

Instanta

SureFlow

Wall Mount series
WMS2 (WA2N), WMS5 (WA5N), WMS10 (WA10N) models



Table of contents

SECTION 1 Using these instructions	3
Before you start	3
Explanation of symbols	3
Introduction	
SECTION 2 IMPORTANT SAFETY INSTRUCTIONS	4
SECTION 3 WARNINGS & REGULATORY INFORMATION	5
SECTION 4 Technical data	7
SECTION 5 Parts supplied	8
5.1 Supplied parts checklist	8
5.2 Filter identification (optional)	8
SECTION 6 Installing the appliance	9
6.1 Positioning, ventilation and in cupboard arrangement	9
6.2 Wall mount the appliance	11
6.3 Push fit best practice	
6.4 Connect the water supply	
6.5 Connecting the mains water supply $\& {\sf vent} / {\sf overflow} {\sf to} {\sf the} {\sf appliance} .$	
6.6 Connect the electricity supply	
6.7 Refit the access cover	
6.8 Fit the tap	
6.9 Earth continuity test	
SECTION 7 Commissioning and operation	
7.1 Commissioning	
7.2 Operation	
SECTION 8 Maintenance	.24
8.1 Optional lime-scale filter	
8.2 Inspection and maintenance	
8.3 Cleaning	
SECTION 9 Troubleshooting	.27
9.1 Service warning & fault diagnostics	.27
9.2 Safety controls	.28
9.3 Taps	
Environmental information	.29
Warranty	.29
Wall mounting dimensions guide	30

SECTION 1 Using these instructions

Before you start



Read and use the instructions supplied with individual kit components for a safe installation.

Explanation of symbols



Read the



WARNING



Danger of electric shock



Hot surface

Introduction

Dear Customer,

Congratulations on the purchase of your Instanta appliance.

- Your new appliance is designed to give you years of trouble-free service provided that the instructions contained in this manual are followed.
- All new Instanta products are energy efficient, simple to operate and easy to service.
- Find out more about Instanta products at www.instanta.com.

SECTION 2 IMPORTANT SAFETY INSTRUCTIONS



Compliance

In the UK the system must be installed in accordance with water supply byelaws, current IEEE regulations and local authority byelaws.

Safety

This appliance is not intended for use by children under 8 years or persons (including children under 8 years) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Qualifications

To avoid hazards, all installation procedures must be carried out by a suitably qualified tradesperson. The power cable and power outlet must be in a safe visible position for connection.

Venting

Sometimes steam and / or boiling water droplets may discharge through the vent / overflow outlet on the appliance. Ensure that the vent / overflow is directed to waste via a 20mm air gap.

Lifting

Take care when lifting. The appliance may exceed safe lifting limits. If you feel this is beyond your personal capabilities, please seek assistance with the lift. Do not lift the appliance by the tap.

Airflow

The appliance operates within the ambient temperature range 5°C - 35°C. Proper air circulation must be provided. The system will operate satisfactorily only if the recommended air gaps are provided.

SECTION 3 WARNINGS & REGULATORY INFORMATION





- FOR CONTINUED SAFETY OF THIS APPLIANCE IT MUST BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- Learn The appliance must be earthed, earthing is provided via the power cable. The resistance of the earth connection to each exposed metal part must be less than 1Ω. It is the responsibility of the installer to ensure the power point is earthed.
- All installation and service work must be completed by trained and suitably qualified tradespeople. Faulty operation due to unqualified persons working on this product may void warranty coverage.
- Electrical installation must conform to current IEEE wiring regulations.
- When using fixed wiring, the bare section of earth must be sleeved to within 8mm of the end.
- As the installer, it is your responsibility to supply and install all valves as required by local regulations and relevant standards.
- The appliance is rated for 220-240V 50Hz AC operation.
- Do not remove the cover of the appliance under any circumstances without first isolating it from the power supply.
- Connect only to a potable (wholesome, cat1) mains water supply.
- The appliance is IP20 rated, it is not suitable for installation in an area where a water jet could be used. Do not expose the appliance to the elements of nature.
- A pressure limiting valve must be fitted for mains water pressures above the max. limits stated.
- Use of tools can be hazardous, assess the risks before you start.
- A clearance envelope around the appliance must be provided to allow adequate ventilation and service access for safe and effective use.
- Valve and fitting threads must be sealed appropriately with PTFE tape where compression seals are not provided. Do not over tighten plumbing and hose connections.
- The power cord and power outlet must be in a safe and accessible

