

Electric Instant Water Heaters Instruction Manual



RTLE-33B RTLE-35B-1 RTLE-35B-1P RTLE-36B-1 RTLE-45B-1 RTLE-33M RTLE-35M-1 RTLE-36M-1 RTLE-45M-1 RTLE-33P-P RTLE-35P-1 RTLE-35P-1P RTLE-36P-1 RTLE-36P-1P RTLE-45P-1

Actual product specification cosmetic design and accessories shown are correct at the time of printing and may be subjected to change without prior notice.



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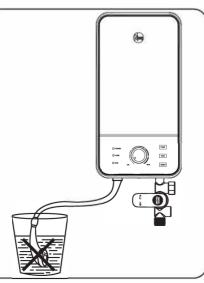
Safety Precaution

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Thank you for purchasing our Rheem Electric Instant Water Heater. Please read this manual thoroughly and understand the content before use. **WARNING:** This appliance is not to be used for a potable water supply.

SAFETY PRECAUTION

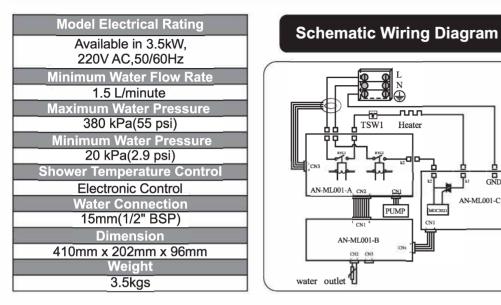
- 1. Do not install reverse INLET & OUTLET of heater.
- 2. Do not install the heater where there is consistent spray directly over the unit.
- 3. Do not connect the OUTLET to any tap or fitting that is not recommended by the manufacturer. The installation instructions for open outlet water heaters shall state that the outlet must not be connected to any tap or fitting other than those specified. The water inlet of this appliance shall not be connected to inlet water obtained from any other water heating system.
- 4. Do not block the heater OUTLET in any way.
- 5. Do not attempt to repair the heater without a qualified technician.
- 6. Do not leave children, elderly or disable person alone in the shower. This appliance is not intended for use 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. The appliance is not to be used 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. Children being supervised should not play with the appliance.
- 7. Engage a qualified electrician for installation.
- 8. Test water temperature with hand before using the shower.
- 9. The water heater must be permanently connected to the electricity supply through a double pole linked switch having a contact separation of at least 3mm in all poles incorporated in the circuit, and out of reach from the person using the shower.
- 10. Do not leave the hand shower idle in a pail.
- 11. To ensure proper Functionality in Hardwater conditions, it is recomended to use a water Filtration system.



Model Electrical Rating Available in 3.5kW to 4.5kW,	Schematic Wiring Diagram
220-240V AC,50/60Hz Minimum Water Flow Rate 1.5 L/minute Maximum Water Pressure 380 kPa(55 psi) Minimum Water Pressure 20 kPa(2.9 psi) Shower Temperature Control Electronic Control Water Connection 15mm(1/2" BSP) Dimension 410mm x 202mm x 86mm Weight	L N TSW1 Heater (CN1 + CN1 + C
3kgs	water outlet

★ Schematic Wiring Diagram For MODEL:RTLE-35B-1/RTLE-36B-1/RTLE-45B-1

Specification



23

GND

AN-ML001-C

Heater

PUMP

MOC302

-66

AN-ML001-B

CN2 CN

TSW1

Introduction

Congratulations!

Thank you for making an excellent choice by purchasing the RHEEM Electric water heater.

Please read these instructions carefully for optimum performance, necessary fitting and operating instructions.

Your RHEEM Heater has been manufactured in a

ISO9001 registered company which provides you with assurances of its quality safety and environmental friendly.

Caution!

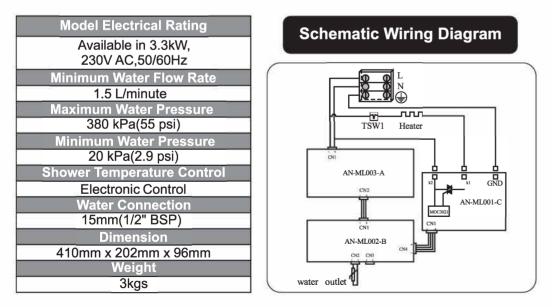
Read all of these instructions and retain this guide for later use.

