MIZUDO EQUIK 27kW

MIZUDO 27kW Electric Tankless Water Heater Instruction Manual

Model: EQUIK 27kW

1. Product Overview

The MIZUDO 27kW Electric Tankless Water Heater provides instant, on-demand hot water for your entire home. Its compact design and advanced heating technology ensure efficiency and reliability, eliminating the need for a bulky storage tank. This manual provides essential information for safe installation, operation, and maintenance of your new water heater.

A front-angled view of the MIZUDO 27kW Electric Tankless Water Heater, showcasing its compact white casing and black LED digital display panel at the bottom. The display shows '108°F' and control buttons. Water inlet and outlet connections are visible at the bottom.

2. Important Safety Instructions

Please read all instructions carefully before installation and operation to prevent injury or property damage. This appliance must be installed by a qualified electrician and plumber in accordance with all local electrical and plumbing codes.

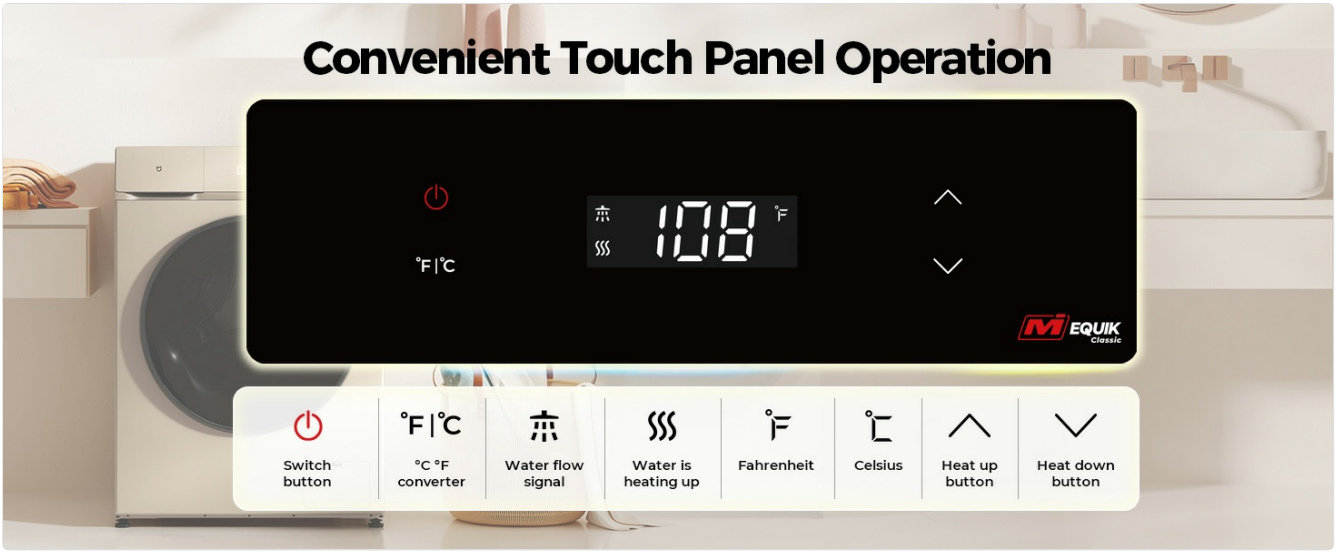
Safety Features:

- **Water and Electrical Circuit Separation:** Unique design minimizes risk of electric leakage.
- **ETL Certified:** Ensures compliance with safety standards.
- **Multiple Safety Protections:** Includes leakage, overheating, high pressure, and dry-fire prevention.
- **IPX4 Waterproof:** Provides protection against splashing water.
- **Anti-scale Design Heating Chamber:** Reduces scale buildup, extending lifespan.
- **Lightning-resistant Control Component:** Enhances durability and safety.

