

Owner's Guide and Installation Instructions



Rheem Eclipse® Continuous Flow Electric Water Heater



*This water heater must be installed and serviced by a qualified person.
Please leave this guide with a responsible officer.*

⚠ Warning: Upon completion of the installation and commissioning of the water heater, leave this guide with a responsible officer or the householder.

RESPONSIBLE OFFICER, HOUSEHOLDER AND INSTALLER PLEASE NOTE

This Owner's Guide and Installation Instructions is shared for the Australian and New Zealand markets.

An electronic copy of these Owner's Guide and Installation Instructions can be downloaded from rheem.com.au.

PATENTS

This water heater may be protected by one or more patents or registered designs in the name of Rheem Australia Pty Ltd or Paloma Co., Ltd.

Rheem Australia Pty Ltd is the supplier of the Rheem range of continuous flow gas water heaters, manufactured by Paloma Co., Ltd., a world leader in water heater technology and manufacture.

® Registered trademark of Rheem Australia Pty Ltd.
™ Trademark of Rheem Australia Pty Lt

Note: Every care has been taken to ensure the accuracy in preparation of this publication. No liability can be accepted for any consequences, which may arise as a result of its application.

CONTENTS

HOUSEHOLDER / RESPONSIBLE OFFICER

This booklet contains important information about your new water heater, including terms of the Rheem warranty.

We recommend you read pages 7 to 17,
and the terms of the Rheem warranty on pages 4 to 6.

The other pages are intended for the installer but may be of interest.

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RHEEM AUSTRALIA PTY LTD, A.B.N. 21 098 823 511

www.rheem.com.au, www.rheem.co.nz

For Service Telephone 131 031 AUSTRALIA or 0800 657 335 NEW ZEALAND

RHEEM CONTINUOUS FLOW ELECTRIC WATER HEATER WARRANTY – AUSTRALIA AND NEW ZEALAND ONLY

CONTINUOUS FLOW ELECTRIC WATER HEATER, 6C318500A, 6C318600A, 6C327500A, 6C327600A MODELS

1. THE RHEEM WARRANTY – GENERAL

- 1.1 This warranty is given in Australia by Rheem Australia Pty Limited ABN 21 098 823 511 of 1 Alan Street, Rydalmere New South Wales, and in New Zealand by Rheem New Zealand Limited of 475 Rosebank Road Avondale Auckland 1026, the suppliers of Rheem continuous flow gas water heaters.
- 1.2 Rheem offer a trained and qualified national service network who will repair or replace components at the address of the water heater subject to the terms of the Rheem warranty. Rheem Service, in addition can provide preventative maintenance and advice on the operation of your water heater. The Rheem Service contact number in Australia is 131031, with Contact Centre personnel available 24 hours, 7 days a week to take your call and if necessary to arrange a service call for during normal working hours Monday to Friday (hours subject to change) or in New Zealand on 0800 657 335.
- 1.3 For details about this warranty, you can contact us in Australia on 131031 or by email at warrantyenquiry@rheem.com.au (not for service bookings), or in New Zealand on 0800 657 335 or by email at rheem@rheem.co.nz (not for service bookings).
- 1.4 The terms of this warranty and what is covered by it are set out in sections 2 and 3 and apply to water heaters manufactured after 1st September 2018.
- 1.5 If a subsequent version of this warranty is published, the terms of that warranty and what is covered by it will apply to water heaters manufactured after the date specified in the subsequent version.

2. TERMS OF THE RHEEM WARRANTY AND EXCLUSIONS TO IT

- 2.1 The decision of whether to repair or replace a faulty component is at Rheem's sole discretion.
 - 2.2 If you require a call out and we find that the fault is not covered by the Rheem warranty, you are responsible for our standard call out charge. If you wish to have the relevant component repaired or replaced by Rheem, that service will be at your cost.
 - 2.3 Where a failed component or cylinder is replaced under this warranty, the balance of the original warranty period will remain effective. The replacement does not carry a new Rheem warranty.
 - 2.4 Where the water heater is installed outside the boundaries of a metropolitan area as defined by Rheem or further than 25 km from either a regional Rheem branch office or an Accredited Rheem Service Agent's / Centre's office, the cost of transport, insurance and travelling between the nearest branch office or Rheem Accredited Service Agent's / Centre's office and the installed site shall be the owner's responsibility.
 - 2.5 Where the water heater is installed in a position that does not allow safe or ready access, the cost of that access, including the cost of additional materials handling and/or safety equipment, shall be the owner's responsibility. In other words, the cost of dismantling or removing cupboards, doors or walls and the cost of any special equipment to bring the water heater to floor or ground level or to a serviceable position is not covered by this warranty.
 - 2.6 This warranty only applies to the original and genuine Rheem water heater in its original installed location and any genuine Rheem replacement parts.
 - 2.7 The Rheem warranty does not cover faults that are a result of:
 - a) Accidental damage to the water heater or any component (for example: (i) Acts of God such as floods, storms, fires, lightning strikes and the like; and (ii) third party acts or omissions).
 - b) Misuse or abnormal use of the water heater.
 - c) Installation not in accordance with the Owner's Guide and Installation Instructions or with relevant statutory and local requirements in the State or Territory in which the water heater is installed.
 - d) Connection at any time to a water supply that does not comply with the water supply guidelines as outlined in the Owner's Guide and Installation Instructions.
 - e) Repairs, attempts to repair or modifications to the water heater by a person other than Rheem Service or a Rheem Accredited Service Agent / Centre.
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- f) Faulty plumbing or faulty power supply.
 - g) Failure to maintain the water heater in accordance with the Owner's Guide and Installation Instructions.
 - h) Transport damage.
 - i) Fair wear and tear from adverse conditions (for example, corrosion).
 - j) Cosmetic defects.
 - k) Ice formation in the waterways of a water heater: where the electricity supply has been switched off or has failed and the water heater has not been drained in accordance with the instructions; or due to an ambient temperature below -20°C (including wind chill factor).
- 2.8 Subject to any statutory provisions to the contrary, this warranty excludes any and all claims for damage to furniture, carpet, walls, foundations or any other consequential loss either directly or indirectly due to leakage from the water heater, or due to leakage from fittings and/ or pipe work of metal, plastic or other materials caused by water temperature, workmanship or other modes of failure.
- 2.9 If the water heater is not sized to supply the hot water demand in accordance with the guidelines in the Rheem water heater literature, any resultant fault will not be covered by the Rheem warranty.
- 2.10 In New Zealand this warranty excludes to the extent permissible all implied warranties set out in the Sale of Goods Act 1908 (New Zealand) and all guarantees set out in the Consumers Guarantees Act 1993 (New Zealand) to the extent that the goods are acquired for the purpose of resupply in trade consumption in the course of a process of production or manufacture or repairing or treating in trade other goods or fixtures on land.

3. WHAT IS COVERED BY THE RHEEM WARRANTY FOR THE WATER HEATERS DETAILED IN THIS DOCUMENT

- 3.1 Rheem will repair or replace a faulty component of your water heater if it fails to operate in accordance with its specifications as follows:

What components are covered	The period from the date of installation in which the fault must appear in order to be covered	What coverage you receive
All components when used in a single-family residence	Years 1-5	Repair and/or replacement of the faulty component, free of charge, including labour.
All components when used in other than a single-family residence	Year 1	

RHEEM CONTINUOUS FLOW ELECTRIC WATER HEATER WARRANTY – AUSTRALIA AND NEW ZEALAND ONLY

4. ENTITLEMENT TO MAKE A CLAIM UNDER THIS WARRANTY

- 4.1 To be entitled to make a claim under this warranty you need to:
- a) Be the owner of the water heater or have consent of the owner to act on their behalf.
 - b) Contact Rheem Service without undue delay after detection of the defect and, in any event, within the applicable warranty period.
- 4.2 You are **not** entitled to make a claim under this warranty if your water heater:
- a) Does not have its original serial numbers or rating labels.
 - b) Is not installed in Australia or New Zealand.

5. HOW TO MAKE A CLAIM UNDER THIS WARRANTY

- 5.1 If you wish to make a claim under this warranty, you need to:
- a) Contact Rheem on 131031 in Australia or 0800 657 335 in New Zealand and provide owner's details, address of the water heater, a contact number and date of installation of the water heater or if that's unavailable, the date of manufacture and serial number (from the rating label on the water heater).
 - b) Rheem will arrange for the water heater to be tested and assessed on-site.
 - c) If Rheem determines that you have a valid warranty claim, Rheem will repair or replace the water heater in accordance with this warranty.
- 5.2 Any expenses incurred in the making of a claim under this warranty will be borne by you.

6. THE AUSTRALIAN CONSUMER LAW

- 6.1 In Australia, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- 6.2 The Rheem warranty (set out above) is in addition to any rights and remedies that you may have under the Australian Consumer Law.

7. THE CONSUMER GUARANTEES ACT 1993 (NEW ZEALAND)

- 7.1 In New Zealand, our goods come with guarantees that cannot be excluded under the Consumer Guarantees Act 1993 (New Zealand). If the goods fail to comply with the applicable guarantees set out under the Consumer Guarantees Act 1993 (New Zealand) being the guarantee as to acceptable quality, the guarantee as to correspondence with description or the guarantee as to repair and parts, or if the goods fail to comply with any express guarantee given by Rheem, then you are entitled to a replacement or refund and for compensation for any other reasonably foreseeable loss or damage.
- 7.2 The Rheem warranty (set out above) is in addition to any rights and remedies that you may have under the Consumer Guarantees Act 1993 (New Zealand).

SAFETY, WARNINGS, INSTALLATION NOTES

It is important you read the following safety and warnings information.

SAFETY AND WARNINGS

This water heater must be installed in compliance with the Plumbing Code of Australia (PCA).

Warning: – This water heater may deliver water at high temperature. Refer to the Plumbing Code of Australia, local requirements and these installation instructions to determine if additional delivery temperature control is required.

Warning: – For continued safety of this appliance, it must be installed, operated and maintained in accordance with the manufacturer's instructions.

Warning: Do not switch on the appliance if there is a possibility that the water in the heater is frozen.

