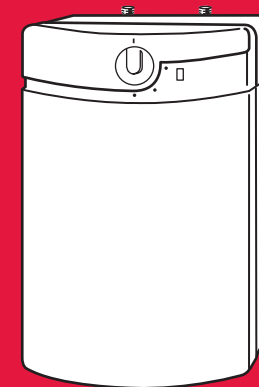


Installation, Maintenance and User Instructions

ZIP Varipoint II

Models VP103, VP153
VP103UB, VP153UB
unvented water heaters

Issued November 2010



Please read these instructions carefully **before** commencing installation
of the Varipoint unvented water heater.

Please leave these instructions with the end user after installation.

Zip[®]
Instant Boiling Water

Zip[®]

Instant Boiling Water



WRAS
APPROVED
PRODUCT



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*The terms 'Zip' and 'Varipoint' are registered trademarks.
Zip products described in the brochure are manufactured
under one or more of the following patents: AU675601,
AU637412, AU635979, GBO422305, GB2065848,
US4354049, US5103859, US5099825. Other patents are
in force and patent applications are pending.*

Warranty – Varipoint II

Your Varipoint II is precision built from the finest materials and should give many years of trouble free service. Zip Heaters (UK) Ltd warrants that should the cylinder fail within five (5) calendar years or any component fail within two (2) years of installation, that part will be repaired or replaced by Zip Heaters (UK) Ltd free of charge, except as set out below, provided that the failure is not due to accident, misuse, abuse, condition of the water, frost or failure to follow installation instructions or service requirements. The only charges payable by the customer are the cost of removal, re-installation and cartage, should any component need to be returned for repair. This warranty does not cover damage resulting from non-operation or consequential damage to any goods, furnishings or property. Zip Heaters (UK) Ltd's liability will be limited to replacement or repair at the option of Zip Heaters (UK) Ltd. This warranty does not replace any statutory warranty in relation to the Varipoint II.

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Specification

Product:	Zip Varipoint II.
Type:	Direct unvented multipoint.
Capacity:	10 ltr, 15 ltr.
Loading:	2.2 kW.
Heating Element:	Embedded rod type.
Thermostat:	Capillary type adjustable 5° to 75°C.
Water vessel:	Heavy gauge copper, tested at 16 bar. Working pressure 6 bar.
Casing:	Impact resistant white plastic.
Insulation:	High density, CFC free, polyurethane foam.
Safety features:	Expansion relief valve (supplied). Set to 6 bar. Manually resettable over temperature safety cutout. Facility for T&P valve (supplied). Set to 90°C / 7 bar. Water heater protected against frost when electricity is switched on. Safety temperature control knob.
Approvals:	CE endorsed - WRAS approved.
Models:	VP103 - 10 ltr overbasin. VP153 - 15 ltr overbasin. VP103UB - 10 ltr underbasin. VP153UB - 15 ltr underbasin.

Performance

Model	Heat up time (15° to 65°C)	Re-heat time (70% vol)	Heat loss (kW/24hrs)
VP103	16 mins	11 mins	0.36
VP153	24 mins	17 mins	0.50
VP103UB	16 mins	11 mins	0.41
VP153UB	24 mins	17 mins	0.58

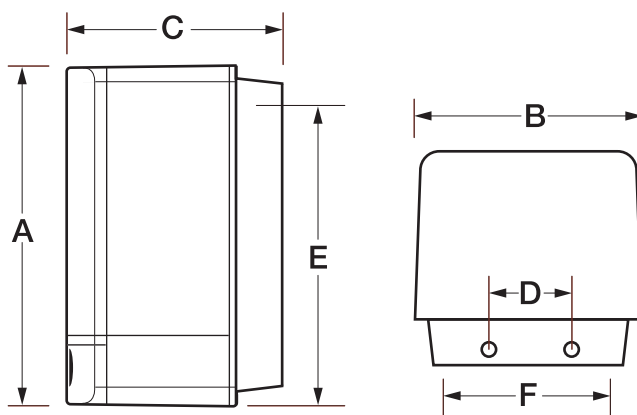
Special notices

These instructions should guide you through the fitting of the Zip Varipoint II, however if you encounter a problem, just call 0845 6024533 and ask for Service Helpdesk.

