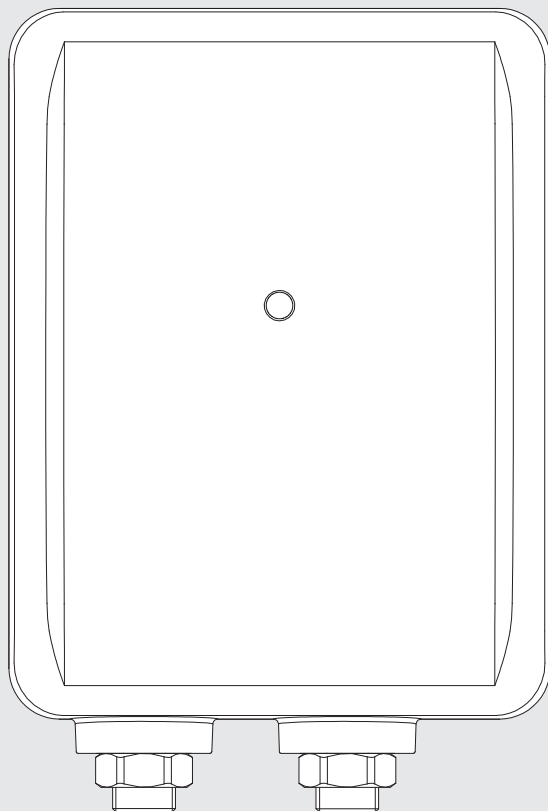


HEATRAESADIA

SMARTER | CLEANER | WARMER

Multipoint Instantaneous Fitting Instructions




WARNING

This water heater must only be installed by qualified persons.

Please read and understand these instructions before starting work.
Please leave this leaflet with the user following installation.

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 This product 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 product in a safe way and understand the hazards involved. Children shall not play with the product. Cleaning and user maintenance shall not be made by children without supervision. Children must be supervised to ensure they do not play with the product.

1. Introduction

1.1 General

The following instructions are offered as a guide to the user and Installer.

The installation must be carried out by a competent plumbing and electrical Installer in accordance with Building Regulation G3 (England and Wales), Technical Standard P3 (Scotland) or Building Regulation P5 (Northern Ireland) and the Water Fitting Regulations (England and Wales) or Water Byelaws (Scotland).

1.2 Symbols used

In these instructions, various risk levels are employed to draw the user's attention to particular information. In doing so we wish to safeguard the user, avoid hazards and guarantee the correct operation of the product.



WARNING

Risk of dangerous situation causing slight physical injury.



CAUTION

Risk of material damage.



Signals important information.

1.3 Abbreviations

- ▶ RCD – Residual current device
- ▶ MCB – Miniature circuit breaker

1.4 Liabilities

Manufacturer's liability

Our products are manufactured in compliance with the requirements of the various applicable European Directives.

This product complies with the requirements of the CE marking directive.

In the interest of UK Customers, we are continuously endeavouring to make improvements in product quality. All the specifications stated in this document are therefore subject to change without notice.

Our liability as the manufacturer may not be invoked in the following cases:

- ▶ Failure to abide by the instructions on using the product.
- ▶ Faulty or insufficient maintenance of the product.
- ▶ Failure to abide by the instructions on installing the product.

Installer's liability

The Installer is responsible for the installation and the commissioning of the product. The Installer must respect the following instructions:

- ▶ Read and follow the instructions given in the manuals provided with the product.
- ▶ Carry out installation in compliance with the prevailing legislation and standards.
- ▶ Perform the initial start-up and carry out any checks necessary.
- ▶ Complete the commissioning checklist.
- ▶ Explain the installation to the user.
- ▶ If maintenance is necessary, warn the user of the obligation to check the product and maintain it in good working order.
- ▶ Give the instruction manual to the user.

Users liability

To guarantee optimum operation of the product, the user must respect the following instructions:

- ▶ Read and follow the instructions given in the manuals provided with the product.
- ▶ Call on qualified professionals to carry out installation and initial start-up.
- ▶ Get your Installer to explain your installation to you.
- ▶ Have your required checks and services done.
- ▶ Keep the instruction manuals in good condition and close to the appliance.

2. Safety

2.1 General safety warnings



WARNING

- ▶ Only competent persons having received adequate training are permitted to work on the product and the installation.
- ▶ Do not tamper with the safety valve supplied.
- ▶ Before any work, switch off the mains supply to the product and water supply.
- ▶ Do not switch on if there is a possibility that the water in the product is frozen.

