# Terminator™ ZP-MS Connection Kit INSTALLATION PROCEDURES



For use with TEK and HTEK series constant watt heating cables for In-Line Splice Connection



## Terminator™ ZP-MS

The following installation procedures are suggested guidelines for the installation of the Terminator ZP-MS Kit. For translations other than English and local language translation provided here, please contact Thermon. The English language installation procedure shall govern.

#### **Receiving, Storing and Handling**

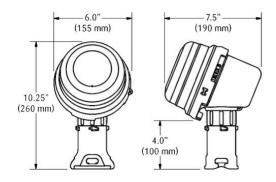
- 1. Inspect materials for damage incurred during shipping.
- 2. Report damages to the carrier for settlement.
- 3. Identify parts against the packing list to ensure the proper type and quantity has been received.
- 4. Store in a dry location.

#### **Kit Contents**



Item	Quantity	Description
1	2	Expediter Assembly Support Cap with O-Ring Threaded Grommet Compressor Grommet Support Base with O-Ring
2	2	Junction Box Lid
3	2	Junction Box Base with O-Ring
4	2	Nut
5	2	Banding
6	2	Banding Guide
7	2	Terminal Blocks with DIN Rail
8	2	Junction Box Cord
9	2	Ground Sleeve

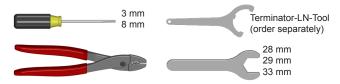
#### **Dimensions**



#### **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

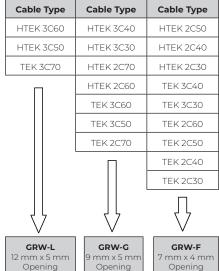
IP66 -60°C ≤ Ta ≤ +55°C Ordinary & Hazardous Locations

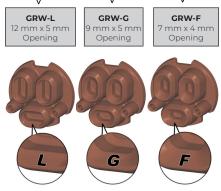
FMG 10.0022X Ex eb IIC T6...T4 Gb Ex tb IIIC T85°C...T135°C Db



**( €** 0344 ⟨x⟩ II 2 GD Ex eb IIC T6...T4 Gb, Ex tb IIIC T85°C...T135°C Db FM 10ATEX0058X

## **INSTALLATION PROCEDURES**

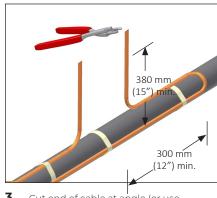




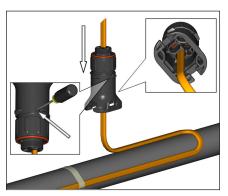
**1.** Select appropriate grommet for specific cable type.



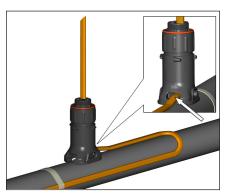
2. Put together expeditor assembly.
Place grommet in support base. Snap
threaded grommet compressor into
support base. Screw support cap onto
support base.



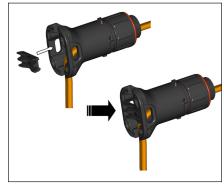
**3.** Cut end of cable at angle (or use screwdriver) to aid in piercing grommet. Leave additional cable for expansion loop. See page 5 for in-line splice (two cable) installation tips.



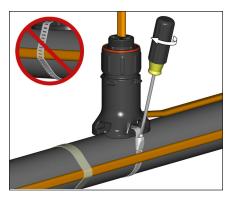
 Insert cable into expediter. If mounted on bottom of pipe, punch out weep hole.



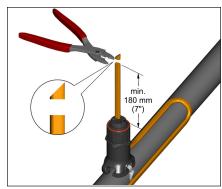
**5.** Slide expediter toward pipe and route cable through support base entry.



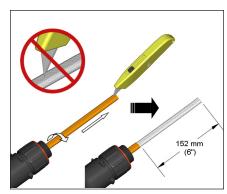
**6.** Insert banding guide into expediter and snap into place.