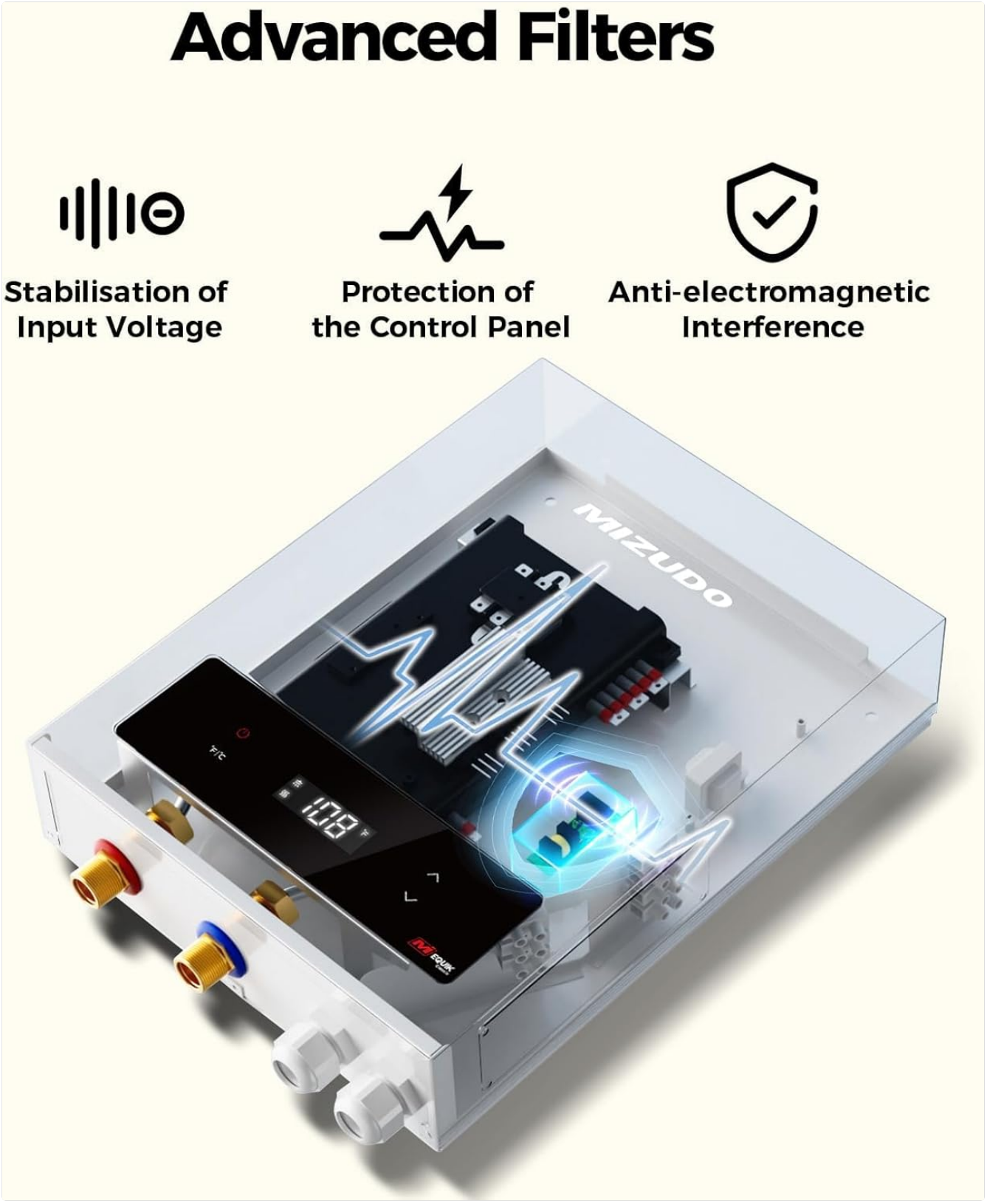
An image illustrating the MIZUDO tankless water heater installed, surrounded by icons representing its multi-security protections: Overheat Protection, Dry Combustion Protection, IPX4 Waterproof, Leakage Protection, Anti-scale Design Heating Chamber, and Lightning-resistant Control Component. An ETL certification logo is also visible.

