

UTC 99

Fitting Instructions and User Guide

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1.0 INTRODUCTION

Thank you for purchasing a Heatrae Sadia UTC 99 vented water heater. The UTC 99 water heater is manufactured in the UK to the highest standards and has been designed to meet all the latest relevant safety specifications.

This UTC99 water heater must be installed, commissioned and maintained by a competent person only. Please read and understand these instructions prior to installing your vented water heater. Particular attention should be paid to the section headed IMPORTANT INSTALLATION POINTS.

Following installation and commissioning, the operation of the heater should be explained to the user and these instructions left with them for future reference.

This appliance can be used by children aged from 8 years and above and persons with reduced physical sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Children must be supervised to ensure they do not play with the appliance.

Means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III conditions is required. The instructions shall state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

2.0 TECHNICAL SPECIFICATION

Electrical rating	1.5kW@240V~ or 3kW@240V~ 50Hz.
Capacity	15 litres
Weight (full)	23.4kg
Rated pressure (open outlet)	0 MPa (0 bar)
Rated pressure (max head pressure cistern fed)	0.2 MPa (2 bar)
Minimum recommended supply pressure	0.04 MPa (0.4 bar)

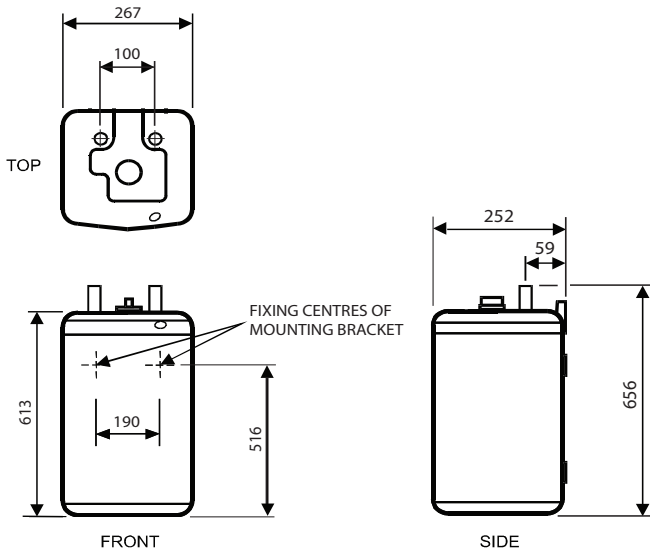
Supplier's name or trade mark	UTC	
Supplier's model identifier	10L	15L
Storage volume V in litres	10.0	15.0
Mixed water at 40°C V40 in litres	16	25
The declared load profile	XS	XS
The water heating energy efficiency class of the model	C	D
The water heating energy efficiency in %	32.3	29.2
The annual electricity consumption in kWh	570	631
Daily fuel consumption Q fuel in kWh	2.75	3.10
The thermostat temperature settings of the water heater, as placed on the market by the supplier	60°C	
Specific precautions that shall be taken when the water heater is assembled, installed or maintained and disposed of at end of life	See Section 2 to 7	

Table 2: Technical parameters in accordance with European Commission regulations 814/2013 and 812/2013

The HWA Charter Statement requires that all members adhere to the following:

- ▶ To supply fit for purpose products clearly and honestly described.
- ▶ To supply products that meet, or exceed appropriate standards and building and water regulations.
- ▶ To provide pre and post sales technical support.
- ▶ To provide clear and concise warranty details to customers.

FIGURE 01: DIMENSIONS



3.0 INSTALLATION

Warning: Do not connect any pressure-relief device to the vent pipe of this water heater.

Warning: This outlet acts as a vent and must only be connected to a fitting recommended by the manufacturer. It must not be connected to a tap.

3.1 IMPORTANT INSTALLATION POINTS

3.1.1 The UTC 99 vented water heater is designed to be fitted under a sink or worktop.

3.1.2 The UTC 99 can be installed either as an Open Outlet or Cistern Fed type unit when used with the appropriate fittings.

