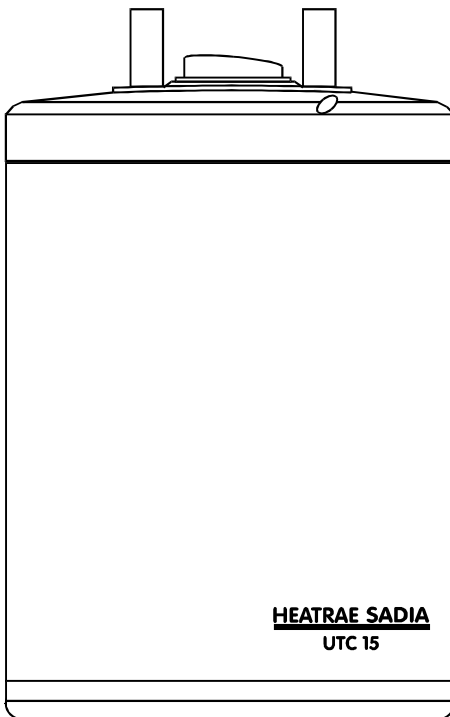


# HEATRAE SADIA

The quality name in water heating

## Installation and User Instructions for the UTC Undersink Vented Water Heater



Please read and understand these instructions before starting work.

Please leave this leaflet with the user following installation

Please read and understand these instructions prior to installing your UTC 15 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 customer and these instructions left with them for future reference.

## **TECHNICAL SPECIFICATIONS**

Electrical rating .....	1.38/1.5kW 230/240V~
or .....	2.75/3.0kW 230/240V~
Capacities .....	15 litres
Weight (full) .....	23.4kg
Rated pressure (Open Outlet).....	0 bar
Rated pressure (Max. head pressure Cistern Fed) .....	2 bar (20 metres)
Minimum recommended supply pressure .....	0.4 bar (4 metres)

## **1.0 IMPORTANT INSTALLATION POINTS**

- 1.1 The UTC 15 vented water heater is designed to be fitted under a sink or worktop.
- 1.2 The UTC 15 can be installed either as an Open Outlet or Cistern Fed type unit when used with the appropriate fittings.
- 1.3 **DO NOT connect directly to the mains water supply.**

### **1.4 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.**

### **1.5 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.**

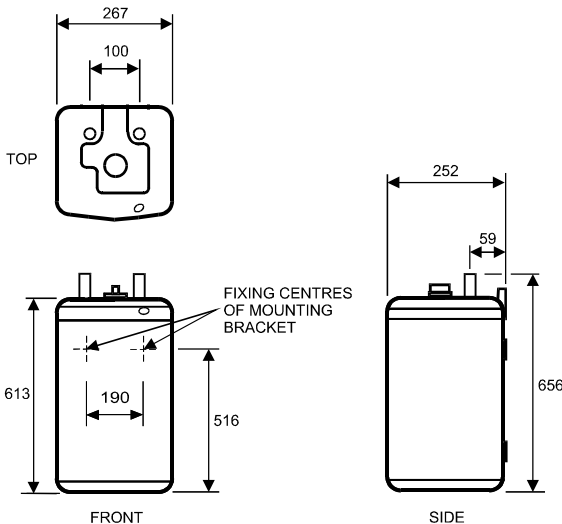
**A vent pipe must be connected to the outlet of the heater. The vent pipe must rise continuously and be arranged to discharge into the cold water feed cistern.**

