

Terminator™ ZP-PTD-100-WP

Temperature Sensor Connection Kit

INSTALLATION PROCEDURES

For Use with PTD-100 Temperature Sensors



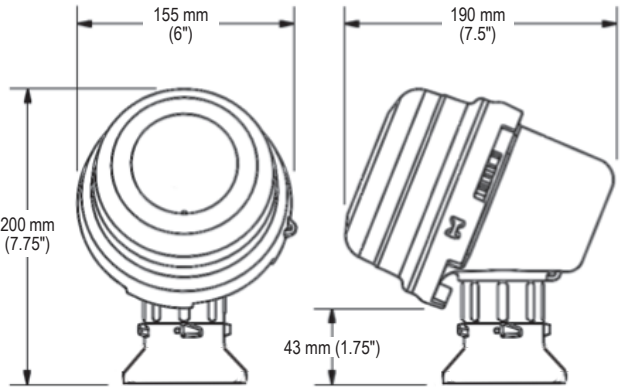
Terminator™ ZP-PTD-100-WP

Kit Contents

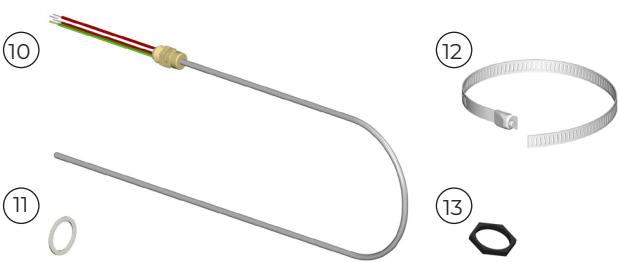


Item	Quantity	Description
1	1	Expediter Assembly Support Cap with O-Ring Threaded Grommet Compressor Grommet Wall Mount Support Base with O-Ring
2	1	Junction Box Lid
3	1	Junction Box Base with O-Ring
4	1	Wall Mount Bracket
5	3	M5 Screws
6	3	Lock Washers
7	1	Terminal Block with DIN Rail
8	1	Junction Box Lid Cord
9	1	Nut
10	1	PTD-100 Temperature Sensor (Supplied with one 1-meter sensor. Longer lengths are available—contact Thermon.)
11	1	Sealing Washer
12	1	Banding (for PTD-100 Temperature Sensor) Banding (Optional, see Steps 1a or 1c)
13	1	M20 Lock Nut

Dimensions



PTD-100 Temperature sensor Kit



B-type Banding (order separately)

- B-4: for pipes up to 4"
- B-10: for pipes up to 10"
- B-21: for pipes up to 21"

Warnings

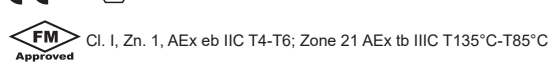
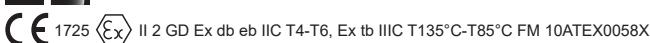
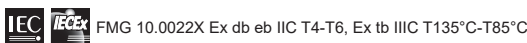
- Due to the risk of electrical shock, arcing and fire caused by product damage or improper usage, installation or maintenance, a ground-fault protection device is required.
- Installation must comply with Thermon requirements and be installed in accordance with the regulations as per the norm EN IEC 60079-14 for hazardous areas (where applicable), or any other applicable national and local codes.
- Component approvals and performance ratings are based on the use of Thermon specified parts only.
- De-energize all power sources before opening enclosure.
- Keep temperature sensor and kit components dry before and during installation.
- Minimum bending radius of heating cable is 30 mm. Measuring tip (15 mm in length) should not be bent.
- Individuals installing these products are responsible for complying with all applicable safety and health guidelines. Proper Personal Protective Equipment (PPE) should be utilized during installation. Contact Thermon if you have any additional questions.

Tools Required

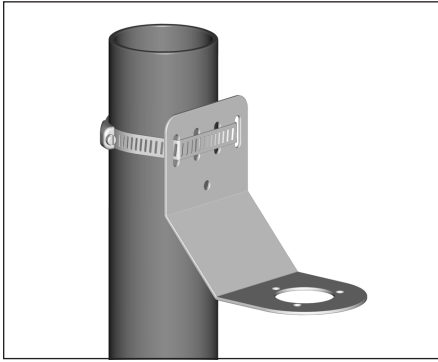


Certifications/Approvals

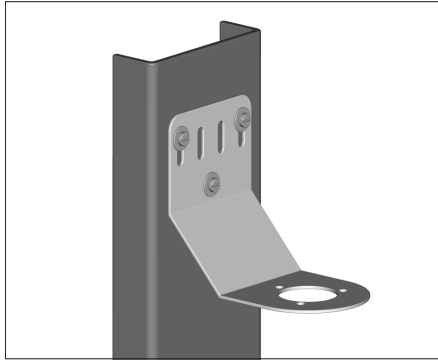
Enclosure...
IP66 -60°C ≤ Ta ≤ +55°C
Temperature Sensor...
IP66 -48°C ≤ Ta ≤ +55°C
Ordinary & Hazardous Locations