2.2 Recommendations



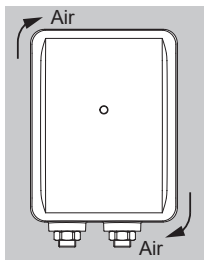
CAUTION

- ▶ Annual maintenance is recommended by a competent person.



IMPORTANT: AIR CIRCULATION

To operate safely and correctly the appliance **MUST NOT** be covered in any way. The installation must allow air to circulate freely around the appliance:



IMPORTANT: TAPS & VALVES

The appliance is designed to serve conventional manually operated valves and taps (see Type A). It **MUST NOT** be connected to mixer, blending or solenoid control valves, e.g. infrared operated taps (Type B). The rapid opening and closing of these valves may damage the appliance.

Type A



Type B



2.3 Specific safety instructions



WARNING

DO NOT operate the product if:

- ▶ Water ceases to flow during use.
- ▶ Water has entered inside the product because of an incorrectly fitted cover.
- ▶ If the product is damaged.

(in all cases turn off mains power and isolate water supply)

3. Technical specifications

3.1 Technical data

Model numbers

7.0kW - 95 050 424

9.0kW - 95 050 425

Connections

Inlet / Outlet connection - 1/2" BSP male

Water entry point - bottom

Cable entry point - bottom or rear

Electrical rating

6.4 - 7.0kW 230 - 240V

8.2 - 9.0kW 230 - 240V

Rated pressure

7kW / 9kW Minimum supply pressure 0.1Mpa (1 bar)

Maximum supply pressure 0.65Mpa (6.5 bar)

Enclosure rated

IP X5

Materials

Backplate, cover - ABS

Element(s) - copper sheathed rod type

Inner container - glass reinforced nylon

Supplier's name or trade mark	Heatrae Sadia Multipoint Instantaneous	
Supplier's model identifier	7kW	9kW
The declared load profile	XXS	XXS
The water heating energy efficiency class of the model	A	A
The water heating energy efficiency in %	38.5	38.5
The annual electricity consumption in kWh	479	479
Daily fuel consumption in kWh	2.206	2.206
Specific precautions that shall be taken when the water heater is assembled, installed or maintained and disposed of at end of life	See sections 3 - 10	

Table: Technical parameters in accordance with European Commission regulations 814/2013 and 812/2013

Standards and approvals

- ▶ Complies with the requirement of EN 60335-2-35.
- ▶ Complies with European Community Directives (CE).
- ▶ Complies with UK water regulations, Kiwa approved

3.2 Dimensions and connections

Dimensions

Height - 210mm

Width - 160mm

Depth - 104mm

3.3 Electrical Diagram(s)

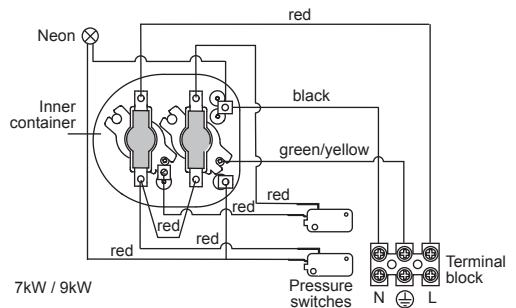


Figure 1 – Wiring Diagram

4. Description of the product

4.1 General description

These heaters are of the closed outlet type (unvented pressure system) and are suitable for connection to normal cold water mains supply up to a maximum of 0.65MPa (6.5 bar) for 7 & 9 kW

4.2 Operation principle

The product is used to provide the user with hot water at point of use.

By turning on the tap water flows through the product which then switches the element on to heat the water.

