

THERMANN™

INSTALLER'S MANUAL

25L and 50L
Electric Storage Water Heaters

Models

25THMS124P | 25THMS136
50THMS124P | 50THMS136



Specifications and materials may change without notice.
Effective for all Thermann 25L & 50L Electric Storage Water Heaters
manufactured and sold after 1st July 2016.

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INSTALLATION REQUIREMENTS

General:

This water heater must be installed by a licensed tradesperson, and in accordance with:

- AS/NZS 3500.4 Plumbing and Drainage – Heated Water Services.
- Clause G12 of the NZ Building Code (in New Zealand).
- AS/NZS 3000 Electrical Installations (known as the Australian / New Zealand Wiring Rules).
- Local authority regulations.
- Outside Australia and New Zealand, please refer to local plumbing and building codes and regulations.

Failure to comply with these requirements may affect the warranty.

Note for Victoria:

This water heater must be installed by a licensed person as required by the Victorian Building Act (1993).

Only a licensed person will provide a compliance certificate, showing that the work complies with all the relevant Standards. Only a licensed person will have insurance protecting their workmanship.

Pool Heating:

This water heater must **not** be used for pool heating.

Location:

The water heater should be located as close as possible to the most frequently used hot water outlet.

Ensure the compliance plate and associated warnings are clearly visible. The water heater must be accessible without the use of a ladder or scaffold. Adequate clearance must be available for service to the element, thermostat, relief valve and anode. All models are equipped with a sacrificial anode, accessed through the top cover.

Electric storage water heaters may be installed indoors. A properly drained safe tray must be installed where property damage could occur from water spillage. Refer to AS/NZS 3500.4 for further information.

Note - the warranty will not cover damage due to leakage of the water heater if a properly drained safe tray has not been installed.

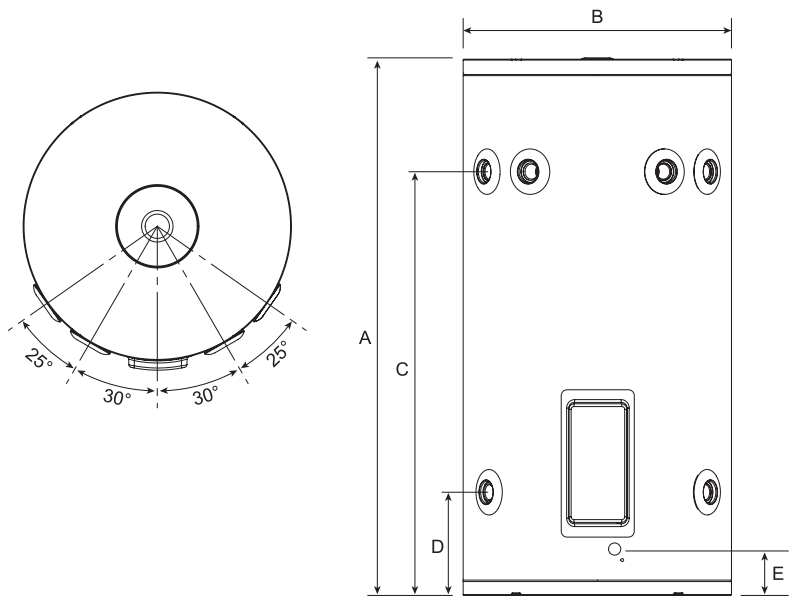
Refer to local regulations before installing the water heater in a roof space.

Water Heater Support:

The water heater must be installed on a flat, solid supporting surface. The pipework must not be used to support the water heater.

Where the water heater is subjected to wet conditions, a plinth should be installed under the water heater.

TECHNICAL DATA



Nominal Dimensions	25L	50L
Total Height (A)	455	670
Total Width (B)	405	405
Outlet Height (C)	275	490
Inlet Height (D)	145	145
Electrical Entry (E)	70	70

Specifications	25L	50L
Storage Capacity (L)	31	50
Hot Water Delivery (L)	25	50
Net Weight Empty (kg)	17	23
Element Sizes (kW)	2.4, 3.6	2.4, 3.6

Relief Valve:

Pressure (kPa)	1000
Temperature (°C)	99
Power Rating (kW)	10

PLUMBING CONNECTIONS

Relief Valve:

The Pressure & Temperature Relief (PTR) Valve, along with a brass reducer, is supplied loose with the water heater.