DO NOT connect directly to the mains water supply.

3.1.3 OPEN OUTLET INSTALLATION

When installed as an open outlet water heater, the outlet acts as a vent and must not be connected to any form of tap or fitting not recommended by Heatrae Sadia.

Only one outlet can be served via an Open Outlet type tapset.

3.1.4 CISTERN FED INSTALLATION

When installed as a Cistern Fed water heater, the cold water supply must be from a feed cistern complying with Water Byelaw 30.

A vent pipe must be connected to the outlet of the heater. The vent pipe must rise continuously and be arranged to discharge into the cold water feed cistern.

The vent pipe must have a minimum bore of 19mm.

- 3.1.5 National Wiring rules may contain restrictions concerning the installation of these units in bathrooms.
- 3.1.6 The installation must be carried out in accordance with the relevant requirements of:
 - The appropriate Building Regulations either The Building Regulations, The Building Regulations (Scotland) or Building Regulations (Northern Ireland).
 - The Water Fittings Regulations or Water Byelaws in Scotland.

LOCATION

- 3.1.7 The unit should be vertically wall mounted using the wall bracket provided. Alternatively, it can be floor mounted on its base. The water connections must always be to the top of the unit.
- 3.1.8 Enough space should be left at the top above the unit to allow for pipe connections. Refer to Fig. 01 to determine a suitable position for the heater.
- 3.1.9 Ensure that the wall can support the full weight of the unit (see Technical Specification) and that there are no hidden services (gas, water or electricity) below the surface of the wall.
- 3.1.10 The unit should be fixed to the wall using No. 12 screws into suitable wall plugs.

3.2 PLUMBING

- 3.2.1 DO NOT install where the unit may freeze.
- 3.2.2 Refer to the section IMPORTANT INSTALLATION POINTS to determine which valves and accessories are required.
- 3.2.3 The water connections are 15mm diameter copper tube suitable for compression fittings. Do not use solder joints as this will damage the heater.
- 3.2.4 The inlet is marked BLUE and the outlet is marked RED. It is recommended to fit a WRAS listed isolating valve on the cold water inlet to simplify servicing.

OPEN OUTLET INSTALLATION

- 3.2.5 **When installed as an open outlet water heater, the outlet acts as a vent and must not be connected to any form of tap or fitting not**

recommended by Heatrae Sadia.

3.2.6 Only one outlet can be served via an Open Outlet type tapset. A range of open outlet (vented) taps are available from Heatrae Sadia. All tapsets are of high quality chromium plated brass construction.

PACK J 95 970 295 Two hole mixer set

PACK K 95 970 296 Monobloc mixer tap

PACK M 95 970 298 Pair of pillar taps with ¼ turn elbow levers

PACK P 95 970 299 Pair of basin taps with ¼ turn elbow levers

PACK Q 95 970 310 Two hole mixer set with ¼ turn elbow levers

PACK R 95 970 311 Pair of pillar taps

PACK S 95 970 312 Basin hot tap

PACK T 95 970 313 Basin cold tap (matches Pack S)

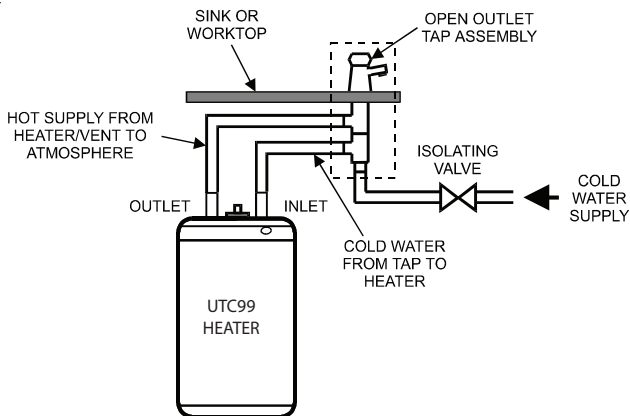
3.2.7 The cold water supply can either be taken from the cold water mains or from a cold water feed cistern complying with Water Byelaw 30 with a minimum recommended pressure of 0.04 MPa (0.4 bar).

