



SL DSE THERM 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

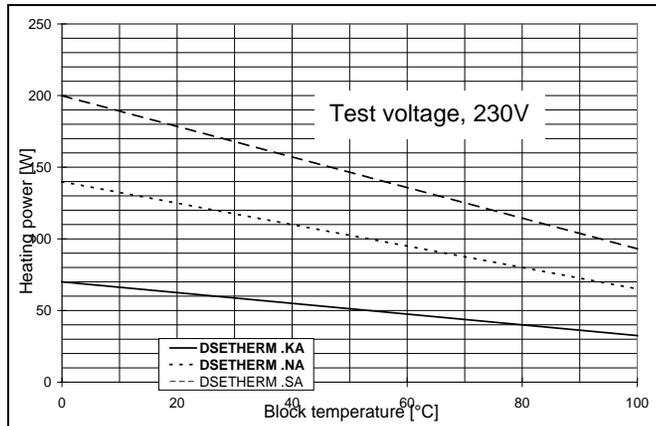
- Energy saving, high output
- Self-limiting, no fusible link or limiter
- Compact, requires very little space
- Adjusts automatically to the voltage
- Also operates as convection heater

3 Description

DSE THERM is an aluminum heating block with a 1/2" 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/EAC).
- as Bi-Standard (see datasheet [HD508](#)).



5 Technical Data

SL DSE THERM	CKA	CNA	CSA
CSA Certificate	1655545 (LR43674)		
CSA Type of Protection	Cl. I, Div. 1, Group A,B,C,D, T3		
Length of Block (Inches)	4"	6,5"	11,35"
Length of Block (mm)	101,60	165,10	288,30
Temperature Class	T3		
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-proof aluminium, black anodized		

6 Options

TSxx Kit	Thermostat with junction box
3M	Connection cable 3 m long

Not all options can be combined.



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7 Temperature Limitation

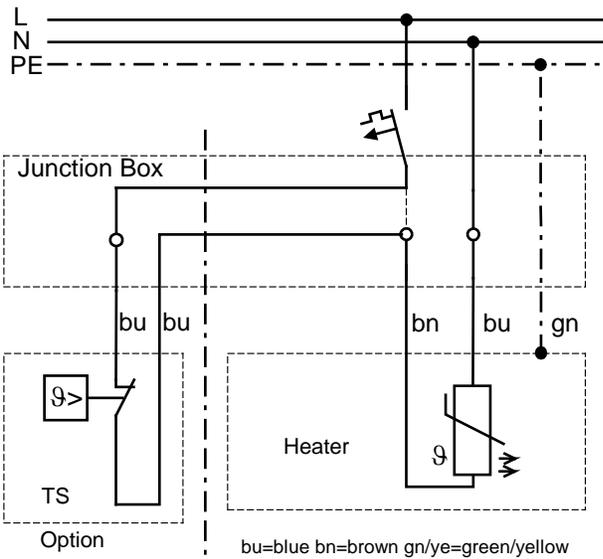
PTC-elements (Positive Temperature Coefficient) raise their electric resistance with rising temperature. High resistance means low heating power. The heating power gets very low at high temperatures so that the temperature cannot exceed the maximum temperature of the respective temperature class.

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.

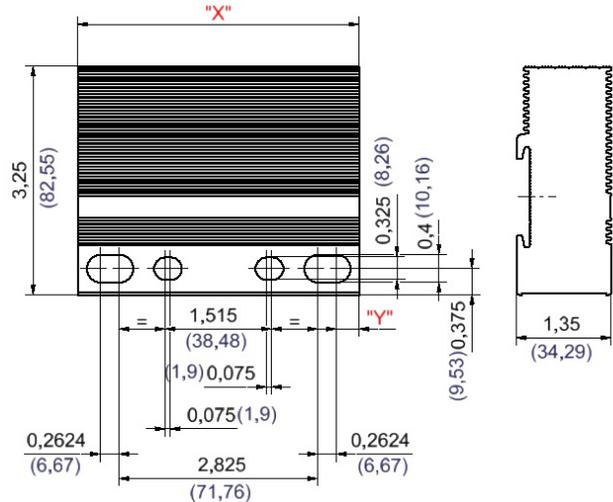
9 Electric Wiring

9.1 DSEETHERM with TS



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

10 Dimensions



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

11 Mounting

The block heater dissipates the heat by convection.

