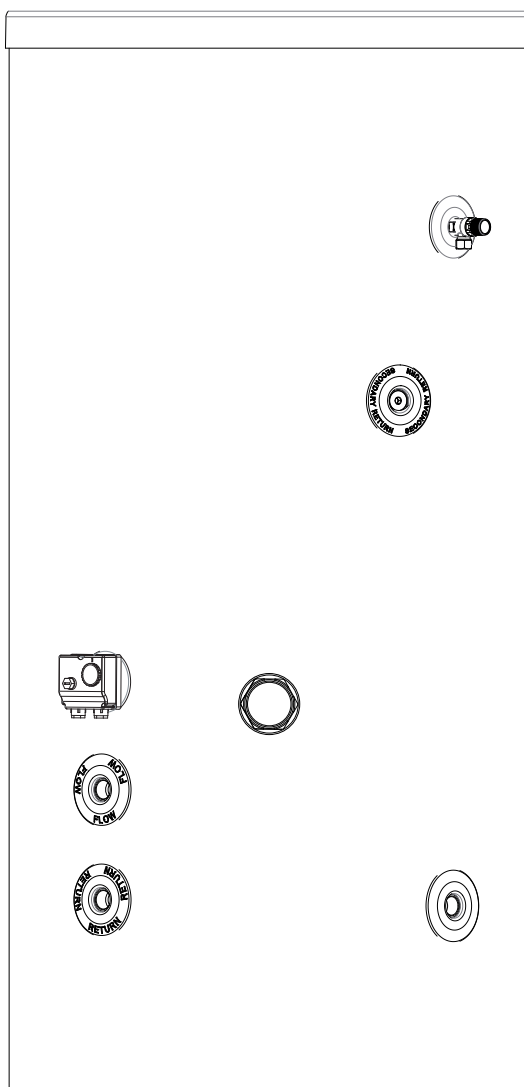


BAXI

PREMIER PLUS

INSTALLATION AND USER INSTRUCTIONS
400L, 500L & 570L Indirect



Russian Version on Page 17

IMPORTANT

PLEASE READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE INSTALLING THE *BAXI PREMIER PLUS WATER HEATER*. INCORRECT INSTALLATION MAY INVALIDATE GUARANTEE.

THE *BAXI PREMIER PLUS WATER HEATER* MUST BE INSTALLED BY A QUALIFIED INSTALLER IN ACCORDANCE WITH LOCAL PLUMBING, BUILDING AND ELECTRICAL REGULATIONS

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 SUPERVISORY 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.

Also:

- Water may drip from the discharge pipe of the pressure-relief device and this pipe must be left open to the atmosphere;
- The pressure-relief device is to be operated regularly to remove lime deposits and to verify that it is not blocked;
- How hot water can be drained. (see page 11 for details).

