

Showering, hot water and space heating solutions **2010** 



# **Redring** Showering, hot water and space heating solutions

## Welcome

Designed with speed in mind and sized so that you can keep it close-to-hand, this pocket guide is packed with all the information you should need to choose the right **Redring** product. Every page contains a brief overview of what the product does, its key features, plus all the other information you may require to ensure specification of the right **Redring** product for every job.

For more detailed information about Redring and our products, you can also visit www.redring.co.uk, or call 0844 372 7750.

### **Redring Pedigree**

**Redring** is part of Glen Dimplex. As a global group, this gives **Redring** exposure to international design trends, technologies and best-practice, which allows us to market our products to increasingly demanding and design conscious customers.

### **Redring Solutions**

**Redring** provides showering, hot water and space heating solutions, through a market leading range of water and space heating products; from digital and care showering to electric flow boilers and towel rails, through to infra-red space heaters that heat people, not air.

### Showering

At **Redring** we know there's nothing better than a refreshing shower. Our stylish range has been designed to compliment lifestyles.

### Water Heating

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

### Washrooms

Our washroom range of products includes hygienic infra-red hand and face dryers and no-touch flush and hand-wash units, which keeps health and safety in focus and helps to reduce the risks of cross-infection between users.

### Space Heating

Our space heating technology is developed with today's lifestyles in mind, so attention to style, as well as efficiency and economy, are paramount.



Digimix Pages 16-21



Selectronic Pages 44-49



Powerstream Professional Pages 70-73

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### Solutions in detail

### Showers

### Designer

If you want to stay ahead in the style stakes the Designer range is for you. With chrome styling, chic designs and the latest features you can't get any better.

### Family

When it comes to safe showering for all the family, look no further than our Family range. Smart modern looks, great performance and reassuring safety features make this range the perfect choice for the family bathroom.

### Day to Day

For get up and go showering, it's difficult to beat our Day to Day range. Boasting good performance, ergonomic lines and outstanding value, the range offers effective efficient showering.

### Care

Our care range has been developed to make showering easier for the elderly, visually impaired and less able.

### Water Heating

### **Electric Flow Boilers**

Whatever the application, our range of electric flow boilers provides an efficient, versatile and safe way of heating water quickly, wherever there is mains electricity.

### Electric Unvented and Vented Water Storage

The **Redring** LWSS Duplex Stainless Steel water heating cylinders heads-up our wide range of unvented water storage products and provides effective, fast and safe mainsfed hot water around any property. If it's vented water storage that you require, we have units that range from 100 litres down to 5 litres, including remote units that can be installed under the sink.

### Instantaneous Water Heating

With economy settings, our Powerstream 3 Phase Plus instantaneous water heaters are ideal for supplying high volumes of water, wherever a 3-phase 415V supply is available - eliminating the need for centrally stored hot water cylinders and saving on electricity usage and space. We also offer a 12kW unit, which is the highest rated single phase heater on the UK market.

### **Beverage Water Boilers**

Used for making cups of tea, coffee, soup and hot snacks on demand, our wall-mounted and self-filling range of water boilers can be specified for use across both Industrial and Commercial applications.

### Washrooms

### Hand Washing

Ideal for use in health and food preparation areas, our hand wash units are compact and simple to operate. A Vortex spray outlet is available, which eliminates the need for costly maintenance, due to the build-up of scale in hard water areas.

### Hand Drying

Our hand dryers are widely specified and accepted by the National Health Service, approved by the Health and Safety Executive and the Ministry of Defence, for use in commercial and office environments.

### Water Management

Autoflush is a compact, unobtrusive, automatic urinal flush controller which maintains hygiene whilst eliminating water wastage.

### **Space Heating**

### Domestic

The **Redring** range of high quality towel warmers has been designed to provide a stylish focal point in any bathroom, whilst satisfying the demand for supplementary heat. We also offer fan heaters and underfloor electric heating.

### Commercial

From versatile linear heaters for steady background warmth, to highly efficient, ceramic, long-wave infra-red, radiant heaters that provide localised heat, our range of commercial heaters will cater for most Commercial and Industrial applications.

### The Building Centre

Building specifiers within reach of Central London can see a permanent exhibition of selected products from **Redring** at the Building Centre in Store Street, WC1E 7BT.

### **Redring online**

Find out more about **Redring** by visiting us online at **www.redring.co.uk**, which contains comprehensive technical and product installation information, downloads, a brochure builder, latest news and contact details.



### **Technical services**

Our technical services call centre is staffed by a team trained in diagnosing and rectifying potential concerns over the phone. If for any reason they are unable to solve a problem by phone, they will brief an engineer on your behalf prior to a service visit to ensure that, wherever possible, the problem is fixed first time. The team also provides advice on product selection, application, installation and operation.

### For further information: Tel: 0844 372 7766 Fax: 0844 372 7767

### **Customer Training Centre**

The **Redring** Customer Centre at our head office in Peterborough showcases many of the products from our range. The centre is available for product introduction and training for distributors, installers and specifiers by arrangement. Training can be combined with live product demonstration and a guided factory tour of our manufacturing and assembly facilities.

### **Consumer Brochure**

Redring Shower Range 2009

To compliment this pocket guide, we have developed a dedicated showering brochure to enable you to help users choose the right shower for their lifestyle.

To request copies or for more information please visit www.redring.co.uk



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### **Technical Tables**

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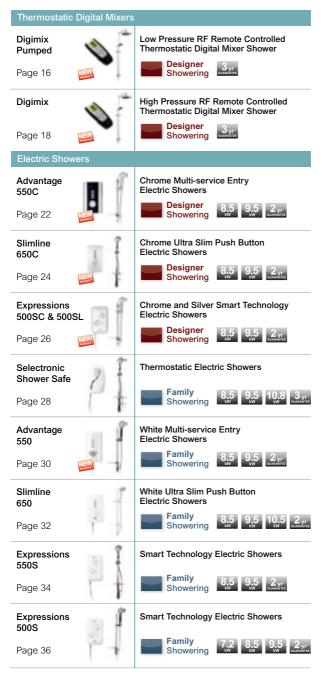
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# Shower Range Profile in Detail

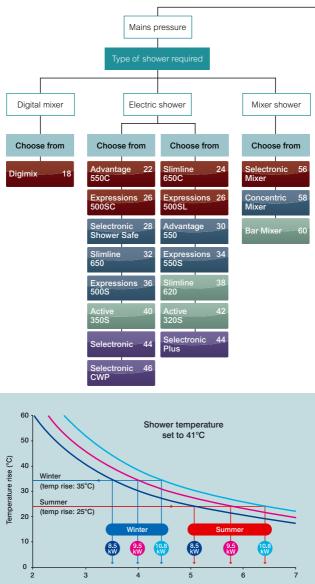


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# Shower Selector

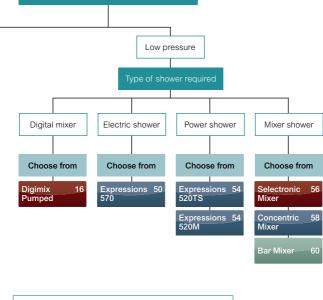
Choosing the right shower is vitally important.

At **Redring**, customer support begins before you even buy! This selector should enable you to make a decision, but if you require assistance, please ring our customer techline on 0844 372 7766 for further information.



Flow rate (I/min)

### Mains or low pressure system?





# Water flow and temperature graph for instant electric showers

This graph shows the relationship between hot water flow and temperature rise obtainable from an instant electric shower. The different power loadings (available in the range) expressed in kilowatts are shown as curves on the graph. The incoming mains water temperature into your property can vary from 5°C in winter to a maximum of 20°C in summer. The graph shows what can be expected in winter at 5°C and in summer at 15°C. In winter the 8.5kW shower will give a flow rate of about 3.5 litres per minute while in summer it will give approximately 5.1l/min.

Please refer to page 176 for more information.



Operating water pressure - 0.1bar min to 1bar max. I Water connection - 15mm plain shank tails, push fit or standard compression fittings I RF remote control handset range 10m I Colour coded inlet pipe - red and blue I Anti-vibration mounting on mixer base unit I Mains supply 230/240V I Rating 200W @ 240V I Base supplied with 2m pre-wired cable I Fixing pack supplied I Remote control batteries included - AAA.

Thermostatic Digital Mixers

### **Digimix Pumped** Low Pressure RF Remote Controlled Thermostatic Digital Mixer Shower

Digimix Pumped brings together the very latest in shower design, styling and performance. Fully thermostatic, this contemporary digital mixer shower provides the ultimate in convenience and control through a remote control which is used to adjust the flow and temperature and incorporates an LCD display. The remote control comes with programmable options that allow you to switch the shower to your preferred setting and prepare the perfect shower before you even set foot into the cubicle.

- Application Designer showering.
- Key Features Suitable for gravity-fed plumbing systems I Remote siting of mixer - ease of installation I Integral pump included for power shower performance I RF remote controlled I LCD digital temperature and flow readout I Programmable pre-set flow and temperature ensures next shower requires no adjustment I Favourite settings programmable I Adjustable automatic off function, ensures no waste water.
- Safety Features Thermostatic | Automatic shutdown if cold or hot water supply fails | Overheat protection | Maintains temperature to + or -1°C (in stable conditions) | Default on/off setting - 40°C | Option to limit temperature adjustment | Battery level indicator.
- Outer Casing Remote control unit and cradle High impact I Easy clean I Thermoplastic.
- Accessories 4 chrome kits available See page 20 for details.
- Pressure Operating pressure 0.1bar to 1bar.
- Approvals IPX2 Base unit 1 CE.
- Guarantee\* 3 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Digimix Pumped Digital Mixer	DMP1	46678001

\*The 2nd and final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure - 1bar min to 5bar max. I Water connection - 15mm plain shank tails, push fit or standard compression fittings I RF remote control handset range 10m I Colour coded inlet pipe - red and blue I Anti-vibration mounting on mixer base unit I Mains supply 230/240V I Rating 50W @ 240V I Base supplied with 2m pre-wired cable I Fixing pack supplied I Remote control batteries included - AAA.

Thermostatic Digital Mixers

### **Digimix** High Pressure RF Remote Controlled Thermostatic Digital Mixer Shower

Digimix brings together the very latest in shower design, styling and performance. Fully thermostatic, this contemporary digital mixer shower provides the ultimate in convenience and control through a remote control which is used to adjust the flow and temperature and incorporates an LCD display. The remote control comes with programmable options that allow you to switch the shower on and prepare the perfect shower before you even set foot into the cubicle.

- Application Designer showering.
- Key Features Suitable for all unvented plumbing systems I Remote siting of mixer - ease of installation I RF remote controlled I LCD digital temperature and flow readout I Programmable pre-set flow and temperature ensures next shower requires no adjustment I Favourite settings programmable I Adjustable automatic off function, ensures no waste water.
- Safety Features Thermostatic | Automatic shutdown if cold or hot water supply fails | Overheat protection | Maintains temperature to + or -1°C (in stable conditions) | Default on/off setting - 40°C | Option to limit temperature adjustment | Battery level indicator.
- Outer Casing Remote control unit and cradle High impact | Easy clean | Thermoplastic.
- Accessories 4 chrome kits available See page 20 for details.
- Pressure Operating pressure 1bar to 5bar.
- Approvals IPX2 Base unit 1 CE.
- Guarantee\* 3 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Digimix Non-Pumped Digital Mixer	DMNP1	46677001
*The 2nd and final year of the guarantee is only available for prod	ucts reaistered with Red	ring after purchase.

\*The 2nd and final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



### **Product Range**

**Product Reference** 

Portia - Chrome Through-the-Wall Diverter with Dual Shower Head Kit Cordelia - Chrome Ext. Through-the-Ceiling Riser Rail and Shower Head Kit Emilia - Chrome Fixed Through-the-Ceiling Shower Head Kit Ophelia - Chrome Bulk-head Riser Rail and Shower Head Kit

# **Digimix Accessories**

The Digimix shower can be combined with one of four stylish accessory kits, each specially selected for stylish design and optimum performance. No matter what your installation requirements or design preferences, we have an accessory set to match your needs.

'Portia'	Through the wall diverter with dual shower
Accessory Kit	<b>head:</b> The ultimate showering experience. A stunningly designed accessory set with a diverter control that enables you to switch between an overhead rain shower and a multi-mode handset - perfect for those times you don't want to get your hair wet.
'Cordelia' Accessory Kit	<b>Extendable through the ceiling riser rail and</b> <b>shower head:</b> A sleek and sophisticated through the ceiling accessory set with a height adjustable multi-mode handset for an invigorating shower.
'Emilia' Accessory Kit	<b>Fixed through the ceiling shower head:</b> A stylish fixed through the ceiling shower head that provides the perfect rain shower experience.
'Ophelia' Accessory Kit	<b>Bulk-head riser rail and shower head:</b> A contemporary designed accessory set with a beautifully curved riser rail and multi-mode handset.

Short Code	Suitable for	Colour	Cat. No
DMACC4	All installations	Chrome	83671104
DMACC3	All installations	Chrome	83671103
DMACC2	All installations	Chrome	83671102
DMACC1	All installations	Chrome	83671101



Left or right - Top, bottom or rear entries | Fittings included | Operating water pressure 0.7-7bar (10-100psi) | Water pressure operated power switch | Water connection - 15mm plain shank tails push fit or standard compression fittings | Removable lower section for ease of installation.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

# Electric Showers

### Advantage 550C Chrome Multi-service Entry Electric Showers

Ideal for shower replacement and upgrades, the Advantage 550C has been developed with the very latest instantaneous shower styling, mixing traditional and contemporary functionality. Designed to stabilise temperature changes caused by water pressure fluctuations, it comes with the convenience of a push button start/stop and power selection facility. Phased shutdown is a key feature, and ensures residual hot water is flushed out reducing scale and ensuring cool-start use.

- **Application** Designer showering.
- Key Features Six pipe, six cable entry configuration (left, right, top, bottom or rear) - for highly flexible installations or replacements | Push button power selection on/off control | 3 push button power settings (cold/economy /high) | LED power indicator | Independent rotary temperature control for set and forget convenience | Flush buttons for easy clean.
- Safety Features Fully temperature stabilised I Smart Time® phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use I Phased shutdown flashing LED indicator I Overheat protection.
- Outer Casing Chrome and black front cover | High impact | Easy clean | Thermoplastic material.
- Accessories Chrome 6 mode rub-clean handset and full accessory kit: Soap dish I Hose with retaining ring I Riser rail I Adjustable clamp I See page 52 for further accessories.
- Pressure Operating pressure 0.7bar to 7bar.
- Approvals BEAB Approved | CE.
- Guarantee\* 2 year product guarantee (UK).

### **Product Range**

Product Reference	Short Code	Cat. No
Advantage 550 Chrome 8.5kW	ADV5508C	53674205
Advantage 550 Chrome 9.5kW	ADV5509C	53676705

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure 1-10bar (14.5-145psi) | Water pressure operated power switch | Water connection - 15mm plain shank tails push fit or standard compression fittings | Top, bottom or rear cable entry | Top, bottom or rear water entry.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

### Slimline 650C Chrome Ultra Slim Push Button Electric Showers

The Slimline 650C has a contemporary chrome, ultra slimline profile, generating more space in a shower cubicle. It is fully temperature stabilised and has the added convenience of a push button on/off and power selection facility. The phased shutdown feature ensures that temperatures are managed to deliver a cool and safe start-up for the next user.

- **Application** Designer showering.
- Key Features Ultra slimline profile | Push button power selection and on/off | 3 power settings | Rotary flow/ temperature control for set and forget convenience | LED power indication | Multi-service points for ease of installation.
- Safety Features Fully temperature stabilised I Overheat protection I Smart Time® phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use I Phased shutdown flashing LED indicator.
- Outer Casing Chrome front cover I High impact I Easy clean I Thermoplastic.

Accessories Full set of all chrome accessories: Rub-clean, multi-mode handset | 6 position variable spray head | Soap dish | Hose with retaining ring | Riser rail | Adjustable clamp | See page 52 for further accessories.

- Pressure Operating pressure 1.0bar to 10bar.
- Approvals BEAB Approved | CE.
- Guarantee\* 2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Slimline 650 Chrome 8.5kW	R6508C	53557202
Slimline 650 Chrome 9.5kW	R6509C	53558202

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Technical Specification Operating water pressure 0.7-7bar (10-100psi) I Water pressure operated power switch I Standard 15mm inlet connection I Top, bottom or rear cable entry options I Removable corner section for ease of installation.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

# Electric Showers

# Expressions 500SC & 500SL

Chrome and Silver Smart Technology **Electric Showers** 

The Expressions 500 Chrome and Silver have been developed with contemporary 'S-line' styling, smart technology and a convenient start/stop button, allowing the power and flow rate setting to remain set ready for your next shower.

Application	Designer showering.
Key Features	Separate rotary control for power selection 1 Push- button stop/start, for 'set and forget' convenience 1 3 power settings with 'Power On', 'Power Medium' and 'Power High' neon indicators 1 Top, bottom or rear entry access for cable and cold water supply 1 Removable corner section for ease of installation.
Safety Features	Fully temperature stabilised I Smart Time <sup>®</sup> phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use I Rotary flow/temperature control with numerical indicator window I Overheat neon indicator.
Outer Casing	Chrome (SC) / Silver (SL)   High impact   Easy clean   Scratch resistant   Thermoplastic.
Accessories	Chrome 6 mode rub-clean handset and full accessory kit: Soap dish   Hose with retaining ring   Riser rail   Adjustable clamp   See page 52 for further accessories.
Pressure	Operating pressure - 0.7bar to 7bar.
Approvals	BEAB Approved I CE.
Guarantee*	2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Expressions 500S Chrome 8.5	EX5008SC	53673005
Expressions 500S Chrome 9.5	EX5009SC	53673505
Expressions 500S Silver 8.5	EX5008SL	53673006
Expressions 500S Silver 9.5	EX5009SL	53673506

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure 0.7-10bar (10-145psi) I Cable entries: top, bottom and rear (up to 16mm<sup>2</sup>) I Pipe entries: top, bottom, and rear (on right hand side) I Water connection - 15mm plain shank tails push fit or standard compression fitting.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm²	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps
10.8	9.9 - 10.8	10 - 16mm <sup>2</sup>	45 amps

# Electric Showers

## Selectronic Shower Safe

Thermostatic Electric Showers

The Selectronic Shower Safe range combines unique microprocessor thermostatic controls with contemporary styling to give the ideal shower for all the family. Its simple to use push button controls with premium chrome accessories make it both 'safe' and 'stylish'.

- ApplicationFamily showering.
- Key Features One-touch operation I Tactile button coding with large, easy to press buttons I Heat exchanger designed to minimise the build up of scale I LED digital readout I Independent adjustment for both temperature and water flow rate.
- Safety Features Fully thermostatic adjusting power and water flow to achieve selected temperature | Microprocessor thermostatic control for safety and comfort | Pre-programmed start-up temperature of 41°C | Phased shutdown reducing scale and ensuring cool-start use | Audible feedback response commands | Auto shut-off to protect against high temperatures.
- Outer Casing White I High impact I Easy clean I Scratch resistant I Thermoplastic.

Accessories Premium chrome accessory kit: 6 mode rub clean handset | Riser rail with fully adjustable handset holder | Soap dish | Chrome shower hose | See page 52 for further accessories.

- Pressure Operating pressure 0.7bar to 10bar.
- Approvals BEAB Approved | CE.
- **Guarantee\*** 3 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Selectronic Safe 8.5kW	SEL85T	53557020
Selectronic Safe 9.5kW	SEL95T	53558020
Selectronic Safe 10.8kW	SEL108T	53559020

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Left or right - Top, bottom or rear entries | Fittings included | Operating water pressure 0.7-7bar (10-100psi) | Water pressure operated power switch | Water connection - 15mm plain shank tails push fit or standard compression fittings | Removable lower section for ease of installation.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

# Electric Showers

## Advantage 550 White Multi-service Entry Electric Showers

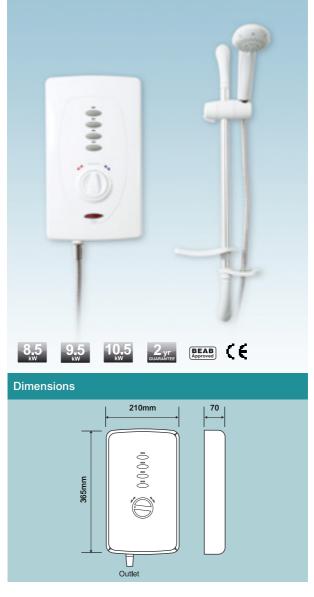
Ideal for shower replacement and upgrades, the Advantage 550 has been developed with the very latest instantaneous shower styling, mixing traditional and contemporary functionality. Designed to stabilise temperature changes caused by water pressure fluctuations, it comes with the convenience of a push button start/stop and power selection facility. Phased shutdown is a key feature, and ensures residual hot water is flushed out reducing scale and ensuring cool-start use.

- **Application** Family showering.
- Key Features Six pipe, six cable entry configuration (left, right, top, bottom or rear) - for highly flexible installations or replacements I Push button power selection on/off control I 3 push button power settings (cold/economy /high) I LED power indicator I Independent rotary temperature control for set and forget convenience I Flush buttons for easy clean.
- Safety Features Fully temperature stabilised I Smart Time® phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use I Phased shutdown flashing LED indicator overheat protection.
- Outer Casing White front cover | High impact | Easy clean | Thermoplastic material.
- Accessories Chrome 6 mode rub-clean handset and full accessory kit: Soap dish I Hose with retaining ring I Riser rail I Adjustable clamp I See page 52 for further accessories.
- Pressure Operating pressure 0.7bar to 7bar.
- Approvals BEAB Approved | CE.
- Guarantee\* 2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Advantage 550 8.5kW	ADV5508	53674202
Advantage 550 9.5kW	ADV5509	53676702

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure 1-10bar (14.5-145psi) | Water pressure operated power switch | Water connection - 15mm plain shank tails push fit or standard compression fittings connection | Top, bottom or rear cable entry | Top, bottom or rear water entry.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps
10.5	9.6 - 10.5	10 - 16mm <sup>2</sup>	45 amps

# Electric Showers

### Slimline 650 White Ultra Slim Push Button Electric Showers

The Slimline 650 has an ultra slimline profile, generating more space in a shower cubicle. It is fully temperature stabilised and has the added convenience of a push button power selection facility. The phased shutdown feature ensures that temperatures are managed to deliver a cool and safe start-up for the next user.