- This water heater is only intended to be operated by persons who have the experience or the knowledge and the capabilities to do so.
- This water heater is not intended to be operated by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure they do not interfere with the water heater.
- This appliance must be permanently connected to fixed wiring.
- If the electrical conduit to the water heater is damaged, it must be replaced by a qualified person in order to avoid a hazard. Phone Rheem Service or their nearest Accredited Service Agent to arrange for an inspection.
- The water heater uses 415V- 3 phase 50Hz electrical power for operation of the control systems. The removal of the front panel will expose 415V- 3 phase wiring. It must only be removed by a qualified person.
- The resistivity of the water supply must not be less than 800Ω·cm.
- This appliance must be earthed.
- This water heater is supplied with an over temperature cut-out, high pressure sensor and an emergency cut-out switch. These devices must not be tampered with or removed. The water heater must not be operated unless each of these devices is fitted and is in working order.

The Rheem warranty may not cover faults if safety devices are tampered with or if the installation is not in accordance with these instructions.

- **DANGER:** The operation of the over-temperature cut-out on a thermostat indicates a possibly dangerous situation. If the over-temperature or emergency cut-out operates, it must not be reset and the water heater must be serviced by a qualified person.
- Servicing of the water heater must only be carried out by qualified personnel. Phone Rheem Service or their nearest Accredited Service Agent / Centre.
- Only a person qualified to install or service a water heater can drain the water heater, if this is required.
- Do not modify this water heater.

INSTALLATION NOTES

This water heater must be installed:

- by a qualified person,
- in accordance with the installation instructions,
- in compliance with the Plumbing Standard AS/NZS 3500.4,
 - This water heater is designed for indoor installation only.
 - This water heater is intended to be permanently connected to the water mains and not connected by a hose-set. A braided flexible hose or semi-flexible connector may be used for connection to the water heater, where permitted by AS/NZS 3500.4.
- in compliance with the Australian / New Zealand Wiring Rules AS/NZS 3000,
 1. Isolation switches must be installed in the electrical circuit to the water heater in accordance with the Wiring Rules, so the water heater can be switched off.
 2. The power supply wires are to be directly connected to the terminal block and earth tab connection, with no excess wire loops inside the front cover. The temperature rating of the power supply wires insulation must suit this application, or the wiring protected by insulating sleeving with an appropriate temperature rating in compliance with all local codes and regulatory authority requirements.
- In New Zealand, the installation must also conform to Clauses G11, G12 and H1 of the New Zealand Building Code.

Installation and commissioning requirements and details for the installing plumber and licensed electrical worker are contained on pages **18** to **29**.

Mains pressure water supply

The water heater is designed to operate at mains pressure by connecting directly to the mains water supply.

The maximum mains water supply pressure for the water heater is 750 kPa. If the mains supply pressure in your area exceeds 750 kPa, an approved pressure limiting valve that does not have non-return valve characteristics (such as an RMC PSL series valve) must be installed.

A minimum water supply pressure of 150kPa is recommended to achieve the rated flow and performance of the water heater. A turn on flow rate of 2.8 Lpm is required to initiate heating.

Mounting of the water heater

This water heater must be installed vertically upright with the water and power connections on the underside. The back of the water heater can be either against a wall or supported by a frame. The water heater must be well secured to the wall or frame using at least two screws (provided).

This water heater has an IP25 ingress protection rating. AS/NZS 3000 clause 6.2 allows this appliance to be installed within zones 1, 2 or 3 in a bathroom, kitchen or laundry. We recommend the appliance be limited to zone 2 or 3.

ABOUT YOUR WATER HEATER

WATER HEATER APPLICATION

This water heater is designed for the purpose of heating potable water. Its use in an application other than this may shorten its life.

MODEL TYPE

The Rheem Eclipse® continuous flow electric water heater model you have chosen is for indoor installation only. It has an IP25 ingress protection rating.

The water heater has a maximum preset outlet temperature setting of:

Model Name	Model Number	Max temperature
1. Rheem Eclipse® 18kW 50°C Water Heater*	6C318500A	50°C
2. Rheem Eclipse® 18kW 60°C Water Heater	6C318600A	60°C
3. Rheem Eclipse® 27kW 50°C Water Heater*	6C327500A	50°C
4. Rheem Eclipse® 27kW 60°C Water Heater	6C327600A	60°C

*This appliance delivers water not exceeding 50°C in accordance with AS 3498.

WATER HEATER OPERATION

The water heater operates automatically, heating water as it passes through the water heater. When a hot tap is opened, the unit energises the nickel chrome heating elements (with 99% heating efficiency) to provide immediate heating of the water. The electric elements modulate according to the demand of hot water. The water heater starts heating instantaneously when a hot tap is opened at a flow rate greater than 2.8L/min.

Automatic safety controls are fitted to the water heater to provide safe and efficient operation.

USER TOUCH SCREEN

To save energy, the touchscreen will cease illuminating after a period of 5 minutes with no activation or water usage.

To wake the screen, press any button located at the bottom of the screen as shown in the image adjacent.


The display screen shows set point temperature, flowrate and volume of water used information and working status with indicator lights.

- Orange light bar at top of screen indicates the water heater is operating and temperature setting is below 42°C.
- Red light bar at top of screen indicates the water heater is operating and temperature setting is 42°C or higher.

When water is being drawn, the flow rate indicator (L/MIN) will display the actual flow rate. The water volume counter (L) will display the accumulated water consumed. The water volume indicator will clear automatically after 5 minutes of no water use or user interaction or with a power cycle.



PRESET MEMORY & BATH OPTION

There are three pre-set output temperature memory buttons on the 60°C and 50°C models. M1 and M2 are factory set at typical showering temperatures for quick change of set points. The Bath symbol  is factory set at a lower temperature for children or elderly people. Memory presets can be adjusted and saved by the user to best meet temperature preferences.

- M1 is factory set at 38°C
- M2 is factory set at 41°C
- Bath is factory set at 38°C



TEMPERATURE ADJUSTMENT

Set Point Setting

Press '▲' to increase or '▼' to decrease set point in 0.5°C change for each press. Press and hold '▲' to increase or '▼' to decrease for 5°C change increments in 60°C and 50°C models between the maximum temperature and 30°C.


M1 and M2

To enter M1/M2 press the appropriate button. The preset temperature will be displayed and water will be delivered at this temperature.


To adjust M1/M2 temperature, simply pressing '▲' or '▼' will exit out of M1/M2 mode and allow free temperature adjustment.

To save a new M1/M2 temperature to memory, press and hold M1 or M2 button as appropriate for 3 sec. The temperature display will blink to indicate you are in a temperature setting mode and the water volume counter will blink with either 1 or 2 to indicate which memory you are altering. Then adjust temperature set point by pressing '▲' to increase or '▼' to decrease and then press M1 or M2 button as appropriate once to finalise the value. If no button is pressed for 1 minute the system will exit memory mode and any settings will not be saved.

Bath Mode

To enter Bath Mode, press the bath icon button . The preset temperature will be displayed, and water will be delivered at this temperature. The water flow rate indicator will alternately blink between the water flow rate and "bA" to indicate you are in Bath Mode.

To adjust Bath Mode temperature, press '▲' to increase or '▼' to decrease between 32°C and 41°C.

To save the new Bath temperature to memory and exit Bath Mode, press and hold the bath icon  for 3 sec. The water flow rate indicator will cease blinking to acknowledge exiting Bath Mode and allow free temperature adjustment.

The saved temperature will be the new default Bath Mode temperature.

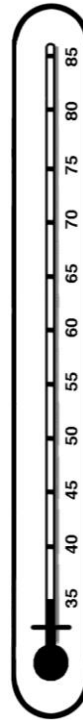
HOW HOT SHOULD THE WATER BE?

The maximum preset outlet temperature setting is model dependant. The water heater delivers heated water to the preset outlet temperature setting. The factory preset outlet temperature setting is:

- 6C318500A Model 50°C
- 6C318600A Model 60°C
- 6C327500A Model 50°C
- 6C327600A Model 60°C

⚠ Warnings

This water heater is only intended to be operated by persons who have the experience or the knowledge and the capabilities to do so. This water heater is not intended to be operated by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure they do not interfere with the water heater.



NZ – maximum recommended supply temperature to bathrooms, ensuites and public areas

AU – maximum recommended supply temperature to bathrooms, ensuites and public areas

HOTTER WATER INCREASES THE RISK OF SCALD INJURY

This water heater can deliver water at temperatures which can cause scalding. Check the water temperature before use, such as when entering a shower or filling a bath or basin, to ensure it is suitable for the application and will not cause scald injury.

In New Zealand a water heater with a maximum set temperature of 60°C is permissible, however it is the responsibility of the installer to set the maximum delivery temperature to not exceed 55°C at the first tap used for ablution purposes.

60°C model water heaters can be connected to a temperature limiting device to allow 2 temperature zones to be serviced.

TEMPERATURE LIMITATION AND OFFSET

The water heater can be trade adjusted to either increase the set point to allow for heat losses within the hot water line to the first tap to the maximum temperature allowable (50 degree limited model) or to limit the maximum delivery temperature (all models). Ask Rheem Service or your plumber about trade temperature adjustments.

PRECAUTIONS

The water heater must be maintained in accordance with the Owner's Guide and Installation Instructions. Refer to "General Maintenance" on page 11 and "Service Every Twelve Months" on page 12.

If this water heater is to be used where an uninterrupted hot water supply is necessary for your application or business you should ensure that you have back-up redundancy within the hot water system design. This should ensure the continuity of hot water supply in the event that this water heater were to become inoperable for any reason. We recommend you seek advice from a plumber or specifier about your needs and building back-up redundancy into your hot water supply system.

GENERAL MAINTENANCE

General maintenance can be performed by the dwelling occupant. It is recommended general maintenance be conducted every six (6) months or more regularly as required.

Switch off the electrical supply at the isolation switch to the water heater prior to performing general maintenance. This will prevent the water heater from operating while you clean or spray around the water heater. Switch on the electrical supply at the isolation switch to the water heater when finished performing the general maintenance.

