

# CP SLIMTHERM D Electric Heater

## 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 heaters heats through its' finned side the air in the enclosure by convection and through its' flat side by conduction. A non-resettable temperature limiter built to ATEX design specifications is integrated in the core block, cutting off the power in case of a technical failure or excessive heating resulting from an external heat source. For this reason and for reasons of operational safety the heater must only be operated under conditions that ensure that the trip temperature of the limiter will not be exceeded: The ambient temperature in the enclosure must not exceed the maximum permissible values. This, in case of freeze protection heaters, will be guaranteed by the TS thermostat or, in case of heaters used for temperature maintenance, by the TS 40 protective thermostat. Therefore, a CP SLIMTHERM heater must have a TS thermostat.

For temperature maintenance, an additional external TAE thermostat must be connected in series and installed on the surface of the heater to enhance thermal coupling. Alternatively, a TC temperature controller can be used.

Ensure effective convection by observing the necessary overall clearance of 3 cm save the flat side of the heater. Take care not to cover the fins.

With regard to the residual current devices and insulation monitors, attention must be paid to DIN EN 60079-14:2014 and/or the operating instructions.

A temperature indicator shows potential problems and failures at an early stage (e.g. incorrect installation). Please check the application if more than 3 fields have irreversibly changed to black



All INTERTEC explosion-proof heaters can also be supplied

- to North American NEC standard (CSA/ NRTL).
- in a less expensive, Non-explosion-proof design
- as Bi-Standard (see datasheet HD508)



## **Explosion Protection**

IEC Scheme Certificate	IECEx PTB 07.0052X
EC Examination certificate	PTB 02 ATEX 1041X
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**

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Ingress Protection		IP68		
Operating temperature range		-60° to +180° C		
Nominal voltage		230V AC		
Connection cable		silicone cable, notch and oil resistant, 3x 1,5mm <sup>2</sup> 8,1mm Ø		
Width x Depth		206 x 30 mm		
Material	seawater-proof aluminium, black anodized			

Types (Other types upon request.)

6 6.1 for freeze protection CP DNA DLA DPA DPA DPA SLIMTHERM 75 T4 125 T3 100 T4 200 T3 250 T3 Temp. class Τ4 T3 Τ4 ΤЗ T3 Nom. Power 125 W 200 W 250 W 75 W 100 W

Height	155mm	105mm	225 mm			
6.2 for temperature maintenance to 40° C						
СР	DLA	DNA	DNA	DNA	DNA	
SLIMTHERM	30 T3	50 T3	50 T4	75 T3	100 T3	
Temp. class	T3	T3	T4	T3	T3	
Nom. Power	30W/24V	50 W	50 W	75 W	100 W	
Height	105 mm	155 mm				
7 Options						

## Options

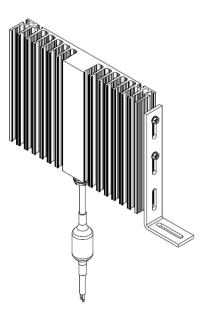
AM	Failure alarm opening at < 5 °C
3M	Connection cable 3 m long
TS	Thermostat in the cable

Not all options can be combined.



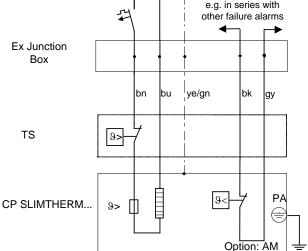
# **CP SLIMTHERM D** Electric Heater

8 **Dimensions** 



- **Electric wiring**
- 9 9.1 **CP SLIMTHERM...TS with TAE** L1 N PE ₹ª e.g. in series with other failure alarms 4 Ex Junction Box bn ye/gn bu bk bn bu ye/gn gy TAE θ> **TS40** θ> θ< PA CP SLIMTHERM ... θ> € Option: AM bu=blue bn=brown ye/gn=yellow/green bk=black gy=grey

## 9.2 **CP SLIMTHERM...TS** L1 N PE e.g. in series with 4 Ex Junction Box bn ye/gn bk bu



bu=blue bn=brown ye/gn=yellow/green bk=black gy=grey