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

**2.0 INSTALLATION - GENERAL REQUIREMENTS:**

- 2.1 National Wiring rules may contain restrictions concerning the installation of these units in bathrooms.
- 2.2 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.
- 2.3 Enough space should be left at the top above the unit for pipe connections. Refer to Diagram 1 to determine a suitable position for the heater.
- 2.4 NOTE: Ensure that the wall can support the full weight of the unit (see TECHNICAL SPECIFICATIONS) and that there are no hidden services (electricity, gas, or water) below the surface of the wall.
- 2.5 The unit should be fixed to the wall using No. 12 screws into suitable wall plugs.
- 2.6 DO NOT install where the unit may freeze.
- 2.7 Refer to the section IMPORTANT INSTALLATION POINTS to determine which valves and accessories are required.
- 2.8 The water connections are 15mm diameter copper tubes suitable for compression fittings. Do not use solder joints as this will damage the heater.
- 2.9 The INLET is marked BLUE, the OUTLET is marked RED. It is recommended that a WBS Listed isolating valve be fitted on the cold water supply to the heater.

**Diagram 1 Dimensions**



### 3.0 INSTALLATION - OPEN OUTLET

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

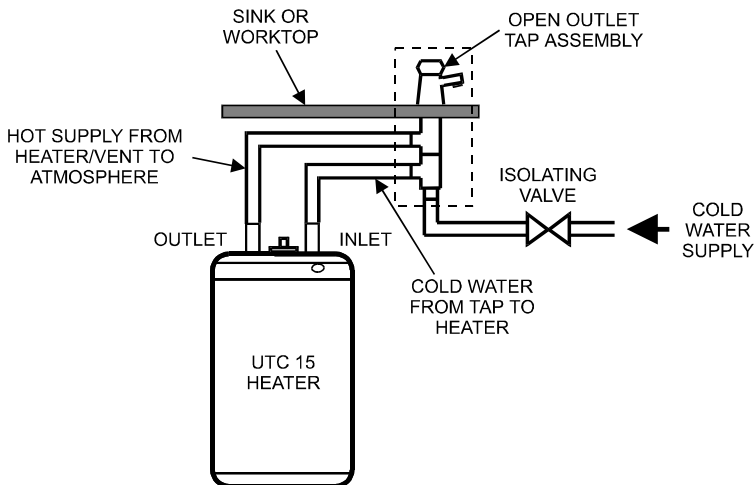
PACK J	95 970 295	Two hole mixer set
PACK K	95 970 296	Monobloc mixer tap
PACK M	95 970 298	Pair of pillar taps with 1/4 turn elbow levers
PACK P	95 970 299	Pair of basin taps with 1/4 turn elbow levers
PACK Q	95 970 310	Two hole mixer set with 1/4 turn elbow levers
PACK R	95 970 311	Pair of pillar taps
PACK S	95 970 312	Basin hot tap
PACK T	95 970 313	Basin cold tap (matches Pack S)

3.3 The cold water supply may 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 0.4 bar (4 metres).

3.4 The inlet and 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.**

3.5 In an Open Outlet installation it is normal for the tap to drip during heating. This is due to expansion of water as it is heated within the unit, it 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.

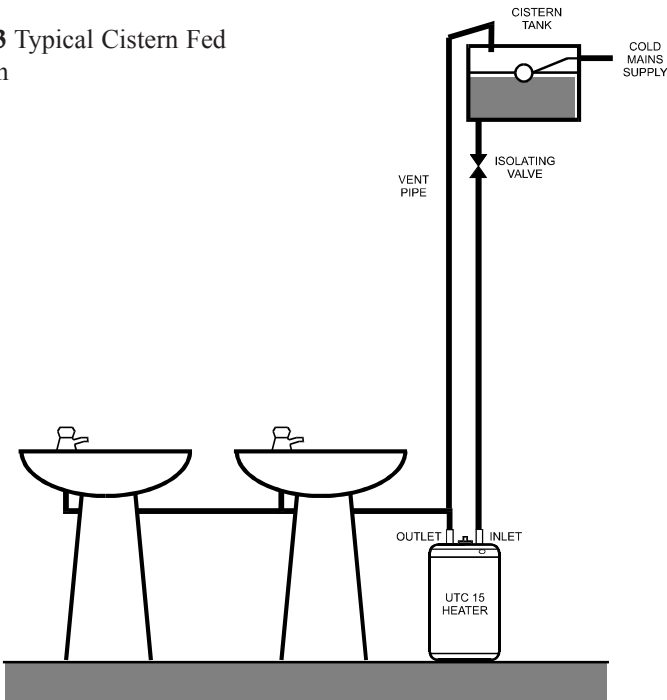
**Diagram 2** Typical Open Outlet Installation



