

Electric Tankless Water Heaters



Single Point (Single Phase)

The KwickShot[®] Electric Tankless Water Heaters Models Feature:

- **On Demand Hot Water**—No delay.
- **Reduced Energy Waste**—Flow switch activates heater only on demand (no stand-by heat loss). 99% efficient.
- **Continuous Hot Water**—No storage capacity to run out.
- **No Need for a T&P Relief Valve**—Check local codes.
- **Integral Flow Restrictor**—Built-in to ensure proper temperature rise.
- **Prevention Of Bacteria Growth.**
- **Easy Installation**—Mounts on wall – no sweat connections.
- **Ni Chrome Heating Element**—A unique, patented flow path ensures optimum heat transfer and extended element life.
- **Durable Design**—Reduces calcification and sedimentation.
- **Space Saving Installation**—Compact size.
- **High Temperature Limit Switch (ECO)**—Protects against element burn out, with Auto Reset.
- **Warranty**—Heaters are designed for durability and guaranteed against failure due to leaks of Heater Body/ Element Assembly for a period of 10 years. Field serviceable element with replaceable cartridge element (1 year warranty).
- **Single Phase Models**—Single phase models 240 volt and below are cUL certified.



Thermostatic
(Single Phase)



Flow Controlled
(Single Phase)



For more information on warranty, please visit www.bradfordwhite.com

For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.



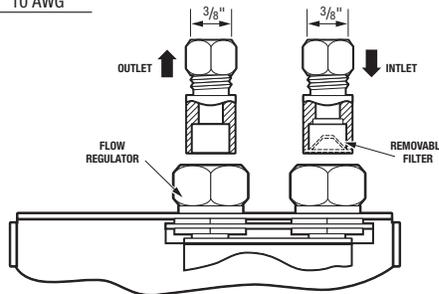
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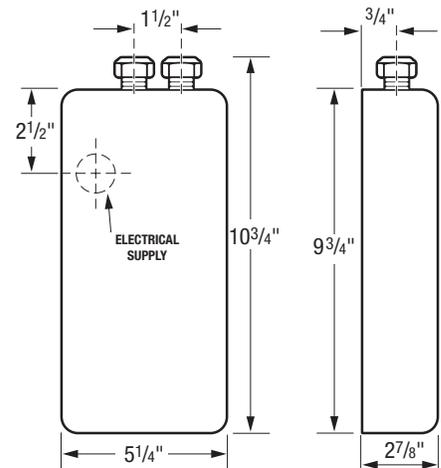
Integral 0.5 GPM flow control and faucet aerator provided.
Integral 1.0 GPM flow control and faucet aerator provided with ES-5500-4-S-10

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F 0.5 GPM	Recommended Wire Size
ES-3000-1-S-10	3.0	120	25.0	41	10 AWG
ES-3500-1-S-10	3.5	120	29.0	48	10 AWG
ES-3500-4-S-10	3.5	240	14.6	48	12 AWG
ES-4100-2-S-10	4.1	208	19.7	56	12 AWG
ES-4100-5-S-10	4.1	277	14.8	56	14 AWG
ES-5500-4-S-10	5.5	240	22.9	37.5*	10 AWG

*Temperature rise °F 1.0 GPM
Refer to Voltage Identification Code Chart.



Specifications:
Dimensions: 10 3/4" x 5 1/4" x 2 1/2"
Weight: 3 lbs.
Materials:
 Cover: ABS UL rated 94Vo.
 Glass reinforced Fortron® Heater Body and Ni Chrome Element
Color: White
Element: Replaceable cartridge insert
Pipe-Fittings: 3/8" compression at top of unit.
Operating Pressure: Min 25 PSI, Max 150 PSI.



Thermostatic (Single Phase)

Turn on 0.5 GPM (up to 5.5kW)
Turn on 0.6 GPM (6.5kW & 7.5kW)
Turn on 0.7 GPM (8kW and up)
Max Flow 2.0 GPM

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F					Recommended Wire Size
				0.5 GPM	0.75 GPM	1.0 GPM	1.5 GPM	2.0 GPM	
EFT-7500-4-S-10	7.5	240	32.0	—	68	51	34	25	8 AWG
EFT-9500-4-S-10	9.5	240	40.0	—	86	65	43	32	8 AWG

Note: Designed to comply with 0.5GPM hand washing code target outlet temperature 105°F - 110°F. Please consult local codes for electrical requirements. Additional voltages and wattages are available. For more information please consult factory.

