Tubular Radiant Heater Assemblies (600 to 3600 Watts) Single Straight Element Double End Termination

TRH1 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

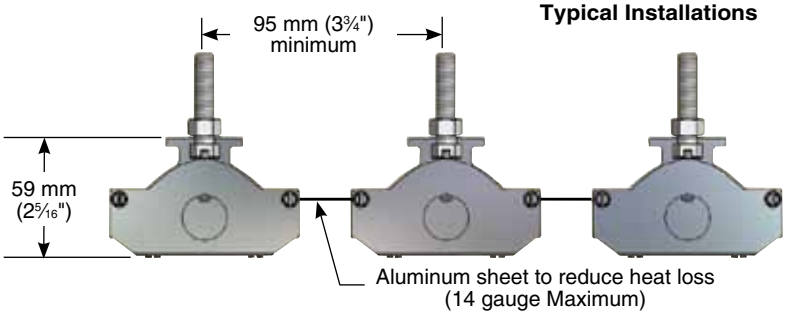
Universal 2000 heaters are ideal for reliable service, providing great flexibility for many diverse industrial and commercial applications. Manufactured with the proper options, Universal 2000 Radiant Heater Assemblies can be used outdoors or in wet locations.

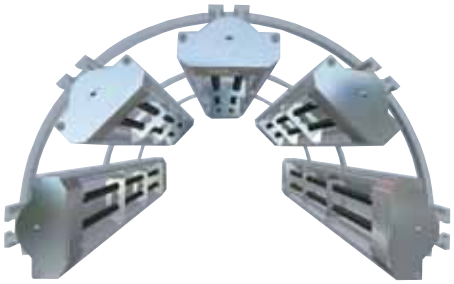
Construction Characteristics

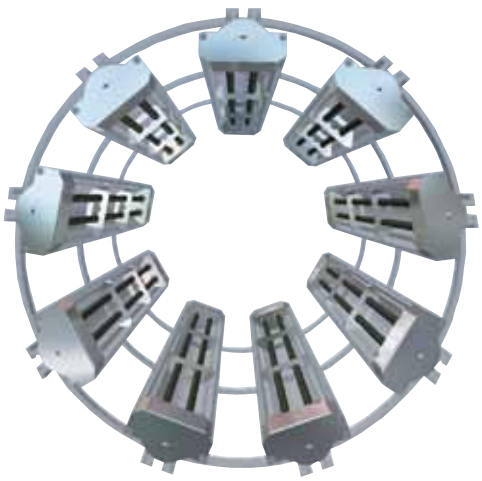
TRH radiant heaters stand apart from all other similar products. Its rugged construction, enhanced design features and flexibility in installation allow it to be used in applications requiring a single unit or to be used as modules creating various configurations for process radiant heating systems.

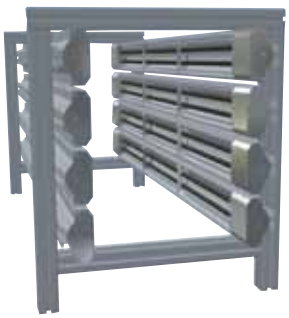
TRH radiant heaters are available in a full range of standard construction variations, physical dimensions and electrical ratings. They are also available in custom engineered/ manufactured units up to 3353 mm (132") for series TRH1, 4 and 6. TRH3 and 5 series units are available up to 3048 mm (120") 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.

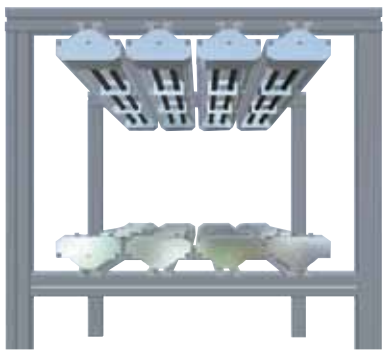
Typical Installations











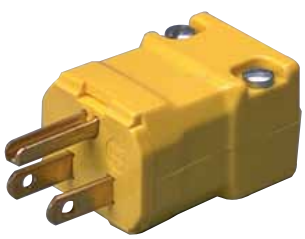
Custom Engineered/Manufactured Heaters

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.

