STIEBEL ELTRON

Tempra® 12 B, Tempra® 15 B, Tempra® 20 B, Tempra® 24 B

Tempra® 12 Plus, Tempra® 15 Plus, Tempra® 20 Plus, Tempra® 24 Plus, Tempra® 29 Plus, Tempra® 36 Plus

English

TANKLESS ELECTRIC WATER HEATERS
INSTALLATION INSTRUCTIONS FOR THE LICENSED PLUMBER AND ELECTRICIAN

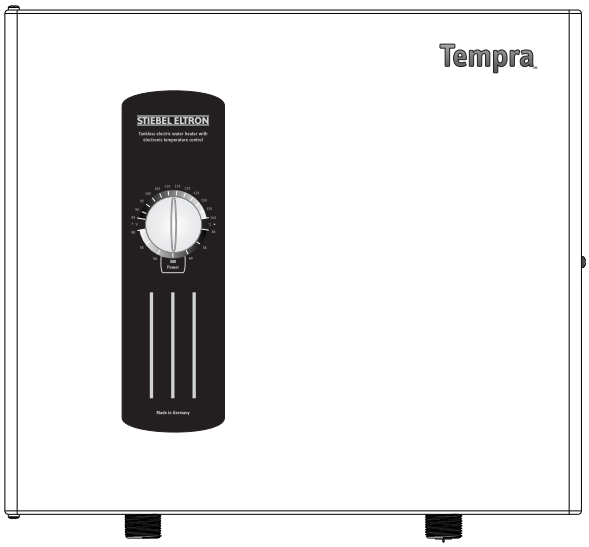
Español

CALENTADORES DE AGUA SIN TANQUE
INSTRUCCIONES PARA LA INSTALACIÓN POR UN PLOMERO Y ELECTRICISTA AUTO-RIZADO

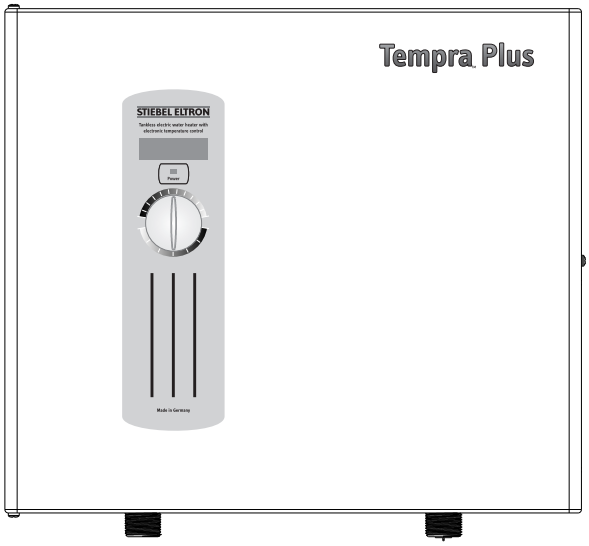
Français

CHAUFFE-EAU INSTANTANÉS ÉLECTRIQUES
INSTRUCTIONS DE MONTAGE POUR PLOMBIERS ET ÉLECTRICIENS AGRÉÉSN

TEMPRA 12 - 24 B



TEMPRA 12 - 36 Plus



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Intertek

The Tempra® / Tempra® Plus series is tested and certified by WQA against NSF/ANSI 372 for "lead free" compliance.

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General information

Read this entire manual. Failure to follow all the guides, instructions and rules could cause personal injury or property damage. Improper installation, adjustment, alteration, service and use of this unit can result in serious injury.

This unit must be installed by a licensed electrician and plumber. The installation must comply with all national, state and local plumbing and electric codes. Proper installation is the responsibility of the installer. Failure to comply with the installation and operating instructions or improper use voids the warranty.

Save these instructions for future reference. Installer should leave these instructions with the consumer.

If you have any questions regarding the installation, use or operation of this water heater, or if you need any additional installation manuals, please call our technical service line at 800-582-8423 (USA and Canada only). If you are calling from outside the USA or Canada, please call USA 413-247-3380 and we will refer you to a qualified Stiebel Eltron service representative in your area.

THIS IS THE SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL INJURY HAZARD. OBEY ALL SAFETY MESSAGES THAT FOLLOW THIS SYMBOL TO AVOID POSSIBLE INJURY OR DEATH.

S1 Safety precautions

PLEASE READ AND FOLLOW THESE INSTRUCTIONS. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOIUS BODILY INJURY OR DEATH.

THE UNIT MUST BE INSTALLED BY A LICENSED ELECTRICIAN AND PLUMBER. THE INSTALLATION MUST COMPLY WITH ALL NATIONAL, STATE AND LOCAL PLUMBING AND ELECTRIC CODES.

SERVICE OF THE UNIT MUST BE PERFORMED BY QUALIFIED SERVICE TECHNICIANS.

BEFORE PROCEEDING WITH ANY INSTALLATION, ADJUSTMENT, ALTERATION, OR SERVICE OF THIS UNIT ALL CIRCUIT BREAKERS AND DISCONNECT SWITCHES SERVICING THE UNIT MUST BE TURNED OFF. FAILURE TO DO SO COULD RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

NEVER REMOVE THE UNIT'S COVER UNLESS THE ELECTRICITY SERVICING THE UNIT IS TURNED OFF. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY OR DEATH.

THE UNIT MUST BE PROPERLY GROUNDED. FAILURE TO ELECTRICALLY GROUND THE PRODUCT COULD RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

DANGER: WATER TEMPERATURES OVER 125°F CAN CAUSE SEVERE BURNS INSTANTLY OR DEATH FROM SCALDING. A HOT WATER SCALDING POTENTIAL EXISTS IF THE THERMOSTAT ON THE UNIT IS SET TOO HIGH. HOUSEHOLDS WITH SMALL CHILDREN, DISABLED OR ELDERLY PERSONS MAY REQUIRE THAT THE THERMOSTAT BE SET AT 120°F OR LOWER TO PREVENT POSSIBLE INJURY FROM HOT WATER.

R1 Register your product

YOU MUST REGISTER THIS PRODUCT WITHIN 90 DAYS OF PURCHASE ON OUR WEB SITE IN ORDER TO ACTIVATE THE STANDARD WARRANTY OR TO BE ELIGIBLE FOR THE EXTENDED WARRANTY. GO TO OUR WEB SITE AT WWW.STIEBEL-ELTRON-USA.COM AND CLICK ON REGISTER YOUR PRODUCT.

Before beginning the registration process, we suggest that you gather the necessary information which will be as follows:

Type, Example: TEMPRA 24 Plus (from the white label that is on the right side of the unit)
Number listed after "Nr."
Place of Purchase
Purchase Date
First & Last Name
Email address
Physical Address
Phone Number

IF YOU HAVE ANY QUESTIONS CONCERNING THE REGISTRATION PROCESS OR WARRANTY OPTIONS, PLEASE CONTACT STIEBEL ELTRON USA DIRECTLY AT (800)-582-8423.

DO NOT TURN THE WATER HEATER TO THE HIGHEST SETTING UNLESS A HIGH TEMP. IS NEED FOR SANITARY PURPOSES, SUCH AS FOR A COMMERCIAL KITCHEN.

