

Installation and Operation Guide Thermo Boost

Instant Water Heater

Digital electric tankless instant water heater provides endless supply of hot water while significantly conserving energy and water





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Important Safety Guidelines

1. Safety Guidelines

Read this manual thoroughly before attempting to install the instant water heater.

Failure to follow the safety instructions in this manual may cause damage to the unit, and could also result in property damage, personal injury, or loss of life.

Failure to comply with the safety, installation or operating instructions voids the product warranty.

The product manufacturer and the product distributor will not be liable for any damages or injury because of failure to comply with the installation and operating instructions specified in this manual or because of improper use.

Never attempt to install, disassemble, inspect or repair, disassemble or service the water heater without first shutting off all power to the unit by means of the circuit breaker on the main electrical panel.

The water heater must be installed by a licensed electrician and in compliance with all national, state, provincial and local electrical and building regulations.

Always contact your local authorized distributor for service.

2. Safety - Important Notes

- For household and indoor use only.
- Do not immerse in water.
- The heater must be installed by a professional technician and according to the installation instructions.
- The heater must be grounded.
- The heater must be connected to a dedicated circuit breaker on the main electrical panel.
- The plumbing installation must be completed before the electrical installation.
- The plumbing installation requires metal pipes or reinforced hoses that can withstand pressure up to 7 bar.
- A pressure relief device (PRD) must be installed at the inlet of the water supply line.
- To ensure proper operation, the water supply flow rate must be at least 1.6 Liter/Min.
- Do not install the heater where it may be subjected to direct sunlight, rain, splashing water, or freezing temperatures.
- This unit is intended for heating water only. Do not attempt to use the unit for heating any other kind of liquid.

Before connecting the product to a public power network, consult your local power supply authority to ensure the power network meets the stated requirements.

SAVE THESE INSTRUCTIONS

Technical Information

Electrical Specifications

	Thermo Boost 8.0 kW
Heating elements	1
Watts	8,000 W
Kilowatts	8.0 kW
Voltage	220 V
Breaker/relay	3 x 20 Amps
Total connection load	36 A
Cable size (minimum)	5x12 AWG

Plumbing Specifications

Minimum water flow to activate unit	1.6 L/Min
Working pressure	0.5–8 bar
Tested pressure	16 bar
Water connections	1/2" BSP

Physical Dimensions

Height	Width	Depth	Weight
235 mm	289 mm	104 mm	2.58 kg

Plumbing

D1 The plumbing in must be comple the electrical in:	nstallation eted before stallation.	02	A pressure re installed on tl supply line pr maximum red pressure is 1	elief device (PRD) must be he heater's incoming water rior to installing the unit. The commended operating water 16 psi (8 bar).	
03	Residential pl unstable pres bar require th stabilizer valv	lumbing systems w ssure or pressure a le application of a p /e, set to 43-72 psi	ith bove 5 oressure (3–5 bar).	04 The plumbing installation requires pipes or reinforced flexible hoses that can	
05	Copper water use within thre and outlet. Ot provided that applications.	pipes are recomme ee feet of the unit's her types of piping are rated for high to	ended for water inlet can be used emperature	withstand pressure up to 116 psi (8 bar) and that are rated for high temperature applications.	
06	If installing the an attic, be su with local code drainage, or a shutoff valve, a leak.	ie heater on an upper floor or in ure installation is in compliance de. Install a drip pan with a leak detector and automatic , to prevent damage in case of After plumbing installat is completed, carefully inspect all fittings and		O7 After plumbing installation is completed, carefully inspect all fittings and	
08	Before procee installation, run for several mir bubbles from t	ding to electrical n water through the nutes to flush out a the water line.	e unit ny air	connections, and the pressure relief device for leaks.	

