



has the answers, with innovative solutions that help foodservice operations everywhere. The best products, service, and information in the industry!

FOCUS ON: ELECTRIC BOOSTER HEATERS



Model C-12

- > **What is the purpose of a hot water booster heater?**
The primary function of a booster heater is to provide 180°F (82°C) of hot water for the final sanitizing rinse in a commercial dishwasher.

- > **What is the typical lead time for a booster heater NOT available in the Quick-Ship program?**
The lead-time is generally 3-4 working days from date of order entry. Boosters in Quick-Ship are sent out the same day when orders are received by 12 p.m. Central Standard Time.

- > **Are slide mount brackets available in lieu of legs on ALL water booster heaters, and is there an extra charge?**



Slide mounting brackets are available only on Compact boosters because of weight and size limitations. Imperial booster heaters must be mounted on legs. There is no charge for slide mounting brackets when ordered in lieu of legs. When you order slide mounting brackets, you will not receive legs with your booster.

- > **What is a shock absorber and what is it used for?**
A shock absorber is an accessory item that can be used in any water heater application. It reduces water hammer, or the "banging noise" that results from quick closing solenoid valves on the dishwasher.

- > **With regard to PHASE, are Hatco electric booster heaters field convertible from single to three phase, or from three phase to single phase?**

Only 6kW, 7kW or 9kW boosters, 208 or 240 volt, are field convertible from single to three phase or vice versa. All other models must be ordered specifically for single phase or three phase, and CANNOT be converted in the field.



Model C-18 Stainless Steel Body/Base

- > **Are there specific electric booster heaters that can be wired in single phase?**

208 and 240 volt boosters up to 18kW, and 480 volt in 4kW and 5kW Compact boosters, can be ordered in single phase. While 24kW through 45kW boosters 240 volts and 24kW through 39kW 208 volts may be ordered in single phase, consultation with the factory and written confirmation is required, due to high amperage in these types of applications.

- > **With regard to VOLTAGE, are Hatco electric booster heaters field convertible from 208 to 240 or 480 volts or vice versa?**

No. Hatco boosters are manufactured and UL approved specifically for 208, 240 or 480 volts, and are NOT field convertible.

FOCUS ON: ELECTRIC BOOSTER HEATERS

> **What key information is required when sizing a booster heater to a dishwasher?**

Essential information is the temperature (degrees Fahrenheit) of the incoming water from the primary water source, temperature rise (incoming water temperature subtracted from 180°F [82°C]), the make and model of the dishwasher the booster heater will be used with, OR the gallons per hour (GPH) (liters per hour [LPH]) required by the dishwasher for the final rinse cycle. The formula to figure kW of booster heater needed to sanitize at 180°F (82°C) is:

$$\frac{\text{GPH} \times \text{°F Temp Rise}}{400} = \text{kW required} \qquad \frac{\text{LPH} \times \text{°Celsius Temp Rise}}{840} = \text{kW required}$$

Sizing charts are available in our price list and on our website.



> **What information needs to be included on an order for a booster heater?**

Necessary information is booster model number, voltage, phase, quantity, mounting style (for Compact series), jacket material, and accessories.

> **What standard features are included with Compact and Imperial electric booster heaters?**

Castone® (cement-lined) tank, low water cut-off, temperature / pressure relief valve, cast iron pressure reducing valve, two temperature / pressure gauges, on / off switch, indicator light and 6" (152 mm) legs are standard. All units also include stainless steel front panel, powdercoated silver gray hammertone body and black base.



> **Can a Hatco booster heater be used as a primary water heater?**

Hatco booster heaters are not designed to be primary water heaters and do not carry a UL listing for this application.

> **What is the tank capacity of the various booster heaters?**

Compact = 6 gallons (23 l) Imperial = 16 gallons (60 l) Mini-Compact = 3.2 gallons (12 l)

> **What is the warranty on Hatco booster heaters?**

One year parts and labor, 10 years on the tank, and lifetime on the jacket.

> **What size piping is required for the booster heater installations?**

¾" piping.

> **What is the height range of the optional Stainless Steel Adjustable Legs?**

6" to 7" (152 to 178 mm).

> **What is the method of shipment for Hatco booster water heaters?**

Because of size and weight, all booster heaters are shipped via common carrier (truck).

> **Are there 120 volt plug-in booster heaters available?**

No. All Hatco boosters come in either 208, 240, or 480 volts and must be hard wired.



FOCUS ON: ELECTRIC BOOSTER HEATERS

> **Should anything be specified differently when ordering a booster to be used in a low temp application?**

The order should specify that the booster is for a low temp application and the factory will preset the thermostat to 140°F (60°C). There is a low temp sizing chart in the Hatco price list or on the website to verify sizing.



Model C-18 Stainless Steel Body/Base/Legs

> **What is the function of the low water cut-off?**

The low water cut-off (LWCO) is a protective device designed to shut off power to the heating elements, thus preventing burnout should the water level decrease in the booster tank. The LWCO is automatically reset when the water level is safe.

> **How is a booster heater to be positioned when installed?**

The booster heater must be installed in a horizontal position, with the base parallel to the floor and the inlet connection at the lowest point. The booster heater must be as close as possible to the dishmachine.



> **Are there any special provisions for booster heaters ordered for marine applications?**

Boosters are available with 400 Series stainless steel body and base (resists rusting from salt air), with stainless steel flanged legs for deck mounting.

> **Why order an Imperial vs. Compact?**

- Step loaded element design can reduce energy costs (above 24kW).
- Larger tank provides greater capacity and faster recovery.
- Easier to service larger unit.

> **What is step loading?**

Imperial Electric Booster Heaters ("S" series) rated for 24kW or larger have multiple banks of heating elements, with each bank controlled by a separate thermostat. During periods of use, the lowest bank of heating elements turns on first and stays on until its thermostat reaches the setpoint. If additional hot water is needed (during periods of high demand), the next level of heating elements come on and heats. This step loading, or staging of the heating elements, allows for reduced energy costs when compared to units that have all of their elements controlled by one thermostat and are either ON or OFF 100% of the time.



Model S-54 Stainless Steel Body/Base/Legs

> **When should Gas vs. Electric be considered?**

Use the energy cost worksheet on our website to calculate energy costs per year, and compare to unit cost. Consider installation and maintenance costs. (Contact your local Hatco Representative for assistance.)