

thermoflow Elex 3.5

Thermoflow Elex 3.5 Mini Tankless Water Heater Instruction Manual

Model: Elex 3.5

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Thermoflow Elex 3.5 Mini Tankless Water Heater. Please read this manual thoroughly before installation and use, and retain it for future reference.

The Thermoflow Elex 3.5 is a compact, point-of-use electric tankless water heater designed to provide instant hot water for single sink applications, such as hand washing or light dishwashing. Its efficient design helps reduce energy consumption and saves space.

2. 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.

- All electrical and plumbing work must be performed by qualified and licensed professionals in accordance with all national, state, and local electrical and plumbing codes.
- Ensure the power supply is disconnected before performing any installation or maintenance.
- Do not operate this water heater if any part of it has been submerged in water.
- This appliance is designed for indoor use only.
- Do not block or obstruct any openings on the appliance.
- Keep flammable materials away from the water heater.
- Verify that the electrical requirements of the unit match your household's electrical supply.

3. PRODUCT OVERVIEW

3.1 Features

- **Energy Efficiency:** Designed to save up to 60% on water heating costs by avoiding distribution, start-up, technical system losses, circulation, and storage losses.
- **Instant Hot Water:** Provides endless hot water on demand without preheating, ensuring immediate desired temperature.
- **Compact Design:** Smaller than a shoebox, wall-mounted for point-of-use installation, freeing up floor space and fitting into tight areas like washbasin cabinets.
- **Durability:** Features rapid and maintenance-free bare wire heating systems with high-quality alloy elements for corrosion and acid resistance, ensuring a longer lifespan and up to 99% instantaneous heating efficiency.
- **Application:** Specifically designed for single sink wash use only.

3.2 Components

The Thermoflow Elex 3.5 Mini Tankless Water Heater consists of several key components that work together to provide instant hot water. Refer to the diagram below for a visual representation of the internal parts.

