



# PRODUCT DATASHEET

## TERMINATOR™ ZT-C

### PIPEWALL SENSING THERMOSTAT

#### APPLICATION

The ZT-C is designed for use as an adjustable control thermostat for freeze protection and temperature maintenance applications requiring tank wall or pipe wall sensing. The ZT-C is available in four temperature control and bulb exposure temperature ranges and has an antistatic flexible capillary armoring complete with capillary gland and insulation entry device.

The ZT-C includes an expediter to facilitate attaching the thermostat directly on the pipe and permits two heating cables to enter and be connected within the enclosure.

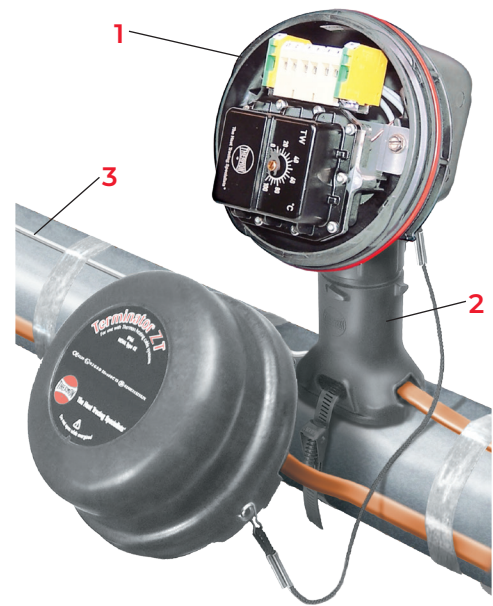
Terminator ZT-C kit is approved for use in ordinary (nonclassified) and hazardous (classified) areas.

#### RATINGS/SPECIFICATIONS

Enclosure rating.....	IP66
Maximum pipe exposure temperature.....	250°C
Minimum installation temperature.....	-60°C
Operating ambient temperature	
-60°C ≤ Ta ≤ +55°C.....	16 Amps Max, T6 85°C
-60°C ≤ Ta ≤ +50°C.....	25 Amps Max, T5 100°C
Voltage rating.....	230 Vac nominal up to 253 Vac <sup>1</sup>
Switch rating.....	25 A (Ohmic, NC contact)
Switch type.....	Controller
Electrical connection <sup>2</sup> .....	Terminal block <sup>3</sup>
Adjustable control range <sup>4</sup>	
ZT-C-100.....	0°C to 100°C
ZT-C-190.....	0°C to 190°C
ZT-C-300.....	0°C to 300°C
ZT-C-500.....	20°C to 500°C
Maximum control differential/accuracy	
ZT-C-100.....	7% / -1 K to +7 K
ZT-C-190.....	2.5% / -2 K to +10 K
ZT-C-300.....	2.5% / -2 K to +16 K
ZT-C-500.....	2.5% / -2 K to +28 K
Maximum bulb exposure temperature	
ZT-C-100.....	220°C
ZT-C-190.....	220°C
ZT-C-300.....	345°C
ZT-C-500.....	530°C
Bulb dimensions/material/capillary length	
ZT-C-100.....	6 x 65 mm/stainless steel/1 m
ZT-C-190.....	6 x 65 mm/stainless steel/1 m
ZT-C-300.....	6 x 55 mm/stainless steel/1 m
ZT-C-500.....	6 x 280 mm/stainless steel/1 m
Max. electrical switching frequency...180 cycles/hour	
Electrical durability operating cycles min. ....	100,000 cycles
Mechanical durability operating cycles min. ....	250,000 cycles

#### Notes

- 400 Vac Nom/440 Vac Max/16 A version available on request.
- Thermostats are shipped with an M25 dust cap that can be replaced with an Ex e approved gland to permit power or heating cable connection.
- The 230 Vac terminal block consists of six 4 mm<sup>2</sup> line/load terminals and two PE terminals.
- The 300°C and 500°C thermostats are only available in wall mount bracket.



#### CONSTRUCTION

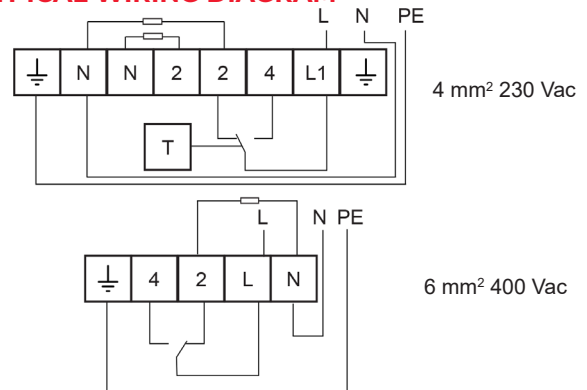
- Junction Box, Glass-Reinforced Polymer with DIN Rail Mounted Terminal Blocks
- Pipe-Mount Expediter, Glass-Reinforced Polymer
- Capillary Ambient Temperature Sensor

#### CERTIFICATIONS/APPROVALS

CE 0344 Ex II 2 GD Ex db eb IIC T6...T5 Gb, Ex tb IIIC T85°C...T100°C Db FM 10ATEX0058X

IEC IECEx IECEx FMG 10.0022X Ex db eb IIC T6...T5 Gb Ex tb IIIC T85°C...T100°C Db

#### TYPICAL WIRING DIAGRAM



#### PRODUCT REFERENCE LEGEND

<b>ZT-C-100-P-XP</b>	
<b>Area Designation</b> Z = Zone Areas	<b>Mounting*</b> XP = Pipe WP = Wall
<b>Kit Type</b> T = Thermostat	<b>Cable Profile</b> P = RSX, USX, VSX-HT, BSX, HTSX, KSX, FP, HPT MI = MIS, MIQ M = TEK, HTEK
<b>Switch Type</b> C = Controller	
<b>Control Range</b> 100 = 0°C to 100°C 190 = 0°C to 190°C 300 = 0°C to 300°C 500 = 20°C to 500°C	

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