SECTION 3 WARNINGS & REGULATORY INFORMATION

position after installation. When positioning the appliance, ensure the power supply cord is not trapped or damaged. If it is damaged it must be replaced by an Instanta service provider or a qualified electrician to avoid a hazard.

- For safe operation, the appliance is designed to be installed, commissioned and used within 48 hours. Should it not be required for an extended period of time (72 hours or more), do not fill and commission until ready for first use.
- For water taste and quality reasons, following any non-use period of more than 72 hours, Instanta recommends to perform a system flush.
 Failure to flush the system may affect water quality.
- For UK, this appliance only contains materials that conform to the requirements of BS6920:2014 'Suitability of non metallic materials and products for use in contact with water intended for human consumption with regard to their effect on the quality of water'.
- Instanta cannot be held responsible for any appliance malfunction if the water pressure exceeds that stated. If in doubt, consult your water supply company.
- Instanta cannot be held responsible for lime-scale related problems even when a lime-scale reducer has been installed.
- Whilst reasonable precaution is taken to prevent an overflow, Instanta cannot be held responsible for any damage caused as a result of incorrect installation or blockage of the overflow or failure to direct the overflow to a safe outlet.
- To meet WRAS installation requirements, an approved single-check valve providing back-flow prevention protection, should be fitted at the point of connection between the water supply and the appliance.
- Water that has been treated by the reverse osmosis process can become aggressive (due to lack of minerals or Ions), and in extreme cases can cause leaching and corrosion of pipes, fittings and other metal parts within the appliance.
- If the appliance is being fed by water treated by reverse osmosis,
 Instanta strongly recommend that the water is tested regularly.

SECTION 4 Technical data

4.1 Technical data table

Model	Unit	WMS2 (WA2N)	WMS5 (WA5N)	WMS10 (WA10N)		
Width	mm	254	290	340		
Depth*	mm	mm 187 205		247		
Height	mm	428	432	480		
Supply voltage	V	230V 50Hz AC	230V 50Hz AC	230V 50Hz AC		
Power rating	kW	2	3	3		
Power supply required		single phase	single phase	single phase		
Fill type		Automatic	Automatic	Automatic		
Capacity	L	2.5	5	10		
Rapid draw off	L	2.5	5	10		
Weight (empty)	kg	6.5	7.5	9.7		
Weight (full)	kg	10.5	14.7	22.7		
Ambient temp. range	°C	5 - 35				
IP rating		IP20				
Water supply pressure range	bar	2.0 - 7.0	2.0 - 7.0	2.0 - 7.0		
A weighted emission sound pressure	dB(A)	Less than 70				

Note *Depth measurement excludes tap protrusion (+85mm).



A pressure limiting valve must be fitted for mains water pressures above the max. limits stated above in accordance with local plumbing regulations.

4.2 Construction and functionality

- Outer casing and tank are constructed in type-304 and type-316 grade stainless steel. The tank is fully insulated with high-temperature polystyrene.
- The appliance has electronic control of the main functions. This means that the heating, filling and temperature are controlled precisely within given parameters.

Note Mains water isolation valve is not supplied with the kit. Contact us on 0345 6 005 005 for the full range of consumables and accessories.

