# TC1 and TC1/XP Plus

## Pipewall Sensing Thermostats

#### Application . . .

#### **Electric Heat Tracing Control**

The TC1 and TC1/XP Plus are designed for use as adjustable control thermostats for freeze protection and temperature maintenance applications requiring pipewall or tankwall sensing. Each thermostat is available in three temperature control and bulb exposure temperature ranges.

The TC1 is designed to be wall-mounted (or pipe-mounted using Thermon's XP-1 stainless steel mounting bracket1) and has a PVC coated galvanised steel flexible capillary armouring complete with capillary gland and insulation entry device. The TC1/XP Plus includes an expediter to facilitate attaching the thermostat directly on the pipe and permits one heating cable to enter and be connected within the enclosure.

Indicating lamps for power-on and heater-on are visible through a transparent cover. Both thermostats utilise nonmetallic enclosures suitable for harsh industrial environments to provide watertight and dusttight protection (per IP65). External hardware is stainless steel. The TC1 and TC1/XP Plus meet the requirements for use in nonhazardous locations.

#### Ratings/Specifications . . .

Voltage rating
Switch rating
230 Vac
400 Vac
Switch type SPDT
Operating ambient temperature30° to +55° C
Electrical connection <sup>2</sup> terminal block <sup>3</sup>
Adjustable control range <sup>4</sup>
TC1-1-6015° to +60° C
TC1-1-120 20°C to 120°C
TC1-1-300 50°C to 300°C
Maximum control differential
TC1-1-60±4°C
TC1-1-120±4°C
TC1-1-300±10°C
Maximum bulb exposure temperature
TC1-1-60150°C
TC1-1-120145°C
TC1-1-300
Bulb dimensions/material/capillary length
TC1-1-60 6 x 140 mm/stainless steel/1 m
TC1-1-120 6 x 140 mm/stainless steel/1 m
TC1-1-300 4 x 165 mm/stainless steel/1 m
Approximate weight

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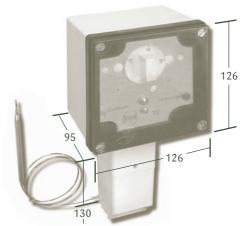
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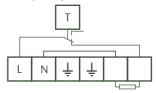
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### **Product Specifications**





#### Typical Wiring Diagram . . .



#### Certification/Approval . . .



- 1. Refer to Form TEP0057U for additional accessories.
- 2. Both thermostats are shipped with an M25-PWR-IND power gland and an M25-B-IND blind plug that can be replaced with an M25 gland to permit power or heating cable connection.
- 3. Terminal block consists of four 4-mm<sup>2</sup> line/load terminals and one 4-mm<sup>2</sup> PE terminal
- 4. The TC1-1-300 with an XP Plus expediter not available.

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