Pass on this guide in the event of change of ownership of the installation site. Follow all warnings, cautions and instructions contained in this guide, and on or inside the appliance.

Anyone who may have difficulty understanding or operating the controls of any shower should be attended while showering. Particular consideration should be given to the inexperienced in the correct operation of the controls as well as children should be supervised to ensure that they do not play with the appliance.

When this appliance has reached the end of its serviceable life, it should be disposed of in a safe manner, in accordance with current local authority recycling. or waste disposal policy.

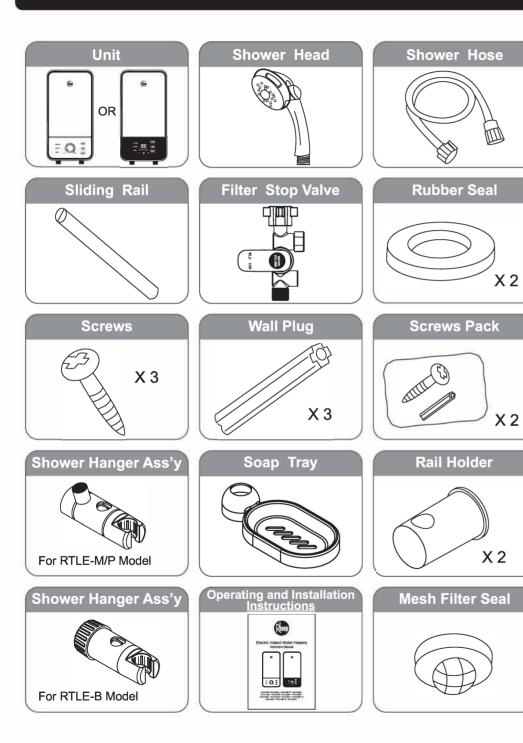




★ Schematic Wiring Diagram For MODEL:RTLE-33B

Parts Description

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Specification

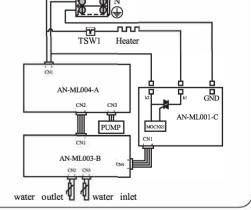


Schematic Wiring Diagram

★ Schematic Wiring Diagram For MODEL:RTLE-33M

Model Electrical Rating
Available in 3.3kW,
230V AC,50/60Hz
Minimum Water Flow Rate
1.5 L/minute
Maximum Water Pressure
380 kPa(55 psi)
Minimum Water Pressure
20 kPa(2.9 psi)
Shower Temperature Control
Electronic Control
Water Connection
15mm(1/2" BSP)
Dimension
410mm x 202mm x 86mm
Weight
3.5kgs

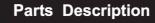
Schematic Wiring Diagram



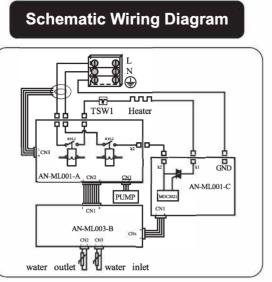
★ Schematic Wiring Diagram For MODEL:RTLE-33P-P

Specification

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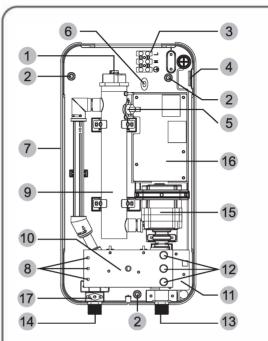




★ Schematic Wiring Diagram For MODEL:RTLE-35P-1P/RTLE-36P-1P

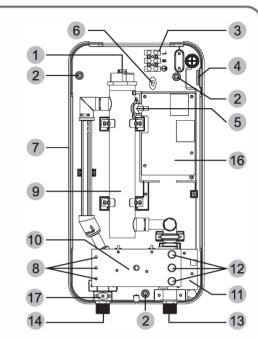
Available in 3.5kW to 4.5kW, 220-240V AC,50/60Hz	Schematic Wiring Diagram
Minimum Water Flow Rate 1.5 L/minute Maximum Water Pressure 380 kPa(55 psi)	
Minimum Water Pressure 20 kPa(2.9 psi) Shower Temperature Control	
Electronic Control Water Connection 15mm(1/2" BSP)	AN-ML002-A CN2 CN1
Dimension 410mm x 202mm x 86/96mm Weight 3~3.5kgs	AN-ML001-B water outlet water inlet

