

# Terminator™ ZT-R-XP Terminator™ ZT-C-R-XP Thermostat Connection Kit INSTALLATION PROCEDURES



For Thermostat Connection (1-2 Heating Cables) Applications  
For Use With TESH Series Constant Watt Heating Cables



# Terminator™ ZT-R-XP & ZT-C-R-XP

The following installation procedures are guidelines for the installation of the Terminator ZT-R-XP & ZT-C-R-XP Kits.

## Receiving, Storing and Handling

1. Inspect materials for damage incurred during shipping.
2. Report damages to the carrier for settlement.
3. Identify parts against the packing list to ensure the proper type and quantity has been received.
4. Store in dry location.

## 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 & M25 Dust Cap						
4	1	Nut						
5	1	Banding						
6	1	Banding Guide						
7	1	Thermostat w/ Terminal Blocks (Refer to terminal specifications for maximum allowable wire size)						
		<table border="0"> <tr> <td><u>Thermostat Type</u></td> <td><u>Terminals</u></td> </tr> <tr> <td>ZT-C-230 Vac</td> <td>4 mm<sup>2</sup> terminals</td> </tr> <tr> <td>ZT-C-400 Vac</td> <td>6 mm<sup>2</sup> terminals</td> </tr> </table>	<u>Thermostat Type</u>	<u>Terminals</u>	ZT-C-230 Vac	4 mm <sup>2</sup> terminals	ZT-C-400 Vac	6 mm <sup>2</sup> terminals
<u>Thermostat Type</u>	<u>Terminals</u>							
ZT-C-230 Vac	4 mm <sup>2</sup> terminals							
ZT-C-400 Vac	6 mm <sup>2</sup> terminals							
8	1	Junction Box Cord						
9	2	Blind Plug						

## Order Separately

PETK-10 for cold lead connection (TESH 2.9-15)

PETK-11 for cold lead connection (TESH 17.8-8000)

## Certifications/Approvals

IP66; -60°C ≤ Ta ≤ +55°C T6, 85°C 16 Amps Max  
-60°C ≤ Ta ≤ +50°C T5, 100°C 25 Amps Max  
Ordinary & Hazardous Locations

Terminator ZT

FMG 10.0022X Ex db eb IIC T5-T6, Ex tb IIIC T100°C-T85°C

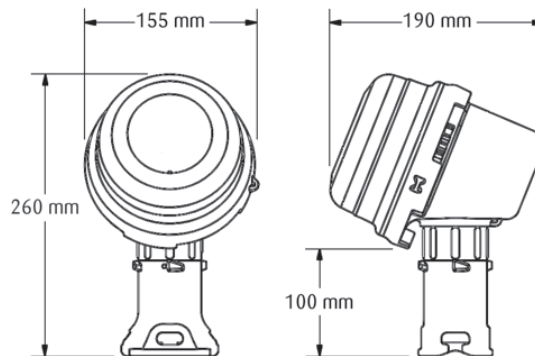
2809 Ex II 2 GD Ex db eb IIC T5-T6, Ex tb IIIC T100°C-T85°C FM10ATEX0058X

Terminator ZT-C

EPS 19.0094X Ex db eb IIC T5-T6, Ex tb IIIC T100°C-T85°C

2809 Ex II 2 GD Ex db eb IIC T5-T6, Ex tb IIIC T100°C-T85°C EPS 19ATEX1216X

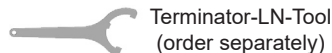
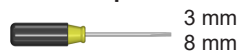
## Dimensions



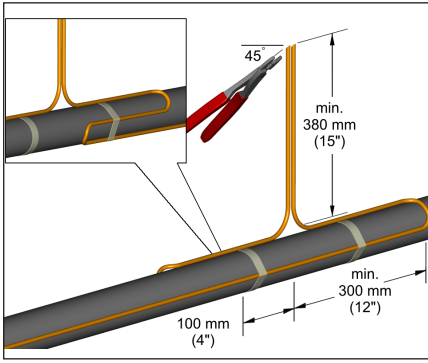
## Warnings

- 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 (including form PN 50273U for Ex systems) 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.
- Avoid electrostatic charge. Clean only with a damp cloth.
- Keep ends of heating cable and kit components dry before and during installation.
- Minimum bending radius of heating cable is 6 times the cable outer diameter.
- 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.

