

## Ranein RE11K (11kW)

# Ranein RE11K Electric Tankless Water Heater

User Instruction Manual

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Ranein RE11K Electric Tankless Water Heater. Please read all instructions carefully before installation and use. Keep this manual for future reference.

A close-up photograph of a dark, textured, curved surface, likely the front panel of the water heater. The word "Ranein" is printed in a large, white, sans-serif font in the center of the image.



Image 1.1: Front view of the Ranein RE11K Electric Tankless Water Heater, showcasing its compact design and LED display.

## 2. IMPORTANT SAFETY INFORMATION

**WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.**

This appliance must be installed by a qualified electrician or plumber in accordance with all local electrical and plumbing codes. Failure to do so may result in electric shock, fire, property damage, or personal injury.

### 2.1 Electrical Requirements

- The RE11K model requires a **240V, 60 AMP** dedicated circuit breaker.
- Ensure your electrical panel can accommodate these specifications.
- Required wire: (1) 8 AWG.

### 2.2 General Safety Precautions

- Do not operate this water heater if it has been damaged or is not functioning properly.
- Do not block or cover any openings on the appliance.

- Keep flammable materials away from the water heater.
- This appliance is designed for indoor use only.

## Multiple Safety Protection



Isolated walls



Leakage protection



Anti-scald protection



Scale-free and tankless



Low water quantity protection



Dry-burning protection



Water and electricity separation



Waterproof protection

Image 2.1: Diagram illustrating the multiple safety protection features of the Ranein tankless water heater, including isolated walls, leakage protection, anti-scald protection, scale-free design, low water quantity protection, dry-burning protection, water and electricity separation, and waterproof protection.





Image 2.2: Visual representation of the comprehensive safety features, including dual insulation walls, waterproof protection, leakage protection, anti-scald protection, low water quantity protection, water and electricity separation, dry-burning protection, and overpressure protection.

For detailed safety information, please refer to the official Safety Information PDF [Safety Information \(PDF\)](#)

### 3. PACKAGE CONTENTS

Verify that all components are present and undamaged before proceeding with installation.

### Package Includes

Order	Offerings	Quantity
1	Water Heater	x 1
2	Installation Manual	x 1
3	Screw	x 2
4	Wall Plug	x 2



Image 3.1: Illustration of the package contents, including the water heater unit, installation manual, screws, and wall plugs.

Table 3.1: Included Components

Order	Offerings	Quantity
1	Water Heater	x 1
2	Installation Manual	x 1
3	Screw	x 2
4	Wall Plug	x 2

### 4. PRODUCT SPECIFICATIONS

The following table outlines the key technical specifications for the Ranein RE11K Electric Tankless Water Heater.

# Product Parameter



Mode	RE11K	Cable Required	1X8 AWG
KW	11KW	Dimensions	14"x8.75"x3"
Voltage	240V/45.8A	Weight	6.5 lbs
Breaker	1X60 AMP	Pipes Fitting	1/2"NPT

Image 4.1: Diagram showing the dimensions and key electrical/plumbing parameters of the RE11K model.

Table 4.1: Ranein RE11K Technical Specifications

Feature	Specification	Feature	Specification
Model	RE11K	Cable Required	1X8 AWG
KW	11KW	Dimensions	14" x 8.75" x 3"
Voltage	240V/45.8A	Weight	4.85 lbs
Breaker	1X60 AMP	Pipes Fitting	1/2" NPT

Feature	Specification	Feature	Specification
Special Features	Dry Combustion Protection, IPX4 Waterproof, LED Display, Lightweight, Overheat Protection	Maximum Temperature	131°F (55°C)
Color	Starry sky gray	Mounting Type	Wall

## 5. INSTALLATION AND SETUP

Professional installation is highly recommended. Consult a qualified electrician or plumber prior to purchase and installation to ensure compliance with all local codes and proper electrical infrastructure.

