

### HEAT TRACE CABLE POWER BOX KIT

- PBK-EHT is used with POWER TRACE heating cables.
- For connecting up to 3 heating cables.
- Nema4x/IP66, Ingress Protection against dust and water.
- Available for use in hazardous and non-hazardous areas.

### Product Overview

- ◆ The PBK-EHT kit is designed to connect power to POWER TRACE EHT Series heating cables.
- ◆ The PBK-EHT integrates the functions of connection kits and insulation entries. The rugged stand protects the heating cable and allows for up to four inches of thermal insulation.
- ◆ The cold-applied core sealer does not require a heat gun or torch for installation, so no hot work permit is necessary.
- ◆ Compared with other systems, this connection kit significantly reduces installation time.
- ◆ For pipe mounting, two pipe straps, and fiberglass tape are required and must be ordered separately.

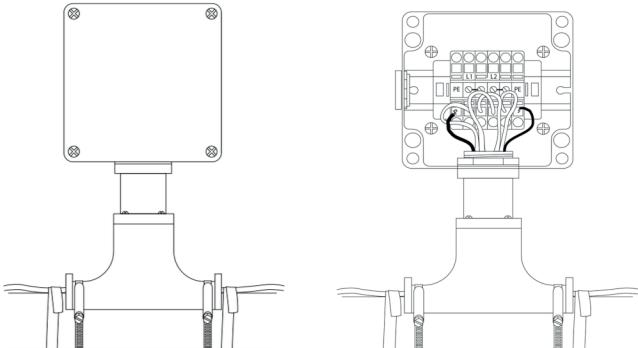
### Product Specification

PBK-EHT-120 SIZE L x W x H (mm), 120 x 120 x 90

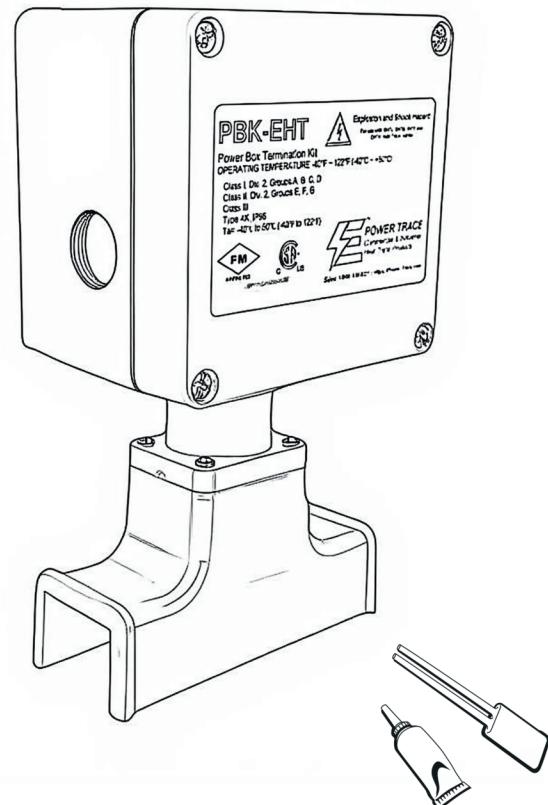
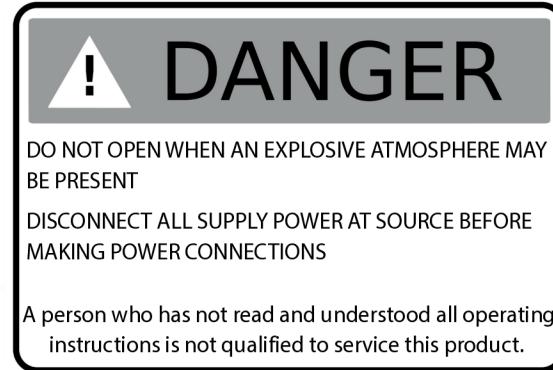
PBK-EHT-160 SIZE L x W x H (mm), 160 x 160 x 90

PBK-EHT-260 SIZE L x W x H (mm), 260 x 160 x 90

MATERIAL Glass Reinforced Polyester, Fire Retardant



Doc.21301223



### Tools Required

- Wire Cutter
- Slotted Screwdriver
- Utility Knife Stainless
- Scissors
- Locknut Wrench
- Needle Nose Pliers

### Additional Materials Required

- Pipe Straps
- Fiber Glass Fixing Tape

## Installation Instructions

1. Open the seal fitting as shown in figure 1 below. Then push with force 1, 2 or 3 heating cables through the strain relief grommet and body until approx. 12" of cable is exposed to make up cable termination.

