Smith's
A Swan Group Company

Caspian® Range

A range of fan convectors suitable for all kinds of commercial applications

Why Choose 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 has grown to become the leading supplier of domestic and light commercial fan-assisted hydronic heat emitters. The vast majority of our product range is manufactured from raw materials at our Essex manufacturing facility. Occasionally we source complementary products from other specialist partners to provide the best overall solutions for our customers. The company is the UK's market leader and has significant shares of both the North American and European markets. Smith's Environmental Products is a member of The Swan Group.

In the early years we developed the Smith's Space Saver, the UK's number one plinth heater, and the business quickly became established in heating and plumbing. Other fan convectors followed and the very first Caspian commercial fan convector was launched in 2007. Since 2007 we have introduced several new innovative heating and cooling solutions using fan convector technologies. In 2020 we launched Smart Control which is a control system which integrates the most commonly sought-after control features into one unit. It is app controlled and enables the control of the heating at several remote sites.

The business has grown from strength to strength and today we offer versatile heating and cooling solutions based on fan convector technology to all commercial specifiers from architects and consultants, to major building engineering services companies.

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.

Quality and the environment

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 the exacting standards of national approval boards such as UL, CSA and Kema.

Smith's is both ISO 9001 (2015) and ISO 14001 accredited. These accreditations are internationally recognised and demonstrate that Smith's is a responsible and forward-thinking organisation committed to achieving and maintaining the highest organisational standards.

Product performance testing

To ensure that our products meet the strictest requirements of our demanding customers we work closely with recognised test houses. We work with BSRIA to verify our products to demonstrate that they perform as they are designed to do. We also work with acoustic experts SRL Technical Services to ensure that the noise performance of our products achieve our customers' requirements. This gives our customers the reassurance that they can specify Smith's products with confidence.

Achilles Building Confidence Scheme

Smith's is a member of the Achilles Building Confidence Scheme. The scheme is designed to give confidence to suppliers in the construction industry that members have achieved the required standard in terms of production quality, health and safety standards, training and development, environmental procedures and processes as well as Corporate Social Responsibility. Membership of this scheme is a requirement of many of the major Main Contractors and suppliers in Construction Industry Supply Chain.

Renewable technology solutions

The debate and discussion about renewable technology continues to dominate the energy and climate landscape and with heat pumps becoming more viable as alternatives to fossil-fuel powered boilers as the principal heat generator in both domestic and commercial applications Smith's fan convector technology provides an efficient solution for heating buildings.

Inherent in the heat pump's design is that the smaller the temperature between the heat source pump 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.

Our products are manufactured in the UK, including the heating/cooling coils, ensuring we can respond quickly to customer demands

ISO 9001 and 14001 accredited

Products are independently tested and verified by BSRIA and SRL Technical services

Compatible with renewable energy sources

Free parts and labour guarantee

Caspian® Range

Fan convectors provide a versatile, energy efficient alternative to radiators and underfloor heating; and are just as easy to install

They are compatible with every type of heat generator; they can be paired with everything from condensing gas and oil powered boilers to renewable technology like ground or air source heat pumps. In fact, fan convectors are especially compatible with ground source and air source heat pumps because they can work with flow temperatures as low as 40°C.

Using forced convection, fan convectors ensure that rooms heat up more quickly, delivering a more even temperature spread, than heat emitters using natural convection. They can be installed and positioned to suit each room's size and shape, rather than having to obey the installation rules that govern radiators.

This ability to deliver heat effectively and efficiently makes them attractive when renovating buildings or specifying heating for new build projects. Unlike radiators, which can be bulky and hot to touch, fan convectors are compact, lightweight, and have very low surface temperatures. They are completely safe; ideal for rooms or buildings regularly used by children, the elderly or other vulnerable groups.

Finally, fan convectors only use 5% of the water content of an equivalent output radiator, ensuring they are far more responsive to people's personal temperature preferences, as well as ever-changing daily weather patterns. In short, as part of a commercial heating system, fan convectors play an important role in providing versatility, more-instant heat, better use of space and greater control for end-users in the commercial market.

NEW! The Smith's Smart Control has been developed to integrate several of the most commonly sought-after control features into one control unit and more (see page 6).
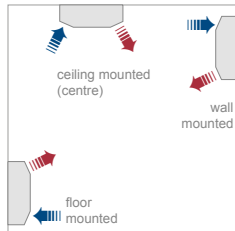
A quick overview of the Caspian range and mounting options available for all of your application needs

