

SL DSETHERM C Self-limiting Block Heater



1 Application

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

2 Special Features & Advantages

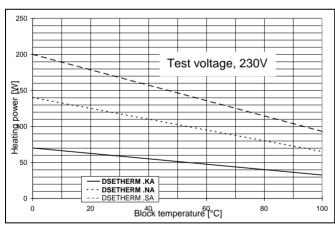
- · Energy saving, high output
- Self-limiting, no fusable link or limiter
- · Compact, requires very little space
- · Adjusts automatically to the voltage
- The additional fins support the convective heat transfer

3 Description

DSETHERM is a aluminum heating block with a ½" NPT thread to connect to a conduit. The PTC cartridge provides the heat that is transferred through the heater block to the device to which it is attached.

4 Performance

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



All INTERTEC explosion-proof heaters can also be supplied

- to European ATEX standard (ATEX/ IEC).
 Ordering Example: SL DSETHERM DSA T3 TS AM
- in a less expensive, <u>N</u>on-explosion-proof design <u>Ordering Example:</u> SL DSETHERM <u>N</u>KA
- as Bi-Standard (see datasheet HD608).



5 Technical Data

SL DSETHERM		CKA	CNA	CSA
CSA Certificate		1655545 (LR43674)		
CSA Type of Protection		CI. I, Div. 1, Group A,B,C,D, T3/T4		
Length of Block (Inches)		4"	6,5"	11,35"
Length of Block (mm)		101,60	165,10	288,30
Temperature Class		Т3		
Nominal Power (Watt)		70	140	200
Nominal Voltage		110 to 277 V		
Operating Temp. Range		-58 F to +356 F/ -50°C to +180°C		
Ingress Protection		IP 68		
Material	seawater-p	roof aluminium, black anodized		

6 Options

TSxx A	Thermostat kit with 3 port junction box
AM	Failure alarm opens at < 41F/ 5°C (only possible with version CNA and CSA)
3M	Connection cable 3 m long

Not all options can be combined.

Ordering example:

SL DSETHERM CNA T3 AM



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7 Temperature Limitation

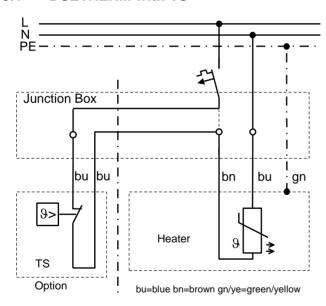
PTC-elements (**Positive Temperature Coefficient**) raise their electric resistance with rising temperature. High resistance means low heating power. The heating power gets very low at high temperatures so that the temperature cannot exceed the maximum temperature of the respective temperature class. 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.

8 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 277 V with the same heater. The output may be a maximum of 15% higher than that shown in the diagramme overleaf.

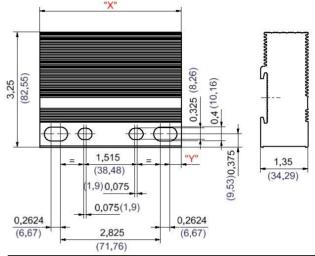
9 Electric Wiring

9.1 DSETHERM with TS



Connection cable Silflex-EWKF 3x1,5 mm², 1m long. Other lengths available upon request (at an extra charge).

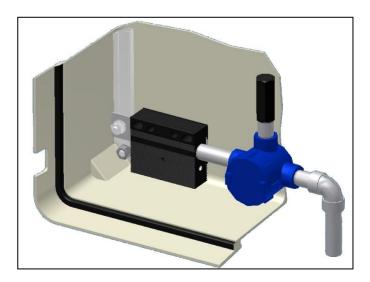
10 Dimensions



DSETHERM -Type	Length "X"	Length "Y"	
102	4" (101,6mm)	0,325" (8,26mm)	
165	6,5" (14,48mm)	0,57" (1448mm)	
288	11,35" (288,29mm)	0,57" (1448mm)	

11 Mounting

The block heater dissipates the heat by convection.



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