4.3 Main components

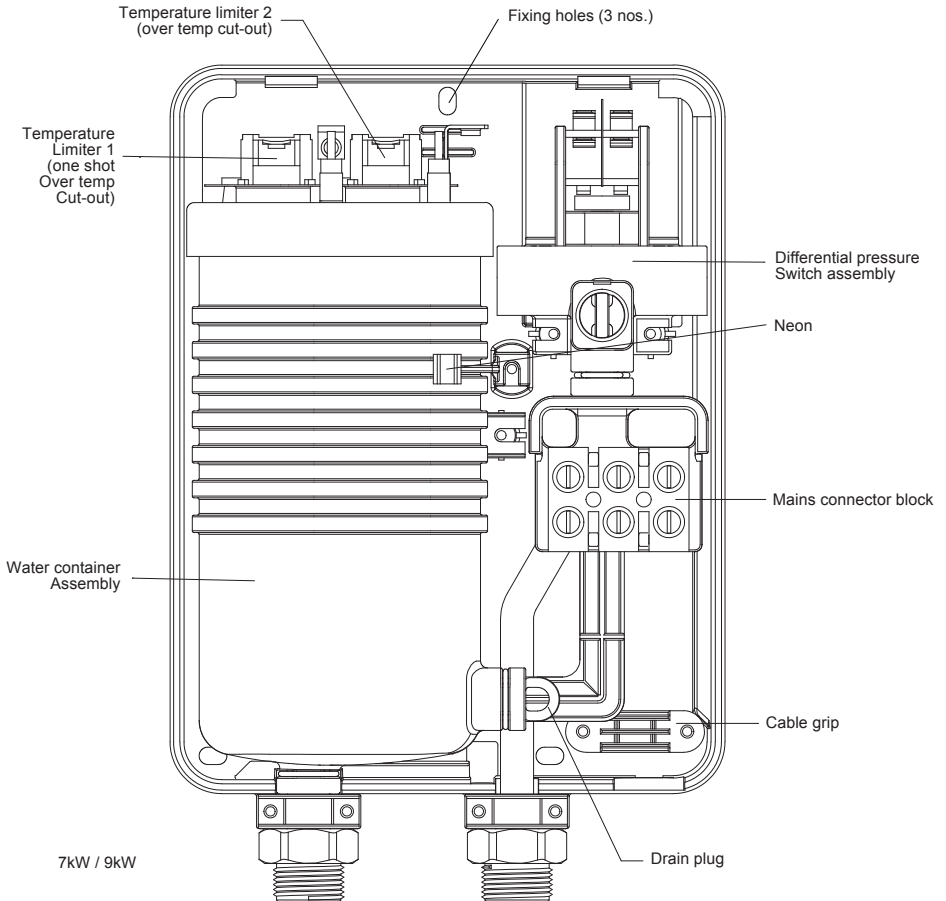


Figure 2 – Internal view

5. Before installation

5.1 Installation regulations



WARNING

Installation of the product must be carried out by a qualified engineer in accordance with prevailing and national regulations as listed below.

- ▶ Building Regulations
- ▶ The Building Standards (Scotland)
- ▶ The Building Regulations (Northern Ireland)
- ▶ I.E.E Electrical Regulations
- ▶ UK Water Regulations



WARNING

- ▶ ISOLATE the electrical and water supplies before removing the cover.
- ▶ ISOLATE the electrical and water supplies BEFORE proceeding with installation or servicing.
- ▶ The product is NOT SUITABLE for mounting into steam rooms or steam cubicles.

5.2 Installation Requirements

Plumbing

The plumbing installation must comply with Water Regulations.

All 7kW and 9kW heaters have an operational pressure range of 0.1Mpa (1bar) to 0.65Mpa (6.5bar). Both inlet and outlet connections are suitable for 15mm diameter copper pipe.

The tee piece and expansion relief valve must be situated where shown (see figure 3, item D) and the relief valve discharge port plumbed via an air break (tundish) to a safe, visible place where there is no risk to persons.

The discharge pipe must fall continuously from the valve outlets and be unobstructed.

An isolating stop valve **MUST** be incorporated to the main water supply to comply with Water Regulations

To obtain optimum performance a flow restrictor (isolating ball valve) must be fitted where shown (see figure 3, item B). This provides temperature control during commissioning (see 7.3 p10).

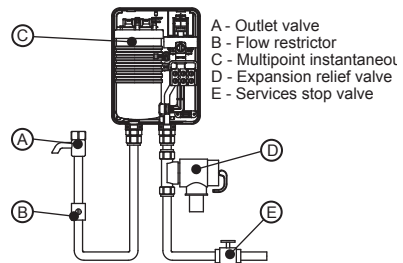


Figure 3

Electrical

Before fitting the product, ensure that the consumer unit and any switches are suitable for the additional load. If in doubt, contact your electricity supplier or a qualified electrician.



WARNING

This product must be earthed.

