

**Nuheat Freeze
Protection Products**



Nuheat

Nuheat Weather-Ready Heat Trace

POWER CONNECTION KIT

MODEL #: RPPC PART #: 0C0061



**DE-ICING AND SNOW MELTING EQUIPMENT 3YH6
PIPE HEATING CABLE 4YM1**

DATE OF MANUFACTURE

1.800.778.WARM(9276)

www.nuheat.com

Assembled in Canada

WARNING: Electrical Device

In order to ensure proper operation and prevent shock or fire, all products must be installed correctly. Read all warnings and follow all installation instructions.

Ground-fault equipment protection must be used to minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed and to comply with Nuheat requirements, agency certifications and national electrical codes. Conventional circuit breakers may not stop arcing.

Do not substitute parts or use electrical tape. Component approvals and performance characteristics are based on Nuheat specific parts only. Substitution will void approvals, warranties and performance claims.

The heating cable core is conductive and can short if not properly insulated and kept dry.

Heating cable core bus wires can overheat and short when damaged. When cutting the cable jacket or core, do not break bus wire strands.

Component and heating cable ends must be kept dry before and during installation.

Fire-resistant thermal insulation materials should be used.

For use with Nuheat R8P5, R13P8 and 13FP cables.

Rated: 277V; Max: 50A

Maximum continuous exposure temperature: 65°C (149°F)

BEFORE YOU START:

- Read through entire installation instructions prior to beginning installation.
- All instructions available at www.nuheat.com
- **DO NOT** install Nuheat Freeze Protection products in direct contact with combustible surfaces or materials.
- **DO NOT** rest a hot heat gun on any Nuheat Freeze Protection Products.
- **DO NOT** make any modifications to Nuheat Freeze Protection Products while connected to power.
- THIS HEATING PRODUCT SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE APPARATUS AND RISKS INVOLVED.
- THE INSTALLATION OF THIS HEATING PRODUCT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND REGULATIONS OF THE AUTHORITY HAVING JURISDICTION.



Power Connection Kit

Model #: RPPC

EQUIPMENT REQUIRED:

- Utility knife
- Wire cutter
- Pliers
- Measuring tape/Ruler
- Scissors
- Heat gun - 1000°F

MATERIALS REQUIRED:

- Listed/certified junction box, suitable for outdoor use
- Leads rated at 75°C or higher

KIT CONTAINS:

Power Connection Kit:

3 – Red wire connectors

3 – Black heat shrink tubes

- 2 – 1/8" x 5 1/2" long

- 1 – 3/4" x 1 1/2" long

1 – Green/yellow heat shrink tube for ground

1 – Strain relief fitting & sealing washer

1 – Lock nut

End Seal Kit:

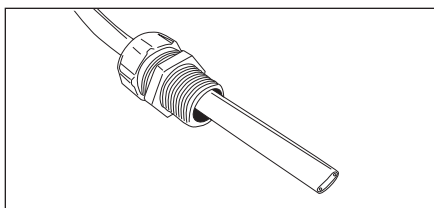
1 – Heat shrink cap (1/2" x 1 1/2" long)

1 – Heat shrink tube (3/4" x 2" long)

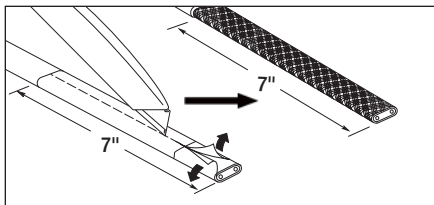
1 – Aluminum tape strip

HOW TO CREATE A POWER CONNECTION:

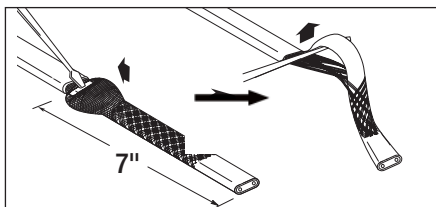
1. Slide the complete strain relief fitting and lock nut onto the cable.



