# *Tubular Radiant Heater Assemblies (6000 to 9000 Watts) Liquid Tight Element Double End Termination*

### TRH6 Series

- Direct Retrofit to Existing Applications
- Rugged Anodized Extruded Aluminum Housing
- Polished Aluminum Reflector (Replaceable)
- Incoloy® Sheath Tubular Heaters (Replaceable)
- Element Support Brackets (Replaceable)
- Sliding Mounting Bolts (Replaceable)
- Dual Internal Wireways for Single End Wiring
- Ground Terminal Lug
- Slots for Heat Shield on Side of Housing for Between Units
- Convenient Field Wiring
- Made to Order/Custom Products

Typical Applications

- Adhesive Drying
- Comfort Heating
- Conveyorized Drying
- Drying Bulk Materials
- Drying Ceramics
- Food Warming
- Freeze Protection
- Heating Rubber or Steel Rolls
- Ink Drying
- Manufacturing Glass and Mirrors
- Moisture Evaporation
- Outdoor Comfort Heating
- Paint Drying
- Resin Curing
- Shrink Fitting
- Thermoforming
- Washdown Facilities
- Welding Preheating

**The TRH Series heaters are ideal for reliable service, providing great flexibility for many diverse industrial and commercial applications.**

**Designed for Maximum Efficiency, Ease of Installation and Trouble-Free Service…**

TRH radiant heaters are a direct retrofit replacement for existing and new applications, utilizing similar products regardless of make.

Its unique design offers several quality enhancements without compromising fit and function on existing applications.

**Delivering Value-Added Performance**

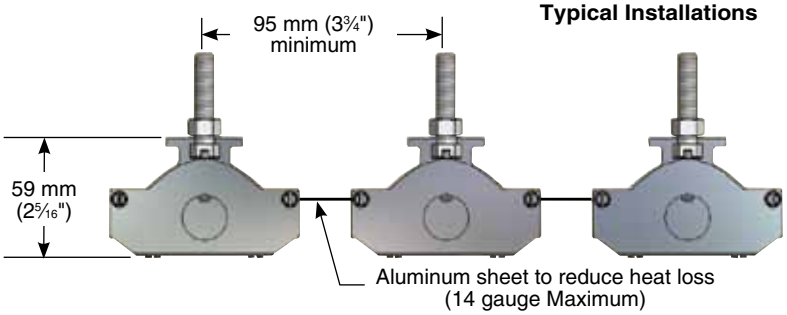
Universal 2000 heaters are ideal for reliable service, providing great flexibility for many diverse industrial and commercial applications. Manufactured with the proper options, Universal 2000 Radiant Heater Assemblies can be used outdoors or in wet locations.

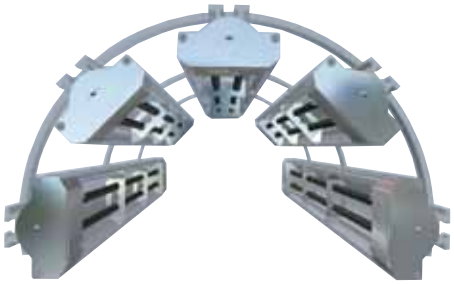
**Construction Characteristics**

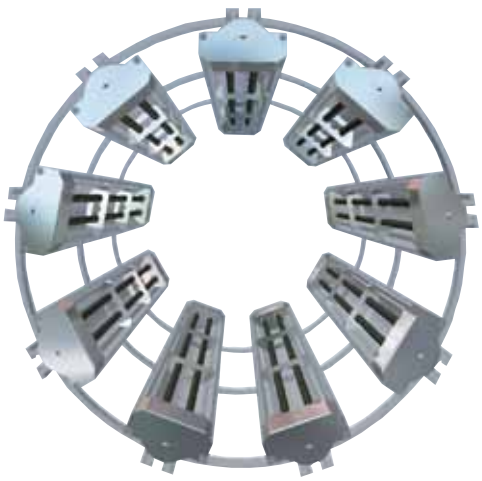
TRH radiant heaters stand apart from all other similar products. Its rugged construction, enhanced design features and flexibility in installation allow it to be used in applications requiring a single unit or to be used as modules creating various configurations for process radiant heating systems.

