Power Band Heater Data Sheet



Power band heaters can continuously operate at sheath temperatures of up to 1300°F, depending on the size and application. These heaters respond quickly to applications that require high temperatures and high watt densities. The interior of our power band heaters are manufactured with Nichrome wire, ceramic tape and high temperature ceramic cement. All moisture is removed from the heater through our baking process of 850°F for 8 hours. For applications in confined spaces we have included a small profile termination on models PWB1 and PWB2.

All of our power band heaters are clamped down with a sturdy 18 gauge stainless steel strap to prevent air gaps between the barrel and the heater for improved performance. Both the outer and inner shell are manufactured with 304 2b stainless steel sheet metal. Power band heaters are manufactured in a variety of electrical termination styles and can be produced with holes.

TriVolt adopts a stringent internal Quality Control System. Every heater is tested for resistance and dielectric. All our electric heaters are compliance certified or have international approvals from CSA, CUL, or CE certified.

Applications

- Plastic extrusion
- Injection molding
- Blow-molding
- Pressure molding
- Structural foam
- Food industry
- Packaging
- Chemical, oil and gas
- Energy industry

Specifications

- » Sheath temperature: up to 1300°F (705°C) continuously depending on size and application
- » Nominal watt density: 60 watts/sq. in.
- Maximum watt density: determined by size of heater and operating temperature
- » Maximum voltage 240VAC
- » Resistance tolerance: +/- 5%
- » Wattage tolerance: +/- 5%

Construction

- » 1 to 4 piece construction
- » Partial coverage
- » Expandable
- » Exterior material; 24 guage 304
 2b stainless steel
- » Interior material: Nickel Chromium wire, ceramic magnesium tape and high temperature ceramic cement
- » Standard gap: 0.5" (if different please specify)
- Min. diameter: 1.5" (depending on style)
- » Max. diameter: 96"
- » Min. width: 1"
- » Max. width: 5.5"
- » Thickness: 0.205" +/- 0.003" (Consult factory for sizes other than those mentioned above)







Power Band Heater Data Sheet

Electrical Connections

- » Post terminals: 10-32 (10A per zone)
- » High temperature lead wire, 550°C (1022°F) with protective;
 - > fiberglass sleeve (SL),
 - > stainless steel over braid (SS)
 - > armored cable (AC)
- » Ground post
- » Dual voltage
- » Low profile cap
- » Single or 3-phase





Fiberglass sleeve (SL), single or double conductor



Armored cable (AC)



Stainless Steel over braid (SS)



Ground posts

Lead positions



Exiting 180° from gap, center of width

Post terminations



Post terminals on each side of gap, center of width



Post terminals vertical position, center of width



Post terminals horizontal position, center of width

Lead directions



Exiting straight out, positioned 180° from gap



Exiting at a right angle, positioned 180° from gap



Exiting straight up, positioned 180° from gap

Power Band Heater Data Sheet

Terminal Housing

- » Terminal box
- » Terminal block with ceramic block
- » European plug (EP)
- » European plug (aluminum block protection)
- » European plug with terminal box
- » Ceramic post covers
- » Brass cap for heaters with different angle lead exits



Terminal box (TB)



European plug (EP)



European plug with aluminum block protection



Terminal box with ceramic block



European plug with terminal box



Brass cap



Ceramic post covers



- » Mounting holes
- » Notches (consult Trivolt)
- » Square cut-out (consult Trivolt)
- » Adaptors and fittings



Mounting holes



Notches



Adaptors and fittings

Clamping Methods

- » Full strap
- » Barrel nut construction
- » Spring-loaded barrel nuts
- » Hinges



Barrel nut construction



Spring-loaded barrel nuts



Hinges



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