





# Why choose Smith's?

If you require energy efficiency and versatility in your heating and cooling, the Smith's range is the ideal solution

For over twenty-five years, Smith's EP UK has been manufacturing and providing an extensive range of commercial and domestic heating and cooling solutions from our head office in the UK. Part of the global family-owned US-based business, the Swan Group, Smith's works closely with architects, consultants, heating contractors and installers to deliver, via our stockist network, high quality products with industry-leading warranties on time, with an aftercare and technical support service that is second to none.

We take an active, innovative approach to new product development and creating bespoke heating products to fulfil the creative requirements of a competitive and demanding customer base that spans the UK, Northern Europe and the US. We believe it is essential to be flexible in our partnerships, while remaining uncompromising on the high quality and care that goes into every product in our range. Smith's is an outward-looking, growing business and we are forging relationships with like-minded manufacturers across Europe to ensure that we can provide additional new and essential heating and cooling solutions in areas where we do not specialise and where our partners excel.

Our catalogue showcases our principal commercial and domestic products. At the same time, we have the ability and the will to work alongside clients at any point in the construction process, and collaborate to develop specific solutions for any and every need. We take great pride and go to great lengths to leave our customers not only satisfied but coming back again and again for solutions that are perfect for your project, each and every time.

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C the

**Gary Haynes** MBA, B.Eng.(Hons) Managing Director #ThinkSmiths

# About Smith's

Founded in 1991 Smith's Environmental Products has grown to become the leading supplier of domestic and commercial heat emitters



Smith's Environmental Products is a member of The Swan Group. Headquartered in Boston, Massachusetts, the Swan Group comprises all of the businesses owned and operated by the Swan Family plus a portfolio of commercial real estate. These include Emerson Swan, Emerson Swan Canada, Flexcon Industries, Global Water Solutions, Skidmore Pump, Smith's Environmental Products US, Smith's Environmental Products UK, Vent-Rite Valve, Vent-Rite Pump and The Swan Realty Group. The businesses manufacture and distribute heating, plumbing and water products globally. The Swan Group has manufacturing operations in Asia, North America and Europe, and sales offices throughout the world.

Most of our products are manufactured in-house in our specialist facility in the UK. The company is the UK's market leader and has significant shares of both the North American and European markets.

Early on we developed the Smith's Space Saver, the UK's number one plinth heater and the business quickly became established in heating & plumbing. Other fan convectors followed and the very first Caspian commercial fan convector was launched in 2007.

Our ambitions have never been modest. The business has grown from strength to strength and today we offer versatile heating solutions based on fan convector technology to all commercial specifiers from architects and consultants, to major building engineering services companies. Our range of Caspian commercial fan convectors can provide products for virtually every heating scenario, with the Smith's high quality and service excellence people have come to expect.

For 2018 we have re-launched our extensive range of updated Fan Coils Units called Aegean. Tested and verified by BSRIA they provide an excellent solution to heating and cooling for all kinds of commercial applications, from restaurants and hotels to office developments, with the ability to rapidly heat and cool large areas with much greater efficiency than other similar heating and cooling systems.

In addition to Aegean we have launched a range of Radiant Panels called Sargasso, further extending our aim to be a solution provider for heating and cooling projects in commercial applications. Not a company to rest on its laurels Smith's will be introducing further products to complement it's existing range of heating and cooling products in 2018.









Space Saver

Caspian

Aegean

Sargasso





#### **Manufacturing Facilities**

Operating from 40,000 square feet of factory and office space near Chelmsford in Essex we manufacture our product range from raw materials through to finished product utilising computerised design and automated production techniques. We are happy to welcome customers to visit our factory and Head Office to demonstrate our capabilities.

In the last 2 years we have implemented some key initiatives to improve productivity and to ensure the quality continues to meet the highest standards.

Lean initiatives such as Kaizen, or continuous improvement process, have brought significant improvements in the factory. Ongoing initiatives such as the implementation of the gemba walk continue drive innovation and to maximize the improvement process.

#### Quality

At Smith's we recognise that quality is about more than just the product, it's an approach that runs throughout the business and is centred on meeting and exceeding customers' expectations. Processes are constantly monitored and evaluated with a focus on continuous improvement. Manufacturing facilities are regularly appraised and meet exacting standards of national approval boards such as UL, BSI and Kema.

In 2017 Smith's were assessed for the highly regarded ISO 9001 (2015) accreditation and passed the audit with no non-conformities and was accredited the new standard certification. It brings Smith's up to the latest standard and assuring our customers receive the best experience possible.

#### **Expertise**

The team at Smith's have many years experience in managing and delivering major projects including high profile airport terminals, major national stadia, ground-up hospital trust projects, major BSF projects and MOD projects. We also have significant expertise and experience in trench heating and have a team who have over 25-years experience in the development and delivery of trench projects.

#### **Special Products**

As part of the Smith's service we can modify current products, we call them modified standards. An example of this is a different RAL colour to the standard colour. Another example would be to add 2-port divertor valves to the flow pipe to the heat exchanger and a check valve on the return pipe on a Caspian Fan Convector. This would allow individual control of the Caspian, permitting zoning when used in conjunction with heating controls. Smith's also offer a bespoke custom product service where we design and develop bespoke custom product solutions to customer requirements. We work with customers to understand their specific requirements.

### **Working with Renewables**

Renewable technology grows apace, with ground source and air source heat pumps offering a viable alternative to boilers as the principal heat generator in both domestic and commercial applications.

Inherent in the heat pump's design is that the smaller the temperature between the heat-source pump (air or ground) and the heat sink/emitter (under-floor heating, fan convector, radiator), the higher the energy efficiency of that heat pump. This higher efficiency means lower fuel bills and greater carbon savings.

Fan convectors can work very effectively at system temperatures as low as 40°C. This allows your chosen heat pump to work close to its maximum levels of efficiency, which means it will reduce the user's energy costs and energy consumption in the way it was intended. By contrast a standard radiator is designed to be efficient at higher temperatures, 45°C and above, which automatically reduces the heat pump's efficiency by more than 10%. In addition the size of the radiator has to be increased significantly to cope with the lower system temperatures.

# **Product ranges**

Please see below for a summary of products suitable for commercial applications

#### **Caspian Fan Convectors**







Caspian SL



Caspian FF

Fan Coils



Caspian TT



Caspian EXT



Caspian LST





Caspian Skyline



Caspian UVC **Radiant Panels** 



Aegean 180



Aegean 235

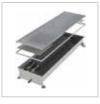


Aegean 260



Aegean 500

MINIB by Smith's



MINIB by Smith's



Sargasso A



Sargasso S





S2/S2 Metallic



PS Series





PS (W)



Pedestal Radiators



Pedestal - Kiosk



Pedestal - Trafalgar



Pedestal - Tube



Ecovector® High





**Fan Convectors** 



Eco-Powerad®







# Please see below for a summary of products suitable for residential/domestic applications

### Plinth Heating





#### **Fan Convectors**



Ecovector® High **Circulating Pumps** 



Ecovector® Low



Ecovector® Vertical



Eco-Powerad®



Spacemaker

Perimeter Heating



Sureline®



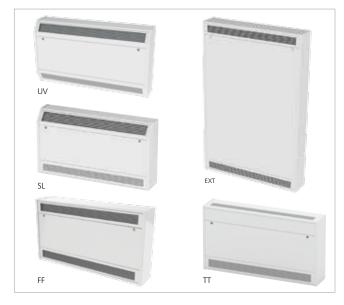
Circulating Pumps



# **Caspian Commercial**

Fan convectors suitable for all kinds of commercial applications, from schools and churches to office developments, with the ability to rapidly heat large areas quickly with much greater efficiency than other heat emitters

Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





#### **Features**

- Caspian fan convectors are both a practical and high quality heating solution for any commercial project
- Incorporating the latest EC motor technology, which can result in running-cost savings as high as 80%, and with variable speed control as standard, the Caspian delivers heat quickly and quietly. AC motor models are available on request
- Caspians are compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- The airflow can be reversed so that the warm air is discharged from the lower vent

#### Motor

EC (BMS compliant) or AC

#### Finish

Casing: zinc-coated steel 1.2mm Polyester powdercoated: white RAL 9010 Available to special order in any colour and with anti-microbial or anti-bacterial paint

#### Filter

Class G3, 100% polyester, non-washable

#### Installation

Suitable for two-pipe central heating systems
Maximum installation height for high or ceiling mounting, 4m to underside
Pipework access holes on the rear and underside

Key operated front access panels Bleed valve accessible on removal of front casing Unit must be earthed

# Commissioning

Check water is hot enough to activate the low temperature cut-out thermostat

### Controls

Variable heat output controller (mounted within the products)

#### Accessories

See matrix on page 70

### Heat output For other heat output data please visit our website

|             | 1           | Heat Output at 75° |              |             | Heat Output at 45° |              |  |
|-------------|-------------|--------------------|--------------|-------------|--------------------|--------------|--|
| Model       | Low<br>(kW) | Medium<br>(kW)     | High<br>(kW) | Low<br>(kW) | Medium<br>(kW)     | High<br>(kW) |  |
| Caspian 60  | 2.9         | 4.1                | 5.3          | 1.1         | 1.5                | 1.9          |  |
| Caspian 90  | 4.8         | 7.2                | 9.6          | 2.0         | 3.1                | 4.1          |  |
| Caspian 120 | 6.1         | 9.7                | 13.2         | 2.0         | 3.7                | 5.4          |  |
| Caspian 150 | 13.7        | 14.2               | 15.2         | 6.2         | 6.9                | 7.5          |  |
| Caspian 180 | 16.2        | 17.0               | 18.0         | 8.4         | 9.1                | 9.4          |  |

Heat output testing based on BS EN442 using mean water temperature, 18°C entering air temperature, 10° temperature drop

|             |                           |               |                | Total Power       | Consumption     |                            |               | Sound Levels    |              |                |
|-------------|---------------------------|---------------|----------------|-------------------|-----------------|----------------------------|---------------|-----------------|--------------|----------------|
| Model       | Flow & return connections | Fused<br>spur | Low<br>(Watts) | Medium<br>(Watts) | High<br>(Watts) | Water Capacity<br>(Litres) | High<br>(dBA) | Medium<br>(dBA) | Low<br>(dBA) | Casting colour |
| Caspian 60  | 22mm                      | 3A            | 8              | 24                | 40              | 0.92                       | 50            | 42              | 33           | white          |
| Caspian 90  | 22mm                      | 3A            | 15             | 43                | 70              | 1.50                       | 53            | 42              | 34           | white          |
| Caspian 120 | 22mm                      | ЗА            | 13             | 62                | 110             | 2.08                       | 58            | 46              | 35           | white          |
| Caspian 150 | 22mm                      | 3A            | 20             | 144               | 177             | 2.58                       | 59            | 47              | 36           | white          |
| Caspian 180 | 22mm                      | ЗА            | 26             | 124               | 220             | 3.18                       | 59            | 48              | 38           | white          |

Sound levels measured at 3m in front of the floor mounted model

# **Correction factors**

|       | Mean water temperature °C |  |
|-------|---------------------------|--|
| EAT°C | 80 to 40                  |  |
| 15    | 1.10                      |  |
| 21    | 0.93                      |  |

|        | Temperature drop °C |            |      |      |
|--------|---------------------|------------|------|------|
|        | 20                  | 20 15 10 5 |      |      |
| Factor | 0.89                | 0.95       | 1.00 | 1.04 |

# How to calculate Mass Flow Rate (L/S)

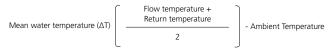
M = H / CP x (Flow °C - Return °C)

M = Mass flow rate (L/S)

H = Output of product (W)

CP = Specific heat capacity [J/(kg·°C)]. Varies upon system temperature, Approx. 4187 if fluid is water.

### How to calculate Mean Water Temperature ( $\Delta T$ )

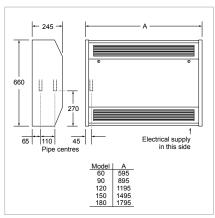


# Caspian UV

One heating solution, suitable for high, low or ceiling mounted applications

Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial







# Ordering guide

| Model          | Packed<br>Wt (kg) | Product<br>Codes |  |  |  |  |
|----------------|-------------------|------------------|--|--|--|--|
| AC Codes       |                   |                  |  |  |  |  |
| Caspian UV 60  | 23                | HPCA21001        |  |  |  |  |
| Caspian UV 90  | 36                | HPCA21002        |  |  |  |  |
| Caspian UV 120 | 45                | HPCA21003        |  |  |  |  |
| Caspian UV 150 | 60                | HPCA21004        |  |  |  |  |
| Caspian UV 180 | 78                | HPCA21005        |  |  |  |  |
| EC Codes       |                   |                  |  |  |  |  |
| Caspian UV 60  | 23                | HPCA20001        |  |  |  |  |
| Caspian UV 90  | 36                | HPCA20002        |  |  |  |  |
| Caspian UV 120 | 45                | HPCA20003        |  |  |  |  |
| Caspian UV 150 | 60                | HPCA20004        |  |  |  |  |
| Caspian UV 180 | 78                | HPCA20005        |  |  |  |  |

#### **Specification**

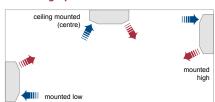
To specify state:

Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian UV 60/90/120/150/180.

| Accessories   | Product Codes |
|---|---------------|
| Plinth to suit low level 60 models - 150mm high (White)                               | HACA33006     |
| Plinth to suit low level 90 models - 150mm high (White)                               | HACA33007     |
| Plinth to suit low level 120 models - 150mm high (White)                              | HACA33008     |
| Plinth to suit low level 150 models - 150mm high (White)                              | HACA33009     |
| Plinth to suit low level 180 models - 150mm high (White)                              | HACA33010     |
| Plinth to suit low level 60 models - 150mm high (Black)                               | HACA33097     |
| Plinth to suit low level 90 models - 150mm high (Black)                               | HACA33098     |
| Plinth to suit low level 120 models - 150mm high (Black)                              | HACA33099     |
| Plinth to suit low level 150 models - 150mm high (Black)                              | HACA33100     |
| Plinth to suit low level 180 models - 150mm high (Black)                              | HACA33101     |
| Adjustable low temperature cut-out (all Caspian models)                               | HACA33001     |
| Thermostat T1 (low level models with AC or EC Motors)                                 | HACA33002     |
| Thermostat T2 (low level models with AC Motors)                                       | HACA33036     |
| Thermostat (T1) & auto-speed Control (T2) (Low level models with AC motors)           | HACA33003     |
| External Control Harness (models with EC motors)                                      | HHCA33004     |
| Caspian EC linking kit (Alt to EXTCH)   | HACA33068     |
| Proportional Heat Output Controller (models with EC motors) 15°-25°C (low level only) | HACA33005     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C    | HACA33037     |
| Proportional Heat Output Controller (models with EC motors) 11°-21°C (low level only) | HACA33075     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C    | HACA33076     |
| Remote (Wired) Room Thermostat  | HAGA95001     |
| Remote (Wired) Room Thermostat Siemens  | HACA33077     |
| Remote (Wireless) Room Thermostat Siemens RF  | HACA33074     |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                   | HAGA95004     |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)        | HACA33078     |
| 22mm flexible hoses (pair)  | HAGA95003     |

100mm plinth also available, please contact us for further information

#### **Mounting options**

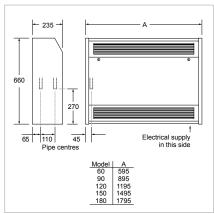


# Caspian SL

Warm air is discharged at an upward 45° angle to avoid causing discomfort to people sitting adjacent to appliance and with chamfered profile to avoid sharp corners

Applications Healthcare Places of worship Leisure and sport Hospitality Retail Showroom Industrial







### Ordering guide

| Model          | Packed<br>Wt (kg) | Product<br>Codes |  |  |  |
|----------------|-------------------|------------------|--|--|--|
| AC Codes       |                   |                  |  |  |  |
| Caspian SL 60  | 23                | HPCA14001        |  |  |  |
| Caspian SL 90  | 36                | HPCA14002        |  |  |  |
| Caspian SL 120 | 45                | HPCA14003        |  |  |  |
| Caspian SL 150 | 60                | HPCA14004        |  |  |  |
| Caspian SL 180 | 78                | HPCA14005        |  |  |  |
| EC Codes       |                   |                  |  |  |  |
| Caspian SL 60  | 23                | HPCA13001        |  |  |  |
| Caspian SL 90  | 36                | HPCA13002        |  |  |  |
| Caspian SL 120 | 45                | HPCA13003        |  |  |  |
| Caspian SL 150 | 60                | HPCA13004        |  |  |  |
| Caspian SL 180 | 78                | HPCA13005        |  |  |  |

# **Specification**

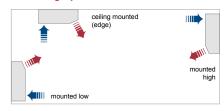
To specify state:

Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian SL 60/90/120/150/180.

| Accessories   | Product Codes |
|---|---------------|
| Plinth to suit low level 60 models - 150mm high (White)                               | HACA33092     |
| Plinth to suit low level 90 models - 150mm high (White)                               | HACA33093     |
| Plinth to suit low level 120 models - 150mm high (White)                              | HACA33094     |
| Plinth to suit low level 150 models - 150mm high (White)                              | HACA33095     |
| Plinth to suit low level 180 models - 150mm high (White)                              | HACA33096     |
| Plinth to suit low level 60 models - 150mm high (Black)                               | HACA33082     |
| Plinth to suit low level 90 models - 150mm high (Black)                               | HACA33083     |
| Plinth to suit low level 120 models - 150mm high (Black)                              | HACA33084     |
| Plinth to suit low level 150 models - 150mm high (Black)                              | HACA33085     |
| Plinth to suit low level 180 models - 150mm high (Black)                              | HACA33086     |
| Adjustable low temperature cut-out (all Caspian models)                               | HACA33001     |
| Thermostat T1 (low level models with AC or EC Motors)                                 | HACA33002     |
| Thermostat T2 (low level models with AC Motors)                                       | HACA33036     |
| Thermostat (T1) & auto-speed Control (T2) (Low level models with AC motors)           | HACA33003     |
| External Control Harness (models with EC motors)                                      | HHCA33004     |
| Caspian EC linking kit (Alt to EXTCH)   | HACA33068     |
| Proportional Heat Output Controller (models with EC motors) 15°-25°C (low level only) | HACA33005     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C    | HACA33037     |
| Proportional Heat Output Controller (models with EC motors) 11°-21°C (low level only) | HACA33075     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C    | HACA33076     |
| Remote (Wired) Room Thermostat  | HAGA95001     |
| Remote (Wired) Room Thermostat Siemens  | HACA33077     |
| Remote (Wireless) Room Thermostat Siemens RF  | HACA33074     |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                   | HAGA95004     |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)        | HACA33078     |
| 22mm flexible hoses (pair)  | HAGA95003     |

100mm plinth also available, please contact us for further information

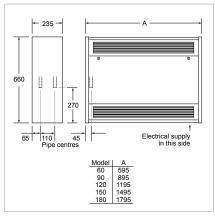
#### **Mounting options**

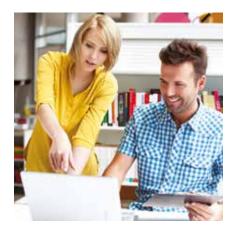


# Caspian FF

Can be installed in an adjacent room, or storage cupboard, with the warm air outlets positioned at the rear of the appliance and ducted into the adjacent room such as a sports hall or even a narrow corridor, permitting an obstruction free wall space Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial







### Ordering guide

| Model          | Packed<br>Wt (kg) | AC<br>Codes | EC<br>Codes     |  |
|----------------|-------------------|-------------|-----------------|--|
| Caspian FF 60  | 24                | HPCA23002   | HPCA22001       |  |
| Caspian FF 90  | 39                | HPCA23003   | HPCA22002       |  |
| Caspian FF 120 | 46                | HPCA23004   | HPCA22003       |  |
| Caspian FF 150 | 61                | HPCA23005   | HPCA22004       |  |
| Caspian FF 180 | 76                | HPCA23006   | HPCA22005       |  |
| Rear Outlet    |                   |             |                 |  |
| Caspian FF 60  | 24                | HPCA23007   | HPCA22006       |  |
| Caspian FF 90  | 39                | HPCA23008   | HPCA22007       |  |
| Caspian FF 120 | 46                | HPCA23009   | HPCA22008       |  |
| Casnian FE 150 | 61                | ⊔DC ∆ 22010 | ⊔DC 4 2 2 0 0 0 |  |

HPCA23011

HPCA22010

# **Specification**

Caspian FF 180

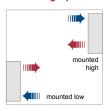
To specify state:

Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian FF 60/90/120/150/180.

| Accessories   | Product Codes |
|---|---------------|
| Plinth to suit low level 60 models - 150mm high (White)                               | HACA33092     |
| Plinth to suit low level 90 models - 150mm high (White)                               | HACA33093     |
| Plinth to suit low level 120 models - 150mm high (White)                              | HACA33094     |
| Plinth to suit low level 150 models - 150mm high (White)                              | HACA33095     |
| Plinth to suit low level 180 models - 150mm high (White)                              | HACA33096     |
| Plinth to suit low level 60 models - 150mm high (Black)                               | HACA33082     |
| Plinth to suit low level 90 models - 150mm high (Black)                               | HACA33083     |
| Plinth to suit low level 120 models - 150mm high (Black)                              | HACA33084     |
| Plinth to suit low level 150 models - 150mm high (Black)                              | HACA33085     |
| Plinth to suit low level 180 models - 150mm high (Black)                              | HACA33086     |
| Adjustable low temperature cut-out (all Caspian models)                               | HACA33001     |
| Thermostat T1 (low level models with AC or EC Motors)                                 | HACA33002     |
| Thermostat T2 (low level models with AC Motors)                                       | HACA33036     |
| Thermostat (T1) & auto-speed Control (T2) (Low level models with AC motors)           | HACA33003     |
| External Control Harness (models with EC motors)                                      | HHCA33004     |
| Caspian EC linking kit (Alt to EXTCH)   | HACA33068     |
| Proportional Heat Output Controller (models with EC motors) 15°-25°C (low level only) | HACA33005     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C    | HACA33037     |
| Proportional Heat Output Controller (models with EC motors) 11°-21°C (low level only) | HACA33075     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C    | HACA33076     |
| Remote (Wired) Room Thermostat  | HAGA95001     |
| Remote (Wired) Room Thermostat Siemens  | HACA33077     |
| Remote (Wireless) Room Thermostat Siemens RF  | HACA33074     |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                   | HAGA95004     |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)        | HACA33078     |
| 22mm flexible hoses (pair)  | HAGA95003     |