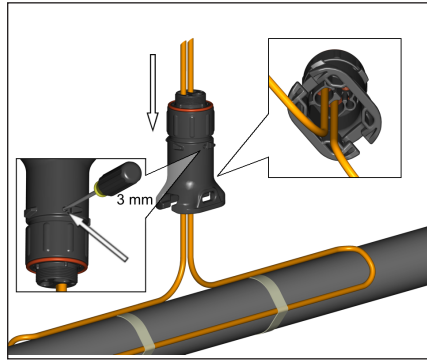
## Tools Required



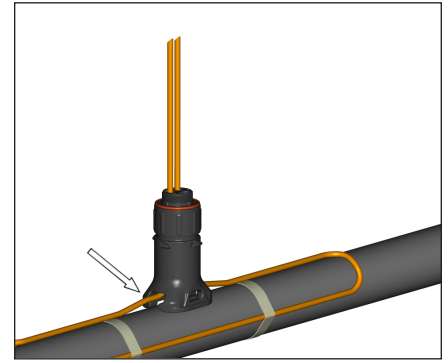
# INSTALLATION PROCEDURES



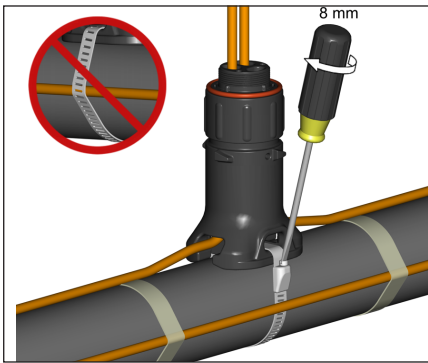
1. Cut end of cable at angle to aid in piercing grommet. Leave additional cable for expansion loop.



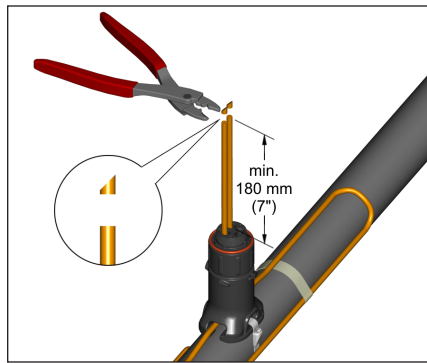
2. Insert cable into expediter. If mounted on bottom or side of pipe, punch out weep hole.



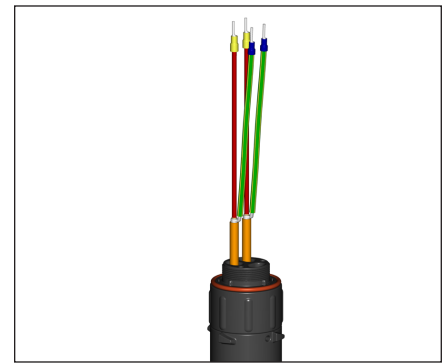
3. Slide expediter toward pipe and route cable through support base entry.



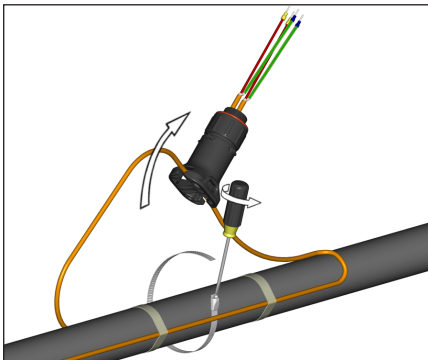
4. Temporarily mount expediter to pipe using pipe band. Do not band over cable.



