

# Unvented point of use hot water







Many different types of large commercial and industrial organisations need a reliable supply of hot water for up to 10 basins or sinks – and we have developed the Multipoint range specifically to meet this demand.

Multipoint can be adapted to suit standard or mixer taps and fed from the mains water supply provides high hot water flow rates. Flexibility when it comes to siting means there is no requirement for a cold water cistern.

With the best possible performance, long-term reliability and corrosion-resistance in mind, our designers specify high-grade copper for the Multipoint's inner container. Using copper for this key component also means we don't have to fit a sacrificial anode – avoiding the need for the hassle and expense of regular inspections and replacement. In addition, copper is better than lower grade materials at withstanding shock and vibration during delivery, installation and maintenance.

The complete confidence we have in the quality of Multipoint's design and materials is proven by its five year inner container guarantee with on-site service support.



# Multipoint 10 and 15

Multipoint is the market-leading range of small unvented water heaters and is ideal for any situation where a single heater is required to service the needs of multiple outlets. Multipoint is supplied with a factory-fitted temperature and pressure relief valve, is quick and easy to install and is offered in a wide range of capacities and ratings.

- 10 and 15 litre capacities.
- Choice of 3kW and 4.5kW ratings.
- Replaceable long-life alloy sheathed element.
- Externally adjustable thermostat from 10°C to 70°C max. Lockable in hot or mid-range position.
- CFC/HCFC free (ODP zero) flame-retardant expanded polystyrene.
- Element 'On' indicator.
- No anode to inspect or replace.
- Suitable for use with any standard mixer or tap.
- Fitted with 1 metre of 3-core cable.
- Comprehensive installation instructions.

- IPX4 rated.
- Kiwa approved to UK Water Supply Regulations. CE marked.
- Five year inner container guarantee with on-site service support.

#### Accessories supplied with all units

- Factory-fitted temperature and pressure relief valve.
- Easy-fit wall-mounting bracket.
- Discharge funnel (tundish).
- Service valve.

### Optional accessories

See pages 8 and 9.





# Multipoint 30 and 50

Multipoint 30 and 50 are ideal for commercial applications such as cloakrooms, kitchens or washrooms, where a single heater is required to service multiple draw-offs. The 50 litre product may also be used for single point showering.

Versions of both products are available with 1kW elements for use in locations where electrical loading is restricted (horizontal unit 3kW only).

Multipoint 30 and 50 are supplied complete with necessary installation accessories. A thermostatic blending valve can also be used. See page 9 for details.

As with all unvented units above 15 litres, it is a Building Regulation requirement that installers are competent to install Multipoint 30 and 50 litre units. This normally means having successfully completed a course in unvented systems. For details on training courses call 0845 600 7402 or 01362 853091.

- 30 and 50 litre capacities.
- Choice of 1kW and 3kW ratings.
- Horizontal versions available.
- Factory-fitted temperature and pressure relief valve.
- Heavy gauge copper inner container.
- Replaceable long-life alloy sheathed element.
- Externally adjustable thermostat from 5°C to 75°C maximum – lockable in hot or mid-range position.
- CFC/HCFC free (ODP zero) insulation.
- Element 'On' indicator.
- No anode to inspect or replace.
- Suitable for use with any standard mixer or tap.
- Fitted with 1 metre of 3-core cable.
- IPX4 rated.

- Comprehensive installation instructions.
- Kiwa approved to UK Water Supply Regulations. CE marked.
- Five year inner container guarantee with on-site service support.

### Accessories supplied with all units

- Easy-fit wall-mounting brackets.
- Discharge funnel (tundish).
- Combined pressure reducing valve with built-in strainer.
- Expansion vessel and fixing bracket(s).
- Pressure relief (expansion) valve.

### Optional accessories

TMV2 and TMV3 thermostatic blending valves – see page 9.



# Multipoint 75 and 100

Ideal for commercial applications such as cloakrooms, kitchens or washrooms, where a single heater is required to service multiple draw-offs. Both products may also be used for single point showering and are available with 6kW rating (2x 3kW elements) for use in locations where faster hot water recovery is required.

As with all unvented units above 15 litres, it is a Building Regulation requirement that installers are competent to install Multipoint 75 and 100 litre units. This normally means having successfully completed a course in unvented systems. For details on training courses call 0845 600 7402 or 01362 853091.