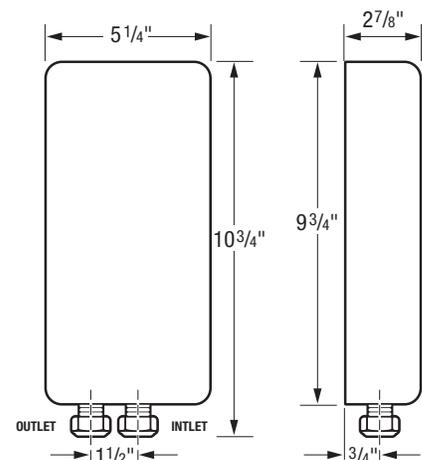
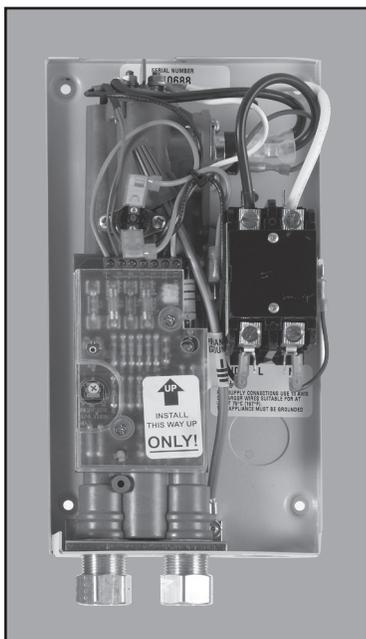
Refer to Voltage Identification Code Chart.

Applications: Single Phase Only.
Dishwashers, Boosters (to 180°F). Schools, Hospitals, Nursing Homes, Laboratories. Emergency Eye Wash Fountains. Single and Multiple Hand wash Stations.

Please specify your application when you place your order.
Example: EFT-9500-4-S-10-S (Dishwasher 180°F)

SPEC OPTIONS:
 S - Sanitation Setting 180°F
 FS - Factory Set Temperature (Ambient to 180°F)

Specifications:
Dimensions: 10 3/4" x 5 1/4" x 2 1/2"
Weight: 3 lbs.
Materials:
 Cover: ABS UL rated 94Vo.
 Glass reinforced Fortron® Heater Body and Ni Chrome Element
Color: White
 Standard temperature range 100°F-140°F.
 Maintains accurate temperature control +/- 1°F
Element: Replaceable cartridge insert
Pipe-Fittings: 1/2" compression at bottom of unit.
Operating Pressure: Min 25 PSI, Max 150 PSI.





Electric Tankless Water Heaters

Flow Controlled (Single Phase)

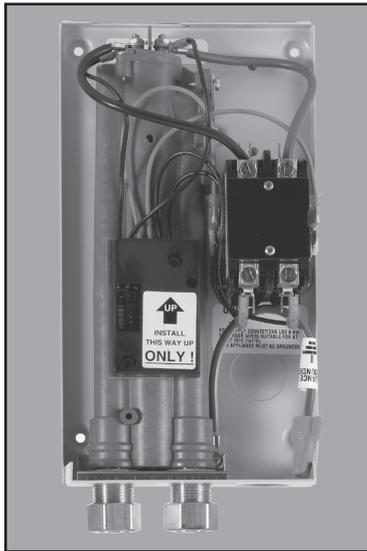
Turn on 0.5 GPM (up to 5.5kW) Turn on 0.7 GPM (8kW and up)
 Turn on 0.6 GPM (6.5kW & 7.5kW) Max Flow 2.0 GPM

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F					Recommended Wire Size
				0.5 GPM	0.75 GPM	1.0 GPM	1.5 GPM	2.0 GPM	
EFC-5500-4-S-10	5.5	240	23.0	75	50	38	25	18	10 AWG
EFC-6500-4-S-10	6.5	240	27.0	88	59	44	30	22	10 AWG
EFC-7500-4-S-10	7.5	240	32.0	—	68	51	34	25	8 AWG
EFC-9500-4-S-10	9.5	240	40.0	—	86	65	43	32	8 AWG
EFC-8300-2-S-10	8.3	208	39.0	—	76	57	38	29	8 AWG

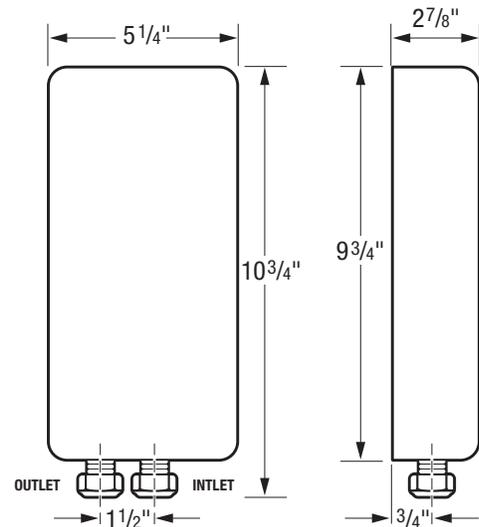
Please consult local codes for electrical requirements. Additional voltages and wattages are available. For more information please consult factory.

