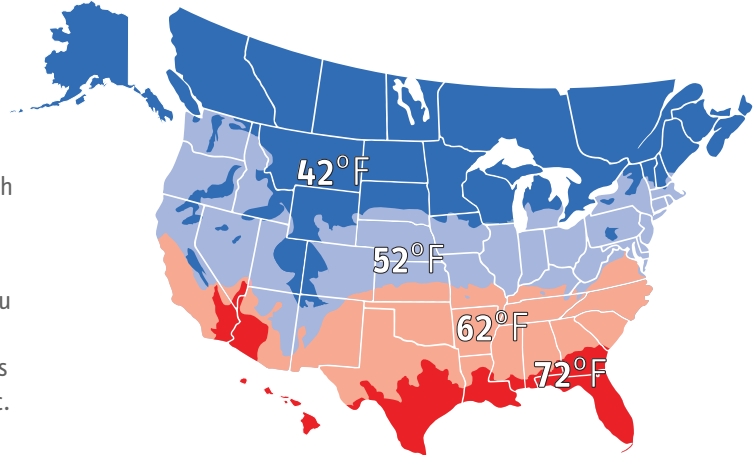


### Tempra® Sizing Guide and Technical Data

#### Tempra® Trend & Plus Tankless Electric Water Heater Sizing Guide

- 1 Use the map to find the approximate ground water temperature where you live.
- 2 Check the column on the table with your ground water temperature to see how many fixtures can be supplied at the same time with hot water.
- 3 Use your actual maximum flow rate to fine-tune these recommendations. If you know you have 1.5 GPM low flow showerheads, for instance, then 3 GPM would supply 2 showers at the same time, or 1 shower plus 1 sink, etc.



	42°F	52°F	62°F	72°F
<b>Tempra® 12 Trend &amp; Plus</b> <small>DRAWS 50 A - Requires minimum 100 A electric service</small>				
MAX. FLOW RATE FROM UNIT	1.3 GPM	1.6 GPM	1.9 GPM	2.5 GPM
SIMULTANEOUS FIXTURES				
<b>Tempra® 15 Trend &amp; Plus</b> <small>DRAWS 60 A - Requires minimum 100 A electric service</small>				
MAX. FLOW RATE FROM UNIT	1.6 GPM	1.9 GPM	2.4 GPM	3.1 GPM
SIMULTANEOUS FIXTURES				
<b>Tempra® 20 Trend &amp; Plus</b> <small>DRAWS 80 A - Requires minimum 125 A electric service</small>				
MAX. FLOW RATE FROM UNIT	2.1 GPM	2.5 GPM	3.1 GPM	4 GPM
SIMULTANEOUS FIXTURES				
<b>Tempra® 24 Trend &amp; Plus</b> <small>DRAWS 100 A - Requires minimum 150 A electric service</small>				
MAX. FLOW RATE FROM UNIT	2.6 GPM	3.1 GPM	3.8 GPM	5 GPM
SIMULTANEOUS FIXTURES				
<b>Tempra® 29 Trend &amp; Plus</b> <small>DRAWS 120 A - Requires minimum 200 A electric service</small>				
MAX. FLOW RATE FROM UNIT	3.1 GPM	3.7 GPM	4.6 GPM	6 GPM
SIMULTANEOUS FIXTURES				
<b>Tempra® 36 Trend &amp; Plus</b> <small>DRAWS 150 A - Requires minimum 300 A electric service</small>				
MAX. FLOW RATE FROM UNIT	3.9 GPM	4.6 GPM	5.7 GPM	7.5 GPM
SIMULTANEOUS FIXTURES				

MAX. FLOW RATE CALCULATED FOR 105°F WATER

FIXTURE FLOW RATES (AND TYPICAL RANGES)	<b>SHOWER</b> <b>1.5 GPM</b> <small>(RANGE 1.5-2.5)</small>	<b>KITCHEN SINK</b> <b>1.5 GPM</b> <small>(RANGE 1.0-2.2)</small>	<b>BATHROOM SINK</b> <b>0.5 GPM</b> <small>(RANGE 0.5-1.0)</small>
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Technical data and temp. rise charts on next page. ↓

