

# Terminator™ ECM-R-XP Electronic Control Module INSTALLATION PROCEDURES



The Heat Tracing Specialists®

# Terminator™ ECM-R-XP

# INSTALLATION PROCEDURES

The following installation procedures are suggested guidelines for the installation of the Terminator ECM-R-XP Kit.

## 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	Nut
5	1	Banding
6	1	Banding Guide
7	1	Electronic Control Module w/ Terminal Blocks (Refer to terminal specifications for maximum allowable wire size)
8	1	Junction Box Lid Cord
9	3	Blind Plug

## Order Separately . . .

### PETK Power and End Termination Kits (per cable)

PETK-5 for direct connection



Item	Quantity	Description
1	2	Conductor Wire Pin
2	2	Braid Wire Pin
3	2	Ground Sleeve

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

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

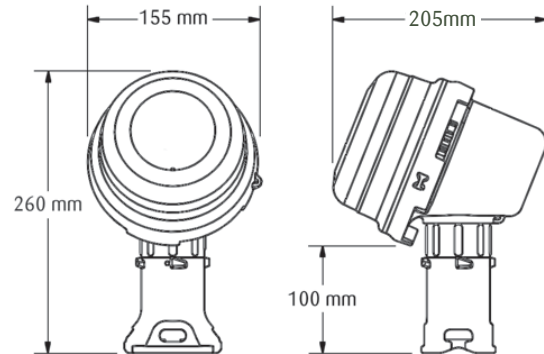


Item	Quantity	Description
1	2	Conductor Wire Pin
2	2	Braid Wire Pin
3	2	Ground Sleeve
4	1	3 m TESH CL-2,5 (PETK-11) 3 m TESH CL-6 (PETK-10)

## 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 a dry location.

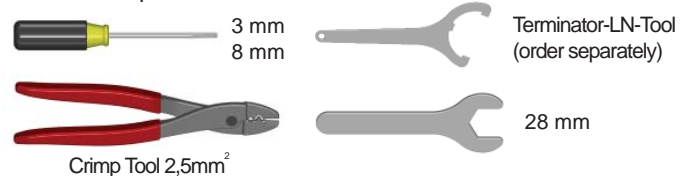
## Dimensions . . .



## 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 50207U 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 32 mm (except HPT is 57 mm and FP is 19 mm).
- 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 . . .

IP66 -60°C ≤ Ta ≤ +50°C T5, 100°C; -60°C ≤ Ta ≤ +40°C T6, 85°C  
Ordinary & Hazardous Locations

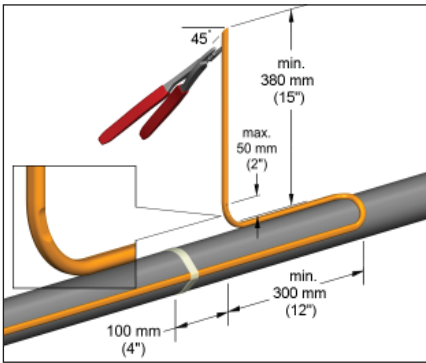
FMG 10.0022X Ex db eb IIC T5-T6, Ex tb IIIC T100°C-T85°C

International Electrotechnical Commission  
IEC Certification Scheme for Explosive Atmospheres  
SIRA 12.0103X

1725 II 2 GD Ex db eb IIC T5-T6, Ex tb IIIC T100°C-T85°C FM 10ATEX0058X

II 2 G EEx e IIC T2 to T6 LCIE 05 ATEX 6135

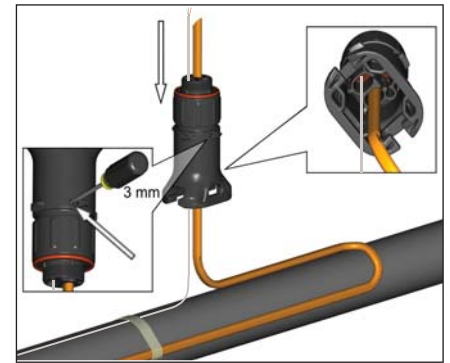
Terminator has additional hazardous area approvals including:  
• GGTN • Kazakhstan



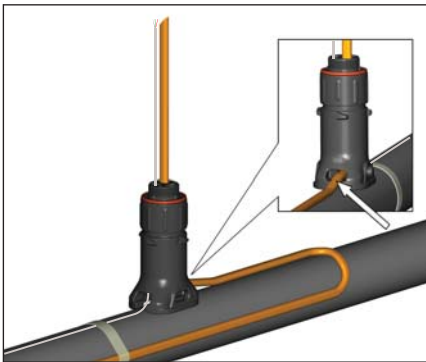
1. Cut end of cable at angle to aid in piercing grommet. Leave additional cable for expansion loop.



2. Position RTD Sensor(s) in grommet (when applicable). Do not pull from the sensor end when routing through the expediter assembly. Pull sensor from the lead wire portion.



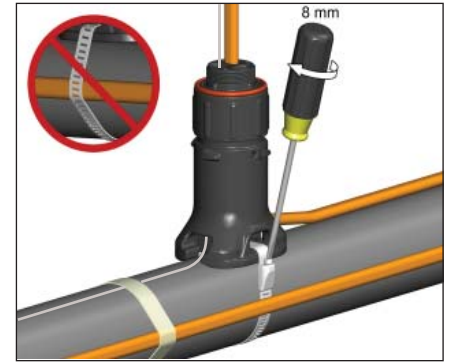
3. Insert cable into expediter. If mounted on bottom or side of pipe, punch out weep hole.



