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› [MIZUDO 24kW 240V Electric Tankless Water Heater Instruction Manual \(Model EQUIK 24kW\)](#)

MIZUDO EQUIK 24kW

MIZUDO 24kW 240V Electric Tankless Water Heater Instruction Manual

Model: EQUIK 24kW

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your MIZUDO 24kW 240V Electric Tankless Water Heater, Model EQUIK 24kW. Please read this manual thoroughly before installation and use, and retain it for future reference.

The MIZUDO EQUIK 24kW is designed to provide instant, endless hot water on demand, offering high thermal efficiency and a compact design suitable for various residential applications.



Image: Front view of the MIZUDO 24kW Electric Tankless Water Heater, showing its compact white casing and digital 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 and plumber in accordance with all national and local electrical and plumbing codes.
- Ensure the electrical supply meets the specifications outlined in this manual.
- Do not operate the water heater if it is damaged or malfunctioning.
- Always disconnect power to the unit before performing any maintenance or service.
- The unit features multiple safety protections including leakage, overheating, high pressure, and dry-fire prevention.
- The unique separation of water and electric circuits prevents electric leakage and scale buildup.
- The unit is ETL certified, ensuring safety and reliability.

Product Parameters & Installation Guide

Must pay attention to the installation requirements

Voltage	240 V	Wattage	24 kW
Circuit Breaker	3*40 Amp Two-Pole Circuit Breaker	Wire Size	3*8 AWG
Water Connections	3/4" NPT	Operating Pressure	Max. 150 PSI
Product Size	17.05"H × 12.99"W × 3.50"D	Waterproof Rating	IPX4

Image: Diagram illustrating the ETL certification and various safety features of the MIZUDO water heater, including IPX4 waterproof rating, scald prevention, dry burn prevention, flame-retardant shell, low flow protection, and voltage protection.

3. PRODUCT SPECIFICATIONS

Feature	Specification
Brand	MIZUDO
Model Number	EQUIK 24kW
Product Dimensions	17.05" H x 12.91" W x 3.58" D
Color	White
Wattage	24 kW
Voltage	240 Volts (AC)
Maximum Temperature	140 Degrees Fahrenheit
Heat Output	24000 Watts
Efficiency	98% Thermal Efficiency
Mounting Type	Wall
Item Weight	21 pounds
Circuit Breaker Requirement	3 x 40 Amp Two-Pole Circuit Breaker
Wire Size Requirement	3 x 8 AWG
Water Connections	3/4" NPT
Operating Pressure	Max. 150 PSI
Waterproof Rating	IPX4

Sleek Design, Instant Flow

Minimalist elegance that complements your modern lifestyle



Image: A visual representation of the MIZUDO water heater's dimensions and water connection points (3/4" NPT).

4. SETUP AND INSTALLATION

Installation of the MIZUDO 24kW Electric Tankless Water Heater requires professional expertise. It must be performed by a licensed electrician and plumber to ensure compliance with all applicable electrical and plumbing codes and safety standards.

4.1 Electrical Requirements

The MIZUDO EQUIK 24kW model requires a 240V electrical supply. It must be connected to three (3) dedicated 40 Amp two-pole circuit breakers. The recommended wire size is 3 x 8 AWG. Ensure your electrical panel has sufficient capacity (minimum 200 Amp service, 300 Amp recommended for older homes) to support the unit's maximum draw of 100A.

Sleek Design, Instant Flow

Minimalist elegance that complements your modern lifestyle



Image: A detailed diagram showing the internal wiring of the MIZUDO water heater and its connection to a breaker panel with three 240V/40A two-pole breakers (A, B, C).

4.2 Plumbing Connections

The unit uses 3/4" NPT connections for both water inlet and outlet. Ensure proper shut-off valves are installed on both lines for maintenance. The minimum activation flow is 0.79 GPM, and the maximum flow rate is 5.6 GPM.