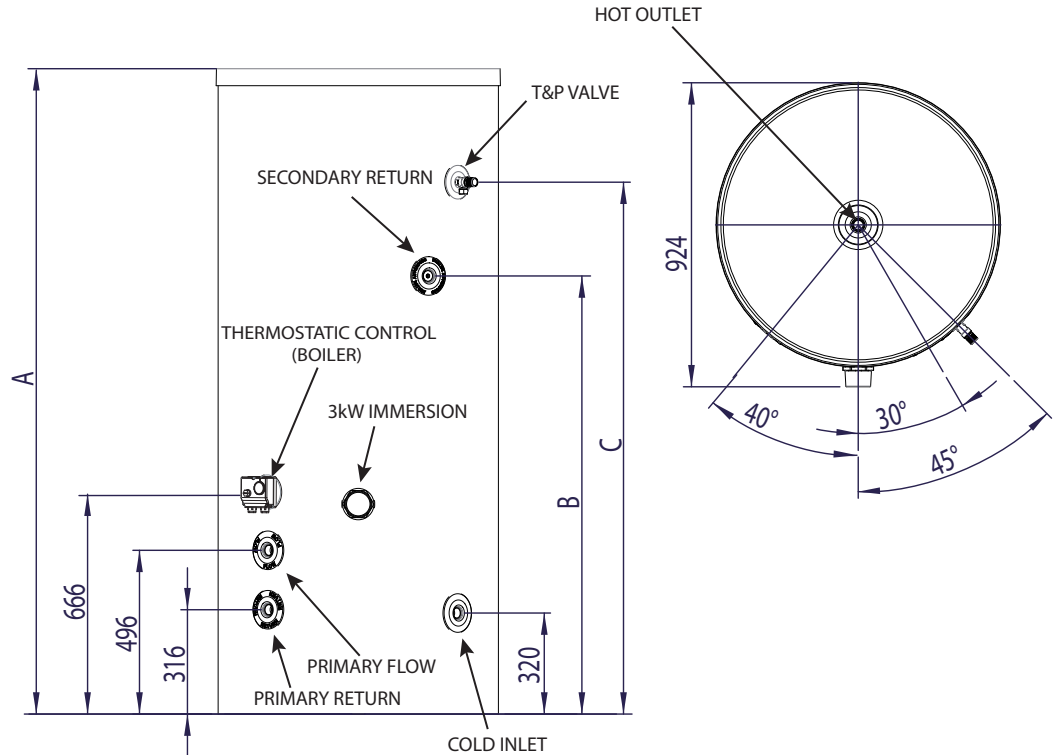
1. IMPORTANT INSTALLATION POINTS

- 1.1 The *BAXI Premier Plus water heater* MUST be fitted with a pressure relief valve rated at 8 bar. FAILURE TO PROVIDE ADEQUATE PRESSURE RELIEF WILL INVALIDATE ANY GUARANTEE AND LEAD TO A DANGEROUS INSTALLATION.
- 1.2 Where the inlet pressure exceeds 6 bar a pressure reducing valve (set at max. 6 bar) should be fitted to the inlet supply to the heater. This MUST NOT be fitted between the pressure relief valve and the water heater (see diagram 3).
- 1.3 A check (non-return) valve should be fitted on the inlet supply to the water heater. This MUST NOT be fitted between the pressure relief valve and the water heater (see diagram 3). This may be provided as part of the inlet security group.

2. INSTALLATION – GENERAL REQUIREMENTS

- 2.1 National Wiring rules may contain restrictions concerning the installation of these water heaters in certain areas, eg. bathrooms.
- 2.2 The water heater MUST be installed vertically.
- 2.3 Enough space should be left around the water heater for pipe connections and for access to controls and any safety valves fitted. Refer to diagram 1 and the dimensions table 1, below to determine a suitable position for the water heater
- 2.4 NOTE: Ensure the floor can support the full weight of the water heater, see table 5, below for cylinder weights.
- 2.5 DO NOT install where the water heater may freeze.

Diagram 1 - Dimensions



SIZE	DIMENSIONS (mm)	
	A	B
400L	1502	832
500L	1802	1132
570L	1997	1336

Table 1: Dimensions

		400	500	570
Max direct kW rating		3	3	3
Coil surface area (m ²)		2.0	2.0	2.0
Coil heat up times (Mins) ⁴	15l/min	43	55	68
	30l/min	29	38	44
	60l/min	21	28	30
Coil rating (kW) ²	15l/min	28.2	27.6	27.0
	30l/min	41.9	40.0	39.1
	60l/min	56.9	54.3	53.6
Pressure drop through coil (MPa) Bar	15l/min	0.02		
	30l/min	0.04		
	60l/min	0.32		
Heat loss (kW/24hrs)		1.71	2.14	2.44
Weight empty (kg)		105	110	115
Weight full (kg) ¹		505	610	685
Max mains pressure		1.6MPa (16 bar)		
Max design pressure		0.8MPa (8 bar)		
Operating pressure/PRV set pressure		0.3MPa (3 bar)		
Max primary pressure ³		1.0MPa (10 bar)		
Expansion relief valve setting		0.8MPa (8 bar)		
Immersion heater electrical rating		3.0kW@240V/2.8kW@230V ~		
T&P Rating		90°C/10 bar		

Table 2: Technical Data

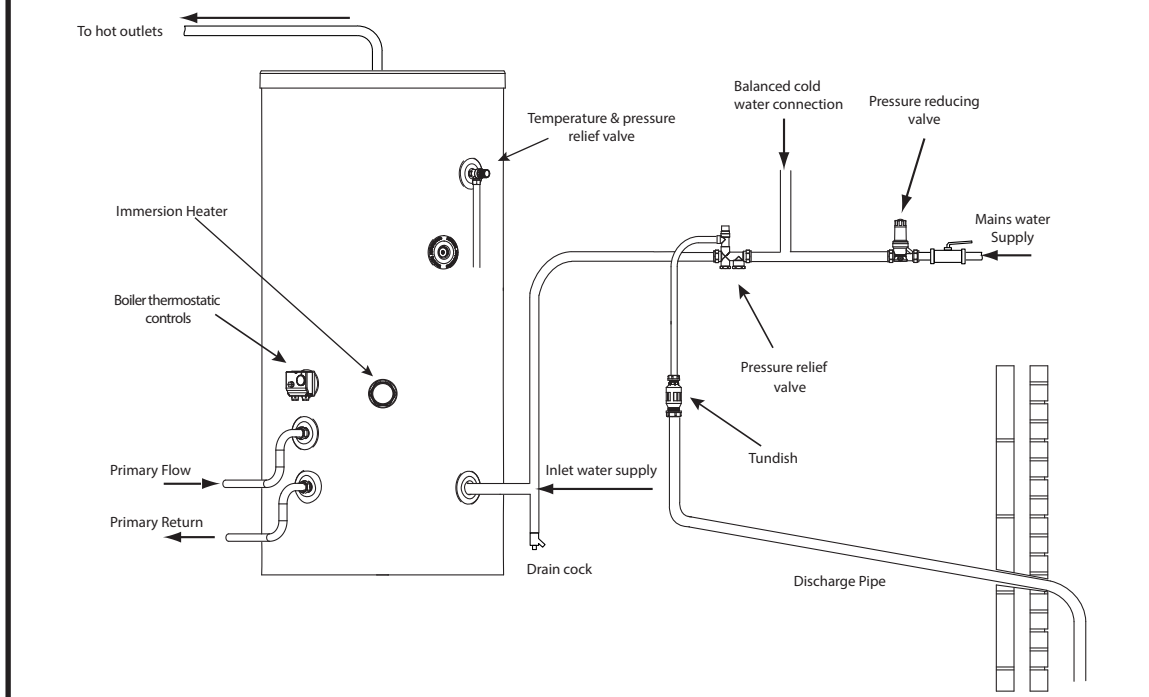
Notes:

