





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 and Three Phase models—Single Phase models 240 volt and below are cUL certified.















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.

Single Point (Single Phase)

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

Integral 0.5 GPM flow control and faucet aerator provided.

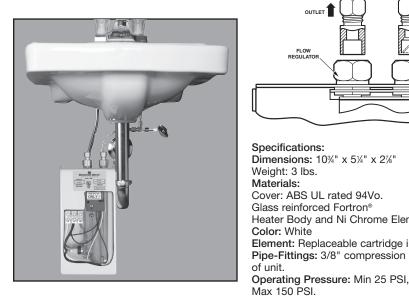
information please consult factory. Applications: Single Phase Only.

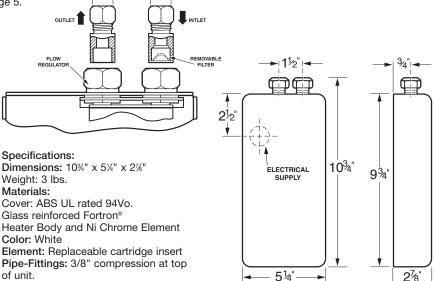
Shopping Malls, Schools, Stadiums, Public Hand Washing.

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 on page 5.





Thermostatic (Single Phase)

Model	kW	Voltage	AMPS		Tempe	:	Recommended		
Number	Rating			0.5 GPM	0.75 GPM	1.0 GPM	1.5 GPM	2.0 GPM	Wire Size
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

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

SPEC OPTIONS:

- Sanitation Setting 180°F

- Factory Set Temperature (Ambient to 180°F)

Specifications:

Dimensions: 10¾" x 5¼" x 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

Operating Pressure: Min 25 PSI, Max 150 PSI.

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

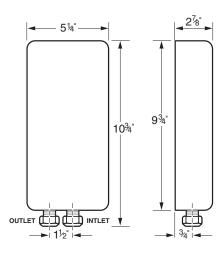
Turn on 0.7 GPM (8kW and up)

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 on page 5.

Applications: Single Phase Only.

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



Flow Controlled (Single Phase)

Model	kW	Voltage	AMPS		Tempe	rature	Rise °F		Recommended	
Number	Rating			0.5 GPM	0.75 GPM	1.0 GPM	1.5 GPM	2.0 GPM	Wire Size	
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	

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

Turn on 0.7 GPM (8kW and up)

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 on page 5.

- Applications: Single Phase Only.

Kitchen Sinks, Bar Sinks, Dual Lavs, Utility Sinks, Manufacturing

Facilities, and Modular Buildings.



Specifications:

Dimensions: 10¾" x 5¼" x 2¾"

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.

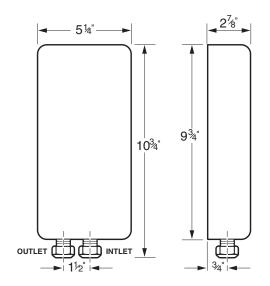
Maintains accurate temperature control

Element: Replaceable cartridge insert Pipe-Fittings: 1/2" compression at

bottom of unit.

Operating Pressure: Min 25 PSI,

Max 150 PSI.



Series Two - Thermostatic (Single Phase)

(Twin Module) With Single Thermostatic Control

Model		Voltage	AMPS	Ter	nperatu	re Rise	e°F	Recommended
Number	Rating			1.5 GPM	2.0 GPM	2.5 GPM	3.0 GPM	Wire Size
EFT-19000-4-D-10	19.0	240	80 (2 x 40 Amps)	87	65	52	43	8 AWG per module

The unit must have 2 independent electrical circuits using correctly rated wire and 2 circuit breakers.



Specifications:

Dimensions: 10" x 9" x 3"

Weight: 8 lbs.

Materials:

Cover: Enameled Steel.

Glass reinforced "UDEL+" Heater Body and Ni Chrome Element

Color: White

Element: Dual replaceable

cartridge inserts

Pipe-Fittings: 3/4" NPT pipe fittings at the bottom of the unit.

Operating Pressure: Min 25 PSI,

Max 150 PSI.

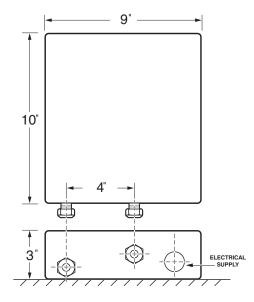
Activated in stages based on demand Min. flow 0.7 GPM Max Flow 3.0 GPM

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.

Residential-Single Shower (Cabin or Condo), Multi Lavs.