Mounting

01 The mounting must be solid a	surface and secure.	D2 The unit must be installed in an upright position with the water inlet and outlet at the bottom.
D Make sure the unit is level prior to securing the mounting screws.	04 Use mounting screws that are at least 1 inch in length.	05 Do not install the unit above electrical boxes or junctions.
066 The water heater must be installed in a manner that prevents contact with combustible materials. Keep combustible materials at least two feet away from the heater and hot water output pipe. The water heater and hot water outlet pipe must be securely out of the reach of children to prevent tampering with controls or contact with an extremely hot pipe.		
077 If installing the heater on an upper floor or in an attic, be sure installation is in compliance with local code. Install a drip pan with drainage, or a leak detector and automatic shutoff valve, to prevent damage in case of a leak.		

Assembly Instructions

Connect the pressure relief device (PRD) to the unit (Figure 1)

IMPORTANT – Do not omit this step. A PRD must be installed. **O2** Remove the appliance covers (Figure 2).

Disconnect the cables from the PCB within the unit. (Figure 3)



Mount the unit on the wall with 4 screws at the marked points. (Figure 4)

Make sure the unit is horizontally level, with water inlets and outlets at the bottom. (Figure 5)

Connect the incoming water line to the heater inlet (on left side), and connect the outgoing water line to the heater outlet (on right side). Use a hose that can withstand pressure up to116 psi (8 bar) (Figure 5).

06 Run water through the unit for one minute, and

make sure there are no leaks.

Make sure power to the unit is shut off by means of the dedicated circuit breakers on the main electrical panel. Run the power cable wires from the circuit breakers on the main electrical panel to the water heater. Connect the power cable to the terminal block within the unit.

Make sure the correct breaker size and wire gauge have been used. Make sure all wire connections are tight and secure.

Make sure the unit is connected to a ground in accordance with applicable codes. (Figure 6)



Assembly Instructions

08 Reconnect the cables to the PCB within the unit. (Figure 3)	09 Place the front cover onto the unit and reattach it with 2 screws. (Figure 2)	10 Before turning on power to the water heater, open several hot water faucets and allow water to run through the unit for
Restore power to the unit by means of the dedicated circuit breakers on the main electrical panel.		This step must be performed before turning on power to
Do not install the heater where it may be subject to direct sunlight, and freezing temperatures.		the heater. Failure to perform this step may result in permanent damage to the heater and heating elements.

Electrical Diagram

8.0kW 220V



Starting the System for the First Time

01	02	03
Press the On/Off switch (C) to activate the heater.	With water running through the unit, adjust the temperature using the Up and Down buttons. (B) The recommended temperature setting is 48°C.	The water heater is now ready for operation.

Setting the Output Water Temperature

To set the temperature, first turn on a hot water faucet and allow water to run through the heater.

The digital display lights up and shows the current temperature setting.

To increase or lower the temperature setting, press the UP or DOWN button.

Temperature can be set to a level from 30°C to 57°C.

A higher temperature setting is not recommended, as it can cause serious scalding injuries to children and elderly persons. Higher temperatures also produce more scale buildup in water heating devices.



- A Digital temperature display
- B Temperature setting Up/Down buttons
- C On/Off switch
- D Pressure relief device (PRD)
- E Cold water inlet
- F Hot water outlet (to be connected to the main hot water pipe)

Operation Guide

Operating Instructions for the Home Owner

This electric water heater is designed as a point of use product to supply hot water to types of outlets. Unlike a conventional tank storage water heater, this unit is a tankless water heater that does not store hot water. However, once you begin using the system, you will find it operates much like a conventional tank system.

Tankless systems deliver hot water instantaneously on demand. Since a tankless system does not waste energy continually heating water that is idly sitting and losing heat in a storage tank, it provides greater energy efficiency than a conventional system.

With your new system, as soon as you turn on a hot water faucet, the demand for hot water is detected, and high power heating elements are activated. Sensors continually monitor water flow rate and incoming and outgoing temperature, and transmit data to the system controller, which determines the exact amount of power required by heating elements to reach the set temperature.

It is important to remember that all tankless water heaters are subject to a maximum flow rate. If this flow rate is exceeded, the heater will not be capable of fully heating water.