Caspian Commercial Range
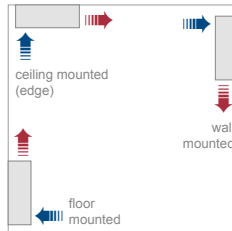
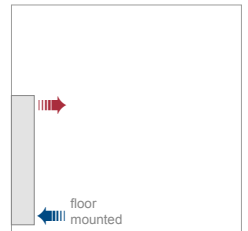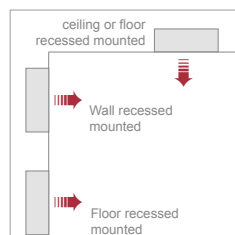| CASPIAN UV | p12 | CASPIAN FF | p13 | CASPIAN SL | p14 | CASPIAN TT | p15 | CASPIAN EXT | p16 |
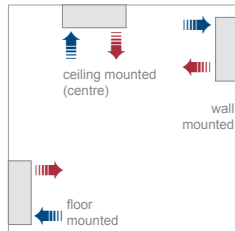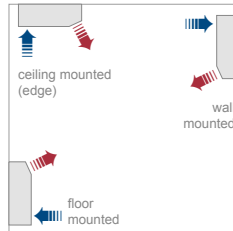
Caspian Smart Control

CASPIAN SMART CONTROL p6
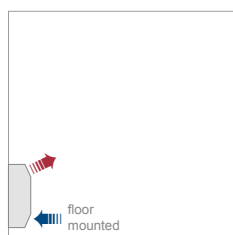
Caspian Concealed

CASPIAN UVC p18

Caspian Low Surface Temperature

CASPIAN LST p22

Caspian Skyline Ceiling Recessed

CASPIAN SKYLINE p24
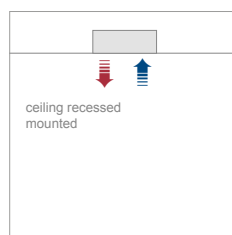
Caspian Skyline E Ceiling Recessed

CASPIAN SKYLINE E p26
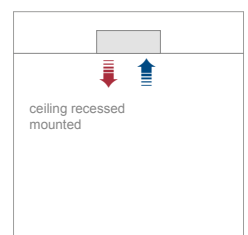
Caspian® - Smart Controls

The Smith's Smart Control has been developed to integrate several of the most commonly sought-after control features into one control unit and more.

At the basic level it offers room temperature control and additionally offers a range of time controlling features too, making it perfect for buildings that serve a varied community demand.

The Smart Control can automatically control the fan speed of the Caspian fan convector, adjusting it in relation to the air temperature in the room providing a fast heat up period when required, and the quietest possible operation during occupied periods. There is a manual override facility too.

Suitable for schools, churches, village halls, community centres, offices, medical practices, retail outlets, restaurants, hotels and sports centres.

Smart Control features a summer mode where air circulation can be achieved without heat in summer months.

Heat mode

Cool mode

The control interface unit can be:

wall mounted (remote) for convenience, for example, where the heater is at high level

flush mounted in the product fascia

internally mounted (tamper-proof)

Thermostat Features

- Control of 2/4 pipe fan coils
- Multiple configurations
- Large LCD
- Maintain room temperature via built in temperature sensor, or external room temperature/return air temperature sensor
- Programming options: 5+2 (5 days same +2days same); individual day every week; all 7 days same
- ECO mode
- Fan speed Hi/Mi/Lo control (automatic or manual)
- Advanced fan control functions (fan start/stop, delay, fan continuously running in manual mode, or depending on heating/cooling demand)

- Auto Frost protection
- Configurable inputs (occupancy sensor or temperature)
- Installer settings
- Span or TPI temperature control algorithm
- Local or remote control by Smart Home App
- Wireless software update by UG600
- Dirty filter notification
- User settings are saved and restored after power break
- Button lock function

More advanced capabilities

The thermostats can be used as standalone localised controls, or with the integration of our hub control multiple thermostats using our ZigBee platform and controlled via app over the internet. This level of control is cost effective and is far more economical than using a full BMS system. The control system with the app is very configurable to the needs of the building users and can integrate with many other smart features, like boiler receivers, door, and window sensors. A key advantage to many community buildings is the ability to control the buildings' services remotely and the app makes this all possible.

Smith's Smart Control can become a part of a much wider control system in a building. It is possible to integrate wireless relays to control other appliances like boilers, along with proximity sensors to control lighting.

The system can be expanded in many ways and the app can interact with other apps using IFTTT.

The only limit is your creativity and willingness to embrace new technologies.

Technical Support

It can be difficult to assess the requirements for a buildings control strategy, so Smith's Technical Support Team will help guide you through, with proposals for your project.

Where drawings can be provided, a desktop exercise can be undertaken to specify the required components, but we are happy to attend site too.

We have taken great care to ensure we have partnered with the best possible providers and have undertaken various site tests in public buildings.

Smith's can bring experience to your project and assist in conveying the many benefits to your customers.

Caspian® - Smart Controls

The Smith's Smart Control has been developed to integrate several of the most commonly sought-after control features into one control unit and more.