Application	Family showering.
Key Features	Ultra slimline profile I Push button power selection and on/off I 3 power settings I Rotary flow/ temperature control for set and forget convenience I LED power indication I Multi-service points for ease of installation.
Safety Features	Fully temperature stabilised I Overheat protection I Smart Time <sup>®</sup> phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use I Phased shutdown flashing LED indicator.
Outer Casing	White I High impact I Easy clean I Scratch resistant I Thermoplastic.
Accessories	White and chrome accessory kit: Rub-clean, multi-mode handset with 3 position variable spray head   Soap dish   Hose with retaining ring   Riser rail   Adjustable clamp   See page 52 for further accessories.
Pressure	Operating pressure - 1.0bar to 10bar.
Approvals	BEAB Approved   CE.
Guarantee*	2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Slimline 650 8.5kW	R6508	53557201
Slimline 650 9.5kW	R6509	53558201
Slimline 650 10.5kW	R65010	53559201

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure 0.7-7bar (10-100psi) | Water pressure operated power switch | Water connection - standard 15mm inlet connection | Top, bottom or rear cable entry options | Fixing pack and instructions supplied | Removable corner section for ease of installation.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

# Electric Showers

### Expressions 550S Smart Technology Electric Showers

Family showering.

The Expressions 550S has been developed with contemporary 'S-line' styling and smart technology to provide the convenience of a push button start/stop facility and push button power selection. Phased shutdown is a key feature provided through electronic control and this shower also has a temperature ready LED indicator.

Application **Key Features** Smart Flow<sup>®</sup> flow indication - LED indicates flow levels | Smart Start® temperature - LED indicates when chosen temperature is ready 1 Separate push button power controls: 'High On', 'Medium On', 'Cold On' and 'Stop' LED indicators | Top, bottom or rear entry access for cable and cold water supply I Removable corner section for ease of installation. Safety Features Fully temperature stabilised | Smart Time® phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use I Phased shutdown flashing LED indicator | Rotary flow/ temperature control with Smart Temp® - illuminated digital temperature indicator | Overheat LED indicator. Polar white | High impact | Easy clean | Outer Casing Thermoplastic. Accessories Deluxe chrome 6 mode rub-clean handset and oval curved style accessory kit: Soap dish I Hose with retaining ring | Riser rail | Adjustable clamp | See page 52 for further accessories. Pressure Operating pressure - 0.7bar to 7bar. Approvals BEAB Approved | CE. Guarantee\* 2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Expressions 550S 8.5kW	EX5508S	53674001
Expressions 550S 9.5kW	EX5509S	53674501
Extended Control Lever	LEV2	See page 52

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure 0.7-7bar (10-100psi) | Water pressure operated power switch | Water connection - standard 15mm inlet connection | Top, bottom or rear cable entry options | Removable corner section for ease of installation.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
7.2	6.6 - 7.2	4 - 6mm <sup>2</sup>	30 amps
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

### Expressions 500S Smart Technology Electric Showers

Developed with contemporary 'S-line' styling, smart technology and a convenient start/stop button, the best selling Expressions 500S allows the power and flow rate setting to remain set ready for your next shower.

Application	Family showering.
Application	ranning showening.

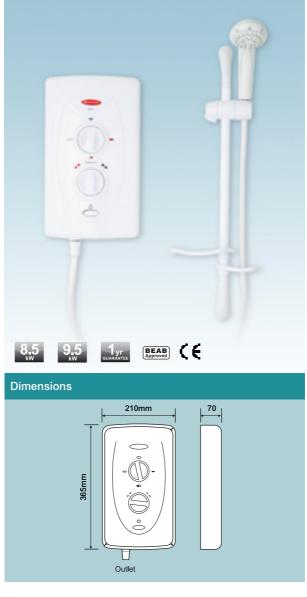
- Key Features Separate rotary control for power selection I Pushbutton stop/start, for 'set and forget' convenience I 3 power settings with 'Power On', 'Power Medium' and 'Power High' neon indicators I Top, bottom or rear entry access for cable and cold water supply I Removable corner section for ease of installation.
- Safety Features Fully temperature stabilised I Smart Time® phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use I Rotary flow/temperature control with numerical indicator window I Overheat LED indicator.
- Outer Casing Polar white | High impact | Easy clean | Scratch resistant | Thermoplastic.
- Accessories Chrome 6 mode rub-clean handset and full accessory kit: Soap dish 1 Hose with retaining ring 1 Riser rail 1 Adjustable clamp 1 See page 52 for further accessories.
- Pressure Operating pressure 0.7bar to 7bar.
- Approvals BEAB Approved | CE.

Guarantee\* 2 year product guarantee (UK).

### **Product Range**

Product Reference	Short Code	Cat. No
Expressions 500S 7.2kW	EX5007S	53672501
Expressions 500S 8.5kW	EX5008S	53673001
Expressions 500S 9.5kW	EX5009S	53673501
Extended Control Lever	LEV2	See page 52

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure 1-10bar (14.5-145psi) | Water pressure operated power switch | Water connection - 15mm plain shank push fit or standard compression fittings | Top, bottom or rear cable entry | Top, bottom or rear water entry.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

### Slimline 620 White Ultra Slim Electric Showers

Packed full of features, the 620 with its ultra slimline profile, timed phased shutdown, overheat protection and multi-mode handset is an ideal choice for upgrading or replacing existing shower installations to generate more space in a shower cubicle.

Application	Day to day showering.
Key Features	Ultra slimline profile I Push button for on/off selection I Rotary power select I Rotary flow/temperature control I 4 power settings I Multi-service points for ease of installation.
Safety Features	Fully temperature stabilised I Overheat protection I Smart Time <sup>®</sup> phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use.
Outer Casing	Polar white   High impact   Easy clean   Scratch resistant   Thermoplastic.
Accessories	White accessory kit: Rub-clean, multi-mode handset I 3 position variable spray head I Soap dish I Hose with retaining ring I Riser rail I Adjustable clamp I See page 52 for further accessories.
Pressure	Operating pressure - 1.0bar to 10bar.
Approvals	BEAB Approved I CE.
Guarantee	1 year product guarantee (UK).

### **Product Range**

Product Reference	Short Code	Cat. No
Slimline 620 8.5kW	R6208	53555201
Slimline 620 9.5kW	R6209	53556201



Technical Specification

Operating water pressure 0.7-7bar (10-100psi) | Water pressure operated power switch | Water connection - standard 15mm inlet connection | Top, bottom or rear cable entry options | Removable corner section for ease of installation.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
7.2	6.6 - 7.2	4 - 6mm <sup>2</sup>	30 amps
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
0.5	1.0 - 0.0	0 - 10mm-	40 amps

### Active 350S White Dual Concentric Control **Electric Showers**

The Active 350S allows accurate temperature selection. Developed with contemporary 'S-line' styling and smart technology, the integral water control valve provides on/off selection via the outer control lever, allowing the flow rate/ temperature position to remain at your favourite setting from your last shower.

- Application Day to day showering.
- **Key Features** 3 power settings with LED power on indicator I Separate controls for temperature adjustment and power selection I Neon power indicator.
- Safety Features Fully temperature stabilised | Smart Time® phased shutdown - electronic flushing of residual hot water which reduces scale and ensures cool-start use | Rotary lever control for on/off and power selection I Overheat protection | Electric solenoid operation on/off | Temperature and flow control with single turn valve I Removable corner section for ease of installation.
- **Outer Casing** Polar white | High impact | Easy clean | Scratch resistant I Thermoplastic.
- Accessories Chrome accessory kit: 3 position variable rub-clean spray head | Soap dish | Hose retaining ring | Riser rail I Height adjustable clamp I See page 52 for further accessories.
- Pressure Operating pressure - 0.7bar to 7bar.
- Approvals BEAB Approved | CE.
- Guarantee 1 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Active 350S 7.2kW	A3507S	53671501
Active 350S 8.5kW	A3508S	53672001
Extended Control Lever	LEV3	See page 52



Operating water pressure 0.7-7bar (10-100psi) | Water pressure operated power switch | Water connection - standard 15mm inlet connection | Top, bottom or rear cable entry options | Removable corner section for ease of installation.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
7.2	6.6 - 7.2	4 - 6mm <sup>2</sup>	30 amps
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
0.5	7.0 - 0.5	0 - 1000	40 amps

### Active 320S White Dual Control Electric Showers

The Active 320S has a unique dual control, combining power select and on/off rotary flow/temperature control. Developed with contemporary 'S-line' styling and smart technology this shower comes complete with single mode handset and riser rail kit all in chrome.

Application	Day to day showering.
Key Features	3 power settings with LED power on indicator 1 Top, bottom or rear entry access for cable and cold water supply.
Safety Features	Fully temperature stabilised with 'Smart Stop®' hot water purge reducing scale and ensuring cool start   Dual concentric rotary controls for on/off and power selection   Overheat protection   Electric solenoid operation on/off   Temperature and flow control with single turn valve   Removable corner section for ease of installation.
Outer Casing	Polar white   High impact   Easy clean   Scratch resistant   Thermoplastic.
Accessories	Chrome accessory kit: Single mode rub-clean handset I Soap dish I Hose retaining ring I Riser rail I Height adjustable clamp I See page 52 for further accessories.
Pressure	Operating pressure - 0.7bar to 7bar.
Approvals	BEAB Approved I CE.
Guarantee	1 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Active 320S 7.2kW	A3207S	53670501
Active 320S 8.5kW	A3208S	53671001
Extended Control Lever	LEV3	See page 52



Operating water pressure 0.7-10bar (10-145psi) I Cable entries: top, bottom and rear (up to 16mm<sup>2</sup>) I Pipe entries - top, bottom, and rear (on right hand side) I Water connection - 15mm plain shank tails, push fit or standard compression fittings.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps
10.8	9.9 - 10.8	10 - 16mm <sup>2</sup>	45 amps

### Selectronic & Selectronic Plus

State of the Art Thermostatic Electric Showers

Endorsed by the RNIB and selected for Inclusive Design status, these instantaneous showers are the most technologically advanced available from Redring and are the preferred choice of the blind, partially sighted, young children, elderly and less able. Pre-programmed to provide hot water at a comfortable and safe temperature, in lock mode the heat is capped at 40°C, with cooler adjustment; no accidental increase is possible.

- Application Care sector showering.
- Key Features One-touch operation | Large tactile, easy to press buttons | Large LED digital readout | Independent adjustment for temperature and water flow rate | Highvisibility shower head and clamp | Automatic shutdown after 30 minutes of inactivity.
- Safety Features Fully thermostatic adjusting power and water flow to selected temperature I Safety temperature lock 40°C with override I Phased shutdown reducing scale and ensuring cool-start use I Audible feedback response commands I Matt antiglare label backing.
- Outer Casing White I High impact I Easy clean I Scratch resistant I Thermoplastic.
- Accessories Curved white 3 pattern rub-clean handset | 0.45m riser rail | Adjustable handset holder | Soap dish | High quality 1.25m chrome shower hose | (Selectronic Plus - as above but with 1m riser rail and 2m smooth white hose).

Pressure Operating pressure - 0.7bar to 10bar.

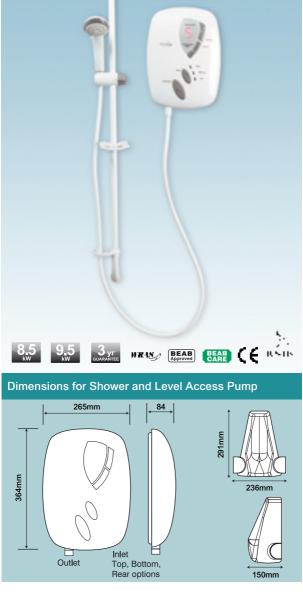
Approvals BEAB CARE | BEAB Approved | RNIB product endorsement | RNIB Inclusive Design status | Disabled Discrimination Act compliant | WRAS Approved | CE.

Guarantee\* 3 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Selectronic 8.5kW	SEL85S	53557001
Selectronic 9.5kW	SEL95S	53558001
Selectronic 10.8kW	SEL108S	53559001
Selectronic Plus 8.5kW	SEL85P	53557005
Selectronic Plus 9.5kW	SEL95P	53558005
Selectronic Plus 10.8kW	SEL108P	53559005

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Operating water pressure 0.7-10bar (10-145psi) I Cable entries: top, bottom and rear (up to  $16mm^2$ ) I Pipe entries - top, bottom, and rear (on right hand side) I Water connection - 15mm plain shank tails push fit or standard compression fittings.

kW variant	kW loading at 230-240V	Recommended cable sizes	Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5	8.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

### Selectronic Plus complete with Level Access Pump

Thermostatic Shower and Pump Pack

Where a gravity drain is not an option, this shower and pump pack provides a solution. The Selectronic shower controls the level access drain pump directly, removing the need to fit a separate flow switch and associated wiring. Selectronic is endorsed by the RNIB and meets all the latest additional safety standards required for care establishments and less able users.

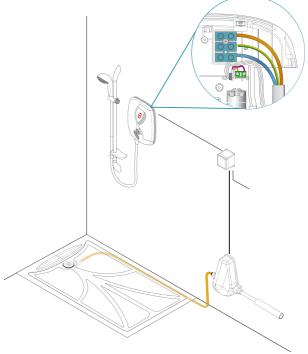
- **Application** Care sector showering.
- Key Features Shower and pump in a pack | Reduced installation time - shower controls pump directly so no requirement for separate flow switch/associated wiring | Meets the Disability Discrimination Act (DDA) | 'Inclusive Design' status, endorsed by RNIB | One-touch operation | Large, tactile, easy to press buttons | Large LED digital readout | Clear print independent adjustment for temperature and water flow rate | Hi-visibilty colour coded showerhead & clamp | Automatic shutdown - after 30 minutes of inactivity | Additional time delay adjustment for pump start-up & over-run | Minimal maintenance - diaphragm (not impeller) pump action - removes residual shower waste (hair, grit, gel) without blocking.
- Safety Features Thermostatic adjusting power and water flow to selected temperature I Safety temperature lock 40°C, with override I Phased shutdown reducing scale and ensuring cool-start use I Audible feedback response commands I Low voltage pump for safe operation I Matt antiglare label backing.
- Outer Casing Thermoplastic | High impact | Easy clean | Scratch resistant.
- Accessories Multi-mode, rub-clean handset, 1m riser rail | Adjustable handset holder | Soap dish | 2m shower hose.
- Pressure Operating pressure 0.7bar to 10bar.
- Approvals BEAB CARE | BEAB Approved | RNIB product endorsement | RNIB Inclusive Design status | Disabled Discrimination Act compliant | WRAS Approved | CE.
- Guarantee\* Shower 3 year (UK) | Pump 2 year guarantee (UK).

Product	Range
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	000_	
Selectronic CWP 9.5kW	SEL95LAP	53558090
Selectronic CWP 8.5kW	SEL85LAP	53557090
Product Reference	Short Code	Cat. No
· · · · · · · · · · · · · · · · · · ·		

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.

### Schematic of Typical Installation



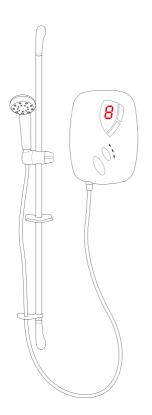
### **Pump Overview**

Combined in harmony with the Selectronic shower, the Level Access Pump uses a diaphragm (not impeller) pump action, and easily removes all residual shower waste including hair, grit and gel without blocking. With an additional time delay adjustment for start-up and over-run, this level access drain pump allows for the perfect modern wetroom to be installed almost anywhere.

Technical (Cont.d) NB: The Selectronic shower variant for use with the Selectronic pump system is fully, third party, approved by BEAB to EN 60 335-1: 1995 (Safety of household and similar electrical appliances) and EN 60 335-2-35 (The particular requirements for instantaneous water heaters).

### Pack Contents

Thermostatic Shower and Level Access Pump all in one box





Pump Shroud

Pump Wall Plate

Shower Drain Pump

Control Unit

15 mm Speedfit

Connector

32 mm Reducer

x2



Shower Drain Pump



Shower Trap



Shroud Cover Screw

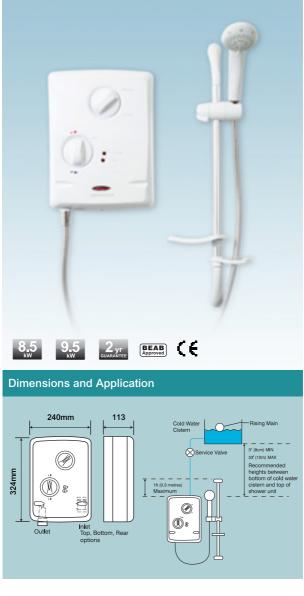


22 mm Speedfit Connector



19 mm Reducer

- · Selectronic thermostatic shower including 2m hose and 1m riser rail
- · Pump shroud
- · Shower drain pump
- · Pump wall plate
- · Shower trap
- · Shower drain pump control unit
- · Shroud cover screws (x 2)
- 15mm speedfit connectors (x 2)
- 22mm speedfit connectors (x 2)
- 32mm reducer
- 19mm reducer



Cold water cistern fed I Operating water pressure - 3" minimum head to 33' maximum head (0.08m to 10m) I Top, bottom and rear water and cable entry options I 15mm push-fit fitting for cold water inlet connection I The unit incorporates a 240V 140W AC motor to boost flow I Maximum flow rate -7.0 littes/min.

			Recommended fuse ratings
8.5	7.8 - 8.5	6 - 10mm <sup>2</sup>	40 amps
9.5 8	3.7 - 9.5	6 - 10mm <sup>2</sup>	45 amps

### **Expressions 570** White Integral Pumped Electric Showers

The Expressions 570 provides the convenience of electric showering in areas where no mains water, or low water pressure, prevents the use of normal electric instant showers. By combining a standard electric shower and booster pump, this shower can simply be connected to a cold water header tank.

Application	Family showering.
Key Features	Instant electric shower with integral pump to ensure constant water flow I High and low power selection I Rotary control for temperature/flow selection I Ideal for installations where water pressure is insufficient for an instant shower I Cold water cistern fed (not mains).
Safety Features	Overheat protection I Power on and overheat neon indicators.
Outer Casing	Polar white   High impact   Easy clean   Scratch resistant   Thermoplastic.
Accessories	Full set of white and chrome accessories: Premium wide spray multi-mode handset   Soap dish   Hose with retaining ring   Riser rail   Adjustable clamp   See page 52 for further accessories.
Pressure	Cold water cistern fed - operating water pressure: 3" or 0.08m minimum head to 33' or 10m maximum head.
Approvals	BEAB Approved I CE.
Guarantee*	2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Expressions 570 8.5kW	EXP5708	24555515
Expressions 570 9.5kW	EXP5709	24556015

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Product Reference

 Helena - Chrome accessory kit with curved riser and 6 mode handset

 Jessica - Chrome accessory kit with straight riser and 3 mode handset

 Isobella - Chrome accessory kit with straight riser and 3 mode handset

 Maria - Chrome accessory kit with straight riser and 3 mode handset

 Viola - Full white accessory kit with straight riser and 3 mode handset

 Complete care pack

 Extended control lever

 Grab rail (plastic)

 Curtain and rail pack with fixings

 Curtain and rail pack with fixings and non-slip bathmat

 Extended 1m riser rail

## Electric Shower Accessories

### **Electric Shower Accessories**

Consistent, all year round shower performance in a range of models to satisfy individual bathroom style requirements. Designed to fit any electric shower, these Accessory Packs contain a shower head, riser rail, brackets, handset holder, soap dish and hose.

Replacement Shower Hoses:	1.25 or 2m hoses   Available in white or chrome - contact our spares department on 08709 000420.
Shower Heads:	Multi-mode shower head packs to fit any electric shower I Available in white or chrome - contact our spares department on 08709 000420.
Standard Accessory Pack:	Multi-mode shower head, riser rail, brackets, handset holder, soap dish and hose I Available in white.
Extended Riser:	The 1 metre extended length riser rails bring the shower head and soap dish within easy reach of children, the elderly or the less-able and are available in white or chrome, in 18 or 22mm diameter.
Complete Care Pack:	For all instant showers to assist less able users. Includes brackets, multi-mode handset, handset clamp, soap dish and hose retainer with 2m hose and 1m riser rail.
Curtain Rail Pack	The versatile curtain rail pack is designed to fit virtually any shape of bathroom. Contains a white curtain, curtain rail, corner fittings, curtain clips and full fixing kit. Available with or without a non-slip bath mat.
Ext. Shower Control Lever	Ideal for children or the less-able, this extended shower control lever is interchangeable with Expressions 550S and 500S (LEV2) and Active 350S and 320S (LEV3).

Short Code	Suitable for	Colour	Cat. No
ACCPKE	All installations	Chrome	83595320
ACCPKD	All installations	Chrome	83595319
ACCPKC	All installations	Chrome	83595318
ACCPKB	All installations	Chrome	83595317
ACCPKA	All installations	White	83595321
CCP1	All installations	White	83595322
LEV2	Expressions	White	83595324
LEV3	Active	White	83595325
PGR	All installations	White	83595315
CU1	All installations	White	83792812
CU2	All installations	White	83792811
RAILC2	All installations	Chrome	83595323



Motor rating - 140 watts @ 240V  $\,$  I Mains supply - 220-240V supply I Top, bottom or rear cable entry I Top, bottom or rear water entry.

Model	Flow rate	Mixing	Min.	Max.
variant	on full	chamber	head	head
520M	14 lit/min	Manual Cartridge	3" / 0.08m	33' / 10m
520TS	12 lit/min	Thermostatic Cartridge	3" / 0.08m	33' / 10m

# Thermostatic and Manual Power Showers

### Expressions 520TS & 520M

Power Showers

The Expressions 520 range delivers luxury showering performance from an integrated booster pump and mixer valve in a simple to plumb installation. Taking both hot and cold water from the cylinder and header tank respectively, the integral pump delivers up to a maximum of 14 litres per minute. The Expressions 520TS unit incorporates fully thermostatic performance.