SECTION 5 Parts supplied

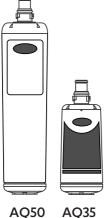
5.1 Supplied parts checklist

• Before starting installation check that you have the following parts.

Qty	Description					
1	Appliance & Tap kit					
3	Wall plugs and screws (to fix appliance to wall)					
2	M4 screws to fix appliance case to access cover					
1	Installation and user instructions					
1	Wall mounting template					
Filter kit (optional)						
1	AQ35 or AQ50 filter					
1	Filter head					
1	Install rail & Water block (optional)					
2	3/4"-3/8" push fit adapter					
2	1m length 3/8" blue JG flexible pipe					
2	Filter head mounting screws					
2	Filter head mounting wall plugs					
2	3/8" push fit elbow, to avoid tight tube bends					

5.2 Filter identification (optional)

For water purification and lime-scale prevention, the appliance can be
 supplied with either the AQ35 water



purification filter or the AQ50 lime-scale filter.

• The filter is identified on its front label.

6.1 Positioning, ventilation and in cupboard arrangement

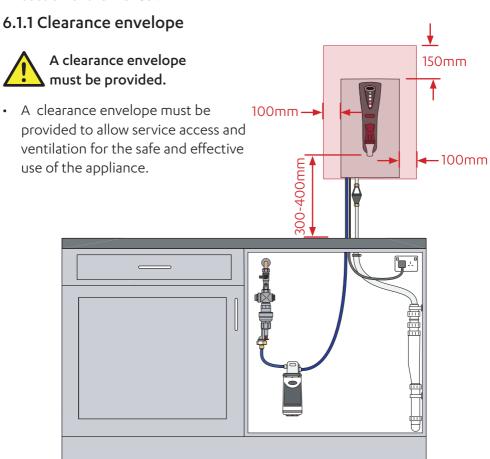


Use of tools can be hazardous, assess the risks before you start.



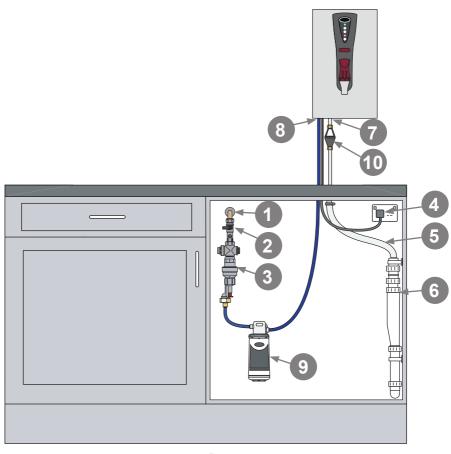
Use instructions supplied with individual kit parts.

- Install the appliance within reach of a mains wholesome (cat 1) water supply, and a 230V 50Hz mains electricity supply.
- Use the illustration below as a guide, and follow the steps through this section of the manual.



6.1.2 Installation layout

(inc optional Water block and lime-scale filter)



- 1 Mains water supply
- 2 Isolation valve & install rail
- 3 Water block
- 4 Mains electricity supply
- 5 Overflow / vent pipe

- 6 Waste to drain
- Overflow & vent
- 8 Mains water connection
- 9 Water filter
- 10 Tundish

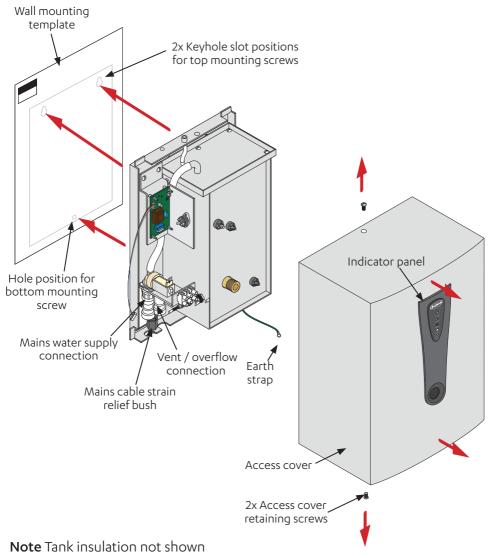
6.2 Wall mount the appliance



Be aware of the risks of hazards which could cause harm when using tools. Assess the risks before starting the installation.



