

SL VARITHERM DPA ...

Electric heater



1 Application

Heating of instrument enclosures in hazardous areas, designed for

- freeze protection
- condensation protection
- temperature maintenance
- preferably horizontal installation

2 Special Features & Advantages

- Horizontal design allows for optimum installation of the heater underneath the instruments in the enclosure
- Vertical installation is also possible
- High heat transfer capabilities due to large surface area of black anodized aluminium fins
- Heater fins can be removed and modified by INTERTEC, if necessary for installation purposes

3 Description

VARITHERM heaters are finned heaters, heating the air in the enclosure by convection.

The SL VARITHERM is heated by a self-limiting PTC-cartridge. Make sure that the minimum installation distances will be met as described under item 8.

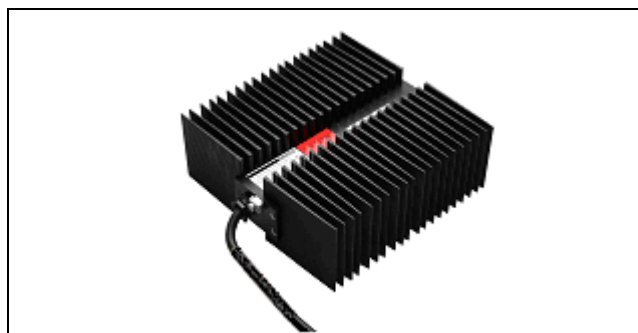
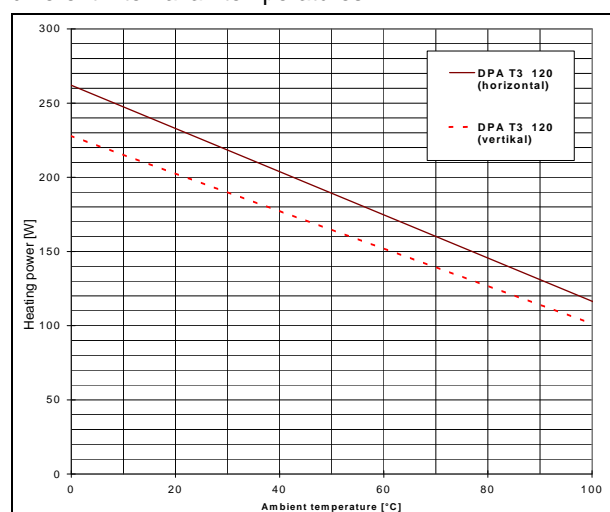
This is essential to achieve the necessary free thermal convection inside the enclosure. The Heater fins must not be covered!

Explosion-proof types of heaters are equipped with a ground terminal and a different nameplate.

With regard to the residual current devices and insulation monitors, attention must be paid to DIN EN 60079-14:2008, Section 7.4 and/or the operating instructions.

4 Performance

The output of an explosion-proof PTC heater depends on the temperature. The diagram below shows the output at different internal air temperatures.



For any specific applications requiring high temperature maintenance we will be pleased to select the suitable combination of heater and controller.

5 Explosion Protection

| | |
|---------------------------------|---|
| EC Type-examination certificate | PTB 02 ATEX 1116 X |
| IEC Scheme certificate | IECEx PTB 07.0055X |
| Marking | II 2 G Ex d IIC T4 bzw. T3 II 2 D Ex tD A21 IP65 T135°C, T200°C |

6 Technical Data

| | |
|-----------------------------|--|
| Ingress Protection | IP 68 |
| Nominal voltage | 110 bis 265 Volt |
| Operating temperature range | -50°C bis 180°C |
| Connection cable | 3x 1,5mm² 8,8mm Ø |
| Length of connection cable | 1 m |
| Dimensions, (L x W) | 220 x 213 mm |
| Material | seawater-proof aluminium, black anodized |

| SL VARITHERM DPA ... | T3 120 |
|----------------------|--------|
| Nominal power | 250 W |
| Temperature class | T3 |
| Height | 120 mm |