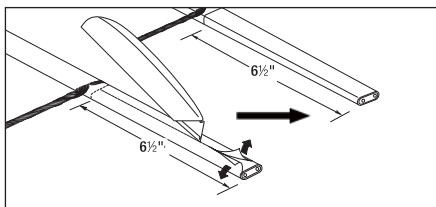
2. Lightly score around and down outer jacket 7" from the end of the heating cable. Bend heating cable to break jacket at score; peel off outer jacket.



- Push back braid to loosen. Spread apart braid, bend the heating cable and work it through the opening in the braid.



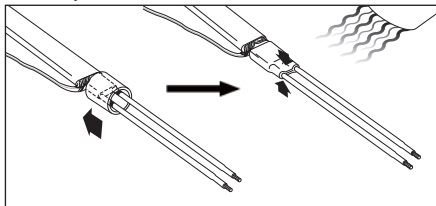
- Position braid on one side of cable and twist into a pigtail.
- Lightly score around and down the inner jacket $6\frac{1}{2}$ " from the end of the heating cable and remove.



- Using scissors, cut down the middle of the conductive core lengthwise to separate into two parts. Do not cut into the inner jacket that remains.
- Completely remove 1" of the conductive core from the tips to expose both of the bus wires.

TIP: Lightly score the conductive core at the 1" mark. Be sure not to contact the bus wires while scoring. Using pliers, lightly hold the scored conductive core section and twist continuously until conductive core breaks at the score mark.

- Trim away just enough conductive core to allow the bus wire to fit in the $\frac{1}{8}$ " x $5\frac{1}{2}$ " long black heat shrink tube. Do not nick bus wires.
- Slide the black heat shrink tube over each trimmed bus wire so that the tube entirely covers the conductive core material then heat shrink. Tube must extend $\frac{1}{4}$ " past conductive core onto exposed portion of bus wire.
- Slide green/yellow heat shrink tube over pigtailed braid then heat shrink.
- Slide the $\frac{3}{4}$ " heat shrink tube over both covered bus wires to the base and heat shrink until inner sealant flows from both ends. Using pliers, pinch tube between the two bus wires and hold for 15 seconds. This will form a Y-junction between the two bus wires.



- Slide sealing washer over the heat shrunk wires up to the shoulder of the fitting.
- Insert the heating cable into a junction box approved for the application. Use the lock nut to securely connect the fitting to the junction box.
- Tighten the fitting to securely grip the cable.
- Use the wire connectors to make the final electrical connections within the junction box. Connect each bus wire to a power wire with a wire connector. Connect the braided ground to the ground wire.
- Ensure the junction box is sealed in accordance with the manufacturer's instructions.



End Seal Kit

Model #: RPES

EQUIPMENT REQUIRED:

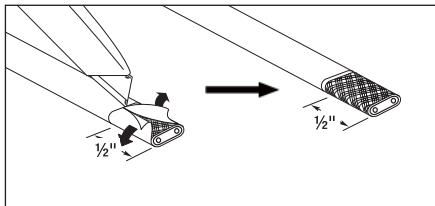
- Utility knife
- Wire cutter
- Pliers
- Measuring tape/Ruler
- Scissors
- Heat gun - 1000°F

KIT CONTAINS:

- 1 – Heat shrink cap ($\frac{1}{2}$ " x $1\frac{1}{2}$ " long)
- 1 – Heat shrink tube ($\frac{3}{4}$ " x 2" long)
- 1 – Aluminum tape strip
- 1 – Caution label

HOW TO CREATE AN END SEAL:

- Strip and remove outer jacket $\frac{1}{2}$ " from the end. Cut off exposed ground braid. Do not cut into inner jacket.



- Place the heat shrink cap over the end of the cable as far as it can go.
- Hold the cable vertical with the cap upwards. Using heat gun, shrink the cap onto the cable.
- Wrap the entire cap including the tip of the cap with the 4" long aluminum tape. Find best lay angle to ensure entire heat shrink cap is covered. Smooth tape out to ensure there is no sharp edge.
- Slide heat shrink tube to cover the cap. Line end of heat shrink tube with top of heat shrink cap. Shrink tube. Hold for 15 seconds.



Freeze Protection Products

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