100mm plinth also available, please contact us for further information

#### **Mounting options**



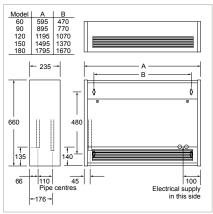


#### Rear outlet

# **Caspian TT**

Warm air is discharged from the upper surface to avoid causing discomfort to people sitting adjacent to the appliance Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial







#### Ordering guide

| Model          | Packed<br>Wt (kg) | Product<br>Codes |  |  |  |  |
|----------------|-------------------|------------------|--|--|--|--|
| AC Codes       |                   |                  |  |  |  |  |
| Caspian TT 60  | 24                | HPCA16000        |  |  |  |  |
| Caspian TT 90  | 39                | HPCA16001        |  |  |  |  |
| Caspian TT 120 | 46                | HPCA16002        |  |  |  |  |
| Caspian TT 150 | 61                | HPCA16003        |  |  |  |  |
| Caspian TT 180 | 76                | HPCA16004        |  |  |  |  |
| EC Codes       |                   |                  |  |  |  |  |
| Caspian TT 60  | 24                | HPCA15000        |  |  |  |  |
| Caspian TT 90  | 39                | HPCA15001        |  |  |  |  |
| Caspian TT 120 | 46                | HPCA15002        |  |  |  |  |
| Caspian TT 150 | 61                | HPCA15003        |  |  |  |  |
| Caspian TT 180 | 76                | HPCA15004        |  |  |  |  |

# Specification

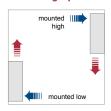
To specify state:

Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian TT 60/90/120/150/180.

| Accessories   | Product Codes |
|---|---------------|
| Plinth to suit low level 60 models - 150mm high (White)                               | HACA33006     |
| Plinth to suit low level 90 models - 150mm high (White)                               | HACA33007     |
| Plinth to suit low level 120 models - 150mm high (White)                              | HACA33008     |
| Plinth to suit low level 150 models - 150mm high (White)                              | HACA33009     |
| Plinth to suit low level 180 models - 150mm high (White)                              | HACA33010     |
| Plinth to suit low level 60 models - 150mm high (Black)                               | HACA33097     |
| Plinth to suit low level 90 models - 150mm high (Black)                               | HACA33098     |
| Plinth to suit low level 120 models - 150mm high (Black)                              | HACA33099     |
| Plinth to suit low level 150 models - 150mm high (Black)                              | HACA33100     |
| Plinth to suit low level 180 models - 150mm high (Black)                              | HACA33101     |
| Adjustable low temperature cut-out (all Caspian models)                               | HACA33001     |
| Thermostat T1 (low level models with AC or EC Motors)                                 | HACA33002     |
| Thermostat T2 (low level models with AC Motors)                                       | HACA33036     |
| Thermostat (T1) & auto-speed Control (T2) (Low level models with AC motors)           | HACA33003     |
| External Control Harness (models with EC motors)                                      | HHCA33004     |
| Caspian EC linking kit (Alt to EXTCH)   | HACA33068     |
| Proportional Heat Output Controller (models with EC motors) 15°-25°C (low level only) | HACA33005     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C    | HACA33037     |
| Proportional Heat Output Controller (models with EC motors) 11°-21°C (low level only) | HACA33075     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C    | HACA33076     |
| Remote (Wired) Room Thermostat  | HAGA95001     |
| Remote (Wired) Room Thermostat Siemens  | HACA33077     |
| Remote (Wireless) Room Thermostat Siemens RF  | HACA33074     |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                   | HAGA95004     |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)        | HACA33078     |
| 22mm flexible hoses (pair)  | HAGA95003     |

100mm plinth also available, please contact us for further information

#### **Mounting options**

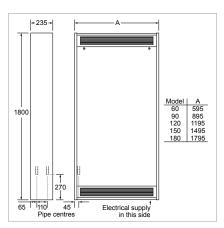


# **Caspian EXT**

Warm air is delivered at 1.7m from the base/floor level and the heater can be installed as a freestanding appliance

Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





# Ordering guide

| Model           | Packed<br>Wt (kg) | Product<br>Codes |
|-----------------|-------------------|------------------|
| AC Codes        |                   |                  |
| Caspian EXT 60  | 30                | HPCA25001        |
| Caspian EXT 90  | 49                | HPCA25002        |
| Caspian EXT 120 | 58                | HPCA25003        |
| Caspian EXT 150 | 76                | HPCA25004        |
| Caspian EXT 180 | 95                | HPCA25005        |
| EC Codes        |                   |                  |
| Caspian EXT 60  | 30                | HPCA24001        |
| Caspian EXT 90  | 49                | HPCA24002        |
| Caspian EXT 120 | 58                | HPCA24003        |
| Caspian EXT 150 | 76                | HPCA24004        |
| Caspian EXT 180 | 95                | HPCA24005        |

# Specification

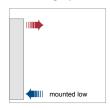
To specify state:

Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 1800mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian EXT 60/90/120/150/180.

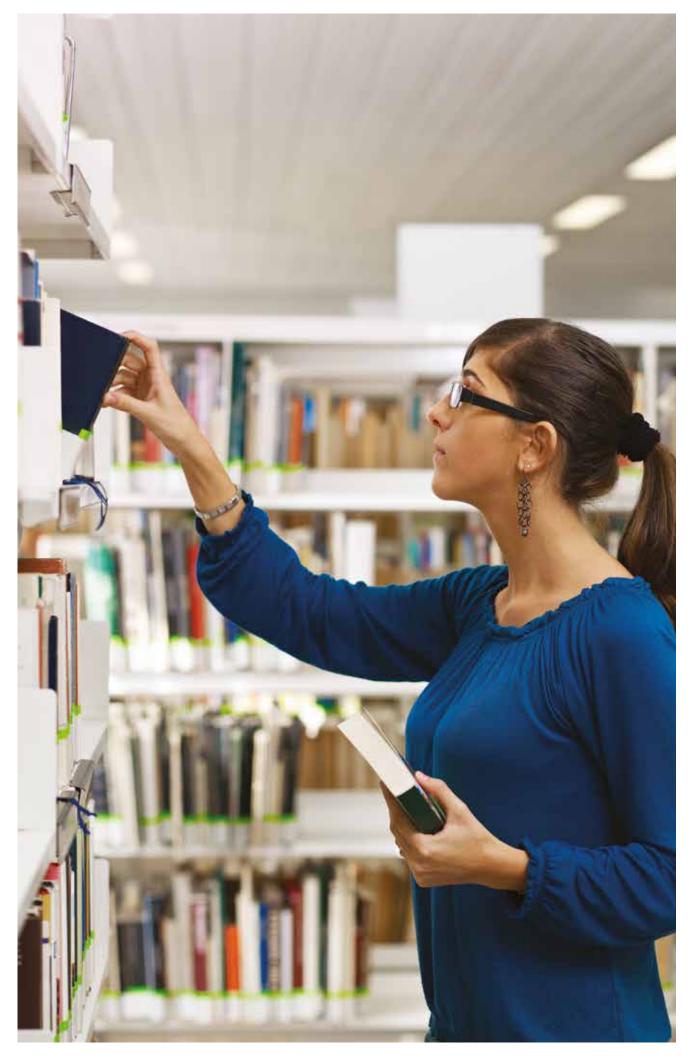
| Accessories   | Product Codes |
|---|---------------|
| Plinth to suit low level 60 models - 150mm high (White)                               | HACA33092     |
| Plinth to suit low level 90 models - 150mm high (White)                               | HACA33093     |
| Plinth to suit low level 120 models - 150mm high (White)                              | HACA33094     |
| Plinth to suit low level 150 models - 150mm high (White)                              | HACA33095     |
| Plinth to suit low level 180 models - 150mm high (White)                              | HACA33096     |
| Plinth to suit low level 60 models - 150mm high (Black)                               | HACA33082     |
| Plinth to suit low level 90 models - 150mm high (Black)                               | HACA33083     |
| Plinth to suit low level 120 models - 150mm high (Black)                              | HACA33084     |
| Plinth to suit low level 150 models - 150mm high (Black)                              | HACA33085     |
| Plinth to suit low level 180 models - 150mm high (Black)                              | HACA33086     |
| Adjustable low temperature cut-out (all Caspian models)                               | HACA33001     |
| Thermostat T1 (low level models with AC or EC Motors)                                 | HACA33002     |
| Thermostat T2 (low level models with AC Motors)                                       | HACA33036     |
| Thermostat (T1) & auto-speed Control (T2) (Low level models with AC motors)           | HACA33003     |
| External Control Harness (models with EC motors)                                      | HHCA33004     |
| Caspian EC linking kit (Alt to EXTCH)   | HACA33068     |
| Proportional Heat Output Controller (models with EC motors) 15°-25°C (low level only) | HACA33005     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C    | HACA33037     |
| Proportional Heat Output Controller (models with EC motors) 11°-21°C (low level only) | HACA33075     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C    | HACA33076     |
| Remote (Wired) Room Thermostat  | HAGA95001     |
| Remote (Wired) Room Thermostat Siemens  | HACA33077     |
| Remote (Wireless) Room Thermostat Siemens RF  | HACA33074     |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                   | HAGA95004     |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)        | HACA33078     |
| 22mm flexible hoses (pair)  | HAGA95003     |

100mm plinth also available, please contact us for further information

#### **Mounting option**







# **Caspian LST**

Caspian LST (low surface temperature) is ideal for applications where the surface temperature of is important such as schools and certain healthcare applications

Applications
Education
Healthcare
Office
Hospitality





- Caspian LST (low surface temperature) fully complies with the NHS Estates Health Guidance Notes, "Safe hot water and surface temperatures" (formally known as DN4) and has been independently verified by BSRIA
- Using EC technology and meeting the DN4 legislation 100% of the time, this hydronic fan convector provides complete peace of mind for specifiers choosing the Caspian
- Any building registered under the Registered Homes Act 1984, including hospitals, clinics, surgeries and other health care premises, requires heat emitters whose maximum surface temperature must not exceed 43°C. This also extends to social services personal care properties, and may also apply to any property where occupants may be at risk of burns to their skin if they came into prolonged (10 seconds or more) contact with a standard heat emitter
- As well as healthcare applications Caspian LST is the ideal choice for schools and nurseries where the risk of children coming into contact with higher surface temperature heat emitters can be avoided



#### Motor

EC (BMS compliant)

#### Finish

Casing: zinc-coated steel 1.2mm Polyester powdercoated: white RAL 9010 Available to special order in any colour and with anti-microbial or anti-bacterial paint

#### Filter

Class G3, 100% polyester, non-washable

#### Installation

Suitable for two-pipe central heating systems Pipework access holes on the rear and underside Key operated front access panels Bleed valve accessible on removal of front casing Unit must be earthed

### Commissioning

Check water is  $\bar{\text{hot}}$  enough to activate the low temperature cut-out thermostat

Regulate the flow to achieve maximum performance

#### Controls

Variable heat output controller (mounted within the products)

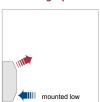
### Accessories

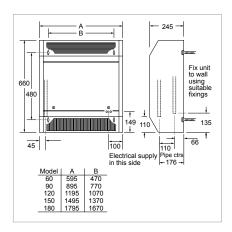
See matrix on page 70

#### **Specification**

To specify state: Low Surface Temperature Fan Convector with EC motor, in 1.2mm zinc coated steel, polyester powder coated in white RAL 9010. Dimensions at 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian LST 60/90/120/150/180.

#### Mounting option





# Heat output For other heat output data please visit our website

|                 | Heat Output at 75° |                |              | Heat Output at 50° |                |              | Pressure Drop |                 |              |
|-----------------|--------------------|----------------|--------------|--------------------|----------------|--------------|---------------|-----------------|--------------|
| Model           | Low<br>(kW)        | Medium<br>(kW) | High<br>(kW) | Low<br>(kW)        | Medium<br>(kW) | High<br>(kW) | High<br>(kPa) | Medium<br>(kPa) | Low<br>(kPa) |
| Caspian LST 60  | 0.9                | 1.4            | 1.9          | 0.6                | 0.7            | 0.8          | 1.5           | 1.1             | 0.9          |
| Caspian LST 90  | 2.8                | 3.2            | 3.7          | 1.6                | 2.0            | 2.3          | 3.9           | 2.3             | 1.6          |
| Caspian LST 120 | 4.7                | 5.1            | 5.5          | 2.8                | 3.2            | 3.7          | 7.3           | 5.5             | 5.3          |
| Caspian LST 150 | 6.0                | 6.5            | 7.0          | 4.2                | 4.7            | 5.2          | 8.6           | 6.8             | 6.2          |
| Caspian LST 180 | 7.5                | 8.0            | 8.5          | 5.7                | 6.2            | 6.7          | 11.3          | 8.6             | 7.9          |

|                 |                           |               |                | Total Power Consumption |                 |                            |               | Sound Levels    |              |                |             |
|-----------------|---------------------------|---------------|----------------|-------------------------|-----------------|----------------------------|---------------|-----------------|--------------|----------------|-------------|
| Model           | Flow & return connections | Fused<br>spur | Low<br>(Watts) | Medium<br>(Watts)       | High<br>(Watts) | Water Capacity<br>(Litres) | High<br>(dBA) | Medium<br>(dBA) | Low<br>(dBA) | Casting colour | Fan<br>only |
| Caspian LST 60  | 22mm                      | 3A            | 26             | 41                      | 55              | 0.92                       | 50            | 43              | 35           | white          | •           |
| Caspian LST 90  | 22mm                      | ЗА            | 33             | 59                      | 85              | 1.50                       | 53            | 45              | 37           | white          | •           |
| Caspian LST 120 | 22mm                      | ЗА            | 33             | 79                      | 125             | 2.08                       | 57            | 48              | 38           | white          | •           |
| Caspian LST 150 | 22mm                      | 3A            | 50             | 119                     | 188             | 2.58                       | 59            | 47              | 36           | white          | •           |
| Caspian LST 180 | 22mm                      | 3A            | 66             | 158                     | 250             | 3.18                       | 59            | 47              | 36           | white          |             |

Heat output testing based on BS EN442 using mean water temperature, 18°C entering air temperature, 10° temperature drop. Sound levels measured at 3m in front of the floor mounted model.

# Ordering guide

| Model           | Packed Wt<br>(kg) | Product<br>Codes |
|-----------------|-------------------|------------------|
| Caspian LST 60  | 24                | HPCA28001        |
| Caspian LST 90  | 37                | HPCA28002        |
| Caspian LST 120 | 46                | HPCA28003        |
| Caspian LST 150 | 60                | HPCA28004        |
| Caspian LST 180 | 78                | HPCA28005        |

| Accessories  | Product Codes |
|--|---------------|
| Plinth to suit low level 60 models - 150mm high (White)  | HACA33006     |
| Plinth to suit low level 90 models - 150mm high (White)  | HACA33007     |
| Plinth to suit low level 120 models - 150mm high (White) | HACA33008     |
| Plinth to suit low level 150 models - 150mm high (White) | HACA33009     |
| Plinth to suit low level 180 models - 150mm high (White) | HACA33010     |
| Plinth to suit low level 60 models - 150mm high (Black)  | HACA33097     |
| Plinth to suit low level 90 models - 150mm high (Black)  | HACA33098     |
| Plinth to suit low level 120 models - 150mm high (Black) | HACA33099     |
| Plinth to suit low level 150 models - 150mm high (Black) | HACA33100     |
| Plinth to suit low level 180 models - 150mm high (Black) | HACA33101     |
| 22mm flexible hoses (pair)                               | HAGA95003     |

<sup>100</sup>mm plinth also available, please contact us for further information

# Caspian Skyline

Caspian Skyline CT60 fits into a 600mm x 600mm ceiling tile, providing easy access for both installation and maintenance. It's suitable for projects in schools, retail or food units or where the heating needs to complement the rest of the premise

Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom





- The Caspian Skyline has been developed to provide a more easily installed ceiling tile fan convector to complement the Smith's range of Caspian commercial fan convectors and may be used alone or in tandem with other Smith's products
- Plumbing easily into any wet central heating system, the Caspian Skyline will also work effectively and efficiently with renewable heat sources, such as air or ground source heat pumps

#### Moto

EC (BMS compliant) or AC

#### Finisl

Casing: galvanised steel 1.2mm

Grille: Eggcrate core, white RAL 9010 complete with touch catches

#### Filter

Class G3, 100% polyester, non-washable



#### Installation

Suitable for two-pipe central heating systems Maximum installation height – 4m to underside Unit must be earthed

#### Commissioning

Check water is hot enough to activate the low temperature cut-out thermostat

#### Controls

Variable heat output controller (mounted within the products)

#### **Accessories**

See matrix on page 70

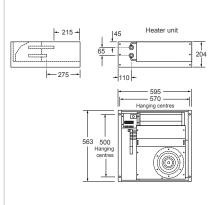
#### **Specification**

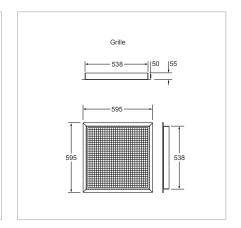
To specify state:

Ceiling mounted Fan Convector with EC (or AC) motor, in 1.2mm galvanised steel, egg crate core grille in white RAL 9010. To fit a standard 600mm x 600mm ceiling grid. With variable heat output controller.

As Smith's Caspian Skyline CT60.







# **Heat output** For other heat output data please visit our website

|                      | Heat Output at 75° |                |              |             | Heat Output at 45° |              |  |  |
|----------------------|--------------------|----------------|--------------|-------------|--------------------|--------------|--|--|
| Model                | Low<br>(kW)        | Medium<br>(kW) | High<br>(kW) | Low<br>(kW) | Medium<br>(kW)     | High<br>(kW) |  |  |
| Caspian Skyline CT60 | 2.7                | 3.7            | 4.6          | 0.5         | 0.9                | 1.3          |  |  |

|                      |                           | Total Power Consumption Sound Levels |                |                   | Total Power Consumption |                            |               |                 |              |                  |
|----------------------|---------------------------|--------------------------------------|----------------|-------------------|-------------------------|----------------------------|---------------|-----------------|--------------|------------------|
| Model                | Flow & return connections | Fused<br>spur                        | Low<br>(Watts) | Medium<br>(Watts) | High<br>(Watts)         | Water Capacity<br>(Litres) | High<br>(dBA) | Medium<br>(dBA) | Low<br>(dBA) | Grille<br>colour |
| Caspian Skyline CT60 | 22mm                      | 3A                                   | 8              | 24                | 40                      | 0.75                       | 48            | 40              | 34           | white            |

Heat output testing based on BS EN442 using mean water temperature, 18°C entering air temperature, 10° temperature drop. Sound levels measured at 3m.

# **Correction factors**

|       | Mean water temperature °C |
|-------|---------------------------|
| EAT°C | 80 to 40                  |
| 15    | 1.10                      |
| 21    | 0.93                      |

|        | Temperature drop °C |      |      |      |  |
|--------|---------------------|------|------|------|--|
|        | 20                  | 15   | 10   | 5    |  |
| Factor | 0.89                | 0.95 | 1.00 | 1.04 |  |

# Ordering guide

| Model                | Packed<br>Wt (kg) | Product<br>Codes |
|----------------------|-------------------|------------------|
| AC Codes             |                   |                  |
| Caspian Skyline CT60 | 20                | HPCA30001        |
| EC Codes             |                   | •                |
| Caspian Skyline CT60 | 20                | HPCA29001        |

| Accessories  | Product Codes |
|--|---------------|
| Adjustable low temperature cut-out (all Caspian models)                            | HACA33001     |
| External Control Harness (models with EC motors)                                   | HHCA33004     |
| Caspian EC linking kit (Alt to EXTCH)  | HACA33068     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C | HACA33037     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C | HACA33076     |
| Remote (Wired) Room Thermostat   | HAGA95001     |
| Remote (Wired) Room Thermostat Siemens   | HACA33077     |
| Remote (Wireless) Room Thermostat Siemens RF                                       | HACA33074     |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                | HAGA95004     |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)     | HACA33078     |
| 22mm flexible hoses (pair)   | HAGA95003     |

# Caspian UVC

The Caspian UVC fan convector was developed for recessed or concealed heating projects and is suitable for high, low or ceiling concealed installations, can even be turned upside down

Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





- Compatible with all types of wet central heating systems and any commercial or domestic air source heat pump project, the Caspian UVC has four different main accessories. They function together in any combination to create the recessed or concealed heating solution required, depending on the project specification
- AC motor models are available on request
- Caspian UVC is compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps

#### Motor

EC (BMS compliant) or AC

#### Finisl

Casing: galvanised steel 1.2mm

#### Filte

Class G3, 100% polyester, non-washable



#### Installation

Suitable for two-pipe central heating systems Unit must be earthed Maximum installation height 4m to underside

#### Commissioning

Check water is not enough to activate the low temperature cut-out thermostat

#### Controls

Variable heat output controller (mounted within the products)

#### **Accessories**

See matrix on page 70

#### **Attachments**

White powder-coated steel inlet/outlet grille Anodised aluminium air inlet/outlet grille 90°C cranked air inlet/outlet duct 1m adjustable straight air inlet/outlet extension duct Circular spigot air inlet/outlet duct

#### Specification

To specify state:

A concealed fan convector for universal mounting with variable heat output controller.

As Smith's Caspian UVC 60/90/120/150/180.

Floor mounted application
The Caspian UVC can be installed either on or behind walls at high and low level, in ceiling voids and on or under floors. Detailed below are a number of application options than can be achieved with the Caspian UVC and Accessories. If in doubt please contact us.



