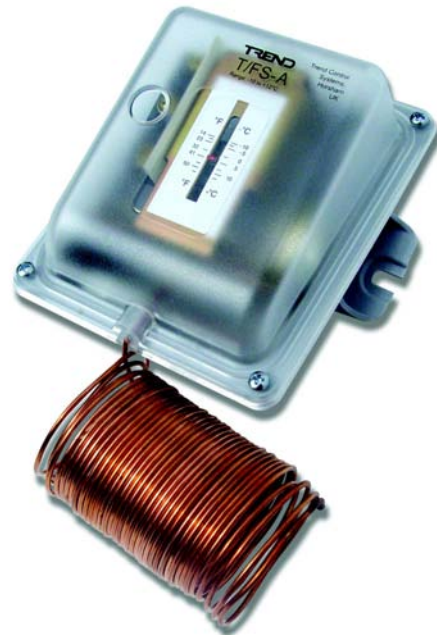


## Frost Protection Thermostat

### T/FS Frost Protection Thermostat



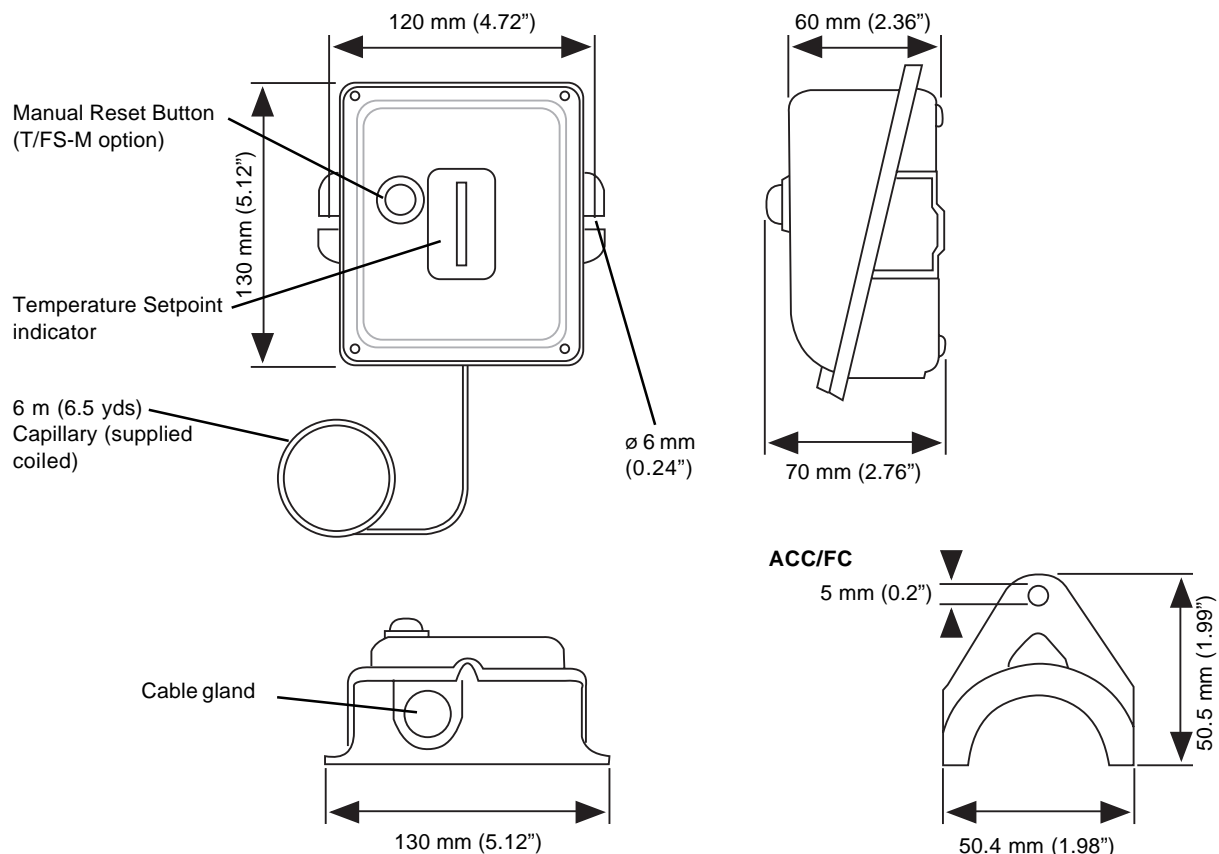
#### Description

Capillary thermostat suitable for the prevention of freezing of liquid filled heat exchangers or pipes, and similar applications. Switching action is responsive to the lowest temperature along the sensing element. IP54 (NEMA 3) housing with tamper-proof cover.

