

Zip Econoboil



On wall boiling water.

Model number:
305542, 303542



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Intended use

This appliance is intended to be used in commercial applications such as:

- Staff kitchens, shops, offices and other working environments.
- Small hotels and bed and breakfast type environments.
- Catering and similar non-retail applications.



This manual contains important safety and installation instructions for the Zip Econoboil. Please read all warnings, installation requirements and installation instructions before installing any Zip Econoboil. This system must be installed in accordance with water supply byelaws, current IEE regulations and relevant local authority byelaws.

Warnings

- ⚡ The Zip Econoboil must be earthed. The resistance of the earth connection from each exposed metal part must be less than 1Ω.
- All installation and service work must be completed by trained and suitably qualified tradespeople. Faulty operation due to unqualified persons working on this product, or any other Zip product may void warranty coverage.
- Never attempt to install a Zip Econoboil instant boiling water heater without reading all of the applicable instructions.
- Do not remove the cover of the Econoboil under any circumstances without first isolating it from the power supply.
- In hard water areas mineral scale accumulation in the boiling chamber of the Zip Econoboil may become a problem, consideration should be given to the maintenance required. A suitable form of water treatment may be necessary.
- The Zip Econoboil instant boiling water heater is not intended for use by young children or infirm people without supervision.
- Young children should be prevented from having access to ensure that they are not able to use or play with the Econoboil.
- Do not use strong, corrosive or abrasive cleaners to clean the case of the Econoboil.
- The ambient temperatures this Econoboil must operate within are 5°C - 50°C.
- The Econoboil is intended only for indoor use and should never be installed outdoors or be exposed to the elements of nature.
- The Econoboil must not be positioned in an area that may be cleaned by a water jet. The Econoboil must not be cleaned by a water jet.
- Frost protection: If the Econoboil is located where ambient air temperature could fall below 5°C when the Econoboil is not in use, do not turn off the Econoboil electrically. This safeguard does not offer the same protection to the connecting pipework and fittings.
- As the installer, it is your responsibility to supply (if necessary) and install all valves as required by local regulations and relevant standards.
- The Econoboil is rated for 230V 50Hz AC operation.
- Due to the process of continuous improvement, Zip reserves the right to change details mentioned in this manual, without notice.
- Visit www.zipwater.co.uk to ensure you have the latest copy of this document.

Safety

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. For products sold in Europe, 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 Econoboil in a safe way and understand the hazards involved. Children should be supervised to ensure that they do not play with the Econoboil.

The Econoboil is intended to be used in commercial applications.

Qualifications

If the power cable is damaged it must be repaired only by a qualified technician. To avoid hazards, all installation procedures must be carried out by a suitably qualified tradesperson.

Venting

Occasionally steam and / or boiling water may discharge through a vent outlet or the tap. Ensure the tap body is located so the tap outlet safely dispenses into the drip tray or sink bowl area, and that the vent is plumbed to a safe location, see page 7.

Lifting

Take care when lifting. The Econoboil may exceed safe lifting limits. If you feel this is beyond your personal capabilities, please seek assistance with the lift. Do not lift the Econoboil by the tap or any of its connections. Refer to the Technical specification, page 6 for the weight of the product.

Positioning

It is important to ensure the Econoboil is positioned in an accessible area. The Econoboil must have its base mounted in a horizontal position.

Before installation ensure that provision has been made for the following



- Review the technical specifications.
- Ensure the mounting wall can support the product weight when full of water (See Technical specification, page 6).
- Provide sufficient space to install the Econoboil and other components in accordance with these installation instructions.
- Position the Econoboil so there is at least 150 mm clearance above it for service access, 65 mm to its left and 20 mm to its right – the tap nozzle is usually positioned nominally 360 mm above a draining board, drip tray or sink bowl area.
- For all Zip Econoboil models, user easy accessible 1 x 230V AC 13A socket or double pole isolation switch, (correctly rated for the appliance), is required.
- The Econoboil must be connected in accordance with IEE regulations. See Technical specification, page 6 for power ratings.

Note Check cable and plumbing against inlet /outlet positions before proceeding.