★ Schematic Wiring Diagram For MODEL:RTLE-35M-1/RTLE-36M-1/RTLE-45M-1 RTLE-35P-1/RTLE-36P-1/RTLE-45P-1



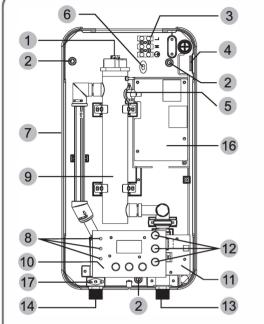
MODEL:RTLE-35B-1P

- 1. Heating Element
- 2. Mounting Holes(3 Nos)
- 3. Terminal Block
- 4. Cable Entry
- 5. Manual Reset Thermal Cut-out
- 6. RCD Coil(for RCD model only)
- 7. Heater Base
- 8. Indicator Light
- 9. Water Tank
- 10. Display Control Board
- 11. Flow Switch Assembly
- 12. RCD TEST RESET Buttons (for RCD model only)
- 13. Water Inlet
- 14. Water Outlet
- 15. DC Pump(For DC Pump model only)
- 16. Electronic Control
- 17. Thermistor



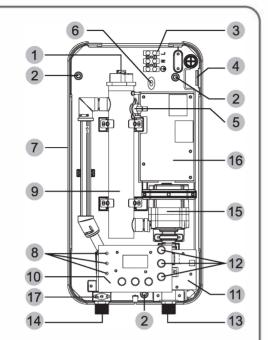
MODEL:RTLE-33B/RTLE-35B-1 RTLE-36B-1/RTLE-45B-1 RTLE-33M/RTLE-35M-1 RTLE-36M-1/RTLE-45M-1

RCD	PUMP	THERMO
×	×	×
\checkmark	X	×
	\checkmark	×
\checkmark	X	×
\checkmark	\times	×
\times	X	\checkmark
\checkmark	X	\checkmark
\checkmark	X	\checkmark
\checkmark	×	\checkmark
	×	× × ✓ × ✓ ✓ ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ ×



MODEL:RTLE-35P-1/RTLE-36P-1 RTLE-45P-1

- 1. Heating Element
- 2. Mounting Holes(3 Nos)
- 3. Terminal Block
- 4. Cable Entry
- 5. Manual Reset Thermal Cut-out
- 6. RCD Coil(for RCD model only)
- 7. Heater Base
- 8. Indicator Light
- 9. Water Tank
- 10. Display Control Board
- 11. Flow Switch Assembly
- 12. RCD TEST RESET Buttons (for RCD model only)
- 13. Water Inlet
- 14. Water Outlet
- 15. DC Pump(For DC Pump model only)
- 16. Electronic Control
- 17. Thermistor



MODEL:RTLE-33P-P/RTLE-35P-1P RTLE-36P-1P

MODEL	RCD	PUMP	THERMO
RTLE-33P-P	X	\checkmark	\checkmark
RTLE-35P-1	\checkmark	X	\checkmark
RTLE-35P-1P	\checkmark	\checkmark	\checkmark
RTLE-36P-1	\checkmark	Х	\sim
RTLE-36P-1P	\checkmark	\sim	\sim
RTLE-45P-1	\checkmark	X	\checkmark

Fault Code Display

RTLE-33P-P RTLE-35P-1 RTLE-35P-1P RTLE-36P-1 RTLE-36P-1P RTLE-45P-1	RTLE-33M RTLE-35M-1 RTLE-36M-1 RTLE-45M-1	RTLE-33B RTLE-35B-1 RTLE-35B-1P RTLE-36B-1 RTLE-45B-1
1. E1: Inlet thermistor Open or short circuit	1. Inlet thermistor Open or short circuit HEAT/ PUMP Light flickering	1.Inlet thermistor Open or short circuit HEAT/PUMP Light flickering
2.E2: Outlet thermistor Open or short circuit	2. Outlet thermistor Open or short circuit HEAT/PUMP Light flickering	2.Outlet thermistor Open or short circuit HEAT/PUMP Light flickering
3.E3: Inlet/Outlet thermistor Open or short circuit	3. POWER/HEAT light :The red light is Power supply , The Orange light is heating	3. POWER light : The red light is Power supply
4. E4: The outlet temperature is over 52°C	4.HEAT/PUMP light :The Orange light is heating and pump on	4.HEAT light : The Orange light is heating
5. E5: Electric leakage protection error	5.RCD light: The Green light indicate no Leakage	
6. POWER/HEAT light:The red light is Power supply ,The Orange light is heating		
7.HEAT/PUMP light:The Orange light is heating and pump on		
8.RCD light: The Green light indicate no Leakage		