### 5.1 Site Selection

- Choose a location that is protected from freezing temperatures.
- Ensure adequate clearance around the unit for maintenance and ventilation.
- The unit must be mounted vertically on a solid wall surface.

### 5.2 Electrical Connection

**Crucial:** Verify your electrical infrastructure meets the requirements before installation.

# Pay Attention To Specs And Electrical Infrastructure Is Very Important.

## ATTENTION! PRODUCT REQUIRES

**45.8**  
**Ampamps Power**

**1 x 60 AMP**  
**Breakers Required**

Please Ensure You Can Accomodate The Power Supply And Have The Proper Spce For This Unit In Your Breaker Panel

Image 5.1: Important notice regarding electrical specifications, highlighting the requirement for 45.8 Amps power and a 1 x 60 AMP breaker.

- Turn off the main power supply at the circuit breaker before beginning any electrical work.
- Connect the water heater to a dedicated 240V, 60 AMP circuit.
- Use 8 AWG wire for the electrical connection.
- Ensure proper grounding according to local electrical codes.

### 5.3 Plumbing Connection

- Connect the cold water inlet (blue) and hot water outlet (red) to 1/2" NPT pipes.
- Install shut-off valves on both the inlet and outlet lines for easy maintenance.
- Flush the water lines thoroughly before connecting to the heater to remove any debris.
- Ensure all connections are watertight to prevent leaks.