Use the mounting template supplied.



- Identify a suitable position for the appliance.
- Ensure that the wall is sufficiently robust to support the appliance.
- Refer to the Technical data table, page 7 for weight of the appliance.
- Place the wall mounting template, supplied in position on the wall, and mark out the 2x keyhole-slot top mounting holes and 1x bottom mounting hole.



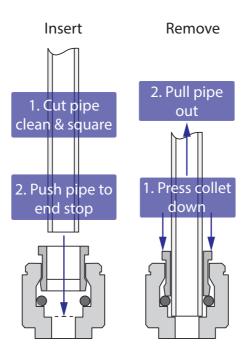


Check for concealed wiring and pipework behind hole positions. Do not drill unless satisfied that drill will not foul pipework or electrical cabling.

- Drill the holes.
- Insert wall plugs, and fix in top screws, leaving 6mm protruding.
- Remove the access cover retaining screws.
- Pull the cover forward to remove from the appliance.
- Hang the appliance to the wall with the top screws, and tighten to secure.
- · Insert and tighten the bottom screw.

6.3 Push fit best practice

· When using the optional filter kit.



6.4 Connect the water supply



Valves and fittings must be sealed with PTFE tape if compression seals are not included.

Water supply pressure range 2 - 7bar.



If the mains water pressure is below 2 bar a fault could arise. If the mains water pressure exceeds 7 bar a suitable water pressure reducing valve must be fitted. Failure to do so could result in the appliance overfilling.



To avoid damage, do not use any solder connections whilst pipes are connected to the appliance.

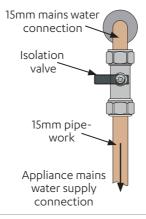
Instanta cannot be held responsible for any appliance malfunction if the water pressure is not within the range stated. If in doubt, consult your water supply company.



Use instructions supplied with the individual system components

6.4.1 Mains water connection (standard arrangement)

- Connect to a wholesome (cat 1) cold drinking water supply using 15mm copper pipe-work and brass compression fittings.
- A 15mm isolation valve must be fitted between the water supply and the appliance so that it can be isolated for service and repair.



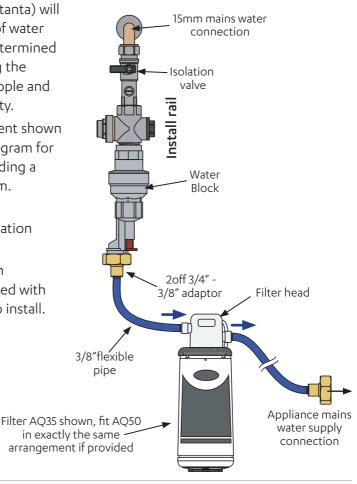
6.4.2 Mains water connection (optional)

(Filter, install rail & Water block arrangement)



Use instructions supplied with the individual system components.

- Water purification filters are available from Instanta to ensure fresh tasting water.
- In hard water areas, lime-scale can cause problems. Fitting a lime-scale reducer will help minimise lime-scale but will not eliminate it completely.
- Fitting a Water block
 (available from Instanta) will
 limit the amount of water
 flowing to a predetermined
 flow rate, lowering the
 risk of harm to people and
 damage to property.
- Use the arrangement shown in the adjacent diagram for water supply including a Water block system.
- See next page for Water block installation requirements.
- See the installation instructions supplied with the filter & head to install



6.4.3 Water block (optional)



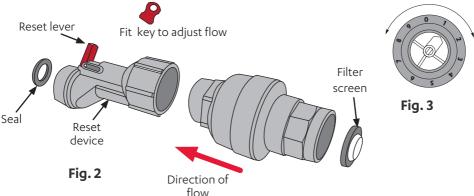


This device must be installed vertically with the direction of flow downwards (inlet at the top, outlet at the bottom. See Fig. 1.