IT IS SAFEST FOR THE USER TO KEEP THE TEMPERATURE SETTING LOWER. WE RECOMMEND 110˚F TO 115˚F (43-46˚C) FOR NORMAL HOUSEHOLD USE.

CHOOSING A LOW TEMPERATURE SETTING ALSO INCREASES THE LIVE EXPECTANCY OF THE TEMPRA UNIT DRAMATICALLY.

THE THREE YEAR WARRANTY COVERS ALL PARTS BUT DOES NOT COVER DAMAGE TO THE UNIT DUE TO HARD WATER (FOR THE COMPLETE WARRANTY CHECK INSIDE THESE INSTRUCTIONS). IF YOU KNOW OR SUSPECT THAT THE WATER IN YOUR AREA IS HARD (HAS A HIGH MINERAL CONTENT), IT IS NECESSARY TO INSTALL A WATER SOFTENING DEVICE TO AVOID DAMAGE TO THE TEMRPA UNIT.

1 Table showing temperature increase above ambient water temperature

Maximum temperature increase above ambient water temperatureLegend to figures

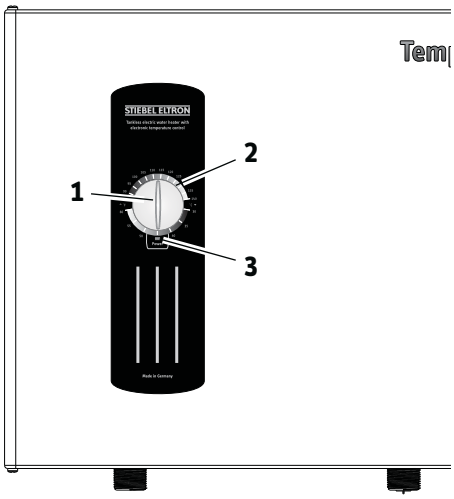
Warm water flow rate			GPM						l/min					
Warm water outlet temperature			105 °F						40 °C					
Cold water inlet temperature			°F						°C					
			39	59	77	95	113	131	4	15	25	35	45	55
TEMPRA 12 B / TEMPRA 12 Plus	@ 208 V	9 kW	0,95	1,36	2,27	6,61			3,58	5,16	8,59	25,00		
	@ 220 - 240 V	12 kW	1,26	1,82	3,03	6,61			4,77	6,87	11,46	25,00		
TEMPRA 15 B / TEMPRA 15 Plus	@ 208 V	10,8 kW	1,14	1,63	2,72	6,61			4,30	6,19	10,31	25,00		
	@ 220 - 240 V	14.4 kW	1,51	2,18	3,63	6,61			5,73	8,25	13,75	25,00		
TEMPRA 20 B / TEMPRA 20 Plus	@ 208 V	14.4 kW	1,51	2,18	3,63	6,61			5,73	8,25	13,75	25,00		
	@ 220 - 240 V	19.2 kW	2,02	2,91	4,84	6,61			7,64	11,00	18,33	25,00		
TEMPRA 24 B / TEMPRA 24 Plus	@ 208 V	18 kW	1,89	2,72	4,54	6,61			7,16	10,31	17,18	25,00		
	@ 220 - 240 V	24 kW	2,52	3,63	6,05	6,61			9,55	13,75	22,91	25,00		
TEMPRA 29 Plus	@ 208 V	21.6 kW	2,27	3,27	5,45	6,61			8,59	12,37	20,62	25,00		
	@ 220 - 240 V	28.8 kW	3,03	4,36	6,61	6,61			11,46	16,50	25,00	25,00		
TEMPRA 36 Plus	@ 208 V	27 kW	2,84	4,09	6,61	6,61			10,74	15,47	25,00	25,00		
	@ 220 - 240 V	36 kW	3,78	5,45	6,61	6,61			14,32	20,62	25,00	25,00		

Warm water outlet temperature			113 °F						45 °C					
Cold water inlet temperature			°F						°C					
			39	59	77	95	113	131	4	15	25	35	45	55
TEMPRA 12 B / TEMPRA 12 Plus	@ 208 V	9 kW	0,83	1,14	1,70	3,41	6,61		3,14	4,30	6,44	12,89	25,00	
	@ 220 - 240 V	12 kW	1,11	1,51	2,27	4,54	6,61		4,19	5,73	8,59	17,18	25,00	
TEMPRA 15 B / TEMPRA 15 Plus	@ 208 V	10,8 kW	1,00	1,36	2,04	4,09	6,61		3,77	5,16	7,73	15,47	25,00	
	@ 220 - 240 V	14.4 kW	1,33	1,82	2,72	5,45	6,61		5,03	6,87	10,31	20,62	25,00	
TEMPRA 20 B / TEMPRA 20 Plus	@ 208 V	14.4 kW	1,33	1,82	2,72	5,45	6,61		5,03	6,87	10,31	20,62	25,00	
	@ 220 - 240 V	19.2 kW	1,77	2,42	3,63	6,61	6,61		6,71	9,16	13,75	25,00	25,00	
TEMPRA 24 B / TEMPRA 24 Plus	@ 208 V	18 kW	1,66	2,27	3,41	6,61	6,61		6,29	8,59	12,89	25,00	25,00	
	@ 220 - 240 V	24 kW	2,21	3,03	4,54	6,61	6,61		8,38	11,46	17,18	25,00	25,00	
TEMPRA 29 Plus	@ 208 V	21.6 kW	1,99	2,72	4,09	6,61	6,61		7,54	10,31	15,47	25,00	25,00	
	@ 220 - 240 V	28.8 kW	2,66	3,63	5,45	6,61	6,61		10,06	13,75	20,62	25,00	25,00	
TEMPRA 36 Plus	@ 208 V	27 kW	2,49	3,41	5,11	6,61	6,61		9,43	12,89	19,33	25,00	25,00	
	@ 220 - 240 V	36 kW	3,32	4,54	6,61	6,61	6,61		12,57	17,18	25,00	25,00	25,00	

Warm water outlet temperature			140 °F						60 °C					
Cold water inlet temperature			°F						°C					
			39	59	77	95	113	131	4	15	25	35	45	55
TEMPRA 12 B / TEMPRA 12 Plus	@ 208 V	9 kW	0.61	0.76	0.97	1.36	2.27	6.61	2.30	2.86	3.68	5.16	8.59	25.00
	@ 220 - 240 V	12 kW	0.81	1.01	1.30	1.82	3.03	6.61	3.07	3.82	4.91	6.87	11.46	25.00
TEMPRA 15 B / TEMPRA 15 Plus	@ 208 V	10,8 kW	0.73	0.91	1.17	1.63	2.72	6.61	2.76	3.44	4.42	6.19	10.31	25.00
	@ 220 - 240 V	14.4 kW	0.97	1.21	1.56	2.18	3.63	6.61	3.68	4.58	5.89	8.25	13.75	25.00
TEMPRA 20 B / TEMPRA 20 Plus	@ 208 V	14.4 kW	0.97	1.21	1.56	2.18	3.63	6.61	3.68	4.58	5.89	8.25	13.75	25.00
	@ 220 - 240 V	19.2 kW	1.30	1.61	2.08	2.91	4.84	6.61	4.91	6.11	7.86	11.00	18.33	25.00
TEMPRA 24 B / TEMPRA 24 Plus	@ 208 V	18 kW	1.22	1.51	1.95	2.72	4.54	6.61	4.60	5.73	7.36	10.31	17.18	25.00
	@ 220 - 240 V	24 kW	1.62	2.02	2.59	3.63	6.05	6.61	6.14	7.64	9.82	13.75	22.91	25.00
TEMPRA 29 Plus	@ 208 V	21.6 kW	1.46	1.82	2.33	3.27	5.45	6.61	5.52	6.87	8.84	12.37	20.62	25.00
	@ 220 - 240 V	28.8 kW	1.95	2.42	3.11	4.36	6.61	6.61	7.36	9.16	11.78	16.50	25.00	25.00
TEMPRA 36 Plus	@ 208 V	27 kW	1.82	2.27	2.92	4.09	6.61	6.61	6.90	8.59	11.05	15.47	25.00	25.00
	@ 220 - 240 V	36 kW	2.43	3.03	3.89	5.45	6.61	6.61	9.21	11.46	14.73	20.62	25.00	25.00

