Installation Instructions

RTPC Power Connection Kit
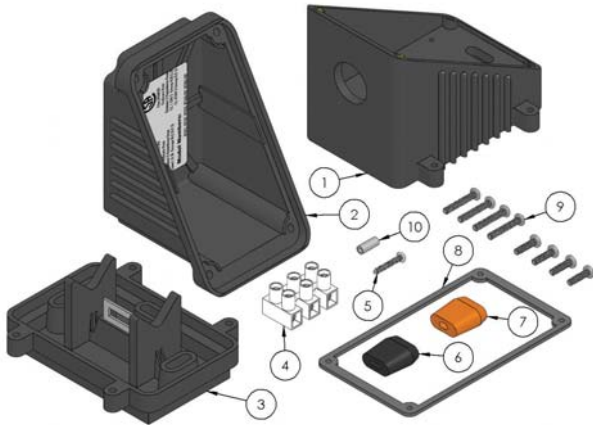
For Self-Regulating & Constant Wattage Heating Cables

CHROMALOX
Advanced Thermal Technologies
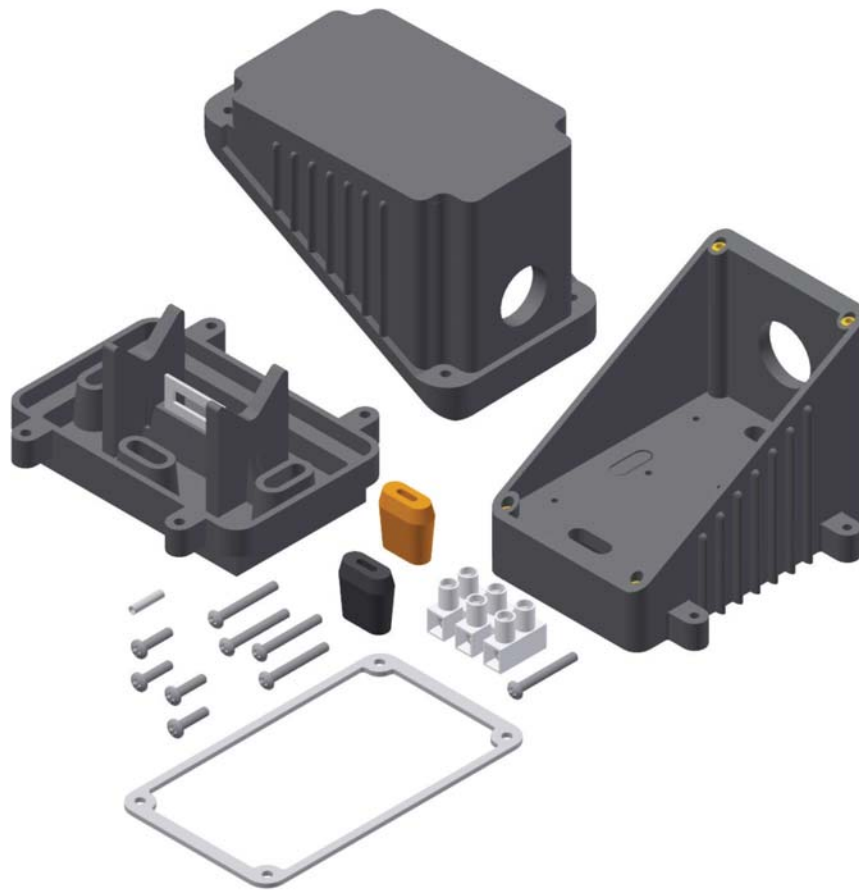
RTPC Power Connection Kit
Self-Regulating & Constant Wattage Heating Cable Installation Instructions

Item	Qty	Description
1	1	Junction Box
2	1	Junction Box Lid
3	1	Junction Box Base
4	1	Three Position Terminal Block
5	1	Mounting Screw for Terminal Block
6	1	Black Self-Regulating Cable Grommet
7	1	Orange Constant Wattage Grommet
8	1	Cover Gasket
9	8	Machine Screws (4 for Cover/4 for Box Base)
10	1	Butt Splice

General

These kits are designed to provide temperature control as well as termination for one run of Chromalox Self-regulating or Constant Wattage Heating Cable.

