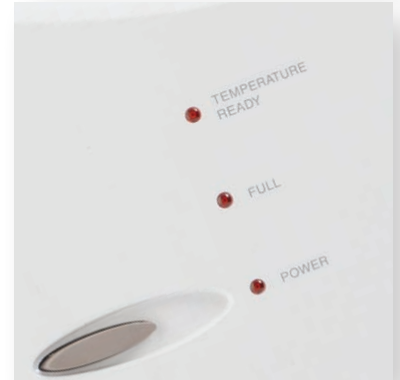


WATER



Water boiling,
and water heating solutions...

UK market leaders
in water heating
and water boiling
for over 45 years.






REDRING










Choose the right product for your application

We like to help customers every step of the way, which is why we've created handy product selector guides to help you find the perfect solution for your application.

Water Boiling Selector

	Page 05	Page 06	Page 07
			
	Sensaboil	SB2	Corvette
Auto fill	•	•	
Plastic tank		•	•
Stainless steel tank	•		
Wall mounted	•	•	•
White finish	•	•	•
Stainless steel finish	•		

Water Heating Selector

	Page 10	Page 11	Page 12	Page 13	Page 14	Page 15	Page 15	Page 16	Page 16
									
	Powerstream Ascari	MW/ EW	UWS	Flatback Cistern	WS7	Powerstream	Powerstream Eco	Instant Manual I3V	Auto AV3
Central heating	•								
Instantaneous						•	•	•	•
Multiple outlets		•	•	•		•	•		
Single outlet					•			•	•
Oversink mounting				•	•			•	•
Undersink mounting		•	•			•	•		
Unvented	•	•	•			•	•		
Vented	•			•	•				

What is a vented system?

A vented system has a cold water header tank directly feeding the hot water cylinder, and are vented through an open pipe within the system.

What is an unvented system?

An unvented system has the hot water cylinder fed directly from the rising cold main. This system has a series of pressure valves and is not vented through a vent pipe.



Why Choose Redring?

Redring have been UK market leaders in water heating and water boiling for over 45 years, with expert design, manufacturing and sales teams on hand to bring innovative market to homes. Our expertise and dedication is second to none and we work tirelessly to supply high quality products in a range of styles and designs to provide a solution for all applications.

We're a British Manufacturer

We pride ourselves on the fact that most of our products are produced in the UK at our state-of-the-art facility in Peterborough. Our commitment as a British manufacturer means that our products undergo extensive quality control measures to meet relevant British safety standards and provide superior solutions that perform to the high standard expected of us.



Mark Of Approval

Our products are tested and retested to ensure that they are of the upmost quality and in line with their specification before we make them ready for distribution. We only put our name on products when they have meet the relevant approvals and the high standard we insist upon.



Water Heating and Water Boiling

When specifying a water heater, you need to consider the use that the hot water is going to be put to. Redring have a comprehensive range of water heating products to suit all applications. Designed using the latest technology, the range covers both storage and point of use products.



keeping Britain refreshed

Sensaboil Automatic



Key Features

- 206 cups per hour
- Powerful 3.0kW (@240V) heating element for rapid heat up time
- Heats and dispenses water at 98°C
- Easy to use chrome tap with constant or controllable flow
- Touch controller with On/Off LED and 'descale now' warning LED
- Sturdy painted or stainless steel construction
- Designed for wall mounting in premises where countertop space is minimal
- 3, 5 and 7.5L tank capacities, ideal for a range of hot water requirements
- Manufactured in the UK
- 2 years parts and labour guarantee



Available in 3, 5 and 7.5L tank capacities

1 cup = 167ml*

206*
cups
per hour



Sensaboil Automatic

Automatic beverage water boilers

- Easy to operate via a patented chrome tap
- Stainless steel tank
- Delivers 206 cups of hot water per hour
- Auto fill and heat

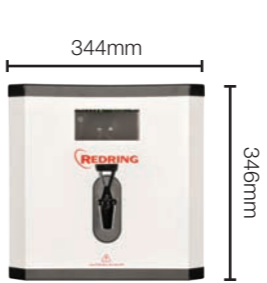
Initial draw off	3L	5L	7.5L
	20	34	51



Technical Specification

- kW loading at 240V: 3kW
- Water delivery temperature: 98°C
- Output per hour:
31 litres/55 pints/206 cups
- Fitted cable length: 2m
- Water inlet connection fitting 3/4" BSP
- Water feed hose length 2m
- Maximum inlet water pressure: 10 bar
- Voltage supply 230/240V 50-60Hz
- Boil dry thermal cut-out
- 3kW element for rapid heat up