Also keep in mind that conventional tank heaters are set to high temperatures to prevent running out of hot water quickly, and thus a large amount of cold water needs to be mixed in to reach a comfortable level for washing and showering. Since this unit heats water on demand, it is designed to heat to a lower temperature. This means you only need to mix in a small amount of cold water, or none at all.

Your hot water supply may also be affected by the incoming water temperature. During winter, if incoming water temperature is very cold, you might not be able to run multiple hot water outlets at the same time. However, you can run showers back-to-back without having to wait for water to heat.

Operation Guide

Freezing Temperatures

If the ambient temperature falls below 0°C, protect the heater from potential damage. Shut off power to the unit by means of the dedicated circuit breaker on the main electrical panel. Open a faucet slightly to cause water to flow continuously through the device at a very low rate, without heating. Restore power to the unit when temperature conditions allow.

If the water inside the heater freezes, it can cause damage that is not covered by warranty. If you suspect water has frozen within the unit, do not turn it on until you are certain the frozen water has melted and there are no leaks in the unit. It is recommended to contact a qualified electrician or the customer service in this situation.

Leak Detected

If you detect a water leak from the water heater: Turn off the water supply at the shutoff valve on the unit's incoming water supply line, shut off power to the heater, and contact customer service.

Care and Maintenance

Periodic inspections and tests are recommended for the unit once every 6-12 months, depending on the hardness in your water.

Remember that water heated to higher temperatures produces scale buildup much faster than at lower temperatures.

Clean the filter every 6 months or more often, depending on the hardness of your water.

Electrical connections should be tested once a year by a qualified technician.

Plumbing connections on the water heater should be inspected at least once a year for any signs of damage or failure. If the water supply has a high level of mineralization (hard water), the water heater should be inspected and descaled more frequently.

As a result of maintenance or a water stoppage, air may be introduced into the plumbing system. Under such circumstances, follow the steps below to ensure the unit can safely resume operation.

Care and Maintenance

Stopping and restarting the system due to servicing, water stoppage, or other interruptions of operation

D1 Press the power switch to the OFF position.	02	Shut off all power to the unit at the circuit breaker on the main electrical panel.
03 Perform the maintenance or servicing tasks.	04	Open one or more hot water faucets and allow water to run through the unit for several minutes to purge any air from the heater and water lines. This step must be performed before turning on power to the heater. Failure to perform this step
Reconnect power to the unit at the circuit breaker on the main electrical panel. Press the power switch to the ON position.	06	may cause permanent damage to the heating elements. With water running through the unit, check and reset the temperature if necessary. The recommended temperature setting is 118°F (48°C).

Troubleshooting

Before calling for service, check the troubleshooting list of common issues. If you are unable to resolve a problem, contact your customer service.

PROBLEM		SOLUTION
Water not hot enough.	The water flow rate exceeds the heating capacity of the heater.	Reduce the water flow rate at the faucet or slightly close the shutoff valve on the unit's incoming water supply line to reduce the water flow rate.
	Temperature setting is too low.	Increase the temperature setting on the unit.
	Water pressure is less than 7 psi (0.5 bar).	Make sure the shutoff valve is fully open and the water supply line is not blocked.
	Electrical malfunction.	Contact a qualified electrician or your local authorized distributor for service.
Water too hot.	The water flow rate through the heater is too slow.	Increase the flow rate at the water outlet.
	Temperature setting is too high.	Switch to a lower temperature setting.
Heater shuts off during use.	Power outage or faulty wiring.	Check the power supply. Check the circuit breaker. If problem persists, contact a qualified electrician or the manufacturer.
Water stops flowing.	Blockage in water pipes or hoses. No water supply.	Make sure the main water line valve is fully open and there are no obstructions in the water supply line.
Water temperature varies from hot to cold during use.	Water pressure has dropped below minimum level.	Increase the flow rate from the water supply source.
No hot water even though the shutoff valve on the unit's incoming water supply line is fully open.	Power outage or faulty wiring.	Check the power supply. Check the circuit breaker.
	The flow rate needed to activate the heating element	Increase the flow rate from the water supply source.
	(0.5 gpm) has not been reached.	Clean the filter screen on the unit's water inlet.