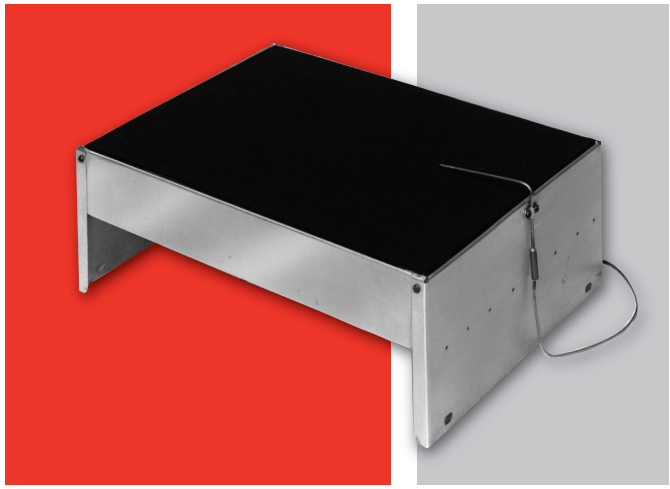
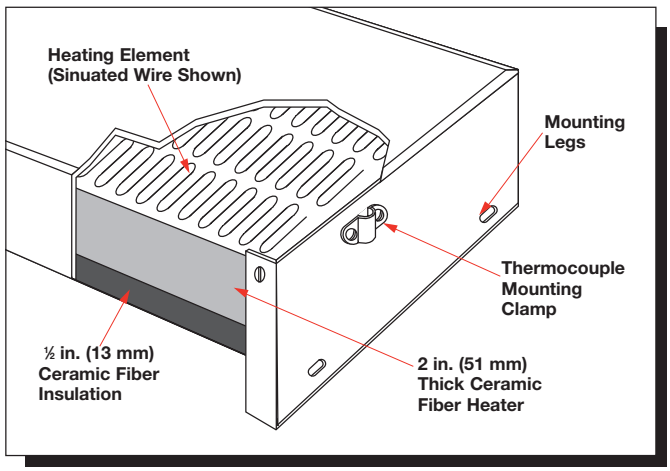
RAYMAX® 1220 and 2030

Ideal For Many Process Heating Applications Requiring “Hot Face” Temperatures





Easy to install and capable of high surface temperatures, the RAYMAX® 1220 and 2030 are ideal for many process heating applications requiring “hot-face” temperatures above 1000°F (540°C).

Each ceramic fiber heater is mounted in a 2½ in. (64 mm) deep sheet metal case providing thermal insulation. The case includes post terminals for electrical connections and provides a mounting system that can be used with virtually any flat ceramic fiber unit. Watt density and temperature capabilities can be tailored to meet a specific radiant application for exposed sinuated embedded coil or foil element configuration.

Performance Capabilities

- RAYMAX 2030 (uses sinuated or coil elements): temperatures up to 2000°F (1095°C); watt densities up to 30 W/in^2 (4.7 W/cm^2)
- RAYMAX 1220 (uses an etched foil element): temperatures up to 1200°F (650°C); watt densities up to 20 W/in^2 (3 W/cm^2)
- Maximum voltage up to 600V

Features and Benefits

Lightweight, low mass design
- Allows fast response to controllers

Self insulation with 2½ in. (64 mm) thick mounting case
- Provides high efficiency

Thermocouple mounting clamp
- Simplifies process system control

Aluminized steel case
- Handles temperatures up to 1100°F (595°C)

Special hot-face heating patterns
- Designed specifically for an application using an etched foil RAYMAX 1220

Typical Applications

- Conveyor furnaces
- High-temperature vessel heating
- Tempering and annealing processes for glass, wire, ceramics and metals
- Coating, curing and drying of inks, paints, plastics and films

WATLOW®
Better Thermal Solutions...*Faster*

COL-1220/2030-0311

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Application Hints

A thermocouple mounting clamp is attached to one end of the case, with holes on both ends for alternate locations. The clamp can be used with ⅛ in. (3.2 mm) O.D. sheath thermocouples. The clamp is 3⁄16 in. (4.8 mm) high, but can be removed for flush mounting*.

The maximum recommended surface temperature of the heater is based on the rating of the ceramic fiber heater module. This can vary from 2000°F (1095°C) at lower watt densities, to higher watt densities at reduced surface temperatures. **Note:** maximum wattages cannot be achieved at the maximum temperatures simultaneously.

* 13⁄16 in. (4.8 mm) and ¼ in. (6 mm) are available upon request.

Specifications

Weight: Less than 6.5 lbs/ft² (31.75 kg/m²)

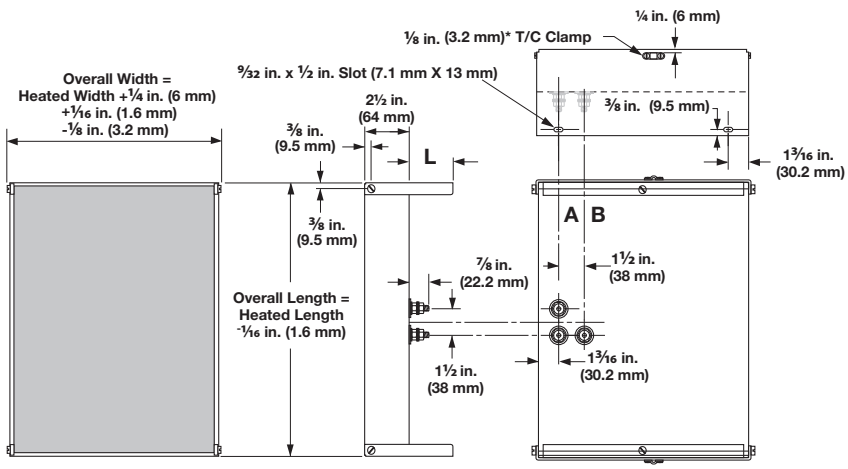
Voltage and Wattage: Ratings, up to 600VAC are based on the ceramic fiber heater module mounted in the case.

Terminals: Terminals are ¼-20 threaded studs. Two terminals plus ground for single-phase, and three terminals plus ground for 3-phase are located on the center length line unless otherwise specified. Terminals can be positioned anywhere along lines A and B (see illustration below), but not closer than 2 in. (51 mm) to the case ends.

Mounting Legs: Mounting legs are available either 1 in. (25 mm) or 3 in. (76 mm) length. For made-to-order units, mounting legs can be supplied in any incremental length **L** from ½ in. (13 mm) to 3 in. (76 mm). Slots are not provided in legs less than 1 in. (25 mm) long.

Heater Dimensions	Min.	Max.	Increments
Width: in. (mm)	2 (51)	30 (762)	Any
Length: in. (mm)	6 (152)	52 (1320)	Any

Note: Units will be ¼ in. (6 mm) wider than the nominal size of the ceramic fiber heater. Overall length is equal to heater length, but thermocouple clamp not included in length.



Options

Several options are available with RAYMAX 1220 and 2030 models. Contact your Watlow representative for more information.

- Single-phase non-standard location power terminals
- Terminal box
- Zoning
- Mounting studs and legs
- 3-phase construction
- Thermocouple mounting tubes
- Alternate case materials

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