3. Product Features

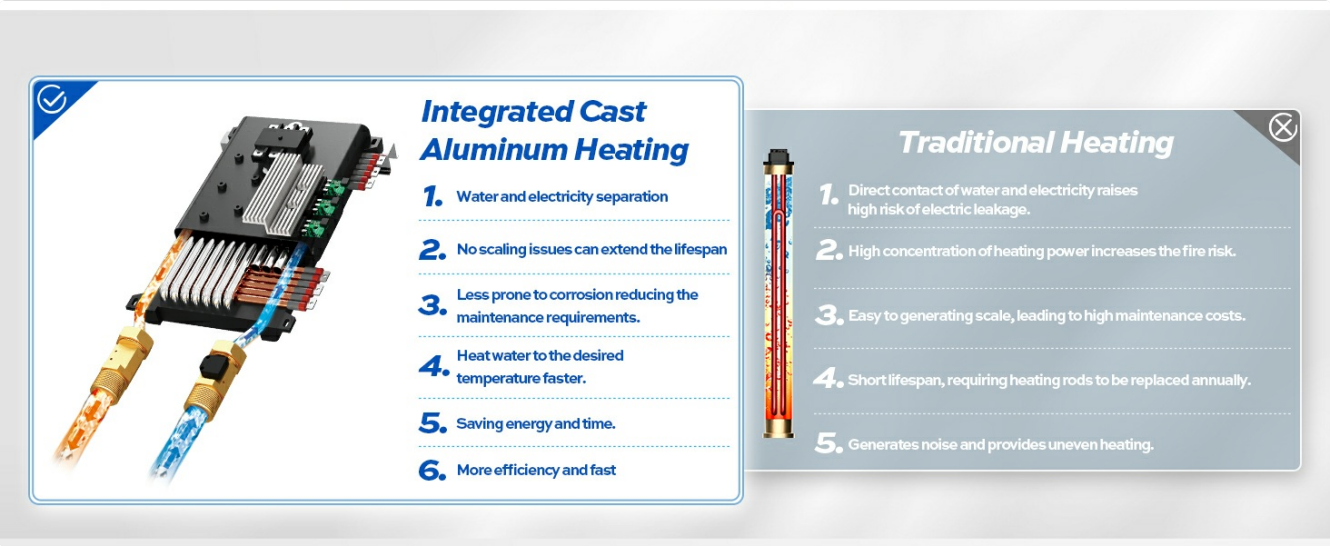
- **Instant & Endless Hot Water:** Delivers hot water above 120°F in seconds with 98% heating efficiency, no preheating needed.
- **Space-Saving Design:** Compact dimensions (17.05" x 12.91" x 3.58") allow installation in tight spaces.
- **LED Touch Display:** Easily customize preferred water temperature with intuitive controls.
- **Advanced Filters:** Ensures stabilization of input voltage, protection of the control panel, and anti-electromagnetic interference.
- **Integrated Cast Aluminum Heating:** Separates water and electricity, prevents scaling, resists corrosion, and heats water faster.



A close-up view of the MIZUDO water heater's black LED touch display panel. It shows the digital temperature reading '108°F' and various control icons: power switch, °F/°C converter, water flow signal, water heating indicator, Fahrenheit/Celsius display, heat up button, and heat down button, illustrating convenient operation.



A transparent view of the MIZUDO water heater's internal components, highlighting its advanced filters. Text indicates features such as 'Stabilisation of Input Voltage', 'Protection of the Control Panel', and 'Anti-electromagnetic Interference', ensuring stable and safe operation.



A comparative diagram showing the benefits of MIZUDO's Integrated Cast Aluminum Heating versus Traditional Heating. The integrated system highlights water and electricity separation, no scaling issues, corrosion resistance, faster heating, energy saving, and higher efficiency. The traditional method is depicted with risks of electric leakage, fire, scaling, and shorter lifespan.