3.2.8 The inlet/outlet connections of the heater must be connected to the open outlet tapset in accordance with the fitting instructions supplied with the tapset.

The inlet must not be connected directly to the cold water mains supply.

3.2.9 In an open outlet installation, it is normal for the tap to drip during heating. This is due to expansion of the water as it is heated within the unit and does not indicate a fault. DO NOT attempt to stop this dripping by over-tightening the tap as damage to the sealing washers or internal operating mechanism will occur.

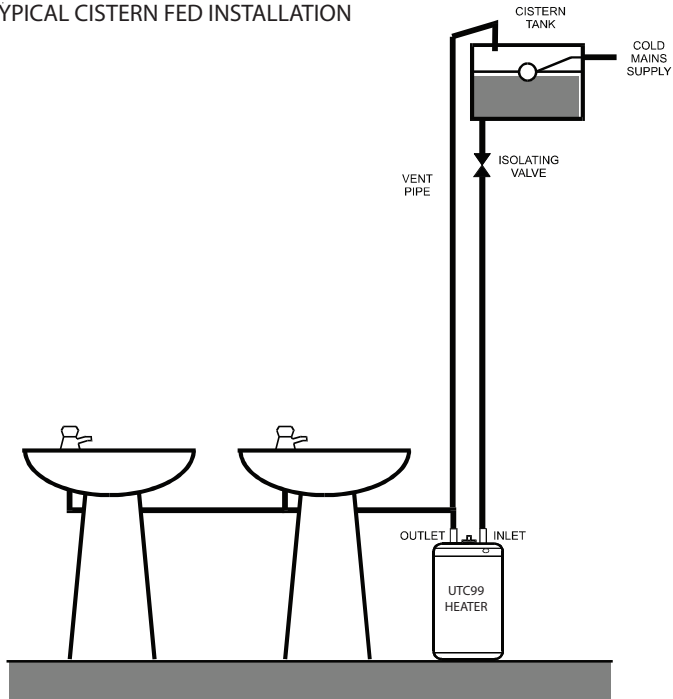
FIGURE 02: TYPICAL OPEN OUTLET INSTALLATION



CISTERN FED INSTALLATION

- 3.2.10 This method of installation must be used if the outlet is to be connected to one or more conventional taps. It is not recommended for supplying a shower. Individual site demands should be considered when choosing the number of outlets to be served.
- 3.2.11 **A vent pipe must be connected to the outlet of the heater. The vent pipe must rise continuously and be arranged to discharge into the cold water feed cistern. The vent pipe must have a minimum bore of 19mm. DO NOT connect any pressure relief device to the vent pipe of this water heater.**
- 3.2.12 The cold water supply must be from a cold water feed cistern complying with Water Byelaw 30. The maximum head distance must not exceed 20 metres.
- 3.2.13 It is recommended to fit a WRAS listed isolating valve on the cold water inlet to simplify servicing.
- 3.2.14 **The inlet must not be connected directly to the cold water mains supply.**

FIGURE 03: TYPICAL CISTERN FED INSTALLATION



3.3 ELECTRICAL REQUIREMENTS

WARNING: This appliance must be earthed. It is suitable for a.c. supply only. Disconnect the electrical supply before removing the terminal cover. Electrical installation must be carried out by a competent electrician and be in accordance with the latest I.E.E. wiring regulations.