A

TEMPRA 12 - 24 B



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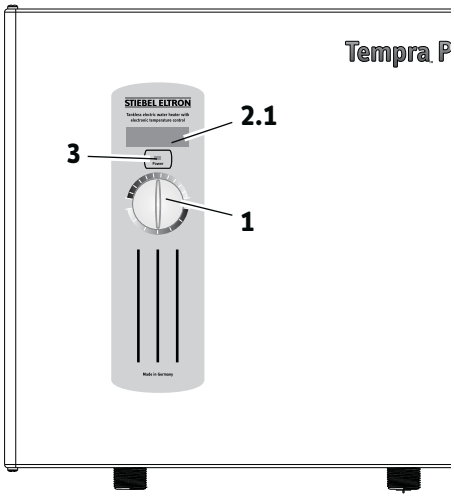

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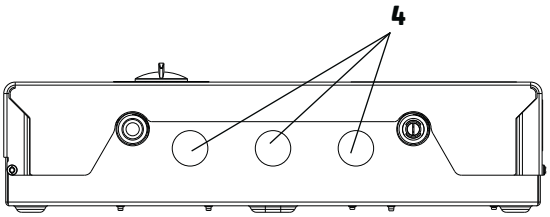

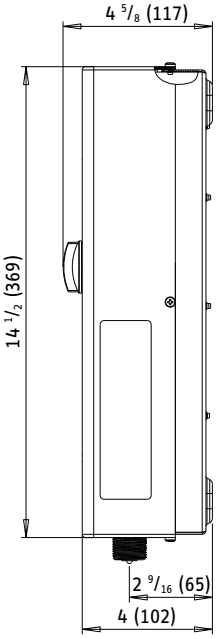

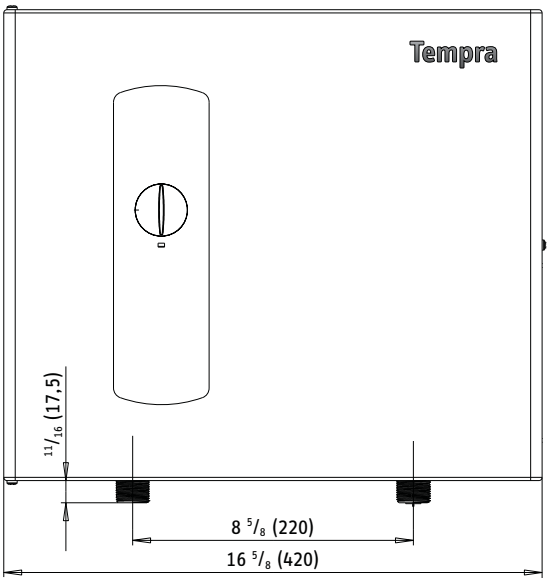

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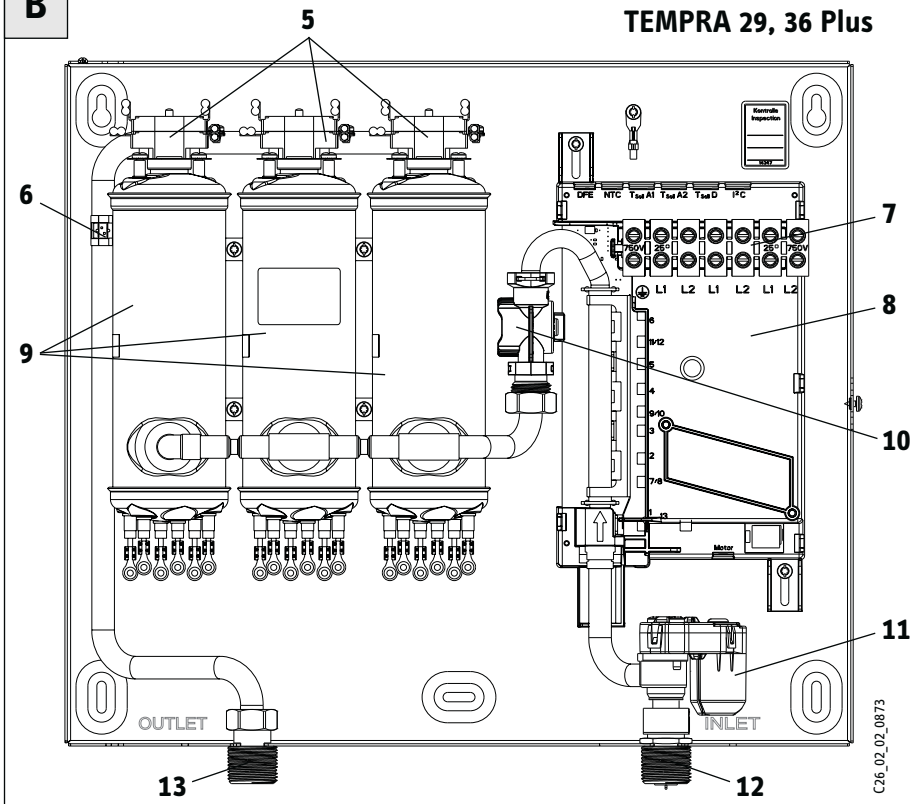

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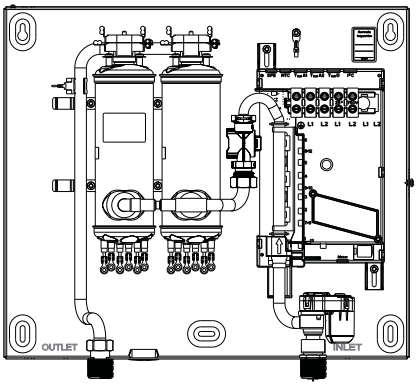
TEMPRA 15, 20, 24 Plus



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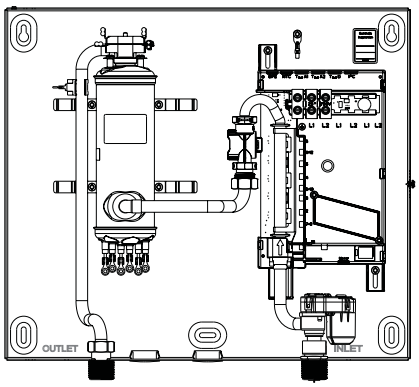
TEMPRA 12 B/TEMPRA 12 Plus



