

**STIEBEL ELTRON**

**Simply the Best**

## COMMERCIAL APPLICATION TANKLESS ELECTRIC

### Advanced Microprocessor Control

- › Steady output temperatures even with variable flow
- › Completely silent operation



**The Finest Tankless Electric Water Heaters Available!**

## DHC-E / Tempra®



Conforms to ANSI/UL Std. 499  
Certified to CAN/CSA E335-1 & E335-2-35



C USA  
Tested and certified by WQA  
against NSF/ANSI 372 for  
lead free compliance.

**ISO 9001  
CERTIFIED**

- › SAVES SPACE COMPARED TO BULKY TANKS PLUS NO STANDBY LOSSES
- › ON-DEMAND, CONTINUOUS AND UNLIMITED SUPPLY OF HOT WATER
- › NO VENTING REQUIRED
- › EXCLUSIVE DESIGN PREVENTS DRY FIRING
- › 7/3 YEAR WARRANTY

**800.582.8423**

[www.stiebel-eltron-usa.com](http://www.stiebel-eltron-usa.com)

# DHC-E / Tempra® Tankless Electric Water Heaters

## DHC-E / Tempra® With Advanced Microprocessor Control



- › **Control Temperature Simply by Setting a Dial** | Set the temperature knob on the front cover, and enjoy water between 86°F / 30°C to 140°F / 60°C. Change the desired temperature at any time. Purchasing a remote selector control is not necessary. Advanced microprocessor technology ensures that the water temperature doesn't deviate from the set point even if flow varies.
- › **Best Warranty in the Industry** | Stiebel Eltron has an enviable track record of engineering excellence and product quality. The three-year parts warranty is unique in the industry. You can depend on a DHC-E / Tempra® for many years to come.
- › **Compliance with Codes Made Easy** | The water temperature required by codes can simply be dialed in at the unit. The 100% accuracy of the water temperature is guaranteed by sophisticated electronics. No need to worry about mixing valves that go out of adjustment and wear out. The DHC-E and Tempra® can supply up to 140°F (60°C) water when health codes call for it. At the same time, when lower, non-scalding temperatures are needed, the advanced electronics of the DHC-E / Tempra® ensure what you set is what you get.
- › **Switchable Power Output** | The DHC-E 8/10 has the added advantage of selectable power output of 7.2 kW (Stage 1) or 9.6 kW (Stage 2) during installation via a jumper.



7 years leakage/  
3 years parts.  
Complete warranty online.



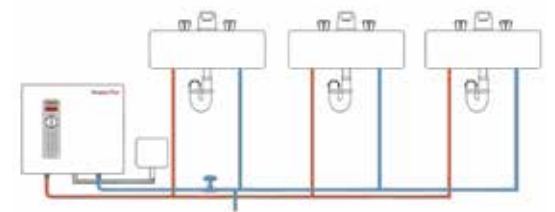
# These are the ones that work.

- › **Superior, Reliable & Energy Saving Performance** | DHC-E and Tempra® models have a flow sensor and two temperature sensors that feed their readings into the proprietary microprocessor control. Heating elements are engaged in stages, achieving the temperature you desire, with the lowest possible energy usage. Both the input and output water temperature and the flow rate are continually monitored. This smart Electronic Temperature Control microprocessor technology ensures steady output at the set point temperature even if flow rates vary up or down. Tankless electric water heaters from other manufacturers don't maintain a steady temperature if the incoming flow varies.
- › **Superior Technical Support** | Stiebel Eltron's toll-free technical support line connects you with knowledgeable staff who can offer sizing recommendations as well as help with troubleshooting and technical questions.
- › **Simple Design of Plumbing System** | There is no need for a T & P valve, drain or mixing valve. The design of the hot water plumbing system is very simple and straightforward due to the advances introduced with the DHC-E / Tempra®.
- › **Sleek Design Fits in Anywhere** | Due to its compact dimensions and attractive housing the DHC-E / Tempra® can be left unconcealed in many applications.
- › **Seismic Proof Construction** | DHC-E / Tempra® is not subject to seismic code. There is no need for preventative construction, as required with bulky water storage heating systems.
- › **No Venting Required** | The units are electric and require no venting. This allows for more flexibility in the positioning of the units.
- › **Superior Engineering in Every Way** | DHC-E / Tempra® models are completely silent in operation. In addition, their exclusive design prevents failure from dry-firing