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



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



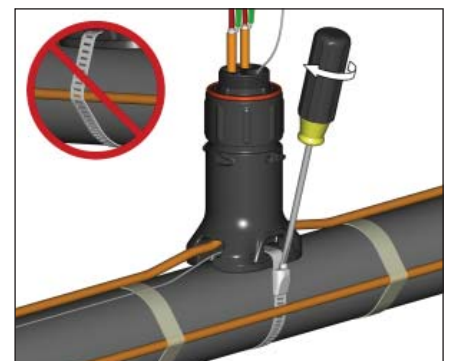
6. Mount expediter to pipe using pipe band. Do not band over cable.



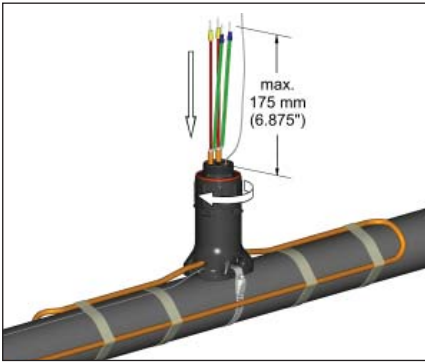
7. Cut off end of cable.



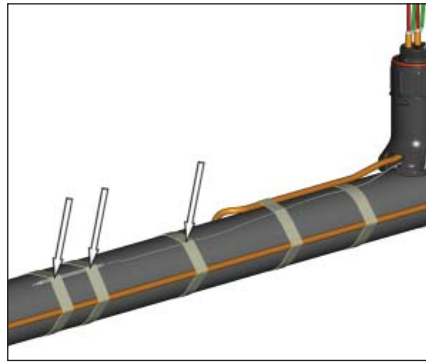
8. Terminate cable with appropriate PETK termination kit. Refer to PETK installation instructions.



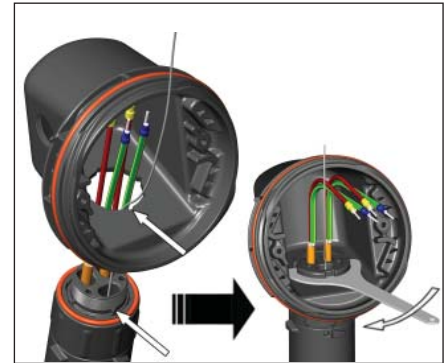
9. Mount expediter to pipe using pipe band. Do not band over cable. If necessary, temporarily mount junction box base on expediter.



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



11. Fix expediter, RTD, and lead wire to pipe.



12. Take out ECM. 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.



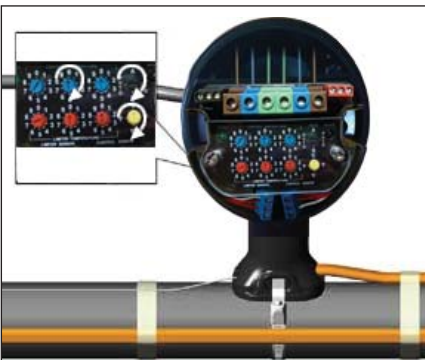
13. Install M25 power gland (order separately) and M25 blind plug. For in-line splice, T-splice, or end termination, install additional M25 blind plug (order M25-B-EXE separately) instead of M25 power gland.



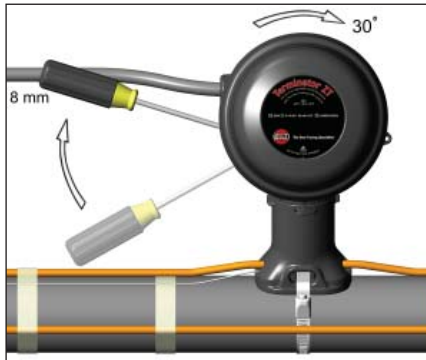
14. Install power cable.



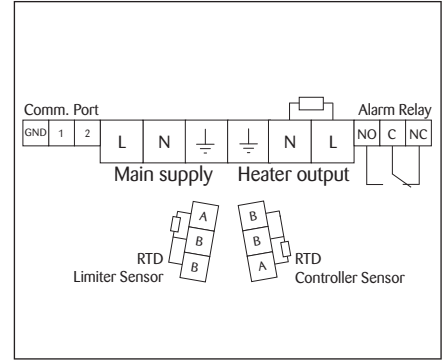
15. Install electronic control module and complete system wiring. Terminal set screws shall be tightened to a torque value of 1,4 Nm (12,4 lb-in). See wiring details. Set modules electronic control and/or control limiter at desired setpoints.



16. Use the rotary switches for setting Control and Limit Temperature, Celcius or Fahrenheit and Auto or Manual reset (control switches on Type "C", Limiter switches on Type "L" and both on Type "CL").



17. Install junction box lid and twist hand tight. Insert screwdriver into ratchet slots located on side of junction box base. Use screwdriver to ratchet on junction box lid. Lid will rotate 30 degrees.



Wiring Details



ISO 9001 REGISTERED