Dimensions - 3 Litre



Dimensions - 5/7.5 Litre



Product Range

Product Ref.	Finish	Model	Cat No.
Sensaboil 3L	White	SB3W	22672801
Sensaboil 3L	Stainless Steel	SB3S	22672805
Sensaboil 5L	White	SB5W	22673801

Product Ref.	Finish	Model	Cat No.
Sensaboil 5L	Stainless Steel	SB5S	22673805
Sensaboil 7.5L	White	SB7W	22674801
Sensaboil 7.5L	Stainless Steel	SB7S	22674805

SB²

Beverage water boilers

- Delivers up to 154 cups of hot water every hour
- Auto fill and temperature control between 90 and 100°C
- Stainless steel sheathed heating element
- CFC-free insulation minimises temperature and energy loss

kW
2.2kW
RATING

154 CUPS



Key Features

- 2.5 litre tank capacity
- Scale trap feature
- 2 pipe entry points for easy installation
- Easy to turn dial to dispense water
- On/standby push button
- Power on, unit full and temperature ready LED indicators
- 2 year UK guarantee

Technical Specification

- kW loading at 240V: 2.2kW
- Wall mounted with rear or bottom plumbing connection via a standard 15mm compression fitting
- Fitted cable length: 1m
- Overflow/vent connection discharges to a suitable drain
- Maximum inlet water pressure 10 bar
- Voltage supply: 230/240V 50-60Hz

Dimensions



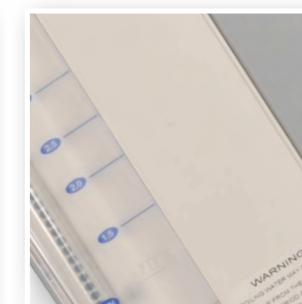
Product Range

Product Ref.	Finish	Model	Cat No.
SB2 2.5L	White	RSB2.5	22714401

Corvette

Wall kettles

- Permanently wired, ideal for oversink installations
- Optional plumbing in kit available
- Auto switch off at boiling point
- Can boil from 1 to 3.8 litres of water

kW
2.2kW
RATING

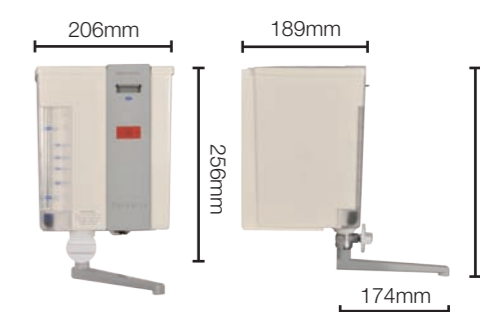
Key Features

- Quick and easy installation
- Easy to read water level indicator
- Optional Plumbing-In Kit allows permanent supply through cold water mains connection
- Supplied with 1m detachable hose for temporary connection to a tap
- Stainless steel base plate
- 2 year UK guarantee

Technical Specification

- kW loading at 240V: 2.2kW
- Electrical connection via a fused spur
- Water entry via filler hose supplied, optional plumbing kit, or manually
- Unit can be positioned over a sink or suitable outlet
- Fitted cable length: 1m
- Voltage supply: 230/240V 50-60Hz
- Supplied with cable tidy, wall mounting plate, wall fixing kit and 1m filler hose

Dimensions



Product Range

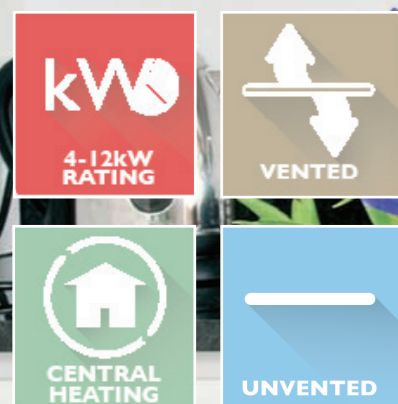
Product Ref.	Finish	Model	Cat No.
Corvette	White	CV1	28717201
Plumbing-in Kit	White		89716201
300mm Extended Length Outlet Spout	White		89716203

Plumbing-in kit includes inlet hose, inlet elbow, sealing washer, pipe clip and flanged jointing tube.