4. Package Contents

Verify that all components are present and undamaged upon opening the package:

Order	Design	Quantity
1	Water Heater	1
2	Installation Manual	1
3	Screw	3
4	Wall Plug	3
5	Filter	1
6	Mounting Template	1
7	Waterproof Ring	2

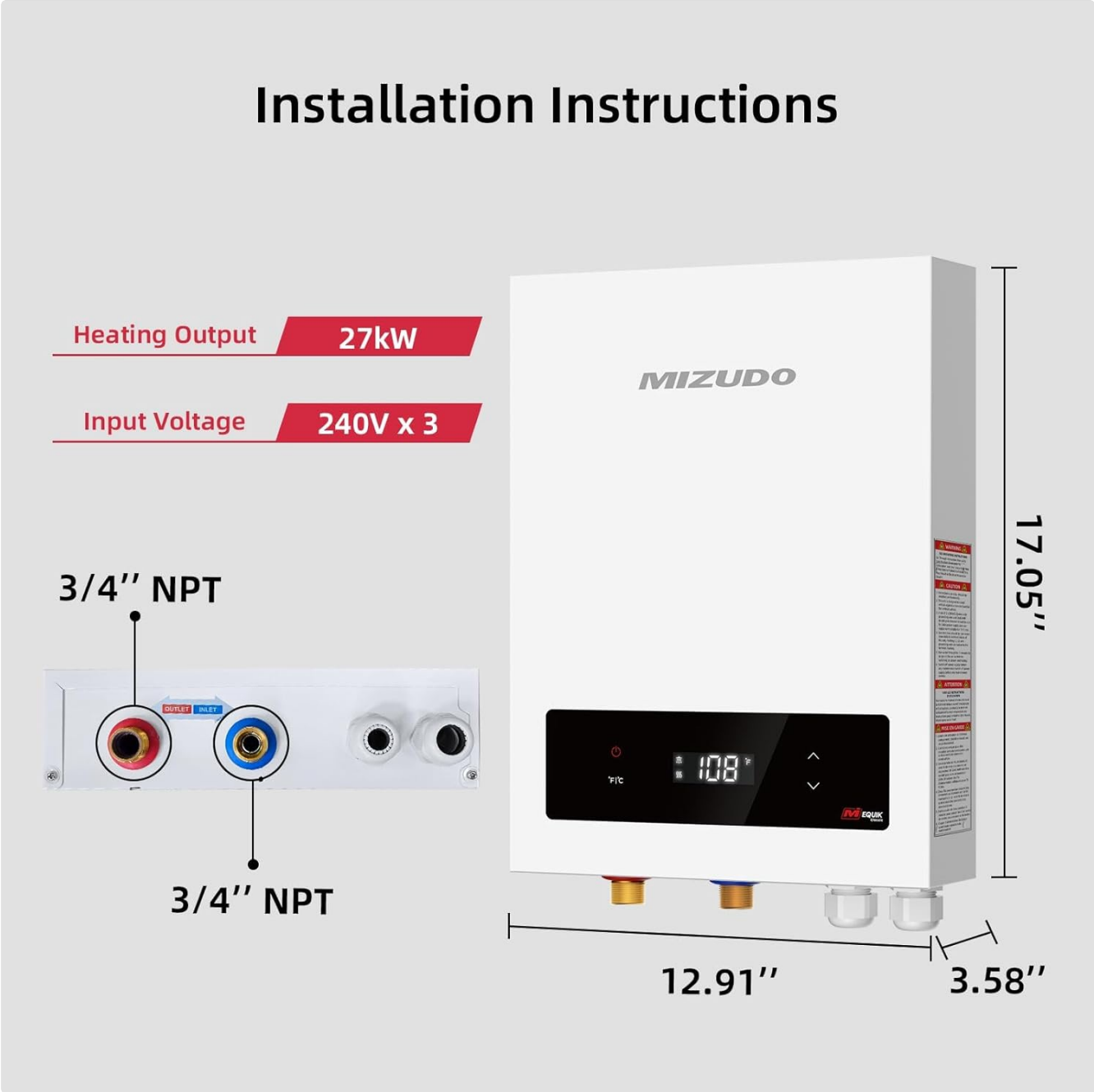
An image displaying the items included in the MIZUDO tankless water heater package: the water heater unit, an installation manual, screws, wall plugs, a filter, a mounting template, and waterproof rings. A table lists the quantity of each item.