Ordering Guide

Description	Product Codes
SL60 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32008
SL90 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32009
SL120 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32010
SL150 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32011
SL180 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32012
FF60 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32013
FF90 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32014
FF120 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32015
FF150 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32016
FF180 EC C/W FACIA MOUNTED SMART CONTROL	HPCA32017
UV60 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32018
UV90 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32019
UV120 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32020
UV150 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32021
UV180 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32022
SL60 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32023
SL90 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32024
SL120 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32025
SL150 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32026
SL180 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32027
FF60 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32028
FF90 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32029
FF120 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32030
FF150 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32031
FF180 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32032
EXT60 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32033
EXT90 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32034
EXT120 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32035
EXT150 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32036
EXT180 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32037
TT60 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32059
TT90 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32060
TT120 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32061
TT150 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32062
TT180 EC C/W INTERNAL TAMPROOF SMART CONTROL	HPCA32063

Description	Product Codes
UV60 EC C/W REMOTE SMART CONTROL	HPCA32038
UV90 EC C/W REMOTE SMART CONTROL	HPCA32039
UV120 EC C/W REMOTE SMART CONTROL	HPCA32040
UV150 EC C/W REMOTE SMART CONTROL	HPCA32041
UV180 EC C/W REMOTE SMART CONTROL	HPCA32042
SL60 EC C/W REMOTE SMART CONTROL	HPCA32043
SL90 EC C/W REMOTE SMART CONTROL	HPCA32044
SL120 EC C/W REMOTE SMART CONTROL	HPCA32045
SL150 EC C/W REMOTE SMART CONTROL	HPCA32046
SL180 EC C/W REMOTE SMART CONTROL	HPCA32047
FF60 EC C/W REMOTE SMART CONTROL	HPCA32048
FF90 EC C/W REMOTE SMART CONTROL	HPCA32049
FF120 EC C/W REMOTE SMART CONTROL	HPCA32050
FF150 EC C/W REMOTE SMART CONTROL	HPCA32051
FF180 EC C/W REMOTE SMART CONTROL	HPCA32052
EXT60 EC C/W REMOTE SMART CONTROL	HPCA32053
EXT90 EC C/W REMOTE SMART CONTROL	HPCA32054
EXT120 EC C/W REMOTE SMART CONTROL	HPCA32055
EXT150 EC C/W REMOTE SMART CONTROL	HPCA32056
EXT180 EC C/W REMOTE SMART CONTROL	HPCA32057
TT60 EC C/W REMOTE SMART CONTROL	HPCA32064
TT90 EC C/W REMOTE SMART CONTROL	HPCA32065
TT120 EC C/W REMOTE SMART CONTROL	HPCA32066
TT150 EC C/W REMOTE SMART CONTROL	HPCA32067
TT180 EC C/W REMOTE SMART CONTROL	HPCA32068
CT60 EC C/W REMOTE SMART CONTROL	HPCA32058
SMITHS HUB FOR CASPIAN SMART CONTROL UG600	HACA33130
SMITHS COMBINED SMART PLUG & REPEATER SP600	HACA33133
SMITHS REPEATER FOR CASPIAN SMART CONTROLS RE600	HACA33134
SMITHS SMART BUTTON FOR CASPIAN SMART CONTROLS B600	HACA33135
SMITHS SMART WINDOW DOOR SENSOR SLIM OS600	HACA33136
SMITHS SMART WINDOW DOOR SENSOR SLIM SW600	HACA33137
SMITHS SMART BOILER RECEIVER RX10RF	HACA33138
SMITHS SMART RELAY SR600	HPCA33139

Caspian® Commercial Range

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

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 70%, and with variable speed control as standard, the Caspian delivers heat quickly and quietly. AC motor models are available on request

It is possible to have master and slave Caspian fan convectors that integrate the entire range of EC Caspian products. Please contact either our sales team or technical team to ensure that this is correctly specified

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. Please contact either our sales team or technical team to ensure that the correct inlet/discharge positioning is specified

Available with antibacterial paint (see page 17)

Now available with Smart Control (see page 6)

Applications
Education, healthcare, places of worship, leisure and sport office, hospitality, retail, showroom and industrial.

Motor
EC (BMS compliant) or AC.

Finish
Casing: zinc-coated steel 1.2mm.
Polyester powder-coated: white RAL 9010.
Available to special order in any colour and with anti-microbial or anti-bacterial paint (see page 17).