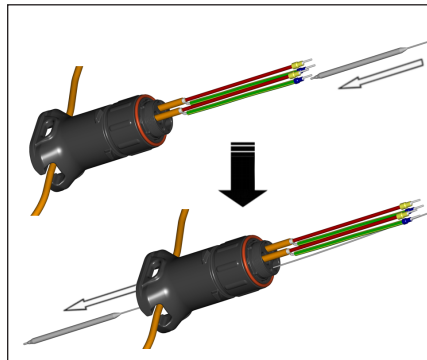
5. Cut off end of cable.



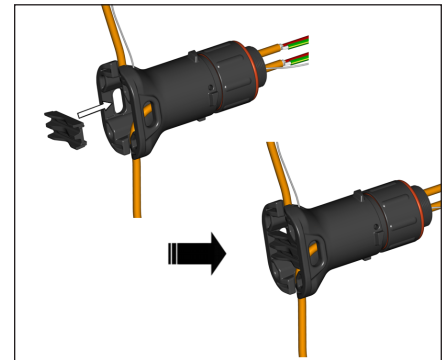
6. Terminate cable with appropriate PETK termination kit. Refer to PETK installation instructions.



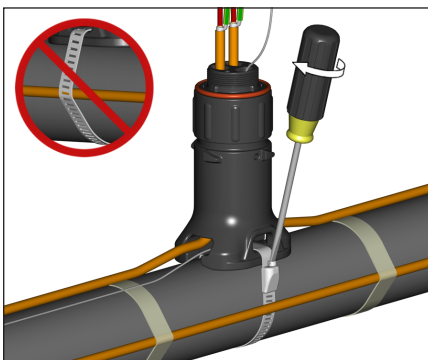
7. Remove expediter from pipe by removing pipe band.



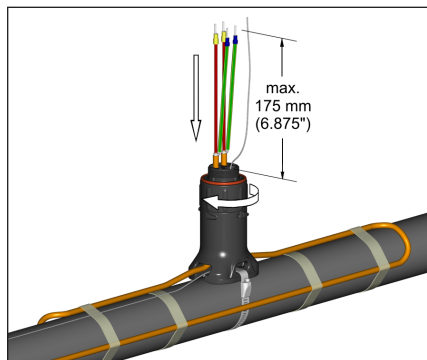
8. Route thermostat bulb through nut and expediter opening in junction box base. If necessary, apply lubricant (user supplied) to end of thermostat bulb. Slide through conical grommet hole. Push excess capillary tube through expediter.



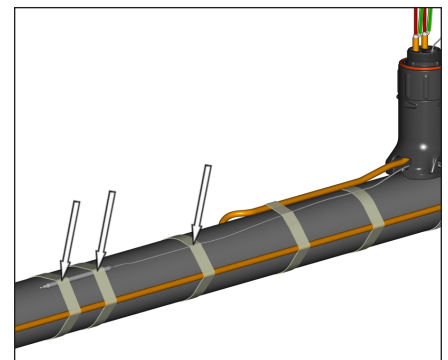
9. Insert banding guide and snap into place.



10. Mount expediter to pipe using pipe band. Do not band over cable. If necessary, temporarily mount junction box base on expediter.

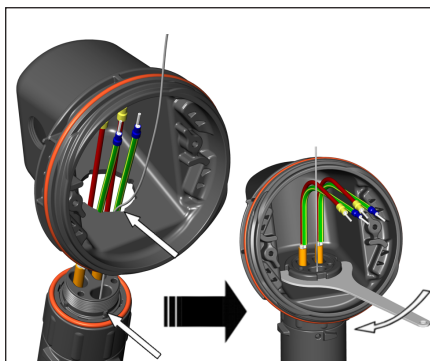


11. Push excess cable and capillary tube back through expediter. Tighten cap securely. Tape cable expansion loop to pipe.