- A wholesome (cat 1) water supply connection with isolation valve within reach of the Econoboil (and positioned so that the isolation valve will not be obstructed when the Econoboil is installed).
- Vent / outlet drainage to a draining board, drip tray or sink bowl area.
- Access to drainage from a vent situated at the base of the Econoboil.
- A wholesome (cat 1) cold water supply with a minimum working pressure of: (see Technical specification, page 6 min. / max. water supply pressure).
- A 0.35 MPa (3.5 bar) pressure limiting valve supplied must be fitted if the incoming mains water pressure is likely to exceed 0.5 MPa (5.0 bar).
- The Econoboil must be placed with its base in a horizontal position.

IMPORTANT! Do not proceed with the installation if these requirements are not met.

Technical specification

Product code	Tank size (litres)	Heat up time (Inlet 15°C)	Heat up time (Inlet 10°C)	Rated voltage and power	Dimensions (mm) W x D x H	Filled weight(Kg)
303542	3.0	16mins	17mins	220-240V, 50Hz, 1400W	289 x 180 x 431	12.5
305542	5.0	16mins	17mins	220-240V, 50Hz, 2200W	318 x 198 x 465	16.5

Min / Max water supply pressure

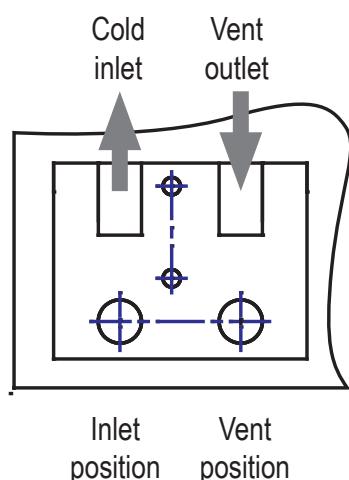
Econoboil.....0.07 MPa (0.7 bar) - 0.5 MPa (5.0 bar)



WARNING ! If the incoming mains water pressure is likely to exceed 0.5 MPa (5.0 bar), a 0.35 MPa (3.5 bar) pressure limiting valve must be installed in the cold water supply line.

Note Optional Water Block is recommended to be fitted in the water supply line to minimise the potential damage in the event of leakage, call Zip on 0345 6 005 005

Installation instructions



Before You Begin

Locate the paper mounting-hole template packed with the Econoboil. (Also see page 12).

Read the installation and operating instructions completely.

Decide whether to install with concealed or exposed plumbing connections.

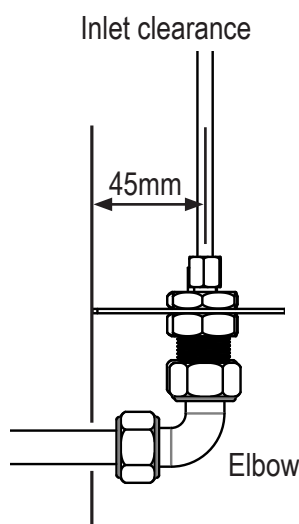
Concealed connections are preferred for superior appearance.

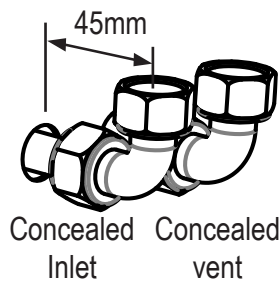
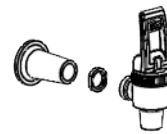
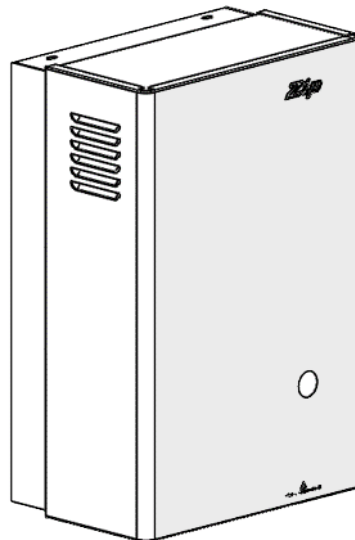
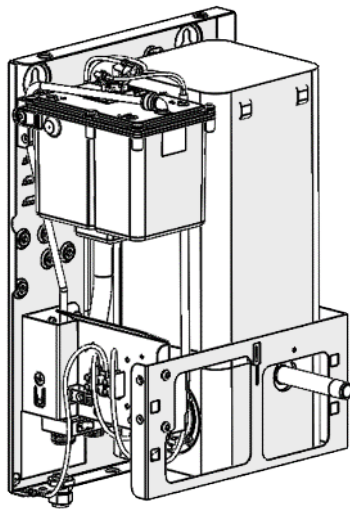
Step 1 – Positioning