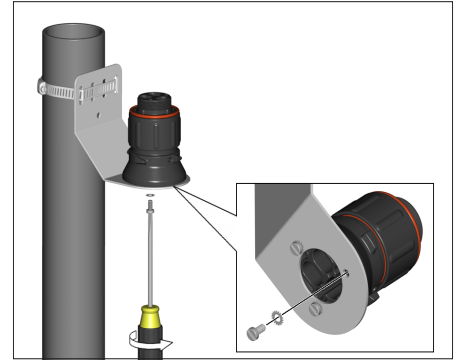
INSTALLATION PROCEDURES



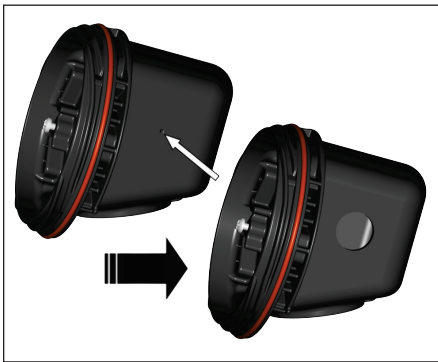
- 1a.** Mounting Method 1: Secure wall mount bracket to mounting surface using pipe band.



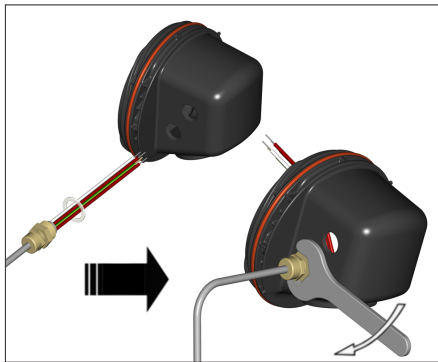
- 1b.** Mounting Method 2: Secure wall mount bracket to mounting surface using screws, washers, and nuts (user supplied).



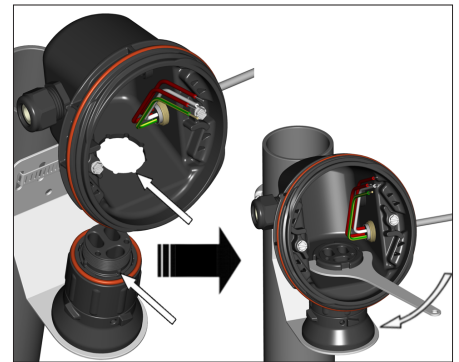
- 2.** Mount expediter to bracket using M5 screws and lock washers.



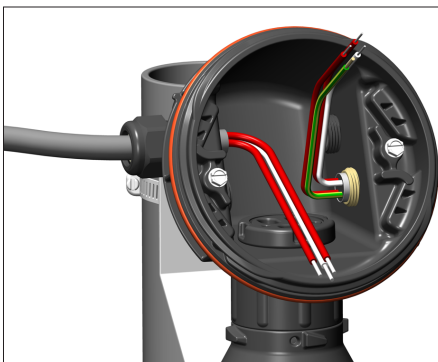
- 3.** Use dimple molded into side of junction box base to locate center of hole, drill clear M20 hole for sensor gland on one side. On the opposite side drill appropriately sized clear hole for sensor cable gland (customer supplied).



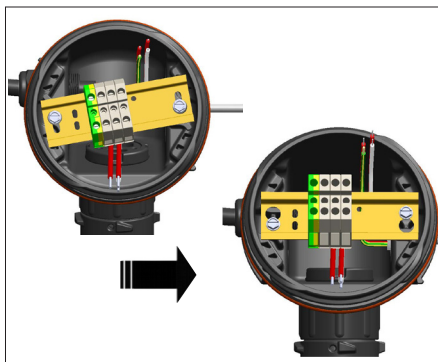
- 4.** Place M20 sealing washer on temperature sensor gland connector. Route temperature sensor leads through entry. Install gland connector into junction box. Make sure temperature sensor body is fully inserted into gland connector. Tighten gland connector.



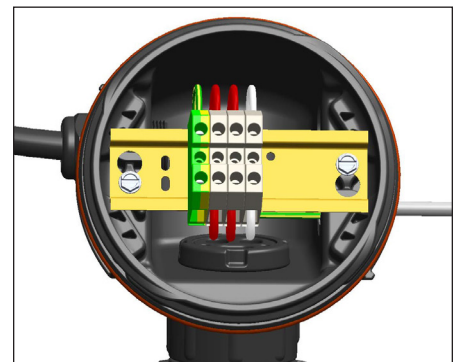
- 5.** Mount junction box base on expediter. Make sure to align slots to properly orient junction box base. If mounting horizontally, threaded gland holes must face downward.



