

RGS™-CFK

INSTALLATION INSTRUCTIONS

RGS Self-Regulating Heating Cables
Power Connection and End Termination Kit

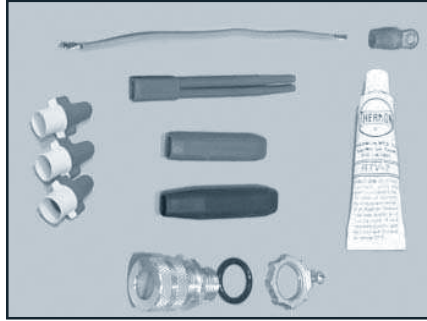


RGS™-CFK Power Connection and End Termination Kit



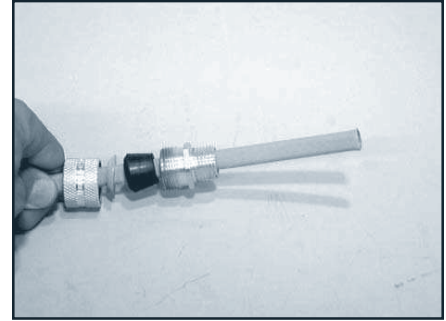
Tools Required for Installation

Scissors, crimper/cutter, flat-blade screwdriver, and utility knife



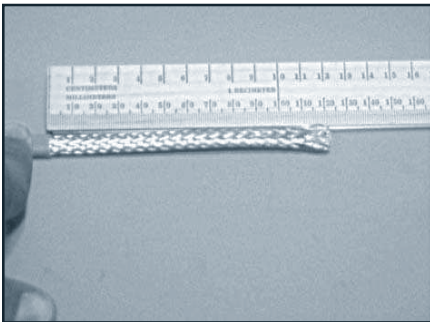
Kit Contents

User supplied junction box must be rated Type 4X (water-tight) and approved for use in ordinary locations.

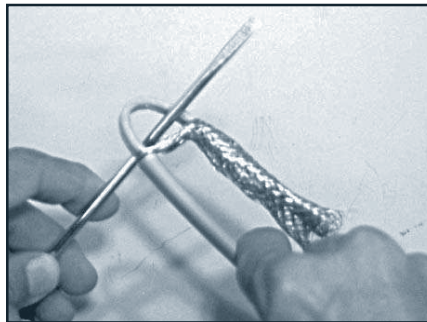


Power Connection

Step 1: Slide the junction box fitting cap, strain relief disk, grommet, and then gland fitting body onto the power end of cable.



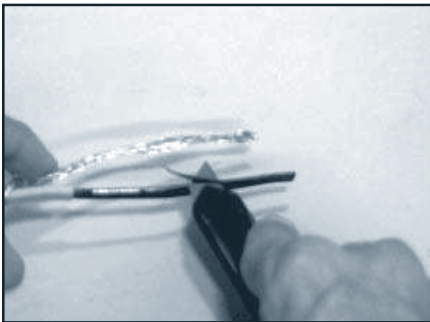
Step 2: Cut overjacket back a distance of 5" (120 mm).



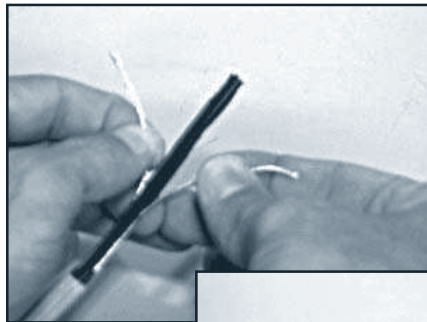
Step 3: Separate braid strands at overjacket and pull cable back through opening in braid.



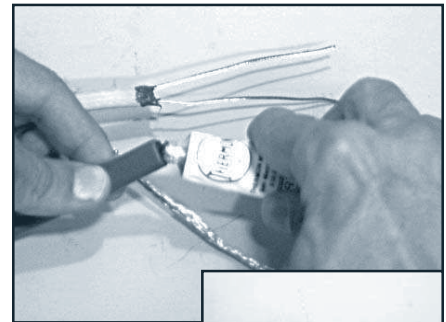
Step 4: Cut insulating jacket of cable back 3.5" (90 mm). Wind braid into a pigtail.



Step 5: Skive outer matrix material from conductors with a utility knife.