12. Fix thermostat bulb and capillary tube to pipe.

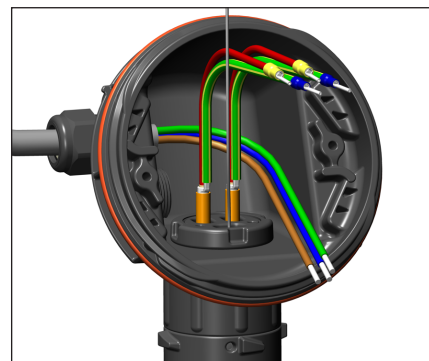
# Terminator™ ZT-R-XP & ZT-C-R-XP



**13.** Take out thermostat. Mount junction box base on expediter. Make sure to align slots to properly orient junction box base. Tighten nut with Terminator-LN-Tool. If mounting horizontally, threaded gland holes must face downward.



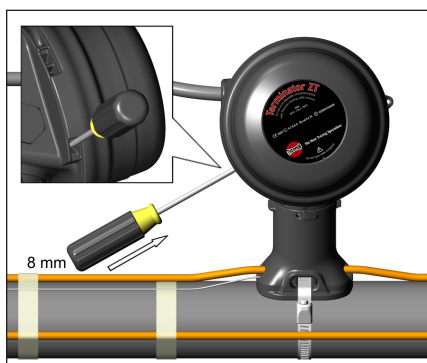
**14.** Remove M25 dust cap. Install M25 power gland (order separately) and M25 blind plug. For in-line splice, T-splice, or end termination, install additional M25 blind plug (order M25-B-EXE separately) instead of M25 power gland.



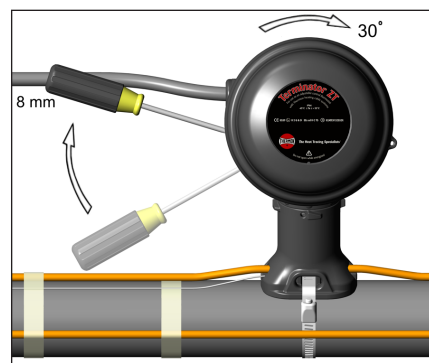
**15.** Install power cable.



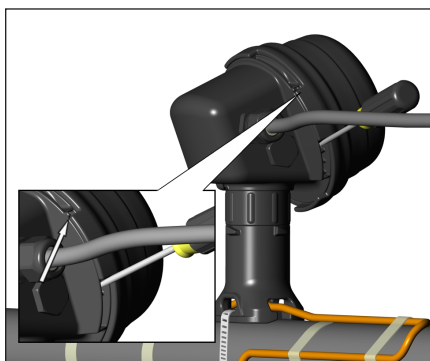
**16.** Install thermostat and complete system wiring. Terminal set screws shall be tightened to a torque value of 1.4 Nm (12.4 lb-in). See page 4 for wiring details. Set thermostat at desired setpoint.



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

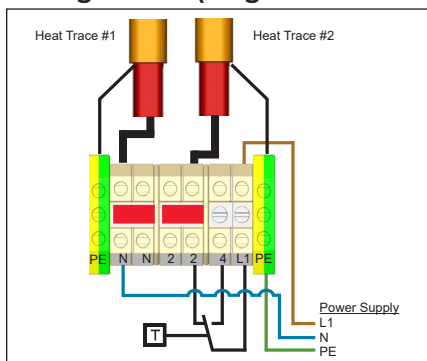


**18.** Use screwdriver to ratchet on junction box lid. Lid will rotate 30 degrees.



**19.** Lid latch mechanism fully engaged. To remove lid, repeat steps 17 and 18 but in the opposite direction.

## Wiring Details (Single Conductor)



Thermostat Connection (2 Heating Cables)