Filter
Class G2, 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
See accessories tables. Smart Control available (see page 6)

Heat output - EC (AC product also available)

Model Reference	Fan Speed	Control Voltage VDC	40°C MWT	45°C MWT	50°C MWT	55°C MWT	60°C MWT	65°C MWT	70°C MWT	75°C MWT	80°C MWT
EC 60	Low	3.4	0.85	1.20	1.45	1.80	2.16	2.35	2.73	3.08	3.40
	Mid	4.9	1.02	1.53	1.92	2.37	2.76	3.18	3.58	4.05	4.38
	High	6.4	1.18	1.85	2.38	2.93	3.36	4.00	4.43	5.02	5.36
EC 90	Low	3.2	1.68	2.23	3.01	3.49	4.05	4.45	5.12	5.49	6.03
	Mid	4.6	2.22	3.07	4.05	4.66	5.42	6.01	6.81	7.34	7.93
	High	6.1	2.75	3.90	5.08	5.82	6.78	7.56	8.49	9.19	9.83
EC 120	Low	3.1	1.62	2.34	3.32	3.98	4.71	5.62	6.32	6.99	7.61
	Mid	4.3	2.31	3.25	4.27	5.15	6.07	7.02	7.91	8.74	9.60
	High	5.5	2.99	4.15	5.21	6.31	7.42	8.41	9.50	10.48	11.59
EC 150	Low	2.8	2.95	3.72	4.49	5.27	6.045	6.79	7.54	8.29	9.04
	Mid	4.0	3.99	4.99	5.99	6.99	7.97	8.99	9.97	10.98	11.93
	High	5.1	5.02	6.26	7.49	8.71	9.90	11.19	12.39	13.67	14.82
EC 180	Low	2.8	3.64	5.20	6.78	8.24	9.39	10.33	11.24	12.15	13.01
	Mid	3.9	4.51	6.18	7.85	9.51	10.95	12.36	13.70	15.07	16.40
	High	4.9	5.38	7.16	8.91	10.77	12.50	14.39	16.16	18.0	19.78

Model Reference	Fan Speed	Air Volume (m³/h)	Air Volume (l/s)	Specific Fan Power w/ls	Power Consumption (W)	NR in typical room*	Hydraulic Resistance (KPA)	Nominal Weight (KG)	Water Capacity (L)
EC 60	Low	201.00	55.90	0.14	8.00	34.00	1.38	23.00	0.92
	Mid	290.50	80.75	0.26	21.00	41.50	1.69		
	High	380.00	105.60	0.32	34.00	49.50	2.00		
EC 90	Low	297.00	80.75	0.20	16.00	34.00	4.70	36.00	1.50
	Mid	450.50	124.38	0.34	42.00	41.50	5.85		
	High	604.00	168.00	0.40	68.00	49.97	7.00		
EC 120	Low	419.30	116.50	0.14	16.00	34.00	17.78	45.00	2.08
	Mid	549.65	152.68	0.26	40.00	42.00	20.59		
	High	680.00	188.89	0.34	64.00	49.96	23.40		
EC 150	Low	459.80	127.72	0.17	22.00	34.70	22.23	60.00	2.58
	Mid	598.10	166.14	0.35	59.00	41.50	29.46		
	High	736.40	205.56	0.47	96.00	49.38	36.69		
EC 180	Low	542.00	150.56	0.19	29.00	34.90	47.83	78.00	3.18
	Mid	690.00	191.67	0.40	78.50	41.50	60.76		
	High	838.00	232.78	0.55	128.00	49.00	73.70		

*a typical room is taken as a room with a volume of 173m³ and a reverberation time of 0.8 seconds at 500 Hz with one unit installed, situated against a wall or ceiling (radiating noise in a quartersphere). No allowance is made for attenuation provided by ceilings, enclosures or ductwork. Outputs based upon testing at EN442: 2014 using mean water temperature and an entering air temperature of 20°C with a 10°C temperature drop between flow and return.

Correction factors

Mean Water Temp °C		45 - 80			
Water Temperature drop °C		5	10	15	20
Entering Air Temperature °C	15	1.13	1.10	1.07	1.05
	18	1.08	1.05	1.02	0.99
	20	1.04	1.00	0.95	0.89
	25	0.93	0.91	0.89	0.86

Factors are approximate data based upon a standard coil.

How to calculate Mass Flow Rate (L/S)

$M = H / CP \times$ (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 (ΔT)

$$\text{Mean water temperature } (\Delta T) = \left[\frac{\text{Flow temperature} + \text{Return temperature}}{2} \right] - \text{Ambient Temperature}$$

Caspian® UV

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

Model	A
60	595
90	895
120	1195
150	1495
180	1795

245 — 660 — 270 — 65 — 110 — 45 — Pipe centres — Electrical supply in this side
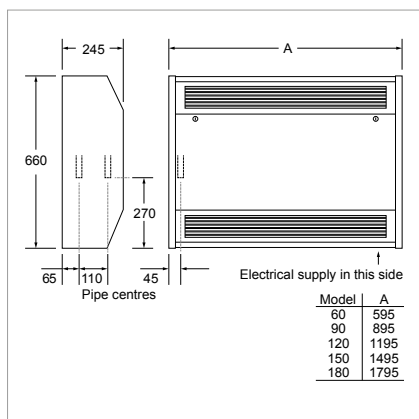
Ordering guide

| Model	Packed Wt (kg)	Product Codes
AC Codes		
CASPIAN UV 60 AC	23	HPCA21001
CASPIAN UV 90 AC	36	HPCA21002
CASPIAN UV 120 AC	45	HPCA21003
CASPIAN UV 150 AC	60	HPCA21004
CASPIAN UV 180 AC	78	HPCA21005
EC Codes		
CASPIAN UV 60 EC	23	HPCA20001
CASPIAN UV 90 EC	36	HPCA20002
CASPIAN UV 120 EC	45	HPCA20003
CASPIAN UV 150 EC	60	HPCA20004
CASPIAN UV 180 EC	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.