Each kit contains enough material to connect one cable.

Certifications & Approvals

IP66 NEMA/Type 4x -60°C < Ta < +55°C
Ordinary & Hazardous Locations
Class I, Division 2 Groups A,B,C, & D, Zone 2 IIC
Class II, Division 2, Groups F & G, Class III

Tools Required for Kit Installation

Order Separately

Pipe Straps
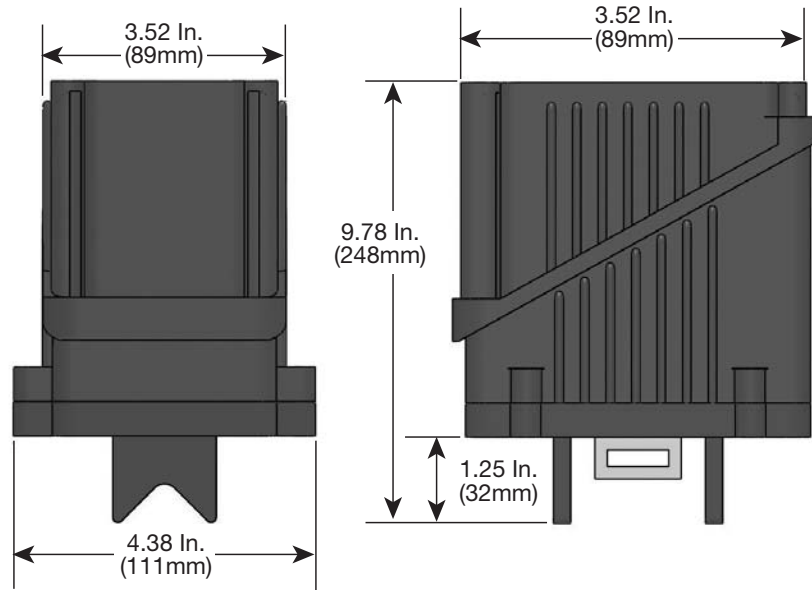Pipe Strap: 1/2" to 3/4" pipes
Pipe Strap: 1" to 3-1/2" pipes
Pipe Strap: 2-1/2" to 9" pipes
Pipe Strap: 9" to 19.5" pipes

Caution Label CL-1
Fiberglass Tape FT-3

3

Actual Kit Dimensions

3.52 In.
(89mm)

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(89mm)

9.78 In.
(248mm)

1.25 In.
(32mm)

4.38 In.
(111mm)

⚠WARNING

HAZARD OF ELECTRIC SHOCK. Disconnect all power before opening. All installations must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard. To avoid electrostatic discharge. Wipe with damp cloth.

⚠WARNING

*Turn off power before removing junction box cover at all times.*

⚠WARNING

Users should install adequate controls and safety devices with their electric heating equipment. Where the consequences of failure may be severe, back-up controls are essential. Although the safety of the installation is responsibility of the user, Chromalox will be glad to assist in making equipment recommendations.