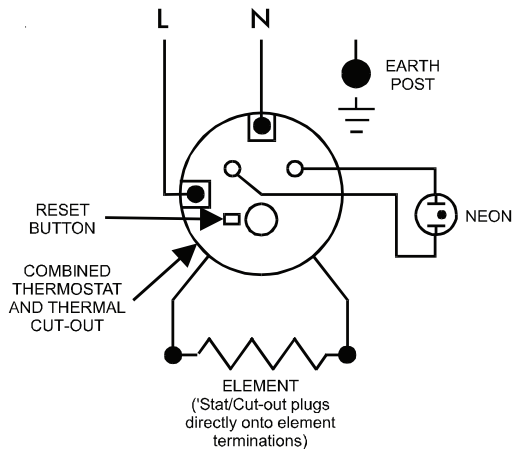
Ensure the electrical supply is switched off before making any connections to the water heater.

3.3.1 The unit is supplied fitted with a 0.75m 3 core 1.5mm² flexible cable. The electricity supply should be fused 13 Amp for 3kW models and 10A for 1.5kW models and be via a double pole isolating switch with a contact separation of at least 3mm in both poles. Refer to Fig. 04 below.

3.3.2 The wires are colour coded as follows:

Green and Yellow	EARTH	⊕
Brown	LIVE	(L)
Blue	NEUTRAL	(N)

FIGURE 04: WIRING DIAGRAM



4.0 COMMISSIONING

- 4.1 Do not switch on the electrical supply until the unit has been filled with water and checked for leaks.
- 4.2 Check that all installation and electrical requirements have been met.
- 4.3 Check that all water and electrical connections are tight.
- 4.4 Open a hot water tap and turn on cold water supply to the heater.
- 4.5 Allow unit to fill and leave hot tap running for a short while to purge any air and flush out the pipework. Close the hot tap and check the system for leaks.
- 4.6 Switch on the electrical supply. The indicator light will illuminate during heating. When the set temperature is reached the indicator light will go out.

5.0 EXPLANATION TO USER

Following Installation and Commissioning of the water heater the operation should be fully explained to the user:

- 5.1 The UTC99 vented water heater stores water at the temperature set on the adjustable thermostat. This can be set to provide temperatures in the range of 10 to 70°C. To avoid any risk of freezing when the heater is not in use for long periods during the winter months, do not switch off the electrical supply and set the thermostat to its minimum position. N.b. this will not protect other system pipework.
- 5.2 The set temperature can be adjusted by rotating the knob located in the terminal cover. It is possible to lock the thermostat knob in either the 'mid-range' or a 'hot' position by following the procedures below. Always switch off the electrical supply before removing the terminal cover.
- 5.3 Setting the 'mid-range' position:
Rotate the thermostat knob to the mid position. Remove the terminal cover using a large flat-bladed screwdriver to depress the three snap lugs located in the three top rectangular depressions. Holding the thermostat knob in position, turn the terminal cover over and remove the backing disc from the underside of the cover. Turn the backing disc over and refit to the knob, ensuring the notch locates with the boss on the underside of the cover. Refit the terminal cover and the thermostat will now be locked in the 'mid-range' position.

5.4 Setting the 'hot' position:

Rotate the thermostat knob to mid way through the hot graduated range (red graphic). Follow the procedure in 5.3, however in this case, the knob should be held in the 'hot' position previously set. When the terminal cover has been re-fitted, the thermostat will be locked in the 'hot' position.

5.5 SYSTEM MALFUNCTION

1. Explain how to isolate electrical and water supplies incase of a fault.
2. Explain that a qualified plumber and / or electrician should be contacted if there is a fault.
3. Explain how to identify / check basic faults.

5.6 SYSTEM MAINTENANCE

Explain the necessity to carry out regular maintenance of the water heater to ensure it's continued safe and efficient operation.

5.7 LITERATURE

Hand over the Installation and user instructions.

6.0 MAINTENANCE

WARNING: Disconnect from all electrical supplies before beginning any work on the water heater. Water contained in the water heater may be very hot!

To ensure the continued safe and efficient operation of the water heater it should be regularly maintained.