4.3 Mounting

The MIZUDO EQUIK 24kW is designed for wall mounting. Choose a location that is protected from freezing temperatures and is easily accessible for maintenance. Ensure the mounting surface is capable of supporting the unit's weight (approximately 21 pounds).

4.4 Installation Video Guide

For a visual guide on the electrical wiring method, please refer to the official MIZUDO installation video below. This video demonstrates the correct procedure for connecting the unit to your electrical panel.

Your browser does not support the video tag.

Video: MIZUDO 24/27kW Electric tankless water heater wiring method. This video provides a step-by-step demonstration of how to correctly wire the tankless water heater to the electrical panel, including connections for L1, L2, and ground wires for each of the three required circuit breakers.

5. OPERATING INSTRUCTIONS

The MIZUDO EQUIK 24kW features an intuitive LED digital display and touch control panel for easy operation.

5.1 Power On/Off

To power on the unit, ensure all circuit breakers are engaged. The unit will automatically enter standby mode. To activate heating, open a hot water faucet. The unit will begin heating water instantly.

5.2 Temperature Adjustment

The LED touch display allows for precise temperature adjustment. The temperature range is 86°F to 140°F. Use the up and down arrows on the control panel to set your desired output water temperature. The display will show the real-time temperature and heating status.

ETL Certified, Safe and Reliable

Guard the safety of every use



Image: Close-up of the MIZUDO water heater's LED digital display and touch control panel, highlighting the power button, temperature display, and up/down arrows for adjustment.

5.3 Water Flow and Temperature Consistency

The intelligent control system and dual water sensors monitor inlet and outlet temperatures to maintain a stable and consistent hot water temperature, even with varying inlet water conditions. The unit delivers hot water in seconds with no preheating required.

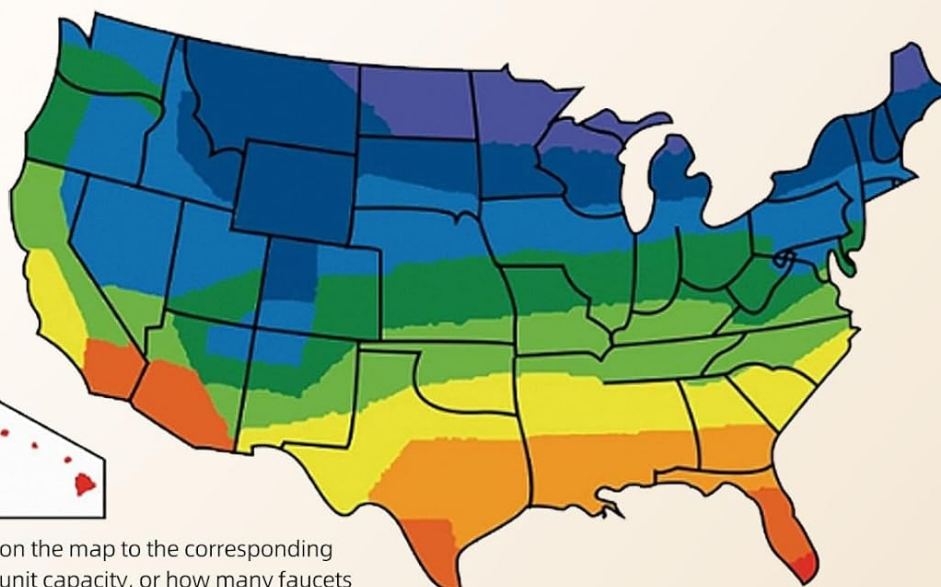
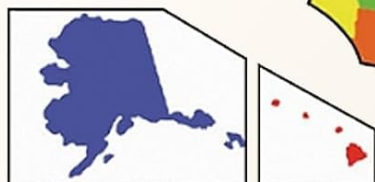


Image: A graph illustrating the stable constant temperature output of the MIZUDO water heater compared to a regular product, showing minimal temperature fluctuations.
































The unit can support multiple points of use simultaneously, such as a shower, bath, and kitchen sink, depending on the inlet water temperature and desired output temperature. Refer to the flow rate chart below for guidance.