Powerstream Ascari

Central heating and hot water flow boilers

- Direct replacement for gas, oil, propane, solid fuel or electric storage heating*
- Suitable for sealed and open vented systems
- Suitable for unvented wet central heating and domestic hot water systems
- Compact design fits in most spaces



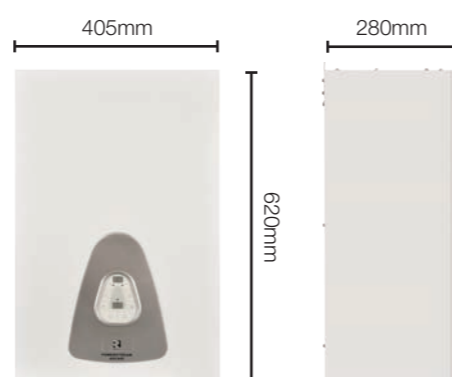
Key Features

- Integral circulation pump and expansion vessel
- Choice of 4, 6, 8, 10 or 12kW on installation
- Ideal for well insulated properties of up to 80m²
- 5 litre water storage for rapid response
- Stainless steel elements
- 3 year UK guarantee on tank and 2 year on components

Technical Specification

- Maximum power 4-12kW
- Includes 8 litre expansion vessel, 3 bar pressure relief valve and 3 speed pump for quick and easy install
- 7 segment digital displays of temperature and pressure
- Frost protection 5°C minimum temp
- Operating pressure 0.5 bar - 3 bar
- Top or bottom cable entry

Dimensions



Product Range

Product Ref.	Finish	Model	Cat No.
Powerstream Ascari	White	PSA12	45551860

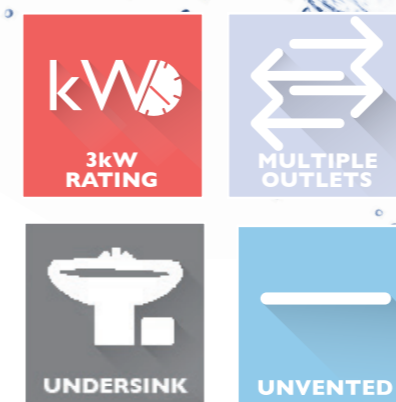
* Building Regulations apply

The Powerstream Ascari should be permanently connected to the electrical supply through a double linked switch with minimum breaking capacity for the loading. All wiring should conform to the current edition of the IEE wiring regulations.

MW/EW

Unvented water storage heaters

- Designed to provide stored hot water from a mains pressurised water supply
- Hot water supply for up to 4 outlets
- MW model supplied with factory fitted temperature and pressure relief device for installation protection safety



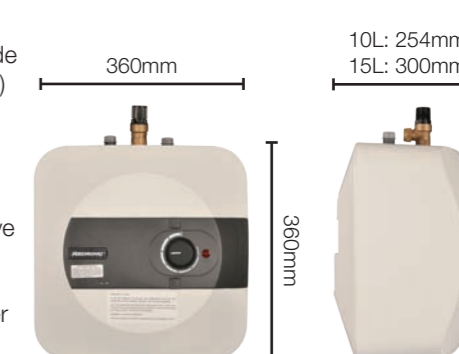
Key Features

- Balanced supply of hot and cold water
- Minimal heat loss and energy savings - short pipe runs and superior insulation
- Adjustable thermostat to 70°C
- Compact for undersink mounting
- Remote siting possible
- Over temperature safety cut-out
- EW supplied as unit only. Safety protection devices will be required relevant to the installation.