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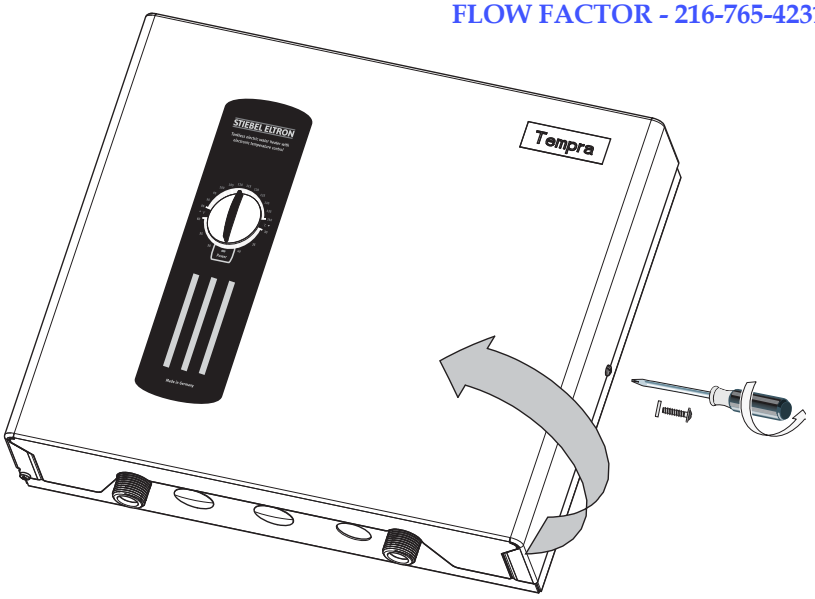

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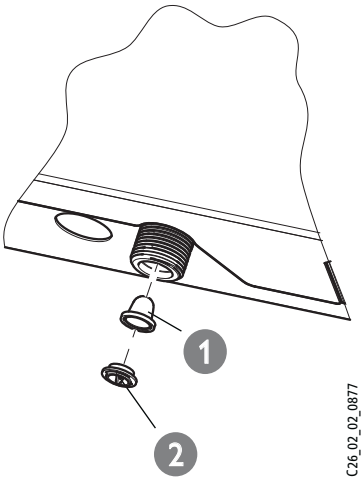

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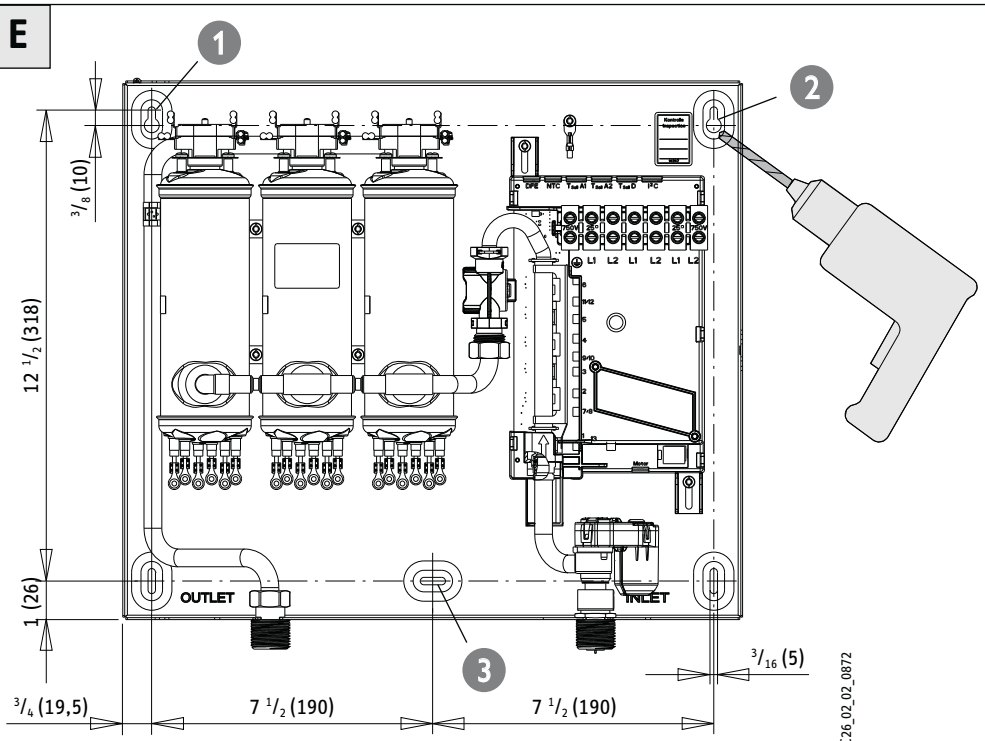

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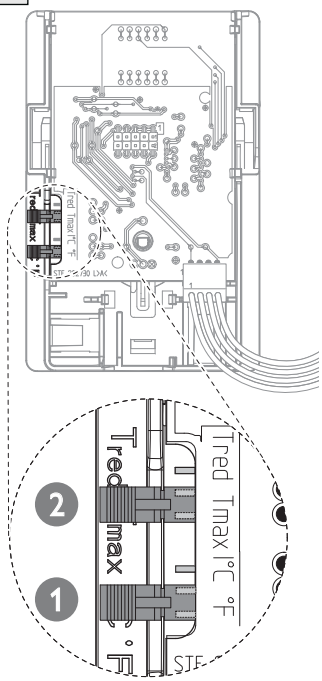

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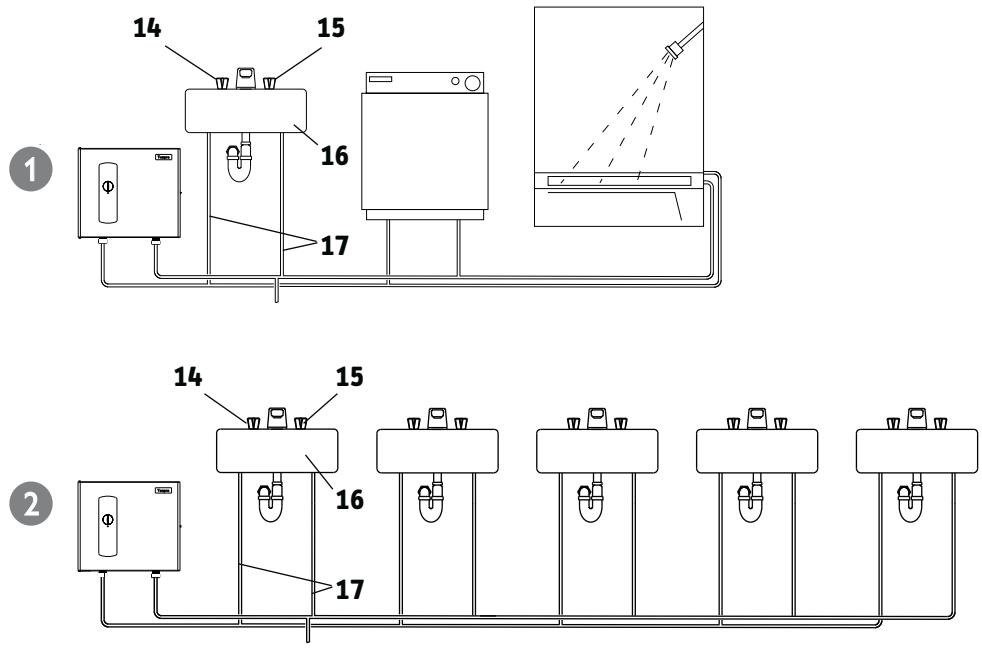