- Position the Econoboil so the nozzle will drain on to a draining board or drip tray.
- Position the base of the tap nozzle to be not less than 280mm (nominally 360mm) above the draining board (height should be increased only if essential for filling larger vessels).
- Provide clearance for service access of not less than 150mm top, 65 mm left, 20mm right.
- Mark corner positions for the Econoboil on the wall in order to position the paper mounting-hole template.

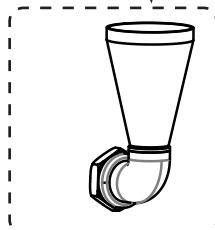
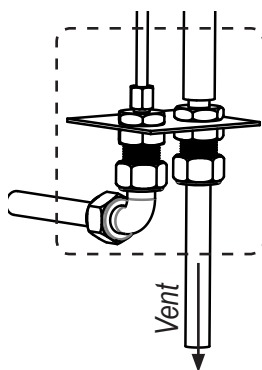
Step 2 – Fastening

- Position mounting-hole template on wall and drill holes where shown.
- Drill holes for water inlet and vent outlet if rear access is intended.
- Install plumbing and wiring and prepare pipe ends as shown.
- Remove cover fastening screws from Econoboil and lift off cover.
- Screw Econoboil chassis to the wall using screws or bolts suited to the wall, (supplied).
- Fasteners must be able to support the product weight when full, (see Technical specification, above).





Internal bulkhead connections



External tundish

Step 3 – Connecting Plumbing

For exposed plumbing connection, connect the cold water inlet pipe from the base of the Econoboil directly to the 1/2" BSP compression fittings with nuts and olives supplied.

For concealed plumbing connections, connect the cold water pipe through the rear of the chassis using a 1/2" BSP capillary elbow.

Cold water pipes must be flushed before connection to the inlet. Any clogging due to sediment or fines will adversely affect the operation of the Econoboil.

The Econoboil must be installed with an isolating valve which allows it to be isolated from the mains water supply for servicing.

Water pressure requirements. (See Technical specification , page 6).

Venting



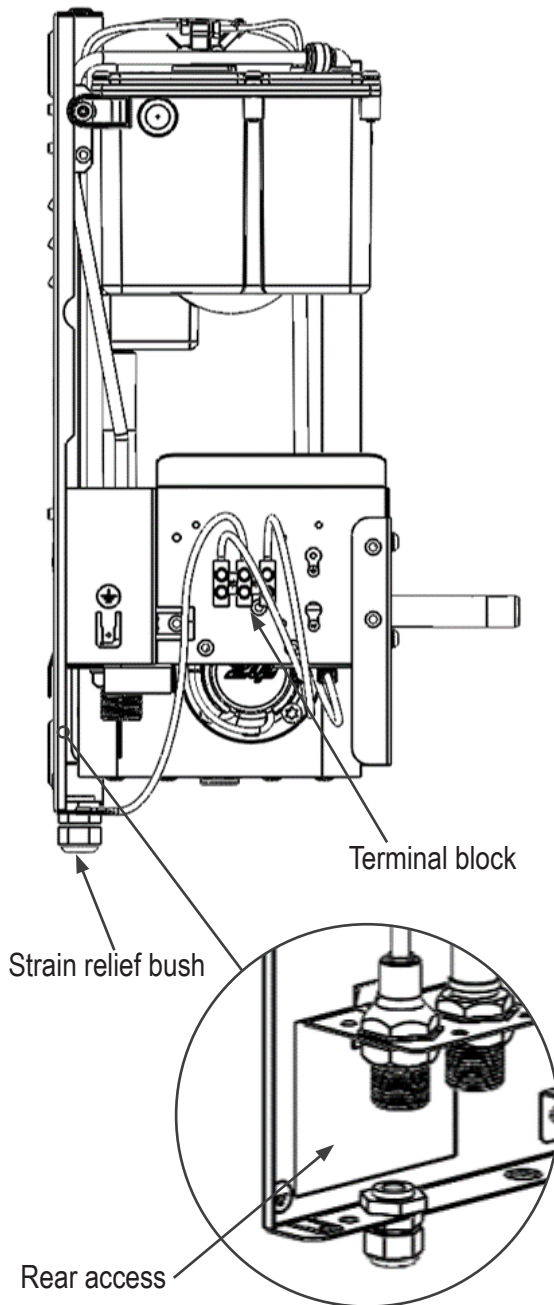
The Econoboil is an open vented water heater, and as such it is essential to provide an air gap in the venting arrangements, as shown in the adjacent diagram.