Application	Family showering.
Key Features	Electric power shower I Separate on/off and flow controls I Multi-entry options I Push-fit pipe connections.
Safety Features	Adjustable temperature limiter with override feature I <b>TS model only:</b> Thermostatic power shower, thermostatic control and operation.
Outer Casing	Polar white   High impact   Easy clean   Scratch resistant   Thermoplastic.
Accessories	Full set of white and chrome accessories: Premium wide spray multi-mode handset   Soap dish   Hose with retaining ring   Riser rail and adjustable clamp.
Pressure	Gravity fed - operating water pressure: 3" or 0.08m minimum head to 33' or 10m maximum head.
Approvals	BEAB Approved I CE.
Guarantee*	2 year product guarantee (UK).

### **Product Range**

Product Reference	Short Code	Cat. No
Expressions 520M	EXM520WC	46598415
Expressions 520TS	EXTS520WC	46599415

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.

M - Manual I TS - Thermostatic



15mm copper pipes I Suitable for all connections including push-on I Pipes rotate for easy alignment compression and soldered joints I Overall height: 1100mm I Suitable for rooms with ceiling heights of up to 2.5 metres I Pressures from 0.1 bar (1 metre head) to 7bar I Maximum hot to cold pressure differential should NOT exceed 2bar at higher pressures or 0.2bar at very low pressures I For pressures in excess of 7bar a pressure regulator should be fitted I Multi-function showerhead for pressures 0.2 - 7bar, single-function showerhead for 0.1 - 7bar especially gravity fed sites.

## Thermostatic Mixers

### Selectronic Mixer TMV3 Thermostatic Mixer Shower

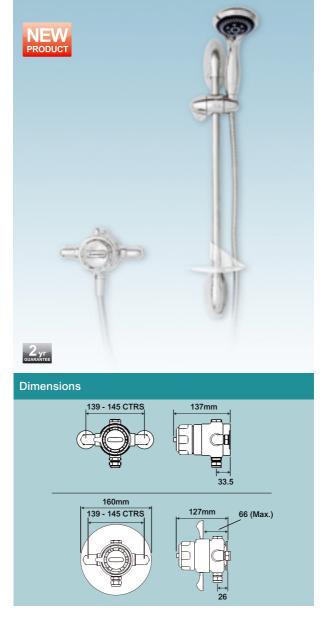
Ideal for retrofit or brand new installations, the Selectronic Mixer, a TMV3 thermostatic shower features sleek design, including a patented 'through the ceiling' water connection - for one of the quickest installation times on the market. Built using the highest quality components this shower fits to just about any plumbing system, on virtually any pressure, with automatic shutdown if the water supply fails.

Application	Designer showering.
Key Features	Simply connect to water supplies within roof cavity I Includes pre-assembled hot and cold feed pipes plus isolating valves with filters I Surface mounted for minimal bathroom disruption - no channel pipe to cut I No tile or wall cutting required I Quick to install - only two fixings needed I Compatible with just about any plumbing system I UK design and manufacture - hot and cold water supplied down riser rail.
Safety Features	Thermostatic   TMV3 certified   Automatic shutdown if cold or hot water supply fails   Safety button override for hotter shower.
Outer Casing	All metal construction in chrome plated solid brass, including the fittings, for strength and durability.
Accessories	Full set of all chrome accessories: Multi-mode rub-clean handset   3 position variable spray head   Soap dish   Hose with retaining ring   Riser rail   Adjustable clamp.
Pressure	Operating pressure - 0.1bar to 7bar.
Approvals	WRAS Approved product   TMV3 scheme certified.
Guarantee	2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Selectronic TM	SLT1	36598201

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Will suit: low, mains, pumped, unequal and gravity water pressure systems | Water pressure - 0.1bar to 5.0bar max. | +0.5bar - flow limiters included | Adjustable inlet elbows for ease of installation | Standard 15mm inlet connection.

## Thermostatic Mixers

### Concentric Thermostatic Mixer

Surface or Flush Thermostatic Mixer Showers

The Concentric Thermostatic Mixer shower combines quality, design and performance. Engineered to deliver invigorating performance and precise temperature control the easy to grip, dual, independent controls gives you dominance over temperature and flow. Once set, the temperature control technology maintains the chosen temperature, regardless of other water users. The valve is available with either surface mounted or recessed fitting options and comes with an adjustable spray handset with 3 invigorating spray patterns and easy rub-clean nozzles.

### **Application** Family showering.

Key Features Suitable for all plumbing systems I Separate flow and temperature controls ensure next shower visit requires no adjustment I Adjustable inlet elbows for ease of installation I Brass body ensures longevity in hard water.

Safety Features Instant thermostatic shut-off in the event of hot or cold water failure | Maintains temperature to + or -1°C | Factory set at 43°C ensures safe maximum operating temperature.

Outer Casing Chromed brass.

Accessories Chrome multi-mode handset provides 3 different spray options I Handset height adjustment 530mm (22') I Detachable soap dish for easy cleaning I 1.25m (4ft) flexible hose.

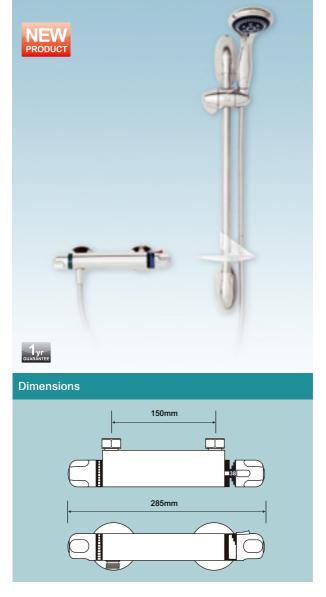
Pressure Operating pressure - 0.1bar to 5.0bar (Flow limiters included).

Guarantee 2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Surface Concentric Thermo Mixer	CTM1S	36594230
Flush Concentric Thermo Mixer	CTM1F	36594231

\*The final year of the guarantee is only available for products registered with Redring after purchase. Conditions apply.



Will suit: Iow, mains, pumped, unequal and gravity water pressure systems I Running water pressure 0.1bar to 5.0bar max. I Maximum static water pressure 10bar I Handset height adjustment 530mm (22") I Standard 15mm inlet connection.

Thermostatic Mixers

### **Bar Thermostatic Mixer**

Thermostatic Mixer Shower

The Bar Mixer combines traditional design, contemporary technology and economical pricing and with dual controls, for separate temperature and independent flow adjustment, this thermostatic mixer has built-in temperature safeguards and offers first-rate performance. It recognises and compensates for changes in water pressure and temperature, mixing accordingly, to maintain desired selected shower. It is also easy to install and requires no electrical connections.

- Application Day to day showering.
- Key Features Uses COLD water from storage tank and stored HOT water from the cylinder | Easy-grip control increases and decreases flow | Easy-grip independent temperature controls | Adjustable inlet elbows for ease of installation.
- Safety Features Thermostatic temperature control | Numerical temperature indicator | Maintains temperature to + or -2°C | Temperature limiter factory set at 38°C | Discreet temperature override button facility.
- Outer Casing Chromed brass.

Accessories Chrome multi-mode handset provides 3 different spray options I Crystal clear detachable soap dish for easy cleaning I 1.25m (4ft) flexible hose with retaining ring, riser rail and adjustable clamp.

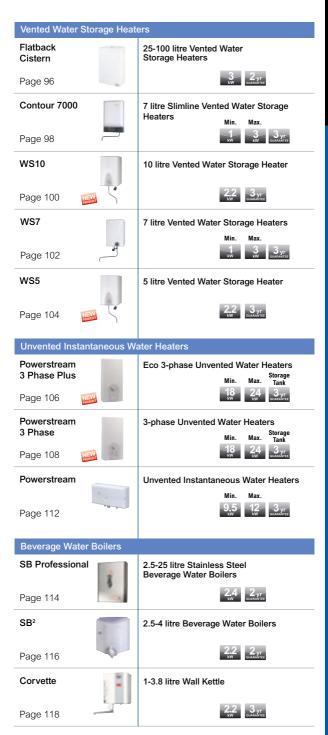
- Pressure Operating pressure 0.1bar to 5.0bar.
- **Guarantee** 1 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Bar TM	BTM1	36594240

### Water Heating Range Profile in Detail

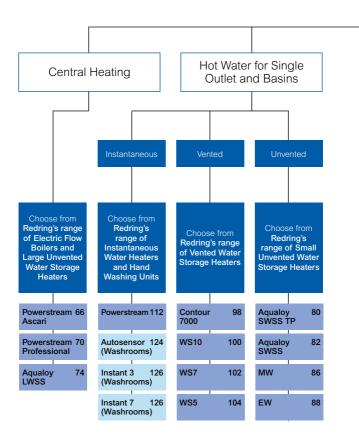
Electric Flow Boilers	
Powerstream Ascari	Central Heating and Hot Water Flow Boiler <u>Min. Max.</u> Storage Min. Max. Tank
Page 66	4 12 3 yr KW KW GUARANTEE
Powerstream Professional	Central Heating, Underfloor and Hot Water Flow Boilers Min. Max.
Page 70	2 12 2 yr KW GUNRANTEE
Unvented Water Storage He	eaters
Aqualoy LWSS Range	90-300 litre Stainless Steel Unvented Water Storage Heaters Min. Max. Cylinder
Page 74	3 6 25 yr KW KW GUARANTEE
Aqualoy MWSS	30-75 litre Stainless Steel Unvented Water Storage Heaters Cylinder
Page 78	
Aqualoy SWSS TP	7-15 litre Stainless Steel Unvented Water Storage Heaters Cylinder
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Aqualoy SWSS	7-15 litre Stainless Steel Unvented Water Storage Heaters Cylinder
Page 82	
MW	10-15 litre Unvented Water Storage Heaters
Page 86	
EW	10-15 litre Unvented Water Storage Heaters
Page 88	
Immersion Heaters & Conti	roller
Domestic Immersion Heaters Page 90	Aqualoy and Copper Water Immersion Heaters Aqualoy Copper
Industrial Immersion Heaters Page 92	Incoloy 825 Industrial Water Immersion Heaters Min. Max. 2. 18 Jur
Immersion Heater Controller Page 94	Economy 7 Time Controller

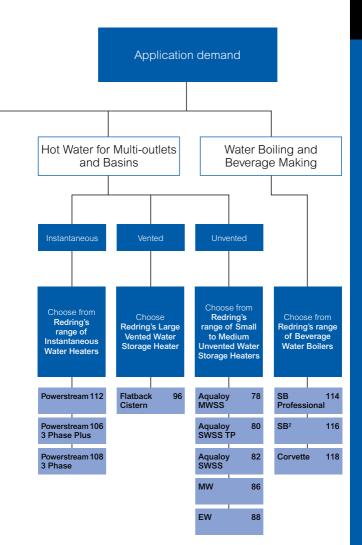


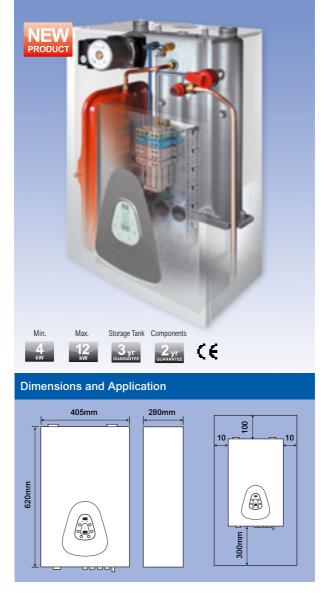
### Water Heating Selector

Choosing the right water heating product is vitally important.

At **Redring**, customer support begins before you even buy! This selector should enable you to make a decision, but if you require assistance, please ring our customer techline on 0844 372 7766 for further information.







Maximum power 4-12kW | Includes 8 litre expansion vessel, 3bar pressure relief valve and 3-speed pump for quick easy install | 7 -segment digital displays of temperature and pressure | Graduated power on/off reduces instantaneous loads | Frost protection 5°C minimum system temperature | 5 litre water storage | Pump protection, prevents pump sticking | Stainless steel elements | Operating pressure 0.5bar - 3bar | Top or bottom cable entry | NB: Please see page 68 for further technical details.

Electrical 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 be installed to conform to the current edition of the IEE Wiring Regulations.

### **Powerstream Ascari** Central Heating and Hot Water Flow Boiler

This electric boiler is 99% efficient and provides a versatile and safe way of heating water wherever there's mains electricity. Suitable for unvented wet central heating and domestic hot water systems, the Powerstream Ascari electric boiler can be used as a direct replacement for Gas, Oil, Propane, Solid Fuel or Electric Storage heating\*. The Powerstream Ascari boiler also provides maximum flexibility as it does not require costly servicing, safety checks or a flue.

- Application Central heating and hot water.
- Key Features
   Integral circulation pump and expansion vessel 1

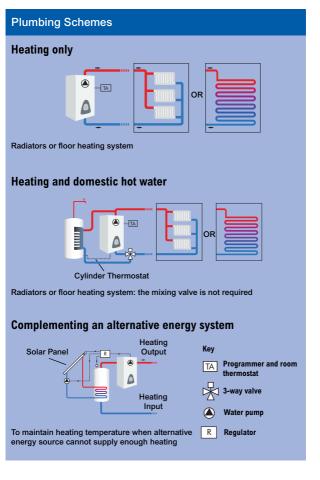
   Auto-adaptability minimising energy input, smoothes temp. variation of the home and on/off cycling of the boiler 1 Suitable for sealed and open vented systems, with radiators or underfloor heating 1 Choice from 12, 8, 6 or 4kW on installation 1 Compact design fits into most spaces (including kitchen cupboards) 1 Low maintenance no requirement for annual service or safety check (5 year check) 1 Near silent operation 1

   Selectable heating system water temperature, 21°C 80°C allows low energy setting of heating 1 Cast iron engine for thermal stability 1 Ideal for well insulated properties of up to 80m<sup>2</sup> 1 5 litre water storage, for rapid response.
- Safety Features Min/max control adjusts the water temperature output from the boiler I No flue and no fuel tanks give a safe and flexible installation.
- **Rating** 4kW, 6kW, 8kW and 12kW options at installation (230V).
- Element Stainless steel.
- Outer Casing White steel casing.
- Pressure Operating pressure 0.5bar to 3bar.
- Approvals CE.
- Guarantee 3 year guarantee on storage tank and 2 years on components (UK).

### Product Range

Product Reference	Short Code	Cat. No
Powerstream Ascari	PSA12	45551860
*Building Regulations apply.		

www.redring.co.uk 67



### Simple to use controls with digital display

- Intelligent operation for comfort and reduced energy use
- System water temperatures can be selected at install or the Ascari can auto-adapt to the requirements of the property, adjusting the water temperature to the optimum setting to reduce energy consumption and smooth the property temperature



Heating circuit water pressure display (bar)

Controls	The Powerstream Ascari boiler has been designed to provide the highest temperature stability and energy consumption possible from an electric boiler. Its 5 litre storage and high thermal mass reduce system cooling, while its electronic temperature and auto-adaptability function keep the room at a stable temperature using the least amount of electrical energy.
	The optional outside temperature sensor allows the boiler to quickly adapt to the external temperatures, increasing heat output on cooler days and reducing energy on warmer days, keeping temperature and energy completely under control.
Running Costs	The Powerstream Ascari boiler is fitted with an auto- adaptability function that operates the central heating system according to the heat characteristics of the property, minimising energy consumption and running costs. The Ascari is designed for use with extended hours off-peak tariffs. Please ask your energy supplier for details of optimum tariffs.
Filling Loop	The Powerstream Ascari is not fitted with a filling loop. Any filling loop being fitted should comply with the Water Supply (water fittings) Regulations 1999 Section G24.1 and G24.2. A filling loop should be fitted at some point to allow the CH system to be filled.
Parallel Operation	For larger properties, multiple boilers may be installed in parallel.
Hot Water Storage	Ask for the Redring Aqualoy LWSS 2304 Duplex Stainless Steel water storage heaters that provide effective, fast and safe hot water for baths, showers and other domestic appliances around any property. For use with direct and indirect heating applications the Aqualoy LWSS cylinders are a high quality vessel employing the best in tig welding technology, the LWSS range also features high flow rates and energy efficient insulation.



Thermostatic temperature range 30°C to 55°C (underfloor) or 55°C to 80°C (central heating) | UK manufactured in a BS EN ISO 9001:2000 registered factory | **NB**: Please see over page for further technical details and sizing guidance.

Boiler variant RFB2	Temp. range <b>30 - 80</b>	BTU output <b>6830</b>	kW loading @ 230-240V <b>1.8 - 2</b>	Cable size guide 1.5mm <sup>2</sup>	Fuse rating guide <b>13 Amps</b>
RFB4	30 - 80	13660	3.7 - 4	2.5 / 4mm <sup>2</sup>	20 Amps
RFB6	30 - 80	20490	5.5 - 6	4mm <sup>2</sup>	30 Amps
RFB75	30 - 80	25613	6.9 - 7.5	4 / 6mm <sup>2</sup>	35 - 40 Amps
RFB9	30 - 80	30735	8.3 - 9	6 / 10mm <sup>2</sup>	40 - 45 Amps
<b>RFB105</b>	30 - 80	35860	9.6 - 10.5	6 / 10mm <sup>2</sup>	45 Amps
RFB12	30 - 80	40980	11 - 12	10mm <sup>2</sup>	50 Amps

## Electric Flow Boilers

### **Powerstream Professional**

Central Heating, Underfloor and Hot Water Flow Boilers

This electric flow boiler provides a versatile and safe way of heating water, where there's mains electricity. Suitable for vented and unvented wet central heating, underfloor heating and domestic hot water, Powerstream Professional can be used instead of Gas, Oil, Propane, Solid Fuel or Electric Storage heating\*. 99% efficient, this boiler is highly flexible as no servicing, safety checks or flue are needed.

- **Application** Central heating, underfloor heating and hot water.
- Key Features 7 power options (2kW 12kW) I Compact design fits in most spaces (including kitchen cupboards) I Solid state technology for long-life I No moving parts, maximum reliability I Minimal service and maintenance costs I Suitable for sealed and open vented systems with radiators or underfloor heating I Uses standard radiators, programmer, pump, room stat and thermostatic radiator valves I Thermostatic range 30°C to 55°C (underfloor) or 55°C to 80°C (central heating).
- Safety Features Min/max control adjusts the temperature I No flue and no fuel tanks give a safe and flexible installation.
- Rating 2kW, 4kW, 6kW, 7.5kW, 9kW, 10.5kW & 12kW (240V).
- **Element** Copper sheathed.
- **Outer Casing** White stove-enamelled corrosion-resistant steel.
- Pressure Operating pressure 0.5bar to 3bar.
- Approvals BEAB Approved | CE.
- **Guarantee** 2 year product guarantee (UK).

### Product Range

Product Reference	Short Code	Cat. No
Powerstream Pro 2kW	RFB2	45670202
Powerstream Pro 4kW	RFB4	45670204
Powerstream Pro 6kW	RFB6	45670206
Powerstream Pro 7.5kW	RFB75	45670207
Powerstream Pro 9kW	RFB9	45670209
Powerstream Pro 10.5kW	RFB105	45670210
Powerstream Pro 12kW	RFB12	45670212

\*Building Regulations apply.



### Selection Guide (Based on NHBC guidelines<sup>1</sup>)

Property Type	Max. floor area (m²/ft²)	Space Heatin New Build	Older properties
1 room bedsit	20 / 200	RFB2	RFB4
2 room flat	40 / 400	RFB4	RFB6
1 bed house	80 / 800	RFB6	RFB105
2 bed house	100 / 1000	RFB6	RFB12
3 bed house	130 / 1400	RFB9	n/a
4 bed house	150 / 1600	RFB9	n/a
5 bed house	190 / 2000	RFB12	n/a

Property	Space Heating & Indirect Hot Water <sup>3</sup>			
Туре	Tank (I)	Wash	New Build	Older properties
1 room bedsit	50	1 shower	RFB4	RFB6
2 room flat	115	1 bath	RFB75	RFB9
1 bed house	115	1 bath	RFB9	n/a
2 bed house	115	1 bath	RFB105	n/a
3 bed house	115	1 bath	RFB12	n/a
4 bed house	140	1 bath	RFB12	n/a
5 bed house	200	2 baths	n/a	n/a

NB: 1 In broad terms, stipulates minimum room temperatures and recovery times for typical hot water draw-offs <sup>2</sup> Based on average space heating requirement of 45 W/m<sup>2</sup> (New Build), 90W/m<sup>2</sup> (Older properties) <sup>3</sup> Includes requirement for a complete tank full recovery time of less than 3 hours.

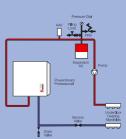
Boiler sizing: Please consult your installer/heating engineer/designer as to the correct size of the Powerstream Professional boiler. Size of the property, the insulation properties of the building itself, the local and seasonal weather conditions and exactly what the boiler will be required to heat, eg: heating and/or hot water will need to be considered. To discuss individual delivery and design requirements or for help with making your selection please call: Technical - 0844 372 7766 or email: Design - aedesign@applied-energy.com

# Technical

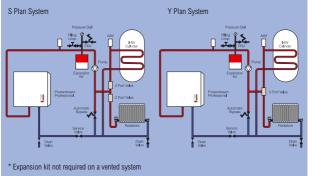
### For Heating only, with Direct domestic hot water cylinder

### Prom Dal Prom D

### For Underfloor Heating system



### For Heating and domestic hot water & Indirect hot water cylinder



Hot Water Storage Ask for the Redring Aqualoy LWSS 2304 Duplex Stainless Steel water storage heaters that provide effective, fast and safe hot water for baths, showers and other domestic appliances around any property. For use with direct and indirect heating applications the Aqualoy LWSS cylinders are a high quality vessel employing the best in tig welding technology, the LWSS range also features high flow rates and energy efficient insulation.

NB 1: The Redring Powerstream Professional flow boiler is ideal for providing water to a domestic /light commercial wet central heating system. Where it is intended for use to provide hot water as well, it may be that an alternative direct source of heat is required, eg: immersion heater. This is to ensure compliance with NHBC guidelines and to provide hot water at all times.

**NB 2:** The Redring Powerstream Professional flow boiler requires fitment of a circulating pump for underfloor and central heating applications. In the case of unvented applications an expansion kit will be required.



