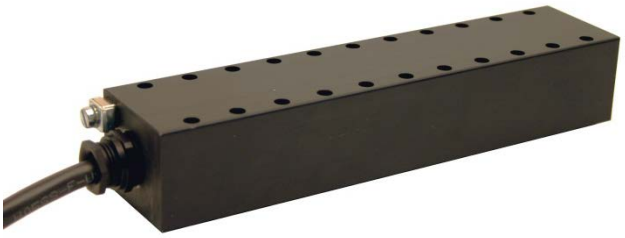
BLOCKTHERM is a metal heating block. The PTC cartridge provides the heat that is transferred through the heater block to the device to which it is attached. Explosion-proof types of heaters are equipped with a ground terminal and a different nameplate.

4 Performance

A conduction heater requires considerably less power than a finned convection heater, as the heat conducting qualities of metal are much better than those of air. The air surrounding the whole installation in the enclosure serves as additional insulation.

The diagram below shows the heating power at different profile temperatures.





5 Explosion Protection

EC Examination certificate	PTB 02 ATEX 1116 X
IEC Scheme Certificate	IECEx PTB 07.0055 X
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

6 Technical Data

Ingress protection	IP66/ IP68$_{1bar/30min}$
Nominal voltage	110 V to 265 V
Ambient temperature range	-60 to +180°C
Connection cable	silicone cable, notch and oil resistant, 3 x 1,5 mm²
Length of connect. cable	1 m
Length x Width x Height	225 mm x 50 mm x 45 mm
Material	seawater-proof aluminium, black anodized

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Temperature Class	T4	T3
Nominal Power	100 W	150 W

(Other types upon request)

All INTERTEC explosion-proof heaters can also be supplied

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

7 Options

AM	Failure alarm opens at < 5°C
3M	Connection cable 3 m long

Not all options can be combined.

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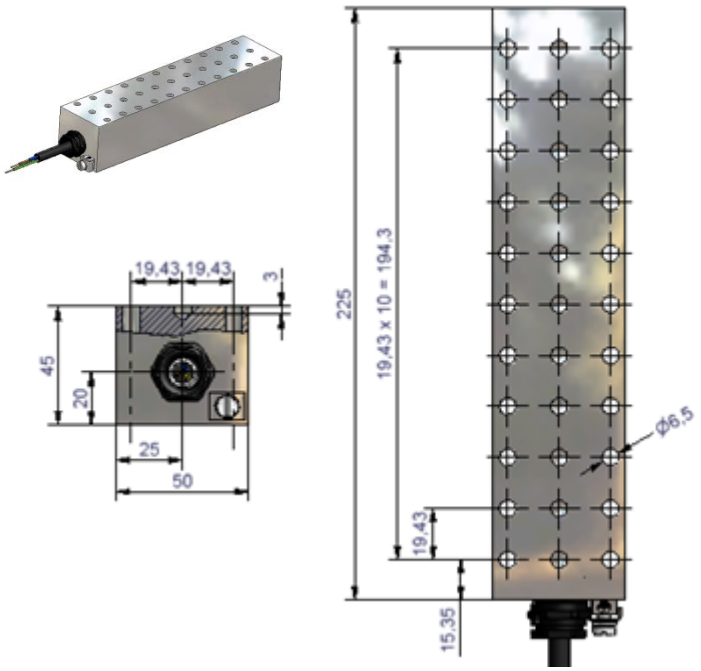
8 Temperature management

PTC-elements (**P**ositive **T**emperature **C**oefficient) raise their electric resistance with rising temperature. High resistance means low heating power. The heating power turns 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.
If a certain maintained temperature set point is required, the TAE thermostat (HD223) can be attached to control the temperature of the item that is being heated.

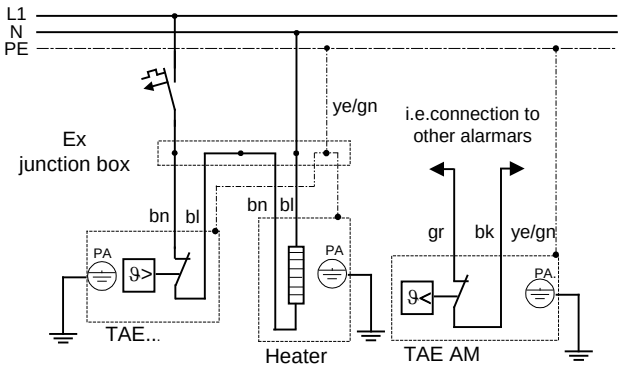
9 Supply Voltage

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 in rush current may be 3 - 5 times greater as the nominal current during the first 1-2 seconds after power on. The heating output may deviate up to 15% from the specified values.

10 Dimensions

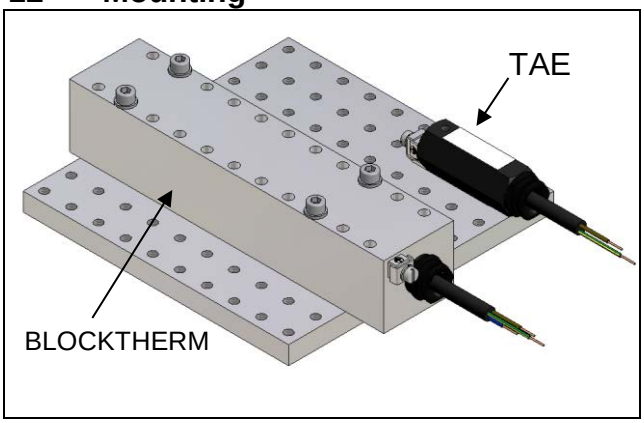


11 Electric Wiring



bl=blue bn=brown bk= black ye/gn=yellow/green gr= grey

12 Mounting



The block heater dissipates the heat by conduction. It should be mounted to a flat surface of a heat conducting material (e.g. metal).Use of min. 2 bolts is sufficient to mount the heater.

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