# Installation Diagram

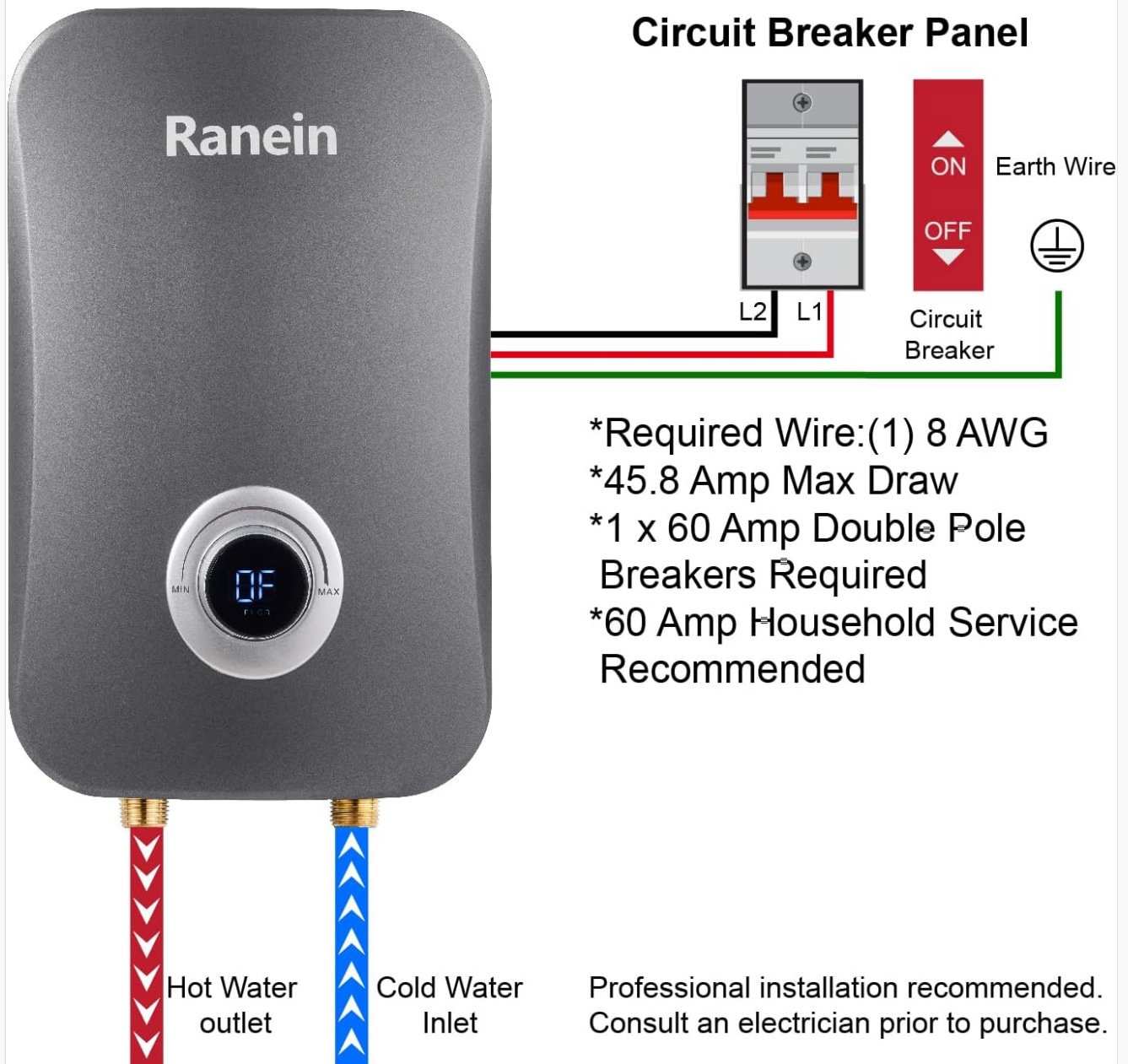


Image 5.2: Detailed installation diagram showing electrical connections to a circuit breaker panel and plumbing connections for hot and cold water lines. It specifies required wire (8 AWG), maximum draw (45.8 Amps), and breaker size (1 x 60 Amp Double Pole).

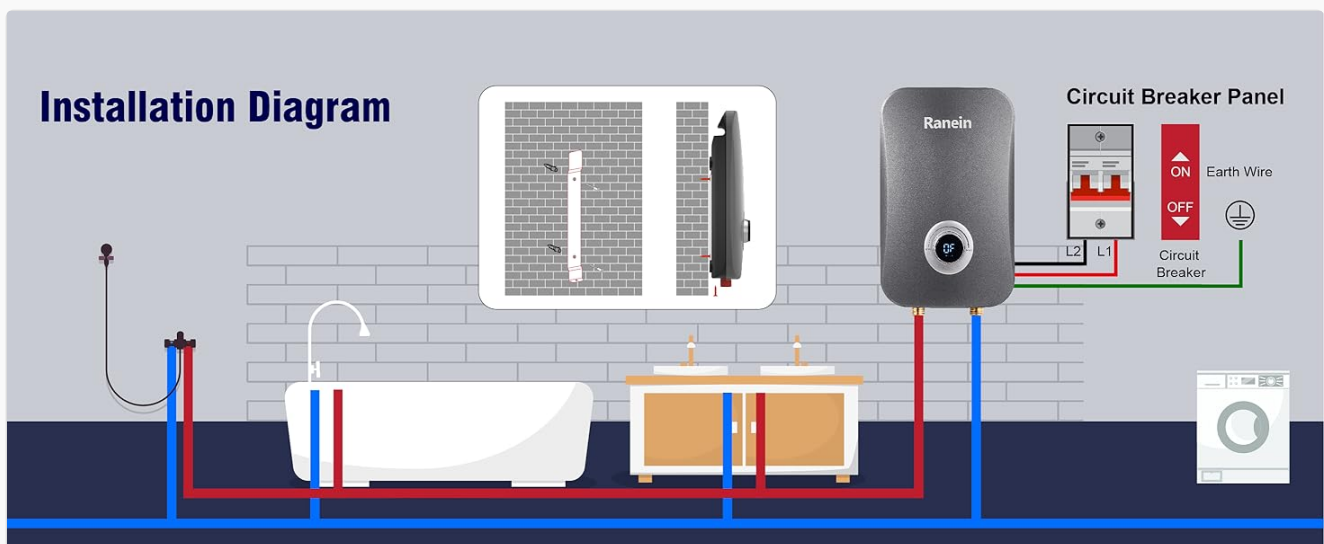




Image 5.3: Comprehensive installation diagram illustrating the placement of the tankless water heater in a bathroom setting, showing connections to a bathtub, sink, and washing machine, along with the circuit breaker panel.