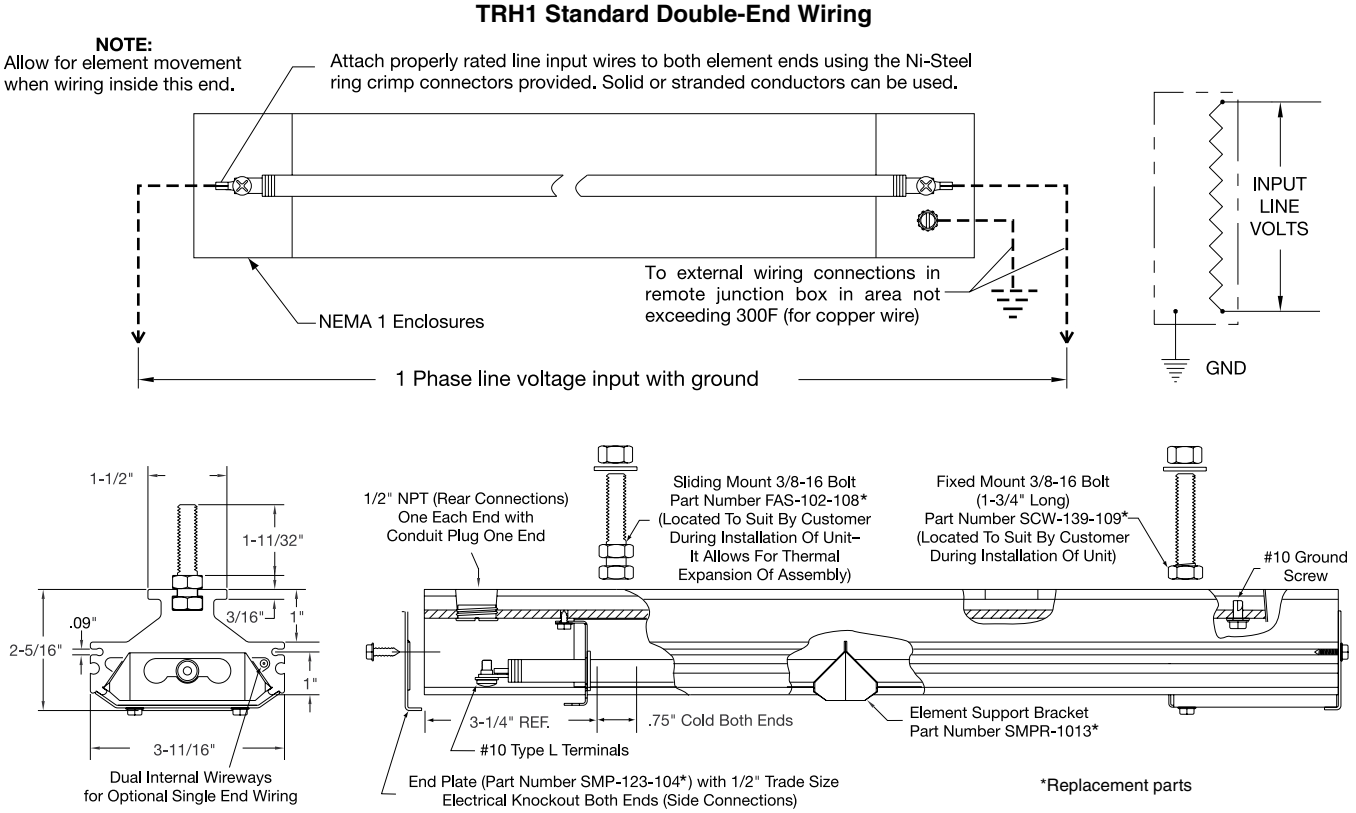
Voltage rating should be equal to the operating voltage of the installation.

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

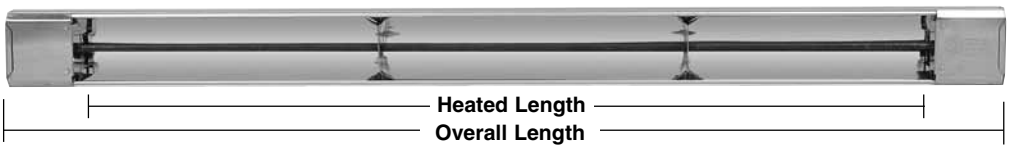
Do not use silver plated or unplated copper wire conductors.

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.

TRH1 Standard Double-End Wiring



TRH1 Series—Single Straight Element Double End Termination



Optional heating element protective guard prevents accidental direct contact with heating element.

