

# Circulation Heaters



## WATROD™ and FIREBAR® Heaters

### Booster Heaters

Booster heaters are ideal for circulating applications requiring less kilowatts, including engine preheating.

Booster heaters are made from a steel or brass 1 1/4 in. (32 mm) NPT screw plug heater and insulated pressure vessel with 1 in. (25 mm) FNPT inlet and outlet. This assembly also contains an integral thermostat.

### Performance Capabilities

- Watt densities up to 60 W/in<sup>2</sup> (9.3 W/cm<sup>2</sup>)
- Wattages up to 3 kilowatts
- Voltages up to 480VAC
- Steel sheath temperatures up to 750°F (400°C)
- Alloy 800 sheath temperatures up to 350°F (175°C)

### Features and Benefits

#### Dual voltages

- Simplifies stocking and wiring

#### Carbon steel, standard pipe wall vessel

- Assures compatibility with many applications

#### One inch thick (25 mm) fiberglass thermal insulation rated to 750°F (400°C)

- Reduces heat loss

#### Steel jacket (shroud)

- Provides a fully welded and painted shroud to protect thermal insulation

#### Inlet and outlet nozzle connections

- Includes threaded FNPT connections to meet OEM standards

#### General purpose terminal enclosures

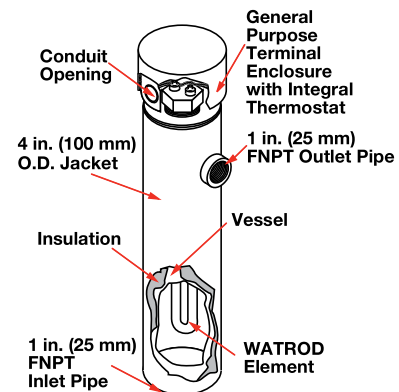
- Protects terminals and thermostat

#### Integral thermostat controls process temperatures from: 60 to 160°F (15 to 70°C) on alloy 800 sheath elements and 175 to 550°F (80 to 290°C) on steel sheath elements

- Minimizes the amount of time that the heater operates while the engine is running

### Typical Applications

- Stand by generators
- Peak power trimming generators
- Mobile generator sets
- Earth moving equipment
- Water heaters
- Lightweight oils



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#### Terminal Enclosure

General purpose terminal enclosures with integral thermostats are supplied on all Watlow booster heaters. Optional moisture resistant terminal enclosures protect wiring and thermostat from liquid contaminants. To order, request the **moisture resistant enclosure option**.

For explosion resistant and explosion/moisture resistant terminal enclosures, request the **explosion/moisture resistant option**.

Description	kW	Phase	Part Number 120/240VAC	Est. Ship. Wt. lbs (kg)
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#### Application: Aqueous Solutions

60 W/in <sup>2</sup>	1.50	1	CBEN8G6	18 (8.2)
Brass Plug	2.00	1	CBEN10F6	18 (8.2)
2-Alloy 800	2.50	1	CBEN12F6	18 (8.2)
(9.3 W/cm <sup>2</sup> )	3.00	1	CBEN15A6X	18 (8.2)

#### Application: Lightweight Oils

23 W/in <sup>2</sup>	0.50	1	CBES7G6	18 (8.2)
Steel Plug	0.75	1	CBES10B6	18 (8.2)
2-Steel	1.00	1	CBES12P6	18 (8.2)
(3.6 W/cm <sup>2</sup> )				

For optional housing adders, use circulation heater adders.