Cable installation instructions: CPR, CPM, CZH, SRL, SRM/E, SRP
**CWM cable special instructions denoted by ***
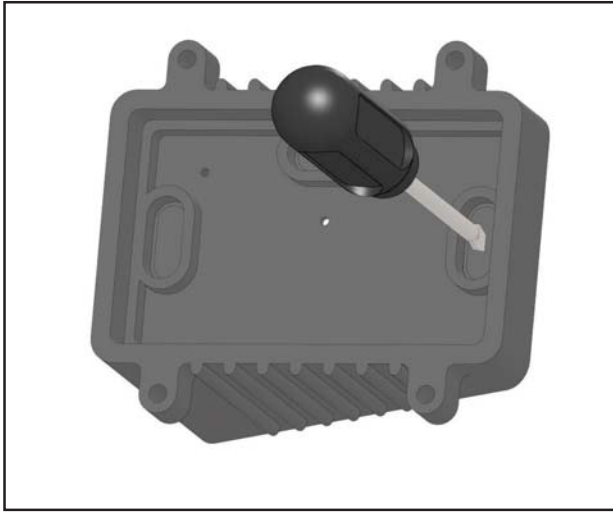
1. Punch out the knockouts on the bottom of the box which correspond to the openings in the base through which the heating cable passes. Only punch out the knockouts that are to be used. If one is mistakenly punched, blank grommets can be ordered to re-establish the water tight seal.
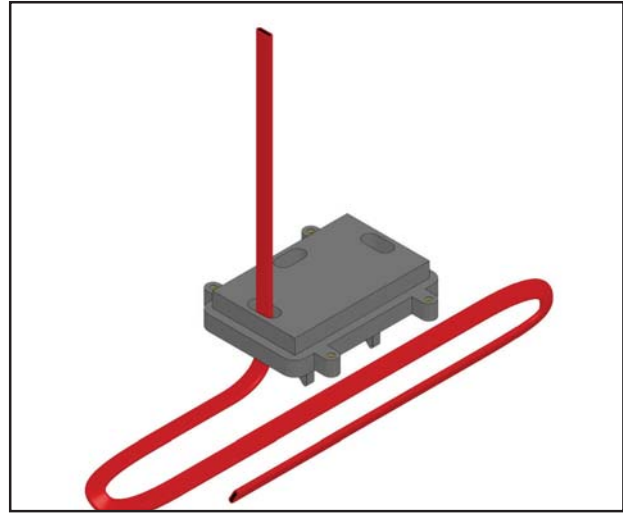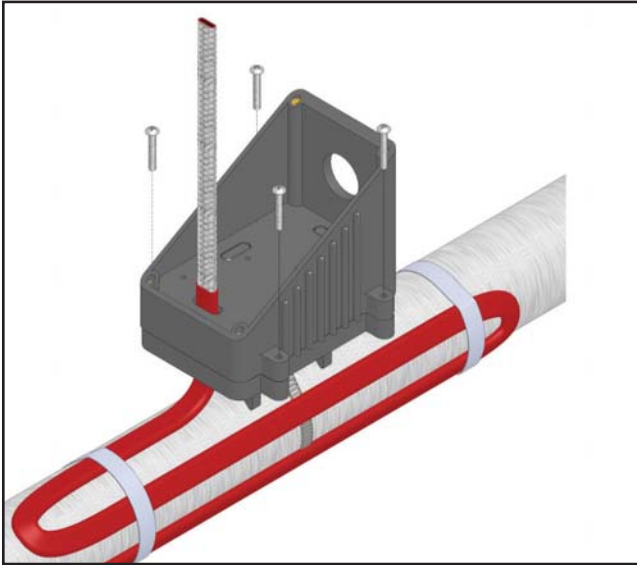

2. Feed the ends of the cables through the appropriate hole in the base. Allow 8 inches of cable to extend above the top of the base.
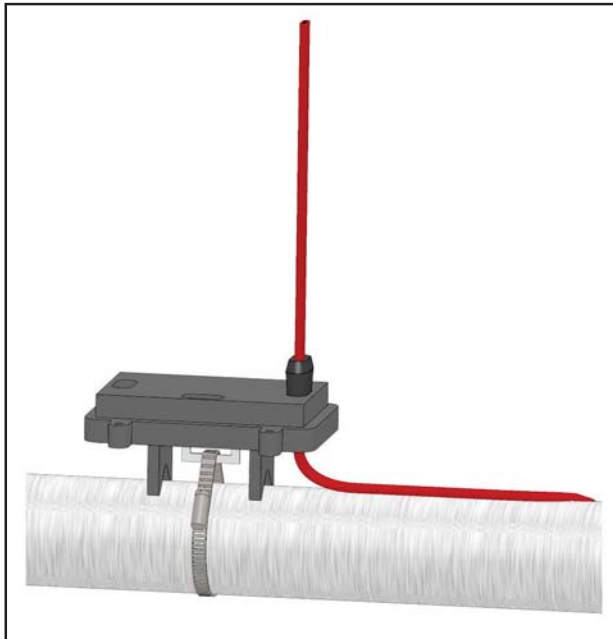