\* Please see over page for full details of range dimensions.

Mains water supply essential | Min 1.5bar and a flow rate of 25 litres per Specification minute | Operating pressure - 3bar | Pressure tested to 15bar | Expansion relief valve set at 5bar | Temperature and relief valve set at 7bar at 90°C | Recommended cable size for all cylinders - 1.5mm<sup>2</sup> | Electrical connections are located on the front of the unit I Cold water inlet and hot water draw-off - 22mm | Coil flow and return - 22mm | Temperature and pressure relief -1/2" | Inlet group - 22mm | Tundish inlet - 15mm, outlet - 22mm (both compression) | 200 litre capacities and above are supplied with a secondary return connection I All ancillary components are supplied, allowing for easy, quick and hassle-free installation.

Technical

# Aqualoy LWSS Range 90-300 litre Stainless Steel Unvented Water Storage Heaters

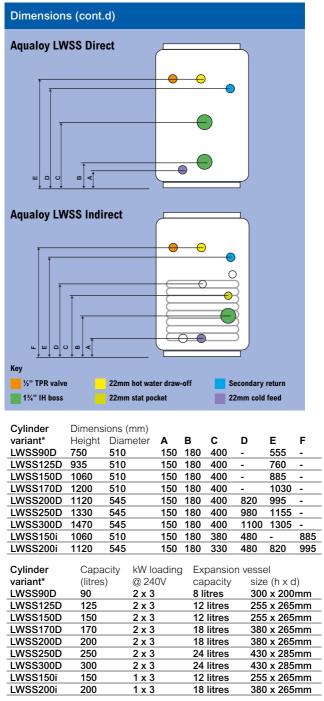
Water heating cylinders that provide effective and fast, mains-fed, hot water for use with direct and indirect heating applications. Employing the best in tig welding technology, the range features high flow rates and energy efficient insulation.

Application	Hot water storage.
Key Features	Long-life, incoloy, low noise immersion heaters I High flow rate, up to 55I/min - ideal to supply power showers without the need for a separate pump I Includes expansion vessel.
Safety Features	Pressure tested to 15bar I Expansion relief valve set at 5bar I Temperature and relief valve set at 7bar at 90°C.
Capacities	90, 125, 150, 170, 200, 250 and 300 litres.
Rating	Immersion heaters 3kW @ 240V (see below).
Outer Casing	Steel, wipe clean, white plastic coated finish and corrosion resistant base and lid.
Insulation	Energy efficient rigid polyurethane foam insulation.
Water Container	Duplex welded stainless shell with pressured domes.
Heat Unit	Long-life Incoloy sheathed element.
Primary Coil	Coil flow and return - 22mm (Indirect only).
Anode	No sacrificial anode required.
Pressure	Operating pressure - 1.5bar to 3.5bar.
Approvals	WRAS Approved Product   BEAB Approved   CE.
Guarantee	25 year cylinder and 2 year parts guarantee (UK).

# Product Range

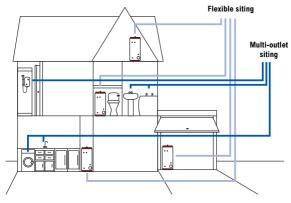
Product Reference	Cat. No	Capacity (I)	kW loading
LWSS90D	47788101	90	2 x 3
LWSS125D	47788201	125	2 x 3
LWSS150D	47788301	150	2 x 3
LWSS170D	47788401	170	2 x 3
LWSS200D	47788501	200	2 x 3
LWSS250D	47788601	250	2 x 3
LWSS300D	47788701	300	2 x 3
LWSS150i	47788801	150	1 x 3
LWSS200i	47788901	200	1 x 3

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\*D - Direct, I - Indirect

# Domestic Selection Guide



Bedrooms	Hot water demand	Direct	Indirect
2 beds	1 shower	125	n/a
	1 bath, 1 shower	155	n/a
3 beds	1 bath, 1 shower	170	150i
4 beds	1 bath, 1 shower	200	n/a
	2 baths, 1 shower	250	200i
	2 baths, 1 shower	300	n/a
6 beds	2 baths, 2 showers	300	n/a
	3 baths	300	n/a

Siting Options The structure supporting the heater must be capable of holding the weight of a cylinder when full with water.

 
 Aqualoy LWSS
 Duplex welded Stainless shell with pressured domes I For use with one or two electric immersion heaters (both included with the unit) for direct heating of the stored water I Can be used with peak rate and/or off peak tariff electricity supplies.

 Aqualoy LWSS
 Duplex welded Stainless shell with pressured domes 1 For use in systems incorporating an indirect heater such as a gas fired boiler or electric flow boiler 1 Unit also includes one electric immersion heater for direct heating of the stored water.

# Re-heat Performance

Requirement	Dire 90		150	170	200	250	300	Indir 150	
Time to re-heat									
after 70% draw-off	27	37	45	51	63	75	136	26	34
Time to re-heat									
from cold to 65°C	52	72	86	98	108	144	202	37	33
Weight when full (kg)	125	165	195	220	250	310	360	195	250
24hr heat loss (kWh)	1.1	1.6	1.9	2.1	2.3	2.5	3.1	1.9	2.3



Heat up time 15°C to 65°C (minutes) - 30L/36, 50L/55, 75L/85 I Weight when full (kg) - 30L/47, 50L/71, 75L/100 I Electrical supply 230V 50Hz direct connection to 13A fused isolation switch with 3mm min gap I Expansion vessel 5 litres I 15mm to 22mm Tundish.

Product	Dimensions (mm)		
variant	A Height (excl. T&P valve)	B Total Height	C Width
MWSS30	586	665	400
MWSS50	789	860	400
MWSS75	1093	1175	400

# Aqualoy MWSS 30-75 litre Stainless Steel Unvented Water Storage Heaters

Water heating cylinders that provide effective and fast, mains-fed hot water. These medium capacity, wall-mounted, stainless steel storage vessels are suited to medium usage situations, such as commercial sinks or even as prime hot water supply storage.

- Application Hot water storage.
- Key Features Premium insulation minimises heat loss | Medium capacity for higher water usage | Installation kit | Expansion vessel | Thermostatic control provides water temperature 15°C - 68°C | Wall-mounted | Stainless steel cylinder - 10 year warranty | No anode to service | Direct connection to cold mains water supply | High water flow rates | Incoloy elements.
- Safety Features Expansion relief pressure valve set at 6bar I Temperature and pressure relief valve settings - Lift pressure 7bar I Lift temperature - 90°C I Thermal cut-out manual reset.
- Capacities 30, 50 and 75 litre.
- Rating 3kW @ 230V.
- Outer Casing Steel, wipe clean, white plastic coated finish and corrosion resistant base and lid.
- **Insulation** Injected foam depth 30mm.
- Water Container 316L stainless steel.
- Heat Unit Long-life Incoloy sheathed elements.
- **Thermostat** Thermostatic temperature control 15°C-68°C.
- Anode No anode to service.
- Pressure Operating pressure 3bar.
- Approvals Kiwa Approved Product | CE.
- **Guarantee** 10 year cylinder and 2 year parts guarantee (UK).

Product Reference	Short Code	Cat. No
Aqualoy MWSS 30 litre	MWSS30	47781760
Aqualoy MWSS 50 litre	MWSS50	47781761
Aqualoy MWSS 75 litre	MWSS75	47781762



 Technical
 Heat up time 15°C to 65°C (minutes) - 7L/9, 10L/12 and 15L/18 I Weight

 Specification
 when full (kg) - 7L/13.5, 10L/17.2 and 15L/23.3 I Cold feed/hot draw-off connections - 15mm I Minimum recommended mains pressure (performance reduces at lower pressure) - 1.5bar I Maximum working pressure - 6bar I Maximum water supply pressure - 16bar I Expansion relief valve set pressure - 6bar I Temperature & pressure relief valve settings - Lift pressure - 7bar, Lift temperature 90°C I Electrical supply - 230°C Solt2 direct connection to 13A fused isolation switch with 3mm min gap I Recommendations are based on BS6700 - Actual water usage varies dramatically per application, the figures given are a guide only. Where water saving devices are used the number of water outlets can be increased.

Installation Kits See page 84 to determine what installation kit is required with your SWSS TP heater. The installation will not comply with the Water Regulations if the correct kits are not fitted.

# Unvented Water Storage Heaters

# Aqualoy SWSS TP 7-15 litre Stainless Steel Unvented Water Storage Heaters

Water heating cylinders with temperature and pressure relief valves that provide thermostatically controlled, mains-fed, hot water up to 68°C. These smaller capacity cylinders are ideal for mounting under sinks or near to the point of use.

- Application Hot water storage.
- Key Features
   Factory fitted temperature and pressure relief valve 1

   Premium insulation minimises heat loss 1
   Thermostatic

   control provides water temperature to 15-68°C 1
   Wall

   mounted 1
   Stainless steel cylinder 10 year warranty 1

   No anode to service 1
   Direct connection to cold mains

   I
   High water flow rates 1
   Ideal for low volume frequent

   or irregular use applications 1
   Incoloy elements.
- Safety Features Temperature and pressure relief valve settings Lift pressure 7bar | Lift temperature 90°C | Thermal cut-out 85°C manual reset.
- Capacities 7, 10 and 15 litre.
- Rating 3kW @ 230V.
- Outer Casing Steel, wipe clean, white plastic coated finish and corrosion resistant base and lid.
- Insulation Injected foam depth 30mm.
- Water Container 316L stainless steel cylinder.
- Heat Unit Incoloy elements.
- **Thermostat** Thermostatic temperature control 15°C-68°C.
- Anode No anode to replace.
- Pressure Maximum water supply pressure 16bar.
- Approvals Kiwa Approved Product | CE.
- Guarantee 10 year cylinder and 2 year parts guarantee (UK).

Product Reference	Short Code	Cat. No
Aqualoy SWSS TP 7 litre	SWSSTP7	47781960
Aqualoy SWSS TP 10 litre	SWSSTP10	47782060
Aqualoy SWSS TP 15 litre	SWSSTP15	47782160
SWSS TP Expansion Kit	SWEXK	47783160
SWSS TP Pressure Reducing Kit	SWPRK	47783161



Heat up time 15°C to 65°C (minutes) - 7L/9, 10L/12 and 15L/18 | Weight when full (kg) - 7L/13.5, 10L/17.2 and 15L/23.3 | Cold feed/hot draw-off connections - 15mm | Minimum recommended mains pressure (performance reduces at lower pressure) - 1.5bar | Maximum working pressure - 6bar | Maximum water supply pressure - 16bar | Expansion relief valve set pressure - 6bar | Electrical supply - 230V 50Hz direct connection to 13A fused isolation switch with 3mm min gap | Recommendations are based on BS6700 - Actual water usage varies dramatically per application, the figures given are a guide only. Where water saving devices are used the number of water outlets can be increased.

Installation Kits See page 84 to determine what installation kit is required with your SWSS heater. The installation will not comply with the Water Regulations if the correct kits are not fitted.

# Aqualoy SWSS 7-15 litre Stainless Steel Unvented Water Storage Heaters

Water heating cylinders that provide thermostatically controlled, mains pressure, hot water up to 68°C. The Aqualoy SWSS cylinders' smaller size allows them to be easily mounted under sinks or any convenient place near to the point of use.

Hot water storage

Application	Hot water storage.
Key Features	High levels of insulation minimise heat loss I Thermostatic temperature control provides water temperature to 15-68°C I Wall-mounted I Stainless steel cylinder with 10 year warranty I No anode to service I Direct connection to cold mains water supply I High water flow rates I Ideal for low volume frequent or irregular use applications I Incoloy elements.
Safety Features	Thermal cut-out - manual reset.
Capacities	7, 10 and 15 litre.
Rating	3kW @ 230V.
Outer Casing	Steel, wipe clean, white plastic coated finish and corrosion resistant base and lid.
Insulation	Injected foam - depth 30mm.
Water Container	· 316L stainless steel cylinder.
Heat Unit	Incoloy elements.
Thermostat	Thermostatic temperature control - 15°C-68°C.
Anode	No anode to replace.
Pressure	Maximum water supply pressure - 16bar.
Approvals	Kiwa Approved Product   CE.
Guarantee	10 year cylinder and 2 year parts guarantee (UK).

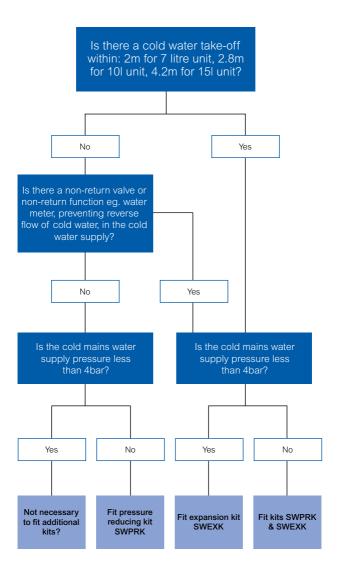
# Product Range

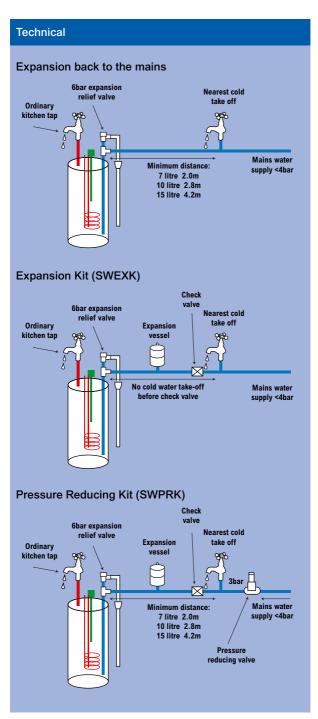
Application

Product Reference	Short Code	Cat. No
Aqualoy SWSS 7 litre	SWSS7	47784562
Aqualoy SWSS 10 litre	SWSS10	47784561
Aqualoy SWSS 15 litre	SWSS15	47784560
SWSS Expansion Kit	SWEXK	47783160
SWSS Pressure Reducing Kit	SWPRK	47783161

# Aqualoy SWSS & SWSS TP Installation Kit Guide

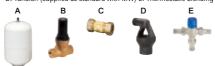
Installation kits should be fitted to all SWSS/SWSS TP units of 15 litres or less and in accordance with the details below. The installation will not comply with the Water Regulations if the correct kits are not fitted.





Water Heating





NB: Use with water supply pressures above 6bar or where cold water supply pipe is not long enough to accommodate expansion of hot water, i.e MW15 - Less than 4.5m of 15mm pipe, (MW10 - Less than 3m)

Operating water pressure 1 - 12bar (above 6bar use cold water pack) I Replaceable magnesium sacrificial anode I Anode available as spare part I Inlet/outlet connections 15mm (½° BSP) I Fixing pack with wall mounting bracket supplied I MW unit needs to discharge to a drain.

Heater	Capacity	kW loading	Cable size	Fuse rating
variant	(litres)	@ 230-240V	guide	guide
MW10	10	2.7 - 3	1.5mm <sup>2</sup>	13 Amps
MW15	15	2.7 - 3	1.5mm <sup>2</sup>	13 Amps
MW10H	10	2.7 - 3	1.5mm <sup>2</sup>	13 Amps
MW15H	15	2.7 - 3	1.5mm <sup>2</sup>	13 Amps

Technical

# <u> Jnvented</u> Water Storage Heaters

# **MW** 10-15L Unvented Water Storage Heaters

The MW range has been designed to provide stored hot water from a mains pressurised water supply. MW TP comes complete with a factory fitted temperature and pressure relief device.

Ar	plication	Hot water storage.

- Key Features Hot water to up to 4 outlets | Balanced supply of hot and cold water | Minimal heat loss and energy savings short pipe runs and superior insulation | Water outlet via existing tap or mixer | Adjustable thermostat to 70°C | Compact for undersink mounting | Remote siting possible.
- Safety Features Over-temperature safety cut-out | Temperature pressure relief valve | Neon light indicates when heater is working.
- Capacities 10 and 15 litre.
- Rating 3kW @ 240V (2.7kW @ 230V).
- **Outer Casing** White thermoplastic cover.
- **Insulation** Foamed polyurethane insulation.
- Accessories See opposite page for details.
- Water Container Vitreous enamelled steel water container.
- Heat Unit Long-life Incoloy elements.
- **Thermostat** Adjustable thermostat to 70°C.
- Anode Replaceable magnesium sacrificial anode.
- Pressure 1 12bar (above 6bar use cold water controls pack).
- Approvals WRAS Approved Product | BEAB Approved | CE.
- **Guarantee** 1 year product guarantee (UK).

47782001
47782101
47781001
47781101
87783101
97783258
87783103



Accessories

Optional Cold Water Pack: A: Expansion vessel (Dia 120mm x H 235mm), B: Pressure reducing valve, C: Check valve | Additional Accessories: D: Tundish, E: Thermostatic blending valve.



NB: Use with water supply pressures above 6bar or where cold water supply pipe is not long enough to accommodate expansion of hot water, i.e EW15 - Less than 4.5m of 15mm pipe, (EW10 - Less than 3m)

Technical Operating water pressure 1 - 12bar (above 6bar use cold water pack) I Replaceable magnesium sacrificial anode | Anode available as spare part | Inlet/outlet connections 15mm (1/2" BSP) I Fixing pack with wall mounting bracket supplied 1 EW unit needs to discharge to a drain.

Heater	Capacity	kW loading	Cable size	Fuse rating
variant	(litres)	@ 230-240V	guide	guide
EW10	10	2.7 - 3	1.5mm <sup>2</sup>	13 Amps
EVVIU	10	2.7 - 3	1.5mm-	15 Amps
EW10 EW15	10	2.7 - 3	1.5mm <sup>2</sup>	13 Amps

# Unvented Water Storage Heaters

# **EW** 10-15L Unvented Water Storage Heaters

The EW has been designed to provide stored hot water from a mains pressurised water supply, where there's no requirement for a temperature/pressure relief device, making installation simple.

Application	Hot water storage.
-------------	--------------------

- Key Features Hot water to up to four outlets | Balanced supply of hot and cold water | Heat loss minimisation and energy savings from short pipe runs and superior insulation | Water outlet via existing tap or mixer | Adjustable thermostat to 70°C | Compact shape for undersink mounting | Remote siting possible.
- Safety Features Over-temperature safety cut-out 1 6bar expansion relief valve 1 On/off neon light.
- Capacities 10 and 15 litre.

Rating 3kW @ 240V (2.7kW @ 230V).

- Outer Casing White thermoplastic cover.
- **Insulation** Foamed polyurethane insulation.
- Accessories See opposite page for details.

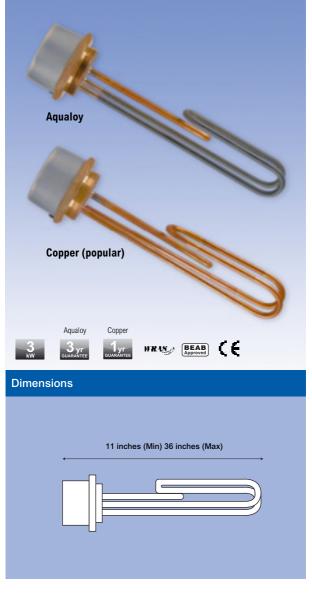
Water Container Vitreous enamelled steel water container.

- Heat Unit Long-life Incoloy alloy sheathed elements.
- **Thermostat** Adjustable thermostat to 70°C.

Anode Replaceable magnesium sacrificial anode.

- Pressure 1 12bar (above 6bar use cold water controls pack).
- Approvals BEAB Approved | WRAS Approved Product | CE.
- Guarantee 1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
EW10 Undersink	EW10	47784501
EW15 Undersink	EW15	47784502
Optional Cold Water Pack		87783101
Tundish		97783236
Temp. & Pressure Relief Valve		97783258
Thermostatic Blending Valve		87783103



Aqualoy - for use in aggressive water areas I Copper (Popular) - for use in soft and normal water areas.

Redring Dual Thermostats For use with non-dual cut out immersion heaters.

Product Reference	Catalogue No.
7 inch DC rod stat 13A	92301573
11 inch DC rod stat horizontal 13A	92301574
18 inch DC rod stat 13 - 16A	92301575
11 inch DC rod stat vertical 13A	92301580

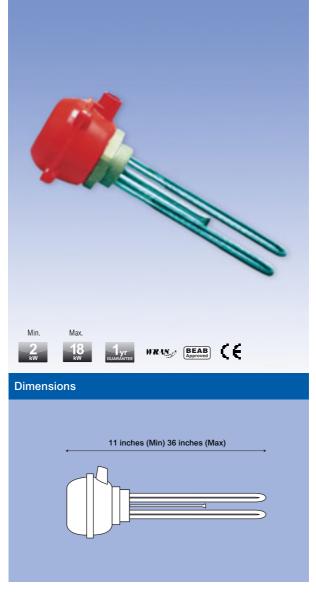
# **Domestic Immersion Heaters**

Aqualoy and Copper Water Immersion Heaters

Redring offer a range of dual cut-out immersion heaters to comply with the latest European safety standard, EN 60335-2-73 for fixed immersion heaters. Redring dual cut-out immersion heaters are supplied with a rod thermostat and a separate, 'secondary manual reset safety cut-out'. Dual cut-out immersion heaters are available in standard Copper or Aqualoy variants for use in more aggressive water areas.

- Application Hot water heating.
- Key Features Comply with European safety standard, EN 60335-2-73 I Dual cut-out heaters supplied complete with rod thermostat I Available in Aqualoy - for more aggressive water areas I Copper - for use in soft and normal water areas.
- Safety Features Dual cut-out I Separate, 'secondary manual reset safety cut-out', fitted directly to the immersion heater head.
- Rating 3kW @ 240V.
- Length 11, 14, 27, 30 and 36 inches.
- Sheath Copper and Aqualoy.
- Thermostat
   All dual cut-out heaters come with rod thermostats supplied.
- Approvals WRAS Approved Product | BEAB Approved | CE.
- Guarantee Aqualoy 3 year | Copper 1 year guarantee (UK).