Series Three (Single Phase)

Model	kW Voltage				Tempeı		Recommended		
Number	Rating		Per Phase	1.5 GPM	2.0 GPM	2.5 GPM	3.0 GPM	4.0 GPM	Wire Size
EFT-28000-4-T-10	28.0	240	120 (3x40 Amps)	—	—	—	65	50	8 AWG

The unit must have 3 independent electrical circuits using correctly rated wire and 3 circuit breakers. This unit can only be ordered with 240V, but can be used on 208V with 25% reduced output (no model number change required).

Min Flow 0.7 GPM Max Flow 4.0 GPM

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 on page 5.

Applications: Single Phase Only.

Whole House Residential up to 4.5 GPM (Apartment,





Specifications:

Dimensions: 151/4"x 121/4"x 41/4"

Weight: 12 lbs.

Materials:

Cover: Enameled Steel. Glass reinforced "UDEL†" Heater Body and Ni Chrome

Flement Color: White

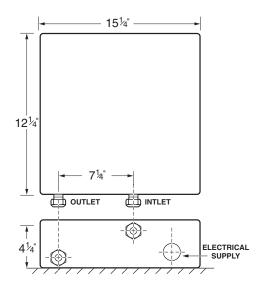
Element: Three replaceable

cartridge inserts

Pipe-Fittings: 3/4" NPT pipe fittings at the bottom of the

Operating Pressure: Min 25

PSI, Max 150 PSI.



Thermostatic Triple Module Models (Three Phase)

Model	kW	Voltage	AMPS		Ten	nperatu	re Rise	°F		Recommended
Number	Rating			1.5 GPM	2.0 GPM	2.5 GPM	3.0 GPM	3.5 GPM	4.0 GPM	Wire Size
EFT-18000-2-T-10	18.0	208v	50.0	82	61	49	41	35	32	6 AWG
EFT-24000-2-T-10	24.0	208v	67.0	_	82	65	54	47	41	4 AWG
EFTR-18000-6-T-10	18.0	480v	21.7	82	61	49	41	35	32	8 AWG
EFTR-24000-6-T-10	24.0	480v	28.9	_	82	65	54	47	41	6 AWG
EFTR-32000-6-T-10	32.0	480v	38.5	_	_	87	73	62	55	4 AWG

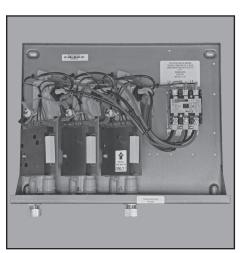
These models are not certified to be installed in Canada.

Min Flow 0.7 GPM Max Flow 4.0 GPM

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 and wiring diagram on page 5.

Multi-Outlet Three Phase Applications: Modular Hand Washing, Multi-Shower, Restaurants, Beauty Salons.



SPEC OPTIONS:

S = Sanitation 180°F FS = Factory Set (ambient to 180°F)

Specifications:

Dimensions:

15¼"x 12¼"x 4¼"

Weight: 15 lbs.

Materials:

Cover: Enameled Steel. Glass reinforced "UDEL†" Heater

Body and Ni Chrome Element

Color: White

Element: Triple replaceable

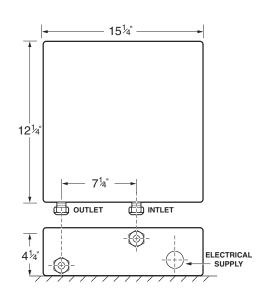
cartridge inserts

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.

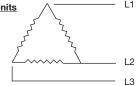
Electrical Configurations and Requirements for Bradford White Three Phase Tankless Water Heaters.

All Bradford White three-phase units are custom made to order and, as such, are non-returnable and non-refundable. We urge you therefore to check your electrical supply, making sure all criteria for operating your Bradford White water heaters are met.

Bradford White 208 or 480 Three Phase Units

Delta Configuration Requires: 3 Lives, 1 Ground (earth)

Three-Phase Delta; Three-Wire





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 except the Thermostatic Three Phase (3 Module) Models. 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

	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

	10	29.34kW	44kW	58.6kW	73.2kW						
	9	26.4kW	39.5kW	52.7kW	65.9kW	82kW					
M	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
		20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F

Temperature Rise - °F

FORMULAS

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

Rise in Temp. (°F) = $\underline{\text{kW rating x 6.83}}$

rise in temp. (°F)

kW Rating =

GPM x rise in temp. 6.83





For field service, contact your professional installer or local Bradford White sales representative.

Sales 800-523-2931 = Fax 215-641-1612

Technical Support 800-334-3393 ■ Email techserv@bradfordwhite.com

Warranty 800-531-2111 ■ Email warranty@bradfordwhite.com

International: Telephone 1-215-641-9400
Email international@bradfordwhite.com / www.bradfordwhite.com