Air outlet



Air inlet option



Reversible



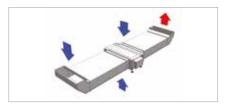








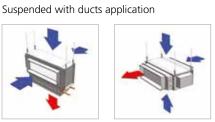


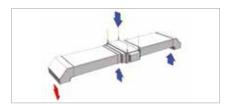




Suspended with spigots application











Heat output For other heat output data please visit our website

|             | 1           | Heat Output at 75 | ;°           | Heat Output at 45° |                |              |  |
|-------------|-------------|-------------------|--------------|--------------------|----------------|--------------|--|
| Model       | Low<br>(kW) | Medium<br>(kW)    | High<br>(kW) | Low<br>(kW)        | Medium<br>(kW) | High<br>(kW) |  |
| Caspian 60  | 2.9         | 4.1               | 5.3          | 1.1                | 1.5            | 1.9          |  |
| Caspian 90  | 4.8         | 7.2               | 9.6          | 2.0                | 3.1            | 4.1          |  |
| Caspian 120 | 6.1         | 9.7               | 13.2         | 2.0                | 3.7            | 5.4          |  |
| Caspian 150 | 13.7        | 14.2              | 15.2         | 6.2                | 6.9            | 7.5          |  |
| Caspian 180 | 16.2        | 17.0              | 18.0         | 8.4                | 9.1            | 9.4          |  |

|                 |                           |               | Total Power Consumption |                   |                 |                            |               |                 |              |                |
|-----------------|---------------------------|---------------|-------------------------|-------------------|-----------------|----------------------------|---------------|-----------------|--------------|----------------|
| Model           | Flow & return connections | Fused<br>spur | Low<br>(Watts)          | Medium<br>(Watts) | High<br>(Watts) | Water Capacity<br>(Litres) | High<br>(dBA) | Medium<br>(dBA) | Low<br>(dBA) | Casting colour |
| Caspian UVC 60  | 22mm                      | 3A            | 8                       | 24                | 40              | 0.92                       | 50            | 42              | 33           | white          |
| Caspian UVC 90  | 22mm                      | 3A            | 15                      | 43                | 70              | 1.50                       | 53            | 42              | 34           | white          |
| Caspian UVC 120 | 22mm                      | 3A            | 13                      | 62                | 110             | 2.08                       | 58            | 46              | 35           | white          |
| Caspian UVC 150 | 22mm                      | 3A            | 20                      | 144               | 177             | 2.58                       | 59            | 47              | 36           | white          |
| Caspian UVC 180 | 22mm                      | 3A            | 26                      | 124               | 220             | 3.18                       | 59            | 48              | 38           | white          |

Heat output testing based on BS EN442 using mean water temperature, 18°C entering air temperature, 10° temperature drop. Sound levels measured at 3m in front of floor mounted model.

### **Correction factors**

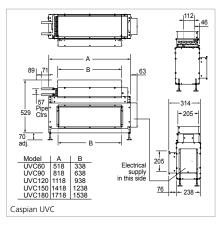
|       | Mean water temperature °C |
|-------|---------------------------|
| EAT°C | 80 to 40                  |
| 15    | 1.10                      |
| 21    | 0.93                      |

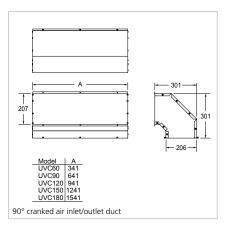
|        | Temperature drop °C |         |      |      |  |  |  |
|--------|---------------------|---------|------|------|--|--|--|
|        | 20                  | 15 10 5 |      |      |  |  |  |
| Factor | 0.89                | 0.95    | 1.00 | 1.04 |  |  |  |

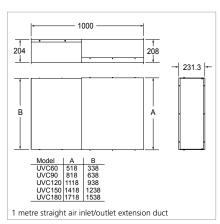
# Caspian UVC

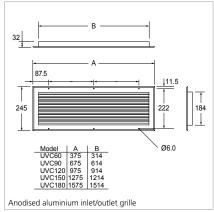
The Caspian UVC fan convector was developed for recessed or concealed heating projects and is suitable for high, low or ceiling concealed installations, can even be turned upside down

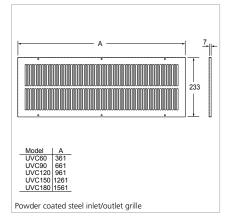
Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial

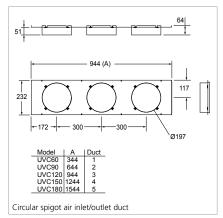












#### **Attachments**



90° cranked air inlet/outlet



1m adjustable straight air inlet/outlet extension duct



Anodised aluminium inlet/ outlet grille



Powder-coated steel inlet/ outlet grille



Circular spigot inlet/outlet

# Ordering guide

| Model           | Packed<br>Wt (kg) | Product<br>Codes |  |  |
|-----------------|-------------------|------------------|--|--|
| AC Codes        |                   |                  |  |  |
| Caspian UVC 60  | 23                | HPCA27001        |  |  |
| Caspian UVC 90  | 36                | HPCA27002        |  |  |
| Caspian UVC 120 | 45                | HPCA27003        |  |  |
| Caspian UVC 150 | 60                | HPCA27004        |  |  |
| Caspian UVC 180 | 78                | HPCA27005        |  |  |
| EC Codes        |                   |                  |  |  |
| Caspian UVC 60  | 23                | HPCA26001        |  |  |
| Caspian UVC 90  | 36                | HPCA26002        |  |  |
| Caspian UVC 120 | 45                | HPCA26003        |  |  |
| Caspian UVC 150 | 60                | HPCA26004        |  |  |
| Caspian UVC 180 | 78                | HPCA26005        |  |  |

| Accessories and attachments   | Product Codes |
|---|---------------|
| Adjustable low temperature cut-out (all Caspian models)                               | HACA33001     |
| Thermostat T1 (low level models with AC or EC Motors)                                 | HACA33002     |
| Thermostat T2 (low level models with AC Motors)                                       | HACA33036     |
| Thermostat (T1) & auto-speed Control (T2) (Low level models with AC motors)           | HACA33003     |
| External Control Harness (models with EC motors)                                      | HHCA33004     |
| Caspian EC linking kit (Alt to EXTCH)   | HACA33068     |
| Proportional Heat Output Controller (models with EC motors) 15°-25°C (low level only) | HACA33005     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C    | HACA33037     |
| Proportional Heat Output Controller (models with EC motors) 11°-21°C (low level only) | HACA33075     |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C    | HACA33076     |
| Remote (Wired) Room Thermostat  | HAGA95001     |
| Remote (Wired) Room Thermostat Siemens  | HACA33077     |
| Remote (Wireless) Room Thermostat Siemens RF  | HACA33074     |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                   | HAGA95004     |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)        | HACA33078     |
| 22mm flexible hoses (pair)  | HAGA95003     |
| 90° cranked air inlet/outlet duct (to suit UVC 60)                                    | HACA33011     |
| 90° cranked air inlet/outlet duct (to suit UVC 90)                                    | HACA33012     |
| 90° cranked air inlet/outlet duct (to suit UVC 120)                                   | HACA33013     |
| 90° cranked air inlet/outlet duct (to suit UVC 150)                                   | HACA33014     |
| 90° cranked air inlet/outlet duct (to suit UVC 180)                                   | HACA33015     |
| Im adjustable straight air inlet/outlet extension duct (to suit UVC 60)               | HACA33016     |
| Im adjustable straight air inlet/outlet extension duct (to suit UVC 90)               | HACA33017     |
| Im adjustable straight air inlet/outlet extension duct (to suit UVC 120)              | HACA33018     |
| Im adjustable straight air inlet/outlet extension duct (to suit UVC 150)              | HACA33019     |
| Im adjustable straight air inlet/outlet extension duct (to suit UVC 180)              | HACA33020     |
| Circular spigot (200mm x 2) air inlet/outlet duct (to suit UVC 60)                    | HACA33021     |
| Circular spigot (200mm x 2) air inlet/outlet duct (to suit UVC 90)                    | HACA33022     |
| Circular spigot (200mm x 3) air inlet/outlet duct (to suit UVC 120)                   | HACA33023     |
| Circular spigot (200mm x 4) air inlet/outlet duct (to suit UVC 150)                   | HACA33024     |
| Circular spigot (200mm x 5) air inlet/outlet duct (to suit UVC 180)                   | HACA33025     |
| Powder-coated White steel inlet/outlet grille (to suit UVC 60)                        | HACA33026     |
| Powder-coated White steel inlet/outlet grille (to suit UVC 90)                        | HACA33027     |
| Powder-coated White steel inlet/outlet grille (to suit UVC 120)                       | HACA33028     |
| Powder-coated White steel inlet/outlet grille (to suit UVC 150)                       | HACA33029     |
| Powder-coated White steel inlet/outlet grille (to suit UVC 180)                       | HACA33030     |
| Anodised aluminium inlet/outlet grille (to suit UVC 60)                               | HACA33031     |
| Anodised aluminium inlet/outlet grille (to suit UVC 90)                               | HACA33032     |
| Anodised aluminium inlet/outlet grille (to suit UVC 120)                              | HACA33033     |
| Anodised aluminium inlet/outlet grille (to suit UVC 150)                              | HACA33034     |
| Anodised aluminium inlet/outlet grille (to suit UVC 180)                              | HACA33035     |

# Aegean SFC 180H

A range of fan coil units suitable for all kinds of commercial applications, from restaurants and hotels to office developments, with the ability to rapidly heat and cool large areas with much greater efficiency than other similar heating and cooling systems Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





#### **Features**

- Suitable for shallow ceiling voids
- EC motor for BMS compliance
- Low sound levels
- Fully attenuated discharge plenum
- · Positive fall drain tray
- Designed and made in the UK
- For bespoke specifications, including electric heating capability please contact us to discuss your requirements

#### **Finish**

Chassis manufactured from 1.2mm hot dipped galvanised steel All flanges formed inward facing to prevent exposure to bare metal edges

#### Installation

Flow and return connections 15mm Designed for system pressures up to 10 bar Fan coils are 4-pipe coils (heating and cooling circuit)

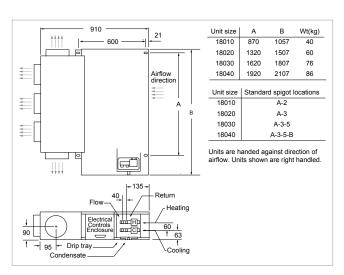
#### **Customised requirements**

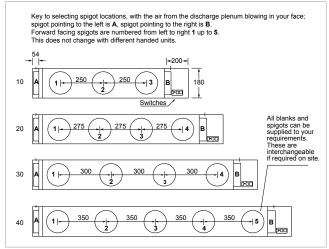
All leading manufacturers controls factory fitted Acoustically lined inlet plenum Concealed/hidden applications (underfloor, behind false walls and ceilings) Fresh air spigot Bespoke options

# Specification

To specify state:

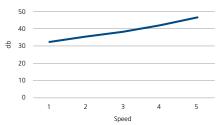
Horizontal Fan Coil Unit 180mm high with EC motor. As Smith's Aegean SFC18010 (or SFC18020, SFC18030, SFC18040)



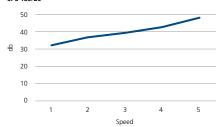


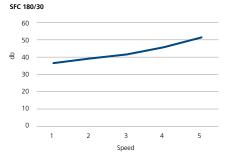
#### Acoustics

#### SFC 180/10

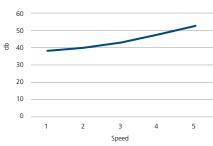


#### SFC 180/20





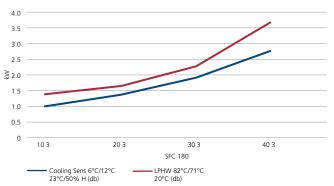
#### SFC 180/40



Please note these graphs are a representation of the data, for the full accurate data set please download the datasheets from our website SmithsEP.co.uk

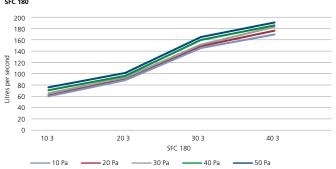
# Cooling and heating outputs

#### SFC 180 - Capacity (kW)



#### Air volume

#### SFC 180



# Ordering guide

| Description        | Weight (Kg) | Product code |  |
|--------------------|-------------|--------------|--|
| Aegean SFC 180     |             |              |  |
| Aegean SFC180EC/10 | 40          | HPAE20000    |  |
| Aegean SFC180EC/20 | 60          | HPAE20001    |  |
| Aegean SFC180EC/30 | 76          | HPAE20002    |  |
| Aegean SFC180EC/40 | 86          | HPAE20003    |  |

For bespoke specifications, including electric heating capability please contact us to discuss your requirements

# Aegean SFC 235H

A range of fan coil units suitable for all kinds of commercial applications, from restaurants and hotels to office developments, with the ability to rapidly heat and cool large areas with much greater efficiency than other similar heating and cooling systems Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





#### **Features**

- EC motor for BMS compliance
- Low sound levels
- Fully attenuated discharge plenum
- Positive fall drain tray
- Designed and made in the UK
- For bespoke specifications, including electric heating capability please contact us to discuss your requirements

#### Finish

Chassis manufactured from 1.2mm hot dipped galvanised steel All flanges formed inward facing to prevent exposure to bare metal edges

#### Installation

Flow and return connections 15mm Designed for system pressures up to 10 bar Fan coils are 4-pipe coils (heating and cooling circuit)

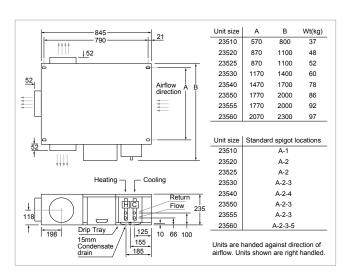
#### **Customised requirements**

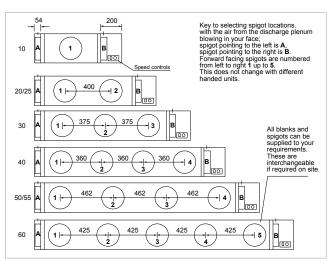
All leading manufacturers controls factory fitted Acoustically lined inlet plenum Concealed/hidden applications (underfloor, behind false walls and ceilings) Fresh air spigot Bespoke options

#### Specification

To specify state:

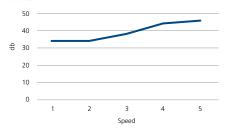
Horizontal Fan Coil Unit 235mm high with EC motor. As Smith's Aegean SFC23510 (or SFC23520, SFC23525, SFC23530, SFC23540, SFC23550, SFC23555, SFC23560)

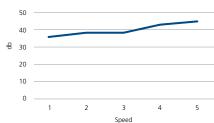




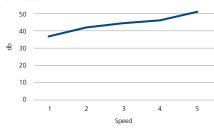
#### Acoustics

#### SFC 235/10

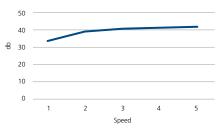




### SFC 235/25



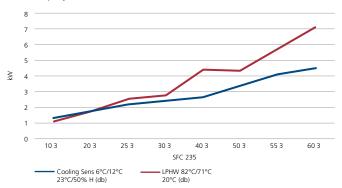
# SFC 235/30



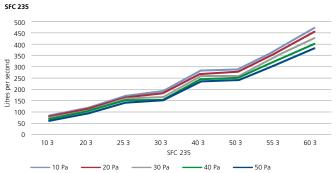
Please note these graphs are a representation of the data, for the full accurate data set please download the datasheets from our website SmithsEP.co.uk

# **Cooling and heating outputs**

#### SFC 235 - Capacity (kW)



#### Air volume



# Ordering guide

| Description        | Wt (Kg) | Product Codes |
|--------------------|---------|---------------|
| Aegean SFC235EC/10 | 37      | HPAE20004     |
| Aegean SFC235EC/20 | 48      | HPAE20005     |
| Aegean SFC235EC/25 | 52      | HPAE20006     |
| Aegean SFC235EC/30 | 60      | HPAE20007     |
| Aegean SFC235EC/40 | 78      | HPAE20008     |
| Aegean SFC235EC/50 | 86      | HPAE20009     |
| Aegean SFC235EC/55 | 92      | HPAE20010     |
| Aegean SFC235EC/60 | 97      | HPAE20011     |

For bespoke specifications, including electric heating capability please contact us to discuss your requirements

# Aegean SFC 260H

A range of fan coil units suitable for all kinds of commercial applications, from restaurants and hotels to office developments, with the ability to rapidly heat and cool large areas with much greater efficiency than other similar heating and cooling systems Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





#### **Features**

- EC motor for BMS compliance
- Low sound levels
- · Fully attenuated discharge plenum
- Positive fall drain tray
- Designed and made in the UK
- For bespoke specifications, including electric heating capability please contact us to discuss your requirements

#### Finish

Chassis manufactured from 1.2mm hot dipped galvanised steel All flanges formed inward facing to prevent exposure to bare metal edges

# Installation

Flow and return connections 15mm
Designed for system pressures up to 10 bar
Fan coils are 4-pipe coils (heating and cooling circuit)

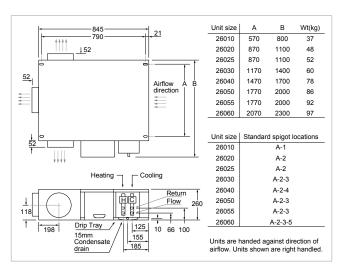
#### **Customised requirements**

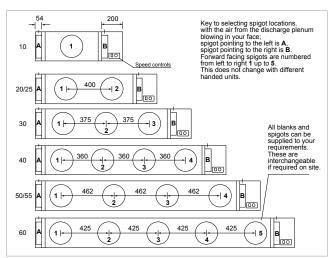
All leading manufacturers controls factory fitted
Acoustically lined inlet plenum
Concealed/hidden applications (underfloor, behind false walls
and ceilings)
Fresh air spigot
Bespoke options

#### **Specification**

To specify state:

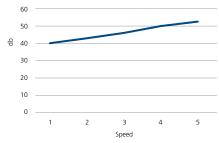
Horizontal Fan Coil Unit 260mm high with EC motor. As Smith's Aegean SFC26010 (or SFC26020, SFC26025, SFC26030, SFC26040, SFC26050, SFC26055, SFC26060)



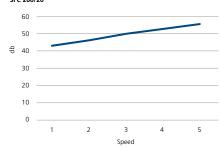


#### Acoustics

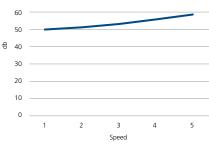




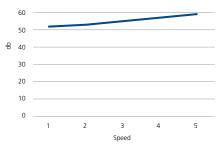
#### SFC 260/20



### SFC 260/25



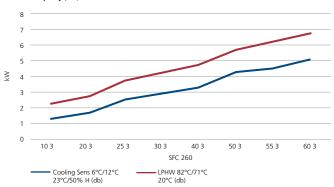
# SFC 260/30



Please note these graphs are a representation of the data, for the full accurate data set please download the datasheets from our website SmithsEP.co.uk

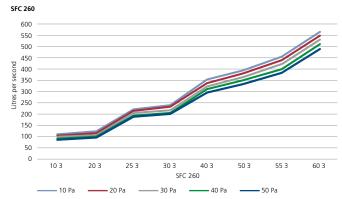
# **Cooling and heating outputs**

#### SFC 260 - Capacity (kW)



#### Air volume

#### All Volullie



# Ordering guide

| Description        | Wt (Kg) | Product Codes |
|--------------------|---------|---------------|
| Aegean SFC260EC/10 | 41      | HPAE20012     |
| Aegean SFC260EC/20 | 52      | HPAE20013     |
| Aegean SFC260EC/25 | 56      | HPAE20014     |
| Aegean SFC260EC/30 | 66      | HPAE20015     |
| Aegean SFC260EC/40 | 82      | HPAE20016     |
| Aegean SFC260EC/50 | 93      | HPAE20017     |
| Aegean SFC260EC/55 | 97      | HPAE20018     |
| Aegean SFC260EC/60 | 105     | HPAE20019     |

For bespoke specifications, including electric heating capability please contact us to discuss your requirements

# Aegean SVFC 500

A range of fan coil units suitable for all kinds of commercial applications, from restaurants and hotels to office developments, with the ability to rapidly heat and cool large areas with much greater efficiency than other similar heating and cooling systems Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





#### **Features**

- · EC motor for BMS compliance
- Low sound levels
- Fully attenuated discharge plenum
- Positive fall drain tray
- Designed and made in the UK
- For bespoke specifications, including electric heating capability please contact us to discuss your requirements

#### Finish

Chassis manufactured from 1.2mm hot dipped galvanised steel All flanges formed inward facing to prevent exposure to bare metal edges

# Installation

Flow and return connections 15mm Designed for system pressures up to 10 bar Fan coils are 4-pipe coils (heating and cooling circuit)

# 

#### **Customised requirements**

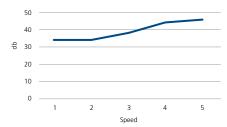
All leading manufacturers controls factory fitted
Acoustically lined inlet plenum
Rectangular spigot connection
Concealed/hidden applications (underfloor, behind false walls
and ceilings)
Fresh air spigot
Bespoke options

### **Specification**

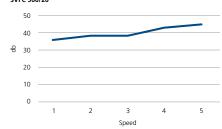
To specify state: Vertical Fan Coil Unit 500mm high with EC motor. As Smith's Aegean SVFC50010 (or SVFC50020, SVFC50025, SVFC50030, SVFC50040, SVFC50050, SVFC50055, SVFC50060)

### Acoustics

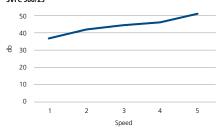
#### SVFC 500/10



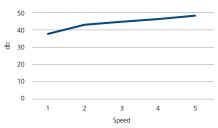
#### SVEC 500/20



# SVFC 500/25



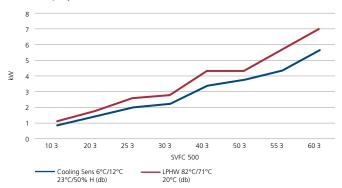
# SVFC 500/30



Please note these graphs are a representation of the data, for the full accurate data set please download the datasheets from our website SmithsEP.co.uk

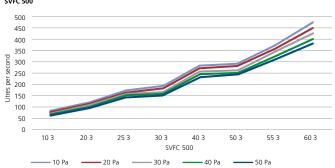
# **Cooling and heating outputs**

#### SVFC 500 - Capacity (kW)



#### Air volume

#### SVFC 500



# Ordering guide

| Description         | Wt (Kg) | Product Codes |
|---------------------|---------|---------------|
| Aegean SVFC500EC/10 | 37      | HPAE20020     |
| Aegean SVFC500EC/20 | 48      | HPAE20021     |
| Aegean SVFC500EC/25 | 52      | HPAE20022     |
| Aegean SVFC500EC/30 | 60      | HPAE20023     |
| Aegean SVFC500EC/40 | 78      | HPAE20024     |
| Aegean SVFC500EC/50 | 86      | HPAE20025     |
| Aegean SVFC500EC/55 | 92      | HPAE20026     |
| Aegean SVFC500EC/60 | 97      | HPAE20027     |

For bespoke specifications, including electric heating capability please contact us to discuss your requirements

# MINIB by Smith's

Smith's is excited to collaborate with MINIB, one of the leading manufacturers of fan convectors and trench heating in the Czech Republic Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial



#### About MINIB

Since 1999, MINIB has invested considerably in the design and development of their products to ensure that they can offer technically and aesthetically mature solutions to their customers. The company's growth and success to date is echoed by the fact that they currently distribute to thirty countries in Europe, Asia, Australia and America



#### The Product

The Smith's range of MINIB trench heating convectors is a market leading design and with 25 natural- and 23 fan-assisted convection heaters it offers an unbeatable solution for every application. Available as both Heating only, and Heating and Cooling convectors they provide stylish solutions with a wide range of grilles and finishes.