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TEMPRA 29, 36 Plus

TEMPRA 15, 20, 24 B
TEMPRA 15, 20, 24 Plus

TEMPRA 12 B
TEMPRA 12 Plus

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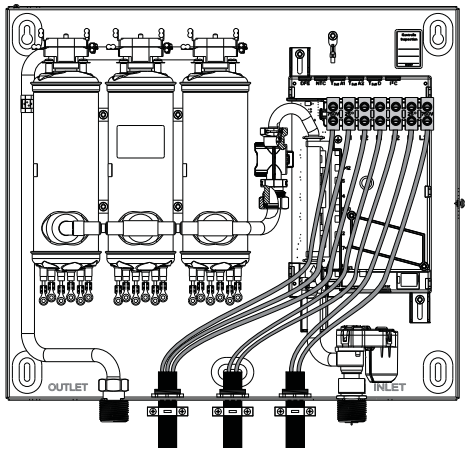

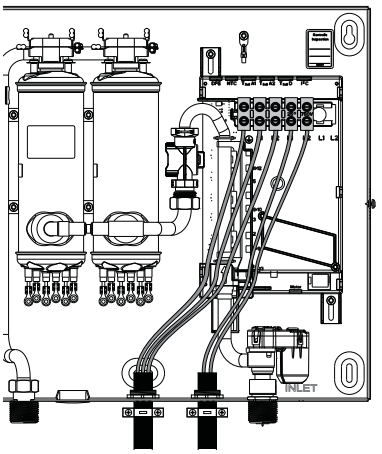

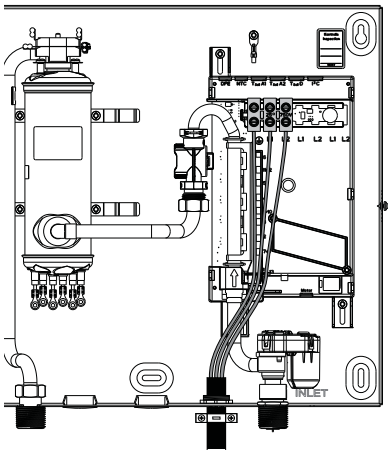

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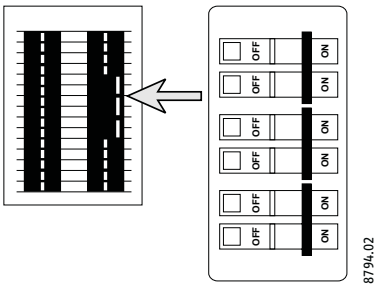

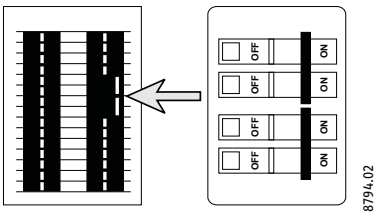

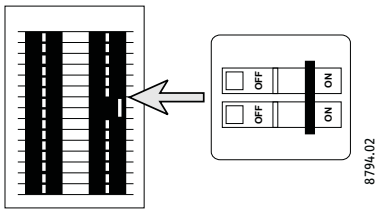

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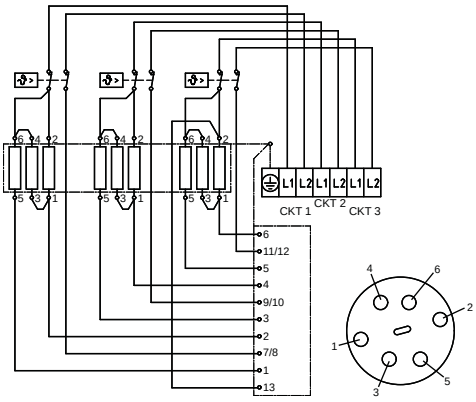
TEMPRA 36 Plus



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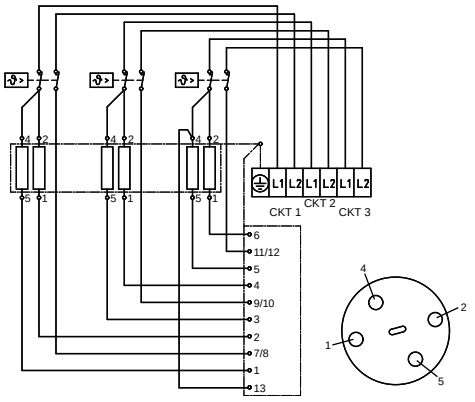
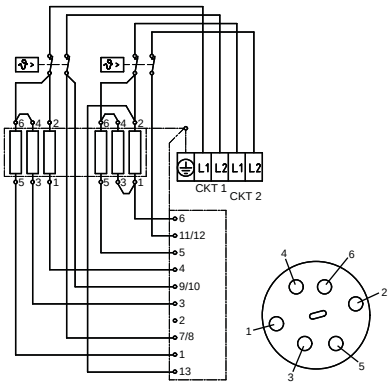
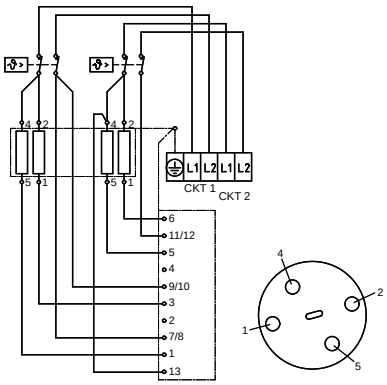




TEMPRA 24 B
TEMPRA 24 Plus



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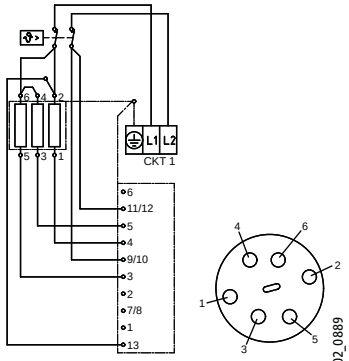
TEMPRA 15/20 Plus



TEMPRA 12 B
TEMPRA 12 Plus

THIS MANUAL MUST BE READ CAREFULLY BEFORE ATTEMPTING TO INSTALL THE TEMPRA WATER HEATER. IF YOU DO NOT FOLLOW THE SAFETY RULES OR THE INSTRUCTIONS OUTLINED IN THIS MANUAL, THE UNIT MAY NOT OPERATE PROPERLY AND IT COULD CAUSE PROPERTY DAMAGE, SERIOUS BODILY INJURY AND/ OR DEATH.

STIEBEL ELTRON, INC. WILL NOT BE LIABLE FOR ANY DAMAGES BECAUSE OF FAILURE TO COMPLY WITH THE INSTALLATION AND OPERATING INSTRUCTIONS OUTLINED IN THIS MANUAL OR BECAUSE OF IMPROPER USE. IMPROPER USE INCLUDES THE USE OF THIS APPLIANCE TO HEAT ANY LIQUID OTHER THAN WATER. FAILURE TO COMPLY WITH THE INSTALLATION AND OPERATING INSTRUCTIONS OR IMPROPER USE VOIDS WARRANTY. NEVER REMOVE THE UNIT'S COVER UNLESS THE ELECTRICITY IS TURNED OFF.

