

Terminator™ ZP-PTD-100

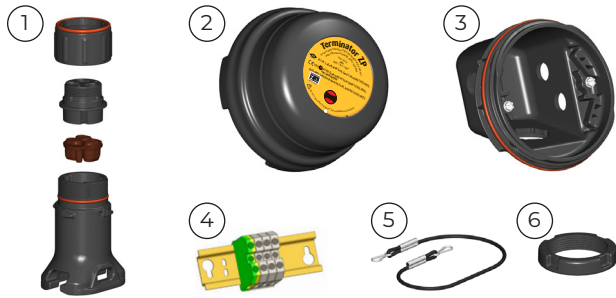
Temperature Sensor Connection Kit

INSTALLATION PROCEDURES



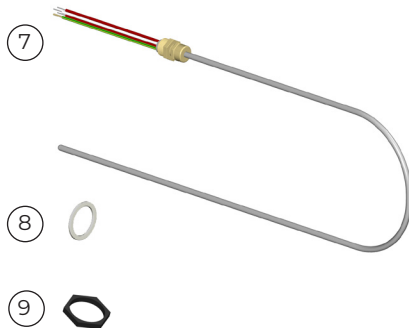
Terminator™ ZP-PTD-100

Kit Contents

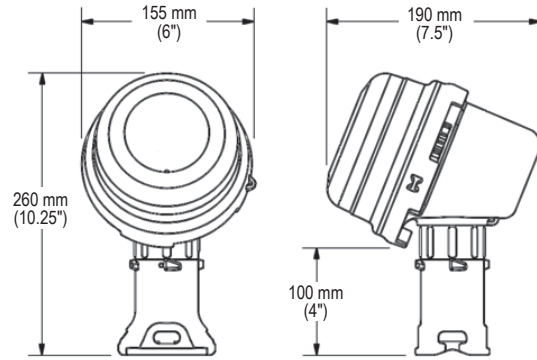


Item	Quantity	Description
1	1	Expediter Assembly Support Cap with O-Ring Threaded Grommet Compressor Grommet Support Base with O-Ring
2	1	Junction Box Lid
3	1	Junction Box Base with O-Ring
4	1	Terminal Block with DIN Rail
5	1	Junction Box Lid Cord
6	1	Nut
7	1	PTD-100 Temperature Sensor (Supplied with one 1-meter sensor. Longer lengths are available—contact Thermon.)
8	1	Sealing Washer
9	1	M20 Lock Nut

PTD-100 Temperature sensor Kit



Dimensions



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

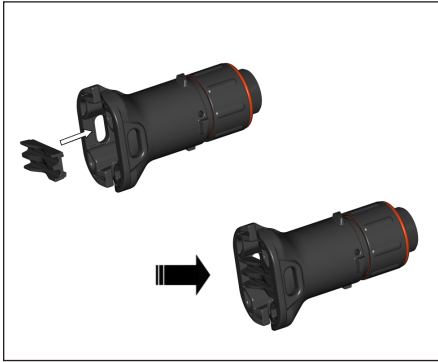
Ordinary & Hazardous Locations

FMG 10.0022X Ex db eb IIC T4-T6, Ex tb IIIC T135°C-T85°C

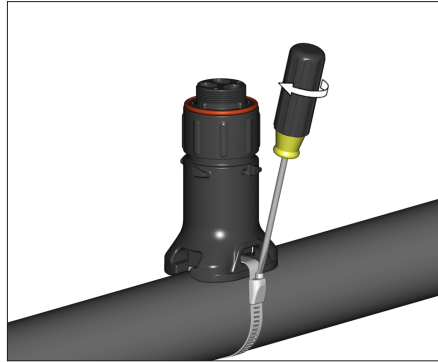
1725 II 2 GD Ex db eb IIC T4-T6, Ex tb IIIC T135°C-T85°C FM 10ATEX0058X

CI. I, Zn. 1, AEx eb IIC T4-T6; Zone 21 AEx tb IIIC T135°C-T85°C

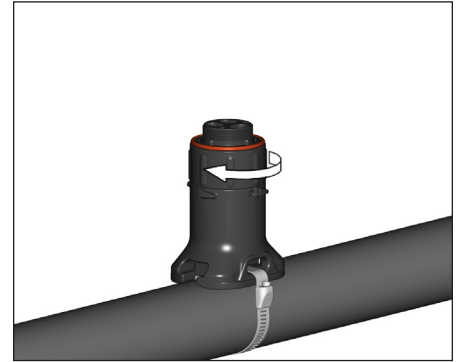
INSTALLATION PROCEDURES



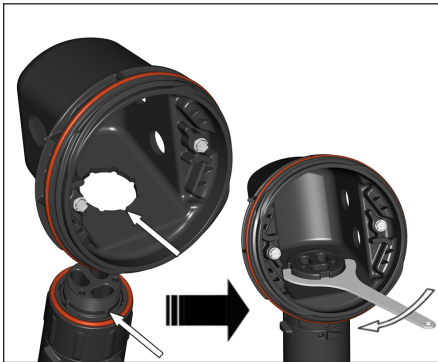
1. Insert banding guide into expediter and snap into place.