The range of MINIB by Smith's trench heating has versions which are just 50mm deep minimising the depth of the trench they are placed in. There are also versions of the MINIB by Smith's range of Trench Heaters in 12v DC for specific applications.

#### Warranty

All of the MINIB by Smith's range of Trench Heating have a market leading 10-year warranty on the bodies and heat exchangers, and a 5-year warranty on the fans and controls.

#### Installation

MINIB by Smith's trench heating is supplied as complete products rather than kits to be made up on site. This minimises the risk of damage during installation and also ensures the correct installation of the product. Smith's products have been tested as a complete product rather than having to rely on sub-contractors to build-up, install and commission correctly. This also minimises on site and installation labour costs and time.

As part of Smith's service as a solution provider they offer an installation service for their trench heating convectors.

#### **Expertise**

Trench heating is complicated so getting the design and specification correct is essential. Smith's have over 25-years expertise in their team of working with customers to design, develop and implement trench-heating solutions.

#### Range

Please visit our website, contact your Smith's representative, or our Head Office for further information on the extensive MINIB by Smith's trench range.



Floor Convectors (Trench)



Wall Mounted Convectors



Freestanding Convectors



Design Convectors







# Sargasso A

An elegant alternative solution to traditional wall mounted radiators, convection heaters and air conditioning systems Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





- Suitable for use in both Standard T-Grid and Micro T system ceilings
- Each panel individually packaged for protection
- Loop panel width 595mm; available in lengths 595mm, 1195mm, 1795mm, 2395mm and 2995mm.
- Panel performance supported by independent test certification to EN 14037
- For bespoke specifications, including cooling capability please contact us to discuss your requirements

#### Benefit

- Create a more comfortable environment for occupants by creating an even temperature distribution across the room
- Save energy and money by achieving a higher perceived temperature than the actual room temperature
- Works well with lower temperature heating systems
- Provide an efficient solution offering a short heating and cooling time
- Installed within a ceiling or high on a wall they maximise wall and floor space
- Silent operation
- No dust/bacteria dispersal offering a hygienic solution
- Maintenance free
- Easy to clean so lower cleaning costs
- Can be integrated in plasterboard



#### **Finish**

Material: 2mm high-grade aluminium extrusion, lightweight, robust, optimum response time

Finish: RAL 9016 white powder coat

Insulation: Rigid non-fibrous, foil-faced insulation to EN13165 fire rating A2

#### Installation

Suitable for use in Micro T system and standard T-Grid system ceilings. Please note that Sargasso is compatible with regular ceiling profiles, but not compatible with Tegular or Microlook ceilings

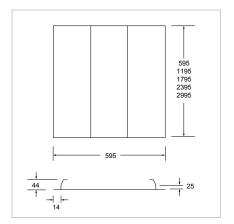
Suspension:

Suitable for installation from drop rods (not supplied). Panels longer than 1200mm will require 3 fixing locations

#### **Specification**

To specify state:

Radiant Panel in white (RAL 9016) at 600mm wide x 600mm (or 1200mm, 1800mm, 2400mm, 3000mm) long. As Smith's Sargasso A





# Heat output (Watts)

|            | Output at ∆T °C |     |     |     |     |      |      |      | Hangers  |
|------------|-----------------|-----|-----|-----|-----|------|------|------|----------|
| Model      | 30              | 35  | 40  | 45  | 50  | 55   | 60   | 65   | required |
| 600 x 600  | 105             | 126 | 148 | 170 | 194 | 217  | 242  | 266  | 4        |
| 600 x 1200 | 210             | 252 | 296 | 340 | 388 | 434  | 484  | 532  | 4        |
| 600 x 1800 | 315             | 378 | 444 | 510 | 582 | 651  | 726  | 798  | 4        |
| 600 x 2400 | 420             | 504 | 592 | 680 | 776 | 868  | 968  | 1064 | 6        |
| 600 x 3000 | 525             | 530 | 740 | 850 | 970 | 1086 | 1210 | 1330 | 6        |

# Ordering guide

| Description       | Width (mm) | Length (mm) | Operating weight including water (kg) | Kg/m² | Product Codes |
|-------------------|------------|-------------|---------------------------------------|-------|---------------|
| Sargasso A        |            |             |                                       |       |               |
| 600mm loop panel  | 595        | 595         | 4.6                                   | 12.7  | HPAE350000    |
| 1200mm loop panel | 595        | 1195        | 9.1                                   | 12.7  | HPAE350001    |
| 1800mm loop panel | 595        | 1795        | 13.7                                  | 12.7  | HPAE350002    |
| 2400mm loop panel | 595        | 2395        | 18.3                                  | 12.7  | HPAE350003    |
| 3000mm loop panel | 595        | 2995        | 22.9                                  | 12.7  | HPAE350004    |

# Sargasso S

An elegant alternative solution to traditional wall mounted radiators, convection heaters and air conditioning systems Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial





- Suitable for use in both Standard T-Grid and Micro T system ceilings
- Each panel individually packaged for protection
- Loop panel width 595mm; available in lengths 595mm, 1195mm, 1795mm, 2395mm and 2995mm. Feed panel available as 595mm wide by 2395mm
- Panel performance supported by independent test certification to FN 14037
- For bespoke specifications, including cooling capability please contact us to discuss your requirements

#### Benefits

- Create a more comfortable environment for occupants by creating an even temperature distribution across the room
- Save energy and money by achieving a higher perceived temperature than the actual room temperature
- Works well with lower temperature heating systems
- Provide an efficient solution offering a short heating and cooling time
- Installed within a ceiling or high on a wall they maximise wall and floor space
- Silent operation
- No dust/bacteria dispersal offering a hygienic solution
- Maintenance free
- Easy to clean so lower cleaning costs
- Can be integrated in plasterboard



#### **Finish**

Material: Smooth faced panel manufactured from 1.2/2.0mm aluminium with panel edges returned for containment of insulation and increased panel rigidity. Pipe carrier manufactured from aluminium bonded to the panel under heat and pressure to ensure integrity of contact along the length of the panel Finish: Polyester Powder coated supplied as standard with a RAL 9010 smooth finish with 20% gloss level; anti-bacterial coating and other colours are available. An anti-bacterial paint finish inhibiting the growth of micro-organisms is available, providing additional assistance in meeting infection control targets

Insulation: 30mm mineral wool pad sealed in tissue paper with foil face

#### Installation

Suitable for use in Micro T system and standard T-Grid system ceilings. Please note that Sargasso is compatible with regular ceiling profiles, but not compatible with Tegular or Microlook ceilings

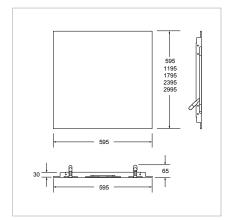
#### Suspension:

Suitable for installation from drop rods (not supplied). Panels longer than 1200mm will require 3 fixing locations

#### **Specification**

To specify state:

Radiant Panel in white (RAL 9010) at 600mm wide x 600mm (or 1200mm, 1800mm, 2400mm, 3000mm) long. As Smith's Sargasso S





# Heat output (Watts)

|            |     |     |     | Output | at ΔT °C |      |      |      |
|------------|-----|-----|-----|--------|----------|------|------|------|
| Model      | 30  | 35  | 40  | 45     | 50       | 55   | 60   | 65   |
| 600 x 600  | 100 | 120 | 140 | 160    | 181      | 203  | 225  | 230  |
| 600 x 1200 | 199 | 240 | 280 | 320    | 361      | 406  | 450  | 460  |
| 600 x 1800 | 299 | 360 | 419 | 481    | 542      | 608  | 675  | 689  |
| 600 x 2400 | 398 | 480 | 559 | 641    | 722      | 811  | 900  | 919  |
| 600 x 3000 | 498 | 600 | 699 | 801    | 903      | 1014 | 1125 | 1149 |

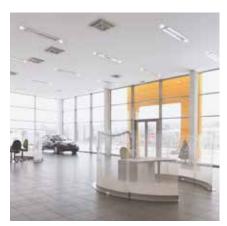
| Description  | Width (mm) | Length (mm) | Operating weight including water (kg) | Kg/m² | Product Codes |  |
|--|------------|-------------|---------------------------------------|-------|---------------|--|
| Sargasso S   |            |             |                                       |       |               |  |
| 600mm loop panel   | 595        | 595         | 7.9                                   | 22.0  | HPAE350005    |  |
| 1200mm loop panel  | 595        | 1195        | 15.8                                  | 22.0  | HPAE350006    |  |
| 1800mm loop panel  | 595        | 1795        | 23.8                                  | 22.0  | HPAE350007    |  |
| 2400mm loop panel  | 595        | 2395        | 31.7                                  | 22.0  | HPAE350008    |  |
| 3000mm loop panel  | 595        | 2995        | 39.6                                  | 22.0  | HPAE350009    |  |
| 2400mm feed panel  | 595        | 2395        | 31.7                                  | 22.0  | HPAE350010    |  |
| Accessories  |            |             |                                       |       |               |  |
| L brackets 4 required per panel upto 1200mm long, 6 brackets required >1800mm long | -          | -           | -                                     | -     | HPAE355000    |  |

# Air Curtains - Stella

Stella air curtains offer the ideal solution to separating climate zones within different temperatures by creating strong air flow in the vicinity of open doors Applications
Office
Hospitality
Retail
Showroom







#### **Features**

- The use of Smith's air curtains reduces the loss of energy used for the heating or cooling of the premises and also acts as an effective barrier to dust, insects and odours
- An attractive addition to any modern interior, Stella air curtains have a stylish stainless steel body and are available in silver and gold mirror and brushed stainless steel finishes
- High-performance centrifugal fans
- Special form of aerodynamic pressure chamber ensures dense uniform air flow over the entire height of the curtain
- Swivel nozzle allows changing the direction of the air flow in case of change in external conditions to ensure efficient protection of the doorway
- Use of computer simulations of hydrodynamic processes ensured minimum noise level and high efficiency of curtain operation
- Fixing elements, electrical communications and connections to the heating system (when connected from the bottom) are not visible after installation of the air curtain
- The striking appearance of the curtains becomes an ornament of any modern interior

#### Finish

Body: Mirror Stainless Steel as standard Also available in Brushed Stainless Steel or Gold Mirror Stainless Steel

# Installation

Installed universally (horizontally to vertically) or as free-standing units For interior use only

#### Controls

Remote control with thermostat. Control cabinet (optional)

#### Specification

#### To specify state:

Universally mounted electric Air Curtain in mirror stainless steel (or Brushed stainless steel, or Gold Mirror Stainless Steel) with swivel nozzle and with remote control and thermostat at 19.7kW or 26.2kW. As Smith's Air Curtains Stella Electric in Mirror Stainless Steel (or Brushed Stainless Steel, or Gold Mirror Stainless Steel) at 19.7kW or 26.2kW.

Universally mounted hydronic Air Curtain in mirror stainless steel (or Brushed stainless steel, or Gold Mirror Stainless Steel) with swivel nozzle and with remote control and thermostat at 29.2kW or 36.6kW. As Smith's Air Curtain Stella Hydronic in Mirror Stainless Steel (or Brushed Stainless Steel, or Gold Mirror Stainless Steel) at 29.2kW or 36.6kW

| Description     | Net Wt (Kg) | Product Codes |
|-----------------|-------------|---------------|
| Electric        |             |               |
| Stella E20      | 65          | HPAC64001     |
| Stella E20 Plus | 70          | HPAC64002     |
| Stella E26      | 85          | HPAC64003     |
| Water           |             |               |
| Stella W29      | 65          | HPAC64004     |
| Stella W29 Plus | 70          | HPAC64005     |
| Stella W37      | 85          | HPAC64006     |

|                                | HPAC64001<br>Electric | HPAC64002<br>Electric | HPAC64003<br>Electric | HPAC64004<br>Water | HPAC64005<br>Water | HPAC64006<br>Water |
|--------------------------------|-----------------------|-----------------------|-----------------------|--------------------|--------------------|--------------------|
| Heating power, kW              | 19.7                  | 19.7                  | 26.2                  | 29.2 / 23.7        | 29.2 / 23.7        | 36.6 / 29.6        |
| Capacity, m³/h                 | 4800 / 2800           | 4800 / 2800           | 5600 / 2800           | 4800 / 2800        | 4800 / 2800        | 5600 / 2800        |
| Maximum installation height, m | 4.5                   | 4.5                   | 4.5                   | 4.5                | 4.5                | 4.5                |
| Supply voltage, V              | 415v (3 phase)        | 415v (3 phase)        | 415v (3 phase)        | 415v (3 phase)     | 415v (3 phase)     | 415v (3 phase)     |
| Air temperature increase, °C   | 12 / 20 °C            | 12 / 20 °C            | 13 / 26 °C            | 21.9 / 27 °C       | 21.9 / 27 °C       | 23.5 / 29.8 ℃      |
| Device dimensions (W×H×D), mm  | 350x2015x500          | 350x2215x500          | 350x2415x500          | 350x2015x500       | 350x2215x500       | 350x2415x500       |
| Package dimensions (W×H×D), mm | 2290x775x550          | 2520x775x550          | 2820x775x550          | 2290x775x550       | 2520x775x550       | 2820x775x550       |

# Air Curtains - S2/S2 Metallic Series

Smith's S2 and S2 metallic series of electric air curtains are ideal for smaller commercial spaces such as pavilions, small retail outlets, mini markets and pick-up windows

Applications
Office
Hospitality
Retail
Showroom







#### **Features**

- These stylish units deliver energy efficient and quiet protection against cold air from outside
- Innovative noise reduction system
- Shock-absorbing dampers to minimise noise
- Stitch-elements ensure fast heating and high temperature difference
- Operation mode without heating for protection against outside heat, dust and insects in summer
- Convenient and aesthetic connection to the terminals inside the housing (3kW model includes a power cord with plug)
- Built-in thermostat protects against overheating

#### Finish

White or metallic finish

#### Installation

Installed horizontally above doorway. Installation height of 2.5m

#### Control

Controls on the body of the air curtain Remote control with thermostat

# **Specification**

To specify state:

Horizontally mounted electric Air Curtain at 3kW, 5.5kW, 6.6kW or 9.8kW output in white finish.

As Smith's Air Curtain S2 3.3kW, 5.5kW, 6.6kW or 9.8kW

Horizontally mounted electric Air Curtain at 3kW, 5.5kW, 6.6kW or 9.8kW output in metallic finish.

As Smith's Air Curtain S2 metallic 3.3kW, 5.5kW, 6.6kW or 9.8kW

| Description | Net Wt (Kg) | Product Codes |
|-------------|-------------|---------------|
| Electric    |             |               |
| S2 E3       | 4.5         | HPAC64105     |
| S2 E5       | 6.8         | HPAC64106     |
| S2 E5M      | 6.8         | HPAC64107     |
| S2 E7       | 8.4         | HPAC64108     |
| S2 E7M      | 8.4         | HPAC64109     |
| S2 E10      | 12.6        | HPAC64110     |
| S2 E10M     | 12.6        | HPAC64111     |

|                                | HPAC64105<br>Electric | HPAC64106<br>Electric | HPAC64109<br>Electric | HPAC64107<br>Electric | HPAC64110<br>Electric | HPAC64108<br>Electric | HPAC64111<br>Electric |
|--------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Heating power, kW              | 3.3 / 1.6 / 0         | 5.5 / 2.7 / 0         | 5.5 / 2.7 / 0         | 6.6 / 3.3 / 0         | 6.6 / 3.3 / 0         | 9.8 / 4.9 / 0         | 9.8 / 4.9 / 0         |
| Capacity, m³/h                 | 350                   | 450                   | 450                   | 700                   | 700                   | 1 050                 | 1 050                 |
| Maximum installation height, m | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   |
| Supply voltage, V              | 230                   | 230                   | 230                   | 230                   | 230                   | 415 (3 phase)         | 415 (3 phase)         |
| Air temperature increase, °C   | 26 °C                 | 34 °C                 | 34 ℃                  | 26 °C                 | 26 °C                 | 26 °C                 | 26 °C                 |
| Device dimensions (W×H×D), mm  | 585×150×155           | 800×150×155           | 800×150×155           | 1080×150×155          | 1080×150×155          | 1570×150×155          | 1570×150×155          |
| Package dimensions (W×H×D), mm | 630×165×185           | 860×165×185           | 860×165×185           | 1180×165×185          | 1180×165×185          | 1655×165×185          | 1655×165×185          |
| Product colour                 | White                 | White                 | Metallic              | White                 | Metallic              | White                 | Metallic              |

# Air Curtains - PS Series

The PS series are high performance, high efficiency air curtains for larger commercial spaces such as production premises, workshops, warehouses, logistics centres and sports facilities Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Industrial







#### **Features**

- These air curtains can be mounted horizontally and vertically and feature two performance modes, 70% or 100% in order to best adapt their performance mode to the weather conditions
- Solid nozzle has no blind zones and provides reliable protection
- · High-efficiency fans
- Precise balancing almost excludes vibration and ambient noise during operation of curtains
- Work chamber of special design generates stabilized laminar air flow
- Minimisation of turbulent flows in curtains ensures formation of solid closing flow, effectively protecting opening, at nozzle outlet
- Capillary protection thermostat ensures timely shutdown of curtain in case of overheating, and manual restart function excludes repeated overheating
- Anti-corrosive treatment and strong polymer coating of casing
- Operation mode without heating for protection from outdoor heat, dust and insects in summer

#### Finish

Anti-corrosive treatment and strong polymer coating of casing White finish

#### Installation

Installed universally (horizontally to vertically) Installation height up to 4.5m

#### Controls

Remote control with thermostat

#### **Specification**

To specify state:

Universally mounted electric Air Curtain constructed in anti-corrosive material with remote control and thermostat at 13.1kW, 19.7kW, 26.2kW or 39.3kW.

As Smith's Air Curtain PS Series 13.1kW, 19.7kW, 26.2kW or 39.3kW

| Description | Net Wt (Kg) | Product Codes |  |  |
|-------------|-------------|---------------|--|--|
| Electric    |             |               |  |  |
| PS E13      | 22.6        | HPAC64101     |  |  |
| PS E20      | 27.9        | HPAC64102     |  |  |
| PS E26      | 40.2        | HPAC64103     |  |  |
| PS E39      | 43.9        | HPAC64104     |  |  |

|                                | HPAC64101<br>Electric | HPAC64102<br>Electric | HPAC64103<br>Electric | HPAC64104<br>Electric |
|--------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Heating power, kW              | 13.1 / 6.6 / 0        | 19.7 / 9.8 / 0        | 26.2 / 13.1 / 0       | 39.3 / 19.7 / 0       |
| Capacity, m³/h                 | 2500 / 1800           | 4000 / 2700           | 5000 / 3500           | 5000 / 3500           |
| Maximum installation height, m | 4.5                   | 4.5                   | 4.5                   | 4.5                   |
| Supply voltage, V              | 415 (3 phase)         | 415 (3 phase)         | 415 (3 phase)         | 415 (3 phase)         |
| Air temperature increase, °C   | 15 / 20 °C            | 15 / 20 °C            | 15 / 21 °C            | 22 / 31 °C            |
| Device dimensions (W×H×D), mm  | 1120x285x295          | 1530x285x295          | 2020x285x295          | 2020x285x295          |
| Package dimensions (W×H×D), mm | 1140x325x385          | 1540x325x385          | 2060x325x385          | 2060x325x385          |

# Air Curtains - PS (W) Series

The PS(W) series are high performance, high efficiency air curtains for larger commercial spaces such as production premises, workshops, warehouses, logistics centres and sports facilities

Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Industrial







#### **Features**

- These air curtains can be mounted horizontally and vertically and feature two performance modes, 70% or 100% in order to best adapt their performance mode to the weather conditions
- In the summer, these air curtains can be operated without heating to protect against outside heat, dust and insects
- Reliable copper-aluminium heat exchanger with working pressure up to 16 bar at 150  $^{\circ}\text{C}$
- Corrugated finning increases the heat exchange area and enhances the heating efficiency
- High-performance aluminium fans
- Precise balancing practically eliminates vibration and extraneous noise during operation of the air curtains
- Working chamber of special structure developed jointly with the Punker company (Germany) creates a stabilized laminar air flow
- Minimisation of turbulent flows in the air curtains ensures the formation of a dense shearing flow at the nozzle exit which protects the opening
- Universal connection to the heating system pipes are output on the left or right side of the housing

#### Finis

Anti-corrosive treatment and strong polymer coating of casing White finish

#### Installation

Installed universally (horizontally to vertically) Installation height up to 4.5m

#### Controls

Remote control with thermostat

#### **Specification**

To specify state:

Universally mounted hydronic Air Curtain with a copper heat exchanger with remote control and thermostat at 8.4kW, 18.1kW, 18.4kW, 27.7kW, 29.2kw or 36.6kW.

