



**FOR RADIANT SPACE HEATING APPLICATIONS**

# Model SH-09

## Two-Chamber Tankless Electric Heat Source

**Description:** The SH-09 is designed for use in residential and commercial applications for hydronic space heating and potable water heating. It is ideal for radiant floor heating, baseboard, hydro-heat pump and snow melting systems. With optional equipment, it can be used as a single heat source in combination systems for potable hot water and radiant heating. This on-demand tankless water heater is a powerful replacement for traditional tank-type heaters and is the enabling technology for use as backup to active renewable energy systems such as solar and geothermal water heating systems. The temperature activated control works effectively in re-circulating systems and in combination with tank-type heaters.

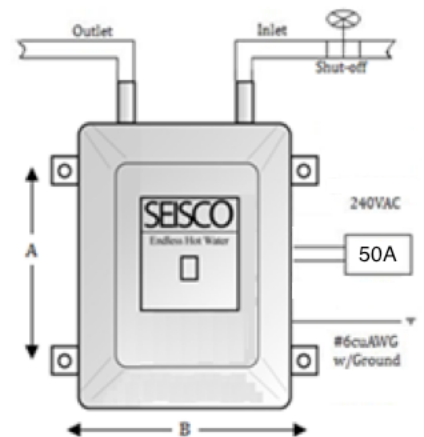
### Features:

- UL 834 Listed for Space Heating Applications
- Heats fluid mixtures including ethylene glycol
- No minimum flow required for activation
- Built-in DSM Utility Integration option
- Compatible with Home Energy Management
- Very small & compact with no moving parts
- Lightweight modular construction
- Standard 3/4 inch plumbing connections with no flow restrictions
- Compatible with all plumbing designs including recirculating, tubing and manifold systems
- Microprocessor digital control
- Power sharing power control technology
- Heats continuously and only when needed
- Self-diagnostics with redundant safety devices
- High performance DuPont polymer nylon chamber material
- Built-in leak detection and alarm
- Rust & corrosion resistant

### Specifications:

Heat Output (max.): **30,710 BTU**  
 Power Rating (max.): **9KW**  
 Voltage Rating (Nominal): **240 VAC**  
 Current Rating (max.): **37.5 AMPS**  
 Panel Load Factor (40%): **15 AMPS**  
 Energy Factor: **0.99+**  
 Heating Elements: **4500 watts x 2**  
 Circuits Required: **1 ea. 2-wire w/ ground (#6cuAWG)**  
 Breakers Required: **One (1), double-pole**  
 Breaker Size: **50 AMPS each x 1**  
 Temp. Output (dial): **90F to 130F (32C - 52C)**<sup>1</sup>

<sup>1</sup> Factory set to 120°F – Custom temperatures to 160°F by special order.



### Flow Ratings:

**Rise (°F)**  
**@ Flow (GPM)**  
 61°F @ 1.0 GPM  
 40°F @ 1.5 GPM  
 30°F @ 2.0 GPM  
 24°F @ 2.5 GPM

**Rise (°C)**  
**@ Flow (LPM)**  
 32°C @ 4 LPM  
 21°C @ 6 LPM  
 16°C @ 8 LPM  
 13°C @ 10 LPM

### Mounting Holes:

A: 14 3/4" (362mm)  
 B: 10 7/8" (276mm)

### Dimensions:

Weight: 15 lbs. (7.0 kg)  
 Height: 15 3/4" (400mm)  
 Width: 10 1/4" (260mm)  
 Depth: 6 1/4" (159mm)  
 Fittings: 3/4" (200mm)

### Approvals:

UL CSA NSF HUD NEC