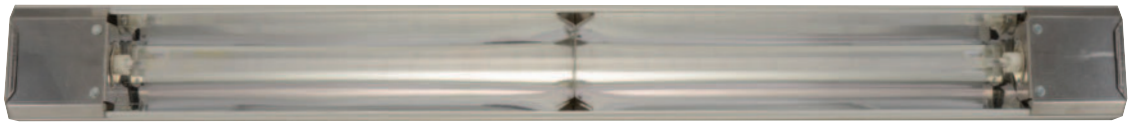
Made in USA

QRH Single Quartz Lamp Radiant Heater Assemblies

Designed for use in applications that require instant on/off response with rapid heat-up and cooldown rates. These heater assemblies are designed to operate in the short wavelength range of 2.5-1.2 microns (1600 to 4000°F peak emitter temperatures).

These Universal 2000 Modular Housing assemblies utilize T3 (10mm) LMP sealed lamps.

These rugged short wavelength units contain double ended lamps having quick connect RSC/R7s bases for easy lamp access without disassembly of housing or removing heater from installation. The Quartz IR heat lamps are mounted at the focal point of a polished aluminum reflector within the housing. These units are available in a variety of sizes and power combinations.



Design Features

- *Direct Retrofit into existing NEMA 1 applications*
- *Rugged Universal 2000 anodized aluminum housing*
- *Wattage range of 375W to 3800W in standard designs*
- *110-600V voltages available depending on heated length*
- *Power density range of 65-220 w/in available; contact Tempco*
- *RSC/R7s quick connect lamp terminations (8 amps maximum per lamp)*
- *Maximum lamp length 41 inches, minimum 8 inches*
- *Fast response, immediate on/off, 20-40 sec for full heat-up*
- *Full cooldown in less than 3-6 minutes*
- *Single end wiring option available*
- *Utilizes standard TRH removable guard designs*
- *Custom dual lamp units up to 48" OAL housing length are available*

Installation Notes:

These units are for horizontal installation only.

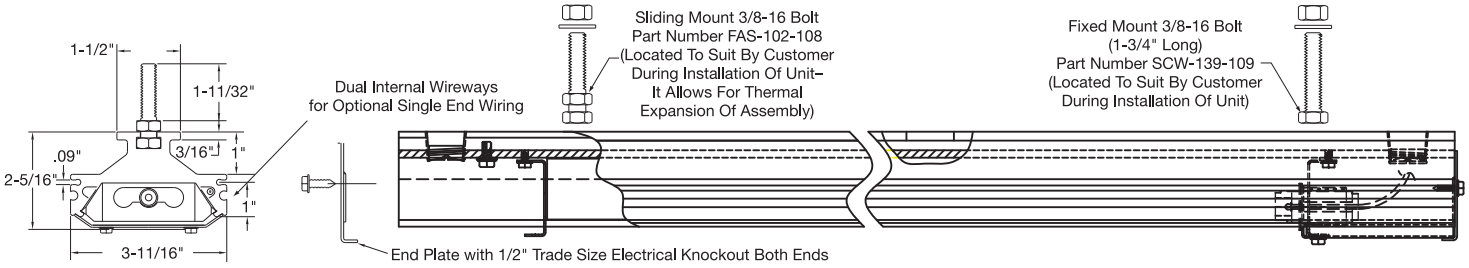
Lamp sockets are prewired in terminal enclosures with 16ga 600V rated conductors. Wires or connectors used for line connections inside junction boxes should be rated 200°C or higher, and sized per NEC/NFPA for unit voltage and amperage ratings.

Wiring used inside the internal wireways as crossover wiring must be rated 450°C or higher. Termination temperature at the exposed lamp cold ends must not exceed 650°F (343°C). Lamps should be shielded from direct visual observation due to their intense brightness when operating.

Initial inrush current will be 10 to 15 times the steady state current. Choose appropriate fuses for this heater assembly. Lamps should be operated within +/- 10% of rated voltage with minimal cycling to ensure long life. Operating outside this voltage range may cause internal degasification and discoloration of the lamp sheath, promoting premature element failure. When using copper wiring for field wiring, use only nickel plated or nickel clad conductors. Unplated or silver plated copper must not be used.

Standard Design (Non–Stock) QRH1 Series Single T3 Lamp Double End RSC Termination

Wattage	Volts	Housing Overall Length in	Housing Overall Length mm	Lamp Heated Length in	Lamp Heated Length mm	Lamp watts/inch	Part Number without Guard	Part Number with Guard	Replacement Lamp Part Number	Replacement Protective Wire Guard	Replacement Reflectors Part Number
375	115/120	16	406	5.06	128.5	74.0	QRH10001	QRH10010	LMP00003	GRD-104-125	SMPR-1111
500	115/120	16	406	5.06	128.5	98.8	QRH10002	QRH10011	LMP00006	GRD-104-125	SMPR-1111
1000	208	21	533	9.81	249.2	102.0	QRH10003	QRH10012	LMP00010	GRD-104-126	SMPR-1112
1000	220/240	21	533	9.81	249.2	102.0	QRH10004	QRH10013	LMP00012	GRD-104-126	SMPR-1112
1000	277	21	533	9.81	249.2	102.0	QRH10005	QRH10014	LMP00017	GRD-104-126	SMPR-1112
1600	220/240	27	686	16.00	406.4	100.0	QRH10006	QRH10015	LMP00025	GRD-104-127	SMPR-1113
1600	277	27	686	16.00	406.4	100.0	QRH10007	QRH10016	LMP00028	GRD-104-127	SMPR-1113
2500	460/480	36	914	25.06	636.5	99.8	QRH10008	QRH10017	LMP00042	GRD-104-107	SMPR-1122
3800	550/575	48	1219	37.00	939.8	102.7	QRH10009	QRH10018	LMP00053	GRD-104-108	SMPR-1123



CAUTION

Danger: Hazard of Fire Do not mount heater closer than 6" to any combustible or structural material that does not have at least a 200°C continuous temperature rating.

These heaters are not for use in atmospheres where flammable or combustible vapors, dust, gases, or liquids are present as defined in the National Electrical Code. Where solvents, water vapor or other VOCs are being evaporated from the process, it is necessary to provide substantial quantities of ventilating air to remove all resulting vapors.