Example

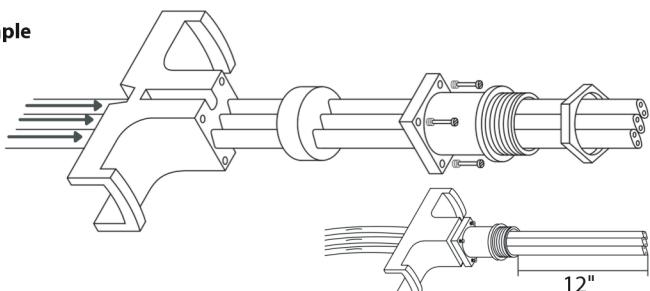


Figure 1.

2. Prepare the heating cable for termination (see figure 2). Start by making a mark 6" from the end of the cable, then lightly score around the outer jacket as shown. Next, lightly cut along the center of the cable, taking care to not damage the metal braid or inner jacket. Bend the cable to break and remove the outer jacket from the heating cable.

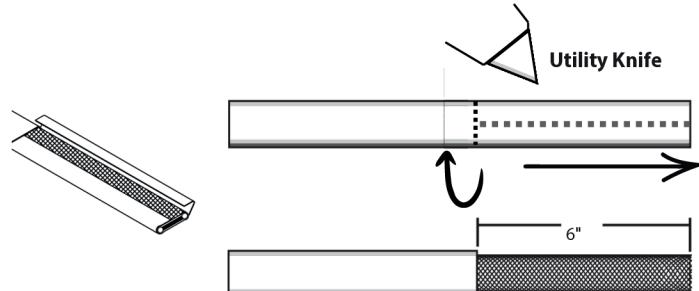
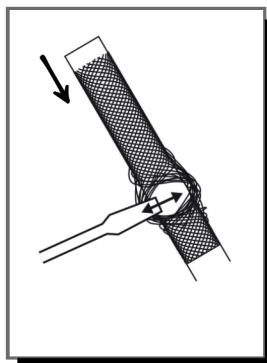
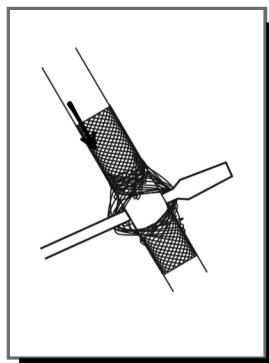


Figure 2.

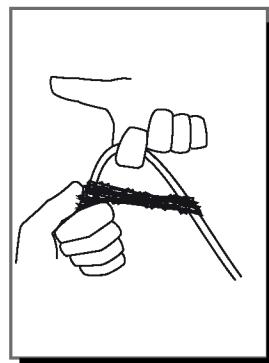
3. Move braid back toward the outer jacket, creating a bulge. At the bulge, separate the braid to make an opening.



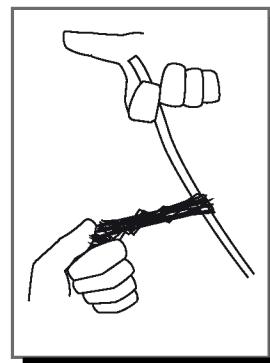
4. Carefully work a flat edge screwdriver between braid and inner jacket of heating cable.



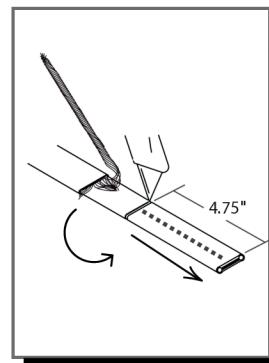
5. While bending, grab the heating cable and slide it through the braid opening.



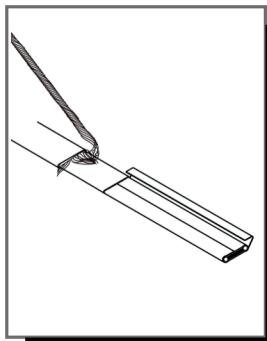
6. Pull the braid tight, twist into a pigtail and trim off end of braid.