IF YOU HAVE ANY QUESTIONS REGARDING THE INSTALLATION OR OPERATION OF THIS WATER HEATER, OR IF YOU NEED ANY ADDITIONAL INSTALLATION MANUALS, PLEASE CALL OUR TECHNICAL SERVICE LINE ON 800-582-8423 (USA AND CANADA ONLY). IF YOU ARE CALLING FROM OUTSIDE THE U.S. OR CANADA, PLEASE CALL USA 413-247-3380 AND WE WILL REFER YOU TO A QUALIFIED STIEBEL ELTRON SERVICE REPRESENTATIVE IN YOUR AREA.

1 Temperature adjustment knob
2 Temperature scale
2.1 Temperature display
3 "Power" light
4 Knock-outs for wires
5 Safety thermal cut out
6 Outlet temperature sensor
7 Wiring block
8 Electronic control unit
9 Heating system
10 Flow sensor
11 Motor-operated valve
12 Cold water connection
13 Hot water connection
14 Hot valve (left)
15 Cold valve (right)
16 Sink
17 Water supply line for faucet/tap installation

2 General

⚠ **DANGER: WATER TEMPERATURES OVER 125 °F CAN CAUSE SEVERE BURNS INSTANTLY OR DEATH FROM SCALDING. A HOT WATER SCALDING POTENTIAL EXISTS IF THE THERMOSTAT ON THE UNIT IS SET TOO HIGH. HOUSEHOLDS WITH SMALL CHILDREN, DISABLED OR ELDERLY PERSONS MAY REQUIRE THAT THE THERMOSTAT BE SET AT 120 °F OR LOWER TO PREVENT POSSIBLE INJURY FROM HOT WATER.**

The TEMPRA and TEMPRA Plus units are designed to supply hot water for a house, apartment or certain commercial applications. Unlike a conventional storage type water heater the TEMPRA tankless water heater does not store hot water. Instead, water is heated instantaneously as it flows through the unit. The TEMPRA offers greater energy efficiency than storage type water heaters due to the absence of stand-by losses and reduced hot water pipe runs.

The input of heat into the water is controlled electronically. The TEMPRA will deliver any water temperature between 86 °F (30 °C) and 140 °F (60 °C). Please set the desired temperature using the knob on the front cover. The TEMPRA PLUS Temperature adjustment knob can be set to: OFF, 86...140 °F (30...60 °C). The TEMPRA has a °F and a °C scale. The output temperature of the TEMPRA Plus is shown in the digital display in °F or °C units. (°F or °C units can be selected during installation, factory setting: °F). The maximum temperature is electronically limited to 140 °F (60 °C).
Recommended is a setting of 108 °F (42 °C) to 116 °F (47 °C).
The outlet temperature of the TEMPRA Plus can be limited to 109 °F (43 °C).

Tempra B units:
In case the "Power" LED is flashing while the unit operates, the water flow rate exceeds the heating capacity of the unit. Reduce the hot water flow rate in order to let the unit achieve the set point temperature.

Tempra Plus units:
Tempra Plus units have Advanced Flow Control. This technology is designed to reduce water flow to maintain consistent temperature if the unit's heating capacity is exceeded. It does this by using a computer controlled, motorized valve to temporarily reduce water flow until the demand is reduced. This is normal operation and does not necessarily mean the unit is clogged or obstructed.

In case you have questions regarding the way you plan to use the TEMPRA unit, please call our technical service line at 800-582-8423 (USA and Canada). For service outside the U.S. and Canada, please call us at USA 413-247-3380. You can also e-mail us at info@stiebel-eltron-usa.com or fax us at USA 413-247-3369.

The TEMPRA can be used for the following applications.

G 1 **Typical residential installation**

G 2 **Typical commercial installation**

3 Mounting the unit

⚠ **NOTICE: UNIT MUST BE INSTALLED IN A VERTICAL POSITION WITH THE WATER FITTINGS POINTING DOWNWARD.**

WARNING: DO NOT INSTALL UNIT WHERE IT WOULD ROUTINELY BE SPLASHED WITH WATER. ELECTRIC SHOCK MAY RESULT.

CAUTION: HOT WATER OUTLET PIPES LEAVING UNIT CAN BE HOT TO THE TOUCH. INSULATION MUST BE USED FOR HOT WATER PIPES BELOW 36" DUE TO BURN RISK TO CHILDREN.

⚠ **NOTICE: THIS UNIT SHOULD NOT BE INSTALLED IN A LOCATION WHERE IT MAY BE EXPOSED TO FREEZING TEMPERATURES (LESS THAN 36 °F). IF THE UNIT MAY BE SUBJECT TO FREEZING TEMPERATURES ALL WATER MUST BE DRAINED FROM THE UNIT. FAILURE TO COMPLY WITH THIS INSTRUCTION VOIDS ALL WARRANTIES.**

THE UNIT SHOULD BE LOCATED IN AN AREA WHERE WATER LEAKAGE FROM THE UNIT OR CONNECTIONS WILL NOT RESULT IN DAMAGE TO THE AREA ADJACENT TO THE UNIT. IF SUCH A LOCATION CANNOT BE AVOIDED IT IT RECOMMENDED THAT A DRAIN PAN BE INSTALLED UNDER THE UNIT.

1. Install TEMPRA as close as possible to the main hot water draw-off points.
2. Install TEMPRA in a frost free area. If frost might occur, remove unit before freezing temperatures set in.
3. Leave a minimum of 5" of clearance on all sides for servicing.
4. Remove the cover screw with chopper disc and open the cover C.
5. Mount unit securely to wall by putting at least three screws through mounting holes E 1 – 3.
   Screws and plastic wall anchors for mounting on masonry or wood are provided.

4 Water connections

NOTICE: EXCESSIVE HEAT FROM SOLDERING ON COPPER PIPES NEAR THE TEMPRA MAY CAUSE DAMAGE.

THE COLD WATER CONNECTION TO THE UNIT MUST BE DISCONNECTED PERIODICALLY IN ORDER TO CLEAN THE FILTER SCREEN. IT IS REQUIRED TO USE WATER CONNECTIONS THAT ARE EASILY DETACHABLE SUCH AS BRAIDED STEEL FLEX CONNECTORS.

NOTICE: HARD WATER OR WATER WITH A HIGH MINERAL COUNT MAY DAMAGE THE UNIT. DAMAGE TO THE UNIT CAUSED BY SCALE OR A HIGH MINERAL COUNT IS NOT COVERED UNDER THE WARRANTY.