- The Zip Varipoint is an unvented water heater designed for connection directly to the incoming mains water supply and can serve one or more outlets using conventional taps.
- Care should be taken that the capacity of the unit chosen is sufficient to meet the demands of the outlets being supplied.
- The casing is constructed from impact resistant plastic and heat losses are minimised by the CFC free polyurethane foam insulation.
- The inner vessel is heavy gauge copper and pressure tested to 16 bar.
- An alloy sheathed heating element provides longer life in aggressive water conditions.
- A manually resettable safety cut-out automatically cuts off the electrical supply to the heating element in the event of a malfunction.

If the hot-water system is not used for two weeks or more, it is recommended that a hot tap be turned on for several minutes at a sink, basin or bath, but not at a dishwasher, clothes washer or other appliance.

Dimensions



Model	Capacity (litres)	Dimensions (mm)				Fixing Centres (mm)		Weight (kg)		Water Connections
		A	B	C	D	E	F	Empty	Full	
VP103	10	452	300	285	60	420	142	6.5	16.5	1/2" BSP
VP103UB	10	452	300	285	60	335	142	6.5	16.5	1/2" BSP
VP153	15	452	300	285	60	420	142	7.5	22.5	1/2" BSP
VP153UB	15	452	300	285	60	335	142	7.5	22.5	1/2" BSP

Installation

Requirements

- 1 These instructions must be read and fully understood before commencing the installation. If in doubt, or in need of further guidance please ring Zip on 0845 602 4533.
- 2 Zip Varipoint unvented water heaters must be installed by a competent installer, familiar with unvented electric water heaters.
- 3 Installations must comply fully with UK Water Regulations and any Local Authority requirements.
- 4 The electrical installation including earthing and cross bonding should comply with the current IEE regulations and any Local Authority requirements.
- 5 The Zip Varipoint is designed for connection direct to the incoming mains water supply and accommodation must be made for the expanded water that will occur with each operating cycle. Regulations permit expanded hot water to be accommodated within the supply pipework provided that no check valve, stop valve with loose jumper or other fitting can prevent reverse flow (diagram 1).

Where the expanded water cannot be accommodated in the pipe work and the static water supply pressure is under 4 bar, fit accessory pack AQ2 (Expansion vessel and check valve). Where static water pressures are likely to exceed 4 bar, fit accessory packs AQ2 and AQ3 Pressure reducing valve and line strainer. See diagrams 2 and 3.

- 6 The 6 bar expansion relief valve must be fitted on the cold water supply.
- 7 The T&P valve should be fitted to the boss provided.
- 8 The drain connection from the expansion relief valve and the T&P relief valve, must be in accordance with Water Supply Regulations. The point of discharge must be in a safe and visible position. The connection should be made using 15 mm pipe having a continuous fall to a maximum length of three metres. It should not have more than 3 right-angled bends. If a waste connection in excess of three metres is necessary, the pipe diameter should be 22 mm with a continuous fall and no more than four right-angled bends to a maximum resistance to flow equivalent to 9 metres of straight pipe.
- 9 An Isolating valve must be fitted to the cold water supply.
- 10 Valves and fittings must be of a type required by Water Supply Regulations.

Diagram 1

Inlet pressure less than 4 bar - expanded hot water can be accommodated in the pipework.