The general maintenance includes:

Use a soft wet cloth to wipe smoothly, do not use petrol or other solvents. Under no circumstances should abrasive materials or powders be used.

- After finishing, use dry cloth to wipe again and keep the water heater dry.
- Inspect around the water heater for infestations of insects, such as ants. Insects encroaching into or nesting in the water heater can interfere with the operation of the water heater and also damage components. The area around the water heater can be sprayed with insecticide to rid the area of insects.

⚠ Warning: Do not spray insecticide near the water heater while it is operating. Propellants in many insect sprays contain hydrocarbons which are flammable. Gases from aerosol sprays may also become corrosive.

- If necessary, to rid the area of insects:
 - Ensure the electrical supply at the isolation switch to the water heater has been switched off.
 - Spray the affected area, taking care not to spray onto the surface of the water heater.
 - Wait a few minutes to allow any aerosol gases to dissipate before switching on the electrical supply at the isolation switch to the water heater.

SERVICE EVERY TWELVE MONTHS

For safe and efficient operation, it is recommended a service be conducted on the water heater every twelve (12) months.

⚠ Warning: Servicing of a water heater must only be carried out by qualified personnel. Phone Rheem Service or their nearest Accredited Service Agent / Centre.

Note: The service and routine replacement of any components, if required, are not included in the Rheem warranty. A charge will be made for this work. Only genuine replacement parts should be used on this water heater.

The service includes the following actions:

- Check and clean the line strainer, and flow regulator
- Visually check the unit for any potential problems.
- Inspect all connections.

TO TURN OFF THE WATER HEATER

If it is necessary to turn off the water heater:

- Switch off the electrical supply at the isolation switch to the water heater.
- Close the cold water isolation valve at the inlet to the water heater.

TO TURN ON THE WATER HEATER

Warning: power must not be activated until the water heater has been filled with water and all lines purged of air. Failure due to air in the system is not covered by the Rheem warranty.

- Ensure the electricity supply to the water heater is **TURNE**D OFF
- Make sure cold inlet and hot outlet are connected to the water heater according to the installation instructions.
- Open the hot taps (don't forget the shower).
- Open the cold water isolation valve fully at the inlet to the water heater.
Air will be forced out of the taps.
- Close each tap as water flows freely from it.
- Switch on the electrical supply at the isolation switch to the water heater.

The water heater will operate automatically when you open a hot tap.

DRAINING THE WATER HEATER

- Switch off the electrical supply at the isolation switch to the water heater.
- Close the cold water isolation valve.
- Open a hot tap (preferably the shower outlet). When water stops flowing, close the hot tap.
- Unscrew the inlet and outlet connections. Water will drain from the water heater.

GOING ON HOLIDAYS

If you are going on holidays, it is not necessary to turn the water heater off. If it is necessary to turn off the water heater, refer to “To Turn Off The Water Heater” on page **12**.

VICTORIAN CUSTOMERS

Notice to Victorian Customers from the Victorian Building Authority. This water heater must be installed by a licensed person as required by the Victorian Building Act 1993.

Only a licensed person will give you a Compliance Certificate, showing that the work complies with all the relevant Standards. Only a licensed person will have insurance protecting their workmanship for 6 years. Make sure you use a licensed person to install this water heater and ask for your Compliance Certificate.

DOES THE WATER CHEMISTRY AFFECT THE WATER HEATER?

The water heater is suitable for most public water supplies, however some water chemistries may have detrimental effects on the water heater, its components, fittings and operation. Refer to “Water Supplies” on page **14**.

If you are in a known harsh water area or you are not sure of your water chemistry, have your water checked against the conditions described on page **14**.

HOW LONG WILL THE WATER HEATER LAST?

The water heater is supported by a manufacturer’s warranty (refer to page **4**). There are a number of factors that will affect the length of service the water heater will provide. These include but are not limited to the water chemistry, the water pressure, the water temperature (inlet and outlet) and the water usage pattern. Refer to “Precautions” on page **11**.

WATER SUPPLIES

This water heater must be installed in accordance with this advice to be covered by the Rheem warranty.

This water heater is manufactured to suit the water conditions of most public reticulated water supplies. However, there are some known water chemistries which can have detrimental effects on the water heater and its operation and / or life expectancy. If you are unsure of your water chemistry, you may be able to obtain information from your local water supply authority. This water heater should only be connected to a water supply which complies with these guidelines for the Rheem warranty to apply.

CHANGE OF WATER SUPPLY

The changing or alternating from one water supply to another can have a detrimental effect on the operation and / or life expectation of the water heater.

Where there is a changeover from one water supply to another, e.g., a rainwater tank supply, bore water supply, desalinated water supply, public reticulated water supply or water brought in from another supply, then water chemistry information should be sought from the supplier or it should be tested to ensure the water supply meets the requirements given in these guidelines for the Rheem warranty to apply.

CHLORIDE AND PH

In a high chloride water supply, the water can corrode the heating element and other components and cause them to fail.

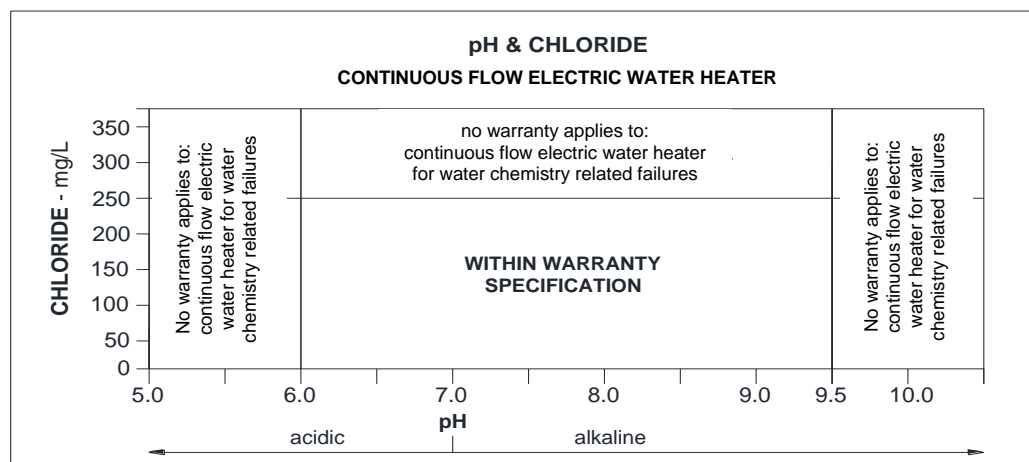
Where the chloride level exceeds 250 mg / L the Rheem warranty does not apply to the water heater.

pH is a measure of whether the water is alkaline or acid. In an acidic or very alkaline water supply, the water can attack the heating element and other components and other parts and cause them to fail.

Where the pH is less than 6.0 or greater than 9.5, the Rheem warranty does not apply to the water heater. Water with a pH less than 6.0 may be treated to raise the pH.

The water supply from a rainwater tank in a metropolitan area is likely to be corrosive due to the dissolution of atmospheric contaminants. This may result in pH of less than 6.0. It is recommended an analysis on the water from a rainwater tank be conducted prior to connecting this type of water supply to this water heater.

Refer to the pH and Chloride chart on page 14.



SATURATION INDEX

The saturation index is used as a measure of the water's corrosive or scaling properties. The saturation index figures stated are calculated using a water temperature of 60°C.

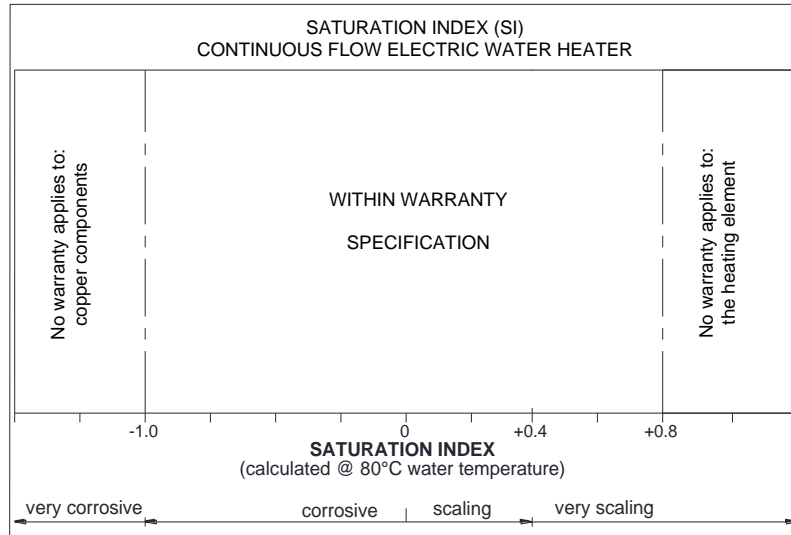
In a corrosive water supply, the water can attack copper parts and cause them to fail. Where the saturation index is less than -1.0, the water is very corrosive and the Rheem warranty does not apply to copper components.

In a scaling water supply calcium carbonate is deposited out of the water onto any hot metallic surface.

Where the saturation index exceeds +0.80, the Rheem warranty does not apply to the heating element.

Water that is scaling may be treated with a water softening device to reduce the saturation index of the water.

Refer to the Saturation Index chart on page 15.



RESISTIVITY, TOTAL DISSOLVED SOLIDS AND CONDUCTIVITY

The resistivity of the water must be greater than 800Ω.cm for the water heater to operate correctly. Resistivity lower than this may cause residual current devices (RCD) to trip.

There is a correlation between resistivity, Total Dissolved Solids (TDS) and conductivity.

Water chemistry is usually provided for TDS in units of mg/Litre or conductivity expressed in units of µS/cm. TDS is approximately 0.7 x conductivity.

The water chemistry is suitable for this water heater, in terms of resistivity, if the TDS is ≤875 mg/L or the conductivity is <1250 µS/cm.