Product Reference	Short Code	Cat. No	Length
2 <sup>1</sup> / <sub>4</sub> " BSP Copper	P11DC	33324501	11"
2 <sup>1</sup> / <sub>4</sub> " BSP Copper	P14DC	33324502	14"
2 <sup>1</sup> / <sub>4</sub> " BSP Copper	P27DC	33324503	27"
2 <sup>1</sup> / <sub>4</sub> " BSP Copper	P30DC	33324504	30"
2 <sup>1</sup> / <sub>4</sub> " BSP Copper	P36DC	33324505	36"
2 <sup>1</sup> / <sub>4</sub> " BSP Aqualoy	A11DC	33324601	11"
2 <sup>1</sup> / <sub>4</sub> " BSP Aqualoy	A27DC	33324602	27"
1¾" BSP Unvented Aqualoy	GU11DC	33324701	11"



Industrial heaters - Incoloy 825 sheathed elements 2¼" BSP threaded brass heads I Control thermostat in Incoloy 825 pocket I Corrosion resistant polypropylene terminal.

# Industrial Immersion Heaters

Incoloy 825 Industrial Water **Immersion Heaters** 

Redring have a comprehensive range of industrial immersion heaters, using Incoloy sheathed heating elements and adjustable rod thermostats.

Application	Hot water heating.
Key Features	Loadings available from 2 - 18kW   Wired in single phase or 3 phase   Control thermostat in Incoloy 825 pocket   Incoloy 825 Industrial heaters with angular rotary terminal enclosure - can be moved to any position   Immersed lengths from 11 - 36 inches.
Safety Features	Dual cut-out I Separate, 'secondary manual reset safety cut-out', fitted directly to the immersion heater head.
Rating	2, 3, 4, 6, 7.5, 9, 12 and 18kW @ 240V.
Length	11, 14, 16, 24, 27, 30 and 36 inches.
Sheath	Incoloy.
Thermostat	All dual cut-out heaters come with rod thermostats supplied.
Approvals	WRAS Approved Product   BEAB Approved   CE.
Guarantee	1 year product guarantee (UK).

# Product Range

1 roudot rta	ngo			
Catalogue Number	Short Code	Loading kW	Phases	Immersed Length
60391301	RY211	2	1 only	11
60391302	RY311	3	1 or 3	11
60391303	RY330	3	1 or 3	30
60391304	RY411	4	1 or 3	11
60391305	RY416	4	1 or 3	16
60391306	RY616	6	1 or 3	16
60391307	RY630	6	1 or 3	30
60391309	RY724	7.5	1 or 3	24
60391310	RY914*	9	1 or 3	14
60391311	RY927	9	1 or 3	27
60391312	RY936	9	1 or 3	36
60391313	RY1224	12	1 or 3	24
60391314	RY1236	12	1 or 3	36
60391315	RY1836	18	1 or 3	36

\*Not recommended for aggressive water.



230V - 240V, 13A | Suitable for immersion heaters up to 3kW | Display: 6.35mm character height, backlit liquid crystal display, am/pm indication, Summer/Winter indication.

Product	Dirt	Moisture	Shock	Max. Op	Min. Op
Variant	Protection	Protection	Protection	Temp °C	Temp °C
EC7	Normal	Ordinary	Class 1	+35	0

# Immersion Heaters and Controller

# **Immersion Heater Controller**

Economy 7 Time Controller

The Redring Electronic 7 immersion heater controller allows up to three secure off-peak heating periods every 24 hours to make the maximum use of cheap rate structures - including split tariffs.

Application	Hot water storage control.
, ppnoanon	filler flator otorago control.

- Key Features One minute accuracy means no accidental running over into full rate tariff periods 1 Suitable for use with single, dual or two element immersion heaters 1 Precise and flexible programming - Off peak - up to 3 on/off periods 1 Pre-programmable automatic boost and one hour manual boost 1 Illuminated display for easy reading even in a dark cupboard 1 One touch Winter/Summer change button alters setting and display 1 2 year battery reserve protection against power interruption 1 Easy installation 1 Microgap on control.
- Safety Features Full disconnection to immersion heater(s) on double pole isolator switch.
- Rating 230V 240V, 13A.
- Outer Casing Thermoplastic, flame retardant.
- Approvals WRAS Approved Product | BEAB Approved | CE.
- **Guarantee** 1 year product guarantee (UK).

Product	Short	Catalogue	Supply	Power	Live
Ref.	Code	Number		Consumption	Parts
Electronic 7	EC7	82700206	240V AC, 50Hz	10VA max	Yes



 $\ensuremath{\,^{\ensuremath{^{\prime}}}}$  BSP cold water and 22mm compression fitting hot water connections.

Product	Dimensions (n	nm)	
variant	A Height	B Width	C Depth
CT25	705	470	210
CT50	750	600	320
CT75	925	600	320
CT100	1080	600	320

# Vented Water Storage Heaters

# Flatback Cistern 25-100 litre Vented Water Storage Heaters

Designed for wall-mounted installation and ideal for small commercial kitchens, bathrooms, cloakrooms and canteens, these Flatback Cisterns are compact and provide a multioutlet water heating solution.

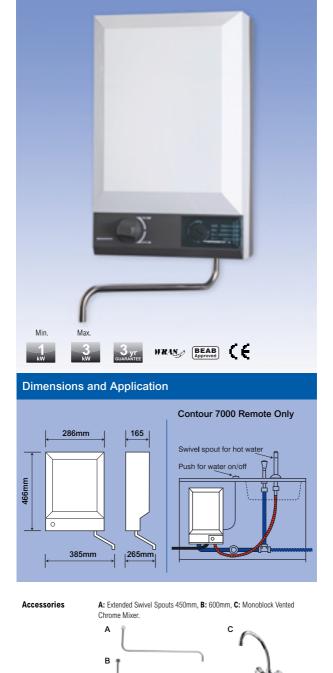
Hot water storage.

Application	not water storage.
Key Features	Choice of 25, 50, 75 or 100 litre capacities I 2 adjustable thermostats for precise control I Ideal for replacement (overflow and cold feed can be connected on the left or right hand side) I 50 to 80°C thermostatic control range I Drain connection supplied and fitted I Cold water cistern incorporated within the unit.
Safety Features	Overheat protection.
Capacities	25, 50, 75 and 100 litre heaters.
Rating	3kW.
Outer Casing	Corrosion proofed steel, with enamel finish outer casing.
Insulation	High density foam.
Water Container	Copper sheet water vessel with brazed seams.
Heat Unit	Long-life Incoloy sheathed elements.
Thermostat	Fixed 50-80°C thermostatic control range.
Pressure	Operating pressure 0.7bar to 10bar.
Approvals	BEAB Approved I WRAS Approved Product I CE.
Guarantee	2 year product guarantee (UK).

# Product Range

Application

Product Reference	Short Code	Cat. No
Cistern Type 25	CT25	26786401
Cistern Type 50	CT50	26786801
Cistern Type 75	CT75	26786901
Cistern Type 100	CT100	26787001





%" BSP cold water and 22mm compression fitting hot water connections I Restrictors supplied to optimise flow rate I  $\,$  NB: We only recommend the use of the of the Redring Vented Monoblock Mixer.

Specification

Water Heating

# **Contour 7000** 7L Slimline Vented Water Storage Heaters

This storage heater has a 7 litre capacity and is ideal for oversink washing. Alternatively, the Contour 7000 Remote allows you to fit under the sink. Featuring an air operated sink mounted switch that, when pressed, delivers hot water through a remote swivel spout at your pre-set temperature.

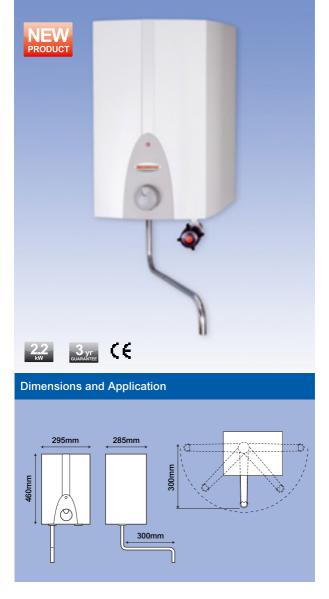
Hot water storage.

Key Features	7 litre capacity, point of use   Adjustable thermostat 15°C - 75°C   Choice of heat settings   Ideal handwash and dishwash temperature settings indicated on the unit   Complete with 300mm swivel spout   Negligible standing heat loss   <b>Contour 7000 Remote Only</b> - On/off control via touch air switch   Hot water delivered through a remote swivel spout   Remote air switch swivel spout and flexible hose supplied   Neat and out of sight installation.
Safety Features	Integral on/off and flow control   Frost protection setting   Tamperproof thermostat cover   Safety over temperature fuse.
Capacities	7 litre.
Rating	1kW and 3kW.
Outer Casing	High quality impact resistant ABS cover.
Insulation	Polystyrene insulation.
Water Container	Corrosion resistant polypropylene.
Heat Unit	Sheathed heating elements.
Thermostat	Capillary type, externally adjustable - 15°C - 75°C with frost protection setting.
Pressure	0.7bar - 10bar (Flow restrictors included).
Accessories	See opposite page for details.
Approvals	BEAB Approved I WRAS Approved Product I CE.
Guarantee	3 year product guarantee (UK).

# Product Range

Application

Product Reference	Short Code	Cat. No
Contour 7000 3kW	C73	44784001
Contour 7000 1kW	C71	44784002
Contour 7000 Remote	C7U3	44784020
Extended Swivel Spouts 450mm	S1	84780404
Extended Swivel Spouts 600mm	S2	84780405
Mono Vented Chrome Mixer	МСМ	84780408



Electrical - Temperature control, isolation valve I Elements - 2.2kW @ 230V 50Hz I Electrical Connections - 1m 3-core supply cable provided I **NB:** Open Outlet Device - Outlet must be left open to the atmosphere and should not be modified or restricted in any way.

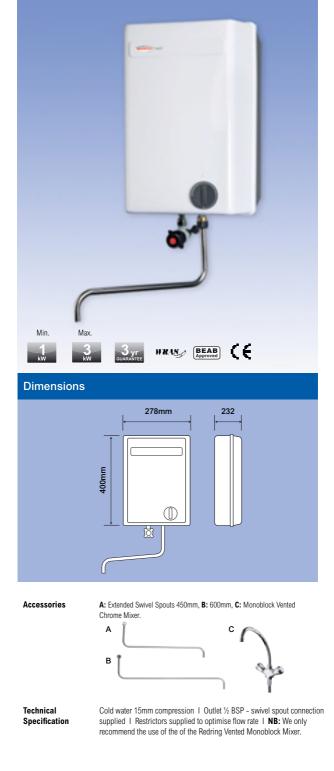
# WS10 10 litre Vented Water Storage Heater

The WS10 provides stored hot water at point of use. It delivers a low volume of water and the open outlet or non-pressurized unit benefits from minimal standing heat loss, because it is installed at point of use.

Application	Hot water storage.
Key Features	10 litre capacity, point of use 1 4 temperature settings - cold, 38°C, 60°C and 70°C 1 Complete with 300mm swivel spout 1 Negligible standing heat loss 1 Power on indicator.
Safety Features	Auto reset temperature cut-out, allows unit to resume operation in the event of being operated when dry.
Capacities	10 litre.
Rating	2.2kW @ 230V 50Hz.
Outer Casing	White I Easy Clean I Thermoplastic.
Insulation	Polystyrene insulation.
Water Container	Corrosion resistant polypropylene.
Heat Unit	Sheathed heating elements.
Thermostat	Capillary type, externally adjustable - $15^{\circ}$ C - $70^{\circ}$ C with frost protection setting.
Pressure	Operating pressure - 0.7bar to 10bar.
Approvals	CE.
Guarantee	3 year product guarantee (UK).

Product Ra	ange
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Product Reference	Short Code	Cat. No
WS10	WS1022	44780065

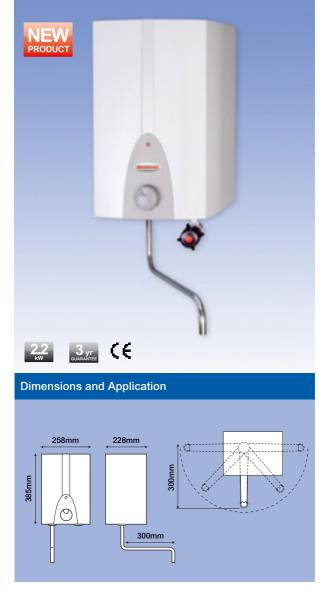


# **WS7** 7 litre Vented Water Storage Heaters

The WS7 offers an economical solution to provide stored hot water at point of use and can be mounted undersink using the special monoblock chrome-mixer accessory. These units also benefit from minimal standing heat loss, because they are installed at point of use.

Application	Hot water storage.
Key Features	7 litre capacity, point of use I Choice of 1kW and 3kW models I 300mm swivel spout included I Extended outlets available I Wall bracket and full fixing pack supplied I Adjustable thermostat 15°C - 75°C with frost protection setting.
Safety Features	Frost protection setting I Integral safety over-temperature thermal fuse I Optional tamper proof cover supplied.
Capacities	7 litre.
Rating	1kW and 3kW.
Outer Casing	High quality impact resistant ABS cover.
Insulation	Polystyrene insulation.
Water Container	r Corrosion resistant polypropylene.
Heat Unit	Sheathed heating elements.
Thermostat	Capillary type, externally adjustable - 15°C - 75°C with frost protection setting.
Pressure	0.7bar - 10bar (Flow restrictors included).
Accessories	See opposite page for details.
Approvals	BEAB Approved I WRAS Approved Product I CE.
Guarantee	3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
WS7 3kW	WS73	44780001
WS7 1kW	WS71	44780002
Extended Swivel Spouts 450mm	S1	84780404
Extended Swivel Spouts 600mm	S2	84780405
Mono Vented Chrome Mixer	MCM	84780408



Electrical - Temperature control, isolation valve I Elements - 2.2kW @ 230V 50Hz I Electrical Connections - 1m 3-core supply cable provided I NB: Open Outlet Device - Outlet must be left open to the atmosphere and should not be modified or restricted in any way.

# **WS5** 5 litre Vented Water Storage Heater

The WS5 water heater offers a very economical solution for stored hot water at point of use. It provides a low volume of water and the open outlet, or non-pressurized unit, benefits from minimal standing heat loss, because it is installed at point of use.

Application	Hot water storage.
Key Features	5 litre capacity, point of use 1 4 temperature settings - cold, 38°C, 60°C and 70°C 1 Complete with 300mm swivel spout 1 Negligible standing heat loss 1 Power on indicator.
Safety Features	Auto reset temperature cut-out, allows unit to resume operation in the event of being operated when dry.
Capacities	5 litre.
Rating	2.2kW @ 230V 50Hz.
Outer Casing	White I Easy Clean I Thermoplastic.
Insulation	Polystyrene insulation.
Water Container	Corrosion resistant polypropylene.
Heat Unit	Sheathed heating elements.
Thermostat	Capillary type, externally adjustable - $15^{\circ}$ C - $70^{\circ}$ C with frost protection setting.
Pressure	Operating pressure - 0.7bar to 10bar.
Approvals	CE.
Guarantee	3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
WS5	WS522	44780060



Electrical supply: 380-415V 3 phase I The unit must be connected to an all-pole isolation switch with a minimum gap of 3mm I Water supply and fittings – supplied from cold mains water supply only – max 20°C I Standard UK water fittings may be connected to the outlet providing they exceed the minimum flow rates I Operative range in waters of specific resistance at 15°C – 1300cm I See page 110 for further technical details.

# Powerstream 3 Phase Plus

Eco 3-phase Unvented Water Heaters

With economy settings the Powerstream 3 Phase Plus instantaneous water heater is ideal for supplying high volumes of water where a 3-phase 415V supply is available.

Application	Instantaneous water heating.
-------------	------------------------------

- Key Features Unit is economical to run, providing flow rates of 6.8-13 litres/min I Two heat settings 38°C or 50°C (at supply temperatures of 12°C) I Rated pressure 10bar allows unit to be connected directly to the cold mains water supply and can be controlled by a normal UK tap fitting I Unique Clickfix<sup>®</sup> allows the unit to be installed within minutes I Scale resistant design stainless steel elements I Variable depth mounting screws for mounting onto uneven surfaces.
- Safety Features Flow activated switch I Over-temperature safety cut-out.
- Rating 18kW, 21kW and 24kW (415V 3-Phase).
- Element Stainless steel elements.
- **Outer Casing** White impact resistant plastic.

 
 Special Accessories
 P3P 02RBS Pipe set: When using the instantaneous water heater as a built-under appliance I Priority switch (load reducing relay): For operation with the priority circuit I P3P 02AP Mounting set: For surface-mount installation.

- Pressure Rated pressure 10bar.
- Approvals CE.
- Guarantee 3 year guarantee on storage tank and 1 year on components (UK).

Product Reference	Short Code	Cat. No
Powerstream 3 Phase Plus 18kW	P3PPE1802	45552865
Powerstream 3 Phase Plus 21kW	P3PPE2102	45552866
Powerstream 3 Phase Plus 24kW	P3PPE2402	45552867
Powerstream 3 Phase Pipe Set	P3P 02RBS	87783163
Powerstream 3 Phase Mounting Set	P3P 02AP	87783164



Electrical supply: 380-415V 3 phase | The unit must be connected to an all-pole isolation switch with a minimum gap of 3mm | Water supply and fittings - supplied from cold mains water supply only - max 20°C | Standard UK water fittings may be connected to the outlet providing they exceed the minimum flow rates | Operative range in waters of specific resistance at 15°C - 1300cm | See page 110 for further technical details.

# **Powerstream 3 Phase** 3-phase Unvented Water Heaters

The Powerstream 3 Phase range of instantaneous water heaters are ideal for supplying high volumes of water where a 3-phase 415V supply is available.

Instantaneous water heating.		
unit to be installed within esign stainless steel elements crews for mounting onto		
r-temperature safety cut-out.		
V (415V 3-Phase) and 24kW		
nen using the instantaneous r appliance I Priority switch beration with the priority t <b>ting set:</b> For surface-mount		
bar.		

Product Reference	Short Code	Cat. No
Powerstream 3 Phase 18kW	P3P1802	45552860
Powerstream 3 Phase 21kW	P3P2102	45552861
Powerstream 3 Phase 24kW	P3P2402	45552862
Powerstream 3 Phase Pipe Set	P3P 02RBS	87783163
Powerstream 3 Phase Mounting Set	P3P 02AP	87783164

# Powerstream 3 Phase Plus & Powerstream 3 Phase Technical Specification

Powerstream 3 Phase Plus models

Rated power
Rated voltage
Economy setting I
1st stage
2nd stage
High setting II
1st stage
2nd stage
Switch-on flow point
1st stage
2nd stage
Mixed water at rated power (supply temp. 12°C)
Approx. 38°C
Approx. 50°C
Minimum flow pressure of appliance
With flow limiter
Without flow limiter
Operative range in waters of specific electric resistance at 15°C
Rated pressure
Maximum permissible supply temperature

### Powerstream 3 Phase models

Rated power
Rated voltage
Warm water quantity at rated power for temperature increases of:
12°C to 38°C
12°C to 60°C
Switch on quantity
Switch-on flow pressure
Flow pressure (at rated power & 60°C)
With flow limiter
Without flow limiter
Operative range in waters of specific electric resistance at 15°C
Rated pressure
Maximum permissible supply temperature
Maximum mains impedance at connection site

Unvented Instantaneous Water Heaters

18kW	21kW	24kW
400V - 3 phase	400V - 3 phase	400V - 3 phase
6kW	7kW	8kW
12kW	14kW	16kW
9kW	10.5kW	12kW
18kW	21kW	24kW
4.0 l/min	4.5 l/min	5.0 l/min
5.0 l/min	5.8 l/min	6.6 l/min
9.9 l/min	11.6 l/min	13.2 l/min
6.8 l/min	7.9 l/min	9.1 l/min
0.07 MPa (0.7bar)	0.08 MPa (0.8bar)	0.09 MPa (0.9bar)
0.04 MPa (0.4bar)	0.05 MPa (0.5bar)	0.06 MPa (0.6bar)
1300cm	1300cm	1300cm
1 MPa (10bar)	1 MPa (10bar)	1 MPa (10bar)
20°C	20°C	20°C
20°C	20°C	20°C

P3PPE2102

P3P1802

P3PPE1802

P3P2102

P3P2404

P3PPE2404

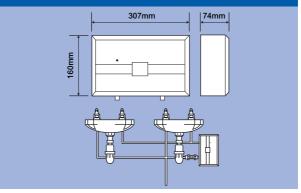
18kW	21kW	24kW
400V - 3 phase	400V - 3 phase	400V - 3 phase
9.9 l/min	11.6 l/min	13.2 l/min
5.4 l/min	6.3 l/min	7.2 l/min
2.6 l/min	2.6 l/min	2.6 l/min
0.025 MPa (0.25bar)	0.025 MPa (0.25bar)	0.025 MPa (0.25bar)
0.028 MPa (0.28bar)	0.035 MPa (0.35bar)	0.048 MPa (0.48bar)
0.013 MPa (0.13bar)	0.020 MPa (0.20bar)	0.026 MPa (0.26bar)
1300cm	1300cm	1300cm
1 MPa (10bar)	1 MPa (10bar)	1 MPa (10bar)
20°C	20°C	20°C
-	-	≤ 0.41 Ω



LT1 Basin Tap



# Dimensions and Application



 Technical
 Flow stabiliser/service valve | Thermal cut-out protection | Unique

 Specification
 Redring water flow operated power switch | Corrosion resistant steel backplate | Half power selection available on installation.