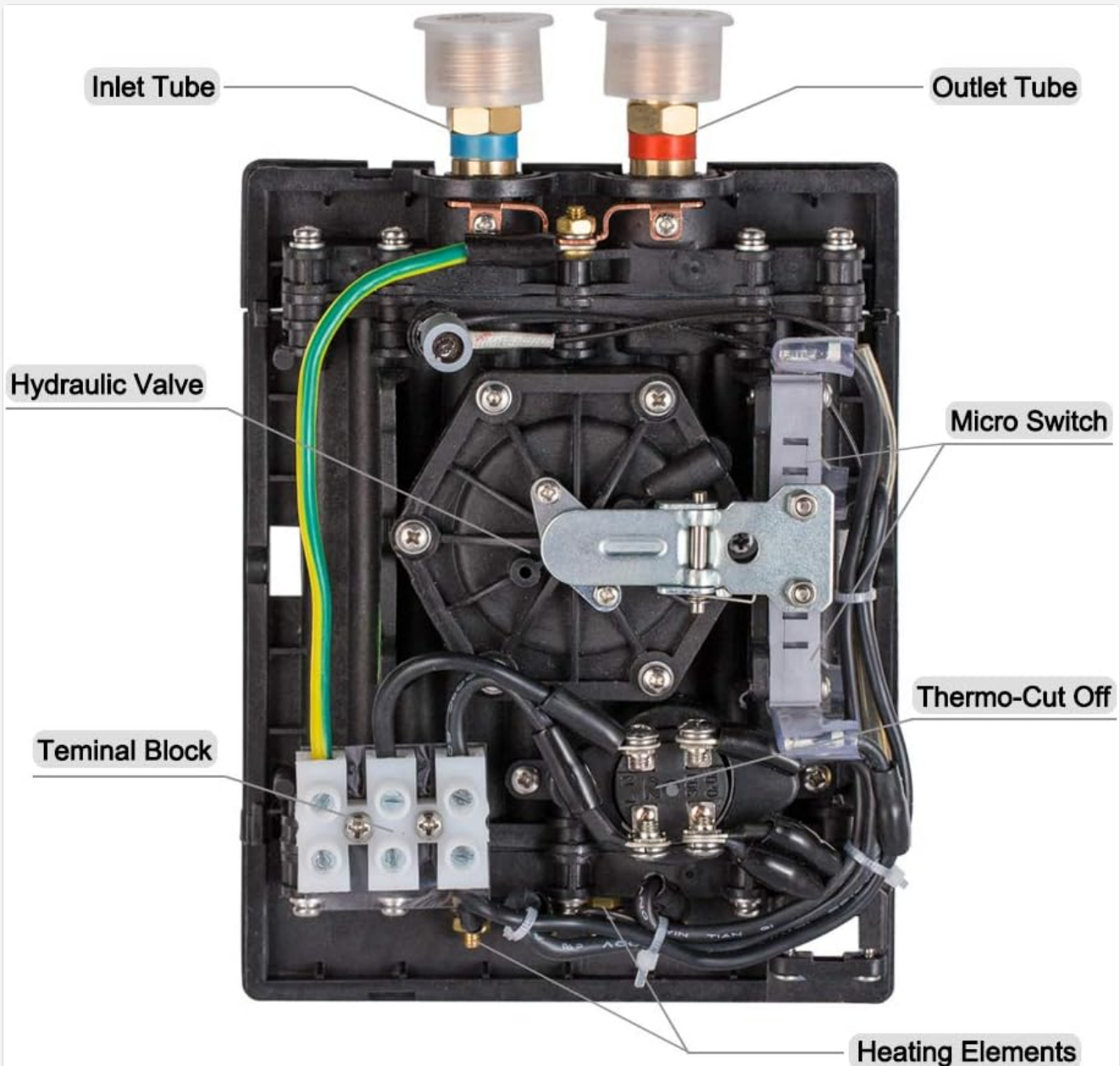


Figure 3.2.1: Internal Components Diagram

This image displays the internal layout of the Thermoflow Elex 3.5 water heater, highlighting key parts such as the Inlet Tube, Outlet

- **Inlet Tube:** Where cold water enters the unit.
- **Outlet Tube:** Where heated water exits the unit.
- **Hydraulic Valve:** Controls water flow within the unit.
- **Micro Switch:** Activates the heating elements when water flow is detected.
- **Thermo-Cut Off:** A safety feature that shuts off power if the water temperature exceeds a safe limit.
- **Terminal Block:** Connection point for the electrical wiring.
- **Heating Elements:** Rapidly heat the water as it passes through the unit.

3.3 Specifications

Specification	Value
Brand	thermoflow
Model Number	Elex 3.5
Product Dimensions (W x H)	7.4" x 3.4"
Item Weight	3.47 pounds
Color	White
Wattage	3500 watts
Voltage	208 volts (3.5kW) or 240 volts (4.7kW)
Nominal Current	25 Amps
Required Breakers	1x 2-POLE 25A (Not included)
Required Wire	1 x 12AWG (Not included)
Pipe Fittings	1/2" NPT
Nominal Pressure	150 PSI
Installation Method	Wall-Mounted
Efficiency	High (up to 99%)
Certifications	CSA Certified

Note: Breakers and wire are not included with the unit.

4. SETUP AND INSTALLATION

The Thermoflow Elex 3.5 is designed for wall-mounted, point-of-use installation. Proper installation is crucial for safe and efficient operation. It is strongly recommended that installation be performed by a qualified and licensed electrician and plumber.

4.1 Pre-Installation Checklist

- Ensure the installation location is indoors, protected from freezing temperatures, and easily accessible for

maintenance.

- Verify that the electrical supply meets the unit's requirements (3.5kW at 208V or 4.7kW at 240V, 25A nominal current). A dedicated 2-pole 25A breaker and 12AWG wire are required.
- Confirm water pressure is within acceptable limits (Nominal pressure: 150 PSI).
- Gather necessary tools and materials, including appropriate plumbing fittings (1/2" NPT), electrical wiring, and mounting hardware.

4.2 Mounting the Unit

The unit should be mounted vertically on a solid surface near the point of use. Use the provided bracket and mounting accessories (anchors, screws) to secure the heater firmly to the wall.