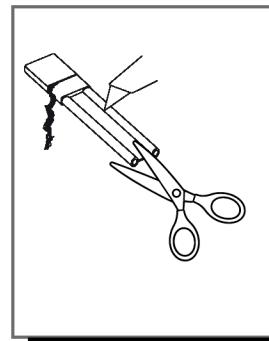
7. Measure down 4.75" and lightly score around the cable insulation and then down the center to the end of the cable.



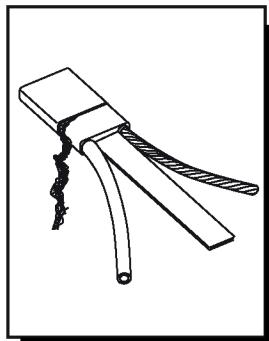
8. Bend cable to break and remove inner jacket insulation. DO NOT CUT DEEP INTO BUS WIRES.



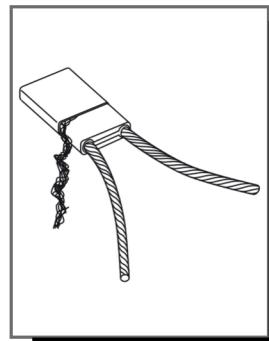
9. Remove center core and expose bus wires. DO NOT CUT THE BUS WIRES.



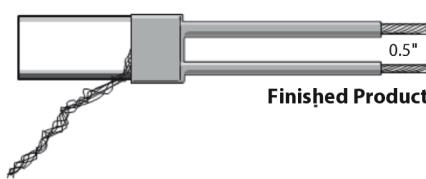
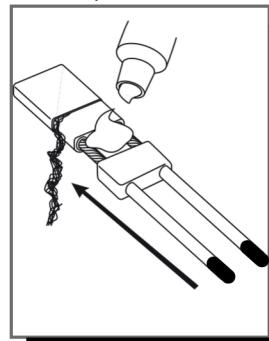
10. Peel back exposed wires from center core. DO NOT CUT THE BUS WIRES.



11. Inspect bus wires, clean off and straighten.

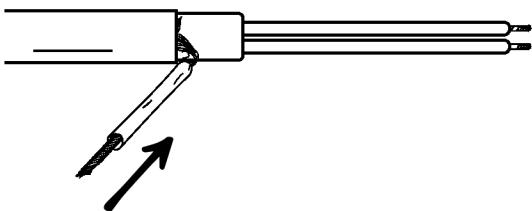


12. Apply a dab of RTV between bus wires then slide the boot over bus wires, leaving .5" of bus wires exposed.



13. If there is a second or third cable, repeat step 2 to step 10.

14. Insert the braiding through the yellow-green tube.



15. Pull back the heating cables through the body leaving 5.0 inches exposed.

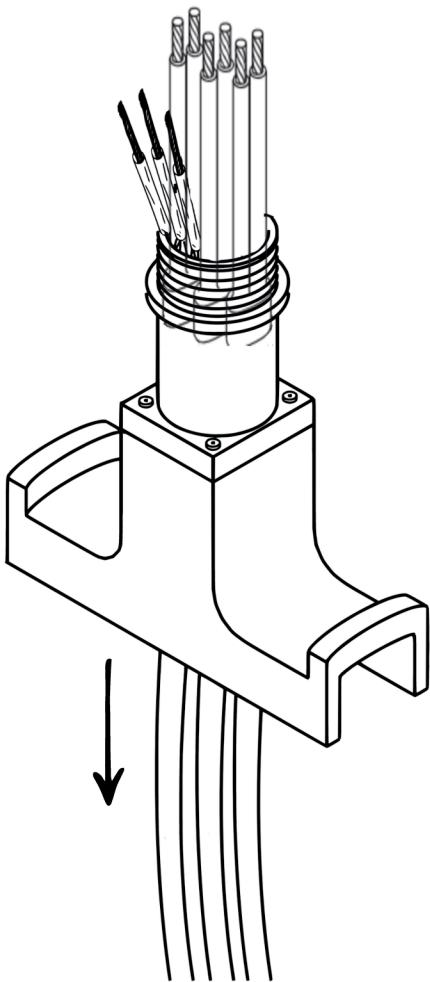


Figure 3.