	r		
Fault/Symptom	Cause	Remedy	
	1.1 Interrupted Water Supply	Check whether the water supply is available.	
1.No water coming out of the heater.	1.2 Incoming water supply stop valves turned off.	Turn on stop valve.	
	1.3 Dirt particles blocking inlet/ outlet hole.	Blocked sprayhead-clean or replace sprayhead. Blocked filter-see 'filter maintenance'.	
	2.1 Interrupted of Power Supply	Check if a main power cut.Check other appliances and if necessary,contact the local service agent.	
2.Heater not functioning	2.2 Low water supply to trigger flow switch	Heater requires minimum 1.5 litres/min water flow rate.	
	2.3 Thermal Cut-Out has operated		
	2.4 Malfunctioning on Flow Switch	Have the shower unit checked by a competent electrician or contact Customer Service.	
	2.5 Electrical malfunction		
3.Water too Hot	3.1 Not enough water flowing through the Unit.	Blocked sprayhead-clean or replace sprayhead.Blocked filter- see 'filter maintenance'.	
	3.1 Increase in ambient water temperature.	Switch to reduced power setting and readjust flow rate to give the required temperature.	
	4.1 Too much water flow.	Switch off Pump button	
4.Water is not hot enough	4.2 Reduction in the ambient water temperature	Switch to full power setting and switch off Pump button in order to get on the desired water temperature	
	4.3 Electrical malfunction.	Have the shower unit checked by a competent electrician or contact Customer Service.	
5.Water supply turned off but the	5.1 Flow Switch malfunction	Have the shower unit checked by a competent electrician or contact	
indicator light unit still ON	5.2 Triac Faulty	Competent electrician or contact Customer Service.	
	6.1 Interrupted of Water	See 1.1 and 3.1	
6.Motor tone increases (For DC Pump model)	6.2 Pump Unit Faulty	Wait for internal pump to cool down. If still faulty contact Customer Service.	

Installation must be carried out by a qualified Electrician. The Current carrying capacity of the cable must be at least that of the shower circuit protection. (See table).

Cable Sizes Table

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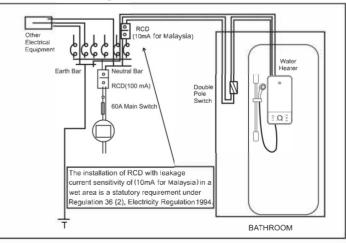
(voltage (V~)	Power (kW)	Amperes (A)	Cable Size (mm ²)	Fuse/MCB (A)	ON/OFF Switch(A)
		3.5	15.9	2.5	20	20
	220V~50/60Hz	4.5	20.5	2.5	30/32	30/32
	230V~50/60Hz	3.3	14.4	2.5	20	20
ĺ	240V~50/60Hz	3.6	15	2.5	20	20

The shower must be connected to its own independent electrical circuit.

Lead the power cable from the indoor fuse distributor board or Miniature Circuit Breaker (MCB) to a 10mA RCD (Malaysia requirement) and from RCD to 'ON/OFF' Double-Pole switch outside the bathroom. Please refer to Bathroom General Wiring layout below.

The water heater must be permanently connected to the electricity-supply through a double-pole linked switch having a contact separation of at least 3mm in all poles Incorporated in the fixed wiring. This switch must be out of reach of a person using the shower. The use of a plug and socket is not recommended.

Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.



Plumbing Schematic Diagram

An electric water heater can be fitted in your home regardless of the type of plumbing system as in most cases they can operate directly off the mains cold water supply.

Fig.shows a typical system layout. Do not use jointing compounds on any pipe fittings for the installation.

The Unit works at minimum water flow rate of 1.5 litre/min.

HANGING OF THE SHOWER

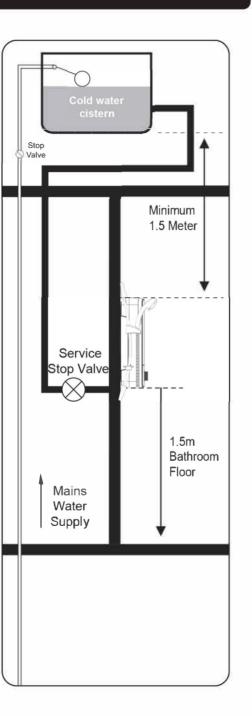
WARNING: The shower must not be positioned where it will be subjected to freezing conditions.