Refer to the Resistivity, TDS and Conductivity chart on page 15

RESISTIVITY, TOTAL DISSOLVED SOLIDS (TDS) AND CONDUCTIVITY CONTINUOUS FLOW ELECTRIC WATER HEATER						
	600	700	800	900	1000	1100
RESISTIVITY Ω.cm	600	700	800	900	1000	1100
TDS mg/L	1167	1000	875	780	700	636
CONDUCTIVITY µS/cm	1667	1430	1250	1110	1000	909

SAVE A SERVICE CALL

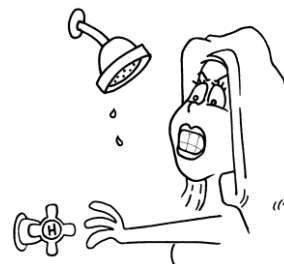
Check the items below before making a service call. You will be charged for attending to any condition or fault, which is not related to manufacture or failure of a part (refer to “Terms of the Rheem Warranty” on page 4).

NO DISPLAY ON THE WATER HEATER

- Is the water heater turned on?
Press any button located at the bottom on the front of the water heater or turn on a hot water tap.
- Is the water heater switched on at the power supply?
- Is power available in the premises?
Try using another electrical appliance.

COLD WATER FROM THE HOT TAP

- Is the temperature on the screen showing correct values?
If not, adjust temperature by pressing ‘▲’ or ‘▼’ buttons.
- Close the hot tap, wait 10 seconds and open the hot tap again.
- Is the hot tap open enough?
The water heater will not turn on if the flow rate is less than 2.8 L / min.
- Is the water heater switched on at the power supply?
- Is power available in the premises?
Try using another electrical appliance.
- Has the water line been purged of air after installation? Refer to a plumber.
- Is the filter blocked? Refer to a plumber.



WATER IS TOO HOT OR NOT HOT ENOUGH

- Is the preset outlet temperature of the water heater higher than required?
- Has the water heater temperature been adjusted to the desired value of delivery temperature?
- A 50 degree limited water heater can have its delivery temperature adjusted by a tradesperson to account for temperature losses in the hot pipes or to limit the maximum delivery temperature. In New Zealand, a 60 degree model can have its maximum delivery temperature limited by a tradesperson in accordance with local regulations. Contact Rheem or a plumber.
- Do you have the correct size water heater for your requirements? Refer to a plumber.

NOT ENOUGH WATER FLOW

- The water heater is fitted with a line strainer to prevent the system from blockages due to debris. Have Rheem Service or a plumber inspect the line strainer.
- Is more water being used than the water heater can heat adequately? A flow regulator is supplied with the water heater. Rheem Service or a plumber can remove the flow regulator, but this may affect the delivery temperature if more water than can be heated is used.
- Is the water pressure adequate to deliver the desired flow rate? The table below indicates the flow rate vs supply pressure with and without the flow regulator fitted.

	Dynamic Supply Pressure (kPa)							
	150	200	250	300	350	400	450	500
Capacity	Maximum Flow Rate with Flow Regulator Fitted (L/min)							
18kW	6.4 – 6.9	6.6 – 7.8	6.6 – 8.5	6.8 – 7.4	6.9 – 7.5	7.0 – 7.5	7.2 – 7.6	7.4 – 7.7
27kW	NA	NA	NA	NA	NA	NA	NA	NA
	Maximum Flow Rate without Flow Regulator Fitted (L/min)*							
18kW	7.8	9.5	11.0	12.0	13.3	14.5	15.7	16.5
27kW	6.7	8.5	9.6	10.5	11.5	12.6	13.5	14.5

*Rheem Service or a plumber can remove the flow regulator, but this may affect the delivery temperature if more water than can be heated is used.

TEMPERATURE FLUCTUATES

Too many taps in use at the same time may cause either a reduction in flow rate per tap or a decrease in the hot temperature from the taps if the flow regulator is removed.

- Are there several hot taps open, or are appliances such as a dishwasher or washing machine in use at the same time?
- Check the flow of hot water from each tap to see if one or more outlets are using more water than you think.
- The supply of consistent hot water temperature is dependent on the size of the water heater, the geographic location and the season. Have a plumber install a flow control valve to each shower outlet, basin and sink to reduce water usage. The water heater is supplied with a factory fitted flow regulator. This may have been removed during installation. Contact Rheem Service or a plumber to fit an approved flow regulator. This will provide consistent hot water delivery temperature but at a limited maximum flow rate.
- The following table indicates the flow rate required, and the maximum flow rate capable (without flow regulator), from each model water heater at various cold water inlet temperatures to provide hot water at 40°C to a 9L/min limited shower rose.

	Cold Water Temperature °C				
	5	10	15	20	25
Model	Flow Rate Required / Flow Rate Capable without Flow Regulator (L/min)				
6C318600A	5.7 / 4.7*	5.4 / 5.1*	5.0 / 5.7	4.5 / 6.5	3.9 / 7.3
6C318500A	7.0 / 5.7*	6.8 / 6.5*	6.4 / 7.4	6.0 / 8.6	5.4 / 10.3
6C327600A	5.7 / 7.0	5.4 / 7.7	5.0 / 8.6	4.5 / 9.7 ⁺	3.9 / 11.1 ⁺
6C327500A	7.0 / 8.6	6.8 / 9.7	6.4 / 11.1	6.0 / 12.9 ⁺	5.4 / 15.5 ⁺⁺

*Not recommended for cold climate areas where the cold water supply temperature drops below 10°C in winter.

⁺ Can supply up to 2 showers simultaneously.

⁺⁺ Can supply up to 2 showers simultaneously. Theoretical capacity based on kW input rate.

Note: refer to the table on page **16** for the maximum flow rate capable for various dynamic supply pressures.

NO WATER FROM THE HOT TAP

No flow of water from the hot tap may indicate a restriction in or failure of the cold water supply to the water heater.

- Check for water flow at other taps and that the cold water isolation valve is fully open.
- Have Rheem Service or a plumber check the filter for blockages.

ERROR CODE

The water heater provides a diagnostic error code in the event of an interruption to its operation. The error code is displayed in the temperature display window after 1 minute if no buttons are pressed.

- E1 – inlet thermistor disconnected. The heater will cease to heat water.
- E2 - outlet thermistor disconnected. The heater will cease to heat water.
- E3 – Outlet temperature over 75°C. The heater will turn off until the outlet thermistor registers a temperature less than 40°C. The heater will shut down if the error is recorded 5 times, indicating a serious problem.
- E4 – No temperature rise detected across the inlet and outlet. The heater will continue to function. E4 could be detected because the cold water supply was high (for example cold water pipe running in roof heated by the sun on a hot day). E4 will automatically reset once a temperature difference is detected.

If the error code persists, take note of the code and turn off the hot tap. Phone Rheem Service or their nearest Accredited Service Agent / Centre to arrange for inspection.

IF YOU HAVE CHECKED ALL THE FOREGOING AND STILL BELIEVE YOU NEED ASSISTANCE, PHONE RHEEM SERVICE OR THEIR NEAREST ACCREDITED SERVICE AGENT / CENTRE.

INSTALLATION

**THIS WATER HEATER IS FOR INDOOR INSTALLATION ONLY.
THIS WATER HEATER IS NOT SUITABLE FOR POOL HEATING.**

WATER HEATER APPLICATION

This water heater is designed for the purpose of heating potable water. Its use in an application other than this may shorten its life.

INSTALLATION STANDARDS

The water heater must be installed:

- by a qualified person, and
- in accordance with the installation instructions, and
- in compliance with the Plumbing Code of Australia (PCA), Standards AS/NZS 3500.4 and AS/NZS 3000, and all local codes and regulatory authority requirements.

In New Zealand the installation must conform to Clauses G11, G12 and H1 of the New Zealand Building Code.

All packaging materials must be removed from the water heater prior to its installation.

PIPE SIZES

The pipe sizing for hot water supply systems should be carried out by persons competent to do so, choosing the most suitable pipe size to ensure adequate flow for each individual application. Reference to the technical specifications of the water heater and local regulatory authority requirements must be made.

To reduce pressure drop, the cold water line to the water heater should be the same size or larger than the hot water line from the water heater.

Notes

- It is not recommended to install this water heater with a low-pressure water supply. The table below indicates the flow rate vs supply pressure with and without the flow regulator fitted.
- This water heater is not suitable for connection to bore water or spring water unless a water treatment device is fitted.

	Dynamic Supply Pressure (kPa)							
	150	200	250	300	350	400	450	500
Capacity	Maximum Flow Rate with Flow Regulator Fitted (L/min)							
18kW	6.4 – 6.9	6.6 – 7.8	6.6 – 8.5	6.8 – 7.4	6.9 – 7.5	7.0 – 7.5	7.2 – 7.6	7.4 – 7.7
27kW	NA	NA	NA	NA	NA	NA	NA	NA
	Maximum Flow Rate without Flow Regulator Fitted (L/min)*							
18kW	7.8	9.5	11.0	12.0	13.3	14.5	15.7	16.5
27kW	6.7	8.5	9.6	10.5	11.5	12.6	13.5	14.5

*Removing the flow regulator will allow increased flow, but this may affect the delivery temperature if more water than can be heated is used.

The following table indicates the flow rate required, and the maximum flow rate capable (without flow regulator), from each model water heater at various cold water inlet temperatures to provide hot water at 40°C to a 9L/min limited shower rose.

	Cold Water Temperature °C				
	5	10	15	20	25
Model	Flow Rate Required / Flow Rate Capable (L/min)				
6C318600A	5.7 / 4.7*	5.4 / 5.1*	5.0 / 5.7	4.5 / 6.5	3.9 / 7.3
6C318500A	7.0 / 5.7*	6.8 / 6.5*	6.4 / 7.4	6.0 / 8.6	5.4 / 10.3
6C327600A	5.7 / 7.0	5.4 / 7.7	5.0 / 8.6	4.5 / 9.7 ⁺	3.9 / 11.1 ⁺
6C327500A	7.0 / 8.6	6.8 / 9.7	6.4 / 11.1	6.0 / 12.9 ⁺	5.4 / 15.5 ⁺⁺

*Not recommended for cold climate areas where the cold water supply temperature drops below 10°C in winter.

+ Can supply up to 2 showers simultaneously.

++ Can supply up to 2 showers simultaneously. Theoretical capacity based on kW input rate.