16. Insert the cables through the lower entry of the junction box and tightly secure the junction box to the base using the provided lock ring. (See figure 4). Connect the heating cables and ground braid to the terminal block as shown. (If terminal block is removed, wire nuts may be used to terminate the heater cables to incoming power supply and ground wires.)

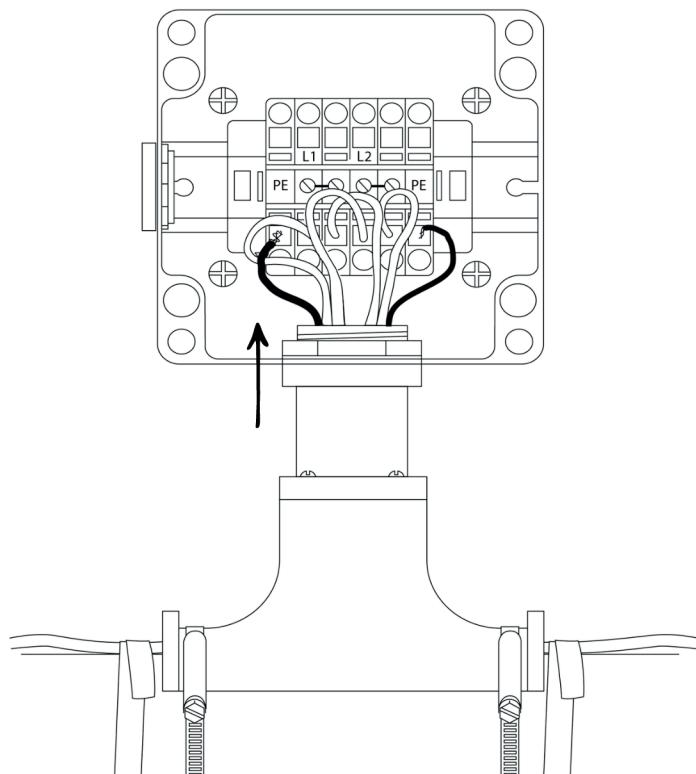


Figure 4.

### Triple loop Connection

PBK-EHT-160 or PBK-EHT-260 Series Junction box is required for triple loop connections. Refer to the following figure 5 for wiring arrangement for 3 heating cables.