For a complete guide, refer to the Instructions for Use (IFU) PDF: [Instructions for Use \(PDF\)](#)

## 6. OPERATING INSTRUCTIONS

The Ranein RE11K water heater provides instant hot water on demand with intelligent temperature control.

### 6.1 Initial Startup

1. After installation, ensure all plumbing connections are secure and leak-free.
2. Open a hot water faucet in your home to allow water to flow through the heater and purge any air from the system. Let water run for a few minutes until flow is steady.
3. Turn on the electrical power to the unit at the circuit breaker.
4. The LED display will illuminate, indicating the unit is ready for operation.

### 6.2 Temperature Adjustment

- The temperature can be adjusted using the touch control knob on the front panel.
- Rotate the knob to increase or decrease the desired water temperature. The LED display will show the set temperature.
- The unit features self-modulating technology, automatically adjusting power consumption to maintain the preset temperature, ensuring energy efficiency.

# Accurate Temperature Control

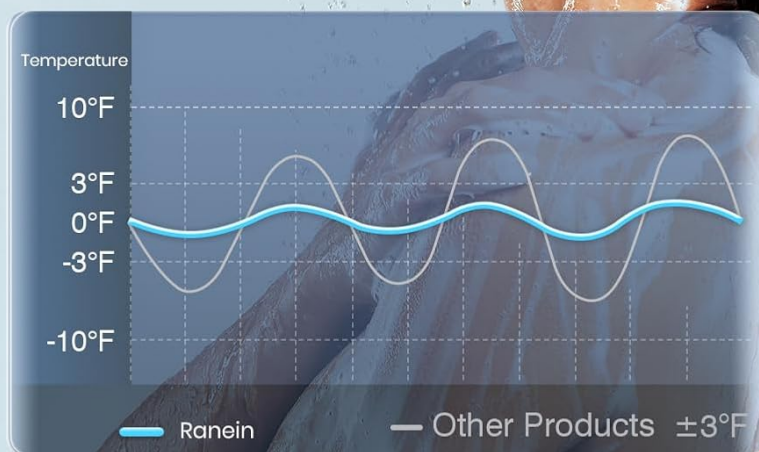


Image 6.1: Graph illustrating the stable temperature output of the Ranein water heater compared to other products, demonstrating accurate temperature control for a consistent hot water experience.



Image 6.2: Visual guide demonstrating the ease of use for temperature adjustment, showing a hand turning the control knob and indicating the ability to switch between Fahrenheit and Celsius by pressing the knob for 5 seconds.

### 6.3 Energy Saving Features

- The unit heats water only when needed, eliminating standby energy consumption associated with traditional tank heaters.
- Self-modulating technology ensures only the necessary amount of energy is used to heat water to your desired temperature.



Image 6.3: Conceptual image highlighting the energy efficiency and power-saving capabilities of the Ranein tankless water heater, with an internal circuit board overlay.