STEP 1: SELECT WATER HEATER LOCATION

The water heater is suitable for indoor installation only and should be installed close to the most frequently used outlet and its position chosen with safety and service in mind.

Clearance must be allowed for servicing of the water heater. The water heater must be accessible without the use of a ladder or scaffold. Make sure the entire front panel can be removed for service. You must be able to read the information on the rating plate. Remember you may have to take the entire water heater out later for servicing.

This water heater has an IP25 ingress protection rating. AS/NZS 3000 clause 6.2 allows this appliance to be installed within zones 1, 2 or 3 in a bathroom, kitchen or laundry. We recommend the appliance be limited to zone 2 or 3.

We do not recommend installing the water heater within a roof space. Regulations require isolating all power to a premises before entering a roof space which will render servicing or troubleshooting the unit impossible.

Warranty will be void if a water heater needs to be removed for servicing.

STEP 2: SECURE WATER HEATER TO THE WALL OR FRAME

This water heater must be installed vertically upright with the water and power connections on the underside. The back of the water heater can be either against a wall or supported by a frame. The water heater must be well secured to the wall or frame using the screws (provided).

- a) Remove the front cover by first removing one screw located under the bottom. The screw is covered by a sticky tab.
- b) Carefully disconnect the display cable on the side as shown in Figure 1 on page 20.
- c) Remove the grey cover at the bottom of the heater by removing two screws as marked in Figure 2 on page 20 to access the inlet/outlet and electrical connections.

INSTALLATION

**THIS WATER HEATER IS FOR INDOOR INSTALLATION ONLY.
THIS WATER HEATER IS NOT SUITABLE FOR POOL HEATING.**

WATER HEATER APPLICATION

This water heater is designed for the purpose of heating potable water. Its use in an application other than this may shorten its life.

INSTALLATION STANDARDS

The water heater must be installed:

- by a qualified person, and
- in accordance with the installation instructions, and
- in compliance with the Plumbing Code of Australia (PCA), Standards AS/NZS 3500.4 and AS/NZS 3000, and all local codes and regulatory authority requirements.

In New Zealand the installation must conform to Clauses G11, G12 and H1 of the New Zealand Building Code.

All packaging materials must be removed from the water heater prior to its installation.

PIPE SIZES

The pipe sizing for hot water supply systems should be carried out by persons competent to do so, choosing the most suitable pipe size to ensure adequate flow for each individual application. Reference to the technical specifications of the water heater and local regulatory authority requirements must be made.

To reduce pressure drop, the cold water line to the water heater should be the same size or larger than the hot water line from the water heater.

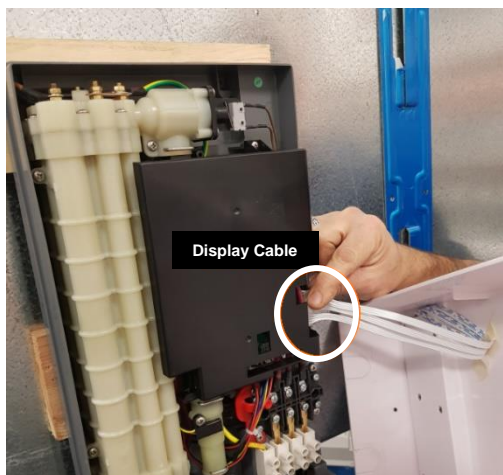


Figure 1: Removing Display Cable

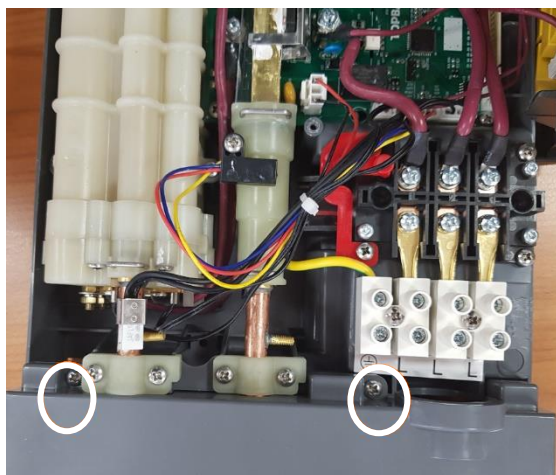


Figure 2: Removing Grey Cover

- d) Determine if connection of the plumbing and electricals will be concealed through the back of the unit or through the bottom of the unit. Refer to Figure 4 on page 22 and Figure 7 on page 23. If plumbing connections have been roughed in, determine the position of the heater on the wall to allow fitment in accordance with the desired plumbing connection method.
- e) Secure the water heater to the wall using the screws provided.

Note: Use the screws (provided) only if they are suitable for the wall or frame type. The screws must be capable of bearing the full weight of the water heater so it may not work loose nor impose any load on the water pipe work connected to the water heater.

CONNECTIONS - PLUMBING

HOT AND COLD WATER CONNECTION SIZES

Concealed connection with 90-degree elbow wall adapters	G½" Female
Through the bottom with straight adapters	R½" Male

WATER INLET AND OUTLET

All pipe work must be cleared of foreign matter before connection and purged before attempting to operate the water heater. All olive compression fittings must use brass or copper olives. Use an approved thread sealant such as Teflon tape on threaded joints where required. Only use sufficient thread sealant to seal a joint. Refer to the sealant manufacturer's guidelines for how much and where to use.

⚠ Warning: Sealant must not be allowed in the waterways of pipe work or fittings. Excess sealant may be carried into the water heater where it will damage components and block the internal filter. This damage to components or blockage of filter is not covered by the Rheem warranty and a service rectification fee will be charged.

A full flow gate valve or ball valve must be installed on the cold water line. **A non-return valve or stop tap must not be installed.**

Insulation used on the hot water lines must extend up to the hot water outlet of the water heater.

This water heater is intended to be permanently connected to the water mains and not connected by a hose-set. A braided flexible hose or semi-flexible connector may be used for connection to the water heater, where permitted by AS/NZS 3500.4.

WARNING – This appliance must only be installed in accordance with the acceptable plumbing configuration specified in these instructions. Failure to do so may result in conditions where delivery temperature control is inadequate. Refer to Figure 3 on page 21.

Notes

- It is essential all pipe connections be correctly aligned, otherwise component connections within the water heater may be strained and / or components themselves misaligned. It is recommended also, wherever possible, pipe connections be made at the water heater first and final pipe runs be made in soft copper pipe to allow some adjustment for misalignment.
- When tightening, use the back nuts and rubber washers supplied on the water heater fittings and take care to avoid twisting the water inlet and outlet pipes inside the jacket. Connections should be finger tight plus ¼ turn with a spanner.

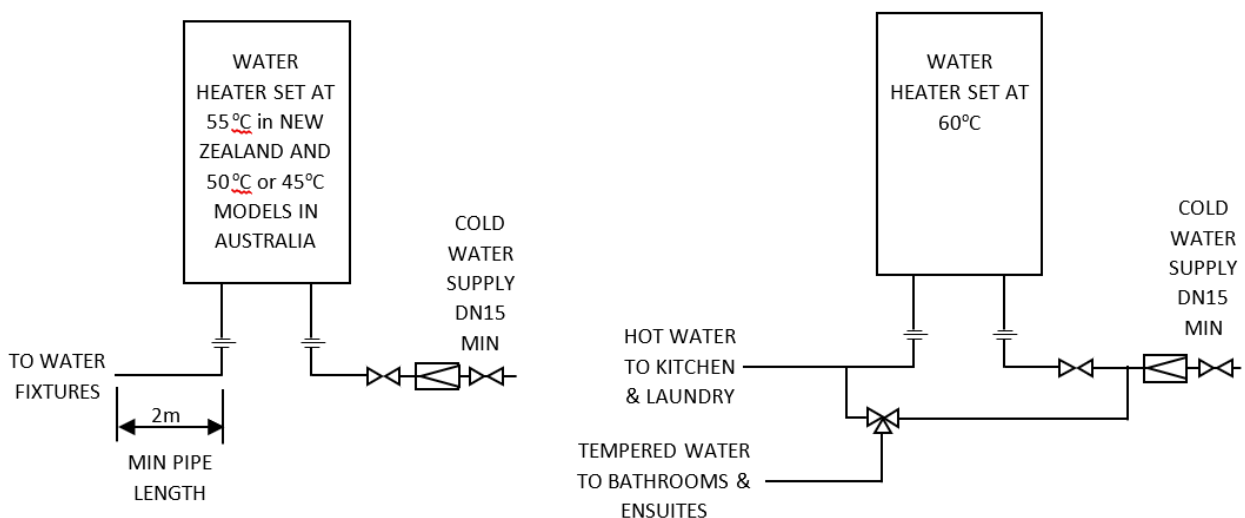


Figure 3: Acceptable Plumbing Configuration

Option 1: Connections through the wall/back of the unit

- a) The water heater is supplied with the elbow adapters fitted and with the inlet filter and flow regulator fitted in the cold inlet and hot outlet respectively. The fittings are spaced at nominally 100mm centres.
- b) Fit a black rubber washer in the cold and hot elbow adapters and connect to the cold and hot water supplies. **DO NOT** overtighten connections. Connections should be finger tight plus ¼ turn with spanner.