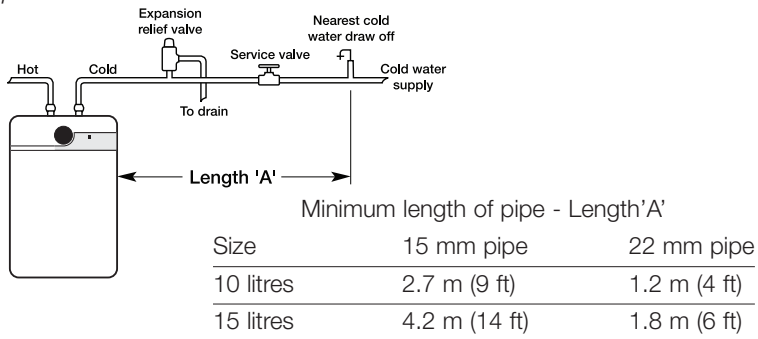


Diagram 2

Inlet pressure less than 4 bar but expanded water cannot be accommodated in the pipework. (Using pack AQ2 expansion vessel and check valve).

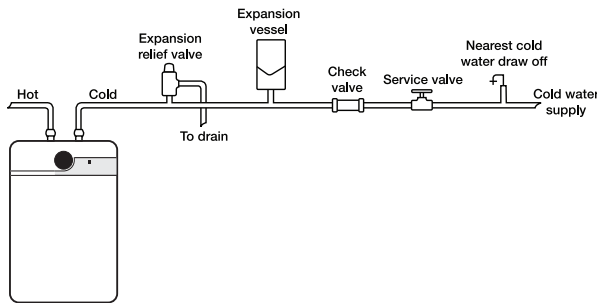
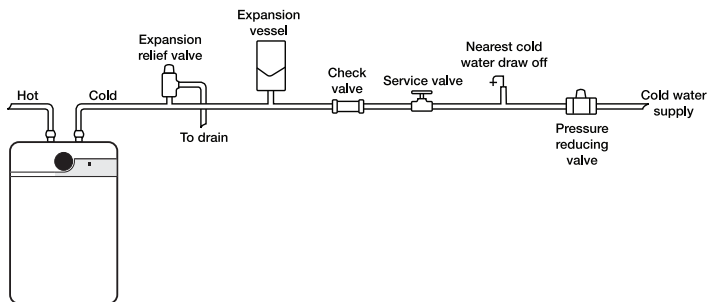


Diagram 3

Inlet pressure is greater than 4 bar. (Using pack AQ2 and AQ3 expansion vessel, check valve and pressure reducing valve).



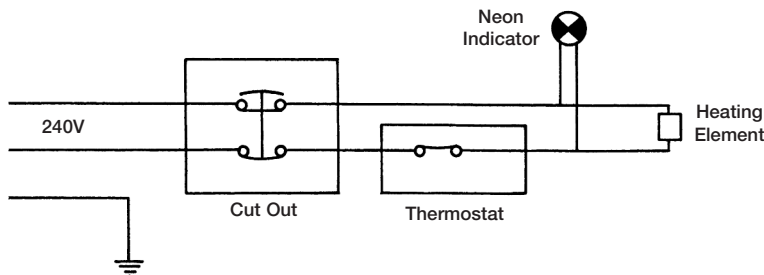
Positioning

- 1 Depending upon the model chosen the Varipoint 2 can be installed over or underbasin. The underbasin model is designed to be floor standing with the connections uppermost, the hot supply (colour coded red) to the left when facing the unit. A wall fixing bracket is supplied for use if required.
- 2 The models to be sited overbasin are wall hung using the bracket provided. **Ensure that the wall supporting the product is sufficiently strong to bear the weight of the unit when full.** The connections are at the bottom of the unit with the hot supply to the left when facing the unit. Mark the position of the fixings **AND BEFORE** drilling into the wall ensure that any hidden pipework or electrical wiring is avoided.
- 3 The dimensions, fixing positions and weights are shown in the Table that appears on page 6.
- 4 **When deciding the final location of the heater, consideration should be given to the safe and visible disposal of any water resulting from leaks or seepage. This is particularly relevant when the heater is located in a roof space, cupboard or any concealed location. For guidance please ring Zip Heaters on 0845 602 4533.**
- 5 Position the Zip Varipoint to allow for future maintenance.
- 6 Do not install in a location where the unit or connecting pipe can freeze.