#### Features

- 6 metre (6.5 yds) capillary
- Manual or automatic reset option
- Adjustment range -10 °C to +12°C (14 °F to 54 °F)
- IP54 (NEMA 3) housing
- Integral mounting bracket

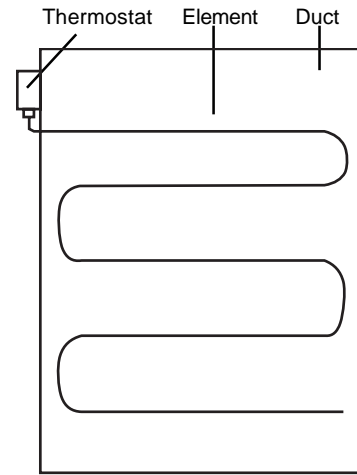
#### Physical



## INSTALLATION

- (1) Mount frost stat in a reasonably clean location, free from damp and condensation, using mounting bracket supplied (120 mm, 4.72" fixing centres).
- (2) Install the complete length of the element so that it spans the face area of the heat exchanger, as shown in the diagram, so that it is exposed to all areas where low temperatures are likely to be encountered. The element is usually installed on the downstream side of the heat exchanger and must be fixed in a vertical plane.

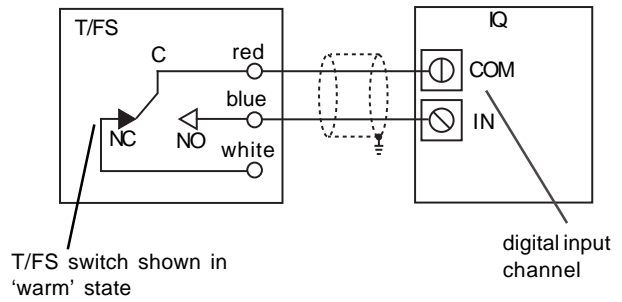
The T/FS has a 250 Vac, 15 A switching capacity. It should be incorporated directly into the Air Handling Unit Control circuits to protect heating and cooling exchanges and ductwork fabric. Alternatively, the T/FS can be used to provide an input to the IQ system controller to initiate a frost protection control strategy.



Typical Mounting Arrangement


## CONNECTIONS

- (1) Remove anti-tamper screw on top of face, and undo screw on front of unit and remove front cover.
- (2) Insert cable through cable gland and connect signal wires to terminals as shown. The unit can be wired normally open or normally closed.
- (3) Adjust setting levels to required temperature set-point using screw on top of unit. 5 °C to 7 °C (41 °F to 44.6 °F) is recommended.
- (4) Replace cover and fit tamper-proof top cover.



(Example of IQ connection to normally open contact)

## DISPOSAL



**WEEE Directive :**

At the end of their useful life the packaging and product should be disposed of by a suitable recycling centre.

Do not dispose of with normal household waste.  
Do not burn.

## ORDER CODES

**T/FS-M:** Frost protection thermostat with manual reset

**T/FS-A:** Frost protection thermostat with automatic reset

**ACC/FC:** Set of 6 fixing clips

## SPECIFICATIONS

Product description	:T/FS frost protection thermostat
Measuring range	:-10 to +12 °C (14 °F to 54 °F)
Sensing element	:6 metre (6.5 yds) fluid filled capillary
Ambient limits	:-30 to +40 °C (-22 °F to +72 °F), 0 to 95% RH non-condensing
Control action	:Single pole, single throw circuit opens on fall of temperature
Electrical rating	:15 A, 250 Vac
Connections	:Screw terminals for 0.5 to 4 mm <sup>2</sup> (12 to 26 AWG) cable
Environmental Protection	:IP54 (NEMA 3)

### Dimensions

Sensing element	:3.2 mm (0.13") dia. x 6 m (6.5 yds) long
Minimum bending radius of sensing element	:20 mm (0.79")
Housing	:130 mm x 130 mm x 70 mm (5.12" x 5.12" x 2.76") (with mounting bracket)
Fixing centres	:120 mm (4.72")
Cable entry	:22 mm (0.87") diameter cut-out fitted with rubber grommet

### Material

Sensing element	:Copper/Tin plated
Housing	:Base polyamide, cover polycarbonate (V-0)
Fixing clips	:Polyamide (V-0)

Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Ecublens, Route du Bois 37, Switzerland by its Authorized Representative.

Trend Control Systems Limited reserves the right to revise this publication from time to time and make changes to the content hereof without obligation to notify any person of such revisions or changes.

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