Heater variant RP1	Operating pressure <b>15 - 150psi</b>	kW loading @ 230-240V <b>8.7 - 9.5</b>	Cable size guide <b>6 / 10mm</b> ²	Fuse rating guide <b>40 Amps</b>
RP10.8	20 - 150psi	9.9 - 10.8	10 / 16mm <sup>2</sup>	45 Amps
RP12	25 - 150psi	11 - 12	10 / 16mm <sup>2</sup>	50 Amps
Heater	Flow rate performance (Winter / Summer)			

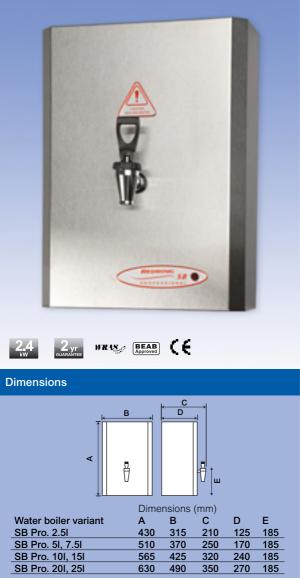
variant	4 litres / min	5 litres / min	6 litres / min
RP1	39 / 54°C	32 / 47°C	28 / 42°C
RP10.8	44 / 58°C	36 / 51°C	31 / 46°C
RP12	48 / 63°C	39 / 54°C	34 / 49°C

# **Powerstream** Unvented Instantaneous Water Heaters

Powerstream delivers instant hot water at point of use. This compact and unique design eliminates the need for centrally stored hot water cylinders saving on electricity usage and important space.

- Application Instantaneous water heating.
- Key Features 12kW unit is the highest rated single phase heater on the UK market I Water supplied to one or two outlets (either one shower and one hand basin or two hand basins) I Water outlet via existing tap or mixer (especially suitable via spray tap) I Direct mains supply I Small compact shape I Remote fitting option I No standing heat losses I Fast response I Half power selection available on installation I Corrosion resistant steel backplate.
- Safety Features Thermal cut-out protection I Water flow operated power switch.
- Rating 9.5, 10.8 and 12kW @ 240V.
- **Element** Sheathed heating elements.
- Outer Casing Impact resistant thermoplastic cover .
- Pressure Rated pressure 1bar to 10bar.
- Accessories 1/4 turn lever control spray tap | NB: We only recommend the use of the Redring 1/4 Turn Spray Tap.
- Approvals BEAB Approved | WRAS Approved Product | CE.
- Guarantee 3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Powerstream 9.5	RP1	45793201
Powerstream 10.8	RP10.8	45793204
Powerstream 12	RP12	45793202
Shower Mixer Kit	RM1	85793620
1/4 Turn Lever Control Spray Tap	LT1	85793616



Connects to 13 Amp (220-240V) doublepole fused isolating switch I Electrical connection via 1 metre cable supplied to fused spur I Water entry bottom/rear via standard I 15mm compression fitting I Install over sink, draining board, or drip tray.

Product Reference	Catalogue Number		Draw Off nl) (litres)	Recovery Rate (cups/hr)
SB Professional 2.5I	22713801	15	2.5	125
SB Professional 5I	22715801	30	5.0	125
SB Professional 7.5	22716801	45	7.5	125
SB Professional 10I	22717801	60	10.0	125
SB Professional 15I	22718801	100	15.0	125
SB Professional 201	22719301	120	20.0	125
SB Professional 25I	22719701	150	25.0	125

# **SB Professional** Stainless Steel Beverage Water Boilers

Wall-mounted, self-calibrating and self-filling this is a water heater for Industrial and Commercial applications. Used for making cups of tea, coffee, soup and hot snacks it offers 7 capacity sizes. The 2.5 litre model is ideal for small offices and the 25 litre model for a busy canteen, dispensing up to 150 cups on demand and a delivery of 250 cups per hour.

Application	Beverage water boiler.
Key Features	7 capacity options I Stainless steel water tank with fully insulated jacket to minimise heat loss I Robust corrosion resistant construction I Provides for concealed plumbing and electrical connection.
Safety Features	Neon 'power on' light   Condensation chamber for steam-free operation   Manual reset thermostat for detecting excessive steam in the event of water solenoid valve failure   Water temperature is automatically maintained   Unit is fitted with manual reset safety device to avoid boiling dry.
Capacities	2.5, 5, 7.5, 10, 15, 20 and 25 litre.
Rating	2.4kW / 13 Amp (220-240V).
Outer Casing	Brushed stainless steel cover, wipes clean.
Insulation	Energy efficient aluminium backed insulation.
Water Container	Stainless steel.
Heat Unit	Incoloy sheathed elements.
Thermostat	Manual reset thermostat.
Pressure	Operating pressure - 2bar to 10bar.
Approvals	BEAB Approved I WRAS Approved Product I CE.
Guarantee	2 year product guarantee (UK).

Storage Capacity (I)	1st hr Delivery (cups)	Element (kW)	Approx. Weight	App. Laden Weight
2.5	125	2.4	6kg	8.5kg
5.0	135	2.4	7kg	12kg
7.5	150	2.4	8kg	15.5kg
10.0	175	2.4	9kg	19kg
15.0	200	2.4	10kg	25kg
20.0	225	2.4	12kg	32kg
25.0	250	2.4	13kg	38kg



Electrical connection from suitable ring circuit via a switched/fused outlet with 1 metre cable supplied 1 Wall-mounted with rear or bottom plumbing connection via a standard 15mm compression fitting to the cold water mains 1 Incorporates an overflow/vent connection that discharges to a suitable drain 1 Supplied with a hook-on wall bracket together with a 3-point screw fixing.

# **SB**<sup>2</sup> 2.5-4 litre Beverage Water Boilers

Developed to deliver up to 154 cups of hot water every hour, this unique design provides drinks and beverages instantly without the need for kettles and minimising waiting times. Integral sensors give auto-fill/top-up and temperature control.

Application	Beverage water boiling.

- Key Features Auto-fill and heat | Push button for on/standby | Quarter turn tap to dispense water | Stainless steel sheathed heat elements for long-life | CFC-free insulation - minimises temperature and energy loss on/standby function for energy saving | Scale trap to enhance guality of beverage.
- Safety Features Three LEDs indicate power on, unit full and temperature ready I Microprocessor controlled for water level and accurate temperature control I Thermostatically controlled to automatically set to boiling point when the unit is first switched on I Cool to the touch I Auto re-set over-temperature cut-out.
- Capacities 2.5 and 4 litre.
- Rating 2.2kW @ 240V.
- Outer Casing High impact, durable thermoplastic.
- Insulation CFC-free insulation.
- Water Container High impact, thermoplastic.
- Heat Unit Stainless steel elements.
- Thermostat Electronic thermostat | Auto re-set over-temperature cut-out.
- Pressure Supply pressure min. 0.5bar (7psi), max. 10bar (145psi)
- Approvals BEAB Approved | WRAS Approved Product | CE.
- **Guarantee** 2 year product guarantee (UK).

Product Reference	Short Code	Cat. No
SB2 2.5 litre	RSB 2.5	22714401
SB2 4 litre	RSB 4	22714601



Accessories

Plumbing-in kit to connect the Corvette directly to the cold water mains (as pictured) | Extended length filler hose 1.7m | Extended length outlet spout 330mm | Tap adaptor kit to connect the filler hose to non-standard taps.



Technical Specification Plumbing-in kit required for permanent supply | 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 | Supplied 1m cable, cable tidy, wall mounting plate, wall fixing kit, 1m filler hose.

# Beverage Water Boilers

# Corvette 1-3.8 litre Wall Kettle

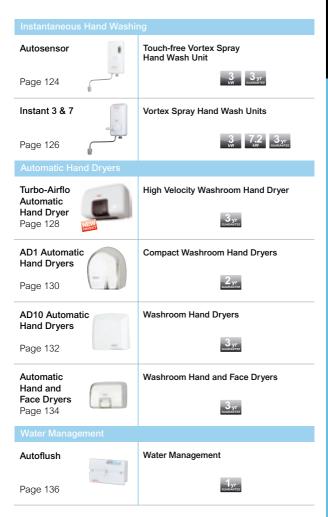
The Corvette delivers boiling water for drinks and washing up needs from a permanently wired installation.

Application	Beverage water boiling.
Key Features	Quick and easy installation   Can boil from 1 litre to a maximum of 3.8 litres   Easy to read water level indicator   Detachable hose supplied for temporary installation   Economical to use   High quality stainless steel sheathed element   Stainless steel base plate.
Safety Features	Auto switch off at boiling point   Rapid reset   Neon glows when water is being heated   Extended spout for extra safe pouring   Safety auto steam switch   2-stage boil dry element protection.
Capacities	1 to 3.8 litres.
Rating	2.2kW @ 240V.
Outer Casing	High impact, durable thermoplastic.
Insulation	CFC-free insulation.
Water Container	High impact, thermoplastic.
Heat Unit	High quality stainless steel sheathed element.
Thermostat	Steam switch I Auto re-set over-temperature cut-out.
Pressure	Mains pressure supply.
Accessories	See opposite page for details.
Approvals	BEAB Approved I WRAS Approved Product I CE.
Guarantee	3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Corvette	CV1	28717201
Plumbing-in Kit		89716201
Extended Length Outlet Spout		89716203



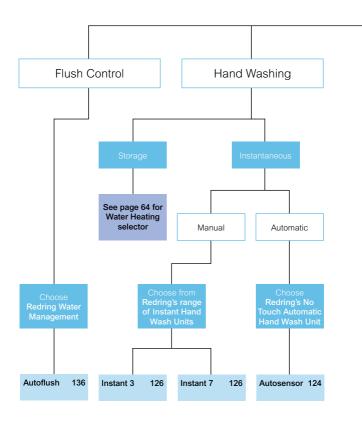
# Washrooms Range Profile in Detail

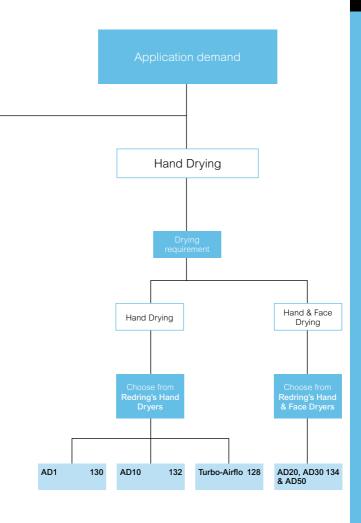


# Washroom Solutions Selector

Choosing the right solution for your washroom is vitally important.

At **Redring**, customer support begins before you even buy! This selector should enable you to make a decision, but if you require assistance, please ring our customer techline on 0844 372 7766 for further information.







Product	kW loading	Cable size	Fuse rating
variant	@ 230-240V	guide	guide
AV3	3	1.5mm <sup>2</sup>	13 amps

# Hand Washing

# Autosensor Touch-free Vortex Spray Hand Wash Unit

Ideal for environments where cross-contamination must be avoided, such as hospitals and food preparation areas, the Autosensor is a unique and patented hand wash unit, operated by a no-touch sensor. The unit is also fitted with a unique non-scaling vortex spray outlet and an automatic shutoff to eliminate waste water.

- Application
   Hand washing.

   Key Features
   Touch free hygienic operation prevents cross contamination I Infra-red sensor activates water output for economy I Compact ergonomic design I Single control lever for on/off and temperature selection I Vortex spray outlet is non-scaling and maintenance free I Swivel 200mm stainless steel spray arm I No standing heat losses I Touch-free time cycle cut-off 20 25 seconds.
- Safety Features Fully temperature stabilised 'Heat on' neon indicator I Overheat protection I Timed shut-off set at approximately 20 seconds.
- Rating 3kW @ 240V.
- **Controls** Automatic no-touch infra-red sensor.
- Outer Casing Easy clean | Polar white | Thermoplastic.
- Heat Unit Sheathed heating elements.
- Water Container Copper.

Ingress IPX4.

Protection

- Pressure Operating water pressure 0.7 to 7bar (10 100psi).
- Accessories Extended length spray arm 380mm | Short length spray arm 100mm.
- Approvals BEAB Approved | CE.
- Guarantee 3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Autosensor	AV3	43591015
Ext. length spray arm, 380mm		85768322
Short length spray arm, 100mm		85768330



Direct connections to water mains I Standard 15mm pipework I Top, bottom or rear cable entry I Standard BSP  $\frac{1}{2}$ " connections I Full fixing pack supplied I Operating water pressure 0.7 - 7bar (10 - 100psi) I Water pressure operated power switch.

kW loading	Cable size	Fuse rating
@ 230-240V	guide	guide
2.7 - 3	1.5mm <sup>2</sup>	13 amps
6.6 - 7.2	4/6mm <sup>2</sup>	30 amps
	@ 230-240V <b>2.7 - 3</b>	@ 230-240V guide 2.7 - 3 1.5mm <sup>2</sup>

# Instant 3 & 7 Vortex Spray Hand Wash Units

Economical and instant, these patented hand wash units are compact and simple to operate with a single on/off and temperature control lever. They are also fitted with our unique Vortex spray outlet which eliminates the need for costly maintenance due to the build-up of scale in hard water areas.

Application	Hand washing.
Key Features	Compact ergonomic design I Single control lever for on/off and temperature selection I Vortex spray outlet is non-scaling and maintenance free I Swivel 200mm stainless steel spray arm I No standing heat losses.
Safety Features	Fully temperature stabilised 'Heat on' neon indicator I Overheat protection.
Rating	3kW and 7.2kW.
Controls	Single rotary control lever for on/off and temperature selection.
Outer Casing	Easy clean I Polar white I Thermoplastic.
Heat Unit	Sheathed heating element.
Water Container	Copper.
Ingress Protection	IPX4.
Pressure	Operating water pressure - 0.7 to 7bar (10 - 100psi).
Accessories	Extended length spray arm - 380mm I Short length spray arm - 100mm
Approvals	BEAB Approved I CE.
Guarantee	3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Instant 3	13V	43769715
Instant 7	17V	43769915
Extended length spray arm		85768322
Short length spray arm		85768330





Heating element closed coil nickel chromium wire I Sensor range 150mm I Peak air temperature rise (°C) 23 I Noise level at 1 metre (dBA) 78.

# Turbo-Airflo Automatic Hand Dryer

High Velocity Washroom Hand Dryer

Hand dryers score significantly over paper towels as germfree warm air is an extremely hygienic drying medium; with no risk of cross-infection between users. The all new Turbo-Airflo hand dryer improves on this by saving on both time and energy too, with its fast drying, high velocity airflow delivery. Approved by the Health and Safety Executive as well as the Ministry of Defence for use in commercial and office environments, it is also accepted by the National Health Service.

Application	Hand hygiene.
Key Features	High velocity airflow for fast drying I Energy efficient, as fast dry times mean the unit is off more of the time I Noise levels the same as standard dryers I Fully automatic I Light to medium use installations - ideal for food preparation areas, surgeries or clinics I Easy clean I Cover cast aluminium alloy with white epoxy paint I UK designed I Fast drying time - 15-22 seconds.
Safety Features	Ingress protection - IP23 I Over-temperature cut-out I Infra-red 'no touch' on/off sensor to prevent cross contamination.
Rating	1.7kW @ 240V.
Weight	5.8kg.
Outer Casing	Cover cast aluminium alloy with white epoxy paint.
Heat Unit	Heating element closed coil nickel chromium wire.
Motor / Fan	345W.
Air Speed	44m/s.
Air Volume	150 (m³/h).
Ingress Protection	IP23.
Approvals	CE.
Guarantee	3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Turbo-Airflo	ADP1	56751801



Heating element closed coil nickel chromium wire I Sensor range 150mm I Noise level at 1 metre (dBA) 63

# AD1 Automatic Hand Dryers

Compact Washroom Hand Dryers

Germ-free warm air is an extremely hygienic drying medium; with no risk of cross-infection between users. Hand dryers are approved by the Health and Safety Executive as well as the Ministry of Defence for use in commercial and office environments. Also accepted by the National Health Service resulting in increasingly widespread use in British hospitals.

Application	Hand hygiene.
Key Features	Light/medium use installations - food preparation areas, surgeries or clinics   Easy clean   White, chrome and stainless steel options   UK manufactured.
Safety Features	Infra-red 'no touch' on/off sensor to prevent cross contamination   Ingress protection - IP24   Class II insulation, so no need to earth   Over-temperature cut-out.
Rating	1.5kW @ 240V.
Weight	1.9kg.
Outer Casing	AD1 - White   AD1Ch - Chrome plated thermoplastic.
Heat Unit	Heating element closed coil nickel chromium wire.
Motor / Fan	60W.
Air Speed	15m/s.
Air Volume	120m³/hr.
Ingress Protection	IP24.
Approvals	BEAB Approved   CE.
Guarantee	2 year product guarantee (UK).
Product Range	9

•		
Product Reference	Short Code	Cat. No
Autodry 1	AD1	56751501
Autodry 1 Chr	AD1Ch	56751570



Heating element closed coil nickel chromium wire I Sensor range 150mm I Noise level at 1 metre (dBA) 63

# **AD10 Automatic Hand Dryers**

Washroom Hand Dryers

Hygiene is an area where warm air dryers score significantly over paper or linen towels. Germ-free warm air is an extremely hygienic drying medium; with no risk of cross-infection between users. Hand dryers are approved by the Health and Safety Executive as well as the Ministry of Defence for use in commercial and office environments. Also accepted by the National Health Service resulting in increasingly widespread use in British hospitals.

- Application Hand hygiene.
- Key Features Light/medium use installations food preparation areas, surgeries or clinics | Easy clean | White, chrome and stainless steel options | UK manufactured | Fully automatic.
- Safety Features Infra-red 'no touch' on/off sensor to prevent cross contamination | Ingress protection - IP21 | Class II insulation, so no need to earth | Over-temperature cut-out.
- Rating 1.7kW @ 240V.
- Weight 2.5kg.
- Outer Casing AD10 White | AD10S Chrome plated thermoplastic or stainless steel.
- Heat Unit Heating element closed coil nickel chromium wire.
- Motor / Fan 100W.
- Air Speed 18m/s.
- Air Volume 180m<sup>3</sup>/hr.
- Ingress IP21. Protection
- Approvals BEAB Approved | CE.
- Guarantee 3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Autodry 10	AD10	56750540
Autodry10Ch	AD10Ch	56750570
Autodry10S	AD10S	56750541



Heating element closed coil nickel chromium wire I Sensor range 150mm I AD20 Noise level at 1 metre (dBA) 64 I AD30 Noise level at 1 metre (dBA) 78 I AD50 Noise level at 1 metre (dBA) 78

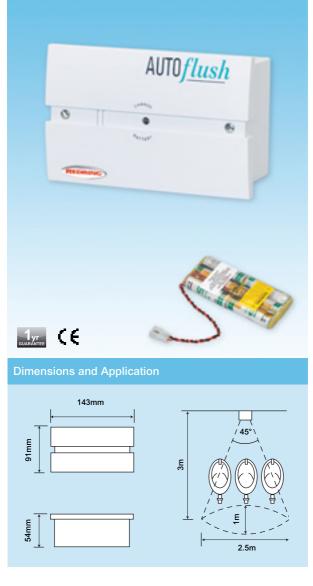
# Automatic Hand and Face Dryers

Washroom Hand and Face Dryers

With fully automatic operation the AD20 is ideal for installation where noise needs to be kept at a minimum, whilst the AD30 provides increased airflow for faster hand and face drying. For installation at the busiest washrooms we recommend the AD50.

<b>Key Features</b> Hand and face drying   Medium to high use installations
(AD50C - High use) - ideal for motorway services, factories, schools & sports centres   Easy clean   Stainless & aluminium steel options   White & chrome options   UK manufactured   Fully automatic   AD20 Quiet operation   AD30 Fast drying time   AD50C High volume air-flow for faster drying.
Safety Features Infra-red 'no touch' on/off sensor to prevent cross contamination I Ingress protection - IP23 I Over-temperature cut-out.
Rating         2kW @ 240V, 2.4kW @ 240V and 2.5kW @ 240V.
Weight         AD20 and AD30 - 6.5kg   AD50C - 15kg.
Outer Casing Cover cast aluminium alloy with epoxy paint (AD50C - Cover cast iron vitreous enamelled)
Heat Unit Heating element closed coil nickel chromium wire.
Motor / Fan AD20 - 60W   AD30 - 200W   AD50 - 300W.
Air Speed         AD20 - 12m/s         I         AD30 - 22m/s         I         AD50 - 25m/s.
Air Volume         AD20 - 150   AD30 - 220   AD50 - 250m³/hr.
Ingress IP23. Protection
Approvals BEAB Approved I CE.
Guarantee 3 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Autodry 20	AD20	56751303
Autodry 30	AD30	56751404
Autodry 30 Chrome	AD30Ch	56751470
Autodry 50C	AD50	56751118



NB: Water Bylaw 83 states that where urinals are installed there must be a method of controlling the flushing, preventing inflow during times when they are not being used | Note 2 - Designed to be used with a cistern. Unsuitable for pressurised systems | Water connections - 15mm compression | Recommended cable - 2 core, CSA 0.5mm2 (Outer diameter 5.4mm).

Product	Sensor	Sensor	Battery pack	Solenoid
variant		range	supplied	valve
AF1	Passive infra-red	Up to 4m	10.5V, 3.6Ah lithium long-life	9V DC latching (0-12bar)

# Autoflush Water Management

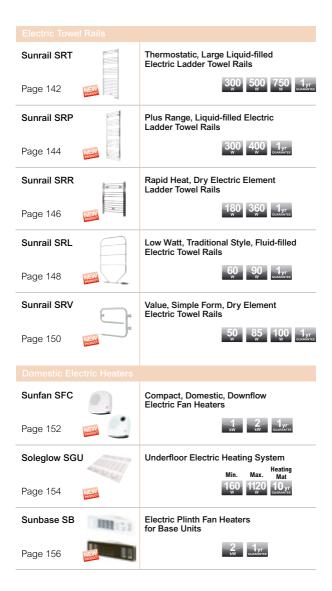
The Autoflush is a compact, unobtrusive automatic urinal flush controller which maintains hygiene whilst eliminating water wastage as required by Water Bylaw 83. Ideal for offices, public conveniences, hotels, restaurants, leisure facilities and factories, the Autoflush requires no electrical mains connection and is supplied with a dedicated long-life lithium battery.

Application	Water management.		
Key Features	A powerful PIR sensor detects when someone approaches the urinals and switches a solenoid valve to open, allowing water to flush to the cistern I Typical water savings of over 70% per annum. Capital costs may be recouped in less than two years I Built-in cleansing flush (every 12 or 24 hours) for maximum hygiene during unoccupied periods I Choice of 10, 20 or 30 minute timed flow after detection (factory set to 30 minutes) I Red LED indicates when battery is low.		
Safety Features	No mains electrical connection required, long-life lithium battery supplied.		
Rating	Long-life lithium battery.		
Controls	PIR sensor.		
Outer Casing	Non-corrosive polar white ABS plastic box.		
Ingress Protection	IPX4.		
Pressure	Operating water pressure - 0.7 to 7bar (10-140psi).		
Accessories	Vandal-proof cover I Spare Battery.		
Approvals	Restrictors - WRAS   Valve - WRAS   Battery - UL   CE.		
Guarantee	1 year product guarantee (UK).		