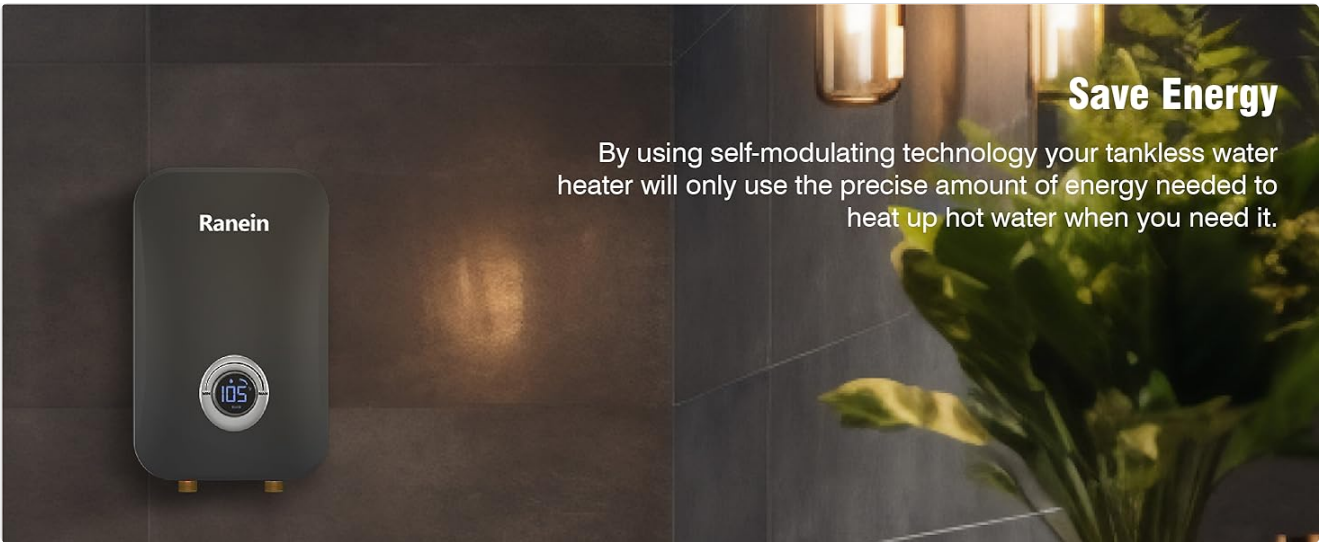


Image 6.4: Illustration emphasizing the energy-saving aspect, explaining that self-modulating technology uses only the precise amount of energy needed to heat water on demand.

## 7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your tankless water heater.

### 7.1 Cleaning

- Wipe the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- The stainless steel heating element is designed to prevent sediment and scale accumulation, reducing the need for frequent descaling.

### 7.2 Water Filter (if applicable)

- If an external water filter is installed, follow the manufacturer's instructions for cleaning or replacing the filter cartridge.

### 7.3 Annual Inspection

- It is recommended to have a qualified professional inspect the unit annually to check for any wear, leaks, or electrical issues.

## 8. TROUBLESHOOTING

Before contacting customer support, review the following common issues and their solutions.

Table 8.1: Troubleshooting Guide

Problem	Possible Cause	Solution
No hot water	No power to the unit	Check circuit breaker; ensure it is ON.
	Water flow too low	Ensure minimum flow rate is met. Check for clogged aerators or partially closed valves.



Problem	Possible Cause	Solution
Water not hot enough	Temperature setting too low	Increase the temperature setting using the control knob.
	Inlet water temperature too cold	The unit's capacity may be exceeded. Reduce flow rate or use for fewer fixtures simultaneously. Refer to sizing map.
Unit leaks water	Loose plumbing connections	Turn off water supply and power. Tighten connections. If leak persists, contact a professional.
Error code on display	Internal fault or sensor issue	Refer to the full instruction manual for specific error code meanings. Power cycle the unit (turn off, wait 30 seconds, turn on). If error persists, contact customer support.

## 9. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation included with your product or visit the Ranein official website. Keep your proof of purchase for warranty claims.

**Return Policy:** This product has a 30-day return policy for refund/replacement.

## 10. ADDITIONAL INFORMATION

### 10.1 Sizing and Application

The Ranein RE11K is suitable for point-of-use applications or small homes, depending on the inlet water temperature and desired flow rate. Refer to the sizing map to determine if this model meets your specific needs.



Image 10.1: A detailed sizing map showing recommended Ranein tankless water heater models based on geographical location (inlet temperature) and desired hot water usage (GPM for low flow faucet, bathroom faucet, kitchen faucet, shower). It provides a 3-step guide for selecting the correct unit.

