

# INSTALLATION AND MAINTENANCE



## CT-9003

Designed to be placed on the pipe under the insulation and padding



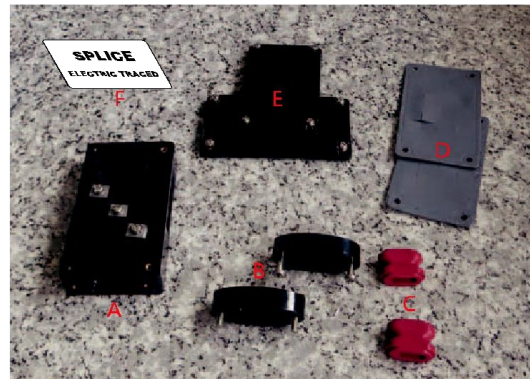
	<b>DANGER</b>	
<b>ELECTRIC SHOCK OR FIRE HAZARD</b>		
READ ALL WIRE SIZING, VOLTAGE REQUIREMENTS AND SAFETY DATA TO AVOID PROPERTY DAMAGE AND PERSONAL INJURY		

## LOW PROFILE SPLICE CONNECTION KIT

Kit includes

Item	Qty	Description
A	1	Main box
B	2	Pressure Seal End
C	2	(colour) Grommets
D	2	Gaskets for Main Box
E	2	Cover for Main Box
F	1	Label

RATING	NEMA TYPE 4X
CERTIFICATION	Class I, Div. 2, Groups A, B, C, D <sup>[2]</sup> Class II, Div. 2, Groups E, F, G <sup>[2]</sup> Class III <sup>[2]</sup>



## ⚠ WARNING ⚠

- If after carefully reading these instructions you still have questions regarding installation or operation of this product, call King Electrical Manufacturing Co. at 206-762-0400 or visit us at [www.king-electric.com](http://www.king-electric.com) for assistance.
- It is recommended that the circuit supplying the unit and heating cable have ground fault protection; this is mandatory by electrical code for some applications in many regions. Consult an electrical inspector to determine the specific ground fault requirements for your application prior to installation. If you are unsure that your circuit has ground fault protection, consult an electrician. If a ground fault device trips and cannot be reset, then a fault in the unit or in the roof de-icing cable exists. Do not attempt to by pass the ground fault device. Bypassing the ground fault device may result in the risk of fire or electrical shock.
- The unit must be kept dry; the unit is not water resistant and will fail if directly exposed to the weather.
- All roof de-icing cables must be installed in compliance with the latest editions of the National Electric Code; Canadian Electrical Code; State or Provincial Codes; and Local Codes.
- These instructions must be saved and made available to owners or users of this product and/or transferred to future owners..

# INSTALLATION INSTRUCTIONS

## CT-9003 Installation Instructions

1

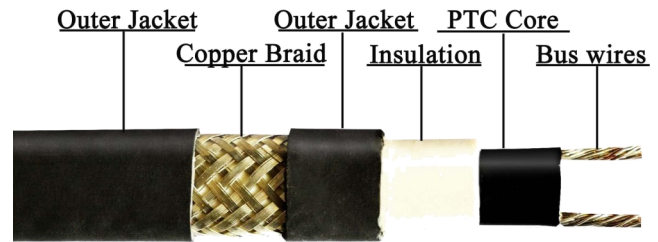
- Identify heating cable type.
- Select correct grommet from table below.

Heating Cable	Type	Grommet
SR	--CT	RED

\* Order separately



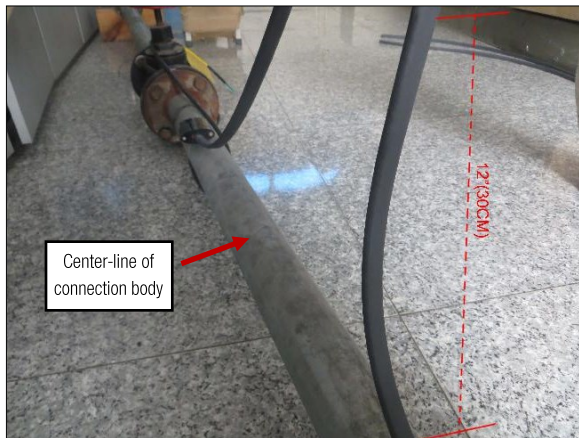
**WARNING:** Use of the wrong grommet can result in leaks, cracked components, shock or dielectric failure, and will invalidate approvals and certifications.



Structure of Model HTR-CR

2

- Allow extra heating cable as shown.

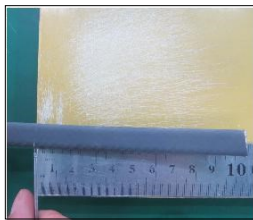


3

- First insert the Pressure Seal End and then the Grommet onto each cable.



4



Do NOT cut the braid.

- Lightly score outer jacket.
- Bend heating cable to break jacket at score, then peel off jacket.



5

- Push braid back to create a pucker.
- At pucker use a screwdriver to open braid
- Bend heating cable and work it through opening braid

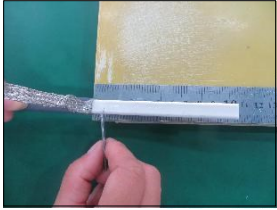


# INSTALLATION INSTRUCTIONS

## CT-9003 Installation Instructions

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Do NOT cut bus wires



- Lightly score inner jacket.
- Peel off jacket.