Technical Specification

- kW loading at 240V: 3kW
- Replaceable magnesium sacrificial anode
- Inlet/outlet connections 15mm (½" BSP)
- Fixing pack with wall mounting bracket supplied
- Long life Incoloy elements
- Needs to discharge to a drain
- Operating pressure 1 bar - 12 bar (above 6 bar use cold water pack)
- Foamed polyurethane insulation
- Vitreous enamelled steel water container

Dimensions MW/EW



Product Range

Product Ref.	Finish	Model	Cat No.	Product Ref.	Model	Cat No.
MW10 10 Litre Undersink	White	MW10	47782001	Temperature/Pressure Relief Valve	TPR	97783258
MW15 15 Litre Undersink	White	MW15	47782101	Thermostatic Blending Valve	TBV	87783103
EW10 10 Litre Undersink	White	EW10	47784501	Tundish	TUN	97783236
EW15 15 Litre Undersink	White	EW15	47784502	Optional Cold Water Pack	CWP	87783101



UWS

Unvented water storage heaters

- Effective and fast mains fed unvented water storage heater
- Small and compact enables undersink installation where space is limited
- Unique ohmic resistance for reinforced protection against corrosion
- High efficiency water inlet

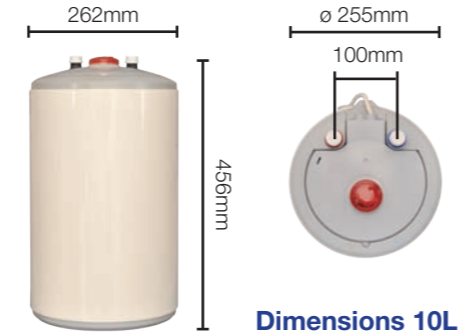


Key Features

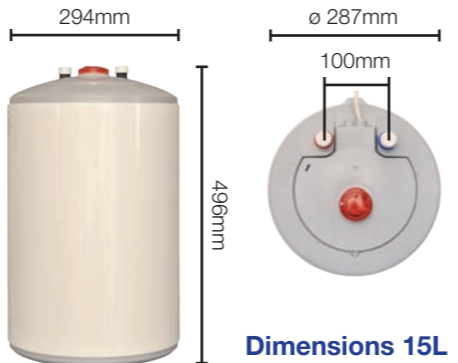
- High quality enamel lined tank
- Large magnesium anode
- CFC-free high density insulation foam
- Expansion relief valve
- Externally adjustable rod type thermostat with integrated security
- Indicator light when operating
- 1 year UK guarantee

Technical Specification

- kW loading at 240V: 2.2kW
- kW loading at 230V: 2kW
- Weight when full 10L: 17.5kg
- Weight when full 15L: 25kg
- Operating pressure: 1.5 bar - 6 bar
- 2 dielectric union
- Sheathed copper immersion element
- Electrical connection 230-240V AC 3kW (13 Amps) is required



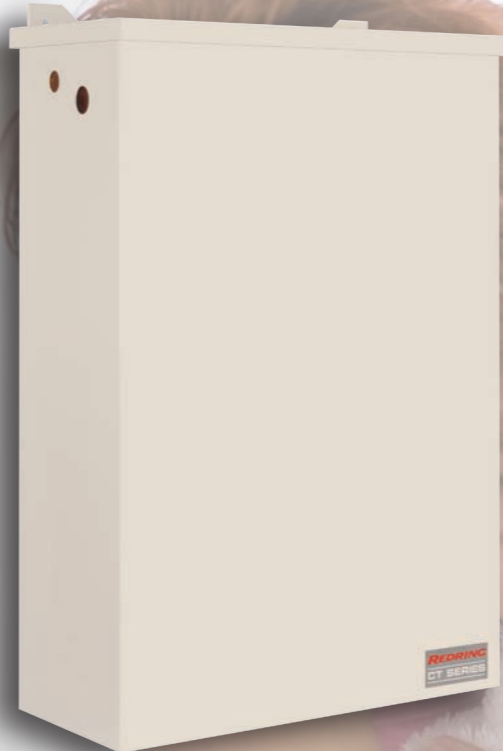
Dimensions 10L



Dimensions 15L

Product Range

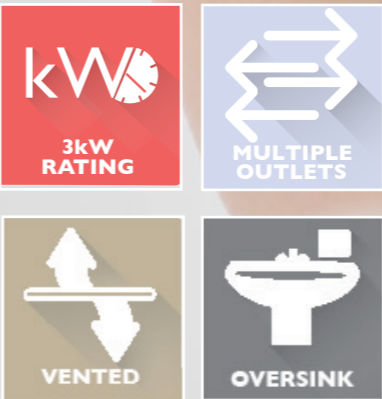
Product Ref.	Finish	Model	Cat No.
UWS 10 Litre	White	UWS10	47784570
UWS 15 Litre	White	UWS15	47784571
Optional Cold Water Pack		CWP	87783101
Tundish		TUN	97783236
Temperature/Pressure Relief Valve		TPR	97783258
Thermostatic Blending Valve		TBV	87783103