### Sharing the Warmth Throughout Your Home

Save space

Save energy

Endless hot water

Save time







Save money

Photo	Point-of-Use	Room	Whole House
	RE4.5K	RE9K	RE11K
Model	RE4.5K	RE9K	RE11K
Voltage	120 V~	240 V~	240 V~
Power	4.5 kW	6.5 kW	11 kW
Min. Required Circuit	1x40 AMP	1x30 AMP	1x60 AMP
Breaker Size	37.5 A	27 A	45.8 A
Max. Amperage	37.5 A	27 A	45.8 A
Recommended Wire Size	10 AWG	12 AWG	10 AWG
Min. Water Flow to Activate the Unit	0.32 GPM 1.2 L/min	0.475 GPM 1.8 L/min	0.475 GPM 1.8 L/min
Safe Operating Pressure	2.9 PSI - 87.02 PSI	2.9 PSI - 87.02 PSI	2.9 PSI - 87.02 PSI
Water Connections	1/2" NPT	1/2" NPT	1/2" NPT
Installation	Wall mounted	Wall mounted	Wall mounted
Temperature Setting	Digital Panel	Digital Panel	Digital Panel
Temp. Increase Per GPM	0.8 GPM   57°F 1.0 GPM   47°F 1.2 GPM   42°F 1.5 GPM   33°F	0.8 GPM   57°F 1.0 GPM   47°F 1.2 GPM   42°F 1.5 GPM   33°F	0.8 GPM   57°F 1.0 GPM   47°F 1.2 GPM   42°F 1.5 GPM   33°F
Dimensions	8.66" x 6.7" x 2.34"	14" x 8.45" x 3"	14" x 8.45" x 3"
Weight	3.5 lbs	5.5 lbs	5.8 lbs

Image 10.2: Diagram illustrating various applications for Ranein tankless water heaters, including whole-house systems and point-of-use installations for kitchens, bathrooms, and individual rooms. A table provides specifications for different models (RE4.5K, RE6.5K, RE9K, RE11K, RE13K, RE18K, RE27K) across various parameters like KW, Voltage, Breaker, Wire Size, Min Water Flow, Operating Pressure, Installation, Temp Increase, Dimensions, and Weight.

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## Related Documents - RE11K (11kW)

	<p><a href="#">Ranein Tankless Electric Water Heater: Installation and Use Guide</a></p> <p>Comprehensive guide for Ranein RE6.5K, RE9K, and RE11K tankless electric water heaters. Covers installation, operation, safety precautions, technical specifications, and maintenance.</p>
	<p><a href="#">Ranein 12L Propane Tankless Water Heater Installation Manual</a></p> <p>Installation manual for the Ranein 12L propane gas tankless water heater, providing up to 3.18 GPM and 68,000 BTU for on-demand hot water.</p>
	<p><a href="#">Ranein Tankless Electric Water Heaters: Installation and Use Manual</a></p> <p>Comprehensive guide for Ranein RE18K and RE27K tankless electric water heaters, covering safety, installation, operation, maintenance, and troubleshooting.</p>
	<p><a href="#">Ranein RA65L RV Tankless Water Heater: Installation, Operation, and Safety Manual</a></p> <p>Comprehensive guide for the Ranein RA65L RV Tankless Water Heater, covering installation, operation, safety precautions, maintenance, and troubleshooting. Essential information for RV owners.</p>
	<p><a href="#">Ranein RV Tankless Water Heater Installation and Use Manual</a></p> <p>Comprehensive instructions for installing and using the Ranein RV Tankless Water Heater. Covers safety warnings, product features, installation steps, operation, winterizing, and troubleshooting for models RA65EH, RA65LH, RA65SH, and RA65ZH.</p>
	<p><a href="#">Ranein RV Tankless Water Heater: Installation and Operation Guide</a></p> <p>Comprehensive guide for installing, operating, and maintaining the Ranein RA65L and RA65S series RV tankless water heaters, including safety guidelines, troubleshooting, and specifications.</p>