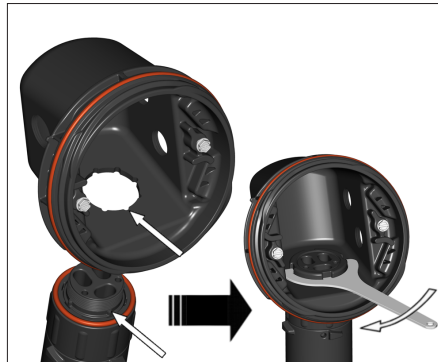
2. Mount expediter to pipe using pipe band.



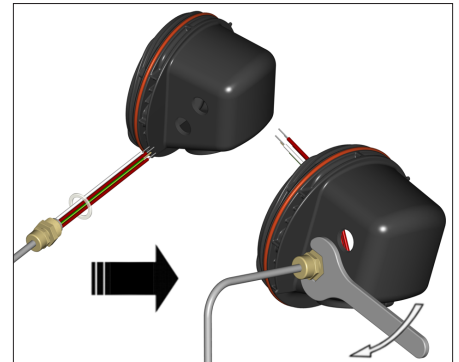
3. Tighten cap securely.



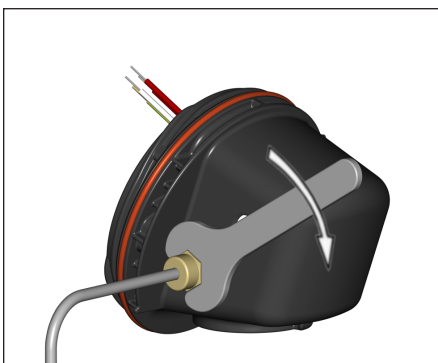
4. Use dimple molded into side of junction box base to locate center of hole, drill clear M20 hole for sensor gland on one side. On the opposite side drill appropriately sized clear hole for sensor cable gland (customer supplied).



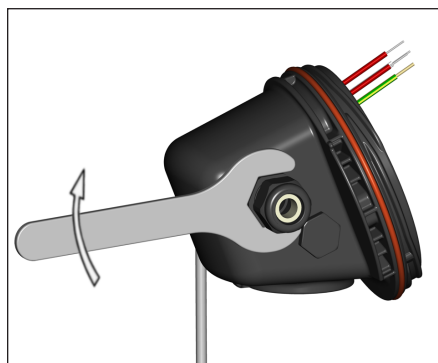
5. Mount junction box base on expediter. Make sure to align slots to properly orient junction box base. If mounting horizontally, gland holes must face downward.



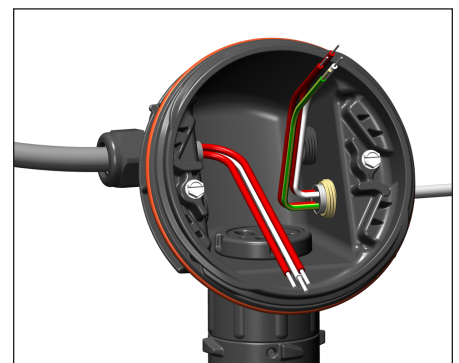
6. Place M20 sealing washer on temperature sensor gland connector. Route temperature sensor leads through entry. Install gland connector into junction box.



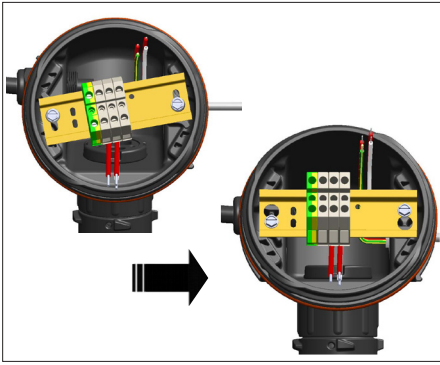
7. Make sure temperature sensor body is fully inserted into gland connector. Tighten gland connector.



