

PCK-RG

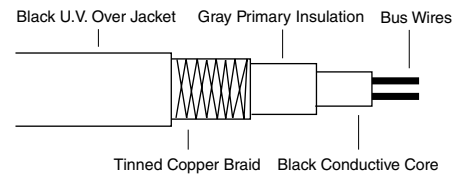


IN Series Power Connection Kit For Roofs And Gutters

DESCRIPTION

PCK-RG allows you to make electrical connections for all IN Series CBT self-regulating heating cables used in roof and gutter applications. The kit contains the necessary materials (except weather-tight junction box) for one power connection, one splice connection, and two end terminations.

SR CABLE CUTAWAY



Detail 1.

CONNECTING TO POWER

1. Attach connector assembly to the Junction Box through a .5" (1cm) NPT fitting. Loosen connector assembly and insert 10" (25cm) of cable through into junction box. Tighten connector assembly.
2. Strip end of cable (in junction box) as outlined on detail 1. Slide one piece of shrink tube over cable. Connect buss wire to the power input using the barrel connectors.
3. Cover the entire spliced area (from barrel connectors over black conductive core to gray over jacket) with silicone sealant and let cure overnight. Center shrink tube over barrel connectors and apply heat to shrink.
4. Twist braid into a conductor and attach ring connector.
5. Connect the ring connector to the connection box using the grounding screw (not supplied).
6. Push the splice and input power wire into the connection box, then attach the gasket and cover.
7. Attach caution labels to the junction box and circuit breaker panel and circuit breaker panel.

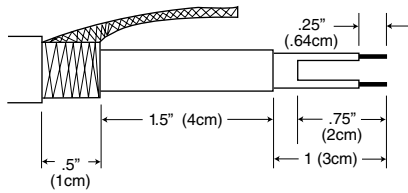


- A. Silicone Sealant
- B. Heat Shrink Sleeve .5" x 1.5" (1 x 15cm) (2)
- C. Heat Shrink Cap .5" x 1.5" (1 x 15cm) (2)
- D. .75" (2cm) Sealing Locknut
- E. Connector Assembly
- F. Caution Labels (2)
- G. LG Butt Connectors (4)
- H. SM Butt Connectors (4)
- I. Ring Connectors (2)
- J. Non-Insulated Butt Splices (2)





WARNING: This kit and the cable used with it must be installed by a qualified electrician. All assembly, installation, and test instructions must be followed. Improper installation can result in property damage, serious injury, and/or death due to electric shock and fires. Please call Delta-Therm Corporation at 1-800-526-7887 with any installation or operating questions.



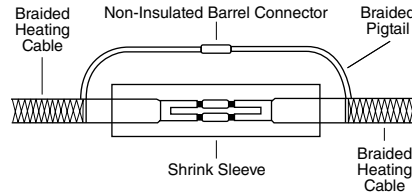
Detail 1. Stripping

STRIPPING THE CABLE (DETAIL 1)

1. Score and remove 3" (8cm) of the black overjacket to expose the braid.
2. Carefully separate 3" (8cm) of braid back to the overjacket, then twist the braid into a pigtail. Trim the pigtail to remove the tapered end.
3. Remove 1" (3cm) of gray over jacket from the end exposing the black conductive core.
4. Cut out the center of core material .125" wide x .75" long (.32cm x 2cm).
5. Strip conductive core .25" (.64cm) from the end of each bus wire, using a wire stripper or utility knife.

END CAP TERMINATION (DETAIL 4 & 5)

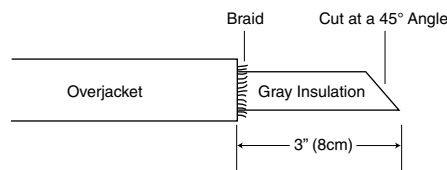
1. Remove 3" (8cm) of black over jacket and braid from end. Cut braid off.
2. Trim the end of the heating cable so that one bus wire is .25" (.64cm) shorter than the other. **Caution:** Do not terminate self regulating cable by connecting the two bus wires. Doing so will destroy the cable. If you have any questions, please call 1-800-526-7887.
3. Slide the heat shrink cap over the end of the cable, leaving .5" (1cm) from end cap to black overjacket exposed.
4. Using a heat gun, shrink the sleeve into place. Heat until glue begins to flow from cap.
5. Apply silicone sealant over .5" (1cm) exposed area covering edge of overjacket and braid.



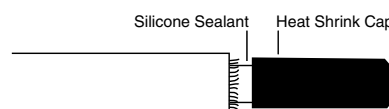
Detail 2. In-Line Splice

MAKING AN IN-LINE SPLICE (DETAIL 2)

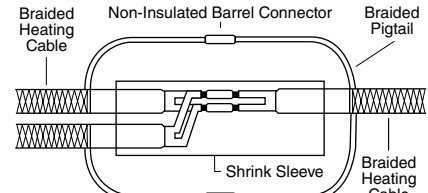
1. Bring the heating cables together allowing approximately .25" (.64cm) gap between them. Remove 4" (10cm) of overjacket and separate braid from end of each cable. Twist braid into pigtail. Trim the pigtail to remove the tapered end.
2. Separate the cable conductors following steps 3, 4, and 5 of the Stripping section above.
3. Slide the shrink sleeve over one of the heating cable ends.
4. Using the blue barrel connectors, connect the bus wires as shown.
5. Cover the entire spliced area (from barrel connectors over black conductive core to gray overjacket) with silicone sealant and let cure overnight. Do not cover the braid with the shrink sleeve.
6. Center the shrink tube over the barrel connectors and shrink using a heat gun.
7. Using a non-insulated barrel connector, connect the two braid pigtails formed in step 1.



Detail 4. Trim End of Cable



Detail 5. Heat Shrink Cap



Detail 3. Three Way Splice

MAKING A THREE WAY SPLICE (DETAIL 3)

1. Separate the braid on the single cable into two equal strands. Twist the braid to form two pigtails on the single cable and one pigtail each on the other cables.
2. Follow steps 1 and 2 from the in-line splice section.
3. Slide the shrink sleeve over the single cable. Strip additional .25" (.64cm) from bus wire (from single cable side) and fold it over.
4. For the T connection, twist together one bus wire from each of two cables, connecting the heaters in parallel.
5. Using two yellow insulated barrel connectors, connect the three bus wires as shown.
6. Seal the splice area with silicone sealant. Seal the ends of the cables and any part where the jacket has been removed. Let silicone cure over night.
7. Center the shrink sleeve over the splice and shrink into place.
8. Using two non-insulated barrel connectors, connect the braid pigtails as shown in the diagram.
9. Cover entire spliced area with electrical tape and scotch coat (provided by others).

ADDITIONAL MATERIALS REQUIRED

- Electrical Tape
- Scotchcoat
- Conduit And Wire
- Weather Proof Junction Box With .5" (1cm) NPT Fittings.
- Crimping Tool