As Smith's Air Curtain PS (W) Series 8.4kW, 18.1kW, 18.4kW, 27.7kW, 29.2kw or 36.6kW

| Description      | Net Wt (Kg) | Product Codes |
|------------------|-------------|---------------|
| Water            |             | •             |
| PS (W) W8 - 3.5  | 19          | HPAC64201     |
| PS (W) W18 - 3.5 | 26          | HPAC64202     |
| PS (W) W28 - 3.5 | 30          | HPAC64203     |
| PS (W) W18 - 4.5 | 23.7        | HPAC64204     |
| PS (W) W29 - 4.5 | 31          | HPAC64205     |
| PS (W) W37 - 4.5 | 43          | HPAC64206     |

|                                |                       |                       | HPAC64202 HPAC64203<br>Water Water |                       | HPAC64205<br>Water  | HPAC64206<br>Water  |
|--------------------------------|-----------------------|-----------------------|------------------------------------|-----------------------|---------------------|---------------------|
| Heating power, kW              | 8.4 / 7.9 / 7.3       | 18.4 / 17.0 / 15.5    | 27.7 / 25.2 / 22.4                 | 18.1 / 16.5 / 14.7    | 29.2 / 26.6 / 23.7  | 36.6 / 33.3 / 29.6  |
| Capacity, m³/h                 | 1400 / 1200 / 1000    | 2300 / 2000 / 1700    | 3200 / 2700 / 2300                 | 2500 / 2100 / 1700    | 4000 / 3200 / 2600  | 5000 / 4200 / 2400  |
| Maximum installation height, m | 3.5                   | 3.5                   | 3.5                                | 4.5                   | 4.5                 | 4.5                 |
| Supply voltage, V              | 230                   | 230                   | 230                                | 230                   | 230                 | 230                 |
| Air temperature increase, °C   | 23.6 / 25.5 / 27.8 °C | 27.4 / 27.4 / 29.5 °C | 27 / 29.2 / 31.9 °C                | 23.2 / 25.2 / 27.8 °C | 23.5 / 25.4 / 28 °C | 23.4 / 25.4 / 28 °C |
| Device dimensions (W×H×D), mm  | 1090×260×240          | 1450×260×240          | 1900×260×240                       | 1100×300×290          | 1510×300×290        | 1960×300×290        |
| Package dimensions (W×H×D), mm | 1130x330x280          | 1512x330x280          | 1940x330x280                       | 1140x385x325          | 1540x385x325        | 2060x385x325        |

# Solano

A modern and lightweight hydronic fan-assisted unit heater designed to heat large areas such as warehouses, showrooms and workshops

**Applications** Industrial Workshops Retail Leisure and sport



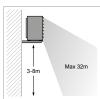


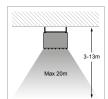
- Lightweight for easy installation <15kg
- High performance heat output up to 70kW
- Air volumes up to 4900 m<sup>3</sup>/h
- 3 speed fan
- Attractive design
- Five year warranty

Expanded Polypropylene (EPP) - Silver grey

#### Installation

Suitable for wall or ceiling mounting. Bracket design aids installation at also 30° and 60°.





To specify state: Lightweight hydronic fan-assisted unit heater at 10-30kW/30-50kW/50-70kW. As Smith's Solano.



#### **Technical data**

|                                 |           | HEATER<br>R1   | HEATER<br>R2   | HEATER<br>R3   | HEATER<br>MIX <sup>1</sup> |
|---------------------------------|-----------|----------------|----------------|----------------|----------------------------|
| Heat output range               | kW        | 10-30          | 30-50          | 50-70          | -                          |
| Max. air output                 | m³/h      | 4 900          | 4 600          | 4 400          | 5 500                      |
| No. of unit rows                | -         | 1              | 2              | 3              | 0                          |
| Air temperature increase*       | °C        | 18             | 33             | 48             | -                          |
| Max. working pressure           | Мра       | 1.6            | 1.6            | 1.6            | -                          |
| Max. airflow range              | m         | 27             | 25             | 24             | 15 **                      |
| Diameter of connection nozzles  | inches    | 3/4"           | 3/4"           | 3/4"           | -                          |
| Power supply                    | V/Hz A    |                | 230/50         | 1.15 A         |                            |
| Motor power                     | kW        | 0.25           | 0.25           | 0.25           | 0.25                       |
| Motor speed                     | rpm       | 1350           | 1350           | 1350           | 1350                       |
| Protection class IP             | -         | IP54           | IP54           | IP54           | IP54                       |
| Sound level                     | dB (A)*** | 56             | 56             | 56             | 56                         |
| Weight without water/with water | kg        | 10.8 /<br>11.9 | 12.7 /<br>14.8 | 14.5 /<br>16.9 | 9.2                        |

- \* for temperatures of 90/70 and inlet temperature of  $0^{\circ}C$
- \*\* max installation height for horizontal installation, working area max 380 m<sup>2</sup>

\*\*\* measured in distance of 5m

1 HEATER MIX is a HEATER series unit without an exchanger for the destratification (displacement) of the warm air that accumulates at ceiling level in rooms with high ceilings. The HEATER MIX can also be used to increase the reach of warm air generated by the

#### **Controls**



Panel COMFORT

- Manual temperature regulation
- Fan speed change
- Ventilation in summer season
- Control up to 3 pcs of HEATER



Panel INTELLIGENT

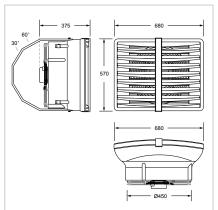
- · Weekly thermostat
- Automatic change of fan speed depending on room temperature
- BMS communication
- Control up to 2 pcs of HEATER



Splitter MUITI 6

Control up to 6 pcs of HEATER





# **Heat output** For other heat output data please visit our website

| Heater R1                                     |      |                              | Air flow 4900 m³/h (speed 3) |      |      |      |                |      |      |      |      |      |      |      |      |      |
|---|------|------------------------------|------------------------------|------|------|------|----------------|------|------|------|------|------|------|------|------|------|
| Inlet/outlet water temperature water 70/50 °C |      | ater 70/50 °C water 80/60 °C |                              |      |      | wa   | water 90/70 °C |      |      |      |      |      |      |      |      |      |
| Inlet air temperature                         | °C   | 0                            | 5                            | 10   | 15   | 20   | 0              | 5    | 10   | 15   | 20   | 0    | 5    | 10   | 15   | 20   |
| Heat output                                   | kW   | 19.5                         | 17.6                         | 15.8 | 14.1 | 12.3 | 23.4           | 21.5 | 19.6 | 17.7 | 15.8 | 27.5 | 25.6 | 23.5 | 21.4 | 19.3 |
| Outlet air temperature                        | °C   | 12.5                         | 16.5                         | 20.5 | 24.5 | 28.5 | 15.0           | 19.0 | 23.0 | 27.0 | 31.0 | 17.5 | 21.5 | 25.5 | 29.5 | 33.5 |
| Water flow                                    | m³/h | 0.7                          | 0.6                          | 0.6  | 0.5  | 0.5  | 0.9            | 0.8  | 0.8  | 0.7  | 0.7  | 1.1  | 1    | 1    | 0.9  | 0.7  |
| Pressure drop                                 | kPa  | 0.9                          | 8.0                          | 8.0  | 0.7  | 0.6  | 1.4            | 1.2  | 1    | 0.8  | 0.6  | 2.0  | 1.8  | 1.6  | 1.4  | 1.2  |

| Heater R2                      |      |                |      |      |      | Air flow 4600 m³/h (speed 3) |      |      |                |      |      |      |      |      |      |      |
|--------------------------------|------|----------------|------|------|------|------------------------------|------|------|----------------|------|------|------|------|------|------|------|
| Inlet/outlet water temperature |      | water 70/50 °C |      |      |      | water 80/60 °C               |      |      | water 90/70 °C |      |      |      |      |      |      |      |
| Inlet air temperature          | °C   | 0              | 5    | 10   | 15   | 20                           | 0    | 5    | 10             | 15   | 20   | 0    | 5    | 10   | 15   | 20   |
| Heat output                    | kW   | 34.6           | 31.2 | 27.8 | 24.4 | 21.0                         | 41.5 | 38.0 | 34.5           | 30.9 | 27.4 | 48.4 | 44.9 | 41.5 | 38.0 | 34.6 |
| Outlet air temperature         | °C   | 24.0           | 26.9 | 29.9 | 33.0 | 36.1                         | 28.5 | 31.5 | 34.4           | 37.5 | 40.5 | 32.5 | 35.4 | 38.5 | 41.5 | 44.6 |
| Water flow                     | m³/h | 1.4            | 1.2  | 1.1  | 1.0  | 0.9                          | 1.8  | 1.6  | 1.5            | 1.4  | 1.2  | 1.9  | 1.8  | 1.8  | 1.7  | 1.5  |
| Pressure drop                  | kPa  | 5.3            | 4.6  | 3.7  | 2.8  | 1.9                          | 7.6  | 6.7  | 5.8            | 4.9  | 4.0  | 10.6 | 9.7  | 8.8  | 7.9  | 7.0  |

| Heater R3 Air flow 4400 m³/h (speed 3) |      |      |                |      |      |                |      |                |      |      |      |      |      |      |      |      |
|--|------|------|----------------|------|------|----------------|------|----------------|------|------|------|------|------|------|------|------|
| Inlet/outlet water temperature         |      |      | water 70/50 °C |      |      | water 80/60 °C |      | water 90/70 °C |      |      |      |      |      |      |      |      |
| Inlet air temperature                  | °C   | 0    | 5              | 10   | 15   | 20             | 0    | 5              | 10   | 15   | 20   | 0    | 5    | 10   | 15   | 20   |
| Heat output                            | kW   | 49.2 | 45.3           | 41.6 | 38.3 | 34.4           | 58.4 | 54.2           | 50.1 | 46.1 | 42.3 | 67.6 | 63.4 | 59.3 | 55.1 | 51.1 |
| Outlet air temperature                 | °C   | 34.5 | 37             | 39   | 41   | 43             | 41.5 | 44             | 46   | 48   | 50   | 47.5 | 50   | 52   | 54   | 56   |
| Water flow                             | m³/h | 1.9  | 1.9            | 1.7  | 1.5  | 1.3            | 2.4  | 2.4            | 2.2  | 1.9  | 1.8  | 2.8  | 2.8  | 2.6  | 2.4  | 2.2  |
| Pressure drop                          | kPa  | 12.3 | 9.6            | 7.9  | 6.4  | 5              | 16.7 | 13.6           | 11.6 | 9.7  | 8.1  | 21.7 | 18.1 | 15.8 | 13.7 | 11.8 |

| Model                | Wt (kg)     | Product Codes |
|----------------------|-------------|---------------|
| HEATER R1 (10-30 kW) | 10.8 / 11.9 | HPUH310001    |
| HEATER R2 (30-50 kW) | 12.7 / 14.8 | HPUH310002    |
| HEATER R3 (50-70 kW) | 14.5 / 16.9 | HPUH310003    |
| HEATER MIX           | 9.2         | HPUH310004    |

| Accessories       | Product Codes |
|-------------------|---------------|
| Panel INTELLIGENT | HPUH310008    |
| Panel COMFORT     | HPUH310009    |
| Splitter MULTI 6  | HPUH310010    |

# **Pedestal**

A new range of freestanding convector pedestal heaters, Kiosk, Trafalgar, and Tube in a variety of shapes, lengths and finishes Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail





#### **Features**

- Perfect for beneath large windows, Smith's freestanding pedestal heaters help to minimise the problem of downward cold airflow with commonly associated with glazed façades
- Fitting into the smallest of spaces Smith's range of freestanding pedestal heaters provide a stylish solution without the need for wall hung heaters
- Minimal height of max. 206mm and lengths from 0.5m to 2m
- Without fan for dry and wet environments
- Perfect for where sub-floor trench heating is not possible
- Heat source: boiler or heat pump

#### Finisl

Outer casing 1.2mm zintec. Polyester powder coated Paint specification: textured white BS 4800 00A01 18% gloss

#### nstallation

Flow and return connections 22mm copper Designed for system pressures up to 10 bar Suitable for two pipe central heating systems only

# **Customised requirements**

Any colour finishes are available on request Price and availability will be confirmed at the time of order

#### Controls

Supplied with TRV and lockshield valve

## Specification

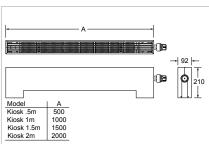
To specify state:

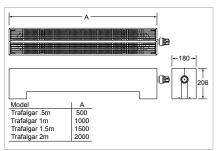
Low height freestanding pedestal heater in linear form with rectangular profile, large rectangular profile or circular profile. As Smith's Kiosk, Trafalgar or Tube

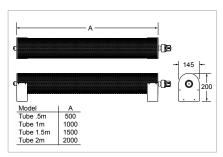












# **Heat output**

| Product length | ΔT °C |       |       |       |       |       |  |  |
|----------------|-------|-------|-------|-------|-------|-------|--|--|
| Troductiength  | 20 ∆T | 30 ∆T | 40 ∆T | 50 ΔT | 60 ∆T | 70 ΔT |  |  |
| Kiosk          |       |       |       |       |       |       |  |  |
| 0.5m           | 22    | 39    | 60    | 83    | 109   | 136   |  |  |
| 1.0m           | 73    | 133   | 202   | 281   | 367   | 459   |  |  |
| 1.5m           | 125   | 226   | 345   | 479   | 626   | 783   |  |  |
| 2.0m           | 176   | 320   | 487   | 677   | 884   | 1106  |  |  |
| Trafalgar      |       |       |       |       |       |       |  |  |
| 0.5m           | 39    | 72    | 110   | 154   | 201   | 253   |  |  |
| 1.0m           | 133   | 243   | 373   | 519   | 681   | 856   |  |  |
| 1.5m           | 226   | 414   | 635   | 885   | 1160  | 1459  |  |  |
| 2.0m           | 320   | 585   | 898   | 1250  | 1640  | 2062  |  |  |
| Tube           |       |       |       |       |       |       |  |  |
| 0.5m           | 36    | 64    | 96    | 132   | 170   | 212   |  |  |
| 1.0m           | 88    | 157   | 237   | 325   | 421   | 524   |  |  |
| 1.5m           | 141   | 251   | 378   | 519   | 671   | 836   |  |  |
| 2.0m           | 193   | 344   | 519   | 712   | 922   | 1148  |  |  |

Entering ambient air temperature of 20°C Outputs in Watts. In accordance with EN442 - BSRIA verified

# How to calculate Mass Flow Rate (L/S)

 $\mathsf{M} = \mathsf{H} \, / \, \mathsf{CP} \, \mathsf{x} \, (\mathsf{Flow} \, {}^{\diamond}\mathsf{C} - \mathsf{Return} \, {}^{\diamond}\mathsf{C})$ 

$$\begin{split} M &= \text{Mass flow rate (L/S)} \\ H &= \text{Output of product (W)} \\ \text{CP} &= \text{Specific heat capacity [J/(kg.^{\circ}\text{C})]}. \ \text{Varies upon system temperature, Approx. 4187 if fluid is water.} \end{split}$$

# How to calculate Mean Water Temperature (ΔT)

| Mean water temperature (ΔT) | Flow temperature +<br>Return temperature | - Ambient Temperature |
|-----------------------------|--|-----------------------|
| mean water temperature (21) | 2  | - Ambient Temperature |

# Ordering guide Listed below are the Pedestal complete with TRV.

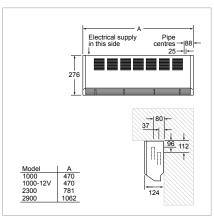
| Description   | Wt (kg) | Product Codes |  |  |  |  |  |
|---|---------|---------------|--|--|--|--|--|
| Kiosk   |         |               |  |  |  |  |  |
| 500 Kiosk pedestal natural convector white TRV            | 5       | HPKI100025    |  |  |  |  |  |
| 1000 Kiosk pedestal natural convector white TRV           | 10      | HPKI100028    |  |  |  |  |  |
| 1500 Kiosk pedestal natural convector white TRV           | 15      | HPKI100031    |  |  |  |  |  |
| 2000 Kiosk pedestal natural convector white TRV           | 20      | HPKI100034    |  |  |  |  |  |
| Trafalgar   |         |               |  |  |  |  |  |
| 500 Trafalgar pedestal natural convector white TRV        | 8       | HPTR110025    |  |  |  |  |  |
| 1000 Trafalgar pedestal natural convector white TRV       | 16      | HPTR110028    |  |  |  |  |  |
| 1500 Trafalgar pedestal natural convector white TRV       | 24      | HPTR110031    |  |  |  |  |  |
| 2000 Trafalgar pedestal natural convector white TRV       | 32      | HPTR110034    |  |  |  |  |  |
| Tube  |         |               |  |  |  |  |  |
| 500 single rnd pedestal natural convector black rnd perf  | 5       | HPTU110000    |  |  |  |  |  |
| 1000 single rnd pedestal natural convector black rnd perf | 10      | HPTU110003    |  |  |  |  |  |
| 1500 single rnd pedestal natural convector black rnd perf | 15      | HPTU110006    |  |  |  |  |  |
| 2000 single rnd pedestal natural convector black rnd perf | 20      | HPTU110009    |  |  |  |  |  |

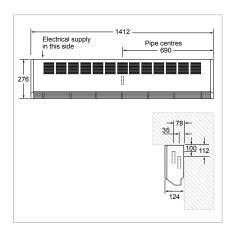
# Ecovector® High

The Ecovector Hydronic fan convectors provide effective and dependable heating for both small and large commercial areas, fitted unobtrusively above head height

# Applications Education Healthcare Places of worship Leisure and sport Office Hospitality Retail Showroom Industrial Residential







#### Features

- They work particularly well in shops and libraries, where lower wall space is limited
- Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Supplied as standard in white but casing can be supplied in any colour

#### Motor

AC only

# Finish

Front casing: zinc-coated steel. Polyester powder-coated RAL 9010 Side panels: polymer eggshell white

#### Installation

Maximum installation height 2.1m (6'11") to underside No top or side clearance required Unit must be earthed (except model 1000-12V) Suitable for two-pipe central heating systems Patress box not supplied for transformer (model 1000-12V)

# **Heat Output** For other heat output data please visit our website

|                    | Heat Out       | out at 75°    | Heat Output at 45° |               |  |  |
|--------------------|----------------|---------------|--------------------|---------------|--|--|
| Model              | Normal<br>(kW) | Boost<br>(kW) | Normal<br>(kW)     | Boost<br>(kW) |  |  |
| Ecovector 1000     | 1.0            | 1.2           | 0.5                | 0.6           |  |  |
| Ecovector 2300     | 2.1            | 2.8           | 1.1                | 1.4           |  |  |
| Ecovector 2900     | 2.7            | 4.0           | 1.4                | 2.0           |  |  |
| Ecovector 4000     | 3.7            | 4.8           | 1.8                | 2.5           |  |  |
| Ecovector 1000-12V | 1.0            | 1.2           | 0.5                | 0.5           |  |  |

#### Commissioning

Check water is hot enough to activate the low temperature cut-out thermostat. The inclusion of an automatic air vent at the highest point is recommended to avoid possible air locks

#### Controls

Two rocker switches - normal/off/boost, heating/fan-only Low temperature cut out thermostat, set to energise fan at approximately 35°C

### Accessories

See matrix on page 70

# **Specification**

To specify state:

High level hydronic fan convector in white.

As Smith's Ecovector High 1000/2300/2900/4000/1000-12V.

