# PETK Power and End **Termination Kit**

# **INSTALLATION PROCEDURES**

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

Order separately to be used in conjunction with Thermon connection kits

Made in the USA







# PETK

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.

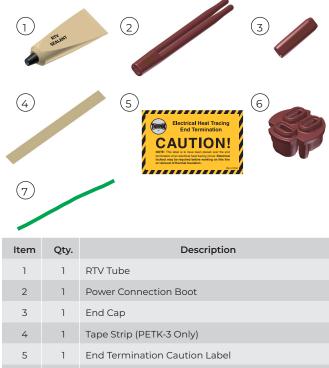
#### **Receiving, Storing and Handling**

- 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, VSX-HT, RSX
PETK-2	for HTSX, KSX, KSR, USX
PETK-3	for HPT, FP
PETK-3-ECM	for HPT, FP
PETK-3-ZT	for HPT, FP

#### **Kit Contents**



#### Note:

6

7

Wire pins may be required as per client/project specification (order separately).

Ground Sleeve

Grommet (For PETK-3 Terminator kits only)

#### 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.
- 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.
- · Avoid electrostatic charge. Clean only with a damp cloth.

#### **Tools Required**







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



#### Note:

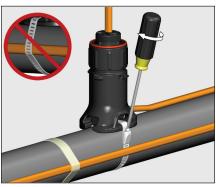
1. Certifications vary by cable type. See heating cable installation procedures for additional information.

### 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.

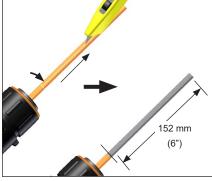


**Terminator:** Route cable through base entry and mount expediter to pipe using pipe band. Do not band over cable.



For HPT and FP cable exchange grommet supplied in Terminator kit with: GRW-G provided in PETK-3 GRW-GT2 provided in PETK-3-ECM GRW-G/Tstat provided in PETK-3-ZT

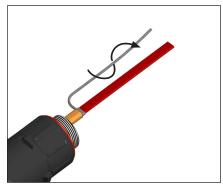
#### Step 1: Remove Heating Cable Overjacket and Separate Metallic Braid to Form Pigtail



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

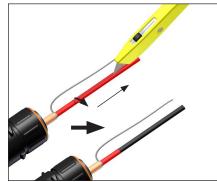


**1b.** Separate braid strands at edge of overjacket and pull cable through opening in braid.

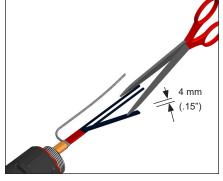


**1c.** Twist braid into a pigtail. Trim ends of braid.

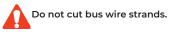
#### Step 2: Matrix Removal for BSX, VSX-HT, HTSX, RSX, KSX, KSR, USX Cables

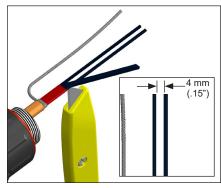


**2a.** Cut and remove primary insulation jacket (BSX and RSX cables only).



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

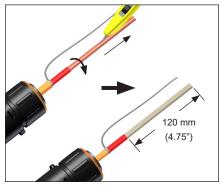




**2c.** Cut and remove the 4 mm matrix strip.

## PETK

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

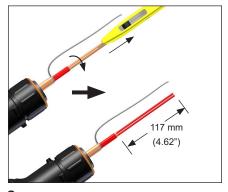


**2a.** Cut and remove primary insulation jacket.

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

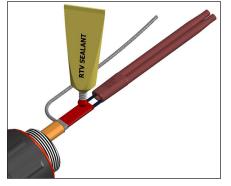


**2b.** Cut and remove fiberglass overlay and heating element. Push any remaining heating element wire under the primary insulation jacket.



**2c.** Cut and remove pairing jacket. Do not cut bus wire insulation.

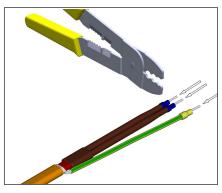
#### Step 3: Install Power Boot on Heating Cables



**3a.** Apply RTV sealant to cable to cover distance of at least 3 mm and slide boot onto the end of the cable.



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

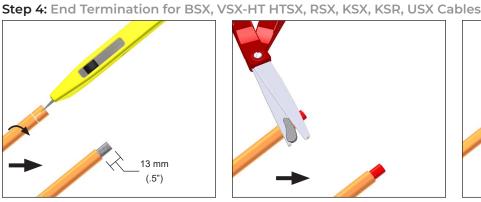


**3c.** Crimp conductor wire pins on each conductor and on twisted braid if required as per client/project specification (order separately).

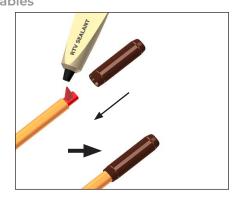
13 mm (.5")

4a. Cut and remove heating cable

overjacket.

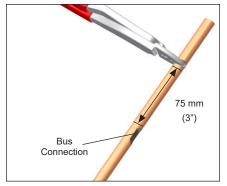


4b. Trim away exposed braid from cable.

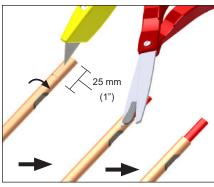


 $\boldsymbol{4C.}\,$  Fill the end cap with RTV sealant and apply a circumferential bead to cable [minimum of 3 mm (0.12") wide]. Slide end cap onto end of cable.