## Constant Temperature Output

Stiebel Eltron electronically-controlled DHC-E and Tempra® models have our exclusive Electronic Temperature Control. Tankless electric water heaters from other manufacturers don't maintain a steady temperature if the flow varies. But Stiebel Eltron Electronic Temperature Control compensates for fluctuations in the flow rate and the incoming water temperature and maintains a constant water temperature output. Our smart microprocessor technology continually monitors information from the flow sensor and two temperature sensors and micro-adjusts the heating elements. All Stiebel Eltron electronically-controlled models ensure steady output at the set point temperature even if flow rates vary. They deliver consistent comfort – every time – all the time.

**Variable Flow**  
**Steady Temperature**



**DHC-E / Tempra® Tankless Electric Water Heaters** deliver instant hot water, and can eliminate wasted time waiting for hot water, while preserving precious water resources, and saving energy.



Due to our continuous process of engineering and technological advancement, specifications may change without notice.



### Engineering & Manufacturing Excellence Since 1924

**Take The Cover Off** | We have done our homework for 90 years. As an international leader in the tankless electric water heating industry, Stiebel Eltron is proud to have pioneered this tankless water heating technology. Our German engineering and manufacturing tradition of excellence means that you can depend on the performance of all our products for many years to come.

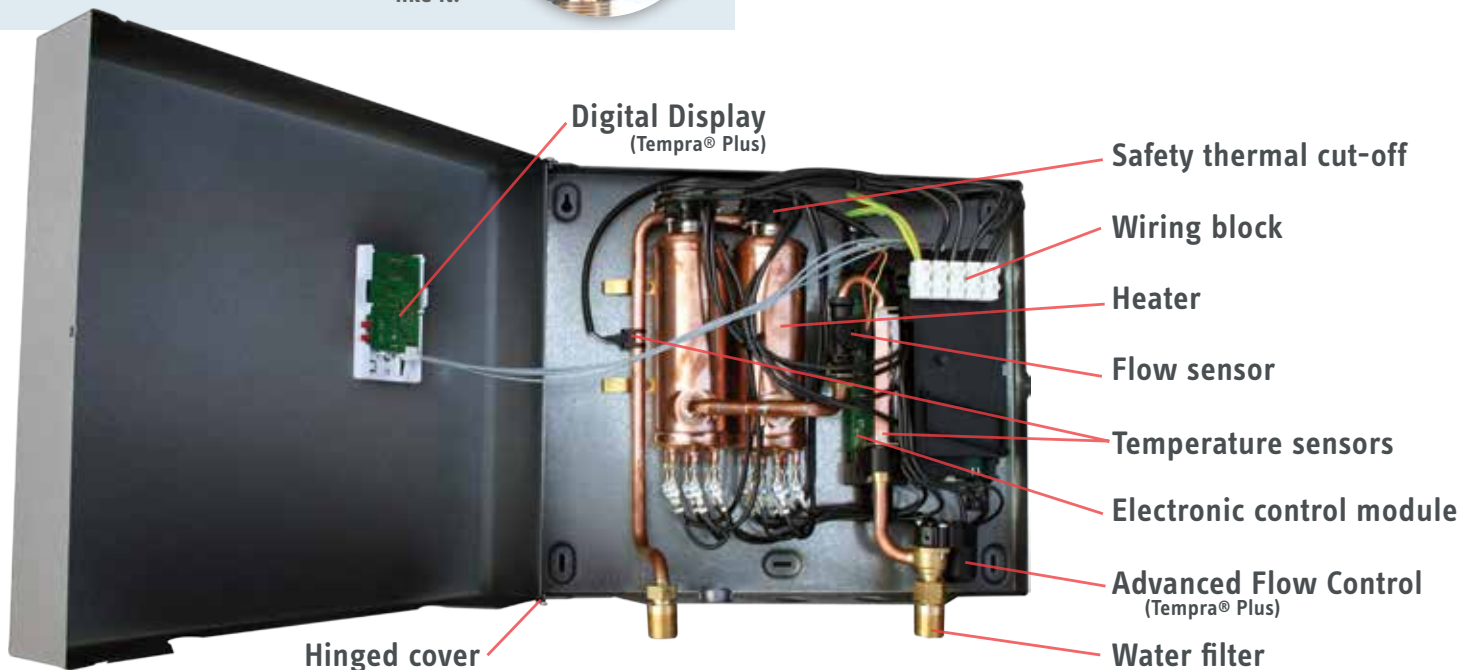
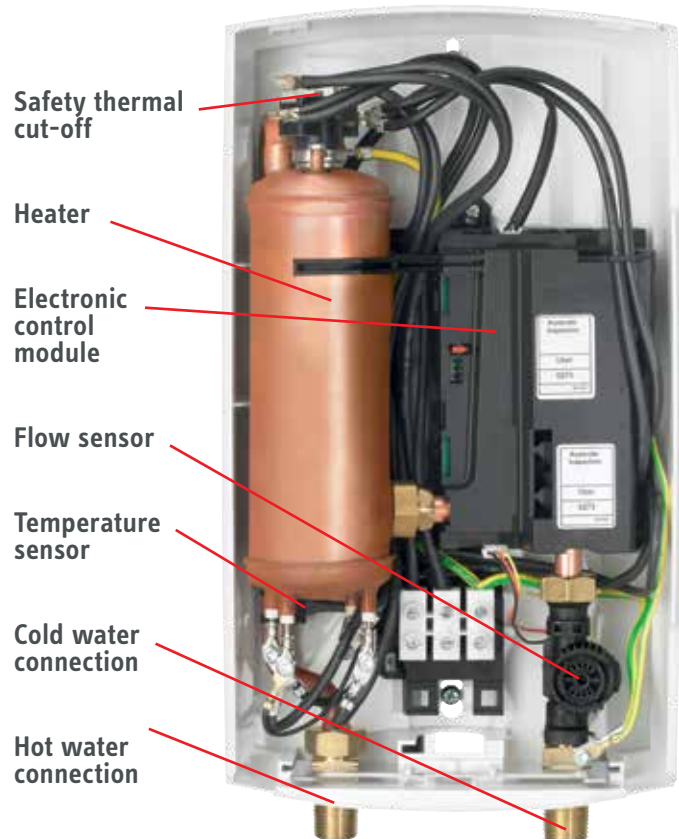
#### Tempra Plus Features Advanced Flow Control™

Tempra® Advanced Flow Control™ is exclusive to the Tempra® Plus and ensures a constant temperature output no matter how great the demand is for hot water. Tempra Advanced Flow Control™ was invented by Stiebel Eltron. No other manufacturer of tankless electric water heaters has anything like it. If the demand is temporarily greater than the unit can handle, Tempra Advanced Flow Control™ reduces the flow of water slightly to maintain delivery of hot water at the set point.

The Advanced Flow Control™ module in Tempra® Plus was invented by Stiebel Eltron. No other manufacturer of tankless electric has anything like it.