### Tempra® Sizing Guide and Technical Data

#### Technical Data



Certified to ANSI/UL Std. 499  
Conforms to CAN/CSA Std. C22.2 No.88



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



Tempra® Model Item Number	12 Trend <sup>2</sup> 239213 12 Plus <sup>2</sup> 239219	15 Trend <sup>2</sup> 239214 15 Plus <sup>2</sup> 239220	20 Trend <sup>2</sup> 239215 20 Plus <sup>2</sup> 239221	24 Trend <sup>3</sup> 239216 24 Plus <sup>3</sup> 239222	29 Trend <sup>4</sup> 239217 29 Plus <sup>4</sup> 239223	36 Trend <sup>5</sup> 239218 36 Plus <sup>5</sup> 239225							
<b>Phase</b>	single 50/60 Hz		single <sup>6</sup> 50/60 Hz		single <sup>6</sup> 50/60 Hz								
<b>Voltage</b>	240 V or 208 V		240 V or 208 V		240 V or 208 V								
<b>Wattage</b>	12 kW	9 kW	14.4 kW	10.8 kW	19.2 kW	14.4 kW							
<b>Amperage draw</b>	50 A	44 A	2 x 30 A	2 x 26 A	2 x 40 A	2 x 35 A							
<b>Number &amp; min. recommended size of circuit breakers<sup>1</sup> (DP)</b>	1 x 50 A		2 x 30 A		2 x 40 A								
<b>Number of runs &amp; min. recommended wire size<sup>2</sup> (copper)</b>	1 x 6/2 AWG		2 x 10/2 AWG		2 x 8/2 AWG								
<b>Maximum temperature increase above ambient water temp</b>	@ 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	
	@ 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
<b>Min. water flow to activate unit</b>	0.37 GPM / 1.4 l/min		0.50 GPM / 1.9 l/min		0.50 GPM / 1.9 l/min								
<b>Weight</b>	13.5 lb / 6.1 kg		16.1 lb / 7.3 kg		16.1 lb / 7.3 kg								
<b>Nominal water volume</b>	0.13 gal / 0.5 l		0.26 gal / 1.0 l		0.26 gal / 1.0 l								
<b>Max. inlet water temperature</b>	131°F / 55°C												
<b>Dimensions</b>	WIDTH 16 <sup>5</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												
<b>Working pressure</b>	150 PSI / 10 BAR												
<b>Tested to pressure</b>	300 PSI / 20 BAR												
<b>Water connections</b>	¾" 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.

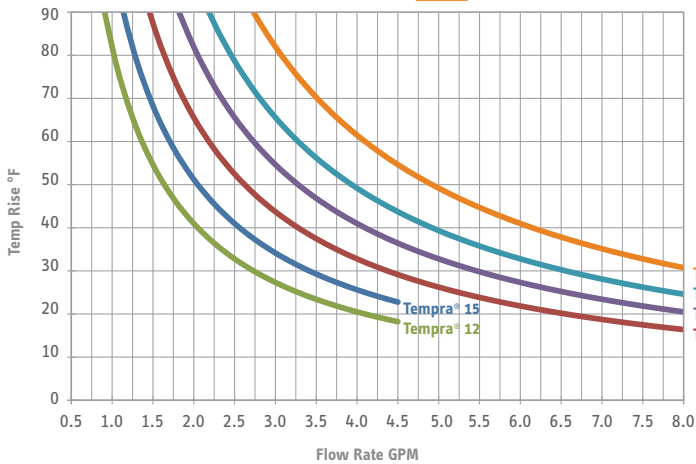
<sup>2</sup> Copper must be used. Conductors should be sized to maintain a voltage drop of less than 3% under load.

<sup>3</sup> Requires minimum 150 A main service. <sup>4</sup> Requires 200 A main service. <sup>5</sup> Requires 300 A main service.

<sup>6</sup> 29 Trend/Plus & 36 Trend/Plus may be wired for balanced 3-phase 208 V.

15 Trend/Plus, 20 Trend/Plus, 24 Trend/Plus may be wired for unbalanced 3-phase 208 V.

Temperature Rise vs. Flow Rate at **240 V**



Temperature Rise vs. Flow Rate at **208 V**