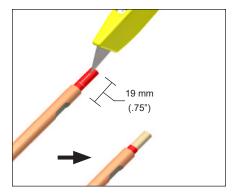
#### Step 4: End Termination for HPT and FP



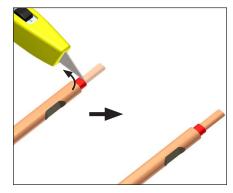
4a. Trim the cable 75 mm (3") from the bus connection.



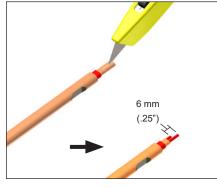
4b. Cut and remove overjacket and trim away exposed braid from cable.



4C. Cut and remove primary insulation jacket.

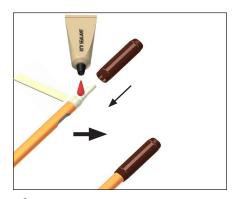


4d. Cut and remove fiberglass overlay andheating element. Push any remaining heating element wire under the primary insulation jacket.



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

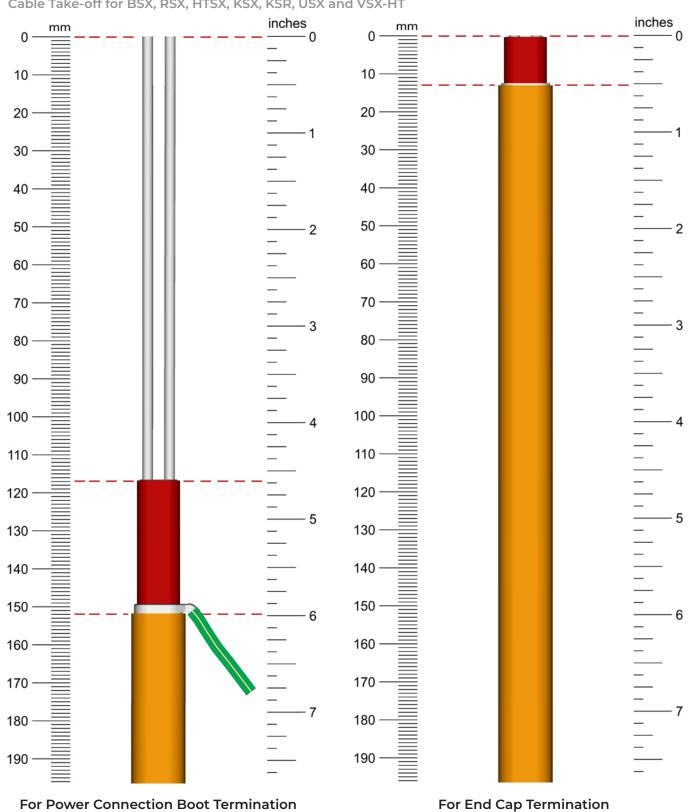




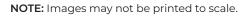
4f. Tape bus wires individually and then together. Continue taping to cover overjacket. Fill the end cap with RTV sealant and apply a circumferential bead to cable [minimum of 3 mm (0.12") wide]. Slide end cap onto end of cable.

#### 5

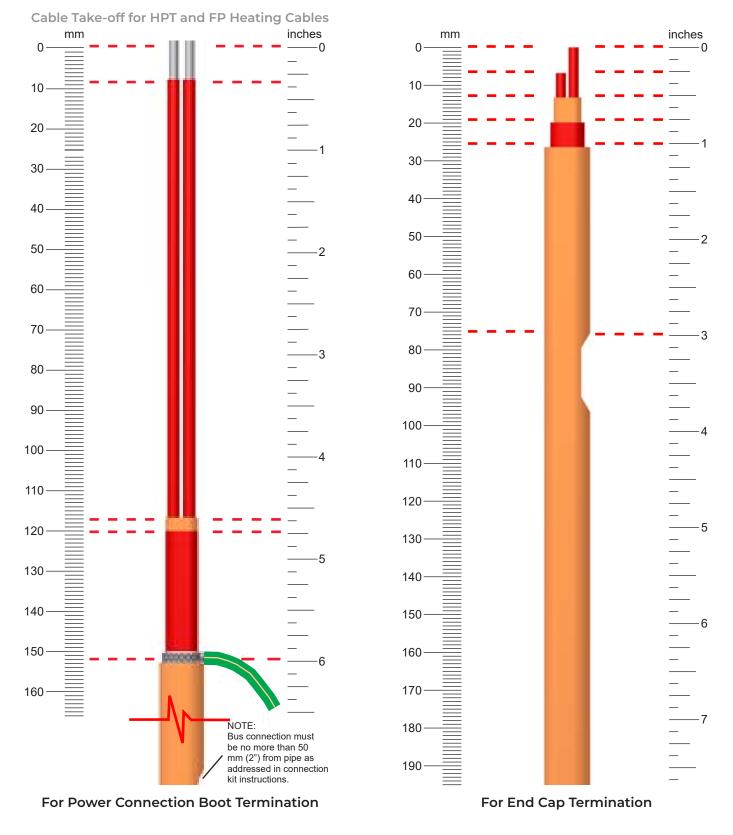
## PETK



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



### INSTALLATION PROCEDURES



NOTE: Images may not be printed to scale.



European Headquarters: Boezemweg 25 · PO Box 205 · 2640 AE Pijnacker · The Netherlands · Phone: +31 (0) 15-36 15 370 Corporate Headquarters: 100 Thermon Dr · PO Box 609 San Marcos, TX 78667-0609 · Phone: 512-396-5801 · 1-800-820-4328 For the Thermon office nearest you visit us at . . . www.thermon.com