# **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®**













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

- > 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

Conforms to ANSI/UL Std. 499

Certified to CAN/CSA E335-1 & E335-2-35

www.stiebel-eltron-usa.com

### DHC-E / Tempra® Tankless Electric Water Heaters



# DHC-E / Tempra<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> can supply up to 140°F (60°C) water when health codes call for it. At the same time, when lower, nonscalding temperatures are needed, the advanced electronics of the DHC-E / Tempra<sup>®</sup> 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.

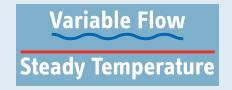


### These are the ones that work.

- 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<sup>®</sup>.
- Sleek Design Fits in Anywhere | Due to its compact dimensions and attractive housing the DHC-E / Tempra<sup>®</sup> can be left unconcealed in many applications.
- Seismic Proof Construction | DHC-E / Tempra<sup>®</sup> 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<sup>®</sup> models are completely silent in operation. In addition, their exclusive design prevents failure from dry-firing

#### **Constant Temperature Output**

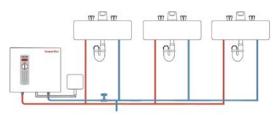
Stiebel Eltron electronicallycontrolled DHC-E and Tempra® models have our exclusive Electronic Temperature Control. Tankless electric water heaters



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 consistant comfort – every time – all the time.







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State 1

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.

# STIEBEL ELTRON

### Simply the Best

DHC-E 8/10. DHC-E 12

## Engineering & Manufacturing Excellence Since 1924

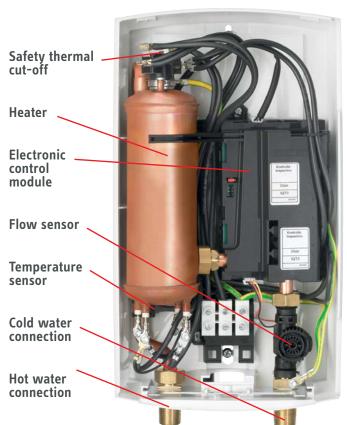
**Take The Cover Off** | We have done our homework for 90 years. As an international leader in the tankless electric water heating industry, Stiebel Eltron is proud to have pioneered this tankless water heating technology. Our German engineering and manufacturing tradition of excellence means that you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

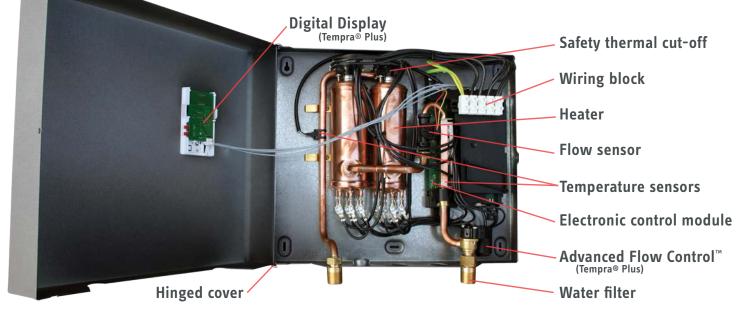
#### **Tempra Plus Features Advanced Flow Control**<sup>™</sup>

Tempra<sup>®</sup> Advanced Flow Control<sup>™</sup> is exclusive to the Tempra<sup>®</sup> Plus and ensures a constant temperature output no matter how great the demand is for hot water. Tempra Advanced Flow Control<sup>™</sup> 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<sup>™</sup> reduces the flow of water slightly to maintain delivery of hot water at the set point.

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

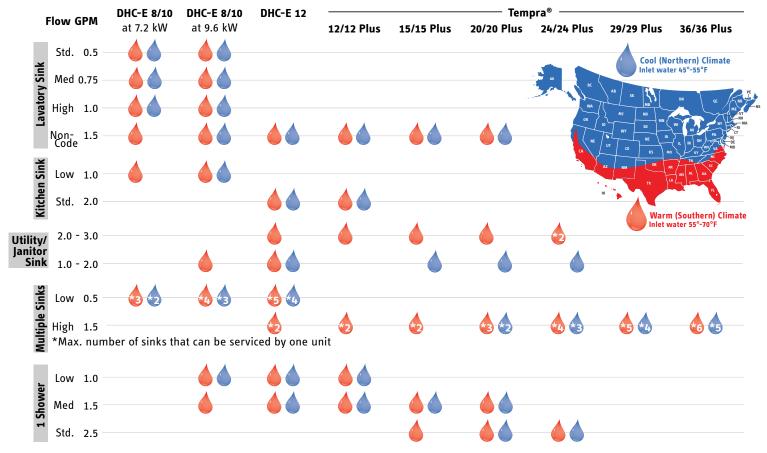






Tempra<sup>®</sup> 15, 20 or 24 Plus shown. Tempra<sup>®</sup> 12 has one heating element, Tempra<sup>®</sup> 29 & 36 have three heating elements.