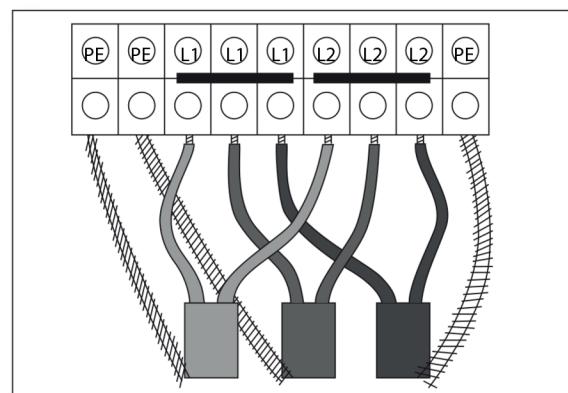
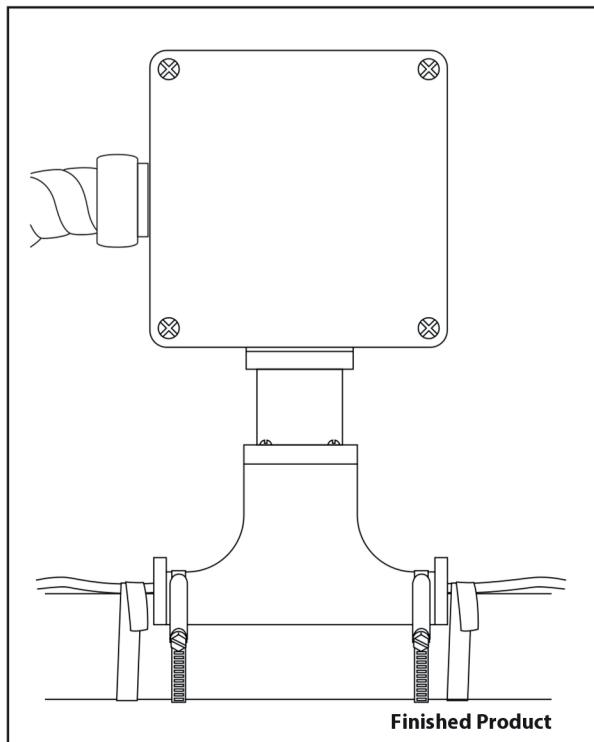
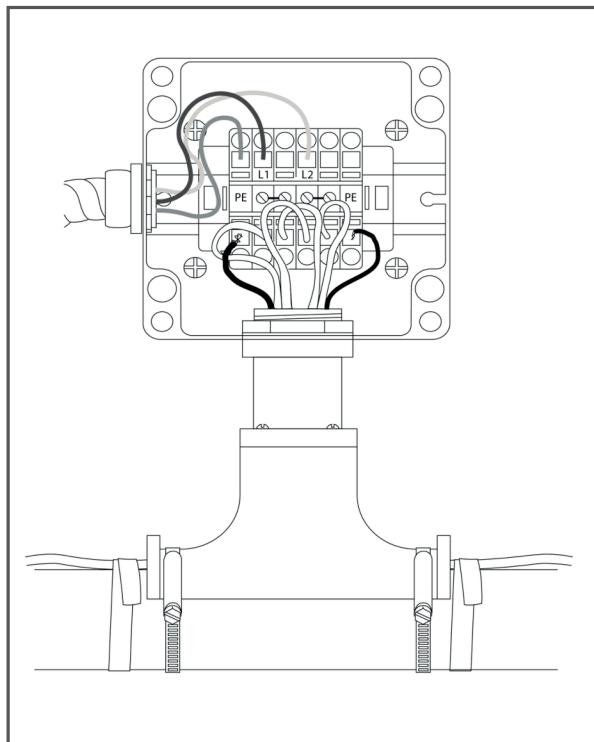


Figure 5.

### Connect to Power

17. Connect the power conductors to the heater cable leads using L1 and L2 at the top of the terminal block. Connect the incoming supply ground to the heating cable braid by using PE. Wire nuts may be used in place of terminal block.



### Certifications / Approvals



Suitable for Class I, Zone 1, AEx eb IIC Gb; Zone 21, AEx tb IIIC Db; Class I, Division 2, Groups A, B, C and D and Class II, Division 2, Groups F and G hazardous (classified) locations with an ingress protection rating of IP66.

*Approvals valid only when installed in accordance with all applicable instructions, codes, and regulations.*

#### CAUTION:

- INSPECT JUNCTION BOX PRIOR TO USE AND DO NOT USE JUNCTION BOX IF ANY COMPONENT IS DAMAGED.
- DO NOT OPERATE JUNCTION BOX ABOVE RATED TEMPERATURE VALUE.
- FASTEN JUNCTION BOX TO DEVICE USING APPROVED METHODS ONLY.
- "RISK OF ELECTRIC SHOCK-DISCONNECT THE ELECTRIC POWER BEFORE SERVICING"
- "ATTENTION: RISQUE DE CHOC ÉLECTRIQUE-DÉBRANCHER AVANT LA MAINTENANCE"

#### NOTE:

1. Terminal torque: 0.7 Nm
2. Operating temperatures: -40°F to 149°F (-40°C to 65°C)
3. UK5N Certificate No: IECEx KEM06.0034U, Max Power: 1.02W
4. USLKG5 Certificate No: IECEx KEM 06.0035U, Max Power: 1.02W
5. Explosion proof joint tightening torque: 3 Nm
6. Max. Current: 40A
7. Rated voltage: 110~120, 220~240V

#### WARNING:

*Failure to observe these warnings may result in personal injury or damage to the product and/or property.*

When wiring, the customer must exercise caution to avoid damaging the cable's insulation.