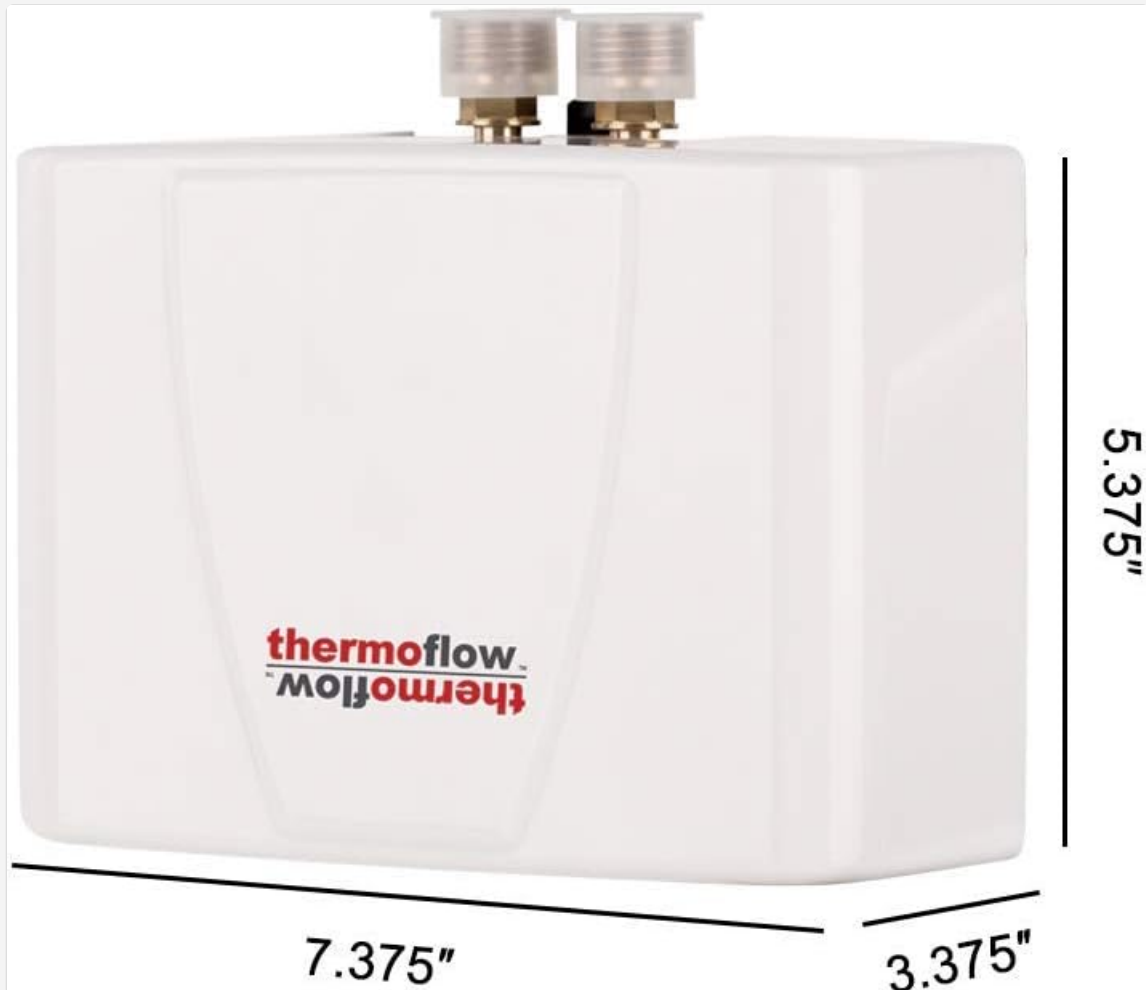


Figure 4.2.1: Product Dimensions

This image illustrates the compact dimensions of the Thermoflow Elex 3.5 water heater, measuring approximately 7.375 inches wide, 5.375 inches high, and 3.375 inches deep, highlighting its suitability for small spaces.

4.3 Plumbing Connections

Connect the cold water supply to the inlet tube and the hot water line to the outlet tube. The unit uses 1/2" NPT pipe fittings. Ensure all connections are watertight to prevent leaks.

