Power and End Termination Kit

## **INSTALLATION PROCEDURES**

- ☐ PETK-1 for BSX, RSX, VSX-HT
- ☐ PETK-2 for KSX, HTSX, USX
- ☐ PETK-3 for HPT, FP
- ☐ PETK-3-ECM for HPT, FP

Order separately to be used in conjunction with Thermon connection kits





The following installation procedures are guidelines for the installation of the Power and End Termination 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

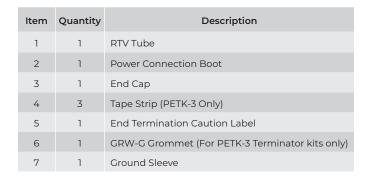
- 1. Inspect materials for damage incurred during shipping.
- 2. Report damages to the carrier for settlement.
- 3. Identify parts against the packing list to ensure the proper type and quantity has been received.
- 4. Store in a dry location.

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

PETK-1	for BSX, RSX, VSX-HT
PETK-2	for KSX, HTSX, USX
PETK-3	for HPT, FP
PETK-3- ECM	for HPT, FP

### Kit Contents





#### Installation Precautions

- To minimize the potential for arcing and fire caused by product damage or improper installation use ground-fault protection. The National Electrical Code (NEC) and Canadian Electrical Code (CEC) require ground-fault protection of equipment for each branch circuit supplying electric heat tracing.
- Installation must comply with Thermon requirements and be installed in accordance with the NEC, CEC, 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 ends of heating cable and kit components dry before and during installation.
- 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.

#### PETK Certifications/Approvals<sup>1</sup>





### Note:

 These sets have been evaluated as components of Thermon's Approved connection kits, such that the area use ratings depend on the rating of the connection kits.

### **Tools Required**





### **INSTALLATION PROCEDURES**

#### **IMPORTANT!**

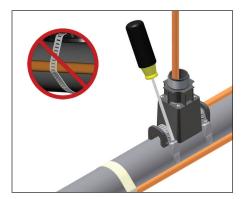
Heating cable must be properly installed within expediter assembly and mounted to pipe prior to terminating with PETK kit.

See Terminator Installation Instructions for expediter mounting details.



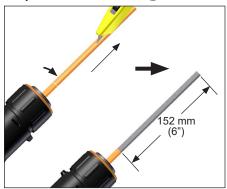
**Terminator:** Route cable through base entry and mount expediter to pipe using pipe band. Do not band over cable.

**Note:** For HPT and FP cable exchange grommet in Terminator with GRW-G provided in PETK-3.



**TracePlus:** Route cable through base entry and mount expediter to pipe using pipe band. Do not band over cable.

### Step 1: Remove Heating Cable Overjacket and Separate Metallic Braid to Form Pigtail



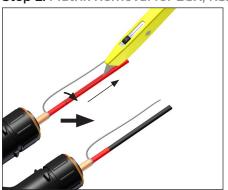
1a. Cut and remove heating cable overjacket.
Do not cut metallic braid.

**1b.** Separate braid strands at edge of overjacket and pull cable through opening in braid.

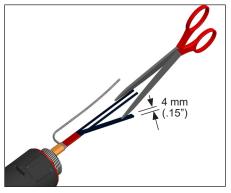


**1c.** Twist braid into a pigtail. Trim ends of braid.

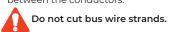
Step 2: Matrix Removal for BSX, RSX, HTSX, KSX, USX, and VSX-HT Cables

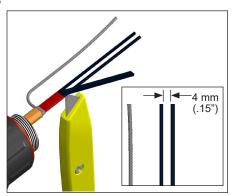


**2a.** Cut and remove primary insulation jacket (BSX and RSX cables only).



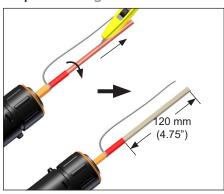
**2b.** Cut a 4 mm strip of conductive matrix between the conductors.





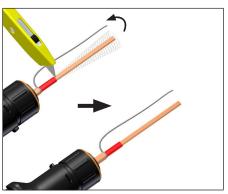
**2c.** Cut and remove the 4 mm matrix strip.

### Step 2: Heating Element Removal for HPT and FP Cables

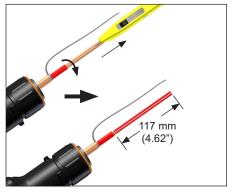


**2a.** Cut and remove primary insulation jacket.

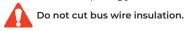
NOTE: Bus connection must be no more than 50 mm (2") from pipe as addressed in power connection kit instructions.



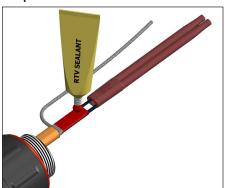
**2b.** Cut and remove fiberglass overlay and heating element. Push any remaining heating element wire under the primary insulation jacket.



**2c.** Cut and remove pairing jacket.



Step 3: Install Power Boot on Heating Cables



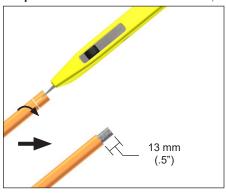
**3a.** Apply a liberal amount of RTV sealant to cable.



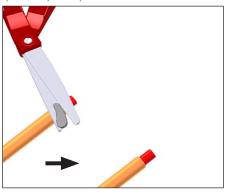
**3b.** Slide boot onto the end of the cable and green/yellow ground sleeve over twisted braid. Expose 13 mm (0.5") of bus wire.

### **INSTALLATION PROCEDURES**

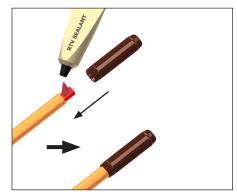
Step 4: End Termination for BSX, RSX, HTSX, KSX, USX and VSX-HT





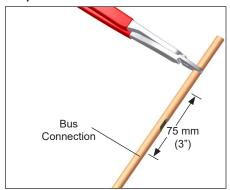


4b. Trim away exposed braid from cable.