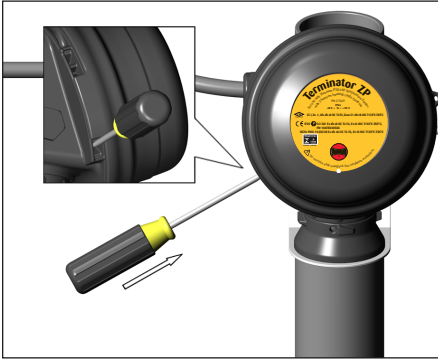
- 6.** Install control wiring (user supplied, 10 AWG [6 mm²] max). 3-wire cable (for 1 sensor) with braided earth shield is recommended.



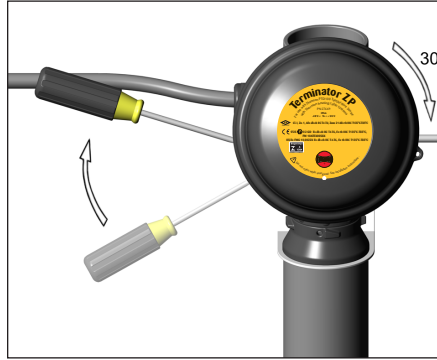
- 7.** Install quick mount terminal blocks and tighten screws (if necessary).



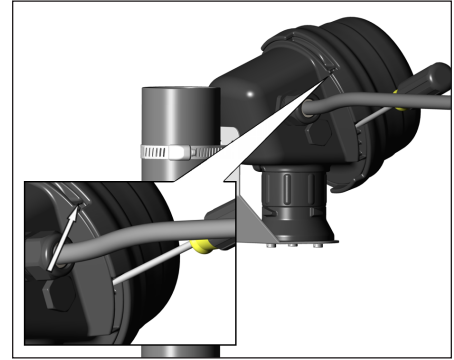
- 8.** Complete system wiring. Terminal set screws shall be tightened to a torque value of 1.4 Nm (12.4 lb-in). See page 4 for wiring details.



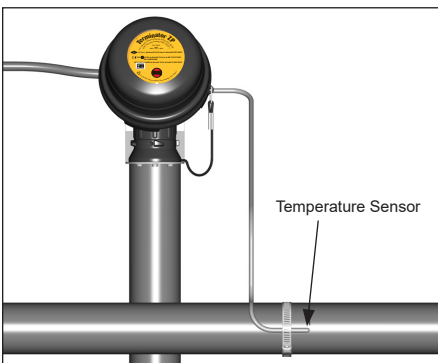
- 9.** Install junction box lid and twist hand tight. Insert screwdriver into ratchet slots located on side of junction box base.



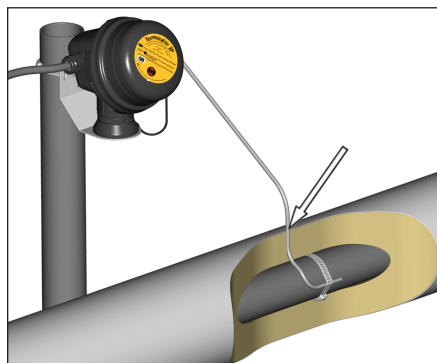
- 10.** Use screwdriver to ratchet on junction box lid. Lid will rotate 30 degrees.



- 11.** Lid latch mechanism fully engaged. To remove lid, repeat steps 11 and 12 but in the opposite direction.



- 12.** Mount the temperature sensor securely to the pipe using pipe band. Make sure the entire length of the sensor is in intimate contact with the pipe. The sensor should be placed at least 90° around the circumference from the heating cable.

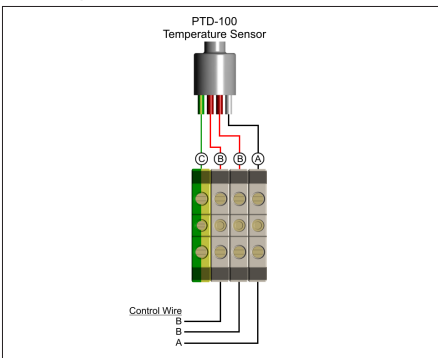


- 13.** Seal temperature sensor penetration through insulation cladding.



- 14.** For ambient sensing applications, the mounting location should be representative of the coldest region, and the sensing element should not be exposed to direct sunlight or any additional heat source.

Wiring Details



In order to avoid EMI issues with a temperature controller, the shield of the control wire shall be connected to the instrumentation earth only. Do not connect the control wire shield in the junction box.

- A1.** Control Wire Connection (1 Sensor)
A = White, B = Red, C = Green / Yellow