Flatback Cistern

Vented water storage heaters

- Wall mounted installation ideal for small commercial kitchens, bathrooms, cloakrooms and canteens
- Compact, multi-outlet water heating solution
- 1 adjustable thermostat and 1 high limit thermostat for extra control and safety
- Cold water cistern incorporated within unit

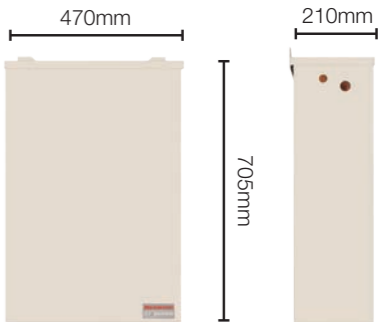


Key Features

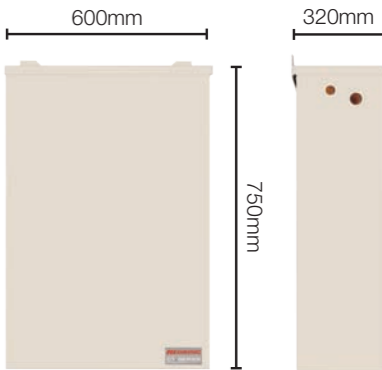
- Ideal for replacement (overflow and cold feed can be connected on the left or right hand side)
- 50 to 80°C thermostatic control range
- Drain connection supplied and fitted
- Overheat protection
- Long life Incoloy sheathed elements
- 2 year UK guarantee

Technical Specification

- kW loading at 240V: 3kW
- ½" BSP cold water and 22mm compression fitting hot water connections
- High density foam insulation
- Corrosion proofed steel, with enamel finish outer casing
- Copper sheathed water vessel with brazed seams
- Operating pressure 0.7 bar - 10 bar



Dimensions 25L



Dimensions 50L

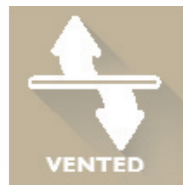
Product Range

Product Ref.	Finish	Model	Cat No.
Cistern 25 Litre	White	CT25	26786401
Cistern 50 Litre	White	CT50	26786801

WS7

7L vented water storage heaters

- An economical solution to provide stored hot water
- EcoT model contains an integral timer
- Minimal standing heat loss as they are installed at point of use
- 1kW model ideal for energy saving and 3kW model ideal for fast recovery and heat time



Key Features

- 7 litre capacity, point of use
- 300mm swivel spout included
- Wall bracket and full fixing pack supplied
- Can be mounted undersink using the monoblock chrome-mixer accessory
- Adjustable thermostat 15°C - 75°C with frost protection setting
- Integral safety over-temperature thermal fuse
- Optional tamper proof cover supplied
- 24 hour, 7 day programmable timer on WS7-EcoT model
- 2 year UK guarantee

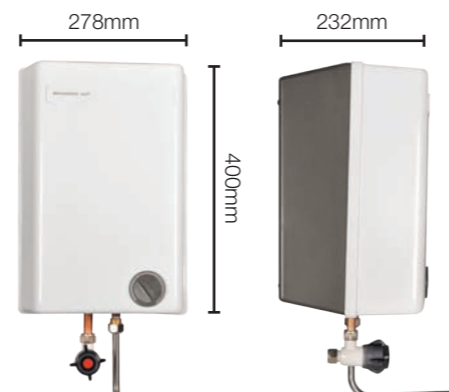
Product Range

Product Ref.	Finish	Model	Cat No.
WS7-EcoT 3kW	White	WS7-EcoT	44780005
WS7 3kW	White	WS73	44780001
WS7 1kW	White	WS71	44780002

Technical Specification

- kW loading at 240V: 1 or 3kW
- Cold water 15mm compression
- Outlet ½ BSP - swivel spout connection supplied
- Restrictors supplied to optimise flow rate
- High quality impact resistant ABS cover
- Sheathed heating elements
- Operating pressure 0.7 bar - 10 bar
- NB: we recommend the use of the Redring Vented Monoblock Mixer