Plinths	Product Codes	
	100mm	**150mm**
CASPIAN UV/LST 60 PLINTH BLACK	HACA33106	HACA33097
CASPIAN UV/LST 90 PLINTH BLACK	HACA33107	HACA33098
CASPIAN UV/LST 120 PLINTH BLACK	HACA33108	HACA33099
CASPIAN UV/LST 150 PLINTH BLACK	HACA33109	HACA33100
CASPIAN UV/LST 180 PLINTH BLACK	HACA33110	HACA33101
CASPIAN UV/LST 60 PLINTH WHITE	HACA33111	HACA33006
CASPIAN UV/LST 90 PLINTH WHITE	HACA33112	HACA33007
CASPIAN UV/LST 120 PLINTH WHITE	HACA33113	HACA33008
CASPIAN UV/LST 150 PLINTH WHITE	HACA33114	HACA33009
CASPIAN UV/LST 180 PLINTH WHITE	HACA33115	HACA33010

Accessories	Product Codes
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 60)	HACA33069
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 90)	HACA33070
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 120)	HACA33071
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 150)	HACA33072
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 180)	HACA33073
FLEXIBLE HOSES 22MM PAIR	HAGA95003
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT TAMPER PROOF	HACA95004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° REMOTE SENSOR (EC)	HACA33118
BLANK CONFIGURABLE PROPORTIONAL HEAT OUTPUT CONTROLLER (PROGRAMMED AT FACTORY)	HACA33126
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN EC LINKING KIT (MASTER/SLAVE)	HACA33068
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)	HACA33127
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN THERMOSTAT (T1) (EC & AC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036

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

Model	A
60	595
90	895
120	1195
150	1495
180	1795

Electrical supply in this side

Pipe centres
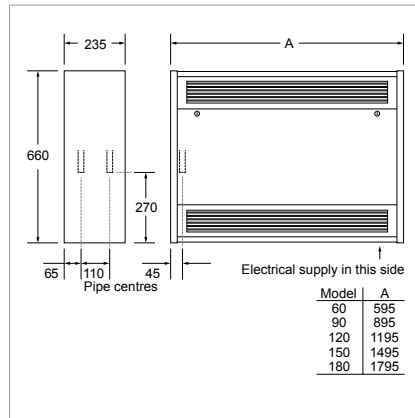
Ordering guide

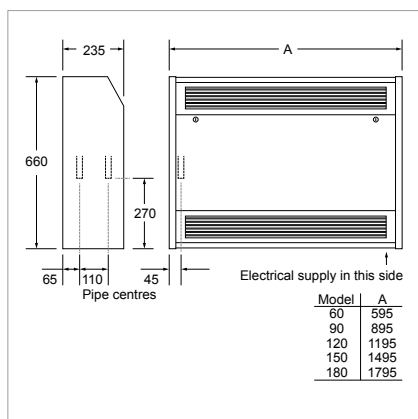| Model	Packed Wt (kg)	AC Codes	EC Codes
CASPIAN FF 60	23	HPCA23001	HPCA22001
CASPIAN FF 90	36	HPCA23002	HPCA22002
CASPIAN FF 120	45	HPCA23003	HPCA22003
CASPIAN FF 150	60	HPCA23004	HPCA22004
CASPIAN FF 180	78	HPCA23005	HPCA22005
Rear Outlet			
CASPIAN FF 60	23	HPCA23006	HPCA22006
CASPIAN FF 90	36	HPCA23007	HPCA22007
CASPIAN FF 120	45	HPCA23008	HPCA22008
CASPIAN FF 150	60	HPCA23009	HPCA22009
CASPIAN FF 180	78	HPCA23010	HPCA22010

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 FF 60, 90, 120, 150, 180.