- 75 and 100 litre capacities.
- Choice of 3kW and 6kW rating.
- Factory-fitted temperature and pressure relief valves.
- Twin heavy gauge copper inner containers.
- Replaceable long-life alloy sheathed elements.
- Adjustable thermostats from 5°C to 75°C maximum.
- Suitable replacement for cistern-type water heaters where improved water flow is required.
- CFC/HCFC free (ODP zero) insulation GWP 3.1 (Global Warming Potential).
- Element 'On' indicator.
- No anodes to inspect or replace.
- Suitable for use with any standard mixers or taps.
- Fitted with 1 metre of 3-core cable.
- Comprehensive installation instructions.

- Kiwa approved to UK Water Supply Regulations. CE marked.
- Five year on-site parts and labour inner container guarantee with on-site service support.

# Items supplied factory fitted to 75 and 100 litre models

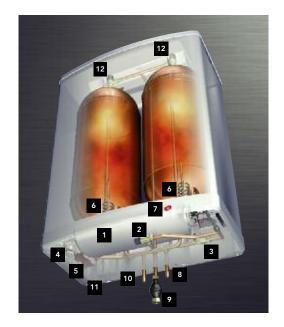
- Expansion vessel.
- Pressure relief (expansion) valve.
- Temperature and pressure relief valves.

### Items supplied loose

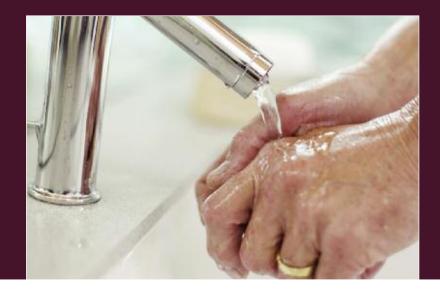
- Combined pressure-reducing valve with built-in strainer.
- Tundish.
- Mounting brackets.

#### **Optional accessories**

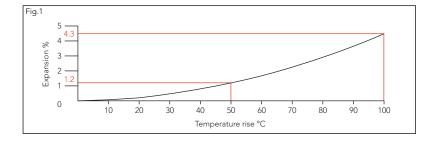
 TMV2 and TMV3 thermostatic blending valves – see page 9.



- 1 Expansion vessel.
- 2 Pressure relief valve.
- 3 Non-return valve.
- 4 Thermostats.
- 5 Safety cut-outs.
- 6 Element plate assemblies.
- 7 Element.
- 8 Inlet.
- 9 Discharge.
- 10 Outlet.
- 11 Cable entry.
- **12** Temperature and pressure relief valves.



Water expands by up to 4% when heated (see Fig. 1). This means that the design of the water heater and the installation in which it is used are critical. Conventional (vented) and unvented systems allow for expansion in different ways.



With unvented systems there are no cistern tanks or open outlets to accommodate expansion. All systems above 15 litre, and some systems of 15 litre or less, employ an expansion vessel or an internal air-gap to accommodate expansion.

With larger systems (above 15 litre) expansion is accommodated either by a separate expansion vessel or an internal air-gap. Multipoint 75 and 100 litre units use an expansion vessel which is supplied factory fitted within the casing. All units above 15 litres are supplied complete with all the necessary components and controls to provide a safe and efficient method of providing stored mains pressure hot water in compliance with the latest building regulations.

**High-grade copper** is used for the Multipoint inner container because of its optimum performance in terms of durability and corrosion resistance. Copper requires no sacrificial anode and therefore avoids the need for regular inspection and replacement. Unlike other lesser grade materials, it also withstands shock and vibration during delivery, installation and maintenance.

