



PRODUCT SPECIFICATIONS

# TC1 and TC1/XP Plus

## PIPEWALL SENSING THERMOSTAT

### APPLICATION

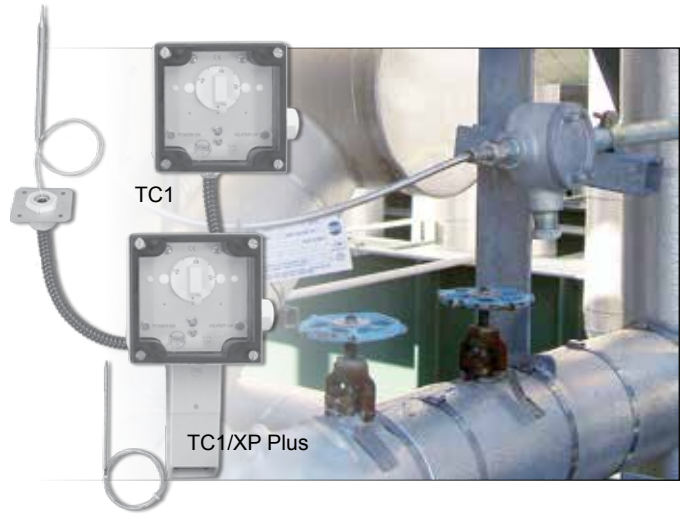
The TC1 and TC1/XP Plus are designed for use as adjustable control thermostats for freeze protection and temperature maintenance applications requiring pipewall or tankwall sensing. Each thermostat is available in three temperature control and bulb exposure temperature ranges.

The TC1 is designed to be wall-mounted (or pipe-mounted using Thermon's XP-1 stainless steel mounting bracket 1) and has a PVC coated galvanised steel flexible capillary armoured 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.

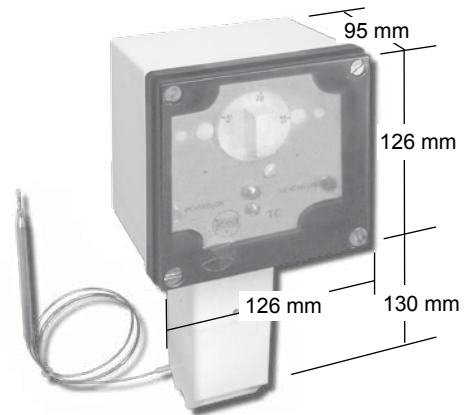
Indicating lamps for power-on and heater-on are visible through a transparent cover. Both thermostats utilise nonmetallic enclosures suitable for harsh industrial environments to provide watertight and dusttight protection (per IP65). External hardware is stainless steel. The TC1 and TC1/XP Plus meet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

### RATINGS/SPECIFICATIONS

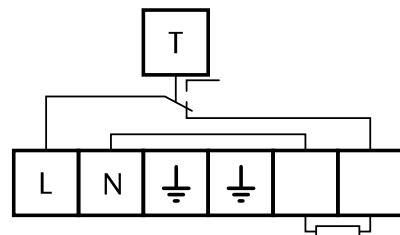
Voltage rating.....	400 Vac
Switch rating	
230 Vac .....	16 A (Ohmic, NC contact)
400 Vac .....	10 A (Ohmic, NC contact)
Switch type .....	SPDT
Operating ambient temperature.....	-30° to +55° C
Electrical connection <sup>2</sup> .....	terminal block <sup>3</sup>
Adjustable control range <sup>4</sup>	
TC1-1-60 .....	-15° 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	
TC1-1-60 .....	150°C
TC1-1-120 .....	145°C
TC1-1-300 .....	320°C
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.....	1.5 kg



### CERTIFICATION/APPROVAL



### TYPICAL WIRING DIAGRAM



#### Notes

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.

### THERMON The Heat Tracing Specialists®



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