#### **Universal 2000**



# Installation Recommendations

#### **Installation Recommendations**

1. Sliding mounting bolts (1-3/4" long, 3/8-16 thread) slide along the length of the aluminum housing for mounting the heater to common structural framing materials, creating multiple heater installations accommodating flat, rectangular, polygonal, cylindrical or any other shape arrays.

Minimum distance of 3-3/4" on center for heaters mounted side-by-side. Do not exceed 42" between sliding mounting bolts.

- 2. To reduce heat losses, heat deflector shields up to 14 gauge thick are recommended between heaters. Fiber insulation can also be placed behind the heater housing.
- 3. In applications where water or solvents are being evaporated, proper ventilation is required to expel vapors or fumes.
- 4. Standard NEMA 1 electrical enclosures located at opposite ends of the heater housing with standard 7/8" diameter knockouts and a ½" NPT conduit threaded opening out the top of the housing facilitate single or double end wiring. Heaters with NEMA 3-4 boxes have dual 1/2" trade size hubs oriented 90° to each other. Openings accept standard electrical fittings.
- 5. Hold the tubular heater terminal tabs with pliers when tightening the screws to ensure secure electrical connections. Use only high temperature hook-up lead wire and nickel-plated steel or monel lugs Available from Tempco; see page 7-23 and Section 15.



**Notes:** Electrical wiring should be done by a qualified electrician with full knowledge of the installation and in accordance with local codes and the National Electrical Code.

High temperature hook-up wire and terminal lugs are available from stock. See page 7-23 and Section 15.

### Maintenance

- 1. Never perform any type of service prior to disconnecting all electrical power to the heater installation.
- 2. To maintain reflector efficiency, clean periodically with mild soap and water. Do not use alkali or other strong cleaners. They will dull the aluminum reflector finish.
- 3. Replacement of elements, support brackets and reflectors.
  (A) Remove terminal enclosure covers. (B) Disconnect power wires from element terminals. (C) Snap out support brackets. (D) Remove elements and old reflectors from front of unit. When replacing elements, reflectors should be replaced. Install new reflectors by snapping edges into housing grooves and reassemble other parts in reverse order.

Replacement parts are available from stock; see pages 7-86 and 7-87.



**Wiring Hints** – Wire selection depends on the requirements of the installation.

Wire Temperature Rating for inside the heater housing should be 482°F (250°C) or higher depending on the installation.

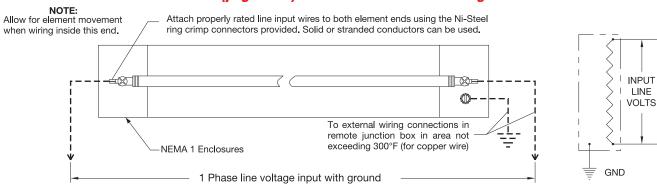
**Voltage Rating** should be equal to the operating voltage of the installation.

**Wire Conductors** should be nickel, nickel plated copper or nickel clad copper.

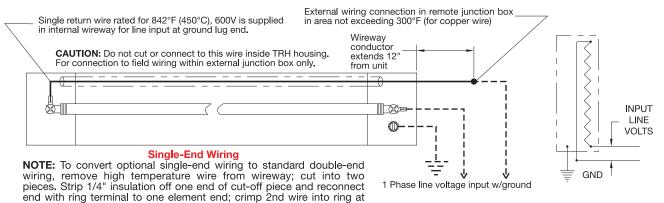
Do not use silver plated or unplated copper wire conductors.

**Amperage Rating** (wire gauge) should be 12 gauge for units drawing over 20 Amps of current. Use 14 gauge for units drawing under 20 Amps of current.

# TRH1 (page 7-76) Standard Double-End Wiring



# TRH1 (page 7-76) Optional Single End-Wiring



opposite element end.