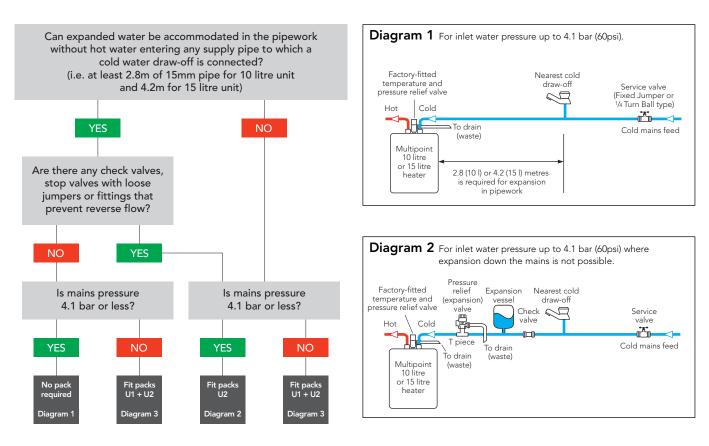
## **Building Regulations**

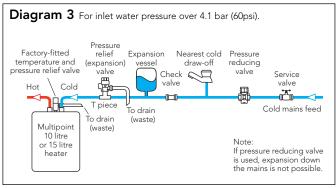
Direct connection to the cold mains supply has been permitted in the UK since 1987. All units above 15 litres must be installed to meet the requirements of the Building Regulations. It is a legal requirement that the local Building Control Officer is notified of any proposed installation of unvented water heating systems over 15 litre capacity. Products up to 500 litres and 45kW must be approved by a recognised body such as kiwa and be fitted by an installer who has successfully completed a recognised course in the installation of unvented heating systems such as those offered at our in-house training centres. Call 08456 007402 for further information.

Requirements call for an expansion space (internal or external), safety devices to prevent the stored water exceeding 99°C, and pipework to convey discharged hot water safely away from the safety devices.

# Accessories

# Multipoint 10 and 15





## Multipoint 10 and 15

A full range of accessories are available for installation with Multipoint 10 and 15. These are supplied as accessory packs.

Thermostatic blending valve, Pack U3 (TMV2) and Pack U7 (TMV3), can also be used with Multipoint 30 and 50 litre units.

When installing small unvented water heaters, it is essential that the correct accessory packs are used. The selection guide on page 8 indicates the appropriate pack(s) for different heaters and situations.

If the expansion in the cold main is restricted, for example by a stop valve, check valve or water meter, an accessory pack which includes an expansion vessel must be fitted. See diagrams 2 and 3 on page 8.

A knowledge of the maximum incoming water pressure is an essential requirement prior to installation; where this is not known the local Water Authority should be consulted.



# Pack U1 – Combined pressure reducing valve and strainer

The pressure reducing valve limits water pressure to 3.5 bar (50 psi).

The strainer filters coarse impurities from the water supply.

Connection 1/2" BSP female.

Installation Pack U1 must be installed on the cold inlet side of the heater and before the expansion vessel. Where possible, installation should be on the mains side of the cold water tap draw-off. This will result in balanced water supplies and is particularly important when mixers are to be used.

Pack U1 must be used with Pack U2.



# Pack U2 – Expansion vessel and check valve

The expansion vessel when fully charged, will absorb all expanded water produced by the

Hotflo heater during normal operation. Connection 1/2" BSP male; precharged 4.1 bar. The check valve prevents backflow of hot water and eliminates any possibility of cross-

contamination between cold and hot water. Connections 15mm compression.

**Installation** Pack U2 must be fitted on the inlet side and in close proximity to the heater as shown in diagram 2 and 3 on page 8.

### All Multipoint models

Thermostatic blending valves allow water to be stored at high temperatures and blended with cold water to a preset outlet temperature.

This provides over-temperature protection, and is ideal for the control of Legionellae and the extension of system capacities.



### Pack U3 – TMV2

Connection 15mm compression.

Allows water to be safely stored above 60°C. Precisely controls outlet water temperature (range from 35°C to 60°C).

Lockable control knob.

Fail-safe shutdown.

Incorporates check valves to prevent cross contamination.

Operating pressure from 0.2 bar to 6.0 bar.



### Pack U7 – TMV3

Connection 15mm compression.

Fully approved under the TMV3 scheme to the DO8 specification.

Allows water to be safely stored above 60°C. Precisely controls outlet water temperature (range from 38°C to 46°C).

Unique adjuster key to prevent unauthorised temperature adjustment.

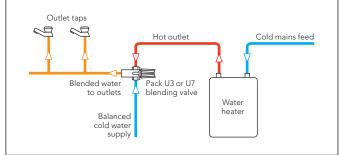
Fail-safe shutdown.

Incorporates check valves to prevent cross contamination.

Operating pressure from 0.2 bar to 5.0 bar.

#### Installation diagram and advice

Heatrae Sadia offers a dedicated Specification Advice Team to provide information and advice on specification and installation. This is supported by a fully-trained national sales team, all of whom are qualified to provide further guidance and support locally.



# **Full specifications**

## Specification

Capacities 10, 15, 30, 50, 75 and 100 litre.

#### Rating

Multipoint 10 and 15 3kW, 4.5kW @ 240V (2.8kW, 4.1kW @ 230V). Multipoint 30 and 50 1kW<sup>+</sup>, 3kW @ 240V, (0.9kW<sup>+</sup>, 2.8kW @ 230V). Multipoint 75 and 100 3kW @ 240V (2x 1.5kW), (2.8kW @ 230V (2x 1.4 kW)). 6kW @ 240V (2x 3kW), (5.6kW @ 230V (2x 2.8 kW)).