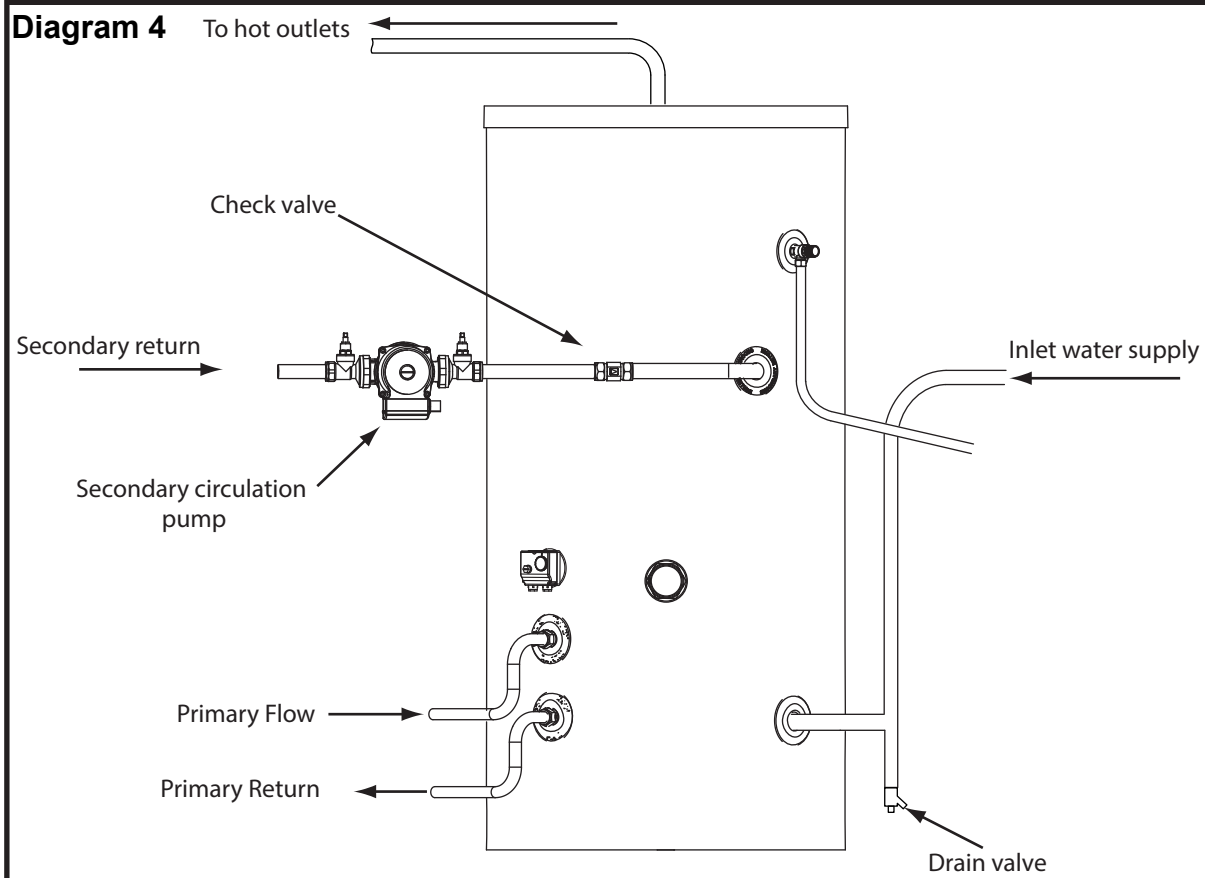
1. At 3 bar inlet pressure
2. At a primary flow temperature 80°C +/- 2°C
3. The primary coil should not be exposed to more than 0.3MPa (3 bar) without the cylinder being full of water and under the minimum working pressure.
4. Temperature rise 15°C - 60°C (45°C)
5. Tested to EN 12897:2006