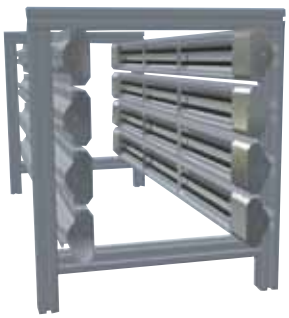
TRH radiant heaters are available in a full range of standard construction variations, physical dimensions and electrical ratings. They are also available in custom engineered/ manufactured units up to 3353 mm (132") for series TRH1, 4 and 6. TRH3 and 5 series units are available up to 3048 mm (120") lengths. Special electrical ratings, single end wiring, dual voltage, multiple heat designs, and optional fast response Quartz heater options (TRH1 and 2 NEMA 1 units only), along with pre-wired units using flexible/ rigid conduit or SJO cord/plug can be custom designed to fit your application.

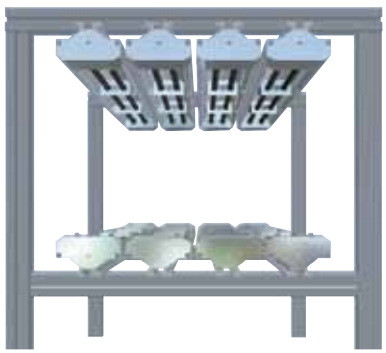
**Typical Installations**









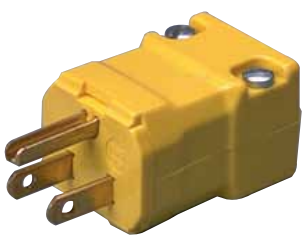
**Custom Engineered/Manufactured Heaters**

Understanding that an electric heater can be very application specific, for sizes and ratings not listed, Omega can manufacture a tubular radiant heater to meet your requirements.

**Please Specify the Following:**

- Overall Housing Length
- Wattage and Voltage
- Termination Features
- Wiring Options (Single or Double Ended)
- Series Construction Style

**Heavy Duty Quick Disconnect Plugs and Receptacles**



P3

P4

P6

P7

**Optional Electrical Plugs listed can be attached to armor cable or SJO cord described under wiring options. Receptacles listed are cable mount matching units for the plugs listed, please contact Sales for more informatiom.**

| **To Order** *Specify Model Number* | | | | | |
|---|---|---|---|---|---|
| **Plug Model No.** | **Reference** | **NEMA P or R** | **Max Amps** | **Volts** | **Receptacle Model No.** |
| **EHD-102-103** | P3 straight | 5-15 | 15 A | 125V | **EHD-103-102** |
| **EHD-102-113** | P4 twist lock | L5-15 | 15 A | 125V | **EHD-103-104** |
| **EHD-102-122** | P6 twist lock | L6-20 | 20 A | 250V | **EHD-103-105** |
| **EHD-102-126** | P7 twist lock | L6-30 | 30 A | 250V | **EHD-103-125** |

***Ordering Example: EHD-102-103,*** *P3 straight connector, 125 Vac.*

## Installation Recommendations

1. Sliding mounting bolts [44 mm (1¾") long, ⅜-16 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 95 mm (3¾") on center for heaters mounted side-by-side. Do not exceed 1.1 m (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 22 mm (⅞") diameter knock-outs 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 13 mm (½") 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.

**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 visit omega.com**

### 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.

### Wiring Hints

Wire selection depends on the requirements of the installation.

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

Voltage rating should be equal to the operating voltage of the installation.