North America Ground Water Temperature Map

MIZUDO



Match your location color on the map to the corresponding chart below to determine unit capacity, or how many faucets and showers can be supported simultaneously.

24 kW	Inlet Water Temperature	Outlet Water Temperature	Outflow Rate (GPM)	Simultaneous Shower Use
	37 °F 	104 °F	2.3	
	42 °F 		2.5	
	47 °F 		2.6	 
	52 °F 		2.9	 
	57 °F 		3.2	 
	62 °F 		3.6	  
	67 °F 		4.0	  
	72 °F 		4.5	  
	77 °F 		5.6	   

Simultaneous shower use was rounded to the nearest whole number based on the data.

Image: A map of North America showing ground water temperatures by region, accompanied by a chart indicating the maximum GPM and simultaneous shower use based on inlet water temperature for a 24kW unit set to 104°F.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your MIZUDO tankless water heater. Always disconnect power to the unit before performing any maintenance.

- **Cleaning:** Periodically wipe the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Water Inlet Filter:** Check and clean the water inlet filter periodically to prevent sediment buildup, which can affect flow rate and performance.
- **Descaling:** In areas with hard water, mineral buildup (scale) can occur within the heating elements. It is recommended to descale the unit annually or as needed by a qualified professional to maintain efficiency.
- **Inspect Connections:** Regularly inspect all water and electrical connections for any signs of leaks or loose wiring.

7. TROUBLESHOOTING

If you experience issues with your MIZUDO tankless water heater, refer to the following common troubleshooting steps. For complex issues, contact a qualified technician.

7.1 Safety Thermal Cut-off Reset

If the product stops working due to the safety thermal cut-off protection function, you can reset it to restore normal product operation. This typically occurs if the unit detects an overheating condition or dry-fire event. **WARNING: Ensure power is disconnected before attempting this procedure.**

1. Remove the outer shell of the water heater.
2. Locate the safety thermal cut-off switch.
3. Press the reset button with a screwdriver.
4. Reinstall the outer shell.

To determine if the safety thermal cut-off has tripped:

- The machine is not working (the display screen shows nothing).
- The municipal power supply is normal (test whether other appliances at home are functioning properly).
- The circuit breaker connected to the electric water heater has not tripped.

If all three conditions are met simultaneously, the product's limiter may have tripped, and you will need to open the product cover to reset the safety thermal cut-off.