3. INSTALLATION – PLUMBING

- 3.1 Refer to section IMPORTANT INSTALLATION POINTS. Plumb in valves in the sequence shown in diagram 3, below. Ensure the valves are installed in the correct orientation by reference to the direction of flow arrows marked on them.
- 3.2 The water connections on the water heater accept direct connection of 1" (to fit 28mm pipe). The thread on the connections is G1" to enable the use of G1" male connections to be used if required.
- 3.3 The sanitary water INLET is marked BLUE, the OUTLET is marked RED. Several hot outlets can be served, however, individual site demands should be considered when choosing capacity and the number of outlets to be served.
- 3.4 It is recommended that an isolating valve is fitted on the cold water supply to the heater.
- 3.5 A drain cock must be fitted below the heater in the inlet pipe work. It must be sited between the heater and the check valve or security group (see diagram 3, below)
- 3.6 A sanitary circuit expansion vessel may be fitted to the cold water supply as shown in diagram 3, below to prevent wastage of expanded water. A 35L expansion vessel is recommended for this range of cylinders.
- 3.7 A re-circulation circuit can be installed on the sanitary water circuit. A connection is provided for the re-circulation circuit return pipe (threaded G1" female). This connection is supplied with a blanking plug fitted which should be removed before connecting the re-circulation circuit return pipe (see diagram 4, page 5).
- 3.8 The primary heating circuit MUST be fully pumped.
- 3.9 The connections to the primary flow and primary return are G1" female.

Diagram 3





4. ELECTRICAL REQUIREMENTS

- 4.1 The *BAXI Premier Plus water heater* is suitable for use with most gas or oil fired boilers provided the boiler has adequate thermostatic control and over-temperature protection. If in doubt consult the boiler manufacturer.
- 4.2 The primary flow from the boiler **MUST** be pumped. Gravity circulation will not work due to the special design of the primary heat exchanger. It is recommended that an air bleed point or automatic air vent is incorporated into the highest point in the system.
- 4.3 The water heater is fitted with a control thermostat suitable for the control of the sanitary water storage temperature. This thermostat should be connected, via the terminal block provided, to the primary heating circuit controls. See diagrams 5 and 6, page 6 for wiring information
- 4.4 The electrical cable should enter the terminal cover via one of the cable grips provided. The outer sheath of the cable should be secured by the cable grip. Connection to the terminal block will depend on the primary control arrangement. Suggested arrangements are shown in diagrams 7, 8, and 9, pages 6 and 7.