5. Installation Guide

Proper installation is critical for the safe and efficient operation of your MIZUDO tankless water heater. Refer to the included Installation Manual for detailed instructions and diagrams.

5.1 Site Selection

Choose a location that is protected from freezing temperatures and is easily accessible for maintenance. The unit measures 17.05"H x 12.91"W x 3.58"D, making it suitable for cabinets, bathrooms, garages, or basements.



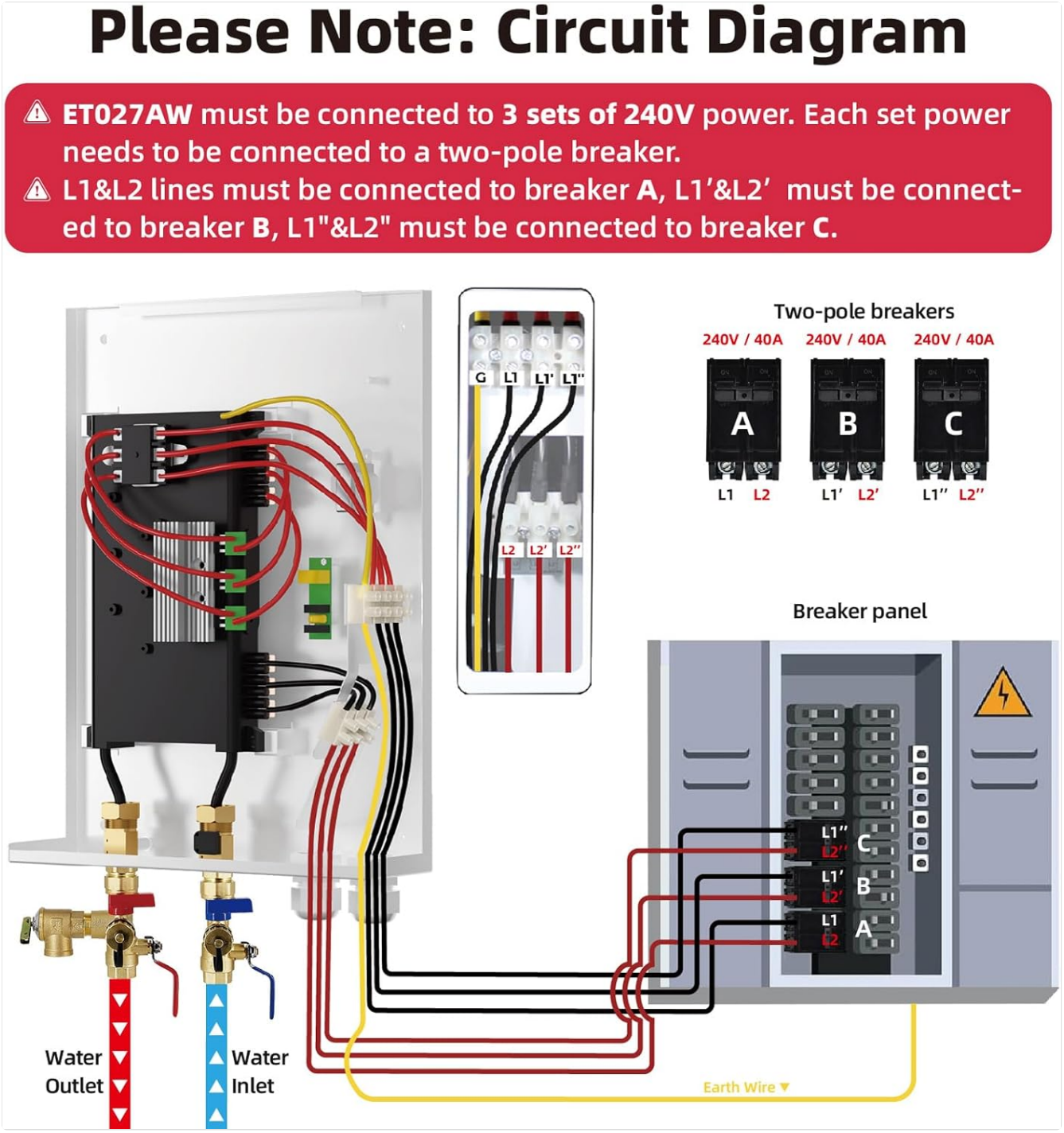
An image displaying the physical dimensions of the MIZUDO 27kW tankless water heater: 17.05 inches in height, 12.91 inches in width, and 3.58 inches in depth. It also indicates the 3/4" NPT water inlet and outlet connections, along with the heating output of 27kW and input voltage of 240V x 3.