Product Reference	Short Code	Cat. No
Autoflush	AF1	27900001
Spare battery	BAT	96900102

# **Space Heating**

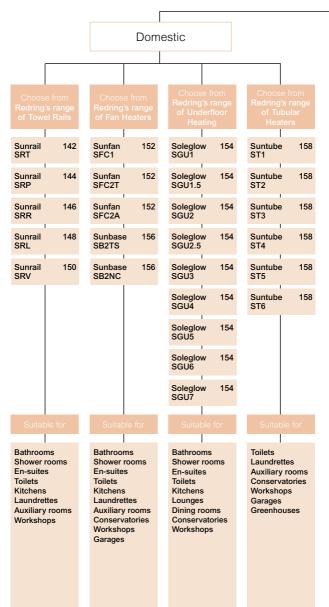
Range Profile in Detail



Suntube ST	Versatile, Linear Electric Tubular Heaters Min. Max.
Page 158	
Sunfan SF	High Level, Wall-mounted, Commercial Electric Fan Heater
Page 160	3 Jyr- auxoberre
Sunspot / Sunscreen RS	Electric Warm Air Curtain Heaters
Page 162	2.25 3 4.5 1yr
Sunslim SL	Infra-red Electric Radiant Heaters
Page 164	KW 3 1yr
Sunplus SP	Electric Outdoor Patio Heaters
Page 166	
Sunquartz SQ	Short Wave Infra-red Electric Radiant Heaters
Page 168	
Ceramic CR	Long Wave Infra-red Electric Radiant Heaters
Page 170	2 3 4.5 1yr

# Space Heating Selector

**Redring** provide a wide range of heating products for applications in both the home and the workplace. From low cost, energy saving towel rails for warming towels and taking the chill off a cold bathroom to controlled selective area heating of retail premises, warehouses and even churches. If you require additional assistance, please ring our customer techline on 0844 372 7766 for further information.



### Application demand

## Commercial / Industrial

Choose from Redring's range of Towel Rails

Sunrail SRT	142
Sunrail SRP	144
Sunrail SRR	146
Sunrail SRL	148
Sunrail SRV	150

Sunspot RS2 162 Sunscreen 162 Sunscreen 162 RS3 162 Sunscreen 162 Sunscreen 162 Sunscreen 162

Sunbase 156 SB2NC

Redring's range of Tubular Heaters		
Suntube ST1	158	
Suntube ST1	158	
Suntube ST3	158	
Suntube ST4	158	
Suntube ST5	158	
Suntube ST6	158	

Choose from Redring's range of Radiant Heaters

Sunslim SL	164
Sunplus SP	166
Sunquartz SQ	168
Ceramic CR	170

### Suitable for

Bathrooms Washrooms Cloakrooms Changing rooms Kitchens Laundry rooms

### Suitable for

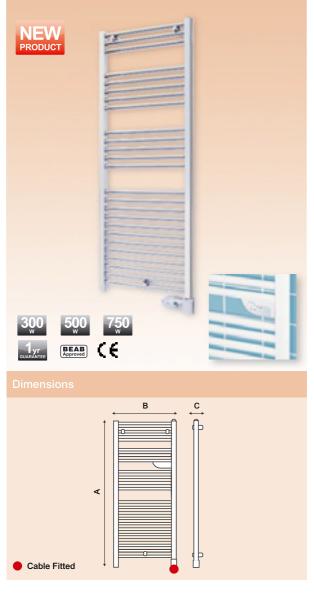
Entrances Changing rooms Receptions Workshops Garages Shops Factories Storage areas Schools Churches Church halls Sports halls

### Suitable fo

Toilets Washrooms Kitchens Changing rooms Reception rooms Workshops Garages Remote buildings Shop windows Factories Schools Churches Church halls Panel cabinets

### Suitable fo

Changing rooms Workshops Garages Remote buildings Shops Cafes Factories Schools Churches Church halls Sports halls Smoking shelters Aircraft hangers Farms Zoos Marquees



Tubular steel frame | Liquid filled | Cartridge heating element | Thermal cut-out | Integral controls | Chrome or white finish | Fitted mains cable | Supplied with brackets and fixings | All models are right hand cable connected.

Heater	Rating @	Dimensions (mm)		
variant	230-240V	A Height	B Width	C Depth
SRT500W	500W	815	550	85
SRT750W	750W	1225	550	85
SRT300C	300W	855	550	85
SRT500C	500W	1300	550	85

# Electric Towel Rails

# **Sunrail SRT** Thermostatic, Large Liquid-filled Electric Ladder Towel Rails

Large format, high output ladder style towel rails with variable thermostatic control and timed boost option for busy bathroom lifestyles. With ratings from 300W to 750W SRT towel rails have the power for heavy duty use with the control flexibility for maximum economy. The 750W rated model has the capacity to be the sole heating source in the average size, well insulated bathroom.

Application	Large towel drying and bathroom warming with integral thermostatic control.			
Key Features	Modern ladder styling   Integral thermostatic control   Variable boost setting 15min - 2 hours   300W, 500W and 750W models   Chrome or white finish   Fitted mains cable   Pilot wire signalling capability   Supplied with brackets and fixings   All models are right hand cable connected   IP24 rated (splashproof).			
Safety Features	Two auto re-set temperature limiters.			
Materials	White powder coated or chrome plated finish.			
Approvals	BEAB Approved I CE.			
Guarantee	1 year product guarantee (UK).			

Product Reference	Short Code	Cat. No
Sunrail SRT Thermostatic 500 White	SRT500W	75772725
Sunrail SRT Thermostatic 750 White	SRT750W	75772726
Sunrail SRT Thermostatic 300 Chrome	SRT300C	75772735
Sunrail SRT Thermostatic 500 Chrome	SRT500C	75772736



Tubular steel frame | Liquid filled | Cartridge heating element | Thermal cut-out | Chrome or white finish | Fitted mains cable | Supplied with brackets and fixings | Straight rail models can be right or left hand mounted.

Heater	Rating @	Dimensions (mm)			Weight
variant	230-240V	A Height	B Width	C Depth	(kg)
SRP300SW	300W	1200	600	110	17.7
SRP400SW	400W	1600	600	110	22.4
SRP300SC	300W	1200	600	110	17.7
SRP400SC	400W	1600	600	110	22.4
SRP300CW	300W	1200	600	110	17.7
SRP400CW	400W	1600	600	110	22.4
SRP300CC	300W	1200	600	110	17.7
SRP400CC	400W	1600	600	110	22.4

### Sunrail SRP Plus Range, Liquid-filled Electric Ladder Towel Rails

Popular ladder style towel rails that can cope with heavier duty use, ideal for the family bathroom. SRP towel rails are permanently liquid filled for even heat transfer distribution and long-life, maintenance free operation. The 300W or 400W rated heating cartridge provides efficient towel drying and low level heating in a well insulated bathroom.

Application	Large towel drying and low level bathroom warming.
Key Features	Modern ladder styling I 300W and 400W models I Liquid filled for even heat transfer I Curved or straight rail variants I Chrome or white finish I Fitted mains cable I Supplied with brackets and fixings I Straight rail models can be left hand or right hand mounted I IP44 rated (splashproof).
Safety Features	Cycling thermostat I Thermofuse protection.
Materials	White powder coated or chrome plated finish.
Accessories	Optional RF radio frequency thermostat kits with or without programmer I Enables thermostatic control of electric towel rails using wireless signalling between the remote wall-mounted thermostat and the receiver unit at the appliance. See page 172 for details.
Approvals	CE.
Guarantee	1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Sunrail SRP 300W Straight White	SRP300SW	75773825
Sunrail SRP 400W Straight White	SRP400SW	75773826
Sunrail SRP 300W Straight Chrome	SRP300SC	75773835
Sunrail SRP 400W Straight Chrome	SRP400SC	75773836
Sunrail SRP 300W Curved White	SRP300CW	75773875
Sunrail SRP 400W Curved White	SRP400CW	75773876
Sunrail SRP 300W Curved Chrome	SRP300CC	75773885
Sunrail SRP 400W Curved Chrome	SRP400CC	75773886



Specification

Two auto re-set temperature limiters | Integral controls | Chrome or white finish | Fitted mains cable | Supplied with brackets and fixings | Straight rail models can be right or left hand mounted.

Heater	Rating @	Dimensio	ns (mm)		Weight
variant	230-240V	A Height	B Width	C Depth	(kg)
SRR180SW	180W	610	453	80 - 100	4.4
SRR360SW	360W	843	602	80 - 100	7.9
SRR180SC	180W	610	453	80 - 100	4.4
SRR360SC	360W	843	602	80 - 100	7.9
SRR180CW	180W	610	453	80 - 100	4.4
SRR360CW	360W	843	602	80 - 100	7.9
SRR180CC	180W	610	453	80 - 100	4.4
SRR360CC	360W	843	602	80 - 100	7.9

146 Technical 0844 372 7766

Sales 0844 372 7750

### Sunrail SRR Rapid Heat, Dry Electric Element Ladder Towel Rails

Featuring patented rapid response technology, SRR dry element ladder rails are much faster to heat up than fluid-filled models. They are much lighter and easier to install, with no chance of leaks and are available in eight models to suit a wide range of bathroom and shower room installations.

Application	Rapid towel warming and drying (and low level background heating).
Key Features	Modern ladder styling I Rapid heat up I 180W and 360W models I Curved or straight models I Chrome or white finish I Fitted mains cable I Supplied with brackets and fixings I Straight models can be left hand or right hand mounted I IPX4 rated (splashproof).
Safety Features	Two auto re-set temperature limiters.
Materials	White powder coated or chrome plated finish.
Accessories	Optional RF radio frequency thermostat kits with or without programmer I Enables thermostatic control of electric towel rails using wireless signalling between the remote wall-mounted thermostat and the receiver unit at the appliance. See page 172 for details.
Approvals	CE.
Guarantee	1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Sunrail SRR 180W Straight White	SRR180SW	75774525
Sunrail SRR 360W Straight White	SRR360SW	75774526
Sunrail SRR 180W Straight Chrome	SRR180SC	75774535
Sunrail SRR 360W Straight Chrome	SRR360SC	75774536
Sunrail SRR 180W Curved White	SRR180CW	75774575
Sunrail SRR 360W Curved White	SRR360CW	75774576
Sunrail SRR 180W Curved Chrome	SRR180CC	75774585
Sunrail SRR 360W Curved Chrome	SRR360CC	75774586



Tubular steel frame | Liquid filled | Cartridge heating element | Thermal cut-out | Chrome or white finish | Fitted mains cable | Supplied with brackets and fixings | All models can be right or left hand mounted.

Heater	Rating @	Dimensions (mm)		
variant	230-240V	A Height	B Width	C Depth
SRL60W	60W	616	533	93
SRL60C	60W	616	533	93
SRL90W	90W	851	533	93
SRL90C	90W	851	533	93

# Electric Towel Rails

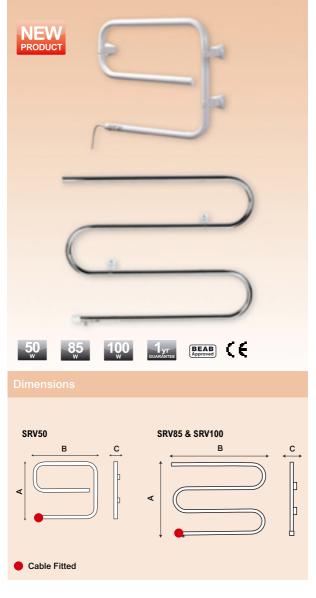
# Sunrail SRL

Low Watt, Traditional Style, Fluid-filled Electric Towel Rails

Classically styled SRL towel rails are permanently liquid filled for even heat transfer and long-life maintenance free operation. The low wattage heating cartridge provides longlife economical operation so SRL towel rails can be left on permanently, if required. Ideal for towel warming and drying in bathrooms, shower rooms and cloakrooms.

Application	Towel warming and drying - low energy use.
Key Features	Traditional styling I Low wattage cartridge heater I Fluid-filled for even heat transfer I 60W and 90W models I Fitted with mains cable I Supplied with brackets and fixings I All models can be left hand or right hand mounted I IPX4 rated (splashproof).
Safety Features	Thermal cut-out protection.
Materials	White stove enamel or bright chrome finish.
Accessories	Optional RF radio frequency thermostat kits with or without programmer I Enables thermostatic control of electric towel rails using wireless signalling between the remote wall-mounted thermostat and the receiver unit at the appliance. See page 172 for details.
Approvals	CE.
Guarantee	1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Sunrail SRL 60W White	SRL60W	75774625
Sunrail SRL 60W Chrome	SRL60C	75774635
Sunrail SRL 90W White	SRL90W	75774626
Sunrail SRL 90W Chrome	SRL90C	75774636



Tubular steel frame | Dry element | Flexible cable electric element | Thermal cut-out | Chrome or white finish | Fitted mains cable | Supplied with brackets and fixings | All models can be right or left hand mounted.

Heater	Rating @	Dimensions (mm)		
variant	230-240V	A Height	B Width	C Depth
SRV50W	50W	410	460	85
SRV100W	100W	570	710	100
SRV50C	50W	410	460	85
SRV85C	85W	570	710	100

# Electric Towel Rails

### Sunrail SRV Value, Simple Form, Dry Element Electric Towel Rails

Sunrail SRVs are compact, lightweight and simple to install. Their low energy use makes them ideal for drying and airing small towels in areas such as en-suite bathrooms, toilets, cloakrooms and even kitchens.

Application	Towel warming and drying in small space applications.
Key Features	Compact I Lightweight I Low wattage dry elements I 50W, 85W and 100W models I Fitted with 1 metre mains cable I Supplied with brackets and fixings I Can be left hand or right hand mounted I IPX4 rated (splashproof).
Safety Features	Cycling thermostat I Thermofuse protection.
Materials	White electrostatic baked paint or bright chrome plated finish.
Accessories	Optional RF radio frequency thermostat kits with or without programmer I Enables thermostatic control of electric towel rails using wireless signalling between the remote wall-mounted thermostat and the receiver unit at the appliance. See page 172 for details.
Approvals	BEAB Approved   CE.
Guarantee	1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Sunrail SRV 50W White	SRV50W	51805725
Sunrail SRV 100W White	SRV100W	51805325
Sunrail SRV 50W Chrome	SRV50C	51805735
Sunrail SRV 85W Chrome	SRV85C	51805335



High temperature plastic body and grille I Stitched ' black heat' element I Thermal cut-out I Secondary thermal overheat protection I Mechanical bi-metal thermostat (SFC2T only) I Fitted mains cable I Supplied with brackets and fixings.

Heater	Rating @	Dimensions (mm)			Weight
variant	230-240V	A Height	B Width	C Depth	(kg)
SFC1	1kW	240	235	135	1.45
SFC2T	2kW	240	235	135	1.45
SFC2A	2kW	240	235	135	1.45

### **Sunfan SFC** Compact, Domestic, Downflow Electric Fan Heaters

Fast response downflow heaters offer a low cost solution for rapid heating on demand. Mounted at high level, they offer an ideal solution where lower wall space is limited in bathrooms, shower rooms, kitchens, conservatories and outbuildings.

Application	Low cost, rapid heating on demand for small rooms.
Key Features	Three model range   1kW constant heat   2kW auto step back to 1kW   2kW with rotary variable thermostat   Pullcord operated   Power on neon indicator   Two integral safety devices   1 metre fitted cable   Supplied complete with instructions and fittings   IPX2 rated.
Safety Features	Dual thermal cut-out protection   Class II (double insulated).
Materials	High temperature plastic body and grille.
Approvals	BEAB Approved   CE.
Guarantee	1 year product guarantee (UK).
Materials Approvals	complete with instructions and fittings   IPX2 rated. Dual thermal cut-out protection   Class II (double insulated). High temperature plastic body and grille. BEAB Approved   CE.

Product Reference	Short Code	Cat. No
Sunfan SFC 1kW Fixed	SFC1	75771035
Output		
Sunfan SFC 2kW Variable	SFC2T	75771036
Thermostat		
Sunfan SFC 2kW Auto Step	SFC2A	75771037
Back to 1kW		



Heater	Rating @	Dimension	s (mm)	
variant	230-240V	Length	Width	Depth
SGU1	160W	2000	500	3
SGU1.5	240W	3000	500	3
SGU2	320W	4000	500	3
SGU2.5	400W	5000	500	3
SGU3	480W	6000	500	3
SGU4	640W	8000	500	3
SGU5	800W	10000	500	3
SGU6	960W	12000	500	3
SGU7	1120W	14000	500	3

### Soleglow SGU Underfloor Electric Heating System

Soleglow underfloor heating gently dissipates into the room, giving an even, draught-free and comfortable warmth. It is unobtrusive, frees up valuable wall space and requires no maintenance. Soleglow also helps dry and dehumidify the air to reduce damp and potential mildew growth in wet rooms.

Application	Underfloor electric heating mats for bathroom, kitchen, conservatory and most living areas in the home.
Key Features	Suitable for use under most floor coverings   Nominal 3mm thick for minimal floor level adjustment   Available in nine sized heating mats from 1m <sup>2</sup> to 7m <sup>2</sup> (160W – 1120W)   Backing material can be cut and turned   Low capital and running costs   Supplied complete with temperature probe.
Safety Features	<b>NB:</b> Requires a fuse spur connection with 400mA RCD protection.
Materials	Continuous flexible coaxial heating cable 1 Mesh fabric backing.
Accessories	Optional advanced multi-control 7 day electronic programmer with temperature probe (required for thermostatic control). See page 172 for details.
Approvals	CE.
Guarantee	10 year heating mat (UK)   1 year programmer and probe (UK).

-		
Product Reference	Short Code	Cat. No.
Soleglow SGU 1.0m <sup>2</sup> 160W	SGU1	75771121
Soleglow SGU 1.5m <sup>2</sup> 240W	SGU1.5	75771122
Soleglow SGU 2.0m <sup>2</sup> 320W	SGU2	75771123
Soleglow SGU 2.5m <sup>2</sup> 400W	SGU2.5	75771124
Soleglow SGU 3.0m <sup>2</sup> 480W	SGU3	75771125
Soleglow SGU 4.0m <sup>2</sup> 640W	SGU4	75771126
Soleglow SGU 5.0m <sup>2</sup> 600W	SGU5	75771127
Soleglow SGU 6.0m <sup>2</sup> 960W	SGU6	75771128
Soleglow SGU 7.0m <sup>2</sup> 1120W	SGU7	75771129





High temperature plastic body | Painted steel grille | Stitched 'black heat' element | Crossflow fan unit | Thermal cut-out | Secondary thermal overheat protection | Mechanical bi-metal thermostat (SBTS only) | Fitted mains cable | Supplied with brackets and fixings.

Heater	Rating @	Dimension	ıs (mm)		Weight
variant	230-240V	A Height	B Width	C Depth	(kg)
SB2TS	2	100	400	200	2.5
SB2NC	2	100	400	200	2.5
					-

# **Domestic Electric Heaters**

### Sunbase SB Electric Plinth Fan Heaters for Base Units

Compact plinth heaters that provide effective warmth to cold floors and rapid room heating. Specially designed to discretely occupy the space beneath kitchen base units and supplied complete with three interchangeable fascias to suit most kitchen finishes.

Application	Plinth fan heaters for rapid heating of kitchens and auxiliary rooms.
Key Features	High efficiency 2kW crossflow fan for rapid heating I Low level mounting for good heat circulation I Saves valuable wall space I Two models I Thermostatic model with integral switching I No controls model where external control is required I Half heat and fan only settings (on switched model) I Built-in neon indicator I Supplied complete with white, brown and silver interchangeable fascias.
Safety Features	Over-temperature cut-out protection $$ I $$ Class II (double insulated).
Materials	High temperature thermoplastic body I Powder coated painted steel grilles.
Accessories	Optional RF radio frequency thermostat kits with or without programmer I Enables thermostatic control of electric plinth heaters using wireless signalling between the remote wall-mounted thermostat and the receiver unit at the appliance. See page 172 for details.
Approvals	BEAB Approved I CE.
Guarantee	1 year product guarantee (UK).

Product Reference Sunbase SB 2kW Thermostatic Switched (White/Brown/Silver)	Short Code SB2TS	Cat. No 75774725
Sunbase SB 2kW No Controls (White/Brown/Silver)	SB2NC	75774726



Aluminium tube body | Polyester epoxy powder coated paint | Metal sheathed heating element | High temperature glass filled nylon end caps and brackets | Fitted mains cable | Supplied with brackets and fixings.

Suntube	Rating @	Dimension	s (mm)	
variant	230-240V	A Length	B Diameter	C Depth
ST1	60W	410	52	75
ST2	120W	670	52	75
ST3	180W	980	52	75
ST4	240W	1280	52	75
ST5	300W	1590	52	75
ST6	360W	1890	52	75

### Suntube ST Versatile, Linear Electric Tubular Heaters

Suntubes are robust, low energy output heaters producing steady background warmth in both domestic and commercial applications. They are also highly effective as window demisters and in horticultural use provide valuable frost protection for greenhouses, outbuildings and conservatories.

 Application
 Low level heat background heating and frost protection.

 Key Features
 A range of 6 lengths from 1ft to 6ft (element length) I 60W per foot output I Low capital and running cost I 1 metre fitted cable I Can be left or right mounted I Supplied complete with brackets for wall or floor mounting I Can be stacked using optional interlinking kit I IPX4 rated.

Safety Features Thermal cut-out protection.

Materials Light grey epoxy powder coated tube | Dark grey end caps and fixing brackets.

Accessories Interlinking kit available for multiple stacking installations I Optional protective guards - We recommend the use of guards for additional safety in sensitive areas such as schools, hospitals and care homes. These can be obtained from C. Aiano Ltd. Tel: 0207 987 1184, quoting the short guard code (SG1 - SG6). See page 172 for details.

- Approvals CE.
- **Guarantee** 1 year product guarantee (UK).

