

## Style RPB Panel Heater

### Style RPB Black Quartz Composite Face Infrared Panel Heaters



#### Design Features

- \* Panel heater can be mounted in any direction
- \* High temperature black quartz composite face
- \* High temperature black coating
- \* Precision wound resistance wire
- \* Heavy gauge aluminized steel enclosure box standard  
Optional: 304 Stainless Steel
- \* Optional: quartz thermowell tube  
Standard: side mount with clamp  
Optional-3 back mounted styles
- \* Refractory blanket insulation
- \* Stainless Steel power screw terminals
- \* Mounting screw studs  
Standard: 1/4-20 x 1"L
- \* Electrical junction box, standard

#### Construction Characteristics

Tempco Style RPB panel infrared heaters have a woven silica quartz composite surface that is transparent to radiant energy and is coated with a high temperature black coating for high emissivity.

The resistance wire is helically wound from a high temperature iron/chromium/aluminum alloy. A uniform pattern across the face is milled out in the high temperature ceramic fiberboard, and the resistance coil is cemented in place. Refractory blanket insulation backs up the fiberboard face assembly.

Tempco Style RPB Radiant Heaters can transmit up to 79.5% of the input energy and can be positioned as close as 2 to 4" from the material being heated.

#### Typical Applications

- ↔ Thermoforming
- ↔ Paint Drying
- ↔ Ink Drying
- ↔ Curing of Plastic Coatings
- ↔ Silk Screen Painting
- ↔ Food Warming
- ↔ Laminating

#### SPECIFICATIONS

**Maximum Size:** In addition to the standard sizes listed below; custom sizes up to 30"W x 84"L can be manufactured.

**Thickness:** Standard — 3", Optional — 1.5" to 5"

**Maximum Watt Density:** 25 Watts/in<sup>2</sup>

**Maximum Voltage:** Voltage can be single, dual or 3-phase up to 600 VAC (depending on heater size and wattage)

**Maximum Face Temperature:** 900°C (1652°F)

**Wavelength Range:** Between 2.5 and 6.0 microns (μm)

**Distributed Wattage and Zoning:** Yes, dependent on size

#### Infrared / Convection Radiant Panels

RPB Radiant Panels can also be supplied for combination radiant/convection applications. Holes are drilled in a uniform pattern in the face of the panel to allow air flow from the rear plenum. A 3" hole is typically provided in the rear panel for mounting a blower or ductwork. Submit your requirements to Tempco.

### Standard (Non-Stock) Sizes and Ratings of Style RPB Black Face Infrared Heaters

To complete the part numbers below, include the designated number that applies to the following options:

**0** = Plain, no thermowell or T/C    **1** = Thermowell only    **2** = Thermowell and type K T/C    **3** = Thermowell and type J T/C

Available Thermowell/Thermocouple types and descriptions can be found on page 7-95.

For the part numbers below, if a thermowell is specified, the standard Side Mount Thermowell with Clamp is supplied.

Width		Length		15W/in <sup>2</sup>			Part Number	25W/in <sup>2</sup>			Part Number
in	mm	in	mm	Watts	Volts	Ph.		Watts	Volts	Ph.	
6	152	12	305	1080	120	1	RPB0101__	1800	240/480	1	RPB0201__
6	152	18	457	1620	240	1	RPB0102__	2700	240/480	1	RPB0202__
6	152	24	610	2160	240/480	1	RPB0103__	3600	240/480	1	RPB0203__
6	152	30	762	2700	240/480	1	RPB0104__	4500	240/480	1	RPB0204__
12	305	12	305	2160	240/480	1	RPB0107__	3600	240/480	1	RPB0207__
12	305	18	457	3240	240/480	1	RPB0108__	5400	240/480	1	RPB0208__
12	305	24	610	4320	240/480	1	RPB0109__	7200	240	3	RPB0209__
12	305	30	762	5400	240/480	1	RPB0110__	9000	240	3	RPB0210__
12	305	36	914	6480	240	3	RPB0111__	10800	480	3	RPB0211__
12	305	48	1219	8640	240	3	RPB0112__	14400	480	3	RPB0212__
18	457	18	457	4860	240/480	1	RPB0117__	8100	240	3	RPB0217__
24	610	24	610	8640	240	3	RPB0118__	14400	480	3	RPB0218__