Fig. 1

Direction of flow

- The Water block should be installed in a convenient location on the water supply line to the appliance.
- Rotate Pointer 'P' (see Fig.3) until in line with the max. required flow. The number scale corresponds to 5 litres of flow i.e. 1 = 5 litres, 10 = 50 litres.
- The key (see Fig.2) should be used to adjust the pointer.
- The inlet should be connected via a 15mm copper tail or install rail.
- The outlet shall be connected via the 3/4" 3/8" push fit brass fitting supplied.
- Ensure that the direction of flow through the Water block is correct and that the filter screen (see Fig.2) is inserted correctly with the convex surface facing towards the water supply.



6.4.4 Reset Procedure

- The Water block will activate and shut off the supply if more water than the set amount is drawn off at one time.
- In this event isolate the water supply to the Water block.
- Identify and repair the leak then press the reset lever (Fig. 2).
- Tripping issues, contact Technical support on 0345 6 005 005 for advice.

6.5 Connecting the mains water supply & vent / overflow to the appliance

- Connect the mains water supply (see page 14) to the appliance (15mm brass spigot) with brass compression fittings.
- If using the optional filter kit, use the fittings supplied in the filter kit (see page 15).

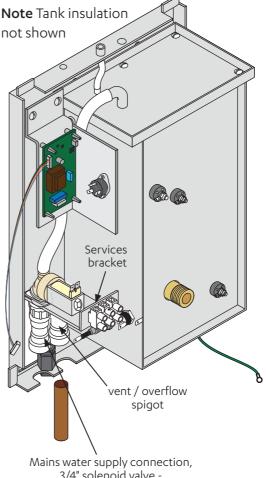
6.5.1 Vent overflow



Under certain conditions the overflow pipe could vent steam, hot water or

cold water. Instanta cannot be held responsible should damage occur from such discharge if the overflow pipe has not been directed to a suitable position where overflowing water can run away safely.

 Connect the brass vent / overflow spigot on the services bracket to drain with brass. compression fittings.



3/4" solenoid valve -15mm brass spigot

- The overflow drain pipe must have a continuous fall and should not be longer than 300mm (if a longer run is required, use 22mm pipe to avoid airlocks). The overflow pipe should have no more than four right angle bends and should discharge to a safe, visible position.
- For rear entry, use brass compression elbow connectors, and access through adjacent aperture in back panel.

6.6 Connect the electricity supply





Before you start, read:

Section 2 Important safety instructions.

Section 3 Warnings & Regulatory information.

Do not switch on the mains electricity supply until installation is complete, The system earth must be verified after access cover & tap are in place.

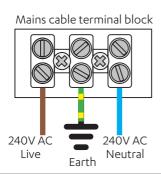
- The circuit should be protected by its own 13A double-pole connection unit with flex outlet to BS5733.
- Alternatively the circuit should have a means of disconnection incorporated in fixed wiring, having a contact separation of at least 3mm in all poles.
- Minimum cable size is 1.5mm².
 The use of an ELCB is recommended.

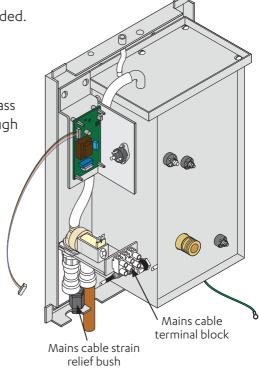
6.6.1 Mains cable installation

 Use the cable strain relief bush (see adjacent).

 Loosen cable-gripping nut and pass cable through bush, leaving enough free cable to connect to terminal block.