5.2 Electrical Requirements

The MIZUDO 27kW model requires specific electrical connections:

- **Voltage:** 240V
- **Amperage:** Max 113A
- **Breakers:** 3 x 40AMP two-pole breakers
- **Wire Gauge:** 3 X 8AWG

Ensure the electrical supply meets these requirements and that wiring is done according to the circuit diagram.



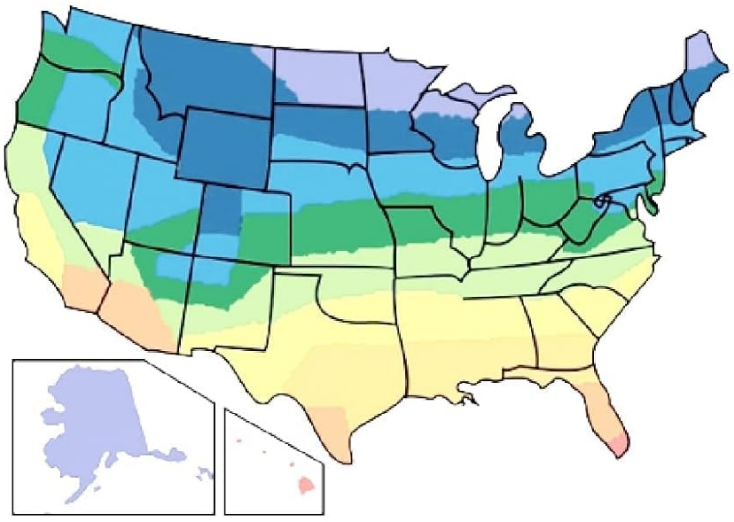
A detailed circuit diagram for installing the MIZUDO 27kW tankless water heater. It shows connections to three sets of 240V power, requiring three 40AMP two-pole breakers (A, B, C) and 3 X 8AWG wire gauge. The diagram illustrates the wiring from the heater to the breaker panel, including L1, L2, and ground connections.

5.3 Plumbing Connections

- **Water Connection:** 3/4" NPT
- **Maximum Flow Rate:** 6.26 GPM
- **Minimum Water Flow:** 0.79 GPM/min

Consult the Tankless Water Heater Selection Guide to determine the appropriate model based on your incoming water temperature and household hot water usage.

Tankless Water Heater Selection Guide



01: Confirming your local water temp

37°F	42°F	47°F	52°F	57°F	62°F	67°F	72°F	77°F

Use your location on the map to correlate with legend for average ground water temperature in the U . S

02: Knowing the water consumption of water outlets

0.5 GPM	1.2 GPM	2.0 GPM	>4.0 GPM
Bathroom Faucet	Kitchen Faucet	Standard Shower	80-Gallon Bathtub

03: choosing the suitable unit, based on your household total hot water usage

Power / Inlet Temp	18kW	24kW	27kW
37°F	1.7 GPM	2.3 GPM	2.6 GPM
47°F	2.0 GPM	2.6 GPM	3.0 GPM
57°F	2.4 GPM	3.2 GPM	3.6 GPM
67°F	3.0 GPM	4.0 GPM	4.4 GPM
77°F	4.2 GPM	5.6 GPM	6.3 GPM

The specified hot water flow rate is based on measurements taken at a set outlet temperature of 110°F

A guide map of the United States showing average ground water temperatures, along with a table. The table helps users choose the suitable water heater power (18kW, 24kW, 27kW) based on inlet water temperature and desired GPM for various outlets like bathroom faucets, kitchen faucets, standard showers, and bathtubs. The 27kW model is highlighted, showing its capability to heat up to 6.3 GPM at 77°F inlet temperature.