1. All plumbing work must comply with national and applicable state and local plumbing codes.
2. A pressure reducing valve must be installed if the cold water supply pressure exceeds 150 PSI (10 bar).
3. Make certain that the cold water supply line has been flushed to remove any scale and dirt.
4. D Also, the TEMPRA unit has a built in filter screen 1 that should be cleaned from time to time. Clean screen and put the screen and the washer 2 back into their original position.
5. The cold water connection (inlet) is on the right side of the unit, and the hot water connection (outlet) is on the left side of the unit.
6. The cold water connection to the unit must be disconnected periodically in order to access and clean the filter screen. It is required to use water connections that are easily detachable such as braided steel flex connectors.
7. Tankless water heaters such as the TEMPRA are not required to be equipped with a Pressure and Temperature Relief Valve (P&T). If the local inspector will not pass the installation without a P&T, it should be installed on the hot water outlet side of the unit.
8. The TEMPRA on the hot side is designed for connection to copper tubing, PEX tubing or a braided stainless steel hose with a 3/4" NPT female tapered thread.
   The plumbing on the cold water inlet side needs to be such that it can easily be removed to allow access to the inlet filter screen. The easiest way to achieve this is to us a stainless steel braided hose connector.
   If soldering near the unit is necessary, please direct the flame away from the housing of the unit in order to avoid damage.
9. When all plumbing work is completed, check for leaks and take corrective action before proceeding.

5 Electrical connection

WARNING: BEFORE BEGINNING ANY WORK ON THE ELECTRIC INSTALLATION, BE SURE THAT MAIN BREAKER PANEL SWITCHES ARE "OFF" TO AVOID ANY DANGER OF ELECTRIC SHOCK. ALL MOUNTING AND PLUMBING MUST BE COMPLETED BEFORE PROCEEDING WITH ELECTRICAL HOOK-UP. WHERE REQUIRED BY LOCAL, STATE OR NATIONAL ELECTRICAL CODES THE CIRCUITS SHOULD BE EQUIPPED WITH A "GROUND FAULT INTERRUPTER".

THE UNIT MUST BE PROPERLY GROUNDED IN ACCORDANCE WITH STATE AND LOCAL CODES, OR IN ABSENCE OF SUCH CODES, IN ACCORDANCE WITH NATIONAL ELECTRIC CODE OR THE CANADIAN ELECTRIC CODE. FAILURE TO ELECTRICALLY GROUND THE PRODUCT COULD RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

1. All electrical work must comply with national and applicable state and local electrical codes.
2. H The TEMPRA should be connected to properly grounded dedicated branch circuits of proper voltage rating. Ground must be brought to the "Ground" at the circuit breaker panel.

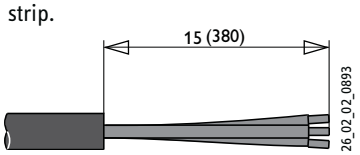
   TEMPRA 12 B/Plus: These units can be connected to a single circuit. Use a supply cable protected by a double pole breaker (see 2).

   The TEMPRAS 15 to 36 must have multiple power sources.

   TEMPRA 15, 20 or **24 B/Plus:** These units require two independant circuits. Use two supply cables protected by two separate double pole breakers (see 2).

   TEMPRA 29 or **36 Plus** These units require three independant circuits. Use three supply cables protected by three separate double pole breakers (see 2).

   Please refer to the technical data table for the correct wire and circuit breaker size. In all cases, make sure that the unit is properly grounded.
3. Cut the electrical connection cable to length and strip.



4. The wire must be fed through the knock-outs located between the hot and cold water connections A, H 1. The "live" wires must be connected to the slots on the terminal block marked L1 and L2. The ground wire must be connected to slot marked with the ground symbol (see I).

6 Initial settings

F 1 Selection of °F or °C units
- Set jumper on the dial-printed circuit board to °F or °C.

F 2 Temperature limiter
The TEMPRA PLUS output temperature can be limited to 109 °F (43 °C) by setting the jumper to position T_{red} (reduced temperature)

7 Putting the water heater into operation

WARNING: OPEN HOT WATER FAUCET FOR A FEW MINUTES UNTIL WATER FLOW IS CONTINUOUS AND ALL AIR IS PURGED FROM WATER PIPES. THE UNIT'S COVER MUST BE INSTALLED BEFORE THE CIRCUIT BREAKERS ARE TURNED ON.

1. Close the cover and fix it using the screw with chopper disc.
2. Turn on circuit breakers to bring electrical power to the unit.
3. Turn the temperature selector clockwise and anti-clockwise, to calibrate the set value transducer.
4. Adjust the water temperature to the desired level using the knob on the front cover of the unit.
5. Turn on hot water and wait twenty seconds until temperature has stabilized.
6. Check the water temperature with your hand and make sure that it does not feel too hot. Reduce if necessary.
7. Explain to the user how the unit works and familiarise him or her with its use.
   Advise the user about possible hazards (hot water temperature up to 140 °F / 60 °C).
   Hand over these instructions, to be kept for future reference.

8 Normal maintenance

NOTICE: THE TEMPRAS DO NOT CONTAIN ANY PARTS SERVICEABLE BY THE LAY PERSON. IN CASE OF MALFUNCTION PLEASE CONTACT A LICENSED PLUMBER OR ELECTRICIAN.

STIEBEL ELTRON TEMPRA tankless water heaters are designed for a very long service life. Actual life expectancy will vary with water quality and use. The unit itself does not require any regular maintenance. However, to ensure consistent water flow, it is recommended to periodically remove scale and dirt that may build up at the aerator of the faucet(s), the filter screen in the unit, or in the shower head.

9 Technical Data

Model		TEMPRA 12 B TEMPRA 12 Plus		TEMPRA 15 B TEMPRA 15 Plus		TEMPRA 20 B TEMPRA 20 Plus		TEMPRA 24 B TEMPRA 24 Plus		TEMPRA 29 Plus		TEMPRA 36 Plus	
Phase		1		1		1		1		1		1	
Voltage	V	208	**240**	208	**240**	208	**240**	208	**240**	208	**240**	208	**240**
Wattage	kW	9	**12**	10.8	**14.4**	14.4	**19.2**	18	**24**	21.6	**28.8**	27	**36**
Max. amp, load	A	44	50	2 x 26	2 x 30	2 x 35	2 x 40	2 x 44	2 x 50	3 x 35	3 x 40	3 x 44	3 x 50
Min. required circuit breaker size	A	60	60	2 x 40	2 x 40	2 x 50	2 x 50	2 x 60	2 x 60	3 x 50	3 x 50	3 x 60	3 x 60
Required wire size	AWG COPPER	6	6	2 x 8	2 x 8	2 x 8	2 x 8	2 x 6	2 x 6	3 x 8	3 x 8	3 x 6	3 x 6
Inlet temperature, max.	°F (°C)	131 (55)											
Water flow to activate unit	≥ GPM (≥ l/min)	0.37 (1.4)		0.58 (2.2)		0.58 (2.2)		0.58 (2.2)		0.87 (3.3)		0.87 (3.3)	
Nominal water volume	GAL (l)	0.13 (0.5)		0.26 (1.0)		0.26 (1.0)		0.26 (1.0)		0.39 (1.5)		0.39 (1.5)	
Working pressure, max.	PSI (bar)	145 (10)											
Tested to pressure	PSI (bar)	290 (20)											
Weight	lbs. (kg)	13.2 (6.1)		15.4 (7.3)		15.4 (7.3)		15.4 (7.3)		17.6 (8.6)		17.6 (8.6)	
Dimensions													
height	inch (mm)	14 1/2 (369)											
depth		4 5/8 (117)											
width		16 5/8 (420)											
Water connections	NPT	3/4"											

- **Tankless water heaters are considered a non-continuous load**
- **Conductors should be sized to maintain a voltage drop of less than 3 % under load**