In hard water areas the water heater will require periodic descaling.

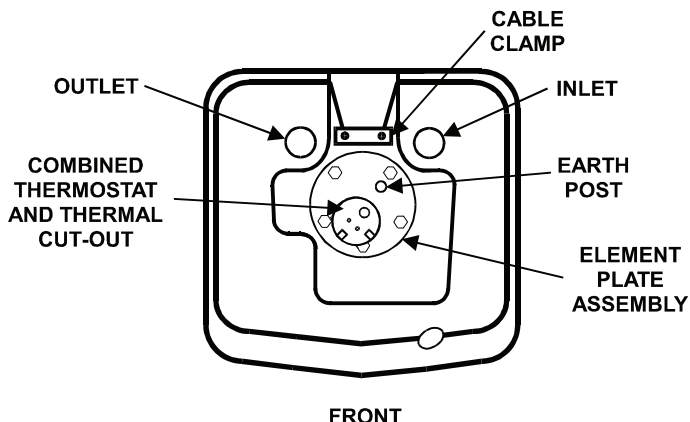
Maintenance and servicing should be carried out by a competent person and any replacement parts used should be authorized Heatrae Sadia spare parts.

6.1 RE SETTING THE THERMAL CUTOUT

- 6.1.1 Switch off and disconnect the electrical supply, turn off the water supply to the unit and remove the terminal cover.
- 6.1.2 Press the thermal cut out button (see Figure 05).

NOTE: If the thermal cut out continues to operate, check the operation of the thermostat and the element plate assembly.

FIGURE 05: COMPONENT IDENTIFICATION



6.2 DRAINING THE WATER HEATER

- 6.2.1 Switch off and disconnect the electrical supply. Turn off the water supply to the unit.
- 6.2.2 Open a hot tap to relieve any system pressure. Disconnect the plumbing connections to the unit and remove (note full weights of units). Empty unit through the outlet connection.

6.3 DESCALING

- 6.3.1 Switch off and disconnect the electrical supply, turn off the water supply to the unit and drain as above.
- 6.3.2 Remove the terminal cover as previously described. Remove the plastic disc from the thermostat spindle and the insulating pad from the terminal housing.
- 6.3.3 Disconnect the electrical terminations to the thermostat. Disconnect earth links to the earthing stud.
- 6.3.4 Remove the element plate assembly by unscrewing the five securing screws, tapped jacking points are provided. Remove any loose scale from the container. Carefully clean off any scale from the element and thermostat pocket. DO NOT clean scale from interior container walls.
- 6.3.5 Re-fit the element plate assembly using a new sealing gasket. Note the correct orientation of the element plate by reference to Figure 05. Rewire the unit with reference to the Figure 04 .
- 6.3.6 Refit the cover.
- 6.3.7 Re-commission the unit following the INSTALLATION and COMMISSIONING instructions.

6.3.8 SUPPLY CORD

If the supply cord is damaged the water heater should be switched off until the supply cord can be replaced by a competent electrician or a Heateam Engineer in order to avoid a hazard.

7.0 FAULT FINDING

WARNING: Disconnect from all electrical supplies before beginning any work on the water heater. Water contained in the water heater may be very hot!

The water heater should give trouble free operation, however should a problem occur, the table overleaf should enable most faults to be identified with ease.

Fault Finding should be carried out by a competent person and any replacement parts used should be authorised Heatrae Sadia spare parts.