Diagram 5

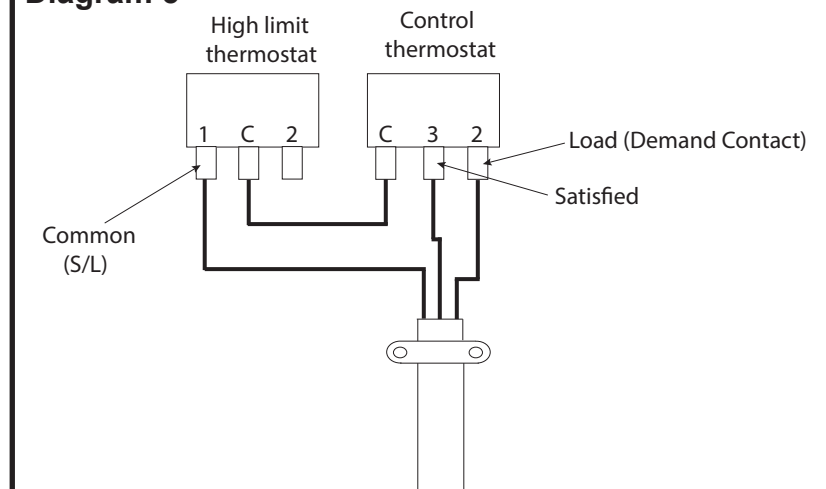


Diagram 6

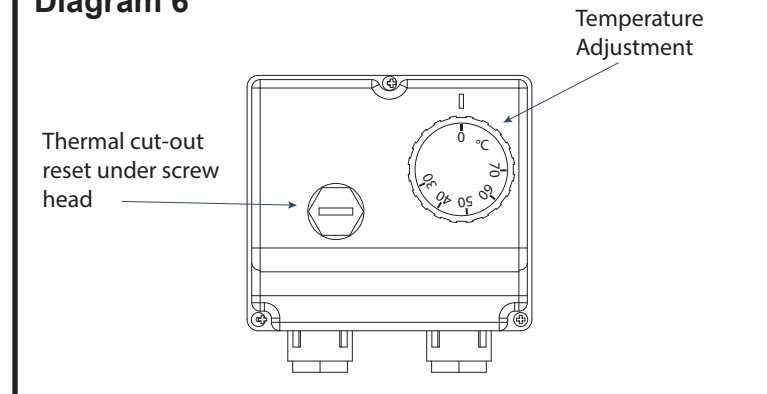


Diagram 7

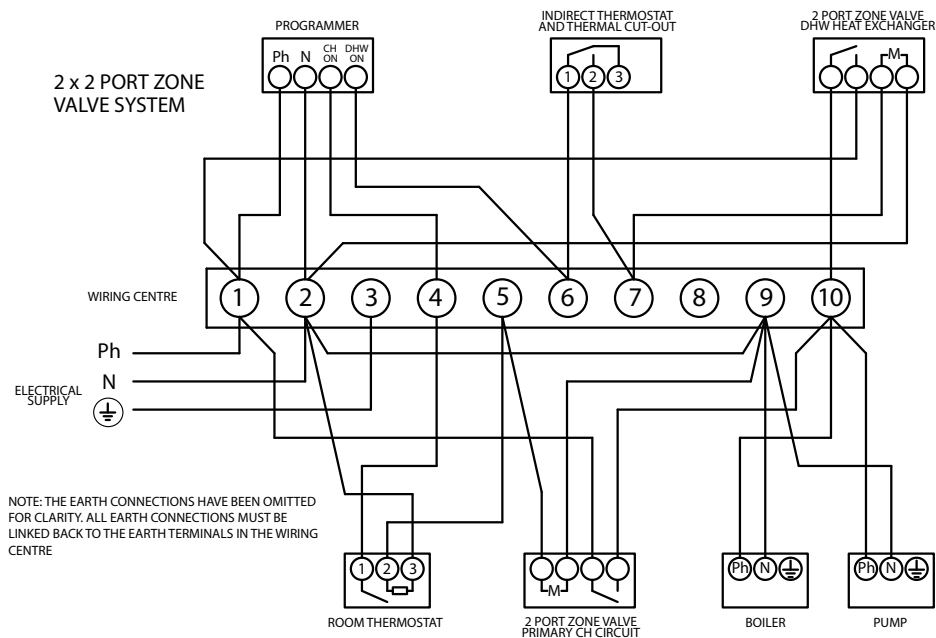


Diagram 8

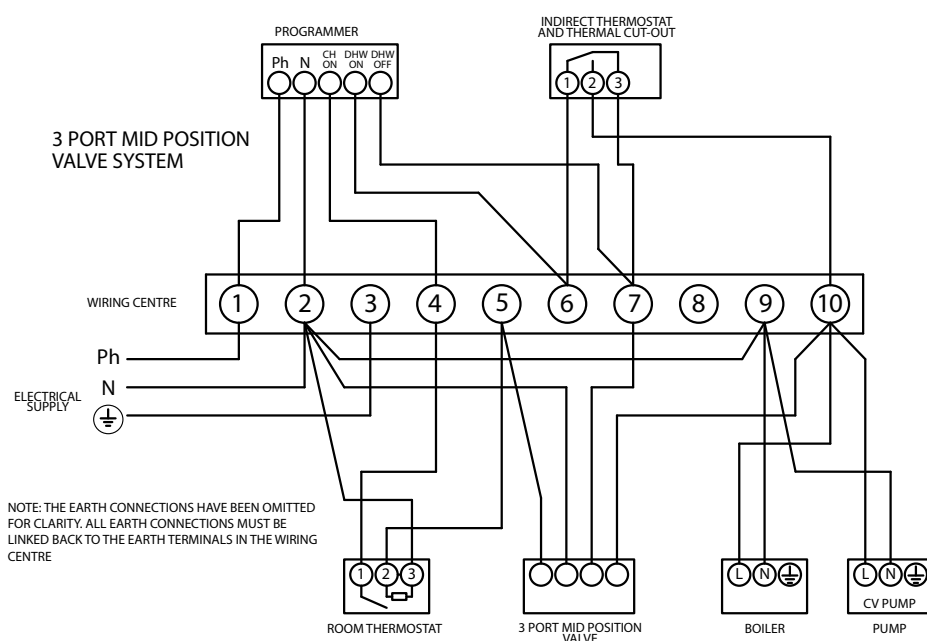
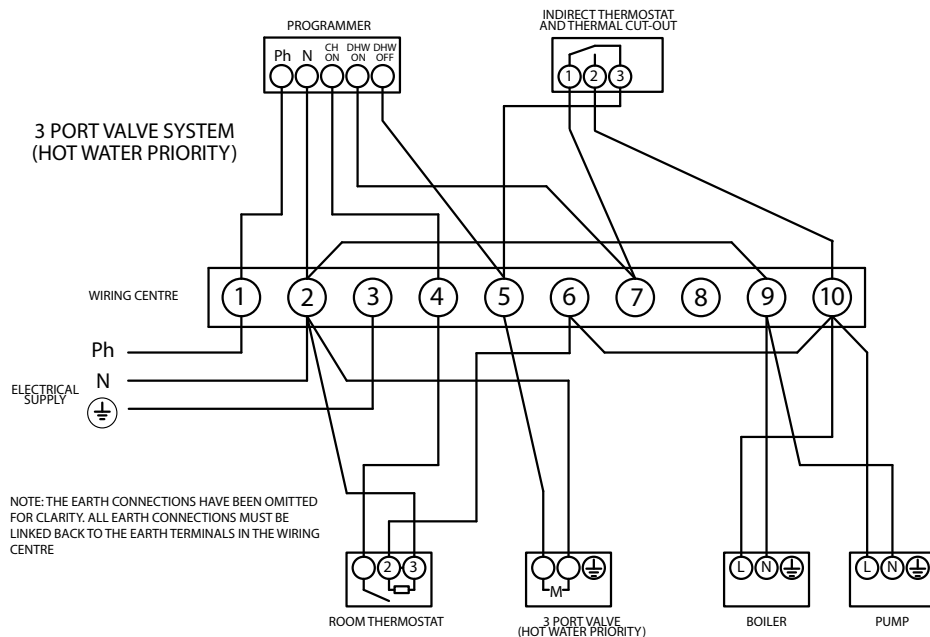