10 Troubleshooting

Symptom	Possible cause	Solution
No hot water	- circuit breakers off - safety thermal cut-out tripped - not enough flow rate to activate unit	- turn circuit breakers on - reset safety thermal cut-out - clean filter screen at unit - clean faucet aerator or shower head
Not enough hot water	- filter screen clogged	- clean filter screen at unit
Water not hot enough	- water flow rate too high - voltage too low	- reduce water flow rate until power light on front cover stops blinking - supply correct voltage to unit

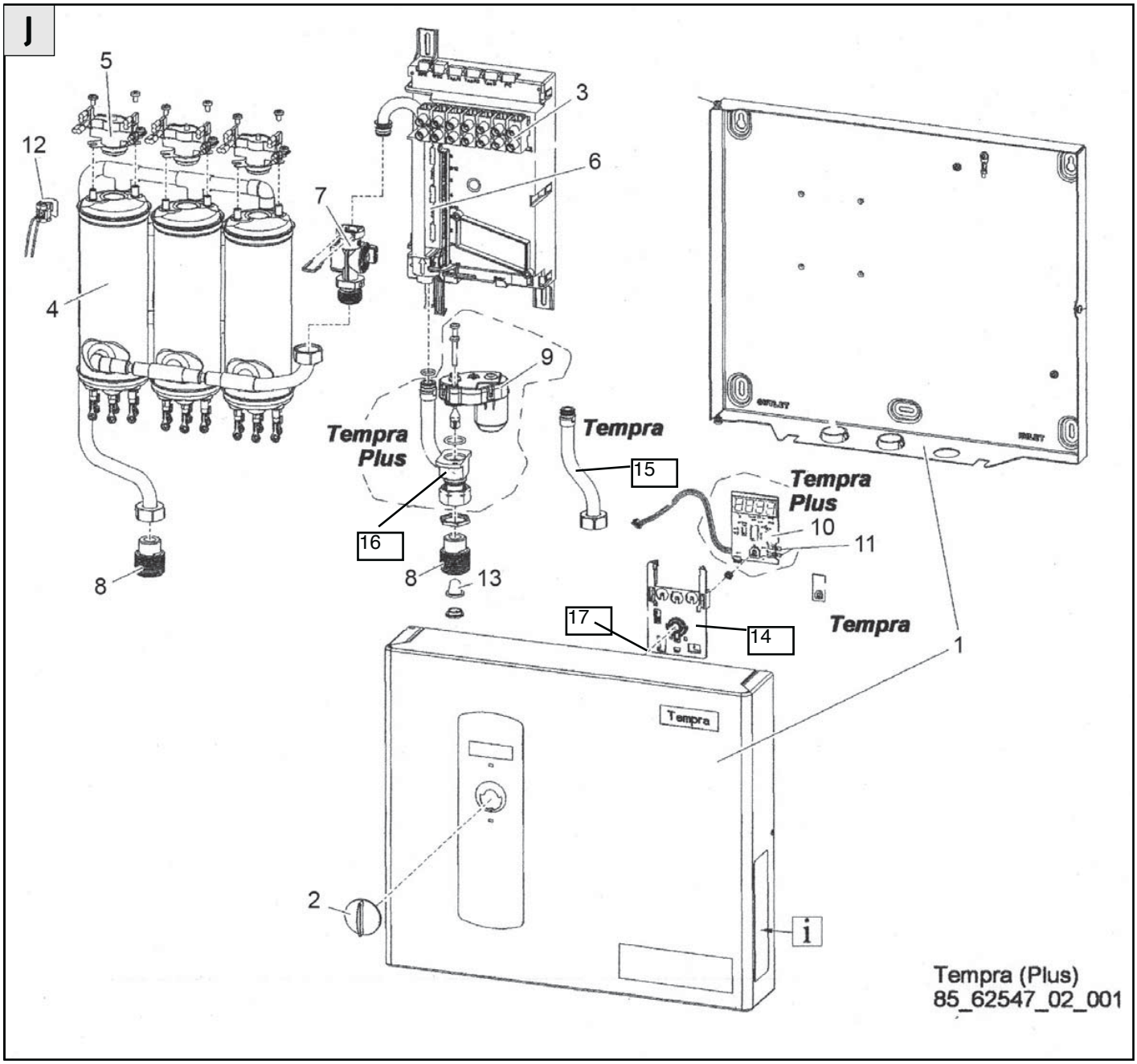
If you are not able to resolve a problem please contact us toll free at 800-582-8423 before removing the unit from the wall.
STIEBEL ELTRON is happy to provide technical assistance. In most instances, we can resolve the problem over the phone.

11 Spare parts

Model	Spare part No.						
J	1	2	3	4	5	6	7
	Housing	Temp. control knob	Wiring block	Heating system	Safety thermal cut out	Electronic control device	Flow sensor
TEMPRA 12 B	286356	254307	279998	286360	286369	286366	286461
TEMPRA 15 B	286356	254307	279997	286361	286369	286844	286461
TEMPRA 20 B	286356	254307	279997	286362	286369	286844	286461
TEMPRA 24 B	286356	254307	279997	286364	286369	286367	286461
TEMPRA 12 Plus	286370	254307	279998	286360	286369	286375	286461
TEMPRA 15 Plus	286370	254307	279997	286361	286369	286845	286461
TEMPRA 20 Plus	286370	254307	279997	286362	286369	286845	286461
TEMPRA 24 Plus	286370	254307	279997	286364	286369	286376	286461
TEMPRA 29 Plus	286370	254307	279996	286373	286369	286378	286461
TEMPRA 36 Plus	286370	254307	279996	286374	286369	286379	286461

Model	Spare part No.						
J	8	9	10	11	12	13	14
	Plumbing connection 3/4"	Advanced Flow Control	Electronic temp. control	Jumpers	Temperature sensor	Filter screen	Set point case
TEMPRA 12 B	278698	---	286359	283455	280677	056755	280730
TEMPRA 15 B	278698	---	286359	283455	280677	056755	280730
TEMPRA 20 B	278698	---	286359	283455	280677	056755	280730
TEMPRA 24 B	278698	---	286359	283455	280677	056755	280730
TEMPRA 12 Plus	278698	220502	286372	283455	280677	056755	280730
TEMPRA 15 Plus	278698	220502	286372	283455	280677	056755	280730
TEMPRA 20 Plus	278698	220502	286372	283455	280677	056755	280730
TEMPRA 24 Plus	278698	220502	286372	283455	280677	056755	280730
TEMPRA 29 Plus	278698	220502	286372	283455	280677	056755	280730
TEMPRA 36 Plus	278698	220502	286372	283455	280677	056755	280730

Model	Spare part No.		
J	15	16	17
	Inlet pipe elbow	Valve assembly	Axis connection plug
TEMPRA 12 B	278695	---	254312
TEMPRA 15 B	278695	---	254312
TEMPRA 20 B	278695	---	254312
TEMPRA 24 B	278695	---	254312
TEMPRA 12 Plus	---	280622	254312
TEMPRA 15 Plus	---	280622	254312
TEMPRA 20 Plus	---	280622	254312
TEMPRA 24 Plus	---	280622	254312
TEMPRA 29 Plus	---	280622	254312
TEMPRA 36 Plus	---	280622	254312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