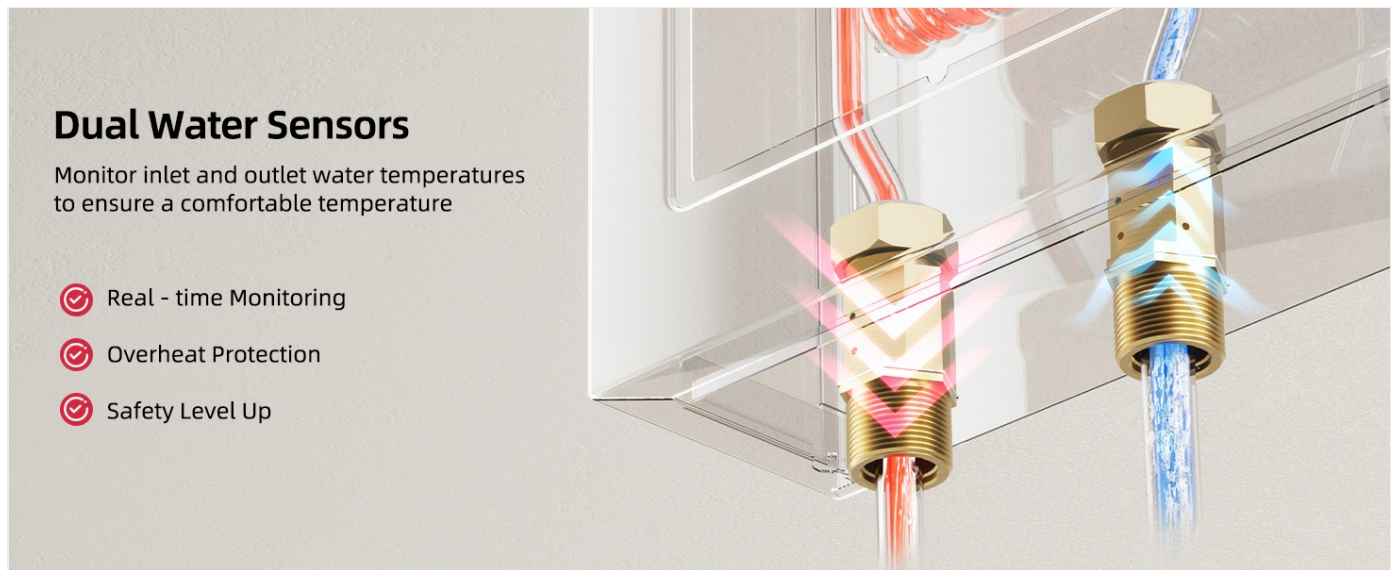


Image: Step-by-step visual guide on how to reset the safety thermal cut-off on the MIZUDO tankless water heater, showing removal of the cover, locating the reset button, pressing it, and reassembling the unit.

7.2 No Hot Water / Insufficient Hot Water

- **Check Power:** Ensure the unit is receiving power and all circuit breakers are engaged.
- **Water Flow:** Verify that the water flow rate is above the minimum activation flow (0.79 GPM). Low flow can prevent the unit from activating or heating effectively.
- **Temperature Setting:** Confirm the desired temperature is set correctly on the LED display.
- **Inlet Water Temperature:** In colder climates, very low inlet water temperatures may reduce the maximum achievable flow rate at higher output temperatures. Refer to the flow rate chart in Section 5.3.
- **Sediment Buildup:** A clogged inlet filter or scale buildup can restrict water flow and heating efficiency. Refer to the

7.3 Leaks

- Immediately shut off the water supply and electrical power to the unit.
- Inspect all plumbing connections for tightness.
- If the leak persists or originates from within the unit, contact a qualified plumber or MIZUDO customer support.

8. WARRANTY AND CUSTOMER SUPPORT


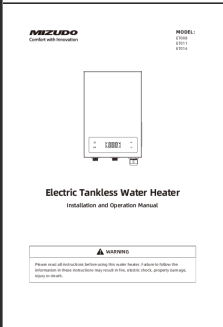
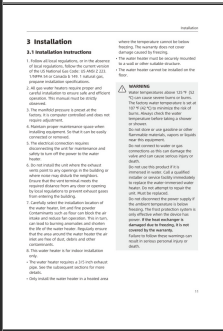
For warranty information, technical assistance, or to purchase replacement parts, please contact MIZUDO customer support. Keep your purchase receipt and model number (EQUIK 24kW) readily available when contacting support.

MIZUDO Home Comfort Direct

For further assistance, you may visit the MIZUDO store on Amazon:[MIZUDO Store](#)



Related Documents - EQUIK 24kW

	<p>Mizudo Water Heater Operation and Safety Manual</p> <p>Detailed operating instructions and safety warnings for the Mizudo HW199A1G-NG and HW199A1G-LP tankless water heaters. Learn about safe operation, controller functions, and mixing valve usage.</p>
	<p>MIZUDO Electric Tankless Water Heater: Installation and Operation Manual</p> <p>Comprehensive installation and operation manual for MIZUDO Electric Tankless Water Heaters (Models ET008, ET011, ET014), covering safety, general information, installation steps, operation, maintenance, troubleshooting, and warranty.</p>
	<p>Mizudo HW180A0W-LP Installation Manual: Comprehensive Guide for Tankless Water Heater</p> <p>Detailed installation instructions, safety guidelines, and technical specifications for the Mizudo Comfortech Classic Propane Gas Tankless Water Heater (Model HW180A0W-LP). Covers preparation, venting, connections, testing, and troubleshooting.</p>