Refer to Voltage Identification Code Chart.

Applications: Single Phase Only.
 Kitchen Sinks, Bar Sinks, Dual Lavs, Utility Sinks, Manufacturing Facilities, and Modular Buildings.



Specifications:
Dimensions: 10³/₄" x 5¹/₄" x 2⁵/₈"
Weight: 3 lbs.
Materials:
 Cover: ABS UL rated 94Vo.
 Glass reinforced Fortron® Heater Body and Ni Chrome Element
Color: White
 Standard temperature range 100°F-140°F.
 Maintains accurate temperature control ±1°F
Element: Replaceable cartridge insert
Pipe-Fittings: 1/2" compression at bottom of unit.
Operating Pressure: Min 25 PSI, Max 150 PSI.



Voltage Identification Code For All Models

Voltage Code	1	2	3	4	5	6	7	8
Voltage	120	208	220	240	277	480	380	415

Example: ES-5500-4-S-10-S

The 4 in the model number indicates 240 volt.

Please be advised that the voltages listed in the Voltage Identification Code may not be available for all models.

Additional voltages and wattages are available. For more information please consult factory.

Typical Flow Rates in Gallons per Minute (gpm)							
Fixture Type	Lavatory	Bathtub	Shower	Kitchen Sink	Pantry Sink	Laundry Sink	Dishwasher
Flow Rates	0.5	2.0-4.0	1.5-4.0	1.0-1.5	1.5-2.5	2.5-3.0	1.0-3.0

FLOW CHART

POWER REQUIRED-KW

GPM	POWER REQUIRED-KW										
	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	
10	29.34kW	44kW	58.6kW	73.2kW							
9	26.4kW	39.5kW	52.7kW	65.9kW	82kW						
8	23.4kW	35.1kW	49.9kW	58.6kW	70.3kW	82kW					
7	20.5kW	30.7kW	41kW	51.2kW	61.5kW	71.5kW	79kW				
6	17.6kW	26.4kW	35.1kW	44kW	52.7kW	61.5kW	70.3kW	79kW			
5	14.6kW	22kW	29kW	37kW	44kW	51.2kW	58.6kW	65.9kW	73.2kW		
4	11.7kW	17.6kW	23.4kW	29kW	35.1kW	41kW	46.9kW	52.7kW	58.6kW	64.4kW	
3	8.8kW	13.0kW	17.6kW	22kW	26.4kW	30.7kW	35.1kW	39.5kW	44kW	48.3kW	
2	5.8kW	8.8kW	11.7kW	14.6kW	17.6kW	20.5kW	23.4kW	26.4kW	29.3kW	32.2kW	
1	3.0kW	4.4kW	5.8kW	7.3kW	8.8kW	10.2kW	11.7kW	13.0kW	14.6kW	16.1kW	
1/2	—	—	3.0kW	3.6kW	4.4kW	5.1kW	5.8kW	6.5kW	7.3kW	8kW	

Temperature Rise - °F

FORMULAS

$$\text{Flow Rate, (GPM)} = \frac{\text{kW rating} \times 6.83}{\text{rise in temp. (°F)}}$$

$$\text{Rise in Temp. (°F)} = \frac{\text{kW rating} \times 6.83}{\text{rise in temp. (°F)}}$$

$$\text{kW Rating} = \frac{\text{GPM} \times \text{rise in temp.}}{6.83}$$

Electric Tankless Water Heaters



Suggested Specification:

Tankless Water Heater shall be a Bradford White Model _____ with _____ kW, _____ vac _____ to heat _____ GPM @ a temperature rise of _____ degrees F. Unit shall have ABS UL 94 Vo rated or enameled-steel cover. Heater body and element shall be glass reinforced UDEL® or Fortron®. Element shall be replaceable cartridge insert. Unit shall have a replaceable filter in the inlet connector. Element shall be iron free, nickel-chrome material. Heater shall be fitted with 3/8" or 1/2" compression nuts and sleeves or 3/4" NPT fittings to eliminate need for soldering. Maximum operating pressure of 150 psi. Hot water storage tanks prohibited. Unit shall be Bradford White or approved equal.

Note: All models are Single Phase.

KwickShot® models are not recommended for Space Heating Applications.

No chemicals shall be added to the Kwickshot® models: Potable Water Only.

U.S. Patent No.'s: 4,762,980 and 4,960,976

UL Patent #'s 4,762,980 and 4,960,976.

UL Listed: E197168

 - Only for 240 Volt and below Single Phase Models
LISTED

— BRADFORD WHITE IS —

**AMERICAN
STRONG**

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