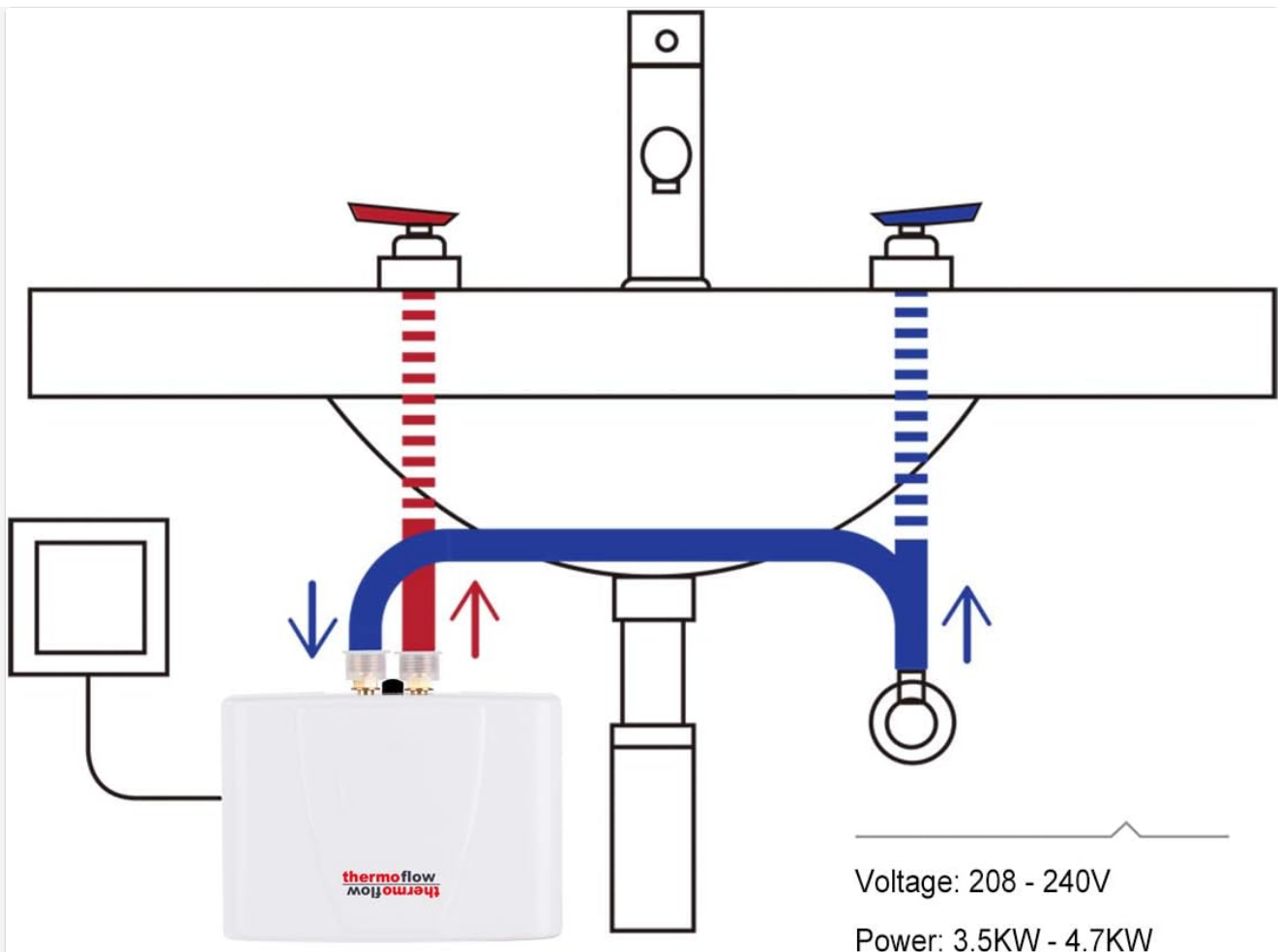


Figure 4.3.1: Typical Under-Sink Installation

This diagram shows a typical installation setup for the Thermoflow Elex 3.5 water heater under a sink, illustrating the connection points for cold water inlet (blue) and hot water outlet (red) to the faucet, and the electrical connection.

4.4 Electrical Connections

The unit requires hardwiring to a dedicated electrical circuit. A fixed power cord of approximately 28 inches is attached. Connect the wiring to the terminal block inside the unit, following local electrical codes and the wiring diagram provided with the product. Ensure the power is OFF at the main breaker before making any electrical connections.

IMPORTANT: This unit must be hardwired. Do not use a plug-in connection.

5. OPERATING INSTRUCTIONS

Once properly installed and connected, the Thermoflow Elex 3.5 operates automatically to provide instant hot water.

5.1 Initial Startup

1. Before turning on the power, ensure the water heater is completely filled with water by opening the hot water faucet at the sink until a steady stream of water flows. This purges air from the system.
2. Check all plumbing connections for leaks.
3. Turn on the electrical power to the unit at the main breaker.
4. The unit will begin heating water as soon as flow is detected.