#### Outer casing

Multipoint 10 and 15 – White plastic top moulding with steel base and centre section finished in white stove enamel.

Multipoint 30, 50, 75 and 100 - White plastic top and base mouldings with steel centre section finished in white stove enamel.

#### Thermal insulation

Multipoint 10 and 15 – CFC/HCFC free (ODP zero) flame-retardant expanded polystyrene. Multipoint 30, 50, 75 and 100 - CFC/HCFC free (ODP zero) flame-retardant expanded polyurethane.

#### Water container

Multipoint 10 and 15 - Replaceable heavy gauge copper inner container, designed for 6 bar (87psi) working pressure and type tested to 20 bar (290 psi). Multipoint 30 and 50 - Heavy gauge copper. Type tested to 20 bar (290 psi).

Multipoint 75 and 100 – 2x heavy gauge copper inner containers. Type tested to 20 bar (290 psi).

#### Heat unit

Replaceable, alloy sheathed rod-type element.

#### Thermostat

Multipoint 10 and 15 - Rod-type externally adjustable from 10°C to 70°C, lockable in hot or mid-range position.

. Multipoint 30, 50, 75 and 100 – Capillary-type, externally adjustable from 5°C to 75°C.

#### Safety features

Multipoint 10 and 15 - Factory-fitted temperature and pressure relief valve opens at 7 bar (100 psi) or 90°C. Resettable over-temperature cut-out.

Multipoint 30, 50, 75 and 100 - Manually re-settable thermal cut-out. Factory-fitted temperature and pressure relief valve set to operate at 7 bar and 90°C.

#### Anode

Not required.

#### Approvals

Kiwa approved to UK water supply regulations. CE marked. Manufactured in the UK in a BS EN ISO 9001:2008 registered factory.

#### Electrical

The unit must be permanently connected to the electrical supply through a double-pole linked switch with minimum breaking capacity suitable for the loading. Must conform to current IEE wiring regulations.

† Vertical models only.

### Installation

Multipoint 30, 50, 75 and 100 must be installed by a competent person in accordance with local Regulations.

England and Wales – Building Regulations G3, Scotland - Technical Standards P3, N. Ireland – Building Regulations P5.

Fixing Multipoint 10 and 15

Must be mounted in the vertical position with inlet / outlet at the top. Floor or wall-mounted (three screws / easy-fit wall bracket).

#### Fixing Multipoint 30 and 50 vertical units

Must be mounted in the vertical position with inlet/outlet at the bottom. Temperature and pressure relief valve fitted to the top of the heater. Wall-mounted by easy-fit wall bracket and spacers (supplied).

#### Fixing Multipoint 30 and 50 horizontal units Must be mounted in the horizontal position with the

inlet and outlet to the right of the heater. Temperature and pressure relief valve fitted to the left of the heater. Wall-mounted using brackets (supplied).

#### Fixing Multipoint 75 and 100

Mounting brackets supplied loose. Must be mounted in the vertical position with inlet/outlet at the bottom. Temperature and pressure relief valves factory fitted to the top of the heater.

#### Plumbing

Minimum water pressure 0.8 bar (12 psi). Multipoint 10 and 15 pressures above 4.1 bar (60 psi), Packs U1 and U2 must be used.

Multipoint 30 and 50 accessories supplied with all units. Multipoint 75 and 100 discharges from tundish 22mm compression.

#### Connections

Heater – 15mm copper tube tails. Tundish – Inlet –  $\frac{1}{2}$ " BSP male; outlet –  $\frac{3}{4}$ " BSP female. Service valve - 15mm compression.

#### Safety valve discharge

Multipoint 10 and 15 the temperature and pressure relief valve must be plumbed to discharge in a safe visible location.

Multipoint 30 and 50 temperature and pressure relief valve and expansion valve must be plumbed to discharge in a safe visible location in accordance with the local regulations stated above (tundish supplied).

### Optional thermostatic blending valve

Accessory Pack U3 and Pack U7 (see page 9) allows water to be stored at high temperature and blended with cold to a preset outlet temperature.

#### Electrical

The unit must be permanently connected to the electrical supply through a double-pole linked switch with minimum breaking capacity suitable for the loading. Must conform to current IEE wiring regulations.

### Accessories (supplied with all units)

Tundish and service valve.