A vent at the base of the Econoboil must be plumbed to a safe location as, under certain conditions, it may discharge cold, boiling water and/or steam.

For concealed or exposed vent plumbing, connect vent outlet from the base of Econoboil to a Ø15 mm pipe which has a continuous fall, is no more than 3m long, has no more than 3 right angle bends, and discharges to a waste water drain. (the vent outlet must be visible).

For concealed vent plumbing, direct the vent outlet from the rear of the Econoboil

Alternatively install a visible tundish. (see adjacent diagram) and plumb to trapped waste.



Electrical

Exposed electrical connection

Connect via a 1.5mm² 3 core cable.

Connect the 3 core cable to the terminal block, via the strain relief bush. See adjacent diagram.

Tighten the strain relief bush, to secure the cable.

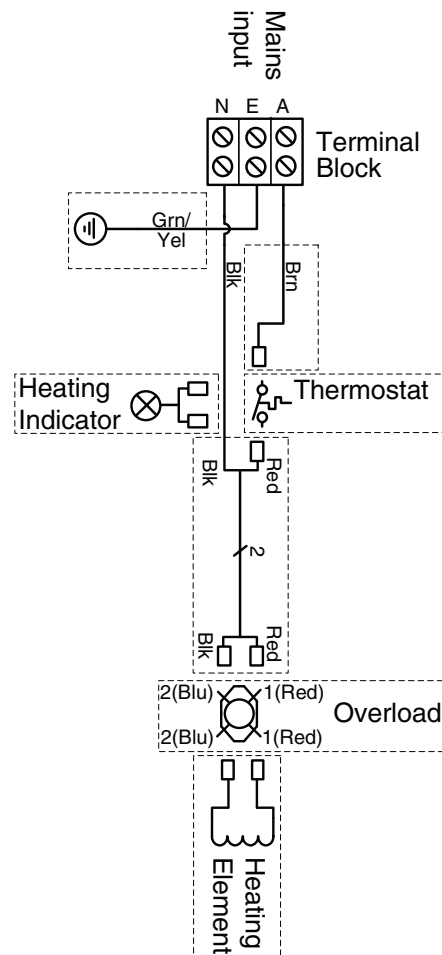
Concealed electrical connection

Connect the concealed power cable through the rear access opening to the terminal block. See adjacent diagram.



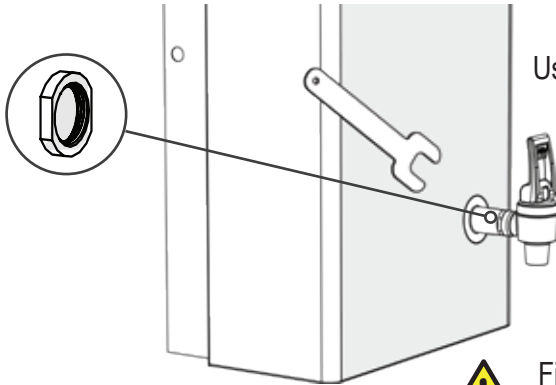
- Do not turn the power ON until the Econoboil can dispense water from the tap outlet.
- Verify the earth continuity (see page 9).