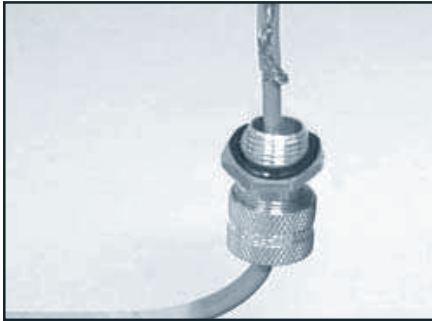


Step 6: Peel exposed wires back from center matrix and cut center matrix away, leaving bare conductors. Twist end of bus wires before inserting into boot to avoid contact with ground wire.

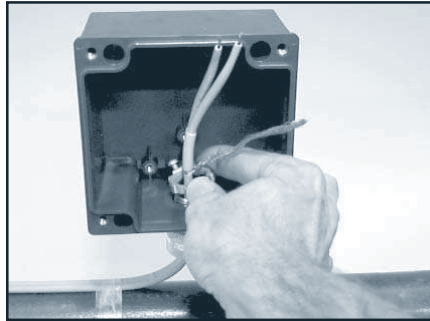


Step 7: Squeeze RTV into the silicone rubber boot and slide over cable end. Verify bus wires do not contact ground wire.

INSTALLATION INSTRUCTIONS

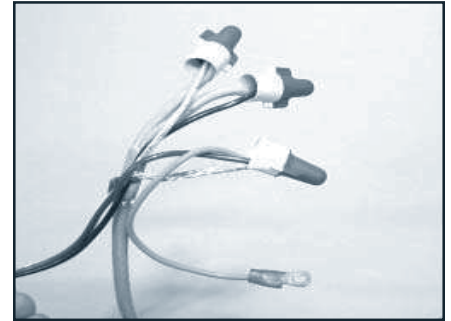


Step 8: Tighten the gland fitting to the cable such that the leading edge of the fitting is 1" (25 mm) back from the braid pigtail. Be careful to leave enough cable to easily reach the junction box without straining the cable.



Step 9: Mount NEMA 4X junction box (not supplied) to support structure. The junction box should have one opening for incoming power and a 1" (25 mm) opening for the heating cable. For roof-and-gutter installations, mount box underneath roof eave if possible.

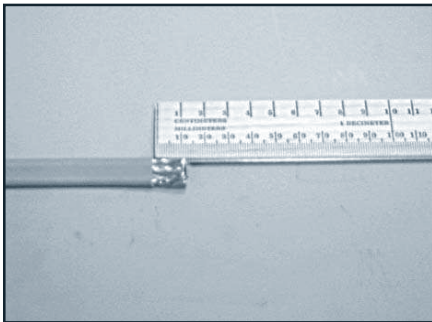
Install the completed cable connection and gland fitting into the 1" (25 mm) opening. Tighten down grounding lock ring. The cable should come up to the junction box from underneath, or should have drip-loop of cable provided.



Step 10: The incoming power cable should also be provided with a drip-loop before it enters the enclosure. Connect the power conductors to the cable leads. Connect the incoming supply ground wire to the cable braid and to the green ground wire. Crimp the ring terminal to the other end of the green ground wire and then connect it to the grounding screw on the lock-ring.

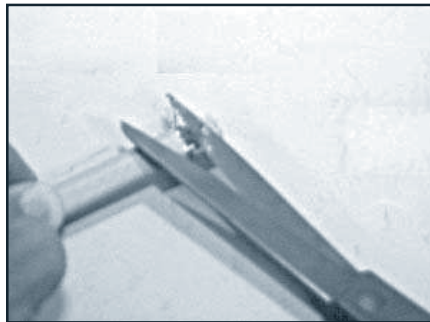
Step 11: Secure the water-tight cover to the junction box. Before the system is energized, make sure it is connected to a ground-fault-circuit-interrupting (GFCI or ELCI) type of outlet or circuit breaker.

Step 12: The cable installation instructions are provided separately.



End Termination

Step 13: Cut back overjacket 0.5" (12 mm).



Step 14: Trim ALL of the braid strands back to the overjacket with scissors



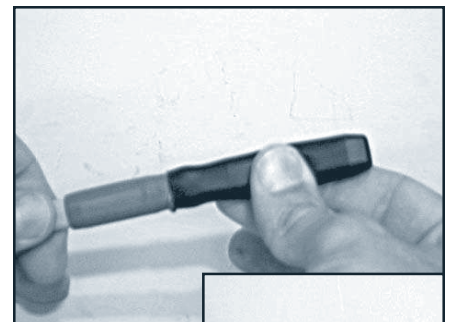
Step 15: Fill the smaller end cap with RTV.



Step 16: Slide the end cap on the end of the cable until fully seated.



Step 17: Put a small amount of RTV into the opening of the larger over-cap.



Step 18: Slide the over-cap over the end cap until fully seated.