A residual current device (rcd), formerly known as an earth leakage circuit breaker (elcb), with a tripping current of 30mA must be incorporated in the circuit.

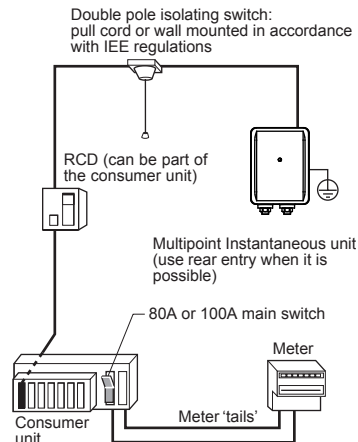


Figure 4

5.3 Choice of location

The product must be mounted on a flat surface which covers the full width and length of the back plate. It is important that the wall surface is flat otherwise difficulty may be encountered when fitting the cover.

DO NOT fit the product to the wall and tile up to the case. It must be fitted on to a finished flat and even wall surface. This allows removal for servicing.

6. Installation

6.1 General

After reading the previous sections in this booklet and choosing a good location for the product please install, paying attention to the following plumbing, electrical and commissioning sections.

Mounting

Preparation

Remove the fixing screw which holds the front cover onto the back plate of the product. Carefully remove the cover.

Fix the product heater loosely to the wall. The wallplugs provided are suitable for most brick walls (use a 6.5mm diameter masonry drill), but if your wall is plasterboard or soft building block you should use special wallplugs and an appropriate drill obtainable from most hardware stores.

6.2 Water Connections

Plumbing

Decide where to connect to the water mains for your feed to the product. Ensure that the pipe you have selected is not a gas pipe, a hot water pipe or from a cold water storage tank.

Cut the necessary pipe work to length, offer up to the installation before making any soldered joints. Ensure that the pipe is the correct length, as shortening it can be difficult once joints have been made.

An isolating stop valve **MUST** be incorporated to the main water supply to comply with Water Regulations

Assemble the installation before making any soldered joints. **DO NOT** use jointing compounds on any pipe fittings for the installation.

Remove the product before soldering the connections.



WARNING

DO NOT solder pipes or fittings within 300mm of the heater once the pipe work is located in the product as heat transfer can damage components.

It is essential to flush the pipe in order to clear debris, particles of solder and swarf.

Turn the water off after flushing using the isolating stop valve.

Connect the cold water supply pipe to the inlet of the product, this is a 1/2" BSP connection.

Fit top and bottom screws and secure the back plate to the wall ensuring that it is level.

Connect all other components as per figure 3. Turn the isolating stop valve on slowly and check for leaks in all pipe work, rectify as necessary.

Turn off the isolating stop valve.

6.3 Electrical Connections



WARNING

This product must be earthed.

The installation, supply cable and circuit protection must conform to the latest BS7671 'Requirements for electrical installations' (IEE Wiring Regulations).

The Multipoint Instantaneous heater must only be connected to a 230/240V ac supply.

Before making any electrical connections within the installation, make sure that no terminal is live. If in doubt, **SWITCH OFF** the whole installation at the consumer unit or switch fuse (where fitted).

The Multipoint Instantaneous heater must be connected to its own independent electrical circuit.

Check that your consumer unit (main fuse box):

1. has a main switch rating of 80A or above.
2. has a spare fuse way which will take the fuse/mcb you need to fit - (see figure. 4). If so, you can wire the Multipoint Instantaneous direct to the spare fuse of your consumer unit via a suitably rated isolating switch- (see figure 4). Note that not all consumer units will accept a 35/40/45A sized fuse.

If point 1 and 2 are not achievable, the installation is not straight forward, since it could involve installing a new consumer unit to serve the whole house or just the Multipoint Instantaneous. You will need to call in your Regional Electricity Company to check the circuit and make the connections to the meter or service connector block.

They should also check the earth bonding of items in the vicinity.

A residual current device (rcd), formerly known as an earth leakage circuit breaker (elcb), with a tripping current of 30mA must be incorporated in the circuit.

A double-pole isolating switch (rated at 30A for 7kW and 40A for 9kW), with a contact separation of at least 3mm in each pole, must be incorporated in the circuit. This must have a mechanical indicator showing when the contacts are open. An indicator lamp alone is not sufficient. Only cord operated switches can be fitted in bathrooms.