Electrical Wiring diagram



Step 4 - Assembly

- Without the cover on, turn the water on to check for any leaks. These should become apparent within a short period of time. If all is dry then isolate water and replace cover. If there are any leaks repair as necessary.
- With the cover on, fit the red escutcheon over the outlet tube, secure with the locknut and apply PTFE tape to the threaded portion of the outlet tube.
- Screw the tap assembly clockwise onto the outlet tube until it touches the escutcheon locknut. Continue to turn the tap until the handle is fully vertical. Tighten the locknut against the tap with spanner provided (see page 9) leaving the tap in a vertical position.



Use the spanner provided to tighten the lock nut.



Fit the boiling water safety label supplied in a prominent visible position for users of the Econoboil

Step 5 – Commissioning

Check previous steps.

Check the earth continuity (see below).



Warning!

This appliance must be earthed.



Upon installation or following service, the earthing continuity of the Econoboil must be tested by a qualified technician using a resistance meter of minimum accuracy of 5% full scale deflection.

- Isolate power supply.
- Verify meter ohms range, connect leads together, reading should be 0 ohms.

- Connect one test lead to the earth of the power lead.
- Connect the other test lead to a cover fixing screw, then the tap.



Warning ! The water may be boiling

- Verify that in every instance the electrical resistance does not exceed 1 ohm.

Note depending upon installation connect to either the earth pin of the 3 pin plug, or the earth conductor of the mains cable.



Do not turn the power ON until the Econoboil can dispense water from the tap outlet.

Turn water supply ON. Water will flow into the Econoboil, check connections for leaks. Wait approximately 5 minutes then pull the tap forward to test for water flow.

Turn the mains electrical power ON only after the water flows freely from this outlet. After a short period, boiling water will be available and will be maintained close to boiling point thereafter.

Trouble-shooting table

Symptom	Possible cause	Solution
Fails to dispense water.	Water isolating valve turned off. Blocked filter, blocked meter tube, blocked strainer, jammed ball valve assy, airlock in transfer tube.	Check water supply valve. Contact Zip authorised agent.
Water not boiling.	No power. Faulty thermostat, faulty element, faulty cut-out.	Check power supply. Contact Zip authorised agent.
Runs out of boiling water and fails to refill. Outlet tap drips. Overflow from vent. Excessive steam from vent. Power “on” but no heat. Overload repeatedly tripping with excessive steam. Overload repeatedly tripping without excessive steam.	Internal adjustment, blocked vent, vented incorrectly (see page 7)	Contact Zip authorised agent.

Boiling water

Zip Econoboil is fitted with a two-way tap for instant boiling water.