## 4.0 INSTALLATION - CISTERN FED

- 4.1** 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.
- 4.2 A vent pipe must be connected to the outlet connection of the heater.**  
**The vent pipe must have a minimum internal diameter of 19mm.**  
**The vent pipe must be unobstructed, rise continuously and be arranged to discharge into the cold water feed cistern.**  
**DO NOT connect any pressure relief device to the vent pipe of this water heater.**
- 4.3** The cold water supply must be from a cold water feed cistern complying with Water Byelaw 30. The maximum head pressure must not exceed 20 metres.
- 4.4** It is recommended that a WBS Listed isolating valve is fitted on the cold water supply to the heater.
- 4.5 The inlet must not be connected directly to the cold water mains supply.**

**Diagram 3** Typical Cistern Fed Installation



## 5.0 INSTALLATION - ELECTRICAL REQUIREMENTS

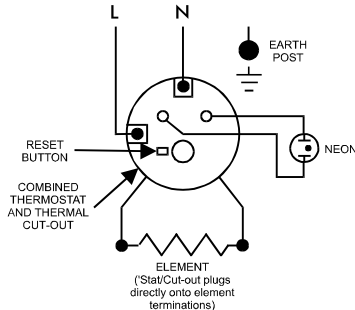
**WARNING: This appliance must be earthed. It is suitable for a.c. supply only. Disconnect the electrical supply before removing the terminal cover. Installation must be in accordance with the current I.E.E. Wiring Regulations.**

**5.1** The unit is supplied fitted with a 0.75m 3 core 1.5mm<sup>2</sup> flexible cable. The electricity supply should be fused 13 Amp for a 3kW model and 10 Amp for a 1.5kW model and be via a double pole isolating switch with a contact separation of at least 3mm in both poles. Refer to the schematic wiring diagram below.

**5.2** The wires are colour coded as follows:

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

### Wiring Diagram



## 5.0 COMMISSIONING

- 5.1** Do not switch on the electrical supply until the unit has been filled with water and checked for leaks.
- 5.2** Check that all installation and electrical requirements have been met.
- 5.3** Check that all water and electrical connections are tight.
- 5.4** Open a hot water tap, turn on cold water supply to the heater.
- 5.5** 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.
- 5.7** Switch on the electrical supply. The indicator light will illuminate during heating. When the set temperature is reached the indicator light will go out.
- 5.8** 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 in 5.9 or 5.10 below. Always switch off the electrical supply before removing the terminal cover.

### 5.9 Setting the “mid-range” position:

Rotate the thermostat knob to the mid position. Remove the terminal cover by 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, the thermostat will now be locked in the “mid-range” position.

### 5.10 Setting the “hot” position:

Rotate the thermostat knob to mid way through the hot graduated range (red graphic). Follow the procedure detailed above, however in this case the knob should be held in the “hot” position previously set. When the terminal cover has been refitted the thermostat will be locked in the “hot” position.