Dimensions

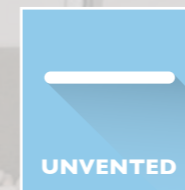


Product Ref.	Finish	Model	Cat No.
Extended Swivel Spout 450mm	Chrome	S1	84780404
Extended Swivel Spout 600mm	Chrome	S2	84780405
Monoblock Chrome Vented Mixer	Chrome	MCM	84780408

Powerstream E

Efficient unvented instantaneous water heaters

- Delivers instant hot water at point of use
- Eliminates the need for a centrally located hot water cylinder and long pipe runs
- External power selection
- Ideal for hand basin supply in commercial washrooms and residential applications



Key Features

- Eco power setting for reduced running costs
- Ease of control with adjustable power dial
- User power selection options for economy and seasonal performance control
- Removes the need for connection to stored hot water
- Suitable for use with two hand basins or one basin and one mixer shower

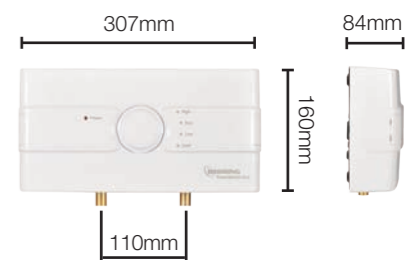
Product Range

Product Ref.	Finish	Model	Cat No.
Powerstream E 9.5kW	White	RP1E	45673201
Powerstream E 10.8kW	White	RP10.8E	45673202
Shower Mixer Kit	Chrome	RM1	85793620
¼ Turn Lever Control Spray Taps (Pair)	Chrome	LT1	85793616

Technical Specification

- kW loading at 240V: 9.5 or 10.8kW
- Connected to the cold mains water supply
- Supplied with 15mm straight shank on the inlet and outlet
- Allows for pipe entry from the right or bottom side
- Operating pressure 1 bar - 10 bar
- Recommended cable sizes and fuse ratings:
9.5kW 6 - 10mm² 40 Amps
10.8kW 10 - 16mm² 45 Amps
- NB: We recommend the use of the Redring 1/4 Turn Spray Tap

Dimensions

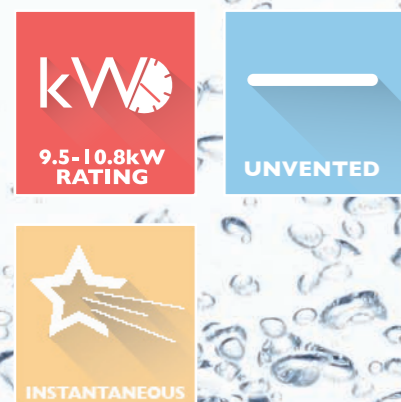




Powerstream

Unvented instantaneous water heaters

- Delivers instant hot water at the point of use
- Compact and unique design eliminates the need for centrally stored hot water cylinders
- Half power selection available on installation
- Thermal cut-out protection



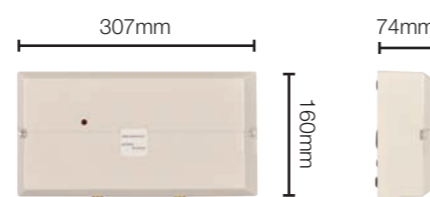
Key Features

- Water supplied to one or two outlets (one shower and one hand basin or two hand basins)
- Water outlet via spray tap accessories
- Direct mains supply
- Small, compact shape
- Remote fitting option
- No standing heat losses
- Corrosion resistant steel backplate

Technical Specification

- kW loading at 240V: 9.5, 10.8 or 12kW
- Flow/service valve
- Water flow operated power switch
- Impact resistant thermoplastic cover
- Sheathed heating elements
- Operating pressure 1 bar to 10 bar
- NB: We recommend the use of the Redring 1/4 Turn Spray Tap

Dimensions



Product Range

Product Ref.	Finish	Model	Cat No.
Powerstream 9.5kW	White	RP1	45793201
Powerstream 10.8kW	White	RP10.8	45793204
Powerstream 12kW	White	RP12	45793202
Shower Mixer Kit	Chrome	RM1	85793620
1/4 Turn Lever Control Spray Taps (Pair)	Chrome	LT1	85793616