### Guarantee

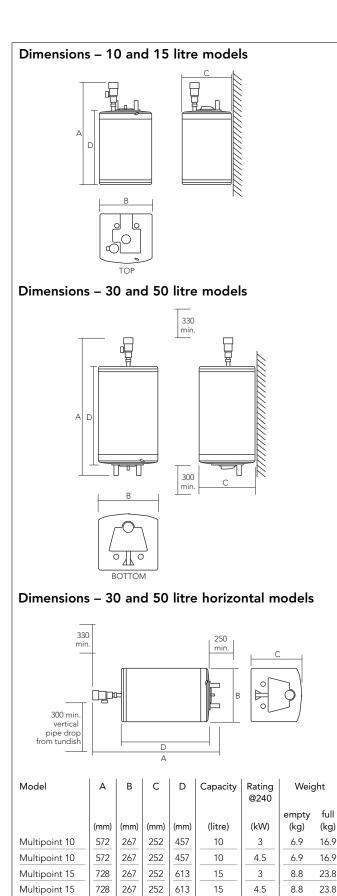
Multipoint is guaranteed for a period of five years and its immersion heater and thermal control for a period of two years from the date of purchase against faulty manufacture and materials provided that:

- It has been installed in accordance with the instructions contained in the installation manual and all relevant Codes of Practice and Regulations in force at the time of installation.
- Any valves or controls are of the recommended type
- The unit has not been tampered with and has been regularly maintained as detailed in the fitting instructions
- It has been used only for heating potable water.
- Within 60 days of installation the user completes and returns the certificate supplied along with proof of purchase to register the product.

The unit is not guaranteed against damage by frost. The Multipoint immersion heater and thermal controls are guaranteed for a period of two years, from the date of purchase, with the exception of damage due to excessive scaling. Evidence of purchase and date of supply must be submitted. The guarantee will not be transferable. This guarantee does not affect your statutory rights.



# Dimensions and ordering



Multipoint 30V

Multipoint 30V

Multipoint 50V

Multipoint 50V

Multipoint 30H

Multipoint 50H

370 352

370 352

370 352 888

616

616

888

616

30

30

50

50

30

50

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3

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3

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69.3

69.3

42.5

69.3

788

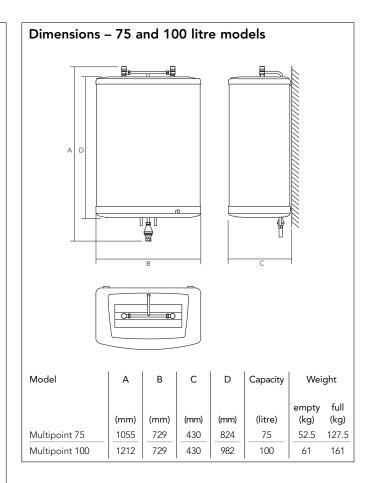
788 370 352

1060 370 352

1060 370 352 888

788

1060



# Ordering guide

Model	Rating @ 240V	Product code
	(kW)	
Multipoint 10	3	95:050:143
Multipoint 10	4.5	95:050:145
Multipoint 15	3	95:050:144
Multipoint 15	4.5	95:050:146
Multipoint 30V	1	95:050:152
Multipoint 30V	3	95:050:150
Multipoint 50V	1	95:050:153
Multipoint 50V	3	95:050:151
Multipoint 30H	3	95:050:154
Multipoint 50H	3	95:050:157
Multipoint 75	3	95:050:170
Multipoint 75	6	95:050:171
Multipoint 100	3	95:050:172
Multipoint 100	6	95:050:173

Supplied complete with external expansion vessel, combined pressure reducing valve and strainer, check valve, expansion valve, tundish and wall brackets.

Accessories ordering guide	
Model	Product code
Accessory pack U1 See page 9 for details	95:970:352
Accessory pack U2 See page 9 for details	95:970:351
Accessory pack U3 See page 9 for details	95:970:354
Accessory pack U7 See page 9 for details	95:970:360

# Contact

Specification Advice Hotline T: 01603 420220 F: 01603 420229 E: specifier@heatraesadia.com

### After Sales Service T: 0844 871 1535 F: 0844 871 1528 E: heatraesadiaservice@heateam.co.uk

Web www.heatraesadia.com

# heateam

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- Dedicated Trade Advice Line our helpful and qualified specialists are always on hand to help you with even the most complex technical query.
- Installer Priority Call-Outs our 280 strong team of specifically trained expert heating engineers covers the UK, no one is better qualified to look after Heatrae Sadia's products for the duration of the guarantee.
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# Simply call **0844 8711535** or visit our website at **www.heateam.co.uk**



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