3. Slide cable grommet over the end of the cable and insert it into the opening in the base. Secure the base to the pipe by threading the appropriate sized pipe strap through the slot in the mounting plate. Tighten the pipe strap until the base is securely attached to the pipe.
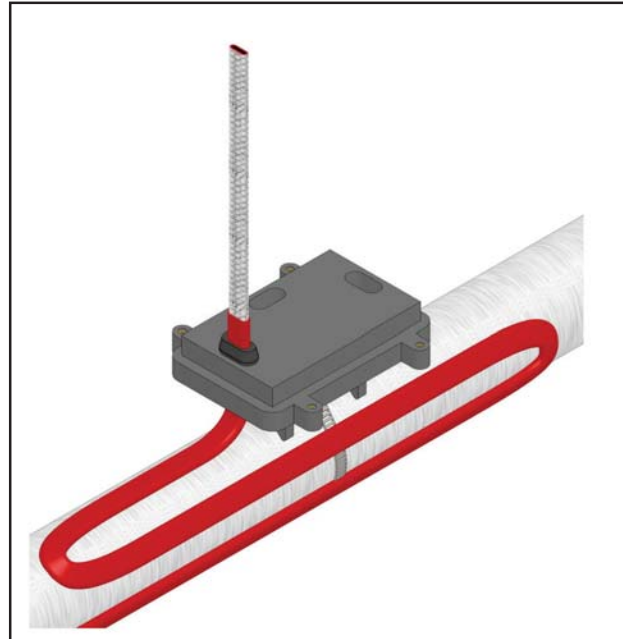

4. Score the outer insulation 7 inches from the end of the cable. Remove the jacket to expose the metal braid. CAUTION: When removing outer jacket, be careful not to damage the braid of the base cable insulation. NOTE: If using braid only cable (-C) skip this step.

5. Feed cables through the corresponding holes in the box and secure box to base using all four screws.
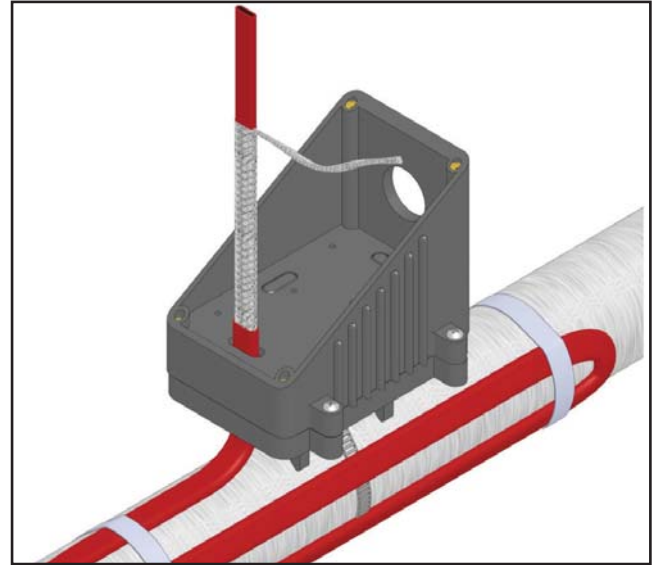
6. Sarting from the end of the cable, unravel 2-1/2 inches of the braid. Twist the strands together to form a pigtail.
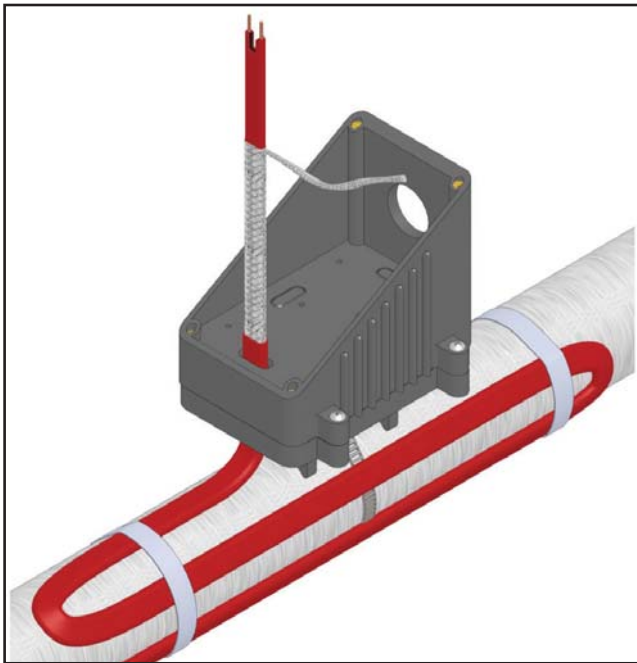