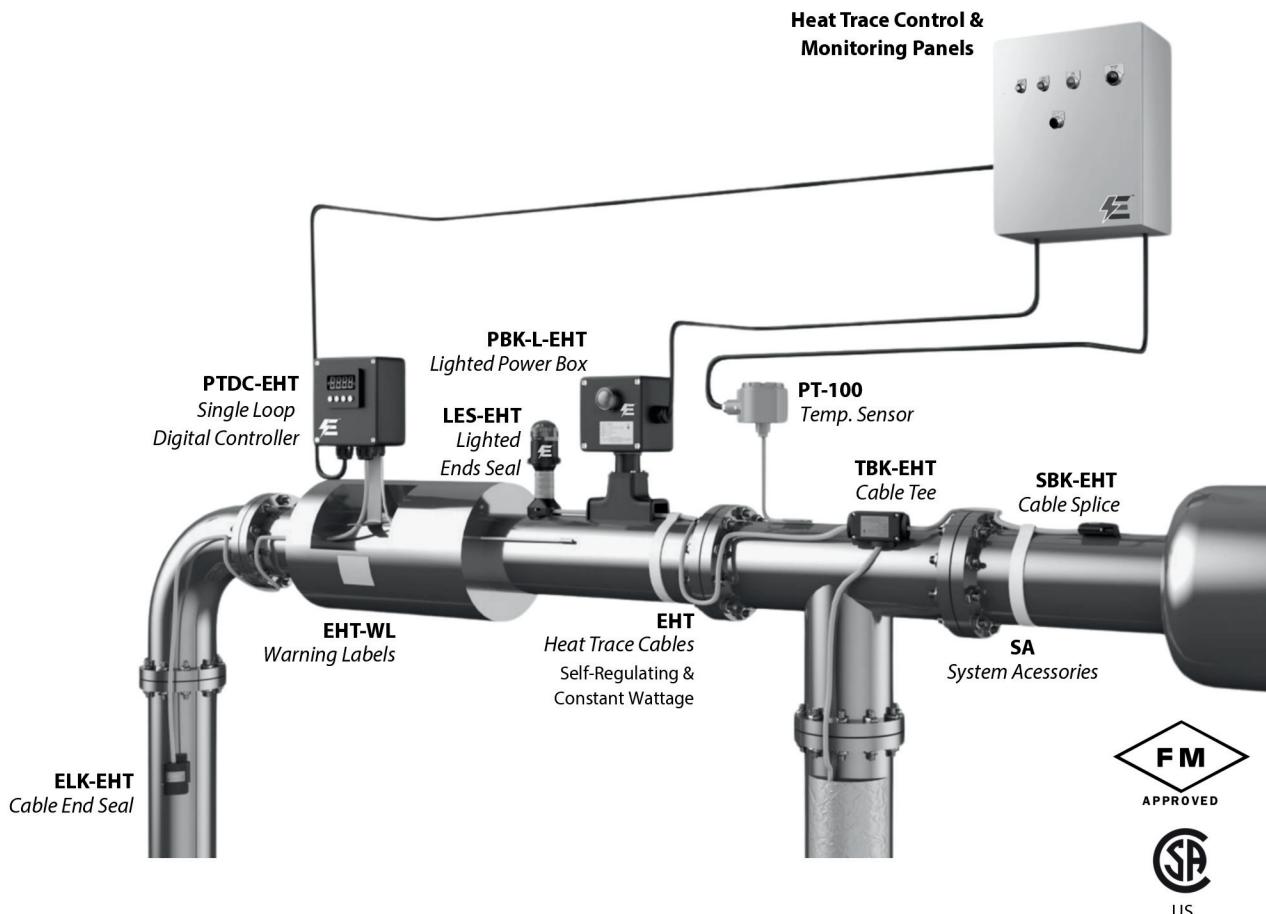
When wiring, it is highly recommended to follow all local electrical codes and NEC Article 427.

When junction box PBK-EHT is installed in an explosive atmosphere, it is crucial to use the correct blanking elements or seals and comply with IEC 60079-0:2017, IEC 60079-7:2017 and IEC 60079-31:2013 with type of protection and EX eb IIC Gb, Ex tb IIIC Db degree of protection IP66, shall be adopted.

The clearance holes for plain entries shall have a diameter not more than 0.7 mm greater than the nominal diameter of the entry thread gland or fitting. Plain hole Ø40 for M40 bracket threaded gland (40.2±0.2mm).

### OTHER POWER TRACE PRODUCTS

For Ordinary and Hazardous Environments



**Your Reliable Source for High-Quality and Long-Lasting Heat Trace Systems.**



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