Diagram 9



5. IMMERSION HEATER - ELECTRICAL REQUIREMENTS

Note: At the time of installation the Cylinder is fitted with a blank immersion boss and cover. A 3kW immersion is available as an accessory, 95 602 030, page 14

- 5.1 If the water heater is fitted with a supplementary immersion heater it will incorporate a thermostatic control and over-temperature cut-out. The immersion heater is rated 3kW @ 240V ~ /2.8kW @ 230V ~, single phase.
- 5.2 The immersion heater is located behind the silver metal cover on the front of the water heater. The cover is secured by a screw on the front.

DISCONNECT THE ELECTRICAL SUPPLY BEFORE REMOVING THE COVER.

- 5.3 The immersion heater **MUST** be earthed.
- 5.4 All electrical wiring should be carried out by a competent electrician and be in accordance with the latest national Wiring Regulations. The circuit must be protected by a suitable fuse and double pole isolating switch with a contact separation of at least 3mm in both poles.
- 5.5 The immersion heater should be wired in accordance with diagram 10, page 9. The supply cable must be routed through the cable gland provided and the outer sheath of the cable firmly secured by tightening the screw on the cable gland. Always replace the cover before operating.
- 5.6 **DO NOT** operate the immersion heater until the water heater has been filled with water.
- 5.7 It is recommended that the immersion heater thermostat is set to between position 4 and 5 (60 to 65°C), however it can be set between 1 and 5 (10° and 70°C). To adjust the temperature insert a flat bladed screwdriver into the adjustment knob and rotate, clockwise to decrease the temperature, counter-clockwise to increase the temperature.
- 5.8 The thermostat incorporates an over-temperature thermal cut-out that will switch off the immersion heater in the event of a thermostat failure. The thermal cut-out reset button is indicated on diagram 11, page 9. **DO NOT** bypass the thermal cut-out in any circumstances.