The PTR Valve rating is 1,000 kPa.

The PTR Valve rating is also shown on the compliance plate. The PTR Valve must be installed with the brass reducer directly into either of the RP $\frac{3}{4}$ "(DN20) sockets marked "RELIEF VALVE". Ensure that a sealing material is applied to the PTR Valve and the brass reducer to prevent water leaks.

The unused socket marked "RELIEF VALVE" is to be plugged with one of the brass plugs supplied loose with the water heater. Ensure that a sealing material is applied to the brass plug to prevent water leaks.

The drain line from the PTR Valve must be made of copper and run in accordance with the requirements of AS/NZS 3500.4. It must be installed in a continuously downward direction in a frost free environment.

The PTR Valve and its drain line must not be sealed or blocked. Generally a separate drain line must be run for the valve although it may be joined with the drain line from the expansion control valve under certain circumstances.

Care must be taken when attaching pipe saddles to the water heater. Self-drilling screws no longer than 12 are recommended.

It is normal for the valve to leak a small amount of water during heating cycles.

The PTR Valve is not intended to enable connection of the water heater to supplementary energy sources such as solar panels or slow combustion stoves.

Refer to AS/NZS 3500.4 for guidance on these types of installations.

Hot Water Connection:

The hot water pipe is to be connected to either of the RP $\frac{3}{4}$ "(DN20) sockets with red surrounds at the top of the water heater.

The unused socket with red surrounds is to be plugged with one of the brass plugs supplied loose with the water heater. Ensure that a sealing material is applied to the brass plug to prevent water leaks.

It is recommended that all hot water pipes are insulated. Hot water pipes installed outdoors should be insulated with UV stabilised insulation.

Plastic pipes or fittings shall not be used within 1 metre of the outlet although they may be used downstream of a temperature control valve. Refer to AS/NZS 3500.4 for further details.

Temperature Protection:

Water heaters can produce very hot water. To reduce the risk of scald injury, it is mandatory under the requirements of AS/NZS 3500.4 that an approved temperature control device is fitted to the hot water supply to outlets used primarily for personal hygiene. This device should be checked at regular intervals to ensure its operation and settings remain correct.

PLUMBING CONNECTIONS

Water Supply:

This water heater has been manufactured to suit the water conditions of most Australian metropolitan supplies.

Please note certain water supplies can have a detrimental effect on the water heater and its life expectancy. If you are unsure about the water supply you can obtain information from the local water supply authority.

The water heater is designed for use in areas where the Total Dissolved Solids (TDS) content of the water supply is less than 2500 mg/L. The Tank Failure Warranty (see Owner's Guide) does not apply in areas where the TDS exceeds 2500 mg/L.

In areas where the TDS exceeds 600mg/L, it is possible the magnesium alloy anode (supplied in standard water heaters) may become over-reactive. To alleviate this, the magnesium alloy anode should be replaced with an aluminium alloy anode. Aluminium alloy anodes are available from your local Reece branch.

Water can also be very corrosive, the measure of this is the saturation index. If the water saturation index is greater than 0.40, an expansion control valve should be fitted. If the index is greater than 0.80, the electrical heating element should be replaced with a low power density Incoloy heating element. Please consult Customer Service on 1300 412 612 for advice if required.

Cold Water Connection:

The water heater is intended to be permanently connected to the water supply main, and not connected by a hose-set.

An approved isolating valve, non-return valve, line strainer (optional but recommended) and union must be fitted between the water supply main and either of the RP $\frac{3}{4}$ "(DN20) sockets with blue surrounds at the bottom of the water heater. See the diagram on page 6 for details.

All fittings must be approved by the relevant Authority. Plastic pipes or fittings shall not be used between the isolating valve and the inlet.