## Ordering guide

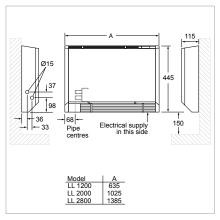
| Model  | Packed<br>Wt (kg) | Product Codes |  |
|--|-------------------|---------------|--|
| Ecovector 1000                               | 7                 | HPEV50011     |  |
| Ecovector 2300                               | 11                | HPEV50012     |  |
| Ecovector 2900                               | 15                | HPEV50013     |  |
| Ecovector 4000                               | 18                | HPEV50014     |  |
| Ecovector 1000-12V                           | HPEV50015         |               |  |
| Accessories                                  |                   |               |  |
| Remote (Wired) Room Thermostat               |                   | HAGA95001     |  |
| Remote (Wired) Room Thermostat Siemens       | HACA33077         |               |  |
| Remote (Wireless) Room Thermostat Siemens RF | HACA33074         |               |  |
| Remote (Wired) Room Thermostat Siemens Tamp  | per Proof         | HAGA95004     |  |

|                    |                           |                |                  |               | Total Power       | Consumption      |                            | Sound           | Levels         |                |          |
|--------------------|---------------------------|----------------|------------------|---------------|-------------------|------------------|----------------------------|-----------------|----------------|----------------|----------|
| Model              | Flow & return connections | Mains<br>cable | Trans-<br>former | Fused<br>spur | Normal<br>(Watts) | Boost<br>(Watts) | Water Capacity<br>(Litres) | Normal<br>(dBA) | Boost<br>(dBA) | Casting colour | Fan-only |
| Ecovector 1000     | 15mm                      | 1.5m           | n/a              | 3A            | 20                | 25               | 0.28                       | 32              | 40             | white          | •        |
| Ecovector 2300     | 15mm                      | 1.5m           | n/a              | 3A            | 20                | 32               | 0.32                       | 34              | 50             | white          |          |
| Ecovector 2900     | 15mm                      | 1.5m           | n/a              | 3A            | 33                | 50               | 0.52                       | 37              | 51             | white          |          |
| Ecovector 4000     | 22mm                      | 1.5m           | n/a              | 3A            | 40                | 60               | 1.04                       | 39              | 52             | white          |          |
| Ecovector 1000-12V | 15mm                      | 0.45m          | •                | 3A            | 20                | 25               | 0.28                       | 32              | 39             | white          |          |

# Ecovector® Low

Ecovector Low Level fan convectors provide warmth from the floor upwards and are more energy efficient and effective than radiators Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial
Residential







#### Features

- The Ecovector can heat up a room more quickly than radiators, thereby reducing the amount of time your boiler or heat pump is running - making it extremely efficient and cost effective
- Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Ideal for new and existing developments, due to ease of installation, the Ecovector is available in a range of models to suit varying room sizes and heat output requirements
- Supplied as standard in white but casing can be supplied in any colour

# Motor

AC only

#### **Finish**

Front casing: zinc-coated steel. Polyester powder-coated RAL 9010 Side panels: polymer eggshell white

# Installation

Mounting bracket supplied Unit must be earthed Suitable for two-pipe central heating systems Minimum height above floor level 150mm Maximum height above floor level 500mm

#### Commissioning

Check water is not enough to activate the selectable low temperature cut-out thermostat

#### Control

Rocker switch - normal/off/boost Built-in room thermostat Low temperature cut-out thermostat set to energise fan at approximately 35°C

# **Specification**

To specify state:

Low level hydronic fan convector in white. As Smith's Ecovector Low LL1200/LL2000/LL2800

# Heat Output For other heat output data please visit our website

|                   | Heat Outp      | out at 75°    | Heat Output at 45° |               |  |  |
|-------------------|----------------|---------------|--------------------|---------------|--|--|
| Model             | Normal<br>(kW) | Boost<br>(kW) | Normal<br>(KW)     | Boost<br>(KW) |  |  |
| Ecovector LL 1200 | 1.1            | 1.4           | 0.5                | 0.6           |  |  |
| Ecovector LL 2000 | 1.9            | 2.4           | 0.9                | 1.1           |  |  |
| Ecovector LL 2800 | 2.6            | 3.2           | 1.2                | 1.5           |  |  |

# Ordering guide

| Model             | Packed Wt (kg) | Product Codes |
|-------------------|----------------|---------------|
| Ecovector LL 1200 | 12             | HPEV50001     |
| Ecovector LL 2000 | 17             | HPEV50002     |
| Ecovector LL 2800 | 24             | HPEV50003     |

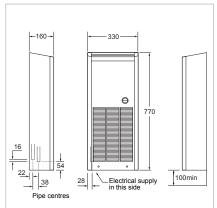
|                   |                           |                |                  |               | Total Power       | Consumption      |                            | Sound           | Levels         |                |          |
|-------------------|---------------------------|----------------|------------------|---------------|-------------------|------------------|----------------------------|-----------------|----------------|----------------|----------|
| Model             | Flow & return connections | Mains<br>cable | Trans-<br>former | Fused<br>spur | Normal<br>(Watts) | Boost<br>(Watts) | Water Capacity<br>(Litres) | Normal<br>(dBA) | Boost<br>(dBA) | Casting colour | Fan-only |
| Ecovector LL 1200 | 15mm                      | 1.5m           | n/a              | 3A            | 17                | 21               | 0.29                       | 32              | 38             | white          | n/a      |
| Ecovector LL 2000 | 15mm                      | 1.5m           | n/a              | 3A            | 26                | 55               | 0.58                       | 35              | 40             | white          | n/a      |
| Ecovector LL 2800 | 15mm                      | 1.5m           | n/a              | 3A            | 43                | 76               | 0.83                       | 37              | 42             | white          | n/a      |

# **Ecovector® Vertical**

Ideal for hallways, corridors, alcoves and other places where space is limited. Ecovector can heat up a room more quickly than radiators, thereby reducing the amount of time your boiler or heat pump is running - making it extremely efficient and cost effective

Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial
Residential







#### **Features**

- Ideal for new and existing building developments
- Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Supplied as standard in white but casing can be supplied in any colour

#### Motor

AC only

## Finish

Front casing and side panels: zinc-coated steel Polyester powder-coated RAL 9010

#### Installation

Mounting bracket supplied Unit must be earthed Suitable for two-pipe central heating systems Minimum height above floor level 150mm, maximum height above floor level 500mm

#### Commissioning

Check water is not enough to activate the selectable low temperature cut-out thermostat

#### Controls

Rocker switch - normal/off/boost

Low temperature cut-out thermostat set to energise fan at approximately  $35^{\circ}\text{C}$ 

Wireless wall mounted thermostat included with this product

# Specification

To specify state:

Vertical floor mounted hydronic fan convector in white. As Smith's Ecovector Vertical.

#### Heat Output For other heat output data please visit our website

|                   | Heat Out       | out at 75°    | Heat Out       | put at 45°    |
|-------------------|----------------|---------------|----------------|---------------|
| Model             | Normal<br>(kW) | Boost<br>(kW) | Normal<br>(kW) | Boost<br>(kW) |
| Ecovector VE 2500 | 2.3            | 2.4           | 1.1            | 1.1           |

#### Ordering guide

| Model             | Packed Wt (kg) | Product Codes |
|-------------------|----------------|---------------|
| Ecovector VE 2500 | 7              | HPEV50021     |

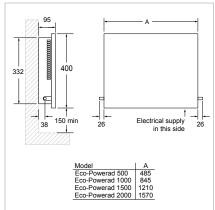
|                   |                           |             |                  |               | Total Power       | Consumption      |                            | Sound           | Levels         |                |          |
|-------------------|---------------------------|-------------|------------------|---------------|-------------------|------------------|----------------------------|-----------------|----------------|----------------|----------|
| Model             | Flow & return connections | Mains cable | Trans-<br>former | Fused<br>spur | Normal<br>(Watts) | Boost<br>(Watts) | Water Capacity<br>(Litres) | Normal<br>(dBA) | Boost<br>(dBA) | Casting colour | Fan-only |
| Ecovector VE 2500 | 15mm                      | 1.5m        | n/a              | 3A            | 28                | 36               | 0.75                       | 36              | 39             | white          | n/a      |

# **Eco-Powerad®**

The Eco-Powerad is the fan convector of the future - energy efficient, responsive and suitable for installation within most wet central heating systems, driven by either boilers or low temperature renewable technology

Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Residential







#### Features

- Compact, with smooth lines to achieve visual simplicity, the Eco-Powerad also features low surface temperature casing for complete safety and possesses a very low operating sound between 28 and 32 decibels
- Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Supplied as standard in white but casing can be supplied in any colour

# Motor

AC only

# Finish

Front casing: zinc coated steel Polyester powder-coated RAL 9010

## Installation

Mounting bracket supplied Unit must be earthed Suitable for two-pipe central heating systems Minimum height above floor level 150mm Maximum height above floor level 500mm

#### Commissioning

Check water is hot enough to activate the low temperature cut-out thermostat. Ensure system is balanced for even heat distribution

#### Control

Low temperature cut-out thermostat, set to energise fan at approximately  $35^{\circ}\text{C}$ 

Suitable for thermostatic radiator valves (TRV) - not supplied Rocker switch - normal/low

# **Specification**

To specify state:

Wall mounted hydronic heat emitter with fan and low temperature cut-out.

As Smith's Eco-Powerad 500/1000/1500/2000

# **Heat Output** For other heat output data please visit our website

| Model            | Heat Output<br>at 75° (kW) | Heat Output<br>at 45° (kW) |
|------------------|----------------------------|----------------------------|
| Eco-Powerad 500  | 0.8                        | 0.4                        |
| Eco-Powerad 1000 | 2.1                        | 0.8                        |
| Eco-Powerad 1500 | 2.4                        | 1.2                        |
| Eco-Powerad 2000 | 3.5                        | 1.7                        |

# Ordering guide

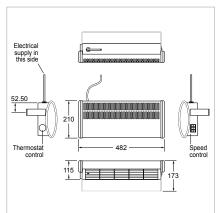
| Model            | Packed Wt (kg) | Product Codes |
|------------------|----------------|---------------|
| Eco-Powerad 500  | 6              | HPEP52001     |
| Eco-Powerad 1000 | 10             | HPEP52002     |
| Eco-Powerad 1500 | 14             | HPEP52003     |
| Eco-Powerad 2000 | 18             | HPEP52004     |

| Model            | Flow & return connections | Mains cable | Transformer | Fused<br>spur | Total Power<br>Consumption (Watts) | Water Capacity<br>(Litres) | Sound Levels<br>(dBA) | Casting<br>colour |
|------------------|---------------------------|-------------|-------------|---------------|------------------------------------|----------------------------|-----------------------|-------------------|
| Eco-Powerad 500  | 15mm                      | 2m          | n/a         | 3A            | 15                                 | 0.17                       | 28                    | white             |
| Eco-Powerad 1000 | 15mm                      | 2m          | n/a         | 3A            | 18                                 | 0.28                       | 30                    | white             |
| Eco-Powerad 1500 | 15mm                      | 2m          | n/a         | 3A            | 33                                 | 0.44                       | 31                    | white             |
| Eco-Powerad 2000 | 15mm                      | 2m          | n/a         | 3A            | 36                                 | 0.55                       | 32                    | white             |

# **Sterling**

The Sterling fan-assisted electric heater is a great low cost solution providing effective and dependable heating for both small and large commercial areas, fitted unobtrusively above head height Applications
Education
Healthcare
Places of worship
Leisure and sport
Office
Hospitality
Retail
Showroom
Industrial
Residential







#### **Features**

 It has been designed for rooms with limited lower wall space, such as shops and libraries

#### Motor

AC only

#### Finish

Outer casing 0.9mm zinc-coated steel Polyester powder-coated white Side panels: Polymer - white

## Installation

Recommended installation height 2.3m (7ft 6") to underside Not suitable for bathrooms and other high humidity areas Angled mounting (optional) 13 amp fused spur required Unit must be earthed

#### Controls

Rocker switches for fan and element - fan only 1kW/2kW/3kW Built-in room thermostat Overheat protection: thermal cut-out Manual reset procedure: switch power off at mains, wait 20 minutes,

#### Specification

To specify state:

switch power on

3-speed electric fan-assisted heater in white polyester coated 0.9mm zinc-coated steel body with built in room thermostat.
As Smith's Sterling.

### **Heat output**

| Model          | Heat Output (kW) |
|----------------|------------------|
| Sterling E 3kW | 1kW/2kW/3kW      |
|                |                  |
|                |                  |

# Ordering guide

| Model          | Packed Wt (kg) | Product Codes |
|----------------|----------------|---------------|
| Sterling E 3kW | 4              | HPST51012     |

| Model          | Fused<br>spur | Total Power<br>Consumption (kW) | Sound Levels<br>(dBA) | Casting<br>colour | Fan-only |
|----------------|---------------|---------------------------------|-----------------------|-------------------|----------|
| Sterling E 3kW | 13A           | 1kW/2kW/3kW                     | 39                    | white             | •        |

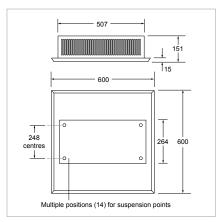
Sound levels measured at 1.5m with the product installed at 2.2m high

# **Skyline®**

The electric Skyline fits neatly into existing ceiling space - replacing a 600mm x 600mm ceiling tile and because it is ceiling mounted, it saves valuable wall space - particularly important in retail units

Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Industrial







#### Features

- It is unobtrusive and effective
- This high output fan convector effectively heats large areas
- Supplied as standard in white but can be supplied in any colour

### Motor

AC only

# **Finish**

Outer casing 0.9mm zinc-coated steel Polyester powder-coated Polyester powder-coated RAL 9010

#### Installation

Maximum installation height 3.2m (10'6") to underside Minimum 150mm void space required for recessed installation Not suitable for bathrooms and other high humidity areas Two air inlet options: room only, room and void Maximum flexibility in installation: only 600mm - side clearance required

Facility for connection to 6mm threaded rod or chains (rods and chains - not supplied)

20 amp fused spur required Unit must be earthed

Supplied with remote operating switch

#### Control

Rocker switches for fan and element Overheat protection: thermal cut-out.

Manual reset procedure: switch power off at mains, wait 5 minutes, switch power on

Time and temperature control - available from April 2018

#### Attachment

Surface mounting kit - 135mm. Provides a complete foursided trim when fitted to a solid ceiling Ceiling tile spacer (85mm)

#### **Specification**

To specify state:

Ceiling mounted heat emitter at 4Kw in white 600x600mm. As Smith's Skyline.

# Heat output

| Model         | Heat Output (Kw) |
|---------------|------------------|
| Skyline E 4kW | 4.0              |

| Model                        | Packed Wt (kg) | Product Codes |
|------------------------------|----------------|---------------|
| Skyline E 4kW                | 9              | HPSK40003     |
| Attachments                  |                |               |
| Surface Mounting Kit (135mm) |                | HASK40102     |
| Ceiling Tile Spacer (85mm)   |                | HASK40103     |

| Model         | Mains cable | Fused<br>spur | Total Power<br>Consumption (kW) | Sound Levels (dBA) | Casting<br>colour | Fan-only |
|---------------|-------------|---------------|---------------------------------|--------------------|-------------------|----------|
| Skyline E 4kW | 1.5m        | 20A           | 4.1                             | 40                 | white             | n/a      |

# Sureline®

Provides gentle, discreet and efficient low-level warmth and is the ideal heating solution for areas where wall space is limited - rooms such as loft conversions and new-builds

Applications
Education
Healthcare
Leisure and sport
Office
Hospitality
Retail
Showroom
Residential





#### **Features**

- Simple to install along the skirting in any room, Sureline is an
  efficient natural convector that provides discreet heating
- Supplied as standard in white but casing can be supplied in any colour

# Finish

Outer casing 0.7mm zinc coated steel. Polyester, powder-coated. Paint specification: textured white BS 4800 00A01 18% gloss. Each length includes casing, element, backplate and joining strip. Casing only includes casing, backplate and joining strip

#### Installation

Minimum clearance above floor 50mm Flow and return connections 22mm copper Designed for system pressures up to 10 bar Suitable for two-pipe central heating systems only

#### **Attachments**

Casing only (1000mm)
LH valve box/end cap kit
RH valve box/end cap kit
Centre valve cover
90° internal cover
90° external cover
135° internal cover
135° external cover
Finger guard 500 (500mm)
Finger guard 1000 (1000mm)
Element (1000mm)

# **Customised requirements**

We are able to offer casings painted in any colour. Price and availability will be confirmed at the time of order

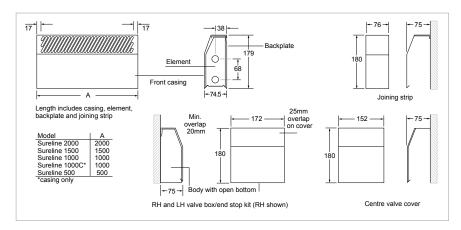
## **Specification**

To specify state:

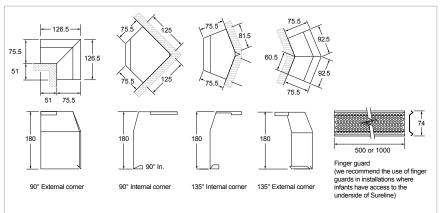
Skirting level perimeter hydronic heat emitter in white. As Smith's Sureline 500/1000/1500/2000.

## Heat Output For other heat output data please visit our website

|                            |                        | Btu/h/m @ average water temperature |      |      | W/m @ average water temperature |      |      |      |      |      |      |      |      |
|----------------------------|------------------------|-------------------------------------|------|------|---------------------------------|------|------|------|------|------|------|------|------|
|                            | Flow Rate<br>L/h (G/h) | 50°C                                | 55°C | 60°C | 65°C                            | 70°C | 75°C | 50°C | 55°C | 60°C | 65°C | 70°C | 75°C |
| Two supplies - Parallel    | 920 (200)              | 1310                                | 1570 | 1820 | 2070                            | 2300 | 2560 | 380  | 460  | 530  | 610  | 670  | 750  |
| Bottom supply - Top return | 920 (200)              | 1030                                | 1250 | 1460 | 1710                            | 1920 | 2140 | 300  | 370  | 430  | 500  | 560  | 630  |







| Model         | Packed Wt (kg) | Product Codes |
|---------------|----------------|---------------|
| Sureline 500  | 5              | HPSL30001     |
| Sureline 1000 | 7              | HPSL30002     |
| Sureline 1500 | 10             | HPSL30003     |
| Sureline 2000 | 14             | HPSL30004     |

| Attachments              | Product Codes |
|--------------------------|---------------|
| Casing only              | HASL30101     |
| LH valve box/end cap kit | HASL30102     |
| RH valve box/end cap kit | HASL30103     |
| Centre valve cover       | HASL30104     |
| 90° internal corner      | HASL30105     |
| 90° external corner      | HASL30106     |
| 135° internal corner     | HASL30107     |
| 135° external corner     | HASL30108     |
| Finger Guard 500         | HASL30109     |
| Finger Guard 1000        | HASL30110     |
| Element only             | HASL30111     |

# **Space Saver**

A highly energy efficient fan convector that fits neatly into the plinth of a kitchen unit and eliminates the need for conventional radiators **Applications**Kitchen
Utility
Bathroom





- Makes room for extra kitchen storage, work space, or additional appliances
- More affordable than underfloor heating
- · Get the flooring you want
- Discreet heating
- Easy to use
- Suitable for plinth heights from 80mm upwards
- Contemporary design with a wide choice of grille colours to suit interior decoration
- Two heat outputs and fan only option for instant heat and cool air circulation
- Low voltage bathroom model available for high humidity areas
- Free five years parts and labour warranty



#### Easy to use

Smith's Space Saver comes on and off with your central heating, just like the rest of your radiators do. It uses the same water that your radiator uses, just a lot less and it has a tiny energy efficient electric fan that pushes out the heat into the room.

#### How many do I need?

As a rule of thumb, for every radiator you remove, install one Space Saver. If you need further help, go to our website to read our installation guides, email us or give us call.

## Is it quiet?

Good question. The sound is very similar to that of your fridge and we think you won't notice it as you go about your daily life in your kitchen, boiling kettles, running taps, chatting with friends.

#### Is it expensive to run?

Not at all. Because the heat comes from your boiler the only extra is the running cost of the fan - it costs 1p a day to use a Space Saver in your kitchen.

#### Can I find out more?

Just visit: thinksmiths.co.uk/spacesaver for more information and a list of stockists. Any questions, please contact us directly.

# How a Smith's Space Saver works

#### Hydronic:

Hot water from your central heating system passes through a heat exchanger transferring its heat to the aluminium fins. Cooler air is drawn in by the fan and heated as it passes through the heat exchanger before being expelled gently back into the room. This not only gives a more even temperature spread, but will heat up a room quicker than a traditional panel radiator.

#### Hydronic Low Voltage:

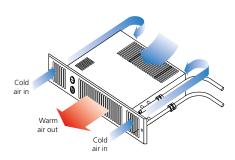
Functions in exactly the same way as a hydronic models but uses a transformer to ensure the product is safe to operate with wet hands.

## Hydronic/Electric:

Like a hydronic model but also includes an electric element so you can still use the product when the central heating system is switched off.

#### Electric:

Plugs into a standard electrical socket when there isn't access to the central heating system. Electric heaters cost 15p per kWh to run.



## Alternative grille finishes

Most Space Saver models are supplied with a detachable Stainless Steel fascia grille. Alternative colours are shown below.









## Outputs For other heat output data please visit our website

|                             | Room size      | Heat C         | Output        | Sound           | levels         | Fascia grille   |          | Minimum               |
|-----------------------------|----------------|----------------|---------------|-----------------|----------------|-----------------|----------|-----------------------|
| Model                       | guide*<br>(m³) | Normal<br>(KW) | Boost<br>(KW) | Normal<br>(dBA) | Boost<br>(dBA) | finish          | Fan-only | plinth<br>height (mm) |
| Hydronic                    |                |                |               |                 |                |                 | •        |                       |
| SS80                        | 24             | 0.8            | 1.1           | 32              | 40             | Stainless Steel | •        | 80                    |
| SS3                         | 31             | 1.1            | 1.4           | 26              | 39             | Stainless Steel | •        | 100                   |
| SS5                         | 37             | 1.3            | 1.7           | 27              | 43             | Stainless Steel | •        | 100                   |
| SS7                         | 46             | 1.6            | 1.9           | 30              | 44             | Stainless Steel | •        | 100                   |
| SS9                         | 63             | 2.2            | 2.4           | 41              | 46             | Stainless Steel | •        | 120                   |
| Hydronic Low Voltage        |                |                |               | ,               |                |                 |          | ,                     |
| SS5 12V                     | 33             | 1.3            | 1.7           | 31              | 39             | Stainless Steel | •        | 100                   |
| Hydronic/Electric (Dual)    |                |                |               | ,               |                |                 | •        | ,                     |
| SS5 Dual (in hydronic mode) | 37             | 1.3            | 1.7           | 27              | 43             | Stainless Steel | •        | 100                   |
| SS5 Dual (in electric mode) |                | 1.0            | -             |                 |                |                 |          | 100                   |
| Electric                    |                |                |               | ,               |                |                 | •        | ,                     |
| SS3E                        | 58             | 1kW/2k         | W/3kW         | 4               | 2              | Brushed Steel   | •        | 100                   |
| SS2E                        | 29             | 1kW/           | ⁄2kW          | 4               | 2              | Brushed Steel   | •        | 100                   |
| SS80E                       | 18             | 0.6kW/         | ′1.2kW        | 4               | 2              | Stainless Steel | •        | 80                    |

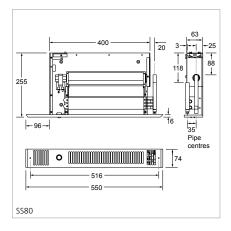
<sup>\*</sup>Room sizes given in cubic metres for general guidance only based on normal heat output (80°C) for domestic applications - always calculate heat losses. Heat outputs tested in accordance with BS4856 using entering water temperature and 340 l/h (75gph) flow rate. Fan-only option operational only when central heating system is switched off. Dual models include an electric element which in electric heating mode will emit 1kW of heat. Sound levels measured at 1.5m.

# Space Saver - Hydronic

A highly energy efficient fan convector that fits neatly into the plinth of a kitchen unit and eliminates the need for conventional radiators **Applications**Kitchen
Utility
Bathroom







#### **Features**

- Makes room for extra kitchen storage, work space, or additional appliances
- · More affordable than underfloor heating
- Get the flooring you want
- Discreet heating
- Easy to use
- Suitable for plinth heights from 80mm upwards
- Contemporary design with a wide choice of grille colours to suit interior decoration
- Two heat outputs and fan only option for instant heat and cool air circulation
- Low voltage bathroom model available for high humidity areas
- Free five years parts and labour warranty

# Motor

AC

#### **Finish**

Fascia grilles: Stainless steel.