Plumbing

- 1 Check the incoming water supply pressure as this will determine the layout and safety controls required. Remember that the mains water pressure can increase considerably at night.
- 2 Refer to the diagrams 1 to 3 to determine accessories required and layout.
- 3 Position the heater and controls to allow for future maintenance.
- 4 All control and safety valves are marked to show the direction of water flow and will not function if incorrectly orientated. Do not break any seals or attempt to adjust any safety valve; to do so may impair the safety of the installation and will **invalidate the guarantee**.
- 5 To ensure a watertight seal use fibre washers for connecting services between the heater and the connectors used. Complete the seal by applying PTFE tape to the threads but do not over-apply. Do not use plumbers paste to secure joints as this can impair the operation of any valves connected to the heater.
- 6 Flush all pipework before making the final connections to the valves, accessories and the heater.

Electrical



- 1 Switch off the main electricity supply before carrying out any work involving a live circuit or access to components that may be live.
- 2 The Zip Varipoint is pre-wired with a length of 3-core cable suitable for connection to a mains 240v supply. Connection must be made to a double-pole isolating switch on a dedicated circuit or a double pole switched spur.
- 3 If the cable length is insufficient it is recommended that the entire length is replaced and no joins made to the original. To replace the cable:
 - a. Prise the temperature control knob off the spindle.
 - b. Release the one screw revealed by the knob.
 - c. Remove the cover by sliding forwards.
 - d. Pass the new cable through the entry point of the cover.
 - e. Remake the connections.
 - f. Ensure the cable is securely clamped.
 - g. Refasten the cover.

Do not switch on the electrical supply until the water heater is full of water.

Commissioning

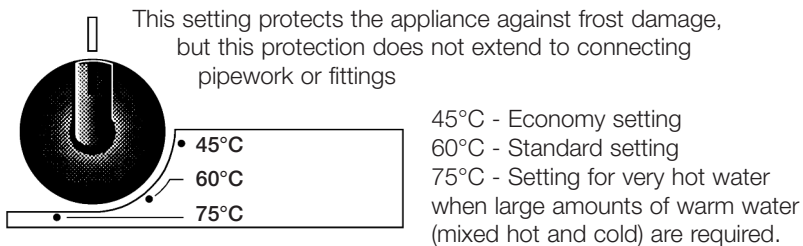
- 1 Check that all the requirements under "Installation Requirements" have been met.
- 2 Check that all the water and electrical connections are correct and tight.
- 3 Open a hot water tap.
- 4 Open the isolating valve and permit the heater to fill.
- 5 When the water flows from the hot tap - turn off the hot tap.
- 6 Check for leaks, rectify as necessary.
- 7 Check the operation of the safety valve and the temperature and pressure relief valve.

- 8 Set temperature as per "Operation" paragraph 1.
- 9 Switch on the power. The red neon light will glow during the heating cycle and when the selected temperature is reached it will go out until the next heating cycle.
- 10 Check the water temperature and re-check water connections and adjust as necessary.
- 11 Pass these instructions to the person responsible for the building management.

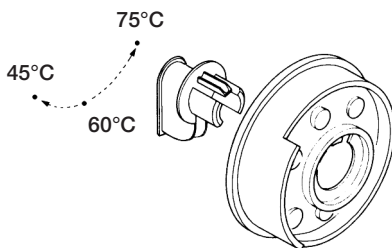
Operation

Precautions

- 1 The required stored hot water temperature may be selected by rotating the control clockwise. There is a positive 'location' at each of the detailed settings.



The water heater cannot be switched off via the temperature selector. It can only be switched off at the switched mains supply socket.



Temperature limitation

- Select position I and pull the temperature selector from the spindle.
- Press out the small manual insert from the inside of the selector and refit in the required maximum position (45, 60 or 75°C).
- Refit the temperature selector onto the spindle.
(The temperature cannot be set to a value higher than that fixed on the selector).

