

Temperature control of heat trace circuits in safe or hazardous areas

- Three wide span temperature ranges
- Stainless steel sensor and capillary tube
- Optional over-temperature lock-out
- Approved for use in Zone 1 and 2 hazardous areas
- Enclosures suitable for Gas groups IIA, IIB & IIC
- Stainless steel armoured capillary

### FEATURES

Capstats are temperature adjustable ON-OFF thermostats comprising a liquid filled sensing bulb connected to an electrical switch via a capillary tube.

Expansion of the liquid on rise in temperature causes the switch to open, and on cooling, it closes.

Capstats may control surface temperatures such as pipes or vessels, or the sensing bulb may be positioned to sense the air temperature.

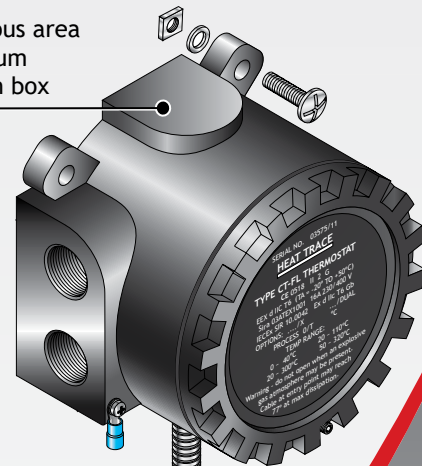
They may be used to provide process temperature control in safe or Zone 1 or 2 hazardous areas by switching the heating circuits at the desired temperature and are available to suit Group IIA, IIB or IIC gases.

The addition of a high limit cut-out switch (as provided with the Capstat-Dual version) is specified when the heat tracing scheme will not stabilise at a safe temperature without process control. It will operate if the process control switch fails or if an unsafe process temperature occurs.

### OPTIONS

- CT-FL ../X** Hazardous area Ex d Capstat suitable for use in Zone 1 and 2 hazardous areas, Gas Groups IIA, IIB and IIC.
- CT-FL ../X/DUAL** Hazardous area Ex d Capstat suitable for use in Zone 1 and 2 hazardous areas, Gas Groups IIA, IIB and IIC. Over-temperature lock-out (20° - 300° C) (Factory preset)

Hazardous area aluminium junction box



Protective metal sheath

Capillary thermostat sensor



The Heat Tracing Authority™

## SPECIFICATION

### THERMOSTAT SPECIFICATION:

	Type A	Type B	Type C
Temp. range (°C):	0-40	20-110	20-300
Setting accuracy:	±6	±6	±6
Switch differential (°C)	2±1.5k	4±2k	10±4k
Max. sensor temp:	110°C	140°C	320°C
Min. sensor temp:	-20°C	-20°C	-15°C
Capillary tube length:	1.5m	1.5m	1.5m
Sensor diameter:	6mm	6mm	6mm
Sensor length (mm):	143	140	89.5
Capillary tube material:	Stainless Steel		
Capillary tube protection:	Stainless Steel Conduit		
Sensor type:	Liquid Filled		
Sensor material:	Stainless Steel		

**SWITCH TYPE:** Single Pole, Single Throw Changeover

**SWITCH RATING:** 16A (Max), 230V / 400V resistive load

**SWITCH LIFE:** 100,000 operations

**TEMPERATURE SETTING ADJUSTMENT:** Internal Tamperproof Knob

**INGRESS PROTECTION:** IP66

**ENCLOSURE:** CT-FL

**Material:** Cast Aluminium  
**Finish:** Anodised black, Paint, Powder Coating or Epoxy

**Conduit entries:** 3 x 6 - 25mm Diameter

**Weight:** 4.3kg

**STANDARD ENTRIES:** 3 x M20

**TERMINALS:** Electrical connections 2.5mm<sup>2</sup> terminals (incoming/outgoing)

**MAX. POWER DISSIPATION:** 16.80W

### APPROVAL DETAILS:

ATEX - CML 19ATEX1461  
IECEX - IECEX CML 17.0113  
UKEX - CML 21UKEX11134  
CCC - 2020312304000837

### EQUIPMENT MARKING:

Ex II 2 G  
Ex db IIC T6 Gb  
Ta= -30°C ≤ Ta ≤ +50°C  
  
Ex db IIC T4 Gb  
Ta= -30°C ≤ Ta ≤ +60°C

### 'DUAL' SPECIFICATION:

	Low Temperature Thermostat	High Temperature Thermostat
Temperature Range:	35 - 120°C	100 - 320°C
Switching Differential:	± 4.5°C	± 8°C
Probe Diameter:	Ø6mm	Ø3mm
Probe Length:	1067mm	875mm
Maximum Sensor Temperature:	As indicated for types A, B or C as appropriate	

**EARTHING:** Internal and external earthing options available.

### BLANKING PLUGS:

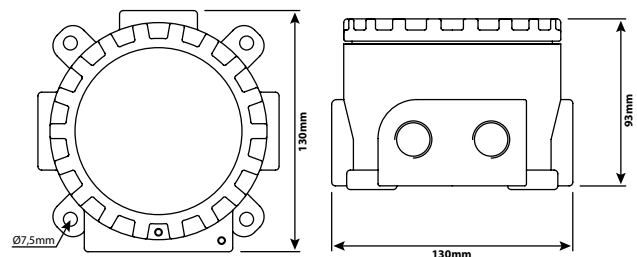
The equipment is not supplied with blanking plugs or cable glands, it is the responsibility of the user to ensure that suitably certified glands/plugs are fitted that do not affect the type of protection. A bottom entry may also be fitted with Peppers type 781D breather / drain plug. (Sira 10ATEX1307U / IECEX SIR 10.0149U). Only use approved termination methods that are provided.

### ORDERING INFORMATION:

Example **CT-FL / 2C / A / X / DUAL**  
 Capstat capillary  
 Thermostat  
 Temperatures range (0-40°C)  
 Armoured capillary  
 Dual lock-out\*

\* when ordering a Dual thermostat, please state the maximum permissible workpiece surface temperature (factory preset).

### CT-FL/2C VERSION:



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