To Order *Visit omega.com/trh1 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
TRH10001	TRH10040	600	120	0.5 (18)	0.3 (10)	THE09100	GRD-104-104	SMPR-1018	1
TRH10002	TRH10046	600	208	0.5 (18)	0.3 (10)	THE09101	GRD-104-104	SMPR-1018	1
TRH10003	TRH10047	600	240	0.5 (18)	0.3 (10)	THE09102	GRD-104-104	SMPR-1018	1
TRH10004	TRH10048	600	277	0.5 (18)	0.3 (10)	THE09103	GRD-104-104	SMPR-1018	1
TRH10005	TRH10049	800	120	0.6 (24)	0.4 (16)	THE09104	GRD-104-105	SMPR-1019	1
TRH10006	TRH10050	800	208	0.6 (24)	0.4 (16)	THE09106	GRD-104-105	SMPR-1019	1
TRH10007	TRH10051	800	240	0.6 (24)	0.4 (16)	THE09106	GRD-104-105	SMPR-1019	1
TRH10008	TRH10052	800	277	0.6 (24)	0.4 (16)	THE09107	GRD-104-105	SMPR-1019	1
TRH10009	TRH10053	1100	120	0.8 (30)	0.6 (22)	THE09108	GRD-104-106	SMPR-1020	1
TRH10010	TRH10054	1100	208	0.8 (30)	0.6 (22)	THE09109	GRD-104-106	SMPR-1020	1
TRH10011	TRH10055	1100	240	0.8 (30)	0.6 (22)	THE09110	GRD-104-106	SMPR-1020	1
TRH10012	TRH10056	1100	277	0.8 (30)	0.6 (22)	THE09111	GRD-104-106	SMPR-1020	1
TRH10013	TRH10057	1100	480	0.8 (30)	0.6 (22)	THE09112	GRD-104-106	SMPR-1020	1
TRH10014	TRH10058	1300	208	0.9 (36)	0.7 (28)	THE09113	GRD-104-107	SMPR-1021	1
TRH10015	TRH10059	1300	240	0.9 (36)	0.7 (28)	THE09114	GRD-104-107	SMPR-1021	1
TRH10016	TRH10060	1300	277	0.9 (36)	0.7 (28)	THE09115	GRD-104-107	SMPR-1021	1
TRH10017	TRH10061	1300	480	0.9 (36)	0.7 (28)	THE09116	GRD-104-107	SMPR-1021	1
TRH10018	TRH10062	1800	208	1.2 (48)	1.0 (40)	THE09117	GRD-104-108	SMPR-1022	1
TRH10019	TRH10063	1800	240	1.2 (48)	1.0 (40)	THE09118	GRD-104-108	SMPR-1022	1
TRH10020	TRH10064	1800	277	1.2 (48)	1.0 (40)	THE09119	GRD-104-108	SMPR-1022	1
TRH10021	TRH10065	1800	480	1.2 (48)	1.0 (40)	THE09120	GRD-104-108	SMPR-1022	1
TRH10022	TRH10066	2500	208	1.5 (60)	1.3 (51)	THE09121	GRD-104-109	SMPR-1023	2
TRH10023	TRH10067	2500	240	1.5 (60)	1.3 (51)	THE09122	GRD-104-109	SMPR-1023	2
TRH10024	TRH10068	2500	277	1.5 (60)	1.3 (51)	THE09123	GRD-104-109	SMPR-1023	2
TRH10025	TRH10069	2500	480	1.5 (60)	1.3 (51)	THE09124	GRD-104-109	SMPR-1023	2
TRH10026	TRH10070	3000	208	1.8 (72)	1.6 (63)	THE09125	GRD-104-110	SMPR-1024	2
TRH10027	TRH10071	3000	240	1.8 (72)	1.6 (63)	THE09126	GRD-104-110	SMPR-1024	2
TRH10028	TRH10072	3000	277	1.8 (72)	1.6 (63)	THE09127	GRD-104-110	SMPR-1024	2
TRH10029	TRH10073	3000	480	1.8 (72)	1.6 (63)	THE09128	GRD-104-110	SMPR-1024	2
TRH10030	TRH10044	3600	208	2.1 (84)	1.9 (75)	THE09129	GRD-104-111	SMPR-1025	2
TRH10031	TRH10074	3600	240	2.1 (84)	1.9 (75)	THE09130	GRD-104-111	SMPR-1025	2
TRH10032	TRH10075	3600	277	2.1 (84)	1.9 (75)	THE09131	GRD-104-111	SMPR-1025	2
TRH10033	TRH10076	3600	480	2.1 (84)	1.9 (75)	THE09132	GRD-104-111	SMPR-1025	2

Ordering Examples: TRH10040, *600 watt radiant heater with guard, 120 Vac.*
TRH10009, *1100 watt radiant heater, 120 Vac.*

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