- 2 The Zip Varipoint is an unvented electric water heater and a competent installer, familiar with unvented systems, should carry out all servicing and maintenance.
- 3 Do not remove the cover whilst the unit is connected to the electrical supply.
- 4 The over temperature cut-out is located beneath the housing cover.
- 5 Do not reset the over temperature cut-out until the cause of its operation has been diagnosed and necessary repairs undertaken.
- 6 Do not use the water heater if it is suspected of being frozen. Switch off the electrical supply if water ceases to flow and do not switch on again until a competent person has checked it is safe to do so.
- 7 The heater should be visually inspected regularly. This is particularly important if the heater is located in a cupboard, roof space or any other concealed location. If there is any sign of leaks or seepage the heater should be isolated from the water supply and switch off until a competent person has investigated the cause.
- 8 Do not block or restrict the discharge from any safety valve fitted.
- 9 Do not tamper with any safety valve fitted.
- 10 If water discharges from any safety valve, switch off the electrical supply to the unit, isolate the water supply and contact a competent installer familiar with unvented systems.
- 11 Please note that lime scale deposits form more readily at higher temperatures.
- 12 The heater is not guaranteed against damage or failures caused by the formation of lime scale.

Maintenance

Schedule

It is recommended that all key components of the heater should be inspected six monthly for continued safe and efficient operation. The components to be inspected should include the following:

- 1 Expansion relief valve. Check correct operation.
- 2 Expansion vessel pressure should be checked – refer to label on vessel for correct pressure.
- 3 Pressure and temperature relief valve. Check correct operation.
- 4 All valves should be replaced after 5 years.

Fault Finding

Fault

Possible causes

Water not heating

- 1 Electricity supply fault.
- 2 Over temperature cut-out tripped.
- 3 Faulty thermostat.
- 4 Faulty element.

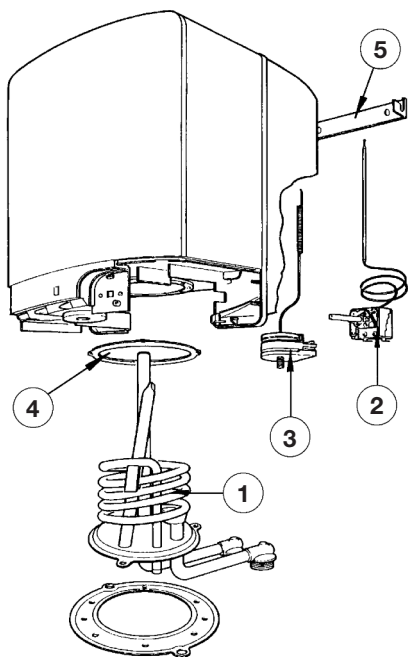
Discharge from any relief valve

- 1 Thermostat fault.
- 2 Excessive mains water pressure.
- 3 Expansion vessel lost charge (if fitted).
- 4 Faulty expansion relief valve.
- 5 Faulty pressure reducing valve (if fitted).

To De-install the Heater

- 1 Switch off and disconnect the electrical supply.
- 2 Close the mains water supply isolating valve.
- 3 Disconnect the inlet and outlet water connections at the top of the unit.
- 4 Remove the heater.
- 5 Drain the unit through the hot water supply connection.

Spare Parts



Zip Varipoint II Overbasin

Item	Part No.	Description
1	VP0301	Element 2.2kW
2	VP0303	Thermostat
3	VP0304	Resettable Cut-Out
4	VP0317	Element Gasket
5	VP0322	Wall Fixing Bracket

Zip Varipoint II Underbasin

Item	Part No.	Description
1	VP0302	Element 2.2kW
2	VP0303	Thermostat
3	VP0304	Resettable Cut-Out
4	VP0317	Element Gasket
5	VP0322	Wall Fixing Bracket