Instant Manual I3V

- Easy to use –
- single control for temperature and flow rate
- Unique Vortex technology improves flow and prevents lime scale
- Instant heating – saving energy and water
- Robust and compact construction



Instant Auto AV3

- Infra-red, touch-free operation –
- ideal for high care areas
- Unique Vortex technology improves flow and prevents lime scale
- Instant heating –
- saving energy and water
- Robust and compact construction

Key Features (Instant Manual I3V)

- Simple to fit – direct swap with previous Redring I3V installations
- Heat on neon indicator and overheat protection
- 3KW power = hot water, fast
- Anti-vandal spray head and swivel 200mm stainless steel spray arm
- 1 year guarantee

Key Features (Auto AV3)

- Simple to fit – direct swap with previous Redring AV3 installations
- Timed shut off after 40 seconds save water and power
- Heat on neon indicator and overheat protection
- Installer adjusted water temperature
- Anti-vandal spray head and swivel 200mm stainless steel spray arm
- 1 year guarantee

Technical Specification (Instant Manual I3V)

- 3KW power
- Direct connection to water mains – standard 15mm pipework
- Top, bottom and rear cable entry options
- Standard fixing kit supplied
- Operating water pressure 0.7 – 7 bar (10-100 PSI)
- Water pressure operated power switch
- IPX4 rated

Technical Specification (Auto AV3)

- 3KW power
- Direct connection to water mains – standard 15mm pipework
- Top, bottom and rear cable entry options
- Standard fixing kit supplied
- Operating water pressure 0.7 – 7 bar (10-100 PSI)
- Water pressure operated power switch
- IPX4 rated

Product Ref.	Finish	Model	Cat No.
Manual I3V	White	I3V	43678901
Auto AV3	White	AV3	43679901

Vortex Technology, Improves flow. Reduces limescale.



Technical tables

Temperature Conversion Table

°C	°F
1	33.8
5	41.0
10	50.0
15	59.0
20	68.0
25	77.0
30	86.0
35	95.0
40	104.0
45	113.0
50	122.0
55	131.0
60	140.0
65	149.0
70	158.0
75	167.0
80	176.0
85	185.0
90	194.0
95	203.0
95	212.0

Pressure Conversion Table

Head	Pressure	Head	Pressure	Head	Pressure	Head	Pressure
Feet	lb / in²	Feet	lb / in²	Feet	lb / in²	Feet	lb / in²
1	0.4	26	11.3	51	22.1	76	32.9
2	0.9	27	11.7	52	22.5	77	33.4
3	1.3	28	12.1	53	23.0	78	33.8
4	1.7	29	12.6	54	23.4	79	34.2
5	2.2	30	13.0	55	23.8	80	34.7
6	2.6	31	13.4	56	24.3	81	35.1
7	3.0	32	13.9	57	24.7	82	35.5
8	3.5	33	14.3	58	25.1	83	36.0
9	3.9	34	14.7	59	25.6	84	36.4
10	4.3	35	15.2	60	26.0	85	36.8
11	4.8	36	15.6	61	26.4	86	37.3
12	5.2	37	16.0	62	26.9	87	37.7
13	5.6	38	16.5	63	27.3	88	38.1
14	6.1	39	16.9	64	27.7	89	38.6
15	6.5	40	17.3	65	28.2	90	39.0
16	6.9	41	17.8	66	28.6	91	39.4
17	7.4	42	18.2	67	29.0	92	39.9
18	7.8	43	18.6	68	29.5	93	40.3
19	8.2	44	19.1	69	29.9	94	40.7
20	8.7	45	19.5	70	30.3	95	41.2
21	9.1	46	19.9	71	30.8	96	41.6
22	9.5	47	20.4	72	31.2	97	42.0
23	10.0	48	20.8	73	31.6	98	42.5
24	10.4	49	21.2	74	32.1	99	42.9
25	10.8	50	21.7	75	32.5	100	43.4

Loading Calculations (excluding heat losses)

Time to heat water (mins)	=	$\frac{\text{Litres} \times \text{Temp rise (°C)}}{\text{kW loading} \times 14.3}$
	=	$\frac{\text{Gallons} \times \text{Temp rise (°F)}}{\text{kW loading} \times 5.7}$
kW loading required	=	$\frac{\text{Litres} \times \text{Temp rise (°C)}}{\text{Time (mins)} \times 14.3}$
	=	$\frac{\text{Gallons} \times \text{Temp rise (°F)}}{\text{Time (mins)} \times 5.7}$