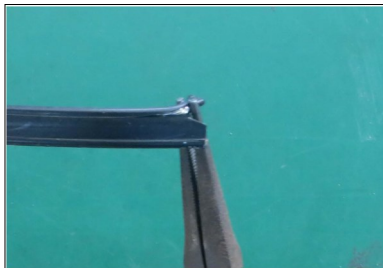
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- Pull braid tightly to make a pigtail



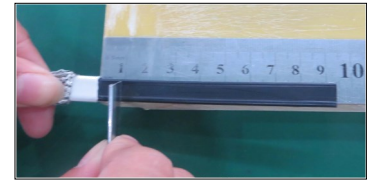
8

- Notch core.
- Twist back and peel bus wire from core.

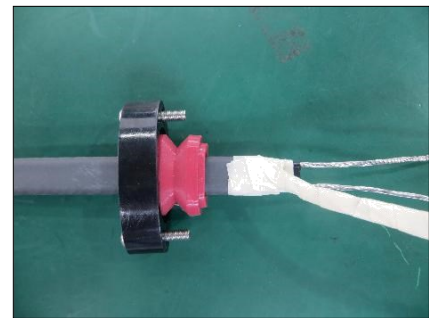
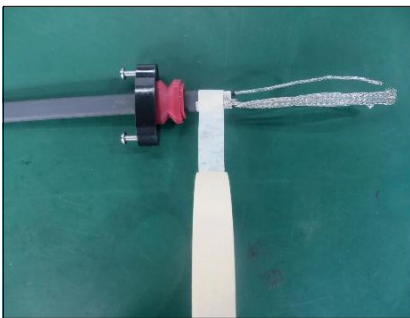


9

- Score between bus wires and inner jacket.
- Bend and snap core.
- Peel core free from bus wire.
- Clean bus wires.



10 For CSA Class 1; Division 2 application only



- Using glass cloth tape, hold the braid pigtail against the inner jacket, and wrap 3 times around the heating cable and braid.
- Separate the braid from the heating cable and wrap 2 wraps of tape around the braid.
- Slide the grommet to the edge of the tape. Do not push grommet onto or over the tape, leaks and dielectric failure may result.



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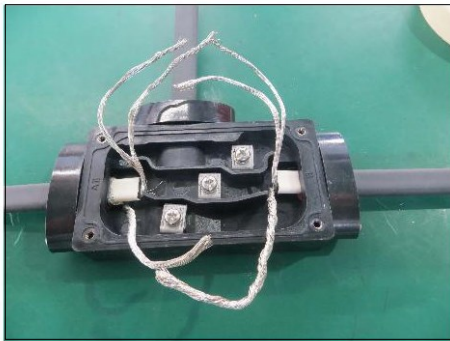
11

- Push heating cable into the body.
- Slide grommets into cavities and seat
- Tighten pressure plate screws to body



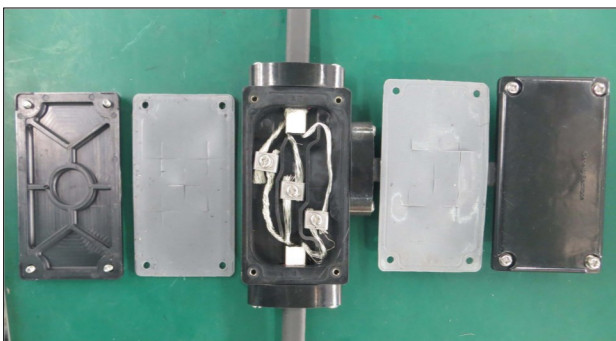
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- Install the wires number 1 & 2 in the main box.
- Install the grommet into the hole of the main box
- Push pressure seal end and then tighten screws back into main box



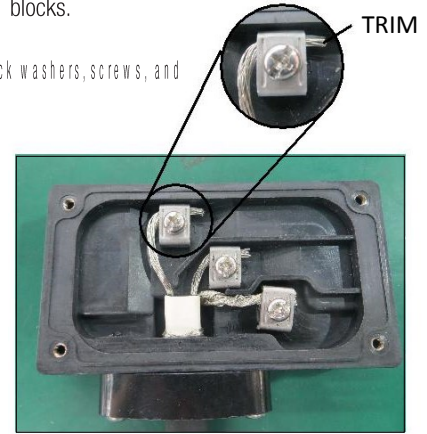
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- Install the 2 gaskets and the 2 covers onto the main box. Tighten the screw back into position.



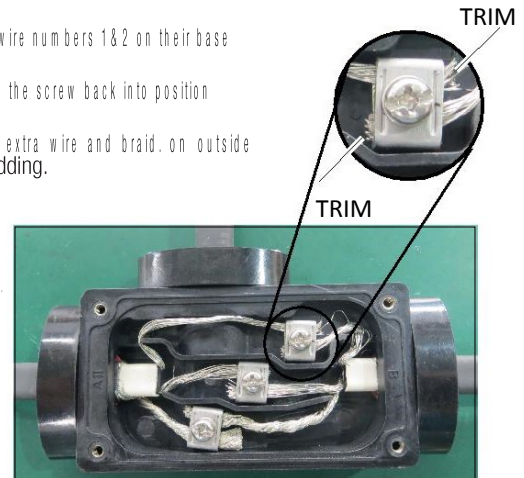
12

- Remove screws, lock washers and clamps.
- Position wires on blocks.
- Re-fit clamps, lock washers, screws, and tighten.
- Trim all extra lengths of wire and any loose braid wires



14

- Loosen the screws number 1 & 2.
- Install wire numbers 1&2 on their base
- Tighten the screw back into position
- Cut all extra wire and braid, on outside of cladding.



14

- Fix the Low Profile Tee Connection and side wires to the pipe using tape.
- Fix insulation
- Install label on the insulator protector
- Save instructions