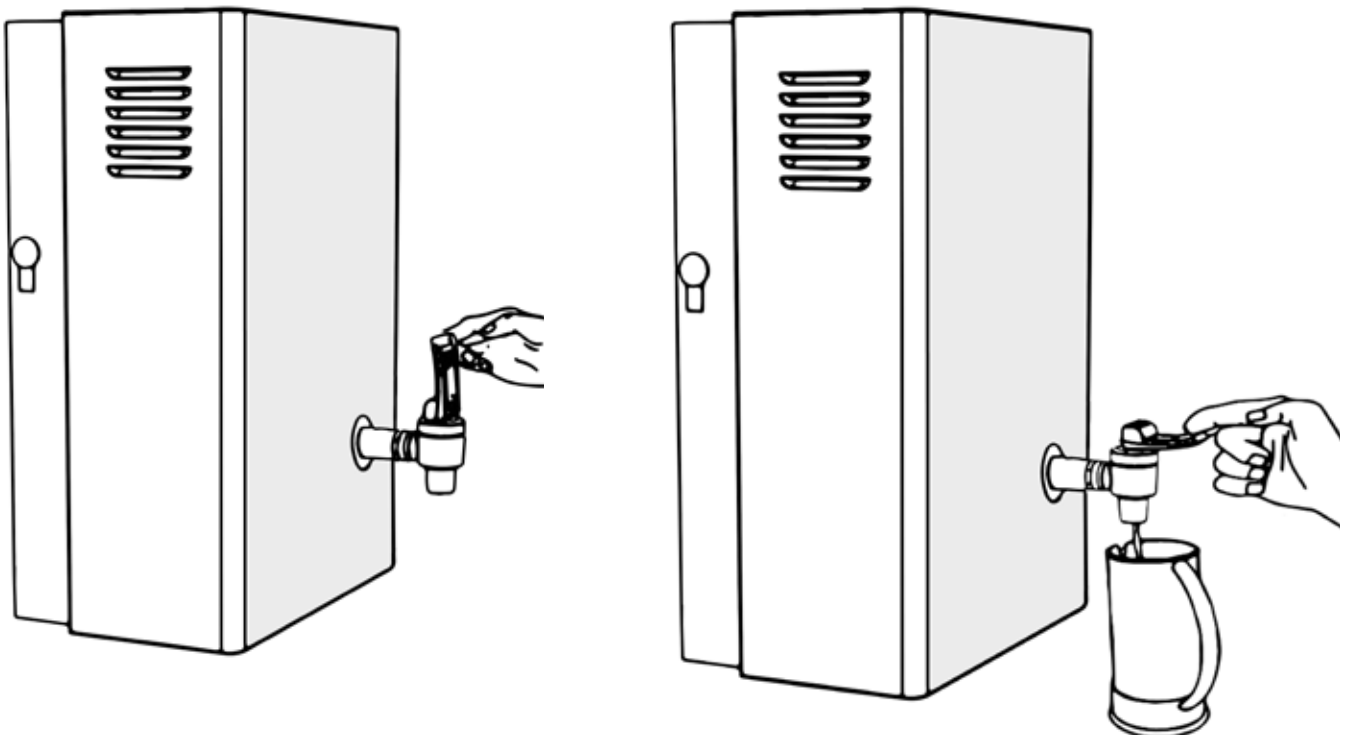
For instant boiling water, gently pull the top of the tap forward.

Boiling water will flow until the tap handle is released.