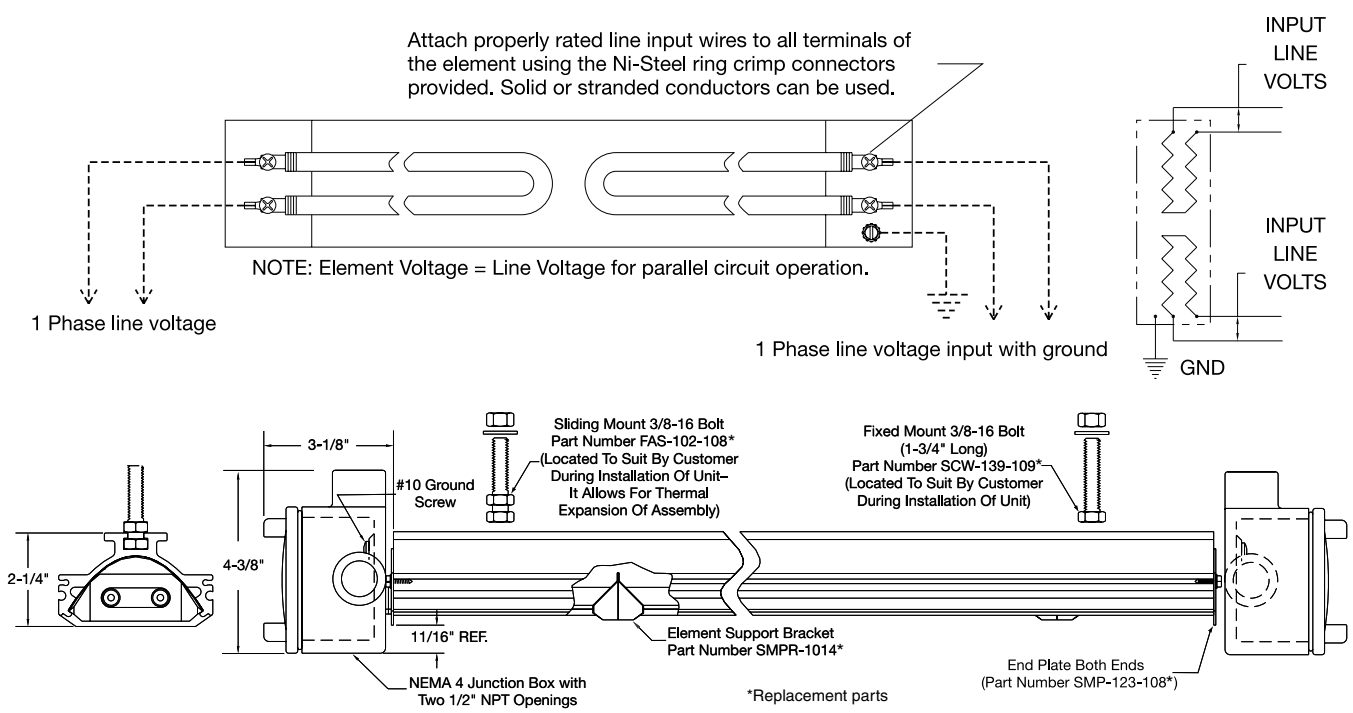
Wire conductors should be nickel, nickel plated copper or nickel clad copper.

Do not use silver plated or unplated copper wire conductors.

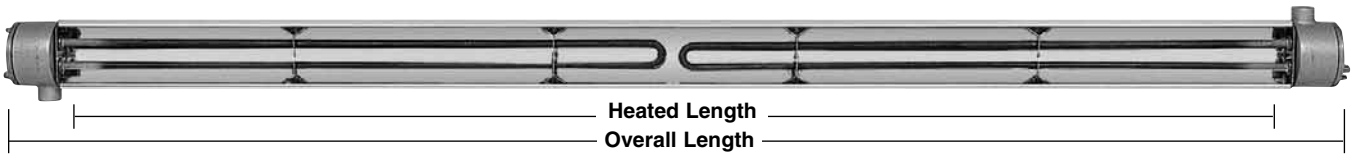
Amperage rating (wire gauge) should be 12 gauge for units drawing over 20 A of current. Use 14 gauge for units drawing under 20 A of current.