Performance Calculations

Litres per minute flow	=	$\frac{\text{kW loading} \times 14.3}{\text{Temp rise (°C)}}$
Temp rise °C	=	$\frac{\text{kW loading} \times 14.3}{\text{Litres per min flow}}$
Temp rise °F	=	$\frac{\text{kW loading} \times 5.7}{\text{Gallons per min flow}}$
kW loading required	=	$\frac{\text{Litres} \times \text{Temp rise(°C)}}{\text{Time (mins)} \times 14.3}$

Physical Constraints

Length	1m	=	3.28ft	1 joule	=	1 watt second (Ws)
	1ft	=	30.8cm			
Volume	1gal	=	4.54l	1 kW hour	=	3412 Btu
		=	277 cu. ins.		=	860kcal
		=	10lbs (water)	1 British Thermal Unit (Btu)	=	Heat required to raise 1lb water through 1°F
	1litre	=	0.22gals		=	17.6 watt mins
		=	1000cm ³		=	0.252kcal
		=	1kg (water)			
	1000l	=	1m ³			
Weight	1lb	=	0.45kg	1 kilocalorie (kcal)	=	Heat required to raise 1kg water through 1°C
	1kg	=	2.21lbs		=	4187Joules
Pressure	1bar	=	14.5psi = 100kN/m ²		=	3.97Btu
	1ft head of water	=	0.434psi			
	1m head of water	=	9.8kN/m ²			

Hot Water Requirements

Handwashing	1 to 2.5 litres per person (40°C)
Kitchen sink	2 to 7 litres per person (60°C)
Cleaning	10 litres per day (60°C)
Bath	60 litres per bath (60°C)
Hairdressing	10 litres per shampoo (40°C)
Dishwasher	2 litres per meal (60°C)

Hot Water Recovery Charts

		Litres of Water							
		5	7	10	15	30	60	80	100
Loading Kilowatts	1.0	18	25	35	55	105	210	280	
	2.0	9	13	18	27	55	105	140	175
	3.0	6	9	12	18	35	70	95	120
	4.0	5	7	9	14	27	55	70	90
	6.0	3	5	6	9	18	35	50	60
	8.0	3	4	5	7	14	27	35	45
	9.0	2	3	4	6	12	24	31	49
	12.0	2	2	3	5	9	18	24	30
	15.0	2	2	3	4	7	14	19	24

		Litres of Water									
		150	200	250	300	400	600	800	1000		
Loading Kilowatts	1.0									Minutes	
	2.0	265									
	3.0	175	235	295							
	4.0	135	175	220	265						
	6.0	90	120	150	175	235	350	470	585		
	8.0	70	90	110	135	185	265	350	440		
	9.0	60	80	100	120	160	235	315	390		
	12.0	45	60	75	90	120	175	235	295		
	15.0	35	50	60	70	95	140	190	235		

We’re here to help

Product Queries

Our Product Service and Repair team are happy to help with any technical queries you have about your product. If you wish to speak to someone over the phone, the team can be contacted on **0844 372 7766**.

Our UK based call centre is open Monday to Friday from 8:00 until 17:30. Alternatively, you can email the team with your query any time at **technical.services@redringxpelair.com**.

In the unlikely event that your product is not performing as expected or has developed a fault, please call **0844 372 7766** or email **service.request@redringxpelair.com**. Our experienced team will then diagnose the fault and arrange a service call from an engineer if necessary.

Sales Queries

If you’ve chosen your Redring product and are eager to purchase it, or if you require spare parts for your unit, our Sales team will be happy to help you find a local stockist. The team can be contacted on **0844 372 7750** from 8:30 until 5:00 Monday to Friday.

The information you need may just be a click away....

The Redring website provides a comprehensive overview of all our showering products, as well as access to product manuals and brochures. You can also find Frequently Asked Questions to look up anything you’re not sure about. Visit **www.redring.co.uk** for quick and easy access to this information.

You can also send us your query through the website by filling out an online enquiry form at **www.redring.co.uk/contacts**.





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