The unused socket with blue surrounds is to be plugged with one of the brass plugs supplied loose with the water heater. Ensure that a sealing material is applied to the brass plug to prevent water leaks.

Water Supply Pressure:

This water heater is designed for direct connection to water supply pressures of up to **800 kPa**.

Where the mains pressure can exceed or fluctuate beyond this pressure, a pressure reducing valve must be fitted in the cold water inlet supply.

Note for New Zealand, South Australia and Western Australia:

It is a requirement in these locations that an expansion control valve be fitted on the cold water supply line between the non-return valve and the water heater.

FILLING AND DRAINING

Filling the Water Heater:

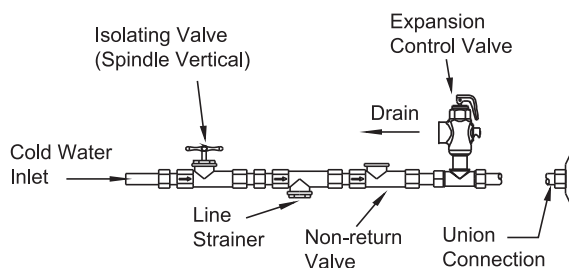
The water heater must be filled with water before turning on the electrical supply.

1. Open all hot water taps.
2. Open the isolating valve at the cold water inlet slowly and allow the water heater to fill until water flows through the system.
3. Close each hot water tap after the air is expelled from its line.
4. Open the Pressure & Temperature Relief Valve for approximately 10 seconds by lifting the easing lever on the valve. Confirm water is relieved to waste through the relief valve drain pipe.
5. Lower the lever gently and check it closes correctly.

Draining the Water Heater:

1. Turn off the electricity supply to the water heater.
2. Turn off the cold water supply to the water heater at the isolating valve.
3. Gently operate the easing lever on the Pressure & Temperature Relief (PTR) Valve to release the pressure in the water heater.
4. Disconnect the cold water inlet union and attach a drain hose to the water heater.
5. Gently operate the easing lever on the PTR Valve to let air into the water heater and allow water to escape through the hose.

Cold Water Connection Diagram:



Note: a combined isolating valve/non-return valve/line strainer may be used.

The expansion control valve is only required where local regulations demand, although it is recommended in areas where the water saturation index is greater than 0.40.

ELECTRICAL CONNECTION

General:

This water heater is designed for single phase 240V a.c. supply only. The electrical connection must comply with Local Supply Authority Regulations and AS/NZS 3000.

Pre-Wired Models:

Water heaters with the letter “P” at the end of their model number are factory fitted with a power supply cord. These water heaters may be plugged into a standard general purpose power outlet.

If the power supply cord is damaged, it must be replaced by the manufacturer, a service agent or a similarly qualified person in order to avoid a hazard.

“Hard Wired” Models:

Water heaters without the letter “P” at the end of their model number are not factory fitted with a power cord.

Connection of the electrical wiring must only be carried out by a licensed tradesperson. Before removing the electrical cover, ensure the electrical power supply is safely isolated.

Connections are made at the terminal block under the water heater electrical cover, and a means for disconnection must be incorporated in the fixed wiring in accordance with the Wiring Rules.

The electrical cover may be removed by undoing the two screws at the bottom of the cover and sliding the cover downwards to disengage the top edge.

Cable entry to the connection area is through the hole in the case beneath the electrical cover, designed to accept a 20mm conduit. Ensure the conduit entry is well sealed to achieve the correct weatherproofing.

When the supply wiring has been connected, ensure the wires are kept lower than the terminal block.

Before replacing the electrical cover, press the reset button on the thermostat to ensure the over-temperature energy cut-out is set.

Ensure the water heater is filled with water before turning on the electricity supply.

HANDOVER TO THE CUSTOMER

Owner's Guide:

Ensure the customer receives the Owner's Guide supplied with the water heater.

Victorian Installations:

Ensure you provide the customer with a Compliance Certificate as required by the Victorian Building Act (1993). Also ensure you lodge the Compliance Certificate with the VBA within five days of completing the installation.

Disposal of Packaging:

Dispose of the packaging and other transit protection responsibly using recycling facilities where they exist.