7. Using standard electrical cutters, cut a 3/4 in long notch out of the cable between the conductor wires. Bare a 3/8 inch length of each conductor by stripping off the outside insulation and the inner black core material.

    ***If using CZH,CWM score the outer jacket 3/4 inch from the end of the cable and remove the jacket. Cut off the exposed nichrome wire, pushing any remainder back under the jacket. Separate the buss wires and strip off the last 3/8 of the insulation from around both buss wires.
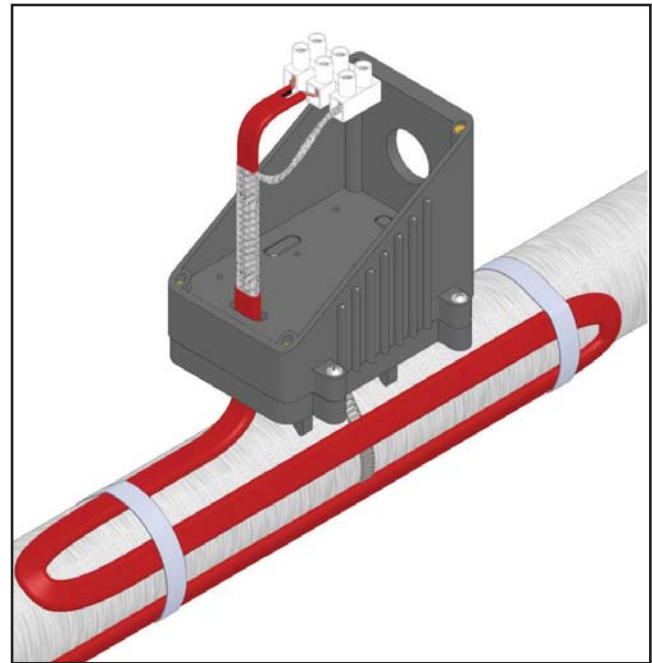