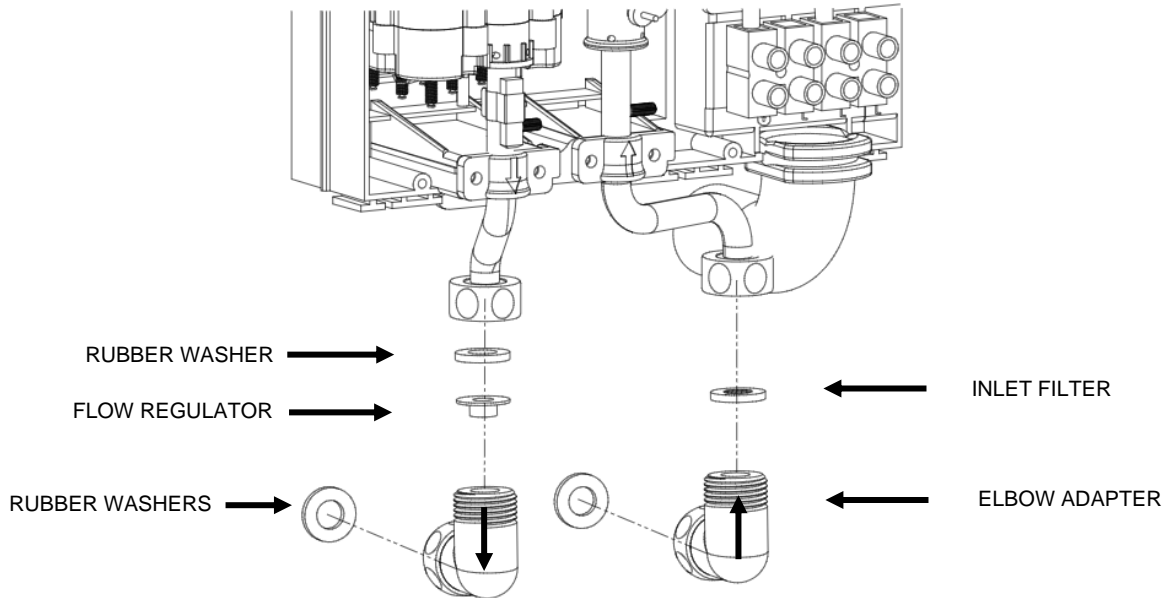


Figure 4: Concealed Entry (viewed from the front)

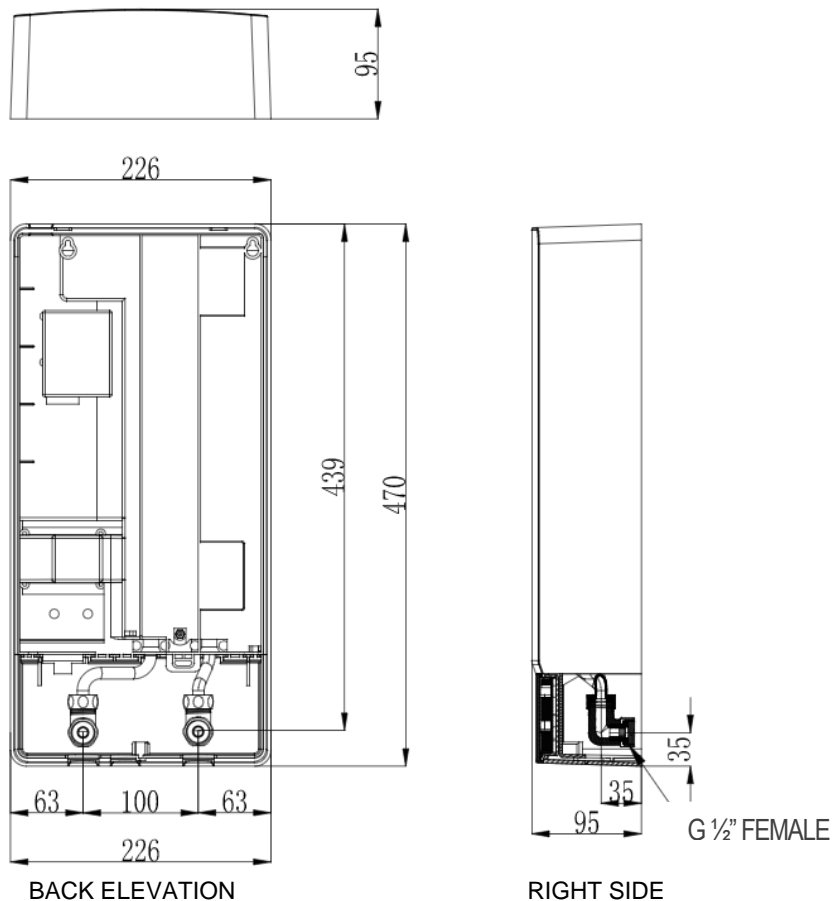


Figure 5: Dimensions (in mm) with wall adapters for connections through the wall/back of the unit

Option 2: Connections through the bottom of the unit

- a) If entering from beneath, it will be necessary to remove the appropriate knockouts from the bottom of the white cover. Using pliers or multi-grips *gently* work the knockout up and down, applying more force inwards than outwards, until one side tears along the die line. Then use a sideways motion to fatigue the rest of the opening. Use a file as necessary to clean up any burrs if required.

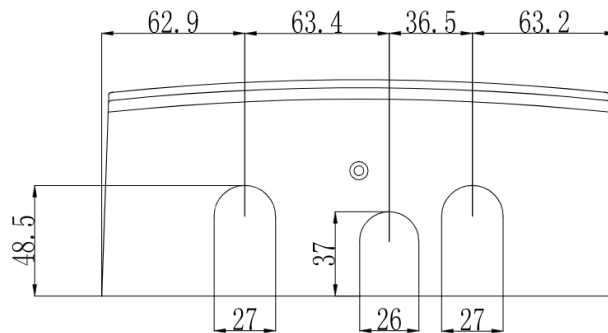


Figure 6: Dimensions (in mm) of end panel of front cover

- b) Remove the two (2) elbows from the hot and cold connections of the water heater. The flow restrictor is located in the hot outlet. Note it's orientation with the O-ring facing in towards the water heater. The filter is located in the cold water inlet.
- c) Use the straight adapters provided in the kit for inlet and outlet as shown below.
- d) Fit the filter in the cold water inlet to the water heater then fit the straight adapter.
- e) Fit a black rubber washer and then the flow restrictor in the hot outlet with the O-ring facing in towards the water heater and fit the other straight adapter.
- f) Connect to the cold and hot water supplies either using the black rubber washers provided or sealing on the threads. **DO NOT** overtighten connections. Connections should be finger tight plus $\frac{1}{4}$ turn with spanner.

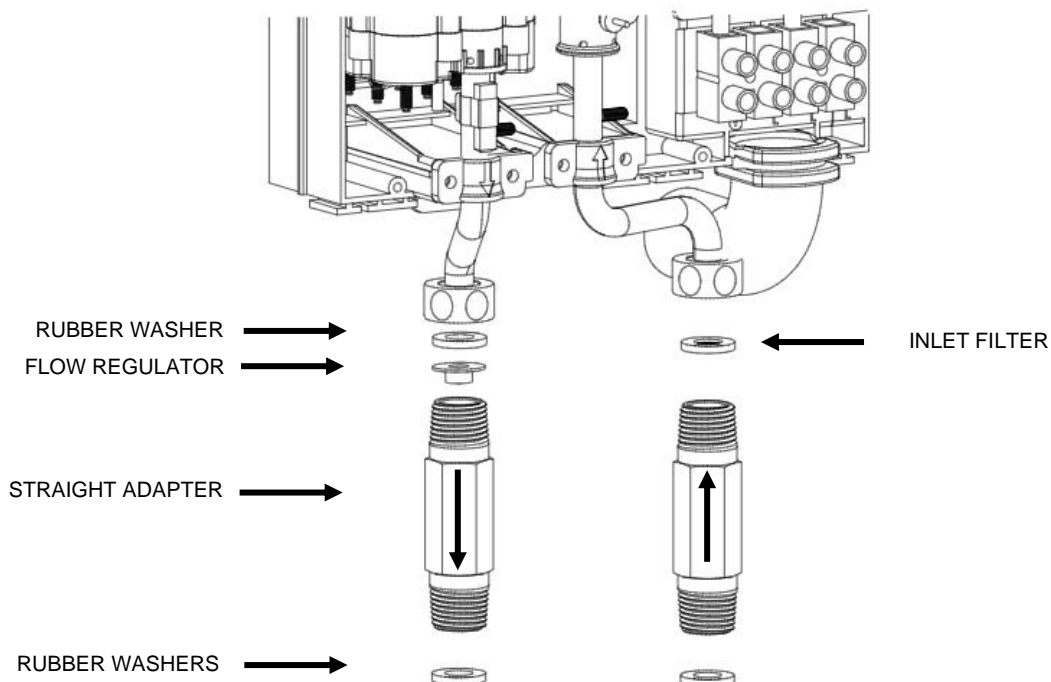


Figure 7: Bottom Entry (viewed from the front)

- g) Reposition the rubber boot in the slot provided to maintain IP rating.
- h) Reposition the lower grey cover and fit the 2 (two) screws.
- i) Plug the display cable back into the connection and refit the front cover, securing with the screw.

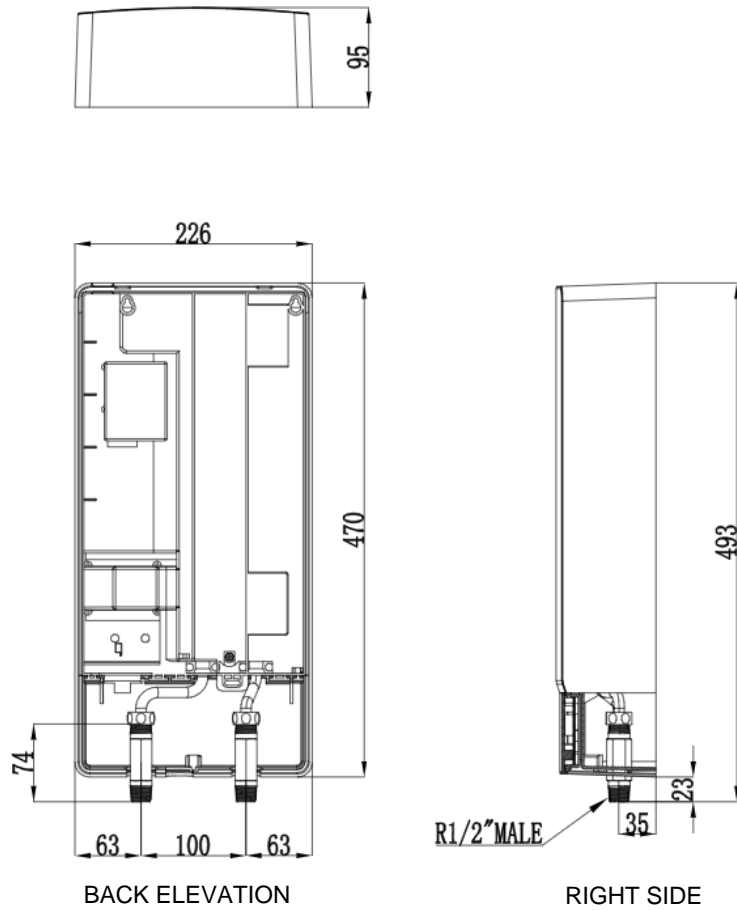


Figure 8: Dimensions (in mm) with straight adapters for connections towards ground/ below the unit

CONNECTIONS – ELECTRICAL

The power supply to the water heater must not be switched on until the water heater is filled with water and a satisfactory megger reading is obtained.