Plinths	Product Codes			
	100mm Black	100mm White	150mm Black	150mm White
CASPIAN FF/EXT/SL/TT 60 PLINTH	HACA33077	HACA33087	HACA33082	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH	HACA33078	HACA33088	HACA33083	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH	HACA33079	HACA33089	HACA33084	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH	HACA33080	HACA33090	HACA33085	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH	HACA33081	HACA33091	HACA33086	HACA33096
Accessories			**White Steel**	**Black steel**
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 60)			HACA33048	HACA33053
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 90)			HACA33049	HACA33054
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 120)			HACA33050	HACA33055
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 150)			HACA33051	HACA33056
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 180)			HACA33052	HACA33057
Accessories				**Product Codes**
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 60)				HACA33043
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 90)				HACA33044
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 120)				HACA33045
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 150)				HACA33046
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 180)				HACA33047
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 60)				HACA33058
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 90)				HACA33059
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 120)				HACA33060
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 150)				HACA33061
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 180)				HACA33062
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 60)				HACA33069
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 90)				HACA33070
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 120)				HACA33071
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 150)				HACA33072
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 180)				HACA33073
FLEXIBLE HOSES 22MM PAIR				HAGA95003
ROOM THERMOSTAT HARD WIRED				HAGA95001
ROOM THERMOSTAT TAMPER PROOF				HACA95004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° INTEGRAL (EC)				HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° REMOTE SENSOR (EC)				HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° INTEGRAL (EC)				HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° REMOTE SENSOR (EC)				HACA33118
BLANK CONFIGURABLE PROPORTIONAL HEAT OUTPUT CONTROLLER (PROGRAMMED AT FACTORY)				HACA33126
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)				HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)				HACA33004
CASPIAN EC LINKING KIT (MASTER/SLAVE)				HACA33068
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)				HACA33127
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)				HACA33003
CASPIAN THERMOSTAT (T1) (EC & AC LOW LEVEL)				HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)				HACA33036

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

Model	A
60	595
90	895
120	1195
150	1495
180	1795

Electrical supply in this side

Ordering guide

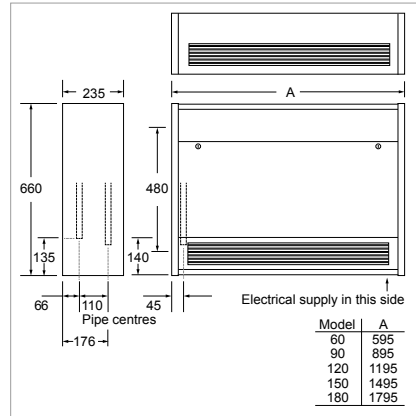| Model	Packed Wt (kg)	Product Codes
AC Codes		
CASPIAN SL 60	23	HPCA31601
CASPIAN SL 90	36	HPCA31602
CASPIAN SL 120	45	HPCA31603
CASPIAN SL 150	60	HPCA31604
CASPIAN SL 180	78	HPCA31605
EC Codes		
CASPIAN SL 60	23	HPCA31501
CASPIAN SL 90	36	HPCA31502
CASPIAN SL 120	45	HPCA31503
CASPIAN SL 150	60	HPCA31504
CASPIAN SL 180	78	HPCA31505

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.

Plinths	Product Codes	
	100mm	**150mm**
CASPIAN FF/EXT/SL/TT 60 PLINTH BLACK	HACA33077	HACA33082
CASPIAN FF/EXT/SL/TT 90 PLINTH BLACK	HACA33078	HACA33083
CASPIAN FF/EXT/SL/TT 120 PLINTH BLACK	HACA33079	HACA33084
CASPIAN FF/EXT/SL/TT 150 PLINTH BLACK	HACA33080	HACA33085
CASPIAN FF/EXT/SL/TT 180 PLINTH BLACK	HACA33081	HACA33086
CASPIAN FF/EXT/SL/TT 60 PLINTH WHITE	HACA33087	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH WHITE	HACA33088	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH WHITE	HACA33089	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH WHITE	HACA33090	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH WHITE	HACA33091	HACA33096

Accessories	Product Codes
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 60)	HACA33069
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 90)	HACA33070
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 120)	HACA33071
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 150)	HACA33072
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 180)	HACA33073
FLEXIBLE HOSES 22MM PAIR	HAGA95003
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT TAMPER PROOF	HACA95004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° REMOTE SENSOR (EC)	HACA33118
BLANK CONFIGURABLE PROPORTIONAL HEAT OUTPUT CONTROLLER (PROGRAMMED AT FACTORY)	HACA33126
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN EC LINKING KIT (MASTER/SLAVE)	HACA33068
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)	HACA33127
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN THERMOSTAT (T1) (EC & AC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036

Caspian® TT

Warm air is discharged from the upper surface to avoid causing discomfort to people sitting adjacent to the appliance

Model	A
60	595
90	895
120	1195
150	1495
180	1795

Electrical supply in this side

Pipe centres

Ordering guide

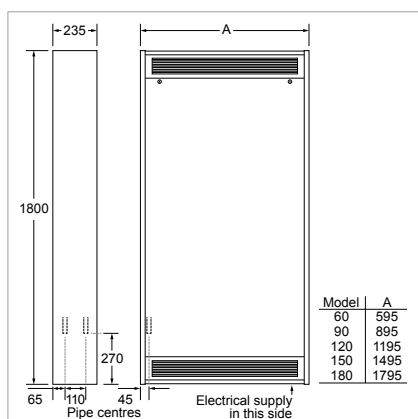| Model	Packed Wt (kg)	Product Codes
AC Codes		
CASPIAN TT 60 AC	23	HPCA16000
CASPIAN TT 90 AC	36	HPCA16001
CASPIAN TT 120 AC	45	HPCA16002
CASPIAN TT 150 AC	60	HPCA16003
CASPIAN TT 180 AC	78	HPCA16004
EC Codes		
CASPIAN TT 60 EC	23	HPCA15000
CASPIAN TT 90 EC	36	HPCA15001
CASPIAN TT 120 EC	45	HPCA15002
CASPIAN TT 150 EC	60	HPCA15003
CASPIAN TT 180 EC	78	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.