FOR EASE OF SERVICING, THE UNIT MUST ALWAYS BE MOUNTED ON THE SURFACE OF TILED WALLS. NEVER TILE UP TO THE UNIT.

This product is splash-proof rated and is approved for use in shower cubicles and over baths.

However, do not install the unit in a position where the sprayhead will consistently direct water over it.

The shower unit MUST be positioned vertically.



CLEANING

NOTE:Do Not Use Thinner, Alcohol or Petroleum spirit

Many household cleaners contain abrasives and chemical substances, and should not be used for cleaning plated or plastic fittings.These finishes should be cleaned with a mild detergent or soap solution, and then wiped dry using a soft cloth.

FILTER MAINTENANCE

It is recommended that the filter is periodically cleaned in order to maintain the performance of the shower.

'Open' the filter head from the stop valve. Remove the Filter Net and clean it using soft brush and wash it under running water. Ensure all dirt particles are removed.

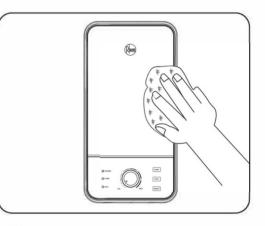
'Close' it back after washing the filter.

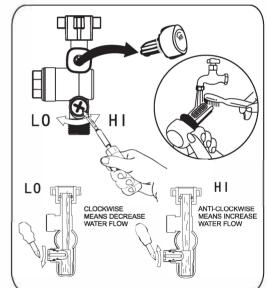
TESTING RCD (For RCD Model Only)

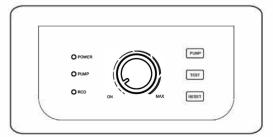
Test the RCD Regularly

Turn On the unit with electric power and water supply.The RCD-LED(Green) should light up.

Test the RCD by gently pressing TEST button. The RCD should be automatically tripped and green light goes off. Press RESET to turn the unit back on.







Important: Ensure the commissioning procedure has been carried out.

To start the shower, turn the stop valve handle counterclockwise allowing water to flow through the unit.

To stop the shower, turn the stop valve handle clockwsie back to the position as shown in the figure.

CAUTION:DO Not Test Stop Valve under dry condition

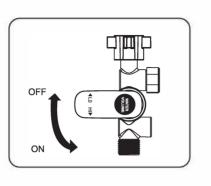
To adjust the shower temperature

The shower temperature is altered by increasing or decreasing the Power Control via the Control knob.

To increase the shower temperature Turn the control Knob clockwise towards the HI sign; this will increase the water temperature.

To decrease the shower temperature Turn the control Knob counterclockwise towards the LO sign; this will decrease the water temperature.

CAUTION:Be certain the showering temperature is satisfactory by testing with your hand before stepping under the sprayhead.It is recommended that persons who may have difficultly understanding or operating the shower controls should not be left unattended while showering. Special consideration should be given to young children and the less able bodied.



* The indicators description

		-		-
MODEL	POWER	HEAT	RCD	PUMP
RTLE-33B				
RTLE-35B-1P				
RTLE-35B-1				
RTLE-36B-1				
RTLE-45B-1				
RTLE-33M				
RTLE-35M-1				
RTLE-36M-1				
RTLE-45M-1				
RTLE-33P-P				
RTLE-35P-1				
RTLE-35P-1P				
RTLE-36P-1				
RTLE-36P-1P				
RTLE-45P-1				



FIXING THE SHOWER TO THE WALL

Instructions for fixed appliances stating how the appliance is to be fixed.

Important:The shower must be mounted on a flat surface which covers the full width and length of the backplate. It is important that the wall surface is flat otherwise difficulty may be encountered when fitting the cover.

1.1 Decide on a suitable position to allow for cover fit and removal.

Determine the direction that you require the inlet water supply and electrical cable to enter the unit from.

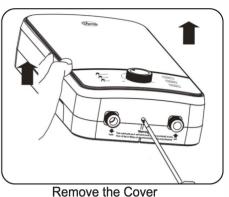
Determine the height at which you require the unit to be installed.

