



**Capillary Thermostats** 

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 conected to an electrical switch via a capillary

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

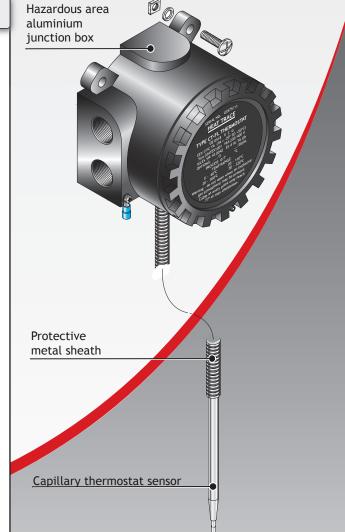
suitable for use in Zone 1 and 2 hazardous areas, Gas Groups IIA,

IIB and IIC.

Hazardous area Ex'd Capstat CT-FL ../X/DUAL

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)







# **SPECIFICATION**

#### THERMOSTAT SPECIFICATION:

	Type A	Type B	Type C
Temp. range (°C):	0-40	20-110	20-300
Setting accuaracy:	±6	±6	±6
Switch differential ( $^{\circ}$ 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

TERMINALS: Electrical connections 2.5mm<sup>2</sup>

terminals (incoming/outgoing)

MAX. POWER DISSAPATION: 16.80W

#### APPROVAL DETAILS:

ATEX - CML 19ATEX1461 IECEx - IECEx CML 17.0113

EAC - TC RU C-GB MЮ62.B.06043

JAPAN - CML 17JPN3008X

### **EQUIPMENT MARKING:**

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	High		
	Temperature	Temperature		
	Thermostat	Thermostat		
Temperature				
Range:	35 - 120°C	100 - 320°C		
Switching Differential:	± 4.5°C	± 8°C		
Probe				
Diameter:	Ø6mm	Ø3mm		
Length:	1067mm	875mm		
Maximum				
Sensor	As indicated for types			
Temperature:	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).

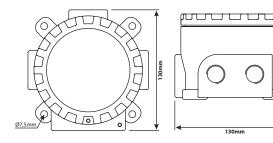
Only use approved termination methods that are provided.

### **ORDERING INFORMATION:**

	CT-FL	_ / 2C / /	4/)		IAI
Example					
Capstat capillary					
Thermosatat ———		]			
Temperatures range (0-	40°C) —				
Armoured capillary —				ļ	
Dual lock-out*					J

<sup>\*</sup> when ordering a Dual thermostat, please state the maximum permissable workpiece surface temperature (factory preset).

## CT-FL/2C VERSION:



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