- · Tighten cable bush grip nut.
- Connect the cable to the appliance at the terminal block as shown below.

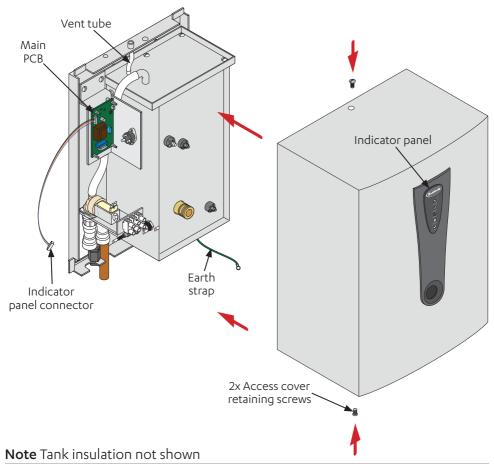




Note Tank insulation not shown

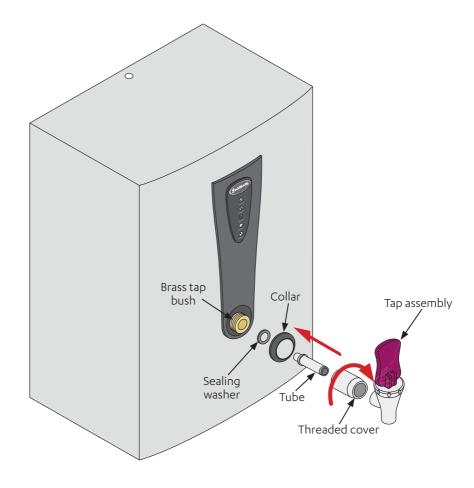
6.7 Refit the access cover

- A small silicone rubber vent tube connects the tank-lid to the back panel.
- Ensure this is connected (and hasn't come off in transit) and that the outlet fitting in the back-panel is not obstructed, see diagram below.
- Move the access cover close to the appliance.
- Attach the earth strap to the earthing stud on the bottom inside cover.
- Connect the indicator panel loom from main PCB to the indicator panel inside of the access cover.
- Place the cover over the appliance and secure with access cover retaining screws supplied.



6.8 Fit the tap

- Ensure rubber sealing washer is in place.
- Carefully screw the tap assembly onto the brass tap bush, leaving the tap upright, as shown below.
- Tighten in position with 28mm AF spanner.
- Do not use grips that are likely to scratch the chrome plating.
- Push the grey tap collar firmly into place and twist to snugly fit against the front panel.



6.9 Earth continuity test





All accessible metal parts must be earthed.

 After installation, the earth continuity must be checked. Use an insulation tester, appliance tester, DMM or continuity tester with an accuracy of Class 5 or better (±5% at full-scale deflection).



One probe connected to

the mains cable

earth wire

6.9.1 To test the earth continuity

• Isolate the appliance from the electricity supply.

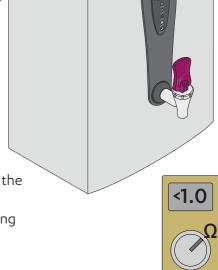
• Set the meter to the lowest ohms (Ω) scale and set to a reading of 0Ω with the meter probes connected together.

• Connect one of the meter probes to the earth wire of the mains cable.

 Connect the second meter probe to a bare patch of metal or a screw (the edge is best) on the appliance and read the display.

 Repeat with the second test lead touching the metal body of the tap.

- All readings should be less than 1Ω .
- If any of the reading are above this value, check the earth connection inside the appliance.



One probe connected

to chassis

DMM

SECTION 7 Commissioning and operation

7.1 Commissioning





Use with caution, the appliance dispenses near-boiling water.