Product Reference		Short Code	Cat. No.
Suntube ST 410mm	60W	ST1	51731110
Suntube ST 670mm	120W	ST2	51731101
Suntube ST 980mm	180W	ST3	51731102
Suntube ST 1280mm	240W	ST4	51731103
Suntube ST 1590mm	300W	ST5	51731105
Suntube ST 1890mm	360W	ST6	51731104



Flame retardant, polycarbonate glass-filled nylon body I Open wound spiral element with ceramic support insulators I Totally enclosed single phase 4 pole motor I Twin thermal cut-out protection I Supplied with brackets and fixings.

Heater variant SF3	Rating @ 230-240V <b>3kW</b>	Dimensions ( A Height 229	(mm) B Width 267	C Depth 260
SF3 SF3	*Noise Level @ 1m @ 3m	Fan only 49.5dBA 41.4dBA	47.9	ter & fan DdBA DdBA

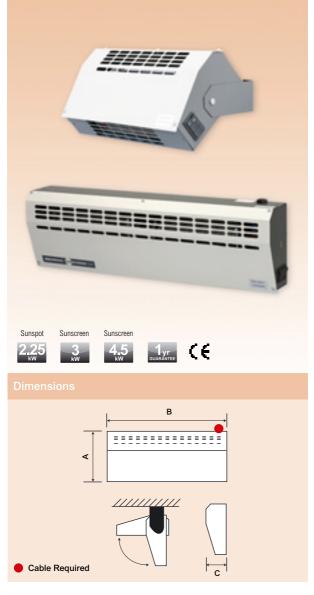
# Commercial Electric Heaters

# Sunfan SF High Level, Wall-mounted, Commercial

Sunfan is a robust 3kW high volume air throughput commercial wall-mounted fan heater designed to provide highly efficient heating in winter, or cool air circulation in summer.

Application	High level fan for heating/cooling for shops and warehouses, where lower wall space is at a premium.
Key Features	High air volume throughput of 300m <sup>3</sup> /hour   Quiet running*   Totally enclosed motor   Multi-directional wall bracket (45° vertically - 150° horizontally)   Two piece self-supporting bracket with single screw locking simplifies installation.
Safety Features	Twin thermal cut-out protection   Class II (double insulated).
Materials	Two-tone grey flame retardant body I Dark grey polycarbonate wall mounting bracket.
Accessories	Optional dual control switch (on/off and hot/cold) I Optional variable thermostatic controller. See page 172 for details.
Approvals	BEAB Approved   CE.
Guarantee	1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Sunfan SF 3kW	SF3	50816401



 
 Technical
 Zinc coated steel, powder coated body | Open coil element with ceramic insulators | Shaded pole motor | Single end connection conduit or cable | Supplied with brackets and fixings.

Heater	Rating @	Dimensions (mm)		
variant	240V	A Height	B Width	C Depth
RS2	2.25kW	185	350	105
RS1	3kW	185	610	105
RS3	4.5kW	185	610	105

RS1 Cold, 1.5, 3 2.5mm <sup>2</sup> 13 Am	Switching (kW) RS2 1.1 - 2.2	Cable size guide 1.5mm <sup>2</sup>	Fuse rating guide 13 Amps
	RS1 Cold, 1.5, 3	2.5mm <sup>2</sup>	13 Amps
RS3 Cold, 2.25, 4.5 4mm <sup>2</sup> 20 Am	RS3 Cold, 2.25, 4.5	4mm <sup>2</sup>	20 Amps

# Commercial Electric Heaters

# Sunspot / Sunscreen RS

Electric Warm Air Curtain Heaters

Sunspot and Sunscreen fan assisted hot air curtains are designed for installation above external doors, effectively combating incoming cool air. The Sunscreen can also run cold, forming a barrier against dust and giving a cool refreshing breeze in summer.

Application	Overdoor vertical heating barrier and internal heating.	
Key Features	High volume throughput 130 cu. ft. per minute (Sunsp 150 cu. ft. per minute (Sunscreen) I Integral switche simplifying installation I Half heat switching on all models I Smooth running motors and balanced tangential fan units for quiet and efficient operation I Key hole slots are provided for ease of installation an back insulation is necessary when mounting direct to v I Brackets are provided for multi-directional adjustme	
Safety Features	Thermal cut-out protection.	
Materials	Two-tone grey powder coated body.	
Installation	For sizing guide and installation details see page 174.	
Approvals	CE.	
Guarantee	1 year product guarantee (UK).	

Product Reference	Short Code	Cat. No
Sunspot RS 2.25kW	RS2	50813907
Sunscreen RS 3kW	RS1	50813905
Sunscreen RS 4.5kW	RS3	50813906



Matt black with bright zinc body | Metal sheathed element | Anodised aluminium reflector | Chrome plated steel guard | Single end connection | Supplied with brackets and fixings.

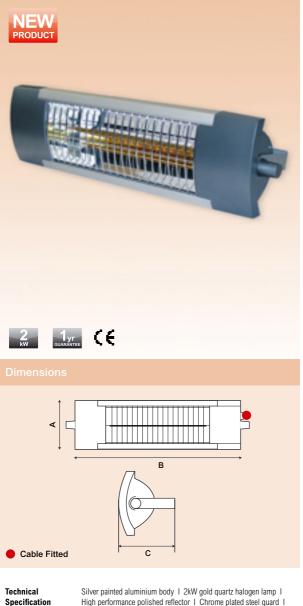
Sunslim	Rating @	Dimensions (mm)		
variant	230-240V	A Height	B Width	C Depth
SL2	2kW	108	1215	71
SL3	3kW	108	1671	71

### Sunslim SL Infra-red Electric Radiant Heaters

The Sunslim is a low cost, robust and linear radiant heater. Its tilt mounting allows heat to be localised, or directed at a targeted area. The Sunslim can be wall-mounted or chain-hung.

Application	Localised overhead 'black heat' radiant heating.	
Key Features	Instant, directional radiant heat   Available in 2 and 3kW models   Completely silent in operation   Lightweight and robust   Corrosion resistant   Suitable for bracket or chain mounting   Easy to install   Overhead mounting means no loss of floor space   Ideal for localised heating in large covered areas.	
Safety Features	<b>NB:</b> Requires high temperature cables and RCD protection I Fitted wire guard for protection.	
Materials	Matt black zinc coated steel body I Anodised aluminium reflector.	
Installation	For sizing guide and installation details see page 174.	
Approvals	CE.	
Guarantee	1 year product guarantee (UK).	

Product Reference	Short Code	Cat. No
Sunslim SL 2kW	SL2	51804902
Sunslim SL 3kW	SL3	51804903



High performance polished reflector I Chrome plated steel guard I Single end connection | Supplied with brackets and fixings.

Sunplus	Rating @	Dimensions (mm)		
variant	230-240V	A Height	B Width	C Depth
SP2	2kW	159	594	144

### Sunplus SP Electric Outdoor Patio Heaters

Sunplus heaters give instant heat, are quick to install and only require minimal maintenance. The radiant heat heats like the sun, passing through the air and warming solid objects, making them the ideal outdoor heating solution. The heaters transmit harmless infra-red radiant energy, that turns into heat only when it comes into contact with a solid object such as people. So you're not heating the atmosphere or having the heat blown away in the wind - unlike outdoor gas heaters.

Application	Under canopy/wall-mounted, projected localised heating for outdoor areas.
Key Features	Low running costs as radiant heat heats solid objects not the air I Instant heat cuts the cost of outdoor heating overall I Silent running with no moving parts or noisy naked flames I Low capital cost as these heaters allow you to select fewer heaters, but place them exactly where the heating need is I When used with PIR sensors, further energy savings are available I IP24 rated (splashproof).
Safety Features	NB: Requires high temperature cables and RCD
	protection 1 Fitted wire guard for protection.
Materials	· · · ·
Materials Accessories	protection   Fitted wire guard for protection. Two-tone aluminium case   Electro-chemically
	protection I Fitted wire guard for protection. Two-tone aluminium case I Electro-chemically brightened reflector I Gold coated quartz halogen lamp.

Product Reference	Short Code	Cat. No
Sunplus SP Radiant Heater 2kW	SP2	75775225



Epoxy painted zinc coated steel body | Ruby sleeved quartz halogen lamp | Electro-chemically brightened reflector | Chrome plated steel guards | Rear connection | Supplied with brackets and fixings.

Sunslim	Rating @	Number	Dimensior	is (mm)	
variant	230-240V	of lamps	A Height	B Width	C Depth
SQ1.5	1.5kW	1	185	390	115
SQ2.0	2kW	1	185	390	115
SQ3.0	3kW	2	370	390	115
SQ4.0	4kW	2	370	390	115
SQ4.5	4.5kW	3	555	390	115
SQ6.0	6kW	3	555	390	115

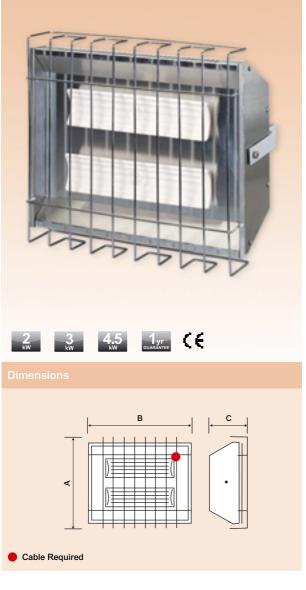
# Commercial Electric Heaters

### Sunquartz SQ Short Wave Infra-red Electric Radiant Heaters

The sensation and welcome of instant heat right where it is needed. Sunquartz short wave infra-red heaters warm people, not the air. Their uses are endless, from warehouses to churches. These efficient sun-like heaters can penetrate damp air with little waste to the atmosphere. A cost efficient way to heat large open spaces.

Application	Instant targeted heating of areas in high heatloss buildings.
Key Features	Up to 90% efficient at converting electricity into energy   Instant visible heat at switch on   Penetrates damp air with minimum atmospheric heat loss   Absolutely silent in operation   Long range heat projection   Robust modular design (1, 2 and 3 lamp units available)   Lightweight and silent   Fitted with safety guard.
Safety Features	<b>NB:</b> Requires high temperature cables and RCD protection I Fitted wire guards for protection.
Materials	Epoxy painted zinc coated steel I Electro-chemically brightened reflector I Ruby-sleeved tungsten halogen lamps.
Installation	For sizing guide and installation details see page 174.
Accessories	Optional SQAD PIR automatic controller, see page 172 for details.
Approvals	CE.
Guarantee	1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Sunquartz SQ 1.5kW	SQ1.5	55821202
Sunquartz SQ 2.0kW	SQ2.0	55821203
Sunquartz SQ 3.0kW	SQ3.0	55821204
Sunquartz SQ 4.0kW	SQ4.0	55821205
Sunquartz SQ 4.5kW	SQ4.5	55821207
Sunquartz SQ 6.0kW	SQ6.0	55821208



Galvanised steel body | Ceramic emitters | Polished reflector | Chrome plated steel guard | Rear connection | Supplied with mounting bracket and fixings.

Ceramic	Rating @	Dimensions	Dimensions (mm)			
variant	230-240V	A Height	B Width	C Depth		
CR2	2kW	340	376	140		
CR3	3kW	340	376	140		
CR4.5	4.5kW	440	376	140		

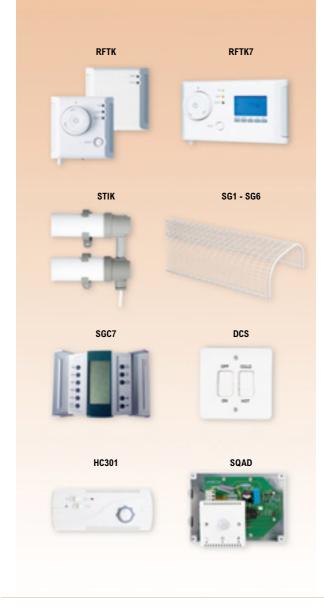
# Commercial Electric Heaters

### **Ceramic CR** Long Wave Infra-red Electric Radiant Heaters

Long wave infra-red heaters offer highly efficient, silent, glare free localised heat. These heaters incorporate dual ceramic emitters to rapidly convert electrical energy into heat energy without producing light. With no moving parts these heaters are virtually maintenance free.

Application	Heavy duty, glare-free localised radiant heating.
Key Features	Durable ceramic emitters which rapidly convert electrical energy into heat energy   Available in 2, 3, and 4.5kW versions   No fans or moving components so no dust contamination to the environment   Low maintenance   Good vibration resistance   Fitted with safety guards   Robust fixing brackets.
Safety Features	<b>NB:</b> Requires high temperature cables and RCD protection I Fitted wire guards for protection.
Materials	Galvanised steel casing I Ceramic element emitters.
Installation	For sizing guide and installation details see page 174.
Approvals	CE.
Guarantee	1 year product guarantee (UK).

Product Reference	Short Code	Cat. No
Ceramic CR 2kW	CR2	71821541
Ceramic CR 3kW	CR3	71821542
Ceramic CR 4.5kW	CR4.5	71821543



Product Reference	Short Code
RF Remote Thermostat Kit	RFTK
RF Remote Thermostat Kit with 7 Day Timer	RFTK7
Suntube Interlinking Kit	STIK
Suntube Guards (C. Aiano Ltd)	SG1 - SG6
Soleglow Multi-controller	SGC7
Sunfan Dual Control Switch	DCS
Sunfan Thermostatic Control Switch	HC301
Sunquartz PIR Autodriver	SQAD

# Space Heating Accessories

# **Space Heating Accessories**

The performance and economy of **Redring** heating products can be further enhanced by the use of control options best suited to the type of installation and heating requirement.

RFTK RFTK7	RF Radio Frequency Thermostat Kit RF Radio Frequency Thermostat and Programmer Kit - Enable thermostatic control (and time control - RFTK7 model only) using wireless signalling between remote wall-mounted thermostat and the receiver unit at the heater. Up to 2kW maximum load.
STIK	Suntube Interlinking Kit - Available for multiple installations (100mm mounting centres).
SG1 - SG6	Suntube Guards - We recommend the use of guards for additional security in sensitive areas such as schools, hospitals and care homes (Contact C. Aiano Ltd Tel - 0207 987 1184).
SGC7	Soleglow Controller - Advanced multi-controller allows 7 day programming of 'on/off' times, comfort and set-back temperatures.
DCS	Sunfan Dual Control Switch - for hard wired remote switching on/off and hot/cold air circulation.
HC301	Sunfan Thermostatic Control Switch - for on/off and variable thermostatic control.
SQAD	PIR autodriver senses movement detected within its range and automatically switches on the heater which will remain switched on for a preset time. The PIR range is adjustable and a temperature hold-off facility will inhibit operation when ambient temperatures exceed a value selected between 10°C and 20°C.

Suitable for	Cat. No
Towel rails, plinth heaters & other appliances (2kW max)	75770922
Towel rails, plinth heaters & other appliances (2kW max)	75770923
Suntube tubular heaters	85731506
Suntube tubular heaters	SG1 - SG6
Soleglow underfloor electric heating system	75771202
Sunfan high level commercial fan heater	82815906
Sunfan high level commercial fan heater	21877AW
Sunquartz short wave infra-red heaters	85822084

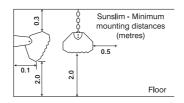
# Space Heating Sizing Guide

**Redring** provides a range of fan and radiant heating products suitable for many commercial and industrial heating applications. From high level rapid fan heaters to short wave infra-red quartz heaters for selective area heating in high heat loss buildings such as warehouses and churches.

### Sunslim sizing guide

When planning a radiant heating installation, refer to Table 1 to select the application and type of environment you wish to heat. Table 2 shows the area that can be heated by a single Sunslim radiant heater in 3kW and 2kW variants.

Note: Heating areas can be overlapped to achieve the necessary heating index.

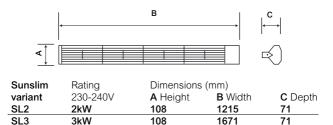


### Table 1 - Sunslim Heating Index

Offices, Canteens, Waiting rooms, 10 - Entrance halls, Dressing rooms Shops, Meeting halls, Recreation rooms, Clubs 12 -	14
· · · · · · · · · · · · · · · · · · ·	
Shops, Meeting halls, Recreation rooms, Clubs 12 -	
	16
Workshops, Garages, Public buildings 14 -	18
Warehouses, Loading bays, Hangars 16 -	20
Churches 18 -	~~

#### Table 2 - Sunslim Heated Area

Heating	3kW			ı 2kW			Кеу
Index	Н	L	W	н	L	W	H Mounting height (determined
10	4.0	5.24	5.49	3.3	4.11	4.53	by on-site
12	3.6	4.88	4.94	3.0	3.84	4.12	requirements)
14	3.2	4.51	4.39	2.7	3.57	3.7	L Length of the heated area
16	3.5	4.33	4.12	2.5	3.38	3.43	W Width of heated
18	2.8	4.14	3.84	n/a	n/a	n/a	area



Customer Techline: 08709 000 430 Email: aedesign@applied-energy.com

### Sunquartz sizing guide

Use the following procedure when planning a Sunquartz heating installation for buildings having a floor area of up to 500m<sup>2</sup>:

- 1. Make a scaled plan of the area to be heated, noting possible mounting heights and positions.
- 2. Determine the overall heating requirements.

 W x Y x K
 = Total kW loading

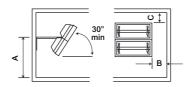
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 Key: W Length to be heated (m)

Y Width to be heated (m) Y Width to be heated (m)

- **K** Intensity watts per m<sup>2</sup>, determined from Heating Index Table
- 3. Determine the number of Sunquartz heaters by dividing the kW rating of the selected units into the total kW loading from stage 2.

### Table 1 - Sunquartz Heating Index

Applications	Heating
	Index (k)
Shops, Meeting halls, Recreation rooms, Clubs	130 - 170
Offices, Canteens, Waiting rooms, Entrance halls	150 - 170
Workshops, Garages, Public buildings	150 - 200
Warehouses, Loading bays, Hangars	180 - 220
Churches	220 - 240



#### Table 2 - Sunquartz Heated Area

Sunquartz	Spare tube	Min. mc	unting di	stances
variant	reference	Α	В	С
Sunquartz 1.5kW	85 821421	1800	300	300
Sunquartz 2.0kW	85 822171	2500	300	300
Sunquartz 3.0kW 2 lamp	85 821421	3000	500	500
Sunquartz 3.0kW 3 lamp	85 821421	3000	500	500
Sunquartz 4.0kW	85 822171	3000	500	500
Sunquartz 4.5kW	85 821421	3000	500	500
Sunquartz 6.0kW	85 822171	4000	500	500

# **Technical** Tables

### Pressure Conversion Table

Head	Pressure	Head	Pressure	Head	Pressure	Head	Pressure
Feet	lb / in <sup>2</sup>	Feet	lb / in²	Feet	lb / in <sup>2</sup>	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

### Hot Water Recovery Chart

				Litr	es of V	Vater				
		5	7	10	15	30	60	80	100	
	1.0	18	25	35	55	105	210	280		
S	2.0	9	13	18	27	55	105	140	175	
vatt	3.0	6	9	12	18	35	70	95	120	_
Loading Kilowatts	4.0	5	7	9	14	27	55	70	90	
	6.0	3	5	6	9	18	35	50	60	
ling	8.0	3	4	5	7	14	27	35	45	
oad	9.0	2	3	4	6	12	24	31	49	
Ľ	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	
	1.0									
ts	2.0	265								
vatt	3.0	175	235	295						
Loading Kilowatts	4.0	135	175	220	265					
ΪX	6.0	90	120	150	175	235	350	470	585	
ing	8.0	70	90	110	135	185	265	350	440	
pad	9.0	60	80	100	120	160	235	315	390	
Ľ	12.0	45	60	75	90	120	175	235	295	
	15.0	35	50	60	70	95	140	190	235	

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Temperature Conversion

Table

### Standard Formulae

# Loading Calculations (excluding heat losses)

(Excluding in	eat ius	353/		
Time to heat	=	Litzaa x Tamp riss (°C)	°C	°F
	-	Litres x Temp rise (°C) kW loading x 14.3	1	33.8
water (mins)		KW IDauing x 14.5	5	41.0
	=	Gallons x Temp rise (°F)	10	50.0
		kW loading x 5.7	15	59.0
			20	68.0
kW loading	=	Litres x Temp rise (°C)	25	77.0
required		Time (mins) x 14.3	30	86.0
	=	Callons x Tomp rise (°E)	35	95.0
	-	Gallons x Temp rise (°F)	40	104.0
		Time (mins) x 5.7	45	113.0
Performance	lationa	50	122.0	
Performance	e carcu	lations	55	131.0
Litres per	=	kW loading x 14.3	60	140.0
minute flow		Temp rise (°C)	65	149.0
		1 ()	70	158.0
Temp rise °C	=	kW loading x 14.3	75	167.0
		Litres per min flow	80	176.0
Temp rise °F	=	kW loading x 5.7	85	185.0
		Gallons per min flow	90	194.0
		·	95	203.0
kW loading	=	Litres x Temp rise (°C)	100	212.0
required		Time (mins) x 14.3		

### **Physical Constants**

Length	1m 1ft		3.28ft 30.8cm	1 joule	=	1 watt second (Ws)
Volume	1gal	=	4.54l 277 cu. ins.	1 kW hour		3412 Btu 860kcal
	1litre 10001	= = =	10lbs (water) 0.22gals 1000cm <sup>3</sup> 1kg (water) 1m <sup>3</sup>	1 British Thermal Unit (Btu)	=	Heat required to raise 1lb water through 1°F 17.6 watt mins 0.252kcal
Weight	1lb 1kg		0.45kg 2.21lbs	1 kilocalorie (kcal)	) =	Heat required to raise 1kg water
Pressure	1ft he	ad	= 14.5psi= 100kN/m²through 1°Cd of water= 0.434psi= 4187Joulesof water= 9.8kN/m²= 3.97Btu			

### **Required 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)

## Approvals and Associations

### Waste Electrical and Electronic Equipment Directive

Redring can confirm that all our responsibilities under the Waste Electrical and Electronic Equipment Directive will be fulfilled in accordance with the law. As required within its provisions we are members of an accredited WEEE recycling scheme for all product categories within the scope of the directive.

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