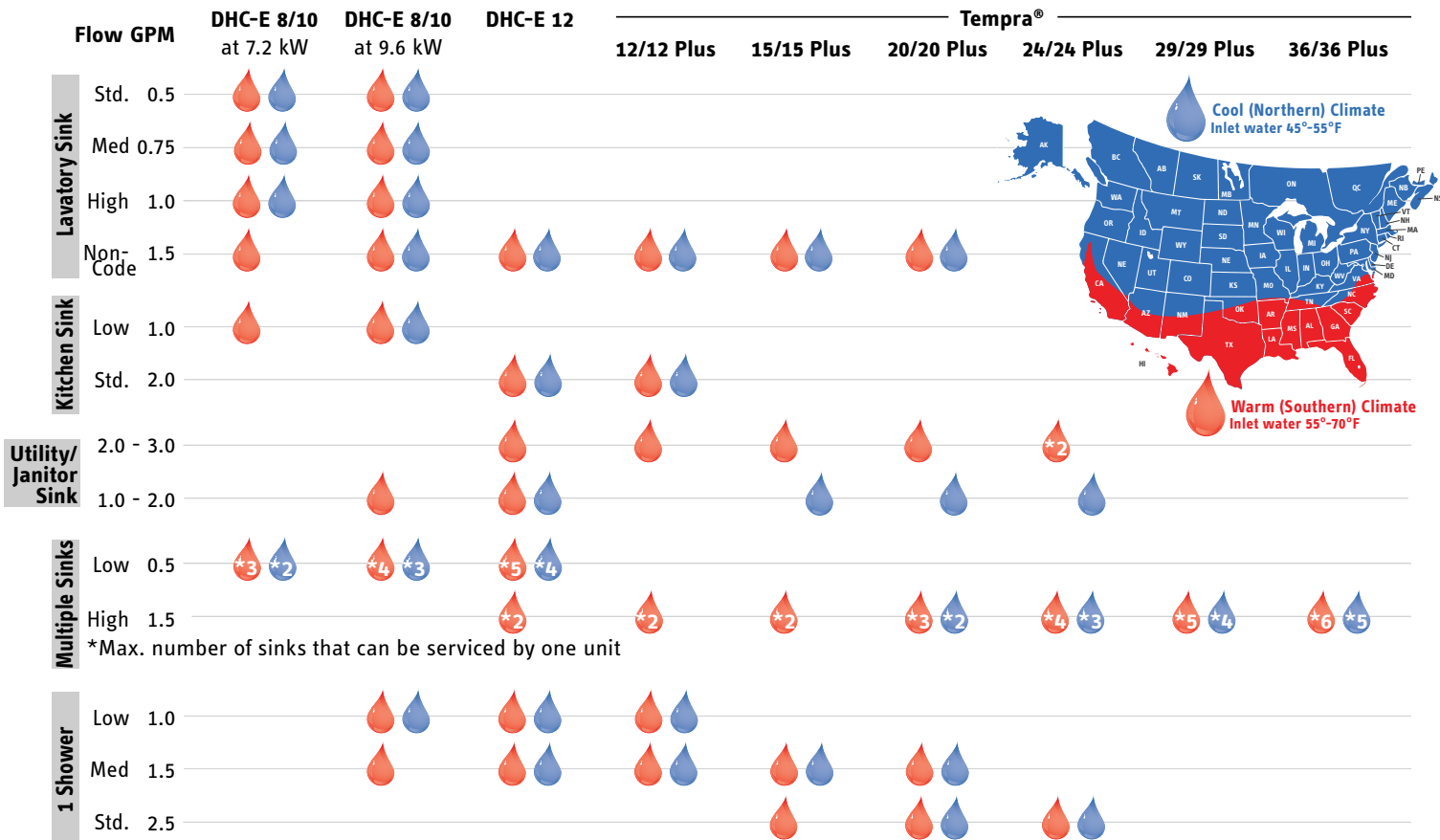
DHC-E 8/10, DHC-E 12



Tempra® 15, 20 or 24 Plus shown. Tempra® 12 has one heating element, Tempra® 29 & 36 have three heating elements.