All electrical work and permanent wiring must be carried out by a qualified person and in accordance with the edition of the Wiring Rules AS/NZS 3000 in force in the state or territory at the time of installation, and all local codes and regulatory authority requirements.

MEGGER READING

When a megger test is conducted on this water heater, then the following should be noted.

Warning: This water heater contains electronic equipment and 500 V insulation tests must only be conducted between each active and earth.

WATER HEATER

The water heater must be directly connected to 380 V - 415 V (3 phase 3 wire and earth) 50 Hz mains power supply with an isolating switch installed at the switchboard. The Wiring Rules AS/NZS 3000:2018 requires a second and lockable isolating switch be installed adjacent to but not on or attached to the water heater, and a residual current device (RCD) installed in the electrical circuit to the water heater.

This water heater must be permanently connected to fixed wiring and must be earthed.

The water heater is designed to operate at 380 - 415V - 50Hz. 3 wire 3 phase (3 x Active and Earth) terminal blocks are supplied.

Product Name	Rheem Eclipse®	Rheem Eclipse®	Rheem Eclipse®	Rheem Eclipse®
	18kW 50°C Water Heater	18kW 60°C Water Heater	27kW 50°C Water Heater	27kW 60°C Water Heater
Model Number	6C318500A	6C318600A	6C327500A	6C327600A
Voltage	380 - 415V			
KiloWatts	18	18	27	27
Amps/phase at 400V	26	26	39	39
Frequency	50Hz			
Phase	3 phase 3 wire and earth			
Water Resistivity	≥800Ω.cm			
Element Nos	3	3	4	4
Element Material	Ni80Cr20			
Temperature Control	Thermostatic			
IP Rating	IP25			

WARNING: Isolate mains power before making any connections.

- a) Remove the front cover by first removing one screw located under the bottom. The screw is covered by a sticky tab.
- b) Carefully disconnect the display cable on the side as shown in Figure 9 on page 26.
- c) Remove the grey cover at the bottom of the heater by removing two screws as marked in Figure 10 on page 26 to access the inlet/outlet and electrical connections.

d)



Figure 9: Removing Display Cable

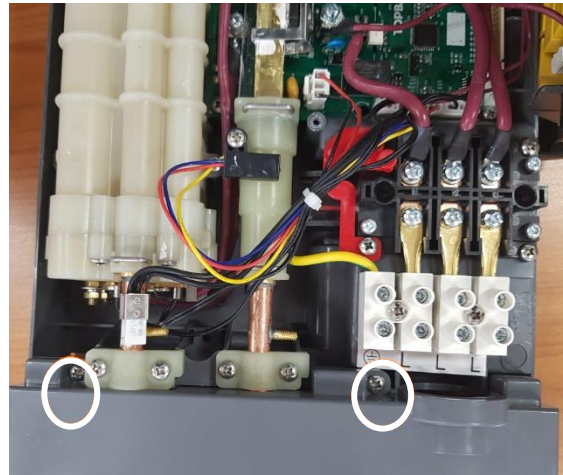


Figure 10: Removing Grey Cover

- j) If electrical connection towards ground/ below the unit is selected, it will be necessary to remove the appropriate knockouts from the bottom of the white cover. Using plyers or multi-grips *gently* work the knockout up and down, applying more force inwards than outwards, until one side tears along the die line. Then use a sideways motion to fatigue the rest of the opening. Use a file as necessary to clean up any burrs if required.
- k) Insert 3 Phase power cables through a flexible conduit with gland nut to secure the connection as shown in Figure 11 on page 26.



Figure 11: Entry through bottom of unit

- l) Remove the black rubber boot and insert 3 Phase power cables through the boot.
- m) Make connections at \oplus , L, L, L as shown in Figure 12 on page 26 and tighten the screws firmly. Phase rotation is not important.
- n) Reposition the rubber boot in the slot provided to maintain IP rating.
- o) Reposition the lower grey cover and fit the 2 (two) screws.
- p) Plug the display cable back into the connection and refit the front cover, securing with the screw.

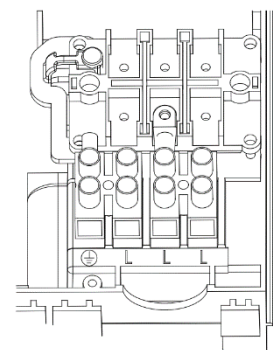
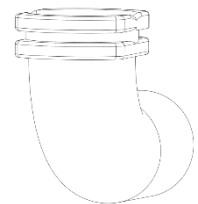


Figure 12: Electrical Connections

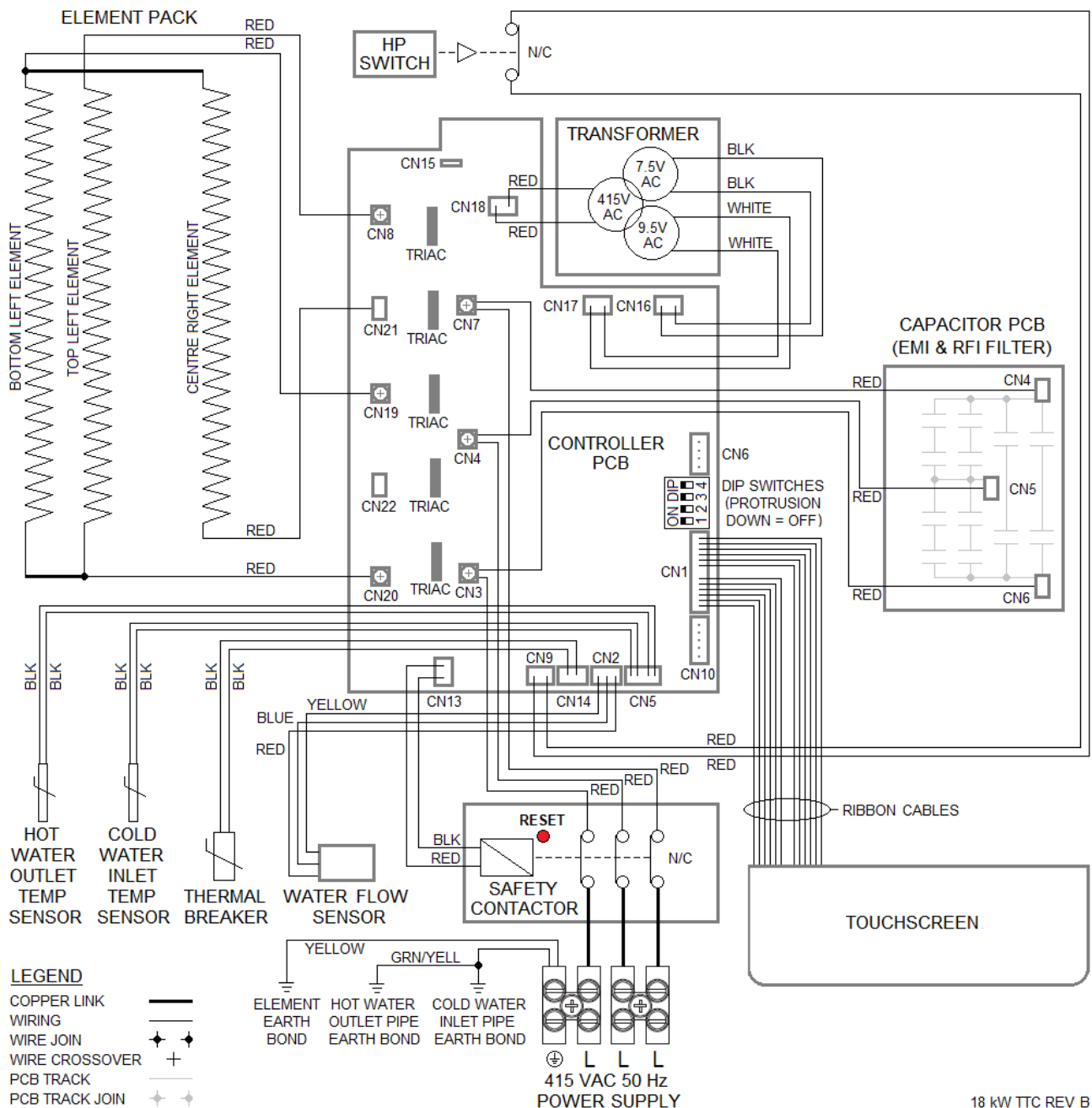
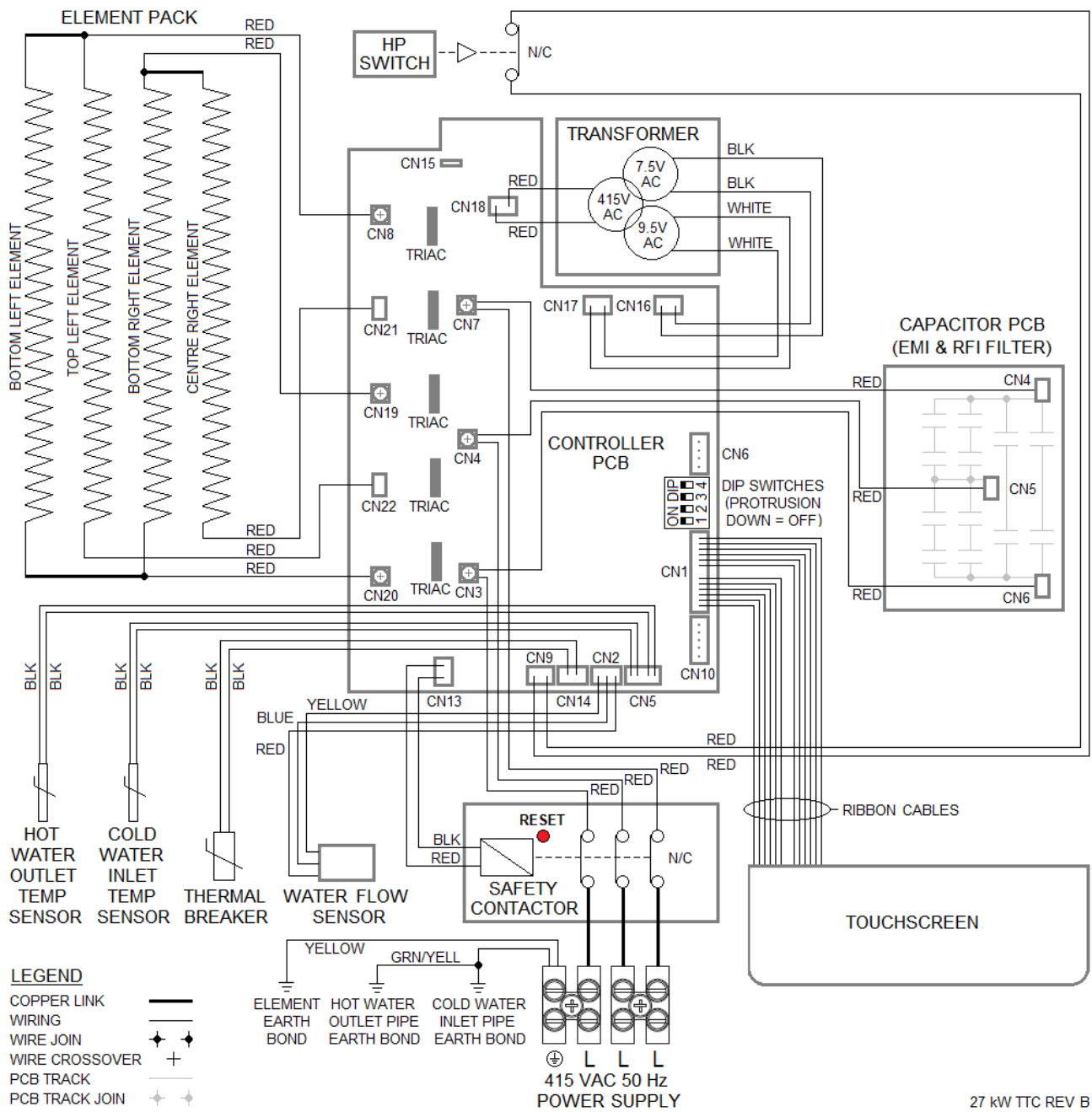