8. Insert the bared ends of the conductors and the braid into the openings in the terminal block. Tighten screws firmly to hold the wires and braid in place.
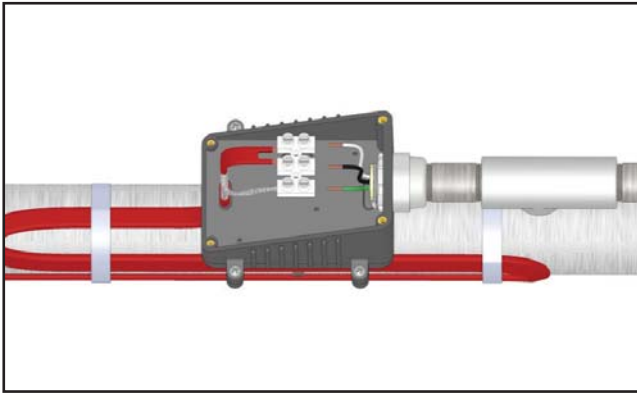
9. Connect conduit hub (Chromalox CCH, CH -75 or equal) to the box. Attach conduit to hub and bring power leads into box.
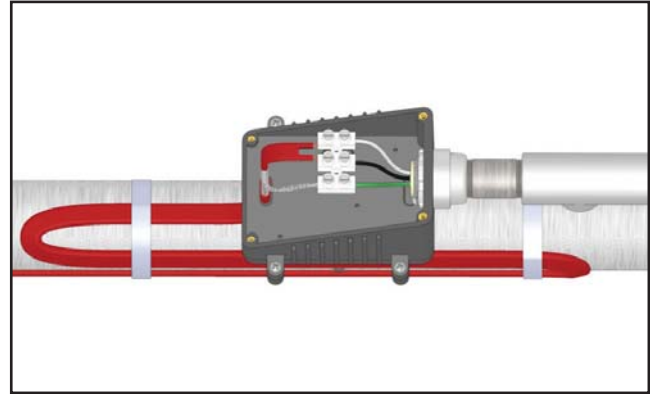
10. Strip 3/8 inch length of each power wire and connect to unused side of terminal block as shown. Tighten screws firmly to hold wires in place.
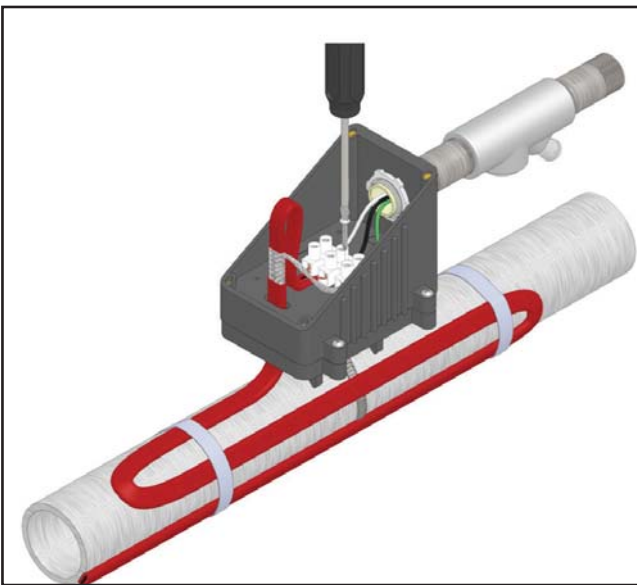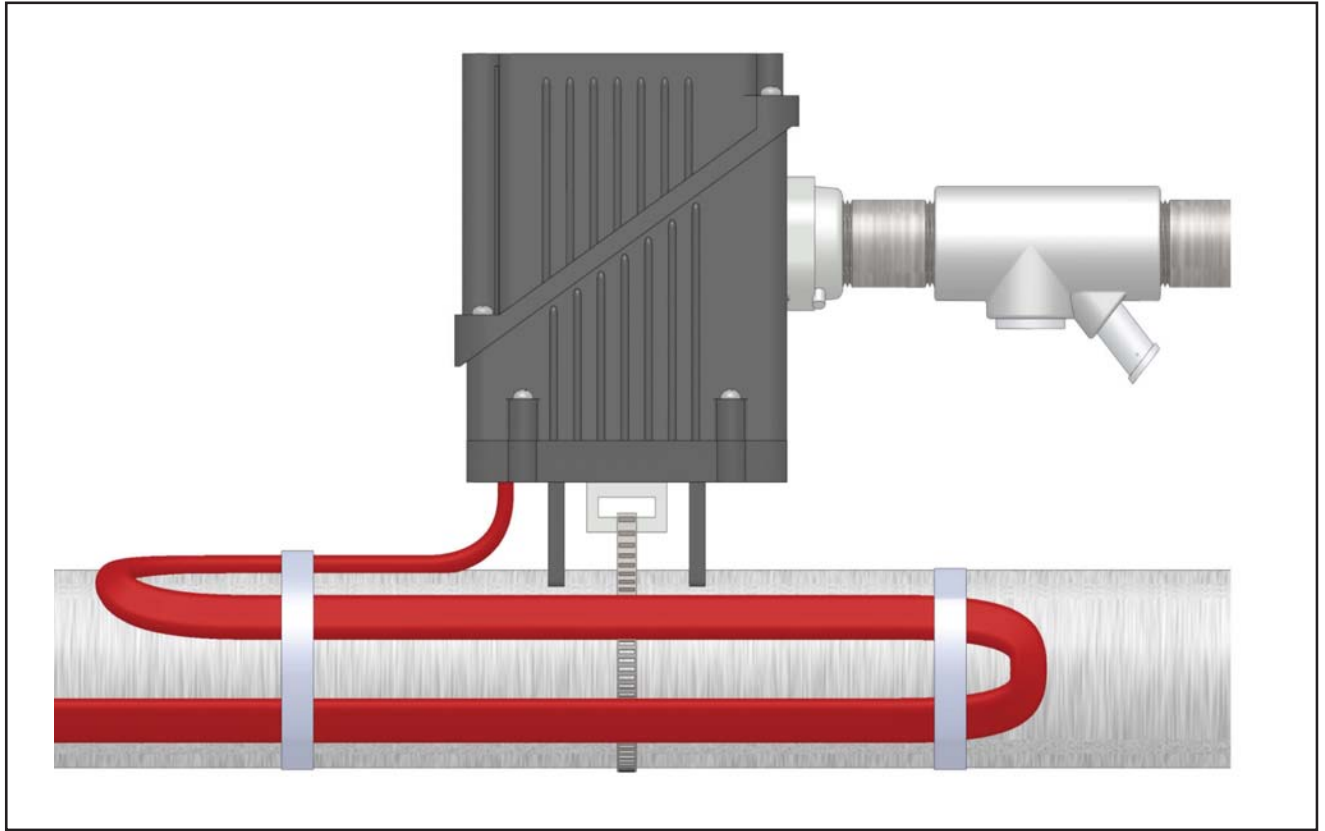

