# **Terminator**™ **ZP-MI-XP** Power Connection Kit

## **INSTALLATION PROCEDURES**



For Power Connection, In-Line Splice Connection, or T-Splice Connection With MI - Mineral Insulated Heating Cable Sets



#### Terminator™ ZP-MI-XP

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

#### **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	Terminal Blocks with DIN Rail (Refer to terminal specifications for maximum allowable wire size)
8	1	Junction Box Cord
9	1	Blind Plug

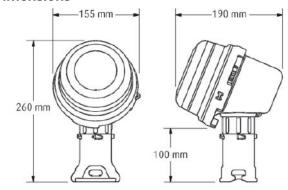
Wire Pins (per MI cable cold lead, order separately)



#### **Specific Conditions of Use**

Avoid electrostatic charge. Clean only with damp cloth.

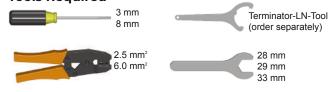
#### **Dimensions**



#### Warnings

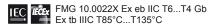
- Due to the risk of electrical shock, arcing and fire caused by product damage or improper usage, installation or maintenance, a ground-fault protection device is required.
- Installation must comply with Thermon requirements (including form PN 50207U for Ex systems) and be installed in accordance with 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 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 TC-E if you have any additional questions.

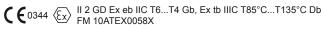
#### **Tools Required**



#### Certifications/Approvals

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





#### **INSTALLATION PROCEDURES**



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



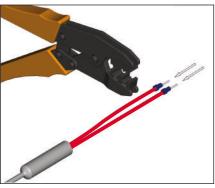
**2.** Mount expediter to pipe using pipe band.



**3.** Tighten cap securely.



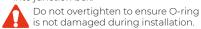
4. Mount junction box base on expediter. Make sure to align slots to properly orient junction box base. Tighten nut with Terminator-LN-Tool. If mounting horizontally, threaded gland holes must face downward.



**5.** Crimp appropriate wire pins (2.5 mm² or 6 mm²) on MI cable cold lead wires.



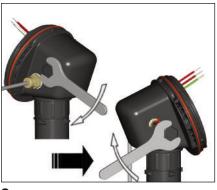
 Route MI cable cold leads through M20 threaded entries. Screw cable glands into junction box.







7. Center cold lead sleeve inside cable gland. Tighten cable glands until ferrule begins to make contact with cold lead sleeve and cold lead sleeve cannot be moved by hand. Tighten cable gland 1/8 additional turn or to a torque value of 16 Nm (142 lb-in).



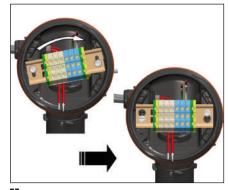
8. Install M20 blind plug in remaining M20 threaded entry (if necessary). Additional M20 blind plug (order M20-B-EXE) will be required if only installing one gland.



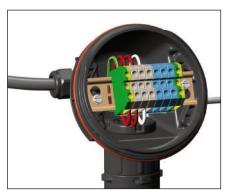
Install M25 power gland (customer supplied) in M25 threaded entry. For in-line splice or 3 phase wye connection, install M25 blind plug (order M25-B-EXE separately) instead of M25 power gland.



**10.** Install power cable (if necessary).



11. Install power cable (if necessary).



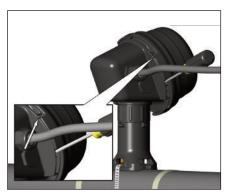
**12.** Complete system wiring. Terminal set screws shall be tightened to a torque value of 1.4 Nm (12.4 lb-in). See page 4 for wiring details.



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



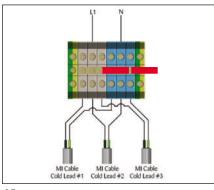
**14.** Use screwdriver to ratchet on junction box lid. Lid will rotate 30 degrees.



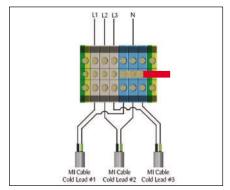
**15.** Lid latch mechanism fully engaged. To remove lid, repeat steps 14 and 15 but in the opposite direction.

**16.** Seal penetration through insulation cladding.

#### **Wiring Details (Two Conductors)**

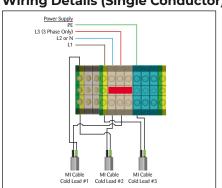


**A1.** Single Phase

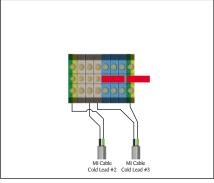


A2. Three Phase

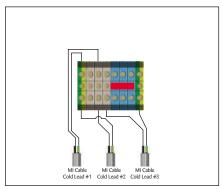
### Wiring Details (Single Conductor)



A1. Power Connection (1 to 3 MI Cable Cold Leads) When connecting three MI cable cold leads, make sure to remove jumpers from terminal blocks. When connecting only one MI cable cold lead, contact TC-E for design assistance.



A2. In-Line Splice



**A3.** 3 Phase Wye Connection



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