## TRH6 Standard Double-End Wiring

**(Note: This is the only option available for TRH 6 series.)**



**TRH6 Series—Dual Hairpin Element Liquid Tight Double End Termination**




## To Order *Visit omega.com/trh6 for Pricing and Details*

| Model No. | | | | | | | | Replacement Reflectors | |
|---|---|---|---|---|---|---|---|---|---|
| Without Guard | With Guard | Watts | Volts | Overall Length m (in) | Heated Length m (in) | Replacement Element | Replacement Guard | Model No. | Number Required |
| TRH60001 | TRH60020 | 6000 | 208 | 1.8 (72) | 1.6 (64) | THE09205 | GRD-104-119 | SMPR-1047 | 2 |
| TRH60002 | TRH60021 | 6000 | 240 | 1.8 (72) | 1.6 (64) | THE09206 | GRD-104-119 | SMPR-1047 | 2 |
| TRH60003 | TRH60022 | 6000 | 277 | 1.8 (72) | 1.6 (64) | THE09207 | GRD-104-119 | SMPR-1047 | 2 |
| TRH60004 | TRH60023 | 6000 | 480 | 1.8 (72) | 1.6 (64) | THE09208 | GRD-104-119 | SMPR-1047 | 2 |
| TRH60005 | TRH60024 | 7200 | 208 | 2.1 (84) | 1.9 (76) | THE09209 | GRD-104-120 | SMPR-1048 | 2 |
| TRH60006 | TRH60025 | 7200 | 240 | 2.1 (84) | 1.9 (76) | THE09210 | GRD-104-120 | SMPR-1048 | 2 |
| TRH60007 | TRH60026 | 7200 | 277 | 2.1 (84) | 1.9 (76) | THE09211 | GRD-104-120 | SMPR-1048 | 2 |
| TRH60008 | TRH60027 | 7200 | 480 | 2.1 (84) | 1.9 (76) | THE09212 | GRD-104-120 | SMPR-1048 | 2 |
| TRH60009 | TRH60028 | 8000 | 208 | 2.4 (96) | 2.2 (88) | THE09213 | GRD-104-121 | SMPR-1049 | 2 |
| TRH60010 | TRH60029 | 8000 | 240 | 2.4 (96) | 2.2 (88) | THE09214 | GRD-104-121 | SMPR-1049 | 2 |
| TRH60011 | TRH60030 | 8000 | 277 | 2.4 (96) | 2.2 (88) | THE09215 | GRD-104-121 | SMPR-1049 | 2 |
| TRH60012 | TRH60031 | 8000 | 480 | 2.4 (96) | 2.2 (88) | THE09216 | GRD-104-121 | SMPR-1049 | 2 |
| TRH60013 | TRH60032 | 9000 | 208 | 2.7 (108) | 2.5 (100) | THE09217 | GRD-104-122 | SMPR-1050 | 2 |
| TRH60014 | TRH60033 | 9000 | 240 | 2.7 (108) | 2.5 (100) | THE09218 | GRD-104-122 | SMPR-1050 | 2 |
| TRH60015 | TRH60034 | 9000 | 277 | 2.7 (108) | 2.5 (100) | THE09219 | GRD-104-122 | SMPR-1050 | 2 |
| TRH60016 | TRH60035 | 9000 | 480 | 2.7 (108) | 2.5 (100) | THE09220 | GRD-104-122 | SMPR-1050 | 2 |

***Ordering Examples: TRH60032,*** *9000 watt radiant heater with guard, 208 Vac.*
***TRH60001,*** *6000 watt radiant heater, 208 Vac.*

**Note: Tubular elements are supplied at the same rated voltage as the overall assembly and are wired in parallel. 120 or 240V rated assemblies can be used at twice the rated voltage by wiring the elements in series (120/240V or 240/480V).**

**See page 2 for heavy-duty quick disconnect plugs and receptacles.**