Diagram 10

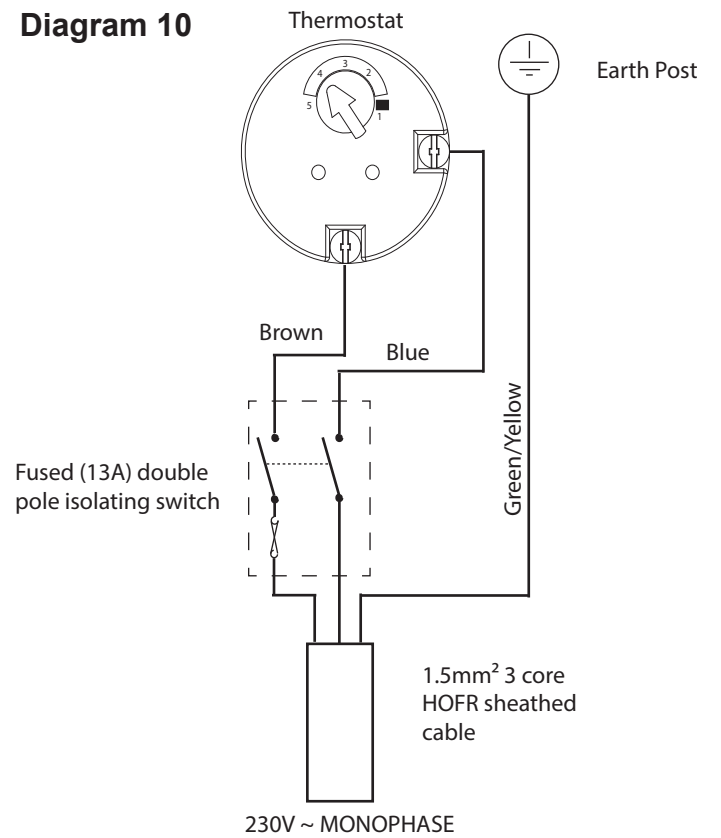
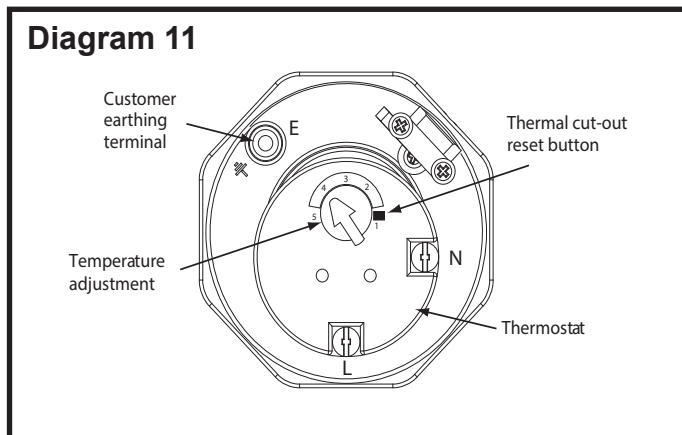


Diagram 11



6. COMMISSIONING

- 6.1 DO NOT switch on either the immersion heater or boiler until the water heater has been filled with water and checked for leaks.
- 6.2 Check that all installation, electrical and discharge pipe requirements have been met.
- 6.3 Check that all water and electrical connections are correctly made and are tight.
- 6.4 Open a hot tap supplied by the water heater, turn on the cold water supply to the water heater.
- 6.5 Allow the water heater to fill and leave the hot tap running for a short while to purge any air and flush out the pipe work. Close the hot tap.
- 6.6 Open successive hot taps to purge any air from the system.
- 6.7 With all hot taps closed, check the system for water leaks and rectify as necessary.
- 6.8 Manually test the operation of the pressure relief valve. Ensure water flows freely from the valve and through the discharge pipe.
- 6.9 Fill the primary circuit following the boiler manufacturers commissioning instructions. If motorised valves are used to control the primary flow ensure these are set to the manual open position for commissioning. When the primary circuit is full return the motorised valves to the AUTO position. Vent any trapped air by opening the air bleed point or automatic air vent.
- 6.10 For heating by immersion heater, switch on the electrical supply to the water heater and allow the water heater to heat. The thermostat is factory set to control the storage temperature to approx. 60°C. If necessary the temperature can be adjusted by inserting a flat bladed screwdriver in the adjustment knob on top of the immersion heater thermostat and rotating (see diagram 11, page 9). The adjustment range 1 to 5 represents a temperature range of 10° to 70°C. DISCONNECT THE ELECTRICAL SUPPLY before making any adjustments.
- 6.11 For heating by indirect heat exchanger switch on the electrical supply to the boiler and ensure the programmer is set to HOT WATER mode. Check that any motorised valves or primary pumps are working and allow the water heater to heat. The indirect control thermostat is factory set to give a storage temperature of approx. 60°C. If necessary the temperature can be adjusted by rotating the knob on the front of the control box, see diagram 6, page 6.

7. MAINTENANCE - DESCALING IMMERSION HEATER (IF FITTED)

- 7.1 Little maintenance is required, however in hard water areas the water heater will require periodic de-scaling to ensure efficient operation. To de-scale the water heater immersion (if fitted):
- 7.2 Switch off and disconnect the electrical supply and shut down the boiler (indirect water heaters). Turn off the water supply to the water heater.
- 7.3 Open a hot tap served by the water heater to relieve any system pressure. Empty the water heater by opening the drain valve in the inlet pipe work.
- 7.4 Open the terminal cover and disconnect wiring from the immersion heater thermostat. Remove the immersion heater thermostat by carefully pulling outwards from the immersion heater.
- 7.5 Unscrew immersion heater. Remove the immersion heater from the water heater. NOTE over time the immersion heater seal may degrade and it is good practice to replace it when servicing the unit.
- 7.6 Carefully remove any scale from the surface of the element. DO NOT use a sharp implement as damage to the element surface could be caused.
- 7.7 Ensure sealing surfaces are clean and seals are undamaged. If in doubt fit a new seal.
- 7.8 Replace immersion heater by screwing into the immersion boss, take care not to over tighten.