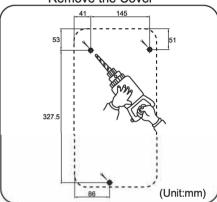
1.2 Remove the cover.

Mark the position of the unit on the wall. Mark the positions of the fixing holes. Make sure that sufficient electrical Supply cable is available for connection to the terminal block.

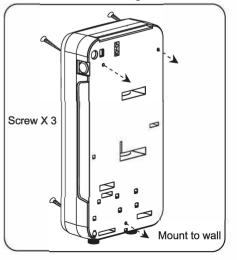
1.3 Drill and plug the fixing holes. Secure the unit to the wall with the screws provided. Avoid drilling into any supply cable/pipe.

Note : Hook the backplate over the top screws and fit the lower fixing screw into position. DO NOT fully tighten the screws at this stage, as the fixing holes are elongated to allow for out of square adjustment after the plumbing connections have been completed.





Mark the mounting holes



PLUMBING CONNECTIONS

COMPLETE THIS PROCESS BEFORE WIRING CON-NECTION

CONNECTION PROCEDURE:

Connect the water supply to the inlet of the shower via 15mm copper, stainless steel or plastic pipe using a 15mm x 15mm elbow compression fitting.

Do not use excessive force when making these connections.

FITTING THE STOP VALVE

The supplied stop valve or one with a filter must be used to ensure proper functionality of unit.

Feed the Stop valve by fastening to the unit Inlet.

Note:

Ensure the supplied washers are in place before connecting inlet and the Stop Valve.

Feed the other point of Stop Valve to the incoming water supply. Ensure that the backplate of the unit is flat on the wall and positioned squarely. Tighten the fixing screws.

Turn on the water supply and check for leaks in the pipework connection to the shower.

NOTE: At this stage no water can flow through the unit.

ELECTRICAL CONNECTION

WARNING: THIS UNIT MUST BE EARTHED.

SWITCH OFF THE ELECTRICITY SUPPLY.

The cable entry points are shown in the figure below. Determine the cable entry to the unit.

Side entry - Poke the electrical cable through the Rubber grommet.

Route the cable into the shower unit and connect to the terminal block as follows:-

Live cable to terminal marked · [' Neutral cable to terminal marked ' N ' Earth cable to terminal marked '⊕'

IMPORTANT: Fully tighten the terminal block screws and ensure that no cable insulation is trapped under the screws. Loose connections can result in cabling overheating. DO NOT switch on the electricity supply until the cover has been fitted.

Operating The Shower Heater

ADJUST TEMPERATURE SETTING FOR BUTTON CONTROL UNIT

1.Press the ON/OFF switch, the POWER indicator will light, and display will show setting temperature.

2.Press the "-" & "+" button, to adjust the water temperature.

3.Press "O" for ON/OFF, cool temperature at power off condition(same as inlet water temperature).

TESTING RCD (For RCD model only)

Test the RCD by pressing the TEST Button. The heater and RCD light will turn OFF.

Press the RESET button to switch ON the unit again.

This shows the RCD should be in good condition. Note!

Never attempt to repair the unit vourself.

Fit the shower fittings. Once the riser rail is fitted, the shower is ready for normal use.

*The Pump function unit is specially designed

3.Press the "Pump" button for turning on/off the

(Earth Leakage Circuit Breaker)

If nothing happens when these buttons are pressed, do not use the heater, and contact your service agent immediately.

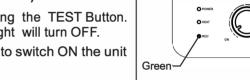
PUMP CONTROL SETTING (ONLY FOR PUMP MODEL)

for low pressure area.

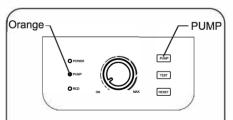
1. The Pump will light up when the unit is turned on, at the same time, DC Pump will turn on.

2.The DC Pump will turn off when the flow rate is lower than 1.2 L/M.

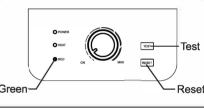
DC Pump.



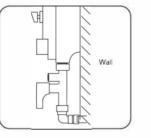


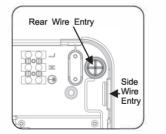


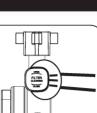












11

Commissioning

15

DO NOT switch on the electricity supply until the following procedure has been completed and the cover has been fitted.