(Other types upon request)

All INTERTEC explosion-proof heaters can also be supplied

- to north American standard (CSA/NEC/NRTL/FM/UL)
Ordering Example: SL VARITHERM **C**PA T3 120
- in a less expensive, **N**on-explosion-proof design
Ordering Example: SL VARITHERM **N**PA T3 120

7 Options

| | |
|----|--|
| AM | Failure alarm opening at < 5 °C silicone cable, notch and oil resistant, 5x 1,0mm² 8,5mm Ø |
| 3M | Connection cable 3 m long |
| TS | Thermostat in Connection cable |

Ordering Example: SL VARITHERM DPA T3 120 **AM**



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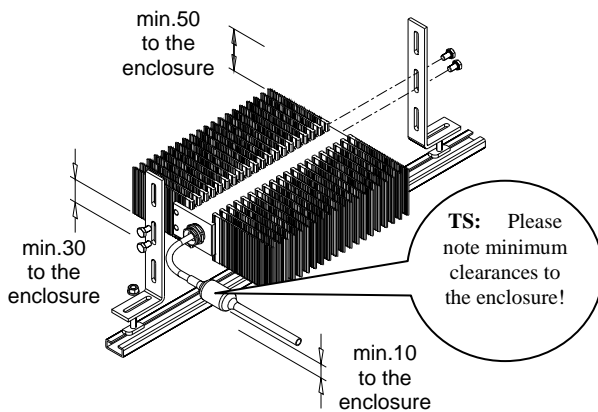
8 Installation

Trouble-free installation, e.g. on a mounting plate or the INTERTEC mounting system (C-rails) in the instrument enclosures or protective cabinets, is possible.

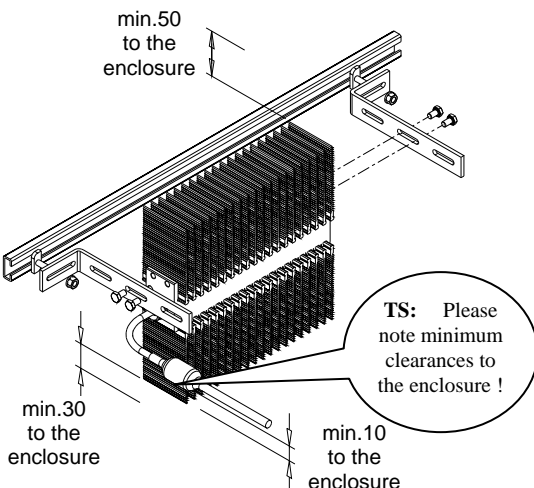
During installation, attention should be paid to the following:

- Follow the installation and operating instructions supplied with the VARITHERM heater.
- The fins must be positioned vertically
- Please note minimum clearances to the enclosure, as per 8.1 and 8.2
- The label must be clearly legible

8.1. Horizontal Installation



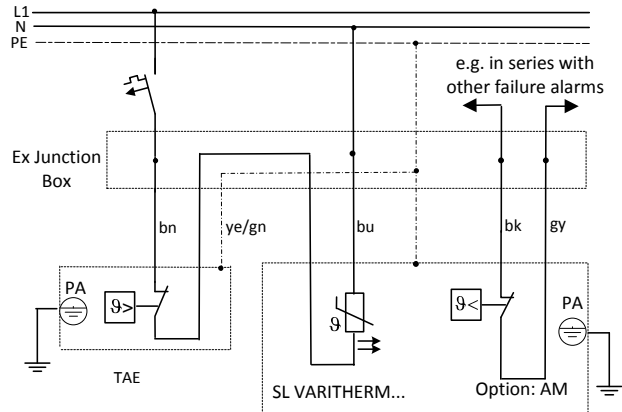
8.2. Vertical Installation



The brackets in zinc coated steel and fixing bolts illustrated above are included with the heater.

9 Electric Wiring

SL VARITHERM DPA ... with TAE



9.1. SL VARITHERM DPA ...TS