Cable entry

Cable entry can be from the rear (see figure 5, below) or from the bottom. When opting for bottom entry make the cut-out to suit the cable before the fitting back plate to the wall.

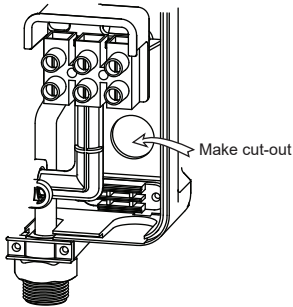


Figure 5

Place the cover onto the back plate.

Secure the cover to back plate using screw provided.

Multiple installation

When larger volumes of water are required than can be provided by one heater, multiple installations can be made by connecting a number of heaters in PARALLEL of the cold feed manifold (See figure 6, below). This is the ONLY method that is recommended provided all heaters receive acceptable flow rates (2.5ltr/min recommended). DO NOT plumb these heaters in series.

To set the heaters in this arrangement use the appropriate procedure as described previously. Each heater in parallel must be set individually.

In this application restrictors capable of closing flow completely should be used so that as each heater is set in turn, the other heaters in the installation may be isolated.

NOTE - In this application if low flow rates exist to plumb the cold manifold in 22mm pipe with 15mm pipe spurs to each heater.

- B - Restrictors
- D - Expansion relief valves
- E - Service stop valve
- F - Cold water supply manifold
- G - Hot water supply manifold

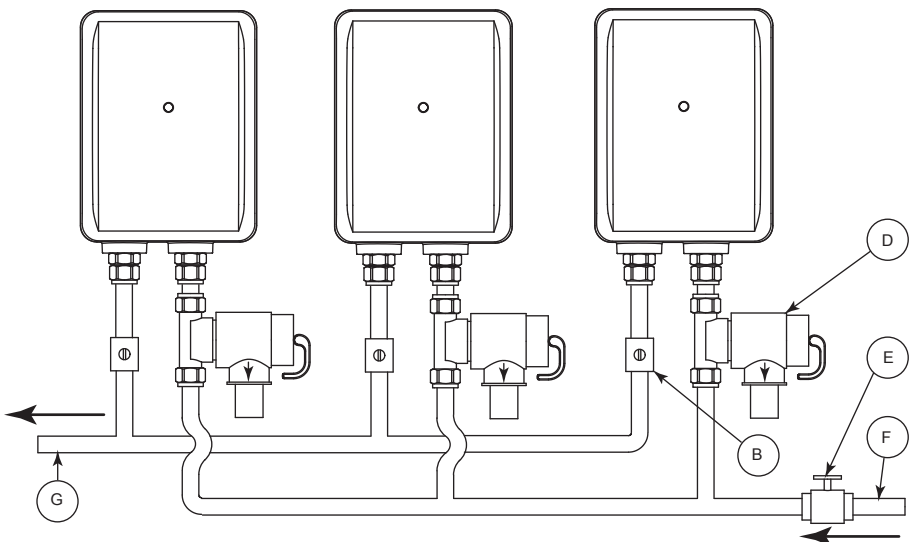


Figure 6

7. Commissioning

7.1 General

After installing the product in the previous section please follow the following steps to complete the installation.

7.2 Checklist before commissioning

Check all water connections for leaks and rectify as necessary.

7.3 Commissioning procedure

Setting flow rate

To set the flow rate, make sure the water and power are turned off. Open the outlet valve fully (see figure 3, add page number) and close the flow restrictor. Open the stop valve and open the flow restrictor (allowing all air to be purged). When all air is purged switch the power on, wait for a few seconds while the water is heated and adjust the flow restrictor to give the required temperature.

Remember the outlet valve is fully opened at this point so the required temperature may need further adjustment.

It is important to note when setting the flow rate/temperature that 48°C is the point at which the average person cannot hold his or her hand under a stream of water. Under most circumstances the water temperature need not be higher than this and it is recommended that this temperature is not exceeded for normal use.



WARNING

These heaters will supply only one outlet at any time and must be controlled by a single outlet valve. DO NOT USE WITH MIXER VALVES.

8. Operation

8.1 General

Once installed, the heater will operate automatically when the outlet valve is opened. The valve must be opened fully to obtain the set flow/temperature. Reduced flow at the outlet will result in hotter water being delivered.

On closing the outlet valve the heating element will automatically shut down provided this tap has been fully turned off by the user.