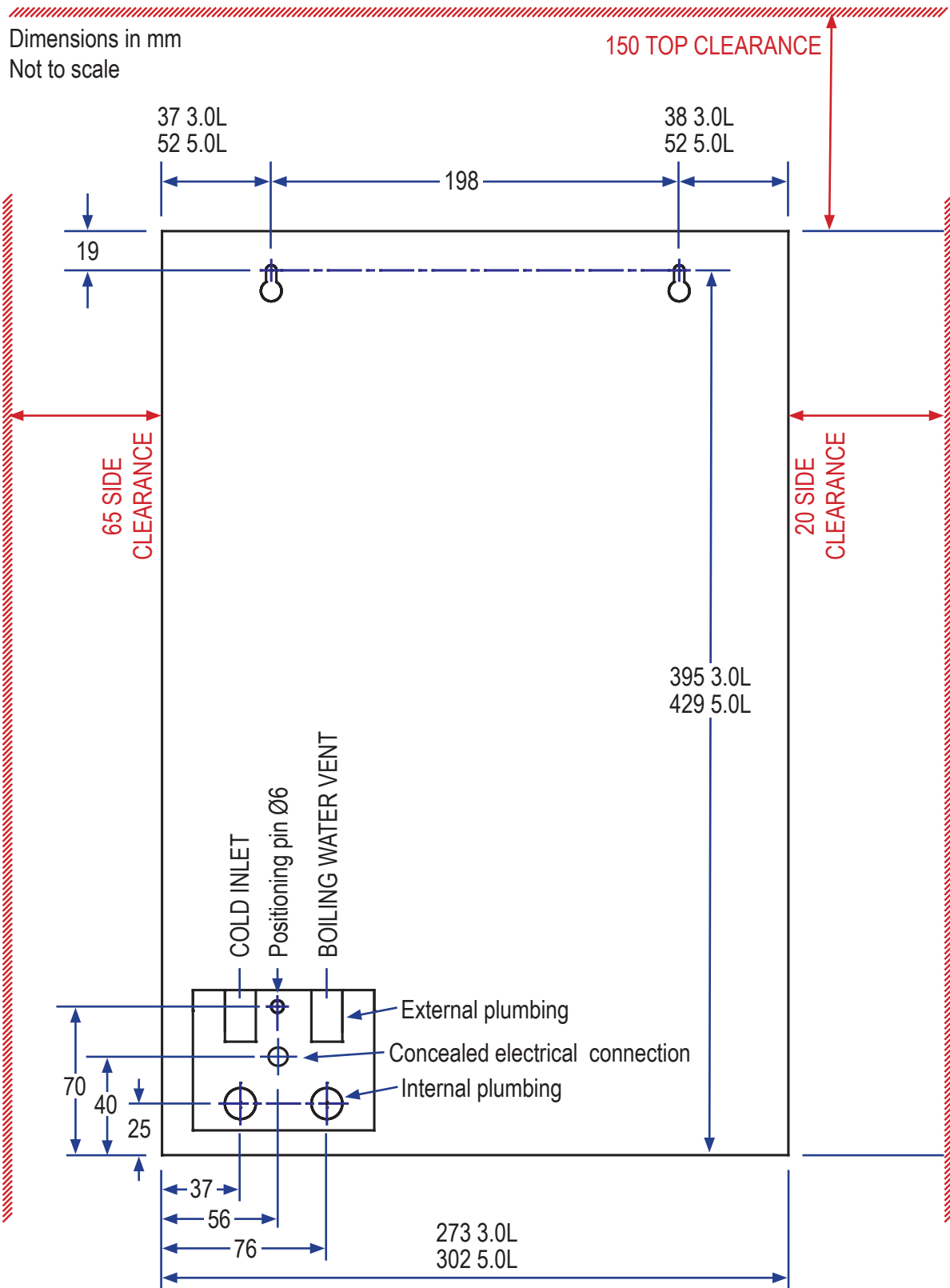
This operation gives fingertip flow control for safe filling of cups and mugs.

To fill larger vessels such as teapots and saucepans, rotate the tap 180° and depress it until it locks into a horizontal position. Boiling water will flow until the tap is returned to its normal vertical position.

This operation allows the vessel to be filled without holding your hand where it may be affected by steam.