Finish: brown - RAL 8016, black - RAL 9005,

white - RAL 9010, chrome

#### Installation

Correct fascia grille opening must be cut to allow sufficient air intake 20mm clearance above unit required

Model secured to plinth by two screws through fascia grille Unit must be earthed (not 12 volt SELV)

Suitable for two-pipe central heating systems only

SS80 supplied with detachable cable

SS80 models have easy fit thermostat facility

# Commissioning

Check water temperature is hot enough to activate low temperature cut-out thermostat (LTC). Vent screw accessible through fascia grille

#### **Controls**

Single rocker switch - low/off/normal

SS80: Low temperature cut-out thermostat set to energise fan at approximately  $35^{\circ}$ C

SSS W/Dual: three rocker switches, heating/off/fan-only, hydronic/electric, normal/boost

Low temperature cut-out thermostat set to energise fan at approximately 35°C

All other models: two rocker switches -normal/off/boost, heating/fan-only

Low temperature cut-out thermostat set to energise fan at approximately 35°C

# Accessories

Wall-mounted room thermostat
Wall mounted control switch (white) to suit SS3, SS5, SS5/12V,
SS7, SS9

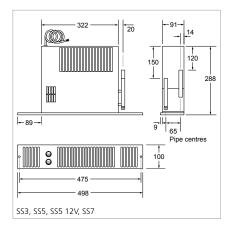
#### **Attachments**

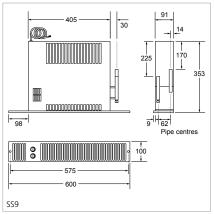
Grilles: brown - RAL 8016, black - RAL 9005, white - RAL 9010 and chrome

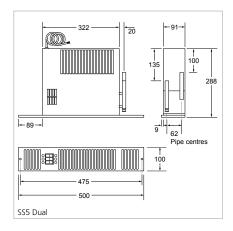
# Attachments



Brown, black, chrome or white fascia grilles







Outputs For other outputs, please see page 49

| Model    |                           |                |             |                   | Total Power C |                       |                       |                            |
|----------|---------------------------|----------------|-------------|-------------------|---------------|-----------------------|-----------------------|----------------------------|
|          | Flow & return connections | Mains<br>cable | Transformer | Flexible<br>hoses | Fused<br>spur | Normal (W)            | Boost (W)             | Water Capacity<br>(Litres) |
| SS3      | 15mm                      | 2m             | n/a         | n/a               | 3A            | 18                    | 25                    | 0.36                       |
| SS5      | 15mm                      | 2m             | n/a         | •                 | 3A            | 18                    | 25                    | 0.36                       |
| SS7      | 15mm                      | 2m             | n/a         | •                 | 3A            | 21                    | 30                    | 0.38                       |
| SS9      | 15mm                      | 2m             | n/a         | •                 | 3A            | 24                    | 35                    | 0.53                       |
| SS80     | 15mm                      | 2m             | n/a         | •                 | 3A            | 5                     | 10                    | 0.35                       |
| SS5 12V  | 15mm                      | 0.45m          | •           | •                 | 3A            | 21                    | 30                    | 0.36                       |
| SS5 Dual | 15mm                      | 2m             | n/a         | •                 | 3A            | 18<br>(electric mode) | 25<br>(electric mode) | 0.36                       |

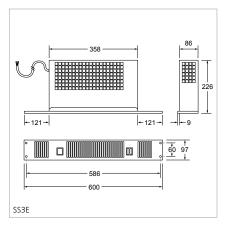
| Model  | Packed Wt (kg) | Product Codes |
|--|----------------|---------------|
| Hydronic                                     |                |               |
| SS3 (with Stainless Steel Grille) - No Hoses | 5              | HPSS10001     |
| SS5 (with Stainless Steel Grille)            | 6              | HPSS10002     |
| SS7 (with Stainless Steel Grille)            | 6              | HPSS10003     |
| SS9 (with Stainless Steel Grille)            | 7              | HPSS10004     |
| SS80 (with Stainless Steel Grille)           | 5              | HPSS10009     |
| SS5/12V (with Stainless Steel Grille)        | 6              | HPSS10005     |
| Hydronic/Electric                            |                |               |
| SS5/Dual (with Stainless Steel Grille)       | 6              | HPSS10076     |

| Accessories                                      | Colour                   | Product Codes |  |  |  |
|--|--------------------------|---------------|--|--|--|
| SS3 / SS5 / SS5 12V / SS7 Grille                 | Brown                    | HASS10101     |  |  |  |
| SS3 / SS5 / SS5 12V / SS7 Grille                 | Black                    | HASS10102     |  |  |  |
| SS3 / SS5 / SS5 12V / SS7 Grille                 | White                    | HASS10103     |  |  |  |
| SS3 / SS5 / SS5 12V / SS7 Grille                 | Chrome                   | HASS10104     |  |  |  |
| SS9 Grille                                       | Brown                    | HASS10111     |  |  |  |
| SS9 Grille                                       | Black                    | HASS10112     |  |  |  |
| SS9 Grille                                       | White                    | HASS10113     |  |  |  |
| SS9 Grille                                       | Chrome                   | HASS10114     |  |  |  |
| SS5 Dual Grille                                  | Brown                    | HASS10121     |  |  |  |
| SS5 Dual Grille                                  | Black                    | HASS10122     |  |  |  |
| SS5 Dual Grille                                  | White                    | HASS10123     |  |  |  |
| SS5 Dual Grille                                  | Chrome                   | HASS10124     |  |  |  |
| SS80 Grille                                      | Brown                    | HASS10141     |  |  |  |
| SS80 Grille                                      | Black                    | HASS10142     |  |  |  |
| SS80 Grille                                      | White                    | HASS10143     |  |  |  |
| SS80 Grille                                      | Chrome                   | HASS10165     |  |  |  |
| Remote Room Thermostat                           | HAGA95001                |               |  |  |  |
| Wall mounted control switch - SS3, SS5, SS7, SS9 | HASS10162                |               |  |  |  |
| 15mm Flexible Hoses (Pr)                         | 15mm Flexible Hoses (Pr) |               |  |  |  |

A highly energy efficient fan convector that fits neatly into the plinth of a kitchen unit and eliminates the need for conventional radiators **Applications**Kitchen
Utility







#### **Features**

- Makes room for extra kitchen storage, work space, or additional appliances
- More affordable than underfloor heating
- Get the flooring you want
- Discreet heating
- Easy to use
- Suitable for plinth heights from 80mm upwards
- Contemporary design with a wide choice of grille colours to suit interior decoration
- Two heat outputs and fan only option for instant heat and cool air circulation
- Low voltage bathroom model available for high humidity areas
- · Free five years parts and labour warranty

#### Motor

AC

#### **Finish**

SS2E and SS3E Fascia grilles: Zinc coated steel polyester, powder coated - metallic silver (referred to as Brushed Steel)

Finish: brown - RAL 8016, black - RAL 9005,

white - RAL 9010 and chrome SS80E Fascia grilles: Stainless steel

Finish: brown - RAL 8016, black - RAL 9005,

white - RAL 9010

#### Installation

Correct fascia grille opening must be cut to allow sufficient air intake SS2E and SS3E - 20mm clearance above unit required SS80E - 10mm clearance above unit required Model secured to plinth by two screws through fascia grille

#### Controls

Unit must be earthed

Overheat protection: thermal cut-out. Manual reset procedure: switch power off at unit or mains, wait 5 minutes, switch power on SS2E: three rocker switches On/off, 1kW, 2kW SS3E: Push on/off switch, two rockers switches 1kW, 2kW, 3kW

SS3E: Push on/off switch, two rockers switches 1kW, 2kW, 3kW SS80E: three rocker switches On/off, 0.6kW, 1.2kW

#### Accessories

Wall-mounted control switch (white) to suit SS2E

# Attachments

SS2E:

Grilles: brown - RAL 8016, black - RAL 9005, white - RAL 9010, chrome

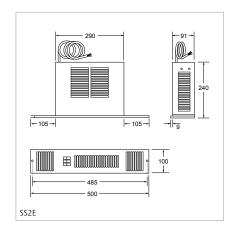
Alternative grilles for SS2E fit over the supplied grille SS80F

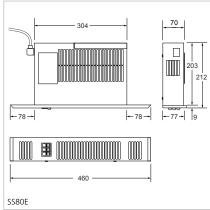
Grilles: brown - RAL 8016, black - RAL 9005, white - RAL 9010

#### Attachments



Brown, black, chrome or white fascia grilles





Outputs For other outputs, please see page 49

| Model | Mains<br>cable | Fused<br>spur | Total Power<br>Consumption (kW) |
|-------|----------------|---------------|---------------------------------|
| SS2E  | 2m             | 10A           | 1kW/2kW                         |
| SS3E  | 2m             | 13A           | 1kW/2kW/3kW                     |
| SS80E | 2m             | 10A           | 0.6kW/1.2kW                     |

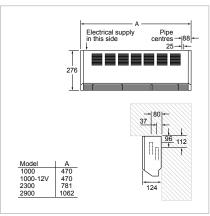
| Model                               | Packed Wt (kg)  | Product Codes |
|-------------------------------------|-----------------|---------------|
| Electric                            | racked vvt (kg) | 110ddct codes |
| SS2E (with stainless steel grille)  | 4               | HPSS10070     |
| SS2E (with white grille)            | 4               | HPSS10079     |
| SS3E (with stainless steel grille)  | 5               | HPSS10075     |
| SS3E (with white grille)            | 5               | HPSS10084     |
| SS80E (with stainless steel grille) | 4               | HPSS10073     |
| Attachments                         | Colour          |               |
| SS2E Grille                         | Brown           | HASS10131     |
| SS2E Grille                         | Black           | HASS10132     |
| SS2E Grille                         | Chrome          | HASS10134     |
| SS80E Grille                        | Brown           | HASS10151     |
| SS80E Grille                        | Black           | HASS10152     |
| SS80E Grille                        | White           | HASS10153     |
| SS80E Grille                        | Chrome          | HASS10164     |
| Accessories                         |                 |               |
| Wall mounted control switch - SS2E  | HASS10161       |               |
| 15mm Flexible Hoses (Pr)            |                 | HAGA95002     |

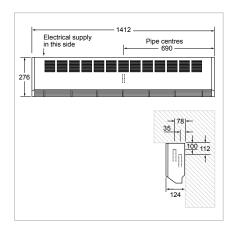
# Ecovector® High

The Ecovector Hydronic Low Voltage fan convectors provide effective and dependable heating for both small and large commercial areas, fitted unobtrusively above head height

**Applications**Bathroom
Conservatory







#### Features

- They work particularly well in shops and libraries, where lower wall space is limited
- Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Supplied as standard in white but casing can be supplied in any colour

# Motor

AC only

# Finish

Front casing: zinc-coated steel. Polyester powder-coated RAL 9010 Side panels: polymer eggshell white

# Heat Output For other heat output data please visit our website

|                    |                          | Heat Out       | out at 75°    | Heat Output at 45° |               |  |
|--------------------|--------------------------|----------------|---------------|--------------------|---------------|--|
| Model              | Room size<br>guide* (m³) | Normal<br>(kW) | Boost<br>(kW) | Normal<br>(kW)     | Boost<br>(kW) |  |
| Ecovector 1000     | 29                       | 1.0            | 1.2           | 0.5                | 0.6           |  |
| Ecovector 2300     | 66                       | 2.1            | 2.8           | 1.1                | 1.4           |  |
| Ecovector 2900     | -                        | 2.7            | 4.0           | 1.4                | 2.0           |  |
| Ecovector 4000     | -                        | 3.7            | 4.8           | 1.8                | 2.5           |  |
| Ecovector 1000-12V | 25                       | 1.0            | 1.2           | 0.5                | 0.5           |  |

#### Installation

Maximum installation height 2.1m (6'11") to underside No top or side clearance required Unit must be earthed (except model 1000-12V) Suitable for two-pipe central heating systems Patress box not supplied for transformer (model 1000-12V)

#### Commissioning

Check water is hot enough to activate the low temperature cut-out thermostat. The inclusion of an automatic air vent at the highest point is recommended to avoid possible air locks

#### Controls

Two rocker switches - normal/off/boost, heating/fan-only Low temperature cut out thermostat, set to energise fan at approximately 35°C

## Accessories

See matrix on page 70

| Model  | Packed<br>Wt (kg) | Product Codes |
|--|-------------------|---------------|
| Ecovector 1000                               | 7                 | HPEV50011     |
| Ecovector 2300                               | 11                | HPEV50012     |
| Ecovector 2900                               | 15                | HPEV50013     |
| Ecovector 4000                               | 18                | HPEV50014     |
| Ecovector 1000-12V                           | 8                 | HPEV50015     |
| Accessories                                  |                   |               |
| Remote (Wired) Room Thermostat               | HAGA95001         |               |
| Remote (Wired) Room Thermostat Siemens       | HACA33077         |               |
| Remote (Wireless) Room Thermostat Siemens RF | HACA33074         |               |
| Remote (Wired) Room Thermostat Siemens Tamp  | HAGA95004         |               |

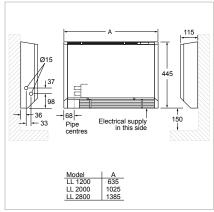
|                    |                           |                |                  |               | T-4-I D           | C                |                            | C               |                |                |          |
|--------------------|---------------------------|----------------|------------------|---------------|-------------------|------------------|----------------------------|-----------------|----------------|----------------|----------|
|                    |                           |                |                  |               | lotal Power       | Consumption      |                            | Souna           | Levels         |                |          |
| Model              | Flow & return connections | Mains<br>cable | Trans-<br>former | Fused<br>spur | Normal<br>(Watts) | Boost<br>(Watts) | Water Capacity<br>(Litres) | Normal<br>(dBA) | Boost<br>(dBA) | Casting colour | Fan-only |
| Ecovector 1000     | 15mm                      | 1.5m           | n/a              | 3A            | 20                | 25               | 0.28                       | 32              | 40             | white          | •        |
| Ecovector 2300     | 15mm                      | 1.5m           | n/a              | 3A            | 20                | 32               | 0.32                       | 34              | 50             | white          | •        |
| Ecovector 2900     | 15mm                      | 1.5m           | n/a              | 3A            | 33                | 50               | 0.52                       | 37              | 51             | white          | •        |
| Ecovector 4000     | 22mm                      | 1.5m           | n/a              | 3A            | 40                | 60               | 1.04                       | 39              | 52             | white          | •        |
| Ecovector 1000-12V | 15mm                      | 0.45m          | •                | 3A            | 20                | 25               | 0.28                       | 32              | 39             | white          |          |

<sup>\*</sup>Room sizes given in cubic metres for general guidance only based on normal heat output (80°C) for domestic applications - always calculate heat losses. Heat outputs tested in accordance with BS4856 using entering water temperature and 340 Vh (75gph) flow rate. Fan-only option operational only when central heating system is switched off. Sound levels measured at 1.5m

# Ecovector® Low

Ecovector Low Level fan convectors provide warmth from the floor upwards and are more energy efficient and effective than radiators Applications
Bathroom
Bedroom
Kitchen
Utility
Conservatory







#### Features

- The Ecovector can heat up a room more quickly than radiators, thereby reducing the amount of time your boiler or heat pump is running - making it extremely efficient and cost effective
- Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Ideal for new and existing developments, due to ease of installation, the Ecovector is available in a range of models to suit varying room sizes and heat output requirements
- Supplied as standard in white but casing can be supplied in any colour

# Motor

AC only

#### **Finish**

Front casing: zinc-coated steel. Polyester powder-coated RAL 9010 Side panels: polymer eggshell white

## Installation

Mounting bracket supplied Unit must be earthed Suitable for two-pipe central heating systems Minimum height above floor level 150mm Maximum height above floor level 500mm

#### Commissioning

Check water is not enough to activate the selectable low temperature cut-out thermostat

#### Control

Rocker switch - normal/off/boost Built-in room thermostat Low temperature cut-out thermostat set to energise fan at approximately 35°C

# **Heat Output** For other heat output data please visit our website

|                   |                          | Heat Out       | out at 75°    | Heat Output at 45° |               |  |
|-------------------|--------------------------|----------------|---------------|--------------------|---------------|--|
| Model             | Room size<br>guide* (m³) | Normal<br>(kW) | Boost<br>(kW) | Normal<br>(KW)     | Boost<br>(KW) |  |
| Ecovector LL 1200 | 34                       | 1.1            | 1.4           | 0.5                | 0.6           |  |
| Ecovector LL 2000 | 57                       | 1.9            | 2.4           | 0.9                | 1.1           |  |
| Ecovector LL 2800 | 80                       | 2.6            | 3.2           | 1.2                | 1.5           |  |

| Model             | Packed Wt (kg) | Product Codes |
|-------------------|----------------|---------------|
| Ecovector LL 1200 | 12             | HPEV50001     |
| Ecovector LL 2000 | 17             | HPEV50002     |
| Ecovector LL 2800 | 24             | HPEV50003     |

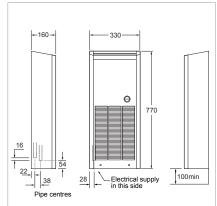
|                   |                           |                | Total Power Consumption |               | Sound Levels      |                  |                            |                 |                |                |          |
|-------------------|---------------------------|----------------|-------------------------|---------------|-------------------|------------------|----------------------------|-----------------|----------------|----------------|----------|
| Model             | Flow & return connections | Mains<br>cable | Trans-<br>former        | Fused<br>spur | Normal<br>(Watts) | Boost<br>(Watts) | Water Capacity<br>(Litres) | Normal<br>(dBA) | Boost<br>(dBA) | Casting colour | Fan-only |
| Ecovector LL 1200 | 15mm                      | 1.5m           | n/a                     | 3A            | 17                | 21               | 0.29                       | 32              | 38             | white          | n/a      |
| Ecovector LL 2000 | 15mm                      | 1.5m           | n/a                     | 3A            | 26                | 55               | 0.58                       | 35              | 40             | white          | n/a      |
| Ecovector LL 2800 | 15mm                      | 1.5m           | n/a                     | 3A            | 43                | 76               | 0.83                       | 37              | 42             | white          | n/a      |

<sup>\*</sup>Room sizes given in cubic metres for general guidance only based on normal heat output (80°C) for domestic applications - always calculate heat losses. Heat outputs tested in accordance with BS4856 using entering water temperature and 340 l/h (75gph) flow rate. Sound levels measured at 1.5m.

# Ecovector® Vertical

Ideal for hallways, corridors, alcoves and other places where space is limited. Ecovector can heat up a room more quickly than radiators, thereby reducing the amount of time your boiler or heat pump is running making it extremely efficient and cost effective **Applications**Hall/landing
Study







#### Features

- Ideal for new and existing building developments
- Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Supplied as standard in white but casing can be supplied in any colour

# Motor

AC only

#### Finish

Front casing and side panels: zinc-coated steel Polyester powder-coated RAL 9010

#### Installation

Mounting bracket supplied Unit must be earthed Suitable for two-pipe central heating systems Minimum height above floor level 150mm, maximum height above floor level 500mm

#### Commissioning

Check water is not enough to activate the selectable low temperature cut-out thermostat

#### Controls

Rocker switch - normal/off/boost Low temperature cut-out thermostat set to energise fan at approximately 35°C

Wireless wall mounted thermostat included with this product

#### Heat Output For other heat output data please visit our website

|                   |                          | Heat Out       | out at 75°    | Heat Out       | out at 45°    |
|-------------------|--------------------------|----------------|---------------|----------------|---------------|
| Model             | Room size<br>guide* (m³) | Normal<br>(kW) | Boost<br>(kW) | Normal<br>(kW) | Boost<br>(kW) |
| Ecovector VE 2500 | 71                       | 2.3            | 2.4           | 1.1            | 1.1           |

| Model             | Packed Wt (kg) | Product Codes |
|-------------------|----------------|---------------|
| Ecovector VE 2500 | 7              | HPEV50021     |

|                   |                           |                | Total Power Consumption |               |                   | Sound            |                            |                 |                |                |          |
|-------------------|---------------------------|----------------|-------------------------|---------------|-------------------|------------------|----------------------------|-----------------|----------------|----------------|----------|
| Model             | Flow & return connections | Mains<br>cable | Trans-<br>former        | Fused<br>spur | Normal<br>(Watts) | Boost<br>(Watts) | Water Capacity<br>(Litres) | Normal<br>(dBA) | Boost<br>(dBA) | Casting colour | Fan-only |
| Ecovector VE 2500 | 15mm                      | 1.5m           | n/a                     | 3A            | 28                | 36               | 0.75                       | 36              | 39             | white          | n/a      |

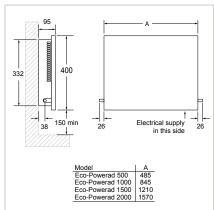
<sup>\*</sup>Room sizes given in cubic metres for general guidance only based on normal heat output (80°C) for domestic applications - always calculate heat losses. Heat outputs tested in accordance with BS4856 using entering water temperature and 340 l/h (75gph) flow rate. Fan-only option operational only when central heating system is switched off. Sound levels measured at 1.5m.