- Turn on the water supply.
- · Switch on the mains power supply.
- The Indicators flash to signal that the start up sequence has begun.
- The white FILLING indicator illuminates.
- The appliance begins to fill with water.
- Once primed with water, the appliance begins to heat.
- The white HEATING indicator illuminates to show that the water is being heated to the correct temperature.
- When the correct temperature has been reached, the white HEATING indicator extinguishes and the green READY indicator illuminates.
- The appliance continues the heat/fill cycle until
 the tank is at full capacity (during the heat/
 fill cycle, small amounts of water are added
 to ensure the water at the tap is always at the
 correct temperature).



Indicator panel



In normal daily use, the appliance may be used as soon as the READY indicator comes on, but on first install, wait 15 minutes before starting to use.

SECTION 7 Commissioning and operation

7.2 Operation





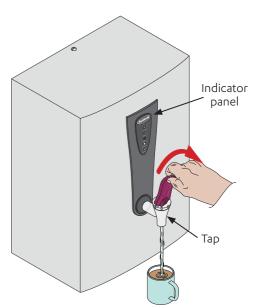
Use with caution, the appliance dispenses near-boiling water.

- Switch on and wait for the green READY indicator to illuminate.
- When the READY indicator illuminates the appliance will be at the correct temperature and ready to use.



Indicator panel

 Dispense water using the lever tap on the front of the appliance.



SECTION 8 Maintenance

8.1 Optional lime-scale filter

8.1.1 How to replace and flush the filter

Remove 2 AQ35 AQ50

- Turn off the isolation valve on the mains water supply.
- Turn off the power supply to the appliance.
- · Remove the old filter (see above).
- Be aware that some water may drip from the filter head.
- Remove the sanitary cap from the new filter, do not touch the connector.
- Moisten the new filter connector with clean tap water.
- Insert the new filter (see above).
- Turn on the mains water supply isolation valve.
- Turn on the power supply to the appliance.
- Dispense 10l of water from the tap to flush the filter.
- Wait for green READY indicator to illuminate before use.

SECTION 8 Maintenance

8.2 Inspection and maintenance



Regular inspection and preventive maintenance will ensure that the appliance functions safely and correctly.

Call us on 0345 6 005 005 to discuss on-site support and HydroCare plans.



After initial commissioning or subsequent re-commissioning (service-repair), check that the water supply has been established prior to switching on the appliance.

Lime-scale

- In hard water areas, the appliance should be de-scaled on a regular basis to maintain efficient operation, minimise energy consumption, and also retain water quality.
- The frequency of depends upon hardness of the local mains water supply and whether or not it is being treated by an effective scale reducer (strongly recommended – see below).
- The white DE-SCALE indicator will illuminate when the appliance needs to be de-scaled.
- Call us on 0345 6 005 005 to discuss on-site support and HydroCare plans.
- PREVENTION IS BETTER: Rather than frequently de-scaling the appliance it may be preferable to install an effective scale reducer or WRAS approved water softener to the mains water supply.



Indicator panel

- This will reduce the frequency of de-scaling but may not remove scale completely in some areas.
- Call us on 0345 6 005 005 to discuss filtration options.

SECTION 8 Maintenance

8.3 Cleaning







Do not use air-drying disinfectant sprays.

Do not use abrasive cleaning agents to clean the appliance. The appliance must never be located near or cleaned with water jets.

- To clean the appliance and tap, wipe surfaces with a damp cloth and then wipe dry with a clean, dry cloth.
- Do not use disinfectant sprays without wiping dry afterwards.
- This could cause permanent malfunction and void warranty.

SECTION 9 Troubleshooting

9.1 Service warning & fault diagnostics

The appliance is fitted with an intelligent fault diagnosing system and can detect certain fault conditions as follows:

Water starvation

The white FILLING indicator flashes to signal water starvation.

- This can be caused by the appliance not sensing a drop in temperature after opening the cold water valve a number of times or once the appliance has been switched on, the circuit has not sensed water on the bottom level sensor within 6 minutes.
- The most common cause is an interruption to the water supply usually following initial commissioning or subsequent re-commissioning after service / repair.
- Check the isolation valve.
- Ensure there are no kinks in the water supply hose.
- Check for debris in the mains water inlet.
- · Check for low mains water pressure.
- After the water supply returns to normal, the indicator will extinguish automatically.