Figure 13: Electrical Diagram –18kW models

18 kW TTC REV B



27 kW TTC REV B

Figure 14: Electrical Diagram –27kW models

COMMISSIONING

All water heaters are tested and adjusted before dispatch from the factory, however further adjustments may become necessary due to local conditions.

TO TURN ON THE WATER HEATER

Warning: Do not switch on the appliance if there is a possibility that the water in the heater is frozen.

The power supply to the water heater must not be switched on until a satisfactory megger reading is obtained.

- Ensure the power supply is isolated to the water heater.
- Open all of the hot taps (don't forget the shower).
- Open the cold water isolation valve fully at the inlet to the water heater.

Air will be forced out of the taps.

- Close each tap as water flows freely from it.
- Check the pipe work for leaks.
- Turn on the water heater at the electrical supply switch.
- Open a hot tap.

The water heater will operate automatically.

- Check to ensure the flow from each connected hot tap is sufficient to operate the water heater.

The minimum operating flow rate for all models is 2.8 litres per minute.

- Check, and if required, adjust the preset outlet temperature setting of the water heater.

Refer to "Preset Outlet Temperature Setting" on page 29.

⚠ Warning: Upon completion of the installation and commissioning of the water heater, leave this guide with a responsible officer or the householder. **DO NOT** leave this guide inside of the cover of the water heater, as it may interfere with the safe operation of the water heater.

PRESET OUTLET TEMPERATURE SETTING

The factory preset outlet temperature setting of the water heater is:

Product Name	Rheem Eclipse® 18kW 50°C Water Heater	Rheem Eclipse® 18kW 60°C Water Heater	Rheem Eclipse® 27kW 50°C Water Heater	Rheem Eclipse® 27kW 60°C Water Heater
Model Number	6C318500A	6C318600A	6C327500A	6C327600A
The factory pre-set outlet temperature setting	50°C	60°C	50°C	60°C

It is usually not necessary to check or adjust the factory preset outlet temperature setting of the water heater unless the customer or application has a particular requirement for this to be done.

In New Zealand a 60°C model must be adjusted to deliver water with a temperature not exceeding 55°C at the taps.

OUTLET TEMPERATURE OFFSET ADJUSTMENT AND MAXIMUM TEMPERATURE SETTING

50°C max temperature model water heaters can be trade adjusted to increase the delivery temperature by up to 5°C to provide 50°C at the nearest tap used for ablution purposes.

All models can have the maximum temperature limited as follows:

- 50°C models – 5°C below the nominal setting.
- 60 models – 10°C below the maximum setting.

The procedure for setting an offset to account for heat losses in the line (positive offset) or to limit the maximum delivery temperature (negative offset) is identical, however, the display will behave differently for each.

Positive Offset

If the delivery temperature at the tap is measured by a digital thermometer and it shows less than the maximum allowable due to heat loss through pipe, then follow the instructions below to trade adjust the delivery temperature up by up to 5°C.

In this instance, the water heater will heat to the new temperature offset but will display the nominal setpoint. For example, if 50°C is required at the nearest tap and measurement shows it is 48°C, this indicates a 2 degree loss in temperature from the heater to the tap. Offsetting +2 will produce 52°C at the water heater but the display set point, in user mode, will be 50°C.

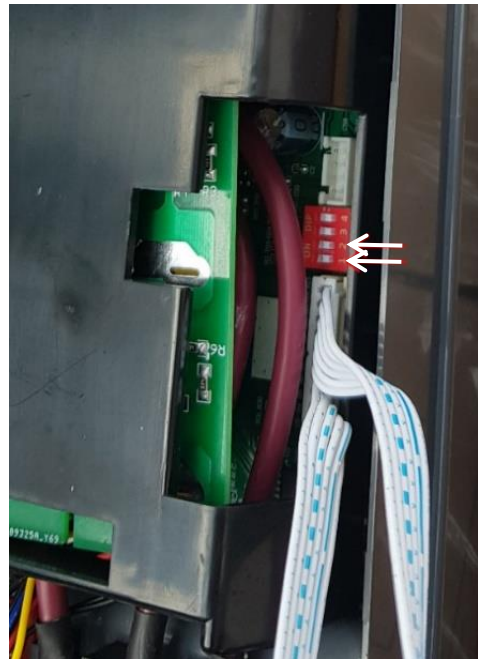


Figure 15: DIP Switch Position


Negative Offset (maximum temperature limiting)

If any negative offset is selected, the display, in user mode, will be limited to the temperature set by the negative offset, and the heater will heat to the temperature set point.

For example, in New Zealand, a 60°C model can be trade adjusted to deliver 55°C at the first tap. Offsetting -5 will limit the maximum temperature setting to 55°C, the display will show 55°C and will produce 55°C at the water heater.

Note that if a higher temperature is required at the water heater to produce 55°C at the tap, the display on a 60°C model will show the actual temperature, not 55°C, but the measured temperature at the tap **MUST NOT** exceed 55°C.

Procedure

- Ensure the water heater is NOT in bath mode. If “b.A” is blinking in the water flow indicator, press and hold the bath icon  for 3 sec to exit Bath Mode.
- Isolate the power to the water heater.
- Open the front cover by removing the screw from the bottom. There is no need to disconnect the display cable on the side. Simply hold the front cover while the display cable is connected.
- Find the DIP Switches at the right side of the unit (beside the display cable). Carefully turn DIP Switch 1 & 2 to ON as shown in Figure 15 on page 30.
- Temporarily replace the front cover back onto the unit. Turn on the power supply.
- The display will show a solid 0 which means no offset has been applied. If the display shows a value, then the offset or maximum temperature limit has been previously adjusted.

Note: If the unit was in Bath Mode when this procedure was enabled, then the display will be blinking the bath mode temperature, eg 38°C instead of an offset value, eg 0, and the water flow indicator will be blinking “b.A”.

In this instance turn off the power supply, set the DIP switches 1 & 2 to OFF, turn on the power supply and press and hold the bath icon  for 3 sec to exit Bath Mode. Restart the procedure from a).

- g) Press '▲' to increase up to 5°C, or '▼' to decrease up to 5°C on 50°C models if required or decrease by up to 10°C on 60°C models.
- h) The value will start to blink indicating you are changing the offset.
- i) Press and hold M1 for 3 seconds. The screen will cease blinking indicating the offset has been memorised.
- j) Isolate the power to the water heater and set the DIP switches back to OFF. Replace the front cover fixing it in place with the screw.
- k) Turn on the power supply.
- l) Open the hot tap on the nearest fixture and use a digital thermometer to measure the delivered temperature.

Note: The temperature at the tap MUST NOT exceed 50°C for 50°C models, and 55°C on 60°C models in New Zealand.

- m) Repeat from step a) if further temperature adjustment is required.

Note: The water heater will not heat water whilst in 'Trade Adjust' mode. It must be returned to normal operation mode to test for water delivery temperature.

Upon completion and testing of the installation, explain to a responsible officer or the householder the functions and operation of the water heater. Refer to **page 9** for user options.

⚠ Warning: Upon completion of the installation and commissioning of the water heater, leave this guide with a responsible officer or the householder. **DO NOT** leave this guide inside of the cover of the water heater, as it may interfere with the safe operation of the water heater.

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