Plinths	Product Codes	
	100mm	150mm
CASPIAN FF/EXT/SL/TT 60 PLINTH BLACK	HACA33077	HACA33082
CASPIAN FF/EXT/SL/TT 90 PLINTH BLACK	HACA33078	HACA33083
CASPIAN FF/EXT/SL/TT 120 PLINTH BLACK	HACA33079	HACA33084
CASPIAN FF/EXT/SL/TT 150 PLINTH BLACK	HACA33080	HACA33085
CASPIAN FF/EXT/SL/TT 180 PLINTH BLACK	HACA33081	HACA33086
CASPIAN FF/EXT/SL/TT 60 PLINTH WHITE	HACA33087	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH WHITE	HACA33088	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH WHITE	HACA33089	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH WHITE	HACA33090	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH WHITE	HACA33091	HACA33096

Accessories	Product Codes
FLEXIBLE HOSES 22MM PAIR	HAGA95003
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT TAMPER PROOF	HACA95004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° REMOTE SENSOR (EC)	HACA33118
BLANK CONFIGURABLE PROPORTIONAL HEAT OUTPUT CONTROLLER (PROGRAMMED AT FACTORY)	HACA33126
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN EC LINKING KIT (MASTER/SLAVE)	HACA33068
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)	HACA33127
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN THERMOSTAT (T1) (EC & AC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036

Caspian® EXT

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

Model	A
60	595
90	895
120	1195
150	1495
180	1795

Rear outlet

Ordering guide

Model	Packed Wt (kg)	Product Codes
AC Codes		
CASPIAN EXT 60 AC	30	HPCA25001
CASPIAN EXT 90 AC	49	HPCA25002
CASPIAN EXT 120 AC	58	HPCA25003
CASPIAN EXT 150 AC	76	HPCA25004
CASPIAN EXT 180 AC	95	HPCA25005
EC Codes		
CASPIAN EXT 60 EC	30	HPCA24001
CASPIAN EXT 90 EC	49	HPCA24002
CASPIAN EXT 120 EC	58	HPCA24003
CASPIAN EXT 150 EC	76	HPCA24004
CASPIAN EXT 180 EC	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.

Plinths	Product Codes			
	100mm Black	100mm White	150mm Black	150mm White
CASPIAN FF/EXT/SL/TT 60 PLINTH	HACA33077	HACA33087	HACA33082	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH	HACA33078	HACA33088	HACA33083	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH	HACA33079	HACA33089	HACA33084	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH	HACA33080	HACA33090	HACA33085	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH	HACA33081	HACA33091	HACA33086	HACA33096
Accessories			**White Steel**	**Black steel**
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 60)			HACA33048	HACA33053
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 90)			HACA33049	HACA33054
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 120)			HACA33050	HACA33055
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 150)			HACA33051	HACA33056
POWDER-COATED STEEL INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 180)			HACA33052	HACA33057
Accessories				**Product Codes**
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 60)				HACA33043
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 90)				HACA33044
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 120)				HACA33045
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 150)				HACA33046
ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT (TO SUIT EXT & FF RO 180)				HACA33047
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 60)				HACA33058
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 90)				HACA33059
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 120)				HACA33060
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 150)				HACA33061
ANODISED ALUMINIUM INLET/OUTLET GRILLE (TO SUIT FF & EXT RO 180)				HACA33062
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 60)				HACA33069
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 90)				HACA33070
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 120)				HACA33071
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 150)				HACA33072
PENCIL PROOF GRILLE INSERT (PAIR TO SUIT FF, SL & UV 180)				HACA33073
FLEXIBLE HOSES 22MM PAIR				HAGA95003
ROOM THERMOSTAT HARD WIRED				HAGA95001
ROOM THERMOSTAT TAMPER PROOF				HACA95004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° INTEGRAL (EC)				HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° REMOTE SENSOR (EC)				HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° INTEGRAL (EC)				HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° REMOTE SENSOR (EC)				HACA33118
BLANK CONFIGURABLE PROPORTIONAL HEAT OUTPUT CONTROLLER (PROGRAMMED AT FACTORY)				HACA33126
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)				HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)				HACA33004
CASPIAN EC LINKING KIT (MASTER/SLAVE)				HACA33068
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)				HACA33127
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)				HACA33003
CASPIAN THERMOSTAT (T1) (EC & AC LOW LEVEL)				HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)				HACA33036

Smith's Antibacterial paint

We have developed a paint finish that has antibacterial properties for use on Caspian Fan Convectors (except UVC and Skyline)

Containing the proven Biocote® Antimicrobial Technology, which repeatedly demonstrates broad spectrum antibacterial performance, Smith's antibacterial paint provides additional protection in environments where minimising the risk and transmission of infection is crucial.