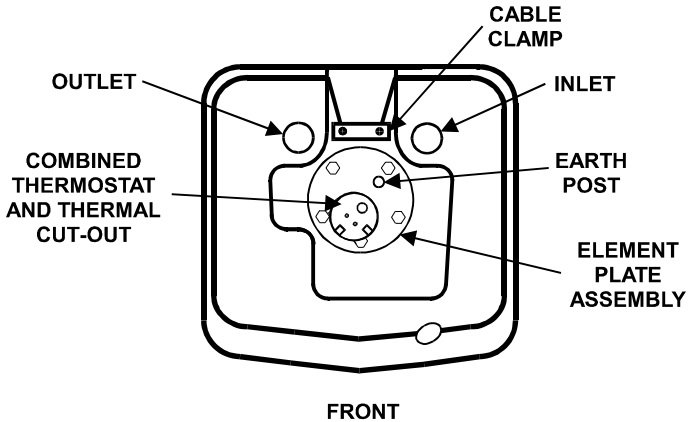
## 6.0 MAINTENANCE

Little maintenance is required, however in hard water areas the unit will require periodic descaling to ensure efficient operation. To descale the unit:

- 6.1 Switch off and disconnect the electrical supply. Turn off the water supply to the unit.
- 6.2 Open a hot tap to relieve any system pressure. Disconnect the plumbing connections to the unit and remove from the wall bracket (note full weights of units). Empty unit through the outlet connection.
- 6.3 Remove the terminal cover by using a large flat bladed screwdriver to depress the 3 snap lugs located in the top 3 rectangular depressions.
- 6.4 Remove the plastic disc from the thermostat spindle. Remove the insulating pad from the terminal housing. Disconnect the electrical terminations to the thermostat. Disconnect earth links to the earthing stud.
- 6.5 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.

- 6.6 Re-assemble the element plate assembly fitting a new sealing gasket. Note the correct orientation of the element plate by reference to Diagram 4 below. Rewire the unit with reference to the Wiring Diagram. Refit the insulating pad and plastic disc to ensure the correct operation of the thermostat.
- 6.7 Re-commission the unit following the INSTALLATION and COMMISSIONING instructions.

**Diagram 4** Correct orientation of element plate (viewed from top of unit)



## 9.0 SPARE PARTS

The following comprehensive list of spare parts is available for your UTC 15 water heater. Please refer to the Rating Label on the side of your heater before ordering to ensure the correct spare part is obtained.

**DO NOT REPLACE WITH PARTS NOT RECOMMENDED BY HEATRAE SADIA - THIS WILL INVALIDATE YOUR GUARANTEE AND MAY RENDER THE INSTALLATION DANGEROUS.**

<b>DESCRIPTION</b>	<b>CODE NO.</b>
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



## 10.0 FAULT FINDING

Disconnect the electrical supply before removing the terminal cover. It is recommended that any service operations on the UTC 15 heater are carried out by a competent person.

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.

## 12.0 USER INSTRUCTIONS

- 12.1 The UTC 15 vented heater stores water at the temperature set on the adjustable thermostat. This can be set to give 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.
- 12.2 The thermostat can also be locked in either the mid range or a “hot” position. To lock the thermostat position the instructions given under Sections 5.9 and 5.10 should be followed. We recommend that this procedure is carried out by a qualified electrician.
- 12.3 The indicator light will be illuminated when the unit is heating.
- 12.4 To ensure the heater continues to operate at its optimum performance it should be periodically maintained in accordance with the instructions given under the Section headed MAINTENANCE.

### 12.5 IMPORTANT NOTES TO USER

#### OPEN OUTLET INSTALLATIONS

**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. The outlet of the tap must not be restricted or blocked in any way.**

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

## **GUARANTEE**

This water heater is guaranteed for a period of two years from the date of purchase provided:

1. The unit has been installed in accordance with these instructions and all necessary controls and valves have been fitted correctly.
2. Any valves or controls are of Heatrae Sadia recommended type.
3. The unit has not been tampered with and has been regularly maintained as detailed in these instructions.
4. The unit has been used only for heating potable water.

The unit is not guaranteed against damage by frost or due to the build up of scale.

This guarantee does not affect the statutory rights of the consumer.

## **ENVIRONMENTAL INFORMATION**

This product is manufactured from many recyclable materials. At the end of its useful life it should be disposed of at a Local Authority Recycling Centre to realise the full environmental benefits.

# **HEATRAE SADIA**

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