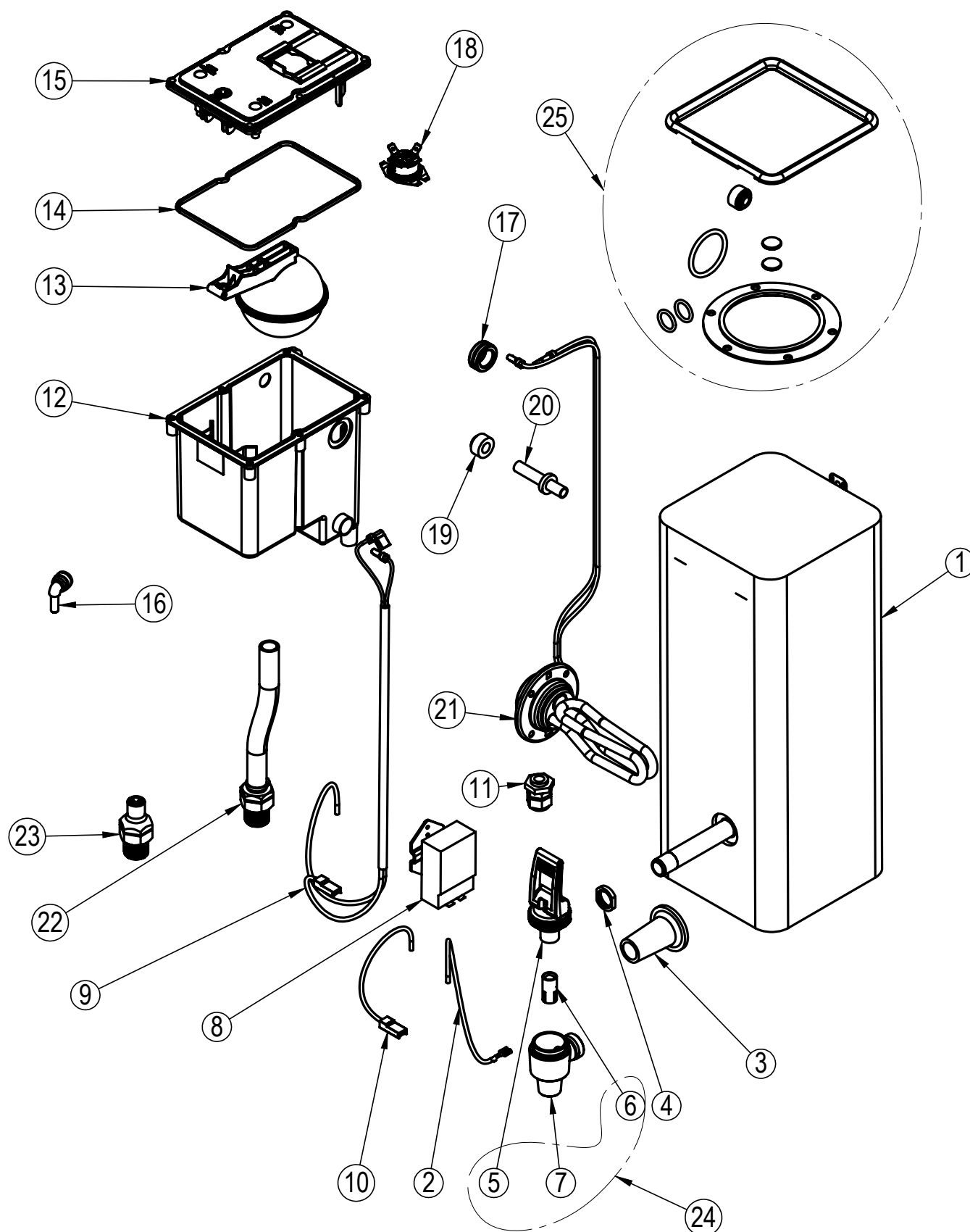
Wall mounting dimension



Spare parts

Item	Kit no	Description
1	94747	UK EB 3Ltr Tank Assy
1	94748	UK EB 5Ltr Tank Assy
2	94750	Earth Wire
3	94751	Escutcheon UK
4	94448	Tap Lock Nut
5	SP90501	Tap Top Assy
6	93730	Flow Insert
7		Not available
8	SP90081	Thermostat
9	94752	Loom Ther-Overload
10	94753	Wire Brown 140mm 6.3QC x 1sqmm
11		Not available
12	94454	Cistern Tank
13	94755	Ball Valve Assy
14	94456	Cistern Gasket
15	94457	Cistern Lid
16	SP93118	Elbow Stem 1/4"
17	90100	Grommet, Cistern to Tank
18	94756	Overload 4 terminal, 2 pole, 90 deg
19 & 20	SP90494	Seal Transfer Tube & Metering Tube
21	SP90485	Element Assy 1500W 3Ltr
21	SP90486	Element Assy 2400W 5Ltr
22	94465	Bush Vent Assy 3Ltr
22	94466	Bush Vent Assy 5Ltr
23	94757	UK Inlet Assy
24	94470	Tap Assy (inc: 5,6,7)
25	94473	Hot Tank Gasket Kit 3Ltr
25	94474	Hot Tank Gasket Kit 5Ltr

Spare parts



End of life disposal



The use of this crossed out wheeled bin logo indicates that this product needs to be disposed of separately to any other household waste.

Within each of the European Union member countries, provisions have been made for collection and recycling of unwanted electrical and electronic equipment. In order to help preserve our environment we ask that you dispose of this product correctly. Please contact Zip Customer Service on 0345 6 005 005 for advice.

Cleaning

Cleaning the case

Do not use strong, corrosive, spray or abrasive cleaners. Clean the case with a soft cloth or brush and mild soap and water.





It's water. Refreshed.



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www.zipwater.co.uk