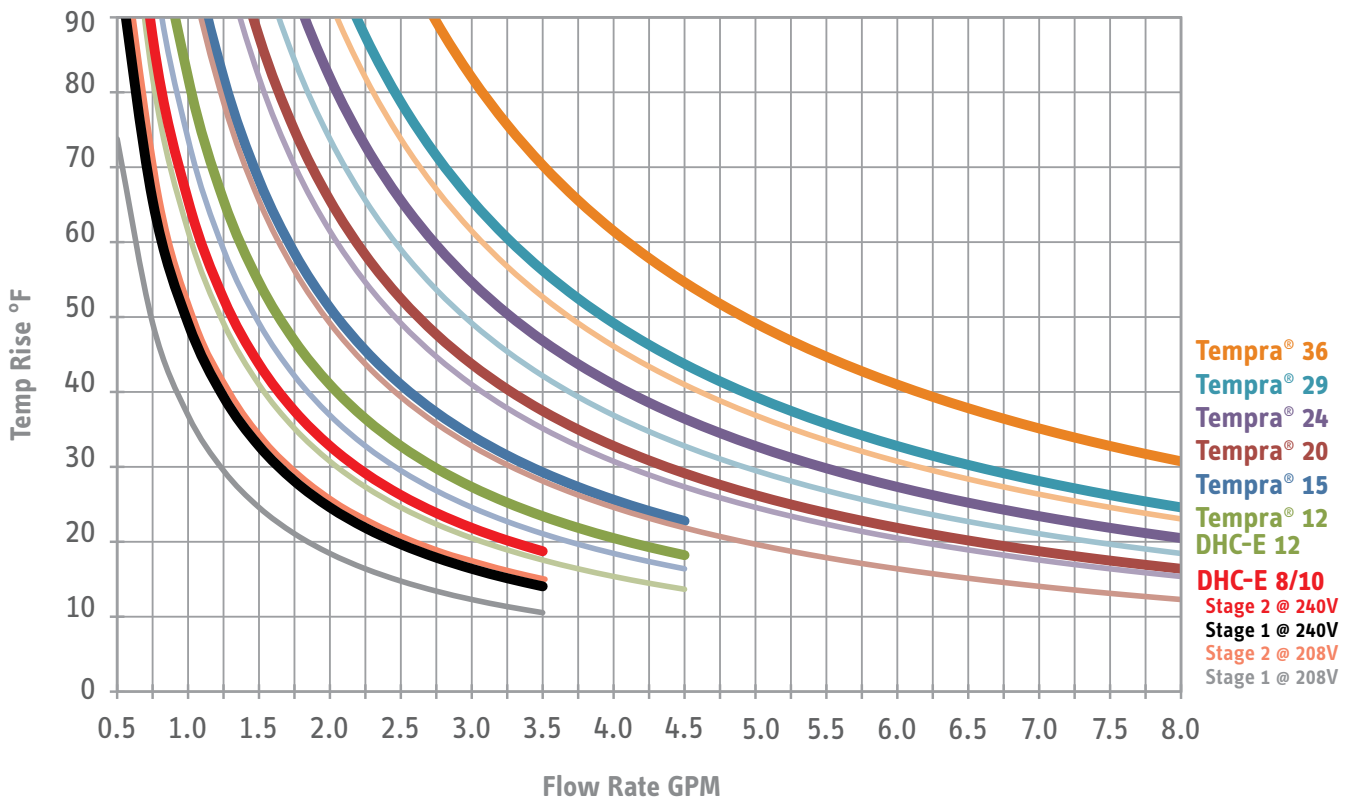
# The Right Size for the Application

## Tankless Electric Water Heater Sizing Guide



These recommendations are for units installed with 240 V service. Increase one model size if unit will be installed with 208 V service.

