

### Operation

Both the water and electrical supplies should be turned on.

The SHH-3 has a fixed and constant heat source and consequently the temperature at which the water is delivered is governed by the rate of flow from the spout:

High flow - reduced temperature

Low flow - increased temperature

The water flow rate is controlled by the valve fitted on the inlet connection. Flow will begin as the valve is opened by turning this anti-clockwise and allow a short time for the temperature of the water to stabilise. If this is too hot increase the flow rate by turning the valve slowly anti-clockwise, and if too cool decrease the flow by turning the valve clockwise. There will always be a short time between selecting a flow rate and reaching a stable temperature for this. The unit features a neon indicator that will glow when the heating element is in operation.

Due to seasonal variations in the temperature of the incoming cold water supply the flow of water required to deliver a certain temperature will vary.

Variation in flow and temperature will also occur when other cold water outlets upstream are used or, fluctuations occur with the incoming cold water supply pressures.

#### SUMMER CONDITIONS:

If with the control valve fully open the water is too hot insert the two additional rings that are supplied into the spray head. To change the rings simply release the centre screw in the spray nozzle head. If the water is too cool at the minimum flow rate use two spray and one blank ring in the spray head.

#### WINTER CONDITIONS:

If the water is not sufficiently warm it is suggested that only one spray ring is fitted in the spray nozzle head. Proceed by slowly turning the inlet flow control until the neon indicator glows. The optimum setting for the prevailing conditions has now been achieved.

The swivel nozzle spray head should be regularly inspected and cleaned to prevent the build up of deposits which will affect the product's performance. Use only the spray rings supplied as these are specifically designed for it's efficient operation.

**SAFETY WARNING: THIS PRODUCT MUST NOT BE SWITCHED ON IF THERE IS ANY POSSIBILITY THAT THE WATER SUPPLY TO IT, OR THAT RESIDUAL WATER IN THE HEATING CHAMBER OR ANY ACCUMULATED IN THE SPRAY HEAD MAY BE FROZEN.**

Should assistance/advice be required on any matter please contact the ZIP Technical Services Dept. Tel. 0870 6088888 Fax. 01362 692448

#### Guarantee

Goods are guaranteed for one year against faulty design, materials or workmanship having been properly installed and operated in accordance with these instructions. The Company has the option to replace or repair an entire product or component. The Company shall not be liable for any consequential loss or damage howsoever caused. It shall be the duty of the customer to insure against such consequential loss damage. The guarantee does not extend to the consequences of limescale deposits or frost damage over which the manufacturer has no control and for which the user is advised to take appropriate precautions. This guarantee does not affect the statutory rights of the consumer.

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# ZIP

ELECTRIC WATER HEATERS

HANDWASH

INSTANTANEOUS WATER

HEATER

Model reference SHH - 3

## INSTALLATION & OPERATING INSTRUCTIONS

(To be left with user after installation)

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Installation and operating instructions for the model reference SHH-3 instantaneous electric water heater.

PLEASE READ THESE INSTRUCTIONS CAREFULLY AND THAT THESE ARE UNDERSTOOD BEFORE COMMENCING INSTALLATION. IF ASSISTANCE IS REQUIRED CONTACT ZIP HEATERS (UK) LTD. TECHNICAL SERVICES DEPT.

#### GENERAL:

The installation should be carried out by competent persons familiar with the work undertaken.

The unit must be connected to a water supply having a pressure of not less than 0.4 Bar (approximately 6psi). The maximum supply pressure should not exceed 6 Bar (approximately 90 psi).

The unit must be connected to a 230/240v. ac mains electrical supply via a fused (13 amps.) double pole isolating switch which should be switched off when not in use.

The SHH-3 is an open outlet water heater and consequently the outlet must not be blocked or restricted at any time. Regular cleaning and maintenance of the spray outlet head is essential.

#### MOUNTING:

The unit is designed to be wall mounted using the wall fixings supplied. Before drilling into the wall take care that the selected position avoids any hidden pipework or electrical circuitry. The unit must be installed horizontally and with the connections pointing downwards. The fixing positions in the back case have centres of 220mm horizontally and 120mm vertically.

To remove the front cover and escutcheon, release the four cover screws. Take care when removing the cover as the neon indicator and connecting wiring is part of the assembly - for complete separation to take place the neon indicator wiring should be disconnected from the heating element terminals, these are to be reconnected when the front cover is replaced.

#### PLUMBING:

Mount the water heater on to the wall and in this position make the plumbing connections to the inlet, the left hand connection when facing the unit.

The unit is supplied with a plastic straight connector that screws on to the inlet connection, the water inlet flow control valve must be attached to the left facing the unit.

When making the connection to the connector supplied do not use any jointing compound or sealant. Wind some PTFE tape around the threads and tighten to complete the seal. Too much PTFE tape or overtightening will reduce the effectiveness of the seal.

Connect the outlet spout directly on to the water heater, this connection is on the right when facing the unit. **No valve or pipework must be attached to the outlet connection.**

Open the control valve to allow water to pass through the heater and check the installation for leaks. Allow the water to flow until all air is expelled from the chamber when there will be a smooth uninterrupted flow from the spout.

The water heater has in-built restrictors to enable this to function correctly, consequently the flow from the spout will depend upon the pressure of the incoming water supply.

It is recommended that an isolating valve is fitted to the cold water supply upstream from the unit to facilitate any future service needs.

#### ELECTRICAL:

The electrical installation including earthing and cross bonding should be carried out to comply with the current edition of IEE Regulations. The product is suitable for connection to 230/240v. ac mains electrical supply. Connection should be made using either a fused (13 amp) double pole switched or a fused (13 amp) double pole switched spur. Contact separation should be at least 3 mm in each pole.

The mains supply cable must not be less than 1.5mm<sup>2</sup> cross sectional area. The cable enters the unit from one of the entry points provided in the back casing and passes through the cable clamp before the cover is replaced. For safety remove the fuse whilst making connections to the terminal block. The red/brown wire should connect to the terminal marked 'L', the blue/black wire to 'N' and the yellow/green to the 'E' connection.

Replace and secure the front cover using the original screws and refit the escutcheon before replacing the fuse and switching on the electrical supply.

**WARNING! SWITCH OFF THE MAINS ELECTRICAL SUPPLY BEFORE REMOVING THE FRONT COVER AND CARRYING OUT ANY WORK INVOLVING A LIVE CIRCUIT.**