# **Eco-Powerad®**

The Eco-Powerad is the fan convector of the future - energy efficient, responsive and suitable for installation within most wet central heating systems, driven by either boilers or low temperature renewable technology

**Applications** Bathroom Bedroom Study Living/dining room Kitchen Utility Conservatory







#### **Features**

- Compact, with smooth lines to achieve visual simplicity, the Eco-Powerad also features low surface temperature casing for complete safety and possesses a very low operating sound between 28 and 32 decibels
- · Compatible with most types of wet central heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps
- Supplied as standard in white but casing can be supplied in any colour

# Motor

AC only

# **Finish**

Front casing: zinc coated steel Polyester powder-coated RAL 9010

#### Installation

Mounting bracket supplied Unit must be earthed Suitable for two-pipe central heating systems Minimum height above floor level 150mm Maximum height above floor level 500mm

#### Commissioning

Check water is hot enough to activate the low temperature cut-out thermostat. Ensure system is balanced for even heat distribution

#### Control

Low temperature cut-out thermostat, set to energise fan at approximately 35°C

Suitable for thermostatic radiator valves (TRV) - not supplied Rocker switch - normal/low

#### Heat Output For other heat output data please visit our website

| Model            | Room size<br>guide* (m³) | Heat Output<br>at 75° (kW) | Heat Output<br>at 45° (kW) |
|------------------|--------------------------|----------------------------|----------------------------|
| Eco-Powerad 500  | 14                       | 0.8                        | 0.4                        |
| Eco-Powerad 1000 | 29                       | 2.1                        | 0.8                        |
| Eco-Powerad 1500 | 43                       | 2.4                        | 1.2                        |
| Eco-Powerad 2000 | 57                       | 3.5                        | 1.7                        |

| Model            | Packed Wt (kg) | Product Codes |
|------------------|----------------|---------------|
| Eco-Powerad 500  | 6              | HPEP52001     |
| Eco-Powerad 1000 | 10             | HPEP52002     |
| Eco-Powerad 1500 | 14             | HPEP52003     |
| Eco-Powerad 2000 | 18             | HPEP52004     |

| Model            | Flow & return connections | Mains cable | Transformer | Fused<br>spur | Total Power<br>Consumption (Watts) | Water Capacity<br>(Litres) | Sound Levels<br>(dBA) | Casting colour |
|------------------|---------------------------|-------------|-------------|---------------|------------------------------------|----------------------------|-----------------------|----------------|
| Eco-Powerad 500  | 15mm                      | 2m          | n/a         | 3A            | 15                                 | 0.17                       | 28                    | white          |
| Eco-Powerad 1000 | 15mm                      | 2m          | n/a         | 3A            | 18                                 | 0.28                       | 30                    | white          |
| Eco-Powerad 1500 | 15mm                      | 2m          | n/a         | 3A            | 33                                 | 0.44                       | 31                    | white          |
| Eco-Powerad 2000 | 15mm                      | 2m          | n/a         | 3A            | 36                                 | 0.55                       | 32                    | white          |

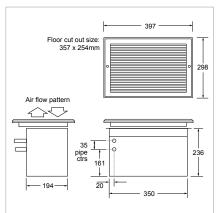
<sup>\*</sup>Room sizes given in cubic metres for general guidance only based on normal heat output (50°C) for domestic applications - always calculate heat losses. Heat outputs tested in accordance with BS4856 using entering water temperature and 340 l/h (75gph) flow rate At inlet water temperatures of 75°C and below, all Eco-Powerad models are classified as LST (low surface temperature) appliances.

# Spacemaker

A fan convector that installs flush with the floor, providing efficient and effective heat at low level

Applications
Hall
Kitchen
Utility
Conservatory







## **Features**

- Perfect for places in the home where space is particularly limited
- Ideal for spaces such as entrance halls, lobbies, circulation areas and applications where wall space is limited

#### Motor

AC only

#### **Finish**

Anodised aluminium grille with removable centre section

#### Installation

Installs between floor joists or purpose made trenches in concrete floors

Air intake and discharge through grille

Unit must be earthed

Suitable for two-pipe central heating systems only

#### Commissioning

Check water temperature is hot enough to activate low temperature cut-out (LTC). Vent screw accessible through grille

#### Controls

Rocker switch - normal/off/boost, below grille Low temperature cut-out thermostat set to energise fan at approx. 35°C

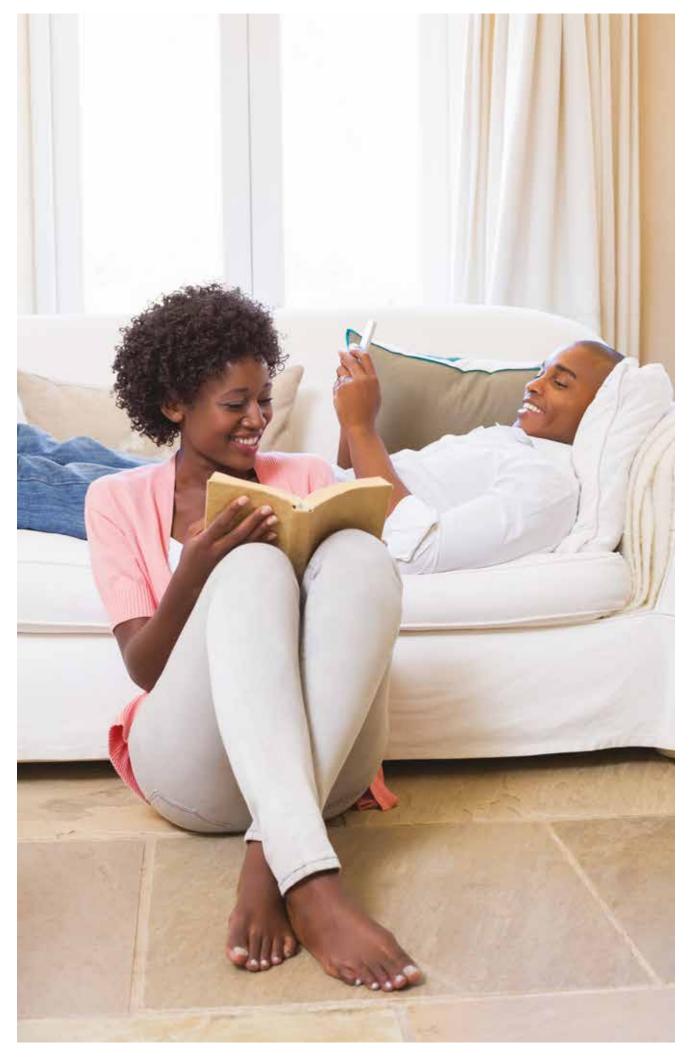
# **Heat Output** For other heat output data please visit our website

|                 |                          | Heat Out       | out at 75°    | Heat Outp      | out at 45°    |
|-----------------|--------------------------|----------------|---------------|----------------|---------------|
| Model           | Room size<br>guide* (m³) | Normal<br>(kW) | Boost<br>(kW) | Normal<br>(kW) | Boost<br>(kW) |
| Spacemaker SST8 | 46                       | 1.5            | 2.1           | 0.7            | 1.0           |

| Model           | Packed Wt (kg) | Product Codes |
|-----------------|----------------|---------------|
| Spacemaker SST8 | 7              | HPSM12001     |

| Model           |                           |                |                  | Total Power Consumption |                   |                  | Sound Levels               |                 |                |                    |          |
|-----------------|---------------------------|----------------|------------------|-------------------------|-------------------|------------------|----------------------------|-----------------|----------------|--------------------|----------|
|                 | Flow & return connections | Mains<br>cable | Trans-<br>former | Fused<br>spur           | Normal<br>(Watts) | Boost<br>(Watts) | Water Capacity<br>(Litres) | Normal<br>(dBA) | Boost<br>(dBA) | Casting colour     | Fan-only |
| Spacemaker SST8 | 15mm                      | 1.5m           | n/a              | ЗА                      | 20                | 30               | 0.27                       | 32              | 39             | Anodised aluminium | n/a      |

<sup>\*</sup>Room sizes given in cubic metres for general guidance only based on normal heat output (80°C) for domestic applications - always calculate heat losses. Heat outputs tested in accordance with BS4856 using entering water temperature and 340 l/h (75gph) flow rate. Sound levels measured at 1.5m.



**Applications**Study
Conservatory

Provides gentle, discreet and efficient low-level warmth and is the ideal heating solution for areas where wall space is limited - rooms such as loft conversions and new-builds





#### **Features**

- Simple to install along the skirting in any room, Sureline is an
  efficient natural convector that provides discreet heating
- Supplied as standard in white but casing can be supplied in any colour

# Finish

Outer casing 0.7mm zinc coated steel Polyester powder-coated RAL 9010 Each length includes casing, element, backplate and joining strip. Casing only includes casing, backplate and joining strip

#### Installation

Minimum clearance above floor 50mm Flow and return connections 22mm copper Designed for system pressures up to 10 bar Suitable for two-pipe central heating systems only

#### **Attachments**

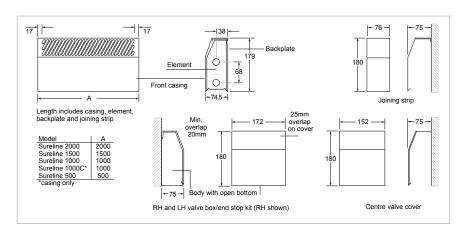
Casing only (1000mm)
LH valve box/end cap kit
RH valve box/end cap kit
Centre valve cover
90° internal cover
90° external cover
135° internal cover
135° external cover
Finger guard 500 (500mm)
Finger guard 1000 (1000mm)
Element (1000mm)

# **Customised requirements**

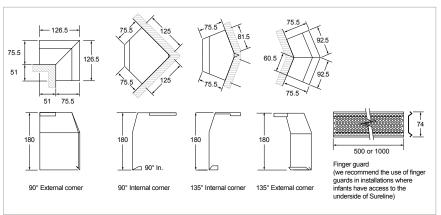
We are able to offer casings painted in any colour. Price and availability will be confirmed at the time of order

# **Heat Output** For other heat output data please visit our website

|                            |                        | Btu/h/m @ average water temperature |      |      |      | W/m @ average water temperature |      |      |      |      |      |      |      |
|----------------------------|------------------------|-------------------------------------|------|------|------|---------------------------------|------|------|------|------|------|------|------|
|                            | Flow Rate<br>L/h (G/h) | 50°C                                | 55°C | 60°C | 65°C | 70°C                            | 75°C | 50°C | 55°C | 60°C | 65°C | 70°C | 75°C |
| Two supplies - Parallel    | 920 (200)              | 1310                                | 1570 | 1820 | 2070 | 2300                            | 2560 | 380  | 460  | 530  | 610  | 670  | 750  |
| Bottom supply - Top return | 920 (200)              | 1030                                | 1250 | 1460 | 1710 | 1920                            | 2140 | 300  | 370  | 430  | 500  | 560  | 630  |







| Model         | Packed Wt (kg) | Product Codes |
|---------------|----------------|---------------|
| Sureline 500  | 5              | HPSL30001     |
| Sureline 1000 | 7              | HPSL30002     |
| Sureline 1500 | 10             | HPSL30003     |
| Sureline 2000 | 14             | HPSL30004     |

| Attachments              | Product Codes |
|--------------------------|---------------|
| Casing only              | HASL30101     |
| LH valve box/end cap kit | HASL30102     |
| RH valve box/end cap kit | HASL30103     |
| Centre valve cover       | HASL30104     |
| 90° internal corner      | HASL30105     |
| 90° external corner      | HASL30106     |
| 135° internal corner     | HASL30107     |
| 135° external corner     | HASL30108     |
| Finger Guard 500         | HASL30109     |
| Finger Guard 1000        | HASL30110     |
| Element only             | HASL30111     |

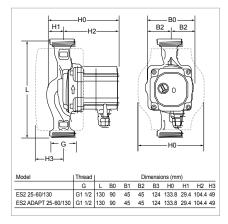
# **Circulating Pump**

Compact high efficiency circulators for domestic and light commercial heating applications

Applications
Domestic and
commercial hot
water heating
systems







#### **Features**

- · Compact design
- Very high degree of efficiency due to permanent magnets motor
- ERP compliant
- LED provides information about the circulator's operation for easy installation and use
  - Auto-unblock feature
  - Air detection system
- Min-Max mode: allows you to set the exact working point across the range
- Wet rotor type because all rotating parts are immersed in the fluid being pumped. The pumped fluid cools and lubricates the motor and rotating parts therefore they do not have a packing seal or mechanical seal
- INVERTER TECH technology allows the circulator to change rotating speed. The microcontroller built in the electronic control system contains a fully automatic speed control system able to adapt to the changing needs of the system. The circulator delivers the performance you need with minimum energy consumption

# ES2 Adapt 60

- activeADAPT mode for easier and faster installations
- Effective performance tuning in constant differential pressure (Δp-c), proportional differential pressure (Δp-v) or fixed speed (min-max)
- Thermal insulation shell included

| Model                   | Packed Wt (kg) | Product Codes |
|-------------------------|----------------|---------------|
| ES2 - 25/60 - 130       | 1.8            | PPES70001     |
| ES2 - Adapt 25/60 - 130 | 1.8            | PPES70002     |

# Accessories

# Glossary

### Remote (Wired) Room Thermostat

This accessory measures room temperature and switches off the heater when the set temperature is reached. This thermostat is hard wired and connects directly into either the heater's terminal block or power supply.

#### **Remote (Wired) Room Thermostat Siemens**

This accessory measures room temperature and switches off the heater when the set temperature is reached. This thermostat is hard wired and connects directly into either the heater's terminal block or power supply.

#### Remote (Wireless) Room Thermostat Siemens RF

This thermostat has two parts, a base station and a wall mounted user control. The base station is usually factory fitted into a unit, with the user control packaged separately, but within the products transportation box. The controller is operated by battery and should be positioned appropriately by the installer.

## Remote (Wired) Room Thermostat Siemens Tamper Proof

This accessory measures room temperature and switches off the heater when the set temperature is reached. This thermostat is hard wired and connects directly into either the heater's terminal block or power supply. The thermostat has a secure cover that deters unwanted adjustment of the room temperature set point.

# Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)

This accessory measures room temperature and switches off the heater when the set temperature is reached. Additionally, it has the ability to control the fan speed on our EC products. This thermostat is hard wired and connects directly into either the heater's terminal block. Normally, the thermostat would be ordered as part of a package that includes an EC Caspian heater and is prepared for use in our factory.

# Wall mounted control switch

Allows the product to be controlled from a switch mounted on the wall rather than the product. Linking to the heater is made by replacing the existing switch connections with the connections on the control switch.

#### Flexible hoses

Flexible connections are a convenient way of connecting a heater into your system. They will provide an easy to achieve connection from your first-fix pipe work. In addition they will provide for a level of expansion and contraction in rigid pipe work and mitigating possible sound and vibration transmission.

# Adjustable low temperature cut-out (LTC)

This cut out device allows the user to set the water temperature (between 30°C and 90°C) at which the product will start to emit heat. It is more accurate than the standard fitted LTC (set at 35°C) and enables more flexible use with both low system temperature heat pumps and higher system temperature boilers including biomass that can produce 80°C flow temperatures.

#### Plinth

The optional plinth creates an attractive floor standing unit and also conceals the pipe work from view. This can also be invaluable where it is necessary to prevent contact with heating pipes by vulnerable groups. A plinth can also add an additional level of protection from the ingress of dust on hard flooring surfaces.

## Caspian EC linking kit (EC only)

The linking kit allows for the creation of master and slave units (up to four units), by allowing a 0-10 V signal to be transmitted through its cabling. This allows one fan speed controller, or room thermostat to control multiple units. It can also be used to control multiple units by means of a BMS.

# External control harness (EC only)

This accessory is generally used to permit a remote manual speed adjustment on an EC variant Caspian. It is possible to provide speed control to a master unit and to then utilise the EC linking kit to link to any slave units.

# **Proportional Heat Output Controller (PHOC)**

This accessory controls the fan speed and hence the heat output of the unit. These controls are available in integral (low level units) and in a remote format (high level units). PHOC's are available in two standard temperature settings, either 15 - 25°C, or 11 - 21°C. When the room temperature is at or below the lowest set point (11°C or 15°C) the fan speed will run at its maximum speed to give fastest heat up time. As the room temperature increases towards the upper set point (21°C or 25°C), the fan speed modulates downwards towards a minimum level.

#### Thermostat T1

This is a factory fitted air thermostat suited to both AC and EC products installed at low level. This control provides a tamperproof room temperature control and is ideal for use in public buildings.

# Thermostat T2 (AC only)

A T2 thermostat is used to control the fan speed on low level AC products only. The objective in using this control is to facilitate a faster heat up period in a room. An installer or commissioning engineer can determine the temperature set point at which the fan speed is changed from high to low. A typical set point would be 16°C, where temperatures below this level would trigger a higher fan speed.

# Thermostat and Auto-Speed control (T1/T2)

This accessory serves two purposes. Firstly, it becomes an integral room thermostat for the unit providing localised control and secondly, the heat output will be changed according to the temperature in the room. For example, the fan may work on full power up to 18°C and above this temperature move to a lower fan speed. Normally the fan speeds used will be medium and low.

# **Accessories Matrix**

# Easy guide to accessories

|   |                  |                  | Products |         |  |
|---|------------------|------------------|----------|---------|--|
| Control   | Model Ref        | Product<br>Codes | Caspia   | n SL/FF |  |
|   |                  |                  | EC       | AC      |  |
| Adjustable low temperature cut-out (all Caspian models)                               | ALTC3            | HACA33001        | 1        | 1       |  |
| Thermostat T1 (low level models with AC or EC Motors)                                 | TCAS T1          | HACA33002        | 1        | 1       |  |
| Thermostat T2 (low level models with AC Motors)                                       | TCAS T2          | HACA33036        |          | 1       |  |
| Thermostat (T1) & auto-speed Control (T2) (Low level models with AC motors)           | TCAS T1-T2       | HACA33003        |          | 1       |  |
| External Control Harness (models with EC motors)                                      | EXTCH            | HHCA33004        | 1        |         |  |
| Caspian EC linking kit (Alt to EXTCH)   | CASPWCK          | HACA33068        | 1        |         |  |
| Proportional Heat Output Controller (models with EC motors) 15°-25°C (low level only) | PHOC 15-25       | HACA33005        | 1        |         |  |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 15°-25°C    | PHOC 15-25 RS    | HACA33037        | 1        |         |  |
| Proportional Heat Output Controller (models with EC motors) 11°-21°C (low level only) | PHOC 11-21       | HACA33075        | 1        |         |  |
| Proportional Heat Output Controller (models with EC motors) Remote Sensor 11°-21°C    | PHOC 11-21 RS    | HACA33076        | 1        |         |  |
| Remote (Wired) Room Thermostat  | 08-0826          | HAGA95001        | 1        | 1       |  |
| Remote (Wired) Room Thermostat Siemens  | RAA21-GB 24-240V | HACA33077        | 1        | 1       |  |
| Remote (Wireless) Room Thermostat Siemens RF  | RDD 100.1 RFS    | HACA33074        | 1        | 1       |  |
| Remote (Wired) Room Thermostat Siemens Tamper Proof                                   | RAA11            | HAGA95004        | 1        | 1       |  |
| Remote (Wired) Room Thermostat Siemens Speed and Temperature Control (EC only)        | RDG160T          | HACA33078        | 1        |         |  |
|   |                  |                  |          |         |  |
| 22mm flexible hoses (pair)  | CAS22FH          | HAGA95003        | 1        | 1       |  |
| Integral, surface mounted and remote switching options                                |                  | *                | 1        | /       |  |
| Factory fitted controls as standard   |                  | *                | 1        | 1       |  |
| Bespoke RAL paint finishes  |                  | *                | 1        | 1       |  |
| Antibacterial and antimicrobial paint finishes  |                  | *                | 1        | /       |  |

Note: \* Please contact Smith's for further information

| Caspia   | n UV/TT | Caspia | an EXT | Caspia | in UVC | Caspian LST | Caspian | Skyline | Ecovector |
|----------|---------|--------|--------|--------|--------|-------------|---------|---------|-----------|
| EC       | AC      | EC     | AC     | EC     | AC     | EC          | EC      | AC      | High/low  |
| <b>✓</b> | ✓       | 1      | 1      | 1      | ✓      |             | ✓       | ✓       |           |
|          | ✓       | 1      | 1      | 1      | ✓      |             |         |         |           |
|          | 1       |        | 1      |        | ✓      |             |         |         |           |
|          | 1       |        | 1      |        | ✓      |             |         |         |           |
|          |         | 1      |        | 1      |        |             | ✓       |         |           |
|          |         | 1      |        | 1      |        |             | ✓       |         |           |
|          |         | 1      |        | 1      |        |             |         |         |           |
|          |         | 1      |        | 1      |        |             | ✓       |         |           |
|          |         | 1      |        | 1      |        |             |         |         |           |
|          |         | 1      |        | 1      |        |             | ✓       |         |           |
|          | ✓       | 1      | 1      | 1      | ✓      |             | ✓       | ✓       | 1         |
|          | 1       | 1      | 1      | 1      | ✓      |             | ✓       | ✓       | 1         |
|          | ✓       | 1      | 1      | 1      | ✓      |             | ✓       | ✓       | 1         |
| <b>✓</b> | ✓       | 1      | 1      | 1      | ✓      |             | ✓       | ✓       | 1         |
| <b>✓</b> |         | 1      |        | 1      |        |             | ✓       |         |           |
|          |         |        |        |        |        |             |         |         |           |
| <b>✓</b> | 1       | 1      | 1      | 1      | ✓      | 1           | ✓       | ✓       |           |
| <b>✓</b> | ✓       | 1      | 1      | 1      | ✓      |             | ✓       | ✓       |           |
| <b>✓</b> | ✓       | 1      | 1      | 1      | ✓      | 1           | ✓       | ✓       |           |
| <b>✓</b> | ✓       | 1      | 1      | 1      | ✓      | <b>✓</b>    |         |         |           |
| <b>✓</b> | /       | 1      | 1      | 1      | 1      | 1           |         |         |           |









# Happy to help

Smith's Environmental Products Ltd is one of the leading manufacturers of heating and cooling products in the UK. We are committed to achieving the highest standards and our faith is supported by a free five year parts and labour guarantee with every product. Our customer service is second to none and we are happy to offer any help and guidance that you might need.

#### **Stockists**

All products are available nationally from Builders' Merchants, Plumbers' Merchants, Heating Equipment Distributors and Kitchen Equipment Distributors. In the event of difficulty, please contact us or visit our website SmithsEP.co.uk for details of your nearest stockist.

## Information and advice

Full technical specifications and list prices is available to download from our website or in hard copy from our office. Also available on our website are price lists, individual product data sheets, installation & user guides, where to buy, who to contact and a media centre.

Alternatively contact our office 9.00am to 5.00pm Monday to Friday.

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To view the full product information download the datasheet at: www.SmithsEP.co.uk

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For the Republic of Ireland, contact MT Agencies on **01 864 3363** 

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