- 7.9 Replace the immersion heater thermostat by carefully plugging the two male spade terminations on the underside of the thermostat head into the corresponding terminations on the element. Ensure the thermostat is pushed fully home.
- 7.10 Rewire the immersion heater in accordance with diagram 10, page 9. Refit and secure the terminal cover.
- 7.11 **DO NOT SWITCH ON EITHER THE BOILER OR IMMERSION HEATER UNTIL THE WATER HEATER HAS BEEN RE-FILLED WITH WATER.**
Re-commission the water heater following the Installation and commissioning instructions.

8. MAINTENANCE - DESCALING THE WATER HEATER

- 8.1 Switch off and disconnect the electrical supply and shut down the boiler (indirect water heaters). Turn off the water supply to the water heater.
- 8.2 Open a hot tap served by the water heater to relieve any system pressure. Empty the water heater by opening the drain valve in the inlet pipe work.
- 8.3 Remove the terminal cover and disconnect wiring from the immersion heater thermostat. Remove the immersion heater thermostat by carefully pulling outwards from the immersion heater.
- 8.4 Unscrew immersion heater. NOTE over time the immersion heater seal may become stuck to the mating surface, if the seal is damaged replace with new one.
- 8.5 The loose scale in the base of the water heater can be removed by inserting the suction hose on a "wet and dry" vacuum cleaner and sucking the scale out of the water heater.
- 8.6 Replace immersion heater by screwing into the immersion boss, take care not to over tighten.
- 8.7 Replace the immersion heater thermostat by carefully plugging the two male spade terminations on the underside of the thermostat head into the corresponding terminations on the element.
- 8.8 Rewire the immersion heater in accordance with diagram 9, page 9. Close and secure the terminal cover.
- 8.9 **DO NOT SWITCH ON EITHER THE BOILER OR IMMERSION HEATER UNTIL THE WATER HEATER HAS BEEN RE-FILLED WITH WATER.** Re-commission the water heater following the Installation and commissioning instructions.

9. MAINTENANCE - SAFETY VALVES

- 9.1 The Pressure Relief valve and any other safety valves fitted should be regularly checked for correct operation.
- 9.2 Manually operate the valve(s) and ensure that water flows freely from the valve and through the discharge pipe. NOTE the water discharged may be very hot. Ensure the valve re-seats correctly when released.

10. USER INSTRUCTIONS

- 10.1 The *BAXI Premier Plus water heater* stores water at the temperature set on the adjustable thermostat. This is factory set to give a storage temperature of approx. 60°C. However, this can be set to give temperatures in the range 10° to 70°C. The adjustable thermostat is located on the front of the cylinder, see diagram 3, page 4.
- 10.2 To avoid any risk of freezing when the water heater is not in use for long periods during the winter months, do not switch off the boiler or immersion heater and set the control thermostat to its minimum position. NOTE this will not protect other parts of the system pipe work.
- 10.3 To ensure the water heater continues to operate at its optimum performance it should periodically be maintained in accordance with the instructions given under the sections headed MAINTENANCE.
- 10.4 **IMPORTANT NOTES TO THE USER**
- **Do not block or restrict the discharge from any safety valve fitted**
 - **Do not tamper with any safety valve fitted**
 - **Do not bypass the thermal cut-outs in any circumstances**
 - **If a fault is suspected contact a qualified engineer to check the system**

11. GUARANTEE

- 11.1 This water heater is guaranteed for a period of 10 years from the date of purchase with the exception of the thermal controls which are guaranteed for a period of two years provided:
- 11.2 The water heater has been installed in accordance with these instructions and all necessary inlet controls and safety valves have been fitted correctly.
- 11.3 Any valves or controls are of the manufacturers recommended type.
- 11.4 The water heater has not been tampered with and has been regularly maintained as detailed in these instructions.
- 11.5 The water heater has been used only for heating potable water.
- 11.6 The water heater is NOT guaranteed against damage by frost or due to build up of scale.
- 11.7 This guarantee does not affect the statutory rights of the consumer.

12. SPARE PARTS

- 12.1 The following list of spare parts is available for the *BAXI Premier Plus water heater*. Refer to the technical data label on the water heater to identify the model installed and to ensure the correct parts are ordered.
- 12.2 DO NOT replace with parts not recommended by the manufacturer as this will invalidate your guarantee and may render the installation dangerous.

Description	Part no.
3kW Immersion heater (1 3/4" screw thread)	95:602:030
3/4" Temperature/pressure relief valve	95:605:103

13. ENVIRONMENTAL INFORMATION

- 13.1 This water heater is manufactured from many recyclable materials. At the end of its useful life it should be disposed of at an approved Recycling Centre to realise the full environmental benefits.
- 13.2 The insulation material is CFC/HCFC free expanded polyurethane foam with an ozone depletion factor of zero.

Notes:

The pace of product development is such that we reserve the right to change product specifications without notice. We do, however, strive to ensure that all information in this leaflet is accurate at the time of publication.

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