**7.** Mount expediter to pipe using pipe band. Do not band over cable.

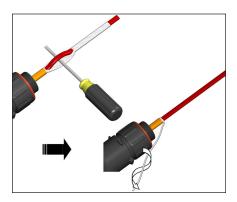


8. Cut off end of cable.

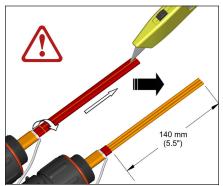


**9.** Cut and remove overjacket by scoring overjacket and bending cable. Do not cut metallic braid.

# Terminator™ ZP-MS

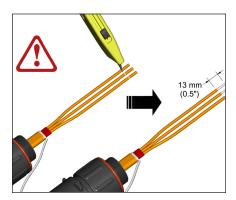


**10.** Separate braid strands at edge of overjacket and pull cable through opening in braid. Twist braid into a pigtail. Trim ends of braid.

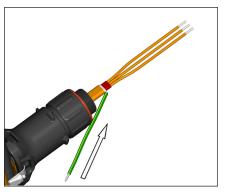


11. Cut and remove pairing jacket by scoring pairing jacket and bending cable. Do not cut insulation on conductors.

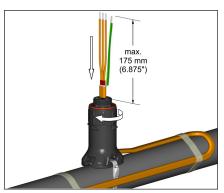
**Note:** Three (3) conductor cable is shown in the instructions and is representative of two (2) conductor cable installations.



**12.** Remove insulation and fiberglass braid (HTEK only) from ends of each conductor. Do not cut bus wire strands.



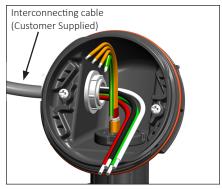
**13.** Slide green/yellow ground sleeve over twisted braid.



Push excess cable back through expediter. Tighten cap securely. Tape cable expansion loop to pipe.



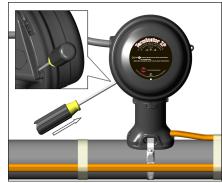
**15.** Mount junction box base on expediter. Make sure to align slots to properly orient junction box base.



16. Install customer supplied connection fittings. Interconnecting cable (customer supplied) shall be at least same size as power cable used to connect main power to unit.

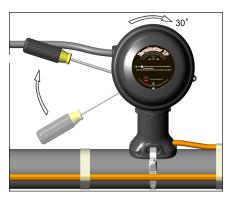


17. Install terminal block and complete system wiring. Terminal set screws shall be tightened to a torque value of 1.4 Nm (12.4 lb-in). See below for wiring details.

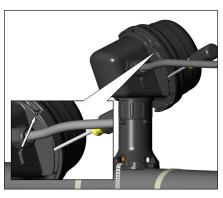


18. Install junction box lid and twist hand tight. Insert screwdriver into ratchet slots located on side of junction box

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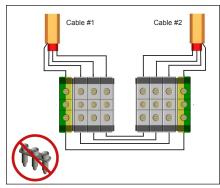


19. Use screwdriver to ratchet on junction box lid. Lid will rotate 30 degrees. To remove lid, repeat steps 18 and 19 but in the opposite direction.

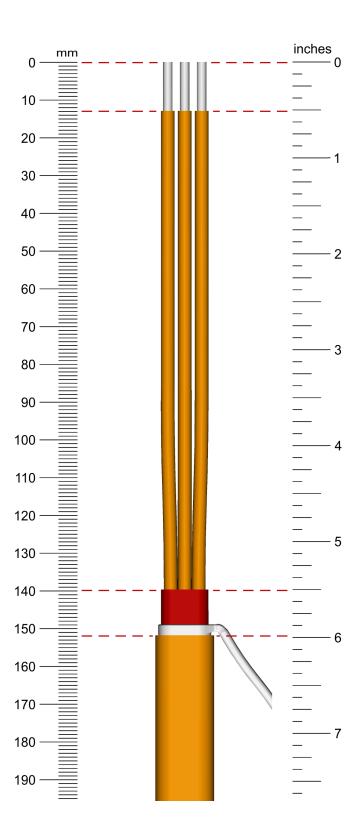


**20.** Lid latch mechanism fully engaged.

## Wiring Details



Typical Wiring Details: 3 Conductor





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