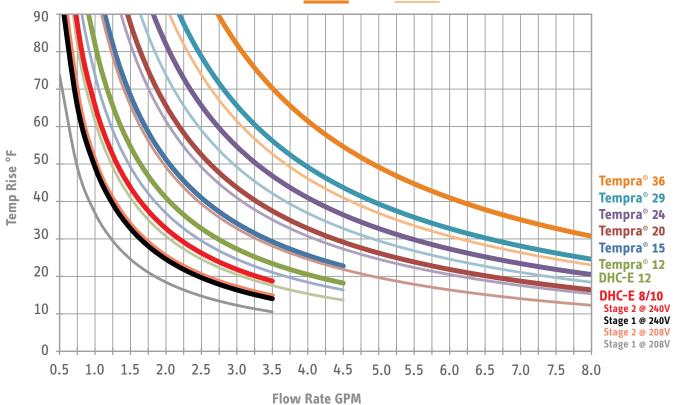
### The Right Size for the Application



#### 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

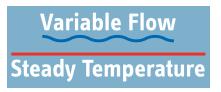


### DHC-E / Tempra® Tankless Electric Water Heaters

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 si	8 AWG		6 AWG					
Maximum	@ 0.75 GPM	66/87	49/66	92	82			
temperature increase	@ 1.00 GPM	49/66	37/49	82	61			
above	@ 1.50 GPM	33/44	25/33	54	41			
ambient	@ 2.25 GPM	-	-	36	27			
water temp.	@ 3.00 GPM	-	-	27	20			
Min. water flow to activate	0.264 gpm / 1.0 l/min							
Max. inlet water temperate	131°F / 55°C							
Weight	5.9 lb / 2.7 kg							
Nominal water volume	0.13 gal / 0.5 l							
WIDTH 71/8" / 20.0 cm x HEIGHT 14 <sup>3</sup> /16" / 36.0 cm x DEPTH 41/8" / 11.0								
Working pressure	150 PSI / 10 BAR							
Tested to pressure	300 PSI / 20 BAR							
Water connections	1⁄2″ NPT							

**Constant Temperature Output** | All Stiebel Eltron electronicallycontrolled models have our exclusive Electronic Temperature

Control. This smart microprocessor technology ensures steady output at the set point temperature even if flow rates vary.



ISO 9001

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.





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\*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).

<b>Model</b> Item Number		Tempra <sup>®</sup> 12 223420 12 Plus 224196		Tempra <sup>®</sup> 15 223421 15 Plus 224197		Tempra <sup>®</sup> 20 223422 20 Plus 224198		Tempra <sup>®</sup> 24 <sup>3</sup> 223424 24 Plus <sup>3</sup> 224199		Tempra <sup>®</sup> 294 232885 29 Plus4 223425		Tempra <sup>®</sup> 36⁵ 232886 36 Plus⁵ 223426		
Phase		single 50/60 Hz		single⁵ 50/60 Hz		single⁰ 50/60 Hz		single⁰ 50/60 Hz		single⁵ 50/60 Hz		single⁵ 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. rec size of circuit breal		1 x 50 A		2 x 30 A		2 x 40 A	2 x 35 A	2 x 50 A		3 x 40 A	x 40 A 3 x 35 A		3 x 50 A	
	Number of runs & min. 1 x 6/2 AWG   recommended wire size <sup>2</sup> (copper)		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	@ 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	
temperature increase above	@ 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	
ambient	@ 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	
water temp	@ 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		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	eight 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 volu	nal 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 te	ter temperature 131°F / 55°C													
Dimensions		WIDTH 16 <sup>5</sup> /8″/42.0 cm x HEIGHT 14 <sup>1</sup> /2″/36.9 cm x DEPTH 4 <sup>5</sup> /8″/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.



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