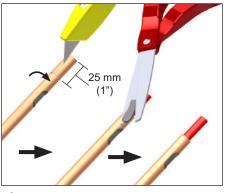


**4c.** Apply a liberal amount of RTV sealant to cable and inside end cap. Slide end cap onto end of cable.

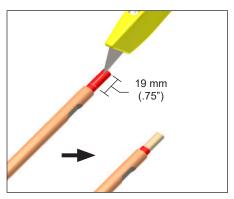
Step 4: End Termination for HPT and FP



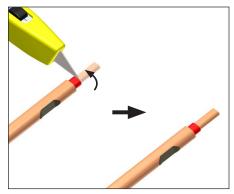
**4a.** Trim the cable 75 mm (3") from the bus connection.



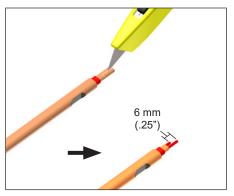
**4b.** Cut and remove overjacket and trim away exposed braid from cable.



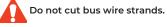
4C. Cut and remove primary insulation jacket.

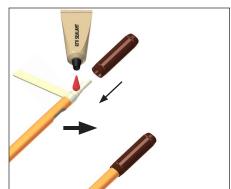


**4d.** Cut and remove fiberglass overlay and heating element. Push any remaining heating element wire under the primary insulation jacket.



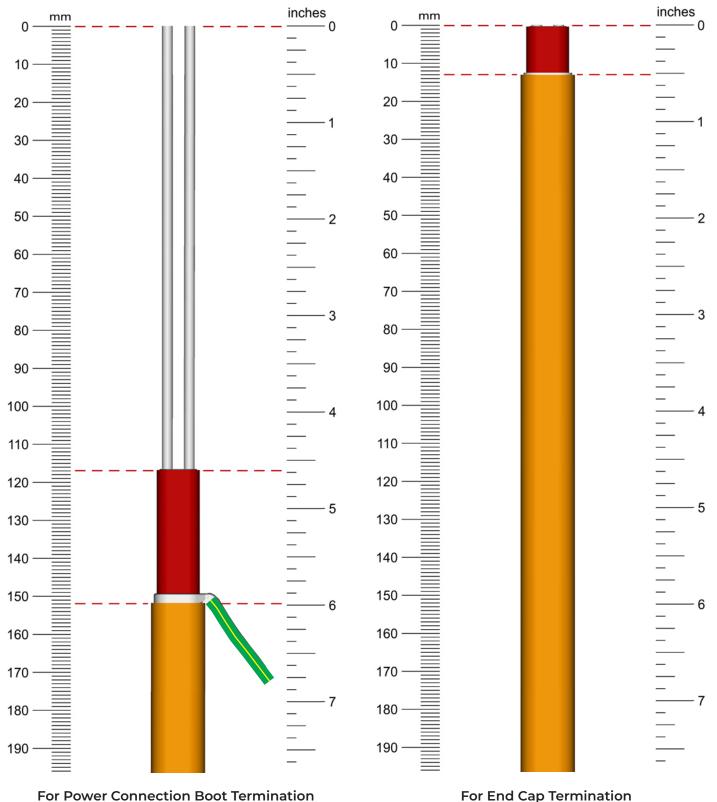
**4e.** Cut and remove pairing jacket. Stagger cut one of the bus wires.





**4f.** Tape bus wires individually and then together. Continue taping to cover overjacket. Apply a liberal amount of RTV sealant to cable and slide end cap onto the end of the cable.

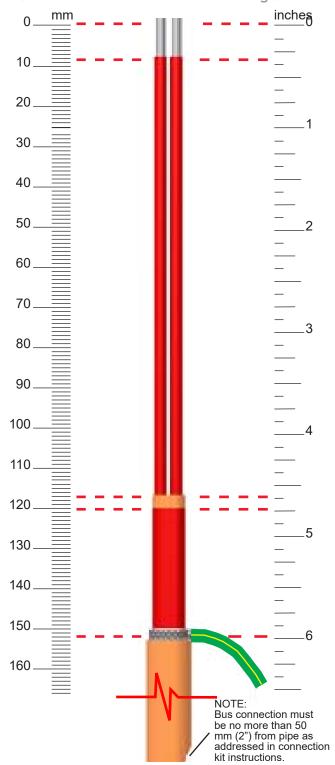
Cable Take-off for BSX, RSX, HTSX, KSX, USX and VSX-HT

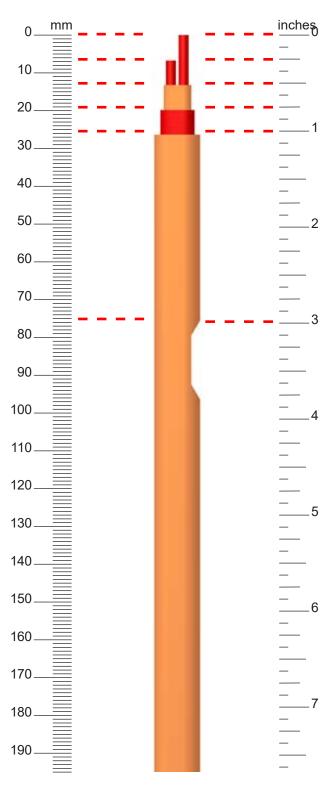


NOTE: Images may not be printed to scale.

### **INSTALLATION PROCEDURES**

### Cable Take-off for HPT and FP Heating Cables





For Power Connection Boot Termination

For End Cap Termination



NOTE: Images may not be printed to scale.