The first operation of the shower is intended to flush out any remaining unit dirt particles, and to ensure the heater unit contains water before the element is switched on.

This operation must be carried out with the flexible hose screwed to the outlet but without the sprayhead attached. Ensure the outlet of the flexible hose is directed to drain.

Turn ON the main water supply. Check if any water leaks from the pipe line.

Secure the cover in position with screws. DO NOT OVERTIGHTEN.

ADJUST TEMPERATURE SETTING FOR KNOB CONTROL UNIT

Switch on the main electric supply to the shower at the isolating switch.

The RCD and the Power will light meaning the unit is on standby.

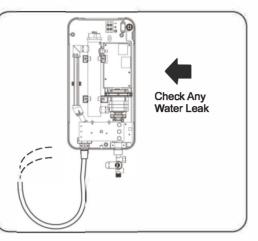
Turn the knob clockwise to ON, the Heat indicator will Light.

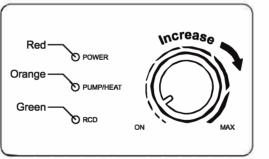
Tum the knob counterclockwise to OFF; the Heat indicator will switch OFF again.

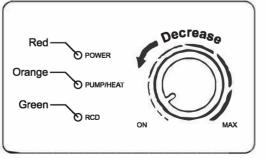
Continual turn the knob clockwise, the temperature of the water should rise slightly.

Allow a few seconds for the warm water to reach the handset.

Set the shower temperature by rotating the Knob as necessary. Turn the knob clockwise for hotter water and counterclockwise to OFF position for cooler water.







Fitting The Shower Set

FITTING THE HOSE AND SPRAY HEAD Instructions concerning new and old hose -sets for appliances connected to the water main by detachable hose-sets.

Fit and flexible hose by screwing to the unit outlet (Left side) and sprayhead ensuring the supplied rubber seal at the sprayhead.

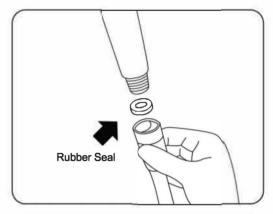
The instructions for appliances connect -ed to the water main by detachable hose-sets shall state that the new hose -sets supplied with the appliance are to be used and that old hose-sets should not be reused.

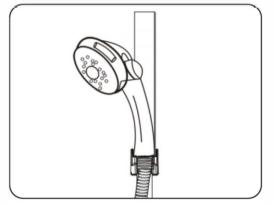
Place the sprayhead into the shower hanger and check that it fits correctly.

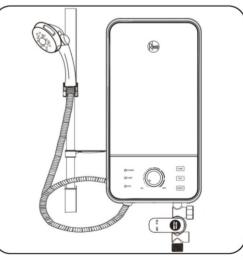
Important:

It is the conical end of the hose which grips into the shower hanger. The sprayhead will not fit in the shower hanger without the hose attached.

The instructions for open-outlet water heaters to be used with a spray head shall state that the spray head must be descaled regularly.

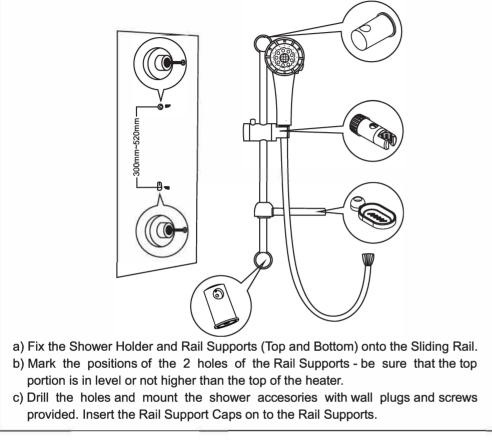


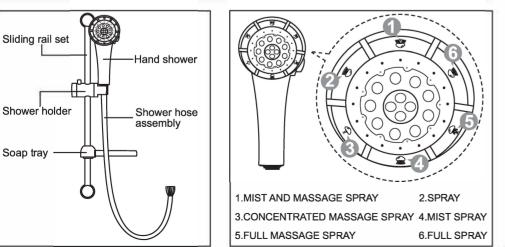




Shower Accessories Installation

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Rain Shower

OPTIONAL ACCESSORY

RAIN SHOWER SET Part Number : RTLE-RS Option for use with Rheem Instant Shower Heater (Pump Models Only)