It can be applied to products that are located in areas where there is a need to maintain a low level of microbes such as hospitals, health centres and care homes, and where there is high level of human traffic such as schools.

The powder used to make the antibacterial paint, Interpon 610 AM, has been tested for antimicrobial efficacy in accordance with ISO 22196:2011 and exhibited a minimum of 95% and up to 99.99% reduction in the population of E. Coli and MRSA. Using Silver ion technology Biocote® has been proven to be effective against a wide range of the most common bacteria.

- Provides an additional level of antimicrobial growth on the surface of the fan convectors

- Help prevent odours, stains and material deterioration

- Provides 24-hour protection, 7-days a week

- Be easier to keep hygienically clean

Efficacy of Biocote®

A study conducted soon after the H1N1 viral pandemic of 2009 investigated the conversion rate of an H1N1 virus from an infectious to non-infectious form because of its exposure to Biocote® protected products. A variety of surfaces had the virus added to them and were left to grow over night. Half contained the Biocote® Antimicrobial Additives, and the other half did not. Having been left for a sufficient amount of time for the virus to grow all of the surfaces were assessed for the presence of the virus. On all the materials, the Biocote® protected surfaces were less contaminated with the virus with up to a 99.99% reduction in the virus.

Where should Caspian fan convectors with antibacterial paint be used?

- Schools
- Hospitals
- Care homes
- Health centres
- Dentists surgeries and waiting rooms
- Public buildings including Libraries, Museums and Village Halls

Support

If you require advice on the antibacterial paint please contact our Technical Team: 01245 324560 | technical.sales@smithsep.co.uk

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

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

Now available with Smart Control
(see page 6)

Applications
Education, healthcare, places of worship, leisure and sport, office, hospitality, retail, showroom and industrial

Motor
EC (BMS compliant) or AC.

Finish
Casing: galvanised steel 1.2mm.

Filter
Class G2, 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 hot enough to activate the low temperature cut-out thermostat.

Controls
See accessories tables (page 21). Smart Control available (see page 6)

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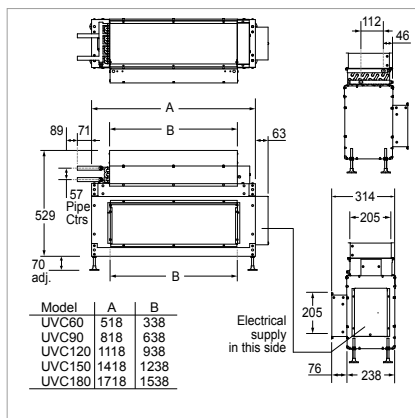White powder-coated steel inlet/outlet grille.
Anodised aluminium air inlet/outlet grille.

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.

Model	A	B
UVC60	518	338
UVC90	818	638
UVC120	1118	938
UVC150	1418	1238
UVC180	1718	1538

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.
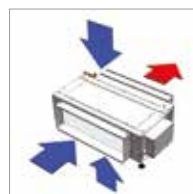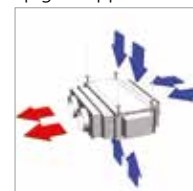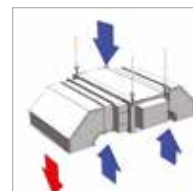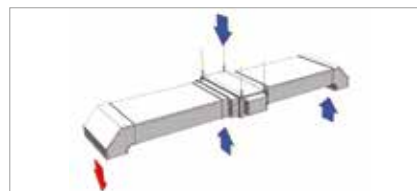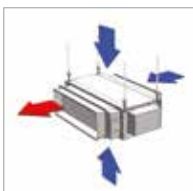
 Air outlet

 Air inlet option

 Reversible

Suspended with ducts application

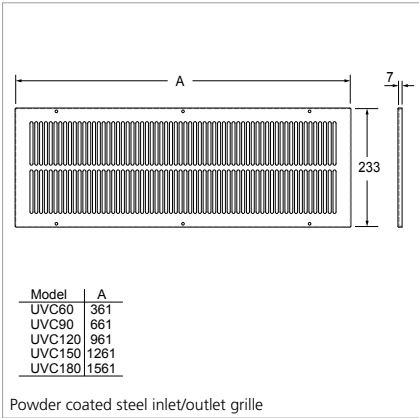