## Temperature Rise vs. Flow Rate at 240 V and 208 V

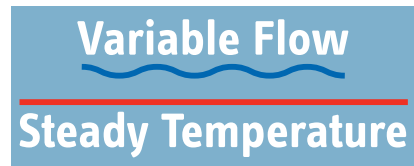


# DHC-E / Tempra®

## Tankless Electric Water Heaters

| Model  | Item Number | DHC-E 8/10* 224201   |            | DHC-E 12 230628 |      |
|--|-------------|--|------------|-----------------|------|
| Phase  |             | single 50/60 Hz  |            | single 50/60 Hz |      |
| Voltage  |             | 240 V or 208 V   |            | 240 V or 208 V  |      |
| Wattage  |             | 7.2/9.6 kW   | 5.4/7.2 kW | 12 kW           | 9 kW |
| Amperage   |             | 30/40 A  | 26/35 A    | 50 A            | 44 A |
| Min. recommended circuit breaker <sup>1</sup> (DP)     |             | 30/40 A  | 30/35 A    | 50 A            | 50 A |
| Min. recommended wire size <sup>2</sup> (copper)       |             | 8 AWG  |            | 6 AWG           |      |
| Maximum temperature increase above ambient water temp. | @ 0.75 GPM  | 66/87  | 49/66      | 92              | 82   |
|  | @ 1.00 GPM  | 49/66  | 37/49      | 82              | 61   |
|  | @ 1.50 GPM  | 33/44  | 25/33      | 54              | 41   |
|  | @ 2.25 GPM  | -  | -          | 36              | 27   |
|  | @ 3.00 GPM  | -  | -          | 27              | 20   |
| Min. water flow to activate unit                       |             | 0.264 GPM / 1.0 l/min  |            |                 |      |
| Max. inlet water temperature                           |             | 131°F / 55°C   |            |                 |      |
| Weight   |             | 5.9 lb / 2.7 kg  |            |                 |      |
| Nominal water volume                                   |             | 0.13 gal / 0.5 l   |            |                 |      |
| Dimensions   |             | WIDTH 7 <sup>3</sup> / <sub>8</sub> " / 20.0 cm x HEIGHT 14 <sup>3</sup> / <sub>16</sub> " / 36.0 cm x DEPTH 4 <sup>1</sup> / <sub>8</sub> " / 11.0 cm |            |                 |      |
| Working pressure                                       |             | 150 PSI / 10 BAR   |            |                 |      |
| Tested to pressure                                     |             | 300 PSI / 20 BAR   |            |                 |      |
| Water connections                                      |             | 1/2" NPT   |            |                 |      |

**Constant Temperature Output** | All Stiebel Eltron electronically-controlled models have our exclusive Electronic Temperature Control. This smart microprocessor technology ensures steady output at the set point temperature even if flow rates vary.



Tankless electric water heaters from other manufacturers don't maintain a steady temperature if the flow varies. Stiebel Eltron electronically-controlled models always deliver steady temperature.



Conforms to ANSI/UL Std. 499  
Certified to CAN/CSA E335-1 & E335-2-35



Tested and certified by WQA against NSF/ANSI 372 for lead free compliance.



\*DHC-E 8/10 is a single unit that is switchable at installation via jumper for output at 7.2 kW (Stage 1) or 9.6 kW (Stage 2).