11. Mount terminal block to bottom of the box by driving the self-tapping screw (Item 5) provided into the mounting hole as shown.
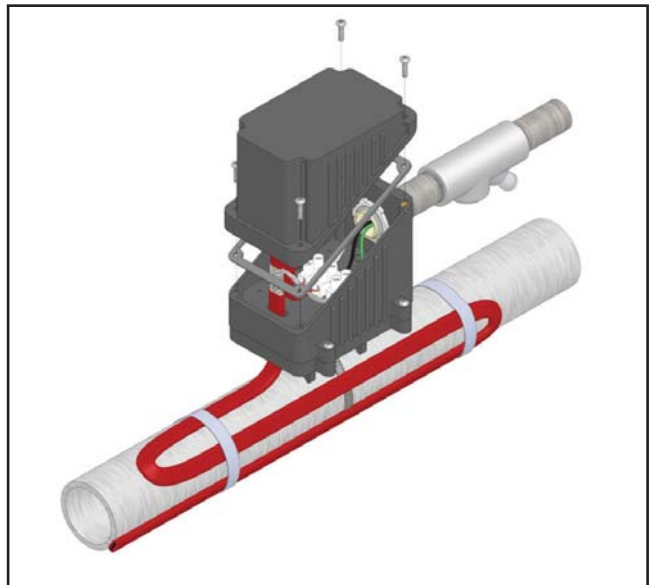
12. Carefully push the all wires into the box and secure the lid to the box. Make sure water tight rubber gasket (Item 8) is in place.

RTPC Fully Assembled