Lime-scale build up

- The white DE-SCALE indicator flashes to indicate that the lower sensing probe has become scaled up.
- The appliance will continue to operate working on the upper level sensor.
- Call us on 0345 6 005 005 to discuss on-site support and HydroCare plans.

Over-boil or boil-dry safety cut-out activated

 The red RESET indicator flashes to indicate that one of the two safety cutouts have activated, see page 28.

Over-filling

 All indicators flash simultaneously to warn of that the appliance has overfilled.



Indicator panel

SECTION 9 Troubleshooting

9.2 Safety controls



Isolate appliance from power supply before removing the access cover or attempting any reset.

In certain circumstances, one of two different safety controls within the appliance may have activated.

The red RESET indicator will flash.

Over-boil safety cut-out

Activates if the appliance produces excess steam. This can be due to:

- Lime-scale within the tank.
- A temporary interruption in the water supply.
- A faulty temperature sensor or internal component (triac).

Boil-dry safety cut-out

 Activates if the appliance has been boiled dry, for example, due to limescale build-up or water starvation.

To reset appliance safety controls

- Switch off at the mains power supply and allow the appliance to cool down for ten minutes before switching back on (the safety device should automatically reset).
- If the boil-dry cut-out has activated, this will require a manual reset.
- Call us on 0345 6 005 005 to book a service call.

9.3 Taps

- Taps are subject to wear & tear but in the event of a tap failing within 12
 months of installation, we will be pleased to replace the tap assembly by
 post. Fitting is very simple and requires no tools. An engineer call out is not
 necessary.
- Fore accidental damage, misuse or use not in accordance with these instructions and damage caused by incorrect installation. The manufacturer disclaims any liability for incidental, or consequential damages.

Environmental information

Waste electrical and electronic equipment

- The symbol above means that according to United Kingdom and
 - European Union member countries laws and regulations, your product and/ or its battery shall be disposed of separately from household waste.
- When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product and/ or its battery at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.



Warranty

Warranty

- The appliance is guaranteed for two years from date of installation.
- Our guarantee includes on site labour and parts for problems caused by fault of manufacture and component failure with the following exclusions:
- Problems caused by hard water and lime-scale. We regret that we cannot be held responsible for problems caused by hard water.
- Accidental damage, misuse or use not in accordance with these instructions and damage caused by incorrect installation.
- The manufacturer disclaims any liability for incidental, or consequential damages.

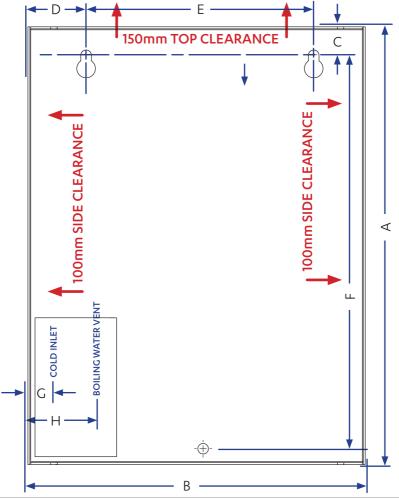
Wall mounting dimensions

Wall mounting dimensions guide



For reference, not to scale

	Dimension in mm										
ı	Model	Α	В	С	D	E	F	G	Н		
	WMS2	428	254	32	86	125	376	27	58		
	WMS5	430	290	22	86	165	390	28	60		
	WMS10	480	340	23	87	188	440	27	58		



Notes





Zip Water UK Instanta

Trafalgar House, Rash's Green, Dereham, Norfolk, NR19 1JG 0345 6 005 005

www.zipwater co.uk www.instanta.com