| Model  | Item Number | Tempra® 12 223420  |      | Tempra® 15 223421            |          | Tempra® 20 223422            |          | Tempra® 24 <sup>3</sup> 223424 |          | Tempra® 29 <sup>3</sup> 232885 |          | Tempra® 36 <sup>4</sup> 232886 |          |
|--|-------------|--|------|------------------------------|----------|------------------------------|----------|--------------------------------|----------|--------------------------------|----------|--------------------------------|----------|
|  |             | 12 Plus 224196   |      | 15 Plus 224197               |          | 20 Plus 224198               |          | 24 Plus <sup>3</sup> 224199    |          | 29 Plus <sup>3</sup> 223245    |          | 36 Plus <sup>4</sup> 223426    |          |
| Phase  |             | single 50/60 Hz  |      | single <sup>5</sup> 50/60 Hz |          | single <sup>5</sup> 50/60 Hz |          | single <sup>5</sup> 50/60 Hz   |          | single <sup>5</sup> 50/60 Hz   |          | single <sup>5</sup> 50/60 Hz   |          |
| Voltage  |             | 240 V or 208 V   |      | 240 V or 208 V               |          | 240 V or 208 V               |          | 240 V or 208 V                 |          | 240 V or 208 V                 |          | 240 V or 208 V                 |          |
| Wattage  |             | 12 kW  | 9 kW | 14.4 kW                      | 10.8 kW  | 19.2 kW                      | 14.4 kW  | 24 kW                          | 18 kW    | 28.8 kW                        | 21.6 kW  | 36 kW                          | 27 kW    |
| Amperage draw  |             | 50 A   | 44 A | 2 x 30 A                     | 2 x 26 A | 2 x 40 A                     | 2 x 35 A | 2 x 50 A                       | 2 x 44 A | 3 x 40 A                       | 3 x 35 A | 3 x 50 A                       | 3 x 44 A |
| Number & min. recommended size of circuit breakers <sup>1</sup> (DP) |             | 1 x 50 A   |      | 2 x 30 A                     |          | 2 x 40 A                     |          | 2 x 50 A                       |          | 3 x 40 A                       |          | 3 x 50 A                       |          |
| Number of runs & min. recommended wire size <sup>2</sup> (copper)    |             | 1 x 6/2 AWG  |      | 2 x 10/2 AWG                 |          | 2 x 8/2 AWG                  |          | 2 x 6/2 AWG                    |          | 3 x 8/2 AWG                    |          | 3 x 6/2 AWG                    |          |
| Maximum temperature increase above ambient water temp.               | @ 1.50 GPM  | 54°F   | 41°F | 65°F                         | 49°F     | 88°F                         | 66°F     | 92°F                           | 82°F     | 92°F                           | 92°F     | 92°F                           | 92°F     |
|  | @ 2.25 GPM  | 36°F   | 27°F | 43°F                         | 37°F     | 58°F                         | 44°F     | 73°F                           | 54°F     | 87°F                           | 66°F     | 92°F                           | 82°F     |
|  | @ 3.00 GPM  | 27°F   | 20°F | 33°F                         | 25°F     | 44°F                         | 33°F     | 54°F                           | 41°F     | 66°F                           | 49°F     | 82°F                           | 61°F     |
|  | @ 4.50 GPM  | -  | -    | -                            | -        | 29°F                         | 22°F     | 37°F                           | 27°F     | 44°F                           | 33°F     | 55°F                           | 41°F     |
| Min. water flow to activate unit                                     |             | 0.37 GPM / 1.4 l/min   |      | 0.50 GPM / 1.9 l/min         |          | 0.50 GPM / 1.9 l/min         |          | 0.50 GPM / 1.9 l/min           |          | 0.77 GPM / 2.9 l/min           |          | 0.77 GPM / 2.9 l/min           |          |
| Weight   |             | 13.5 lb / 6.1 kg   |      | 16.1 lb / 7.3 kg             |          | 16.1 lb / 7.3 kg             |          | 16.1 lb / 7.3 kg               |          | 19.0 lb / 8.6 kg               |          | 19.0 lb / 8.6 kg               |          |
| Nominal water volume   |             | 0.13 gal / 0.5 l   |      | 0.26 gal / 1.0 l             |          | 0.26 gal / 1.0 l             |          | 0.26 gal / 1.0 l               |          | 0.39 gal / 1.5 l               |          | 0.39 gal / 1.5 l               |          |
| Max. inlet water temperature   |             | 131°F / 55°C   |      |                              |          |                              |          |                                |          |                                |          |                                |          |
| Dimensions   |             | WIDTH 16 <sup>3</sup> / <sub>8</sub> " / 42.0 cm x HEIGHT 14 <sup>1</sup> / <sub>2</sub> " / 36.9 cm x DEPTH 4 <sup>5</sup> / <sub>8</sub> " / 11.7 cm |      |                              |          |                              |          |                                |          |                                |          |                                |          |
| Working pressure   |             | 150 PSI / 10 BAR   |      |                              |          |                              |          |                                |          |                                |          |                                |          |
| Tested to pressure   |             | 300 PSI / 20 BAR   |      |                              |          |                              |          |                                |          |                                |          |                                |          |
| Water connections  |             | 3/4" NPT   |      |                              |          |                              |          |                                |          |                                |          |                                |          |

<sup>1</sup> This is our recommendation for overcurrent protection sized at 100% of load. Check local codes for compliance if necessary. Tankless water heaters are considered a non-continuous load.

<sup>2</sup> Copper must be used. Conductors should be sized to maintain a voltage drop of less than 3% under load.

<sup>3</sup> Requires a 200A main service. <sup>4</sup> Requires a 300A main service.

<sup>5</sup> 29/29 Plus & 36/36 Plus may be wired for balanced 3-phase 208V. 15/15 Plus, 20/20 Plus, 24/24 Plus may be wired for unbalanced 3-phase 208 V.

# STIEBEL ELTRON

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