An illustration of a multi-story house with the MIZUDO tankless water heater installed in the basement. Arrows indicate hot water being supplied instantly and constantly to various points of use, including a laundry room, kitchen sink, and bathroom shower, demonstrating its whole-house capability.

6. Operating Instructions

The MIZUDO 27kW water heater is designed for simple operation via its LED touch display.

6.1 Power On/Off

Press the power button () on the display to turn the unit on or off.

6.2 Temperature Adjustment

Use the up (∧) and down (∨) arrow buttons to set your desired water temperature. The display will show the current temperature setting.

6.3 Temperature Unit Conversion

Press the °F/°C button to switch between Fahrenheit and Celsius temperature displays.

A woman is shown testing the water temperature from a bathtub faucet, with the MIZUDO tankless water heater mounted on the wall in the background. An overlay graph illustrates the steady temperature control, showing the water temperature quickly rising from 72°F to 108°F and maintaining it consistently over 40 minutes.

7. Maintenance and Care

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

- **Annual Inspection:** It is recommended to have a qualified professional inspect the unit annually.
- **Filter Cleaning:** Periodically check and clean the water filter to prevent debris buildup.
- **Descaling:** In areas with hard water, periodic descaling may be necessary to maintain efficiency and prevent mineral buildup in the heating chamber. Consult a professional for descaling procedures.
- **Exterior Cleaning:** Clean the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.

8. Troubleshooting

If you encounter issues with your MIZUDO tankless water heater, refer to the common problems and solutions below. For persistent issues, contact customer support.

8.1 Common Issues and Solutions

- **No Hot Water / Unit Not Turning On:** Check power supply, circuit breakers, and ensure water flow is above the minimum activation rate (0.79 GPM/min).
- **Inconsistent Water Temperature:** Verify incoming water pressure and flow rate. Ensure the unit is sized correctly for your demand (refer to selection guide).
- **Error Codes on Display:** Refer to the detailed installation manual for specific error code meanings and troubleshooting steps.

8.2 Safety Thermal Cut-off Reset Instructions

If the product stops working due to triggering the safety thermal cut-off protection function, you can reset it to restore normal product operation. **Warning: Please make sure to operate under power-off conditions.**

1. **Remove the outer shell:** Carefully detach the outer casing of the water heater.
2. **Locate the safety thermal cut-off:** Identify the thermal cut-off component inside the unit.
3. **Press the reset button with a screwdriver:** Use a small screwdriver to press the reset button on the thermal cut-off.
4. **Install the outer shell:** Reattach the outer casing securely.

How to determine if the safety thermal cut-off has tripped:
① The machine is not working (the display shows nothing); ② The municipal power supply is normal (Test whether other appliances at home are functioning properly); ③ The circuit breaker connected to the electric water heater has not tripped.
If the above three conditions are met simultaneously, the product's limiter may trip, and you will need to open the product cover to reset the safety thermal cut-off.

A four-step visual guide on how to reset the safety thermal cut-off. Step 1: Remove the outer shell. Step 2: Locate the safety thermal cut-off. Step 3: Press the reset button with a screwdriver. Step 4: Install the outer shell. A warning emphasizes performing the reset under power-off conditions.

9. Technical Specifications

Specification	Value
Brand	MIZUDO

Specification	Value
Model Number	EQUIK 27kW
Product Dimensions	12.91"W x 17.05"H x 3.6"D
Color	White
Wattage	27 KW
Voltage	240 Volts (AC)
Maximum Temperature	120 Degrees Fahrenheit
Heat Output	27 Kilowatts
Efficiency	98%
Mounting Type	Wall
Item Weight	21.2 pounds
Water Connection	3/4" NPT
Maximum Flow Rate	6.26 GPM
Minimum Water Flow	0.79 GPM/min

10. Warranty and Customer Support

For warranty information, please refer to the warranty card included with your product or visit the official MIZUDO website. If you require technical assistance, troubleshooting support, or have questions regarding your MIZUDO tankless water heater, please contact MIZUDO customer support directly. Contact details can typically be found in the product packaging or on the manufacturer's website.