5.2 Daily Operation

Simply open the hot water faucet at your sink. The unit will detect water flow and activate the heating elements, providing hot water almost instantly. Close the faucet to stop the flow, and the unit will cease heating.

3.5kW Instant Tankless Water Heater

2s Fast Heating



Hot Water Washing



Washing Vegetable



Dish Washing



Washing Clothes

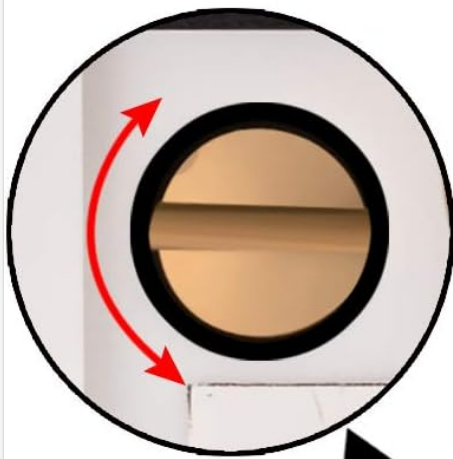
Figure 5.2.1: Versatile Use Cases

This image demonstrates the Thermoflow Elex 3.5 providing hot water for various single-sink applications, including hand washing, washing vegetables, dishwashing, and washing small clothing items.

5.3 Advanced Flow Control

The unit features an Advanced Flow Control mechanism. This allows you to slightly reduce the water flow to maintain a consistent temperature if the demand for hot water temporarily exceeds the unit's capacity. This can be useful in situations where the incoming water is very cold or if a slightly higher temperature rise is desired for a specific task.

Exclusive Advanced Flow Control



You can use the Advanced Flow Control in anytime to reduces flow slightly to maintain a consistence temperature if the demand for hot water exceeds capacity.



Figure 5.3.1: Advanced Flow Control Mechanism

This close-up image highlights the Advanced Flow Control feature, indicated by a rotating mechanism, which allows users to fine-tune water flow to optimize temperature consistency.

6. MAINTENANCE

The Thermoflow Elex 3.5 is designed for low maintenance. However, regular checks can help ensure its longevity and optimal performance.

- **Regular Inspection:** Periodically inspect the unit for any signs of leaks, corrosion, or damage to the casing or connections. Address any issues promptly.
- **Clean Exterior:** Clean the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Sediment Buildup:** In areas with hard water, sediment buildup can occur over time. If you notice a decrease in water flow or heating efficiency, it may be necessary to flush the unit or clean the inlet filter. This procedure should ideally be performed by a qualified plumber.
- **Winterization (if applicable):** If the unit is installed in an area prone to freezing and will not be used for an extended period, it should be drained to prevent damage from freezing water. Consult a professional plumber

for proper winterization procedures.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your Thermoflow Elex 3.5 water heater. For problems not listed here or if solutions do not resolve the issue, contact qualified service personnel.

Problem	Possible Cause	Solution
No hot water / Water is cold	No power to the unit Water flow too low Heating elements failure Thermo-cut off activated	Check circuit breaker and electrical connections. Ensure sufficient water flow (minimum activation flow rate). Contact qualified technician for inspection/replacement. Reset power at breaker; if issue persists, contact technician.
Water is not hot enough	Incoming water too cold Water flow too high Unit undersized for demand	Reduce water flow using the Advanced Flow Control or faucet. Reduce water flow. Ensure the unit is used for single sink applications only.
Water leaks from unit	Loose plumbing connections Internal component damage	Tighten all water connections. If leak persists, turn off water and power, then contact a qualified plumber. Turn off water and power immediately. Contact qualified technician.
Low water pressure	Clogged inlet filter General household water pressure issue	Clean or replace inlet filter (consult plumber). Check other faucets in the house. Contact a plumber if widespread.

8. WARRANTY AND SUPPORT

For specific warranty terms and conditions, please refer to the warranty card included with your product or contact Thermoflow customer support directly. Keep your proof of purchase for warranty claims.

For technical assistance, troubleshooting beyond this manual, or to inquire about replacement parts, please contact Thermoflow customer service. Contact information can typically be found on the manufacturer's website or on the product packaging.

Thermoflow is committed to providing quality products and support. For the most up-to-date information, please visit the official Thermoflow website.