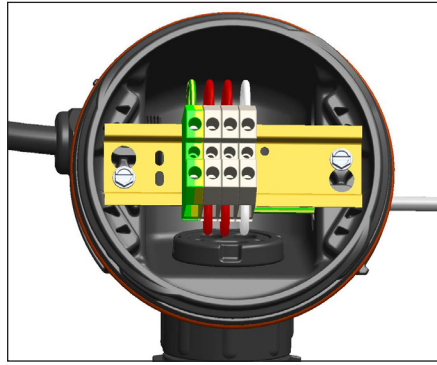
8. Install gland. (Customer Supplied)



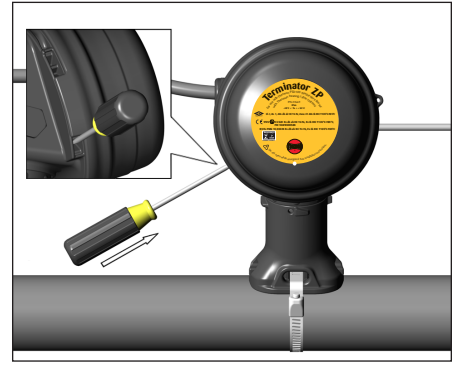
9. Install control wiring (user supplied, 10 AWG [6 mm²] max). 3-wire cable (for 1 sensor) with braided earth shield is recommended.



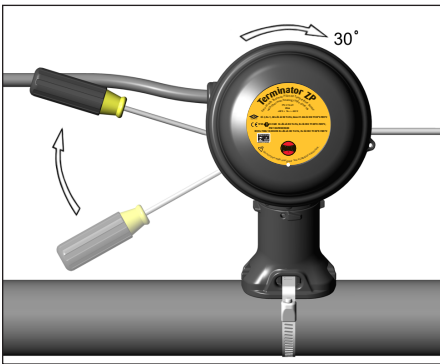
10. Install quick mount terminal blocks and tighten screws (if necessary).



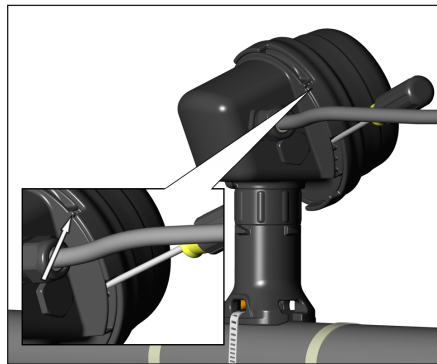
11. Complete system wiring. Terminal set screws shall be tightened to a torque value of 1.4 Nm (12.4 lb-in). See below for wiring details.



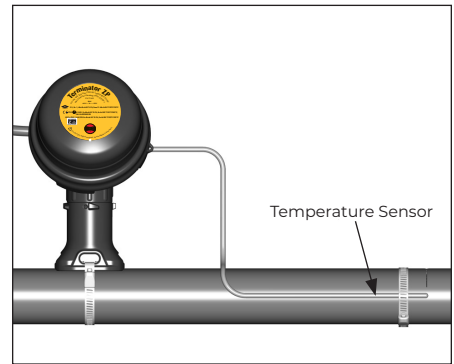
12. Install junction box lid and twist hand tight. Insert screwdriver into ratchet slots located on side of junction box base.



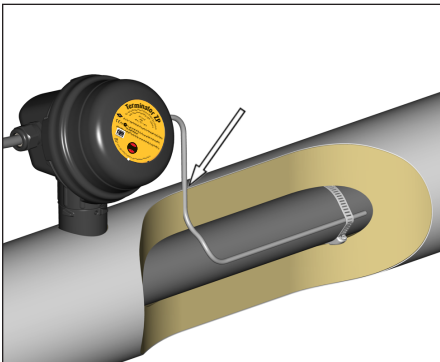
13. Use screwdriver to ratchet on junction box lid. Lid will rotate 30 degrees.



14. Lid latch mechanism fully engaged. To remove lid, repeat steps 12 and 13 but in the opposite direction.

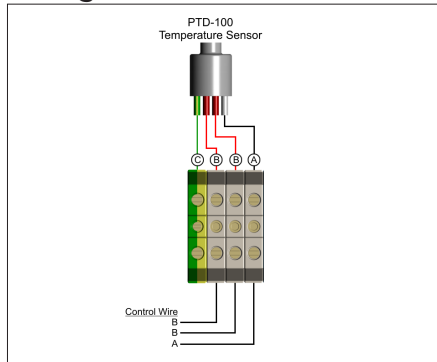


15. Mount the temperature sensor securely to the pipe using pipe band. Make sure the entire length of the sensor is in intimate contact with the pipe. The sensor should be placed at least 90° around the circumference from the heating cable.



16. Seal temperature sensor penetration through insulation cladding. 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



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



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.