FAULT	POSSIBLE CAUSES	ACTION
Water not heating	1. Electrical supply fault	1. Check electrical supply
	2. Thermal cut-out tripped	2. Check cut-out, if operated reset and check thermostat operation. If necessary replace
	3. Thermostat fault	3. Check thermostat operation, replace if necessary
	4. Element fault	4. Check element for circuit continuity and insulation resistance. If faulty replace.
No water flow - General	1. Cold water supply not turned on	1. Check mains water supply is on.
	2. Blockage in cold water supply	2. Check for obstructions.
No water flow - Open Outlet installations	1. Open Outlet tapset not correctly installed	1. Check water connections to tapset
	2. Blockage in tapset	2. Check for obstructions.
No water flow - Cistern Fed installations	1. Blockage in tapset	1. Check for obstructions.
	2. Cistern tank empty	2. Check water supply to cistern tank is turned on. Check operation of cistern float valve.
Water flow gradually reduces - Cistern Fed installations	1. Cistern not filling as fast as outlet flow rate	1. Check water supply to cistern tank is turned on and that inlet flow rate is equal to outlet flow rate. Check operation of cistern float valve.
	2. Vent pipe blockage	2. Check vent pipe for obstructions, clear as necessary.

NOTE: Use only Heatrae Sadia approved spare parts. Replacement of any parts with components not recommended by Heatrae Sadia will invalidate the guarantee and may render the installation dangerous.

8.0 SPARE PARTS

WARNING: Disconnect from all electrical supplies before beginning any work on the water heater. Water contained in the water heater may be very hot!

To ensure the continued safe and efficient operation of the water heater it should be regularly maintained.

Maintenance and servicing should be carried out by a competent person and any replacement parts used should be authorized Heatrae Sadia spare parts.

DESCRIPTION	CODE No.
Element plate assembly - 3kW	95 606 922
Element plate assembly - 1.5kW	95 606 927
Combined thermostat/thermal cut-out	95 980 041
Indicator light	95 607 992
Element plate gasket	95 611 811
Top cover moulding	95 614 246
Terminal cover c/w thermostat knob	95 614 182

9.0 GUARANTEE

This product is guaranteed against faulty materials and manufacture for a period of 2 years from the date of purchase provided that:

1. The unit has been installed in accordance with the Installation and User Instructions and all relevant Codes of Practice and Regulations in force at the time of installation, and that all necessary controls and safety valves have been fitted correctly.
2. Any valves and controls are of the Heatrae Sadia recommended type and specification.
3. The unit has not been modified or tampered with in any way, and has been regularly maintained as detailed in the Installation and User Instructions.
4. The unit has been used only for heating potable water.

The unit is not guaranteed against damage by frost, and the inner container with integral immersion heater is not guaranteed against excessive scale build-up.

This Guarantee in no way affects the statutory rights of the consumer.

The policy of Heatrae Sadia is one of continuous product development and, as such, we reserve the right to change specifications without notice.

10.0 ENVIRONMENTAL INFORMATION

Heatrae Sadia products are manufactured from many recyclable materials.

At the end of their useful life they should be disposed of at a Local Authority Recycling Centre in order to realise the full environmental benefits. Insulation is by means of CFC-free polyurethane foam.

This water heater does not contain substances harmful to health; it does not contain any asbestos.

11.0 SPARES STOCKISTS

For the fast and efficient supply of spares, please contact the stockists listed below:

Electric Water Heating Co.
2 Horsecroft Place, Pinnacles
Harlow, Essex, CM19 5BT
Tel: 0845 0553811
E-Mail: sales@ewh.co.uk

SPD
Special Product Division
Units 9 & 10 Hexagon Business Centre
Springfield Road, Hayes, Middlesex, UB40 0TY
Tel: 020 8606 3567

Parts Centre
Tel: 0344 292 7057
www.partscentre.co.uk

Newey & Eyre
Unit 3-5 Wassage Way
Hampton Lovett Ind. Estate
Droitwich, Worcestershire, WR9 0NX
Tel: 01905 791500
Fax: 01905 791501

UK Spares Ltd.
Unit 1155 Aztec West
Almonsbury, Bristol, BS32 4TF
Tel: 01454 620500

Alternatively contact your local supplying merchant
or wholesale branch or use our online stockist finder
at www.interpartspares.co.uk

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