9. Troubleshooting

9.1 General

Your product should give trouble free operation. However if a problem occurs the table below should allow most faults to be identified. Fault finding should only be carried out by a competent person.

For any faults that cannot be identified using the fault finding chart please contact the Heatrae Sadia Service Department.

Symptom	Possible cause	Remedy
1. Water too hot	A. Water flow too low	Increase the flow by turning the stop valve
2. Water too cold	A. Electrical power to the Multipoint heater is off	Ensure that the electrical supply to the Multipoint
	B. Water flow too high	Reduce the flow by adjusting the water control isolating valve
	C. Element fault	Check for open circuit
3. Hot Water Temp Fluctuates	A. Pressure switch is operating, normally making a "click" as it does so	Check water pressure/flow
	B. Input pressure is below 1.0 bar (14.5psi); flow is not stable	Ensure that your stop cock and servicing valve are opened fully
4. "Power on" indicator not lit. Isolating switch "ON" but its neon not lit	A. Cartridge fuse or miniature circuit breaker (mcb) has operated in your fusebox (or consumer unit) or switch fuse	Switch off Multipoint Instantaneous and isolating switch. Renew fuse, reset the mcb. If they operate a second time, contact a qualified electrician
	B. Residual current device (rcd) or (earth leakage circuit breaker) has operated	Follow the same procedure as above. If this has happened with a "split load" consumer unit on initial installation, check that the neutral core of the Multipoint Instantaneous feed cable is connected to the "protected" neutral bar of the unit
5. Water emerges from expansion relief valve	A. Expansion relief valve has operated	1. Switch off immediately at isolating switch 2. Turn water off at the servicing valve (if fitted) or stop valve 3. Contact Heatrae Sadia Service Department
6. No water flows with valve open	A. Water supply turned off	Turn on water supply
	B. Unit frozen	Turn OFF ELECTRICITY at isolating switch and contact installer DO NOT USE THE MULTIPOINT INSTANTANEOUS

10. Decommissioning

10.1 Decommissioning procedure

- ▶ Isolate electrical supplies and make safe
- ▶ Isolate the water supply
- ▶ Drain the product
- ▶ Remove the product
- ▶ Cap pipework

Environmental information

Products are manufactured from many recyclable materials. At the end of their useful life they should be disposed of at a Local Authority Recycling Centre in order to realise the full environmental benefits.

Disposal of Waste Equipment by Users in Private Household in the European Union.



This symbol on the product indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the company where this product was purchased.

11. Spare parts

The following comprehensive list of spare parts is available for your product. Please refer to the rating label on the right hand side of your product before ordering to ensure the correct spare parts are obtained.

Do not replace with parts not recommended by Heatrae Sadia - this will invalidate your warranty and may render the installation dangerous.

	Description	Code No
1	Heat Exchanger 7kW	95 606 965
	Heat Exchanger 9kW	95 606 966
2	Temperature limiter 1	95 612 035
3	Temperature limiter 2	95 612 036
4	Pressure differential switch assembly 7/9kW	95 613 005
5	Multipoint instantaneous cover	95 614 108
6	Neon assembly	95 615 058
7	Inlet boss assembly	95 607 106
8	Outlet boss assembly	95 607 109
9	Terminal Block	95 607 249
10	Relief valve and T piece (not shown)	7724178

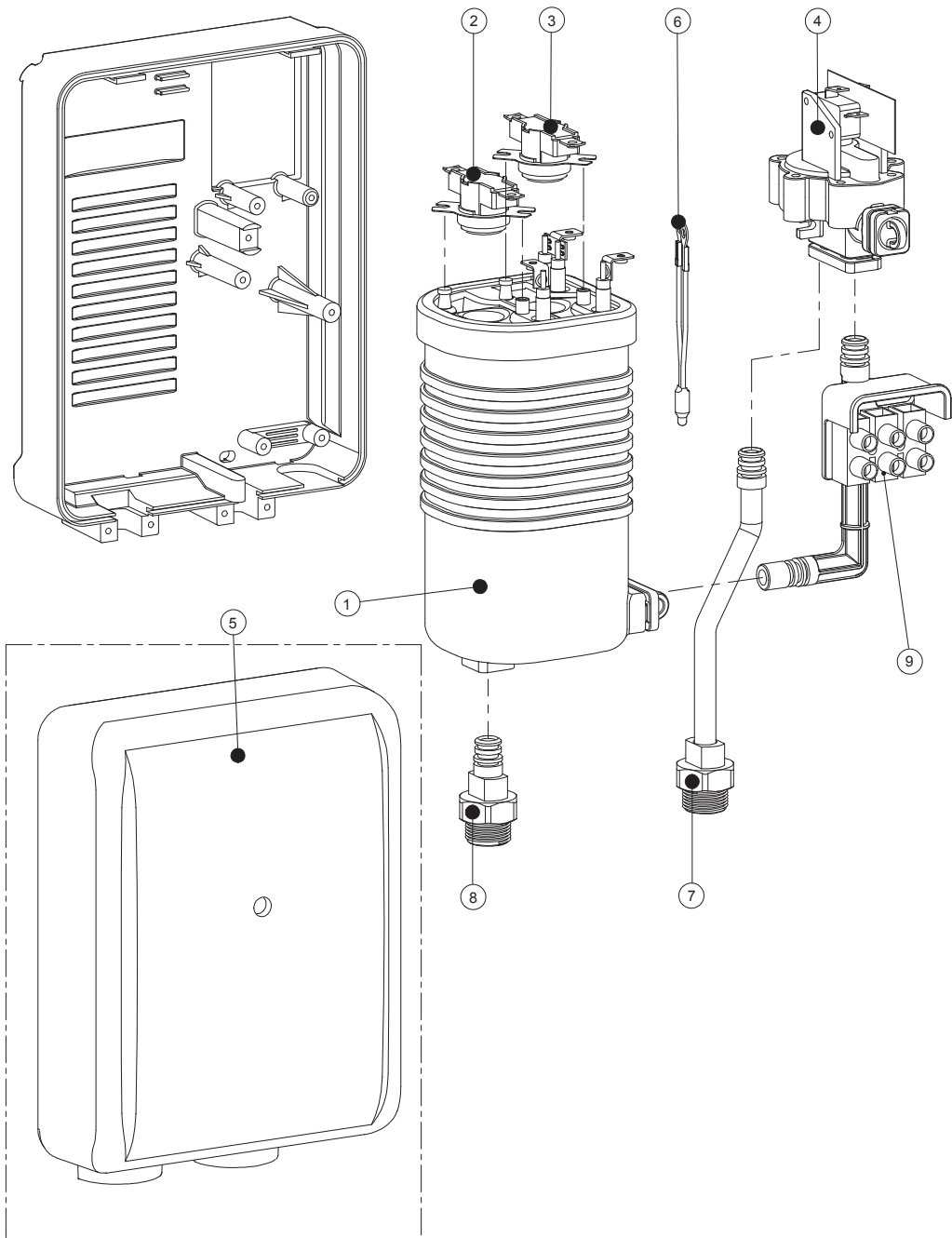


Figure 7

Warranty

The product warranty is for a period of two years from the date of purchase provided:

The product has been installed in accordance with these instructions, all relevant Codes of Practice and Regulations in force at the time of installation and that all necessary inlet, vent and electrical connections have been fitted correctly.

Any valves or controls are of the Heatrae Sadia recommended type.

The product has not been tampered with.

The product has been used only for heating potable water.

The product is not covered against damage by frost or due to the build-up of scale. Please note that if Heatrae Sadia personnel or agents are requested to descale a unit, this work will be chargeable.

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

The policy of Heatrae Sadia is one of continuous product development and, as such, we reserve the right to change specifications without notice.

HEATRAESADIA

SMARTER | CLEANER | WARMER

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Parts Center

Tel: 0344 292 7057
www.partscenter.co.uk

Newey & Eyre

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Tel: 01454 620500

Alternatively contact your
local supplying merchant
or wholesale branch or use
our online stockist finder at
www.interpartspares.co.uk

Please follow us online:



SPECIFICATION ADVICE HOTLINE

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w | heatraesadia.com



OUR NATIONWIDE NETWORK OF CUSTOMER SUPPORT ENGINEERS

Heatrae Sadia has its very own dedicated nationwide network of highly trained customer support engineers so you can have peace of mind that we're always here to help.

PRODUCT RANGE

Full specification details on all our products are available to download from our website.

To support our corporate responsibility and sustainability charters and reduce our printed material we encourage you to download product brochures from our website.

In designing these files we have taken into account the need to access data on screen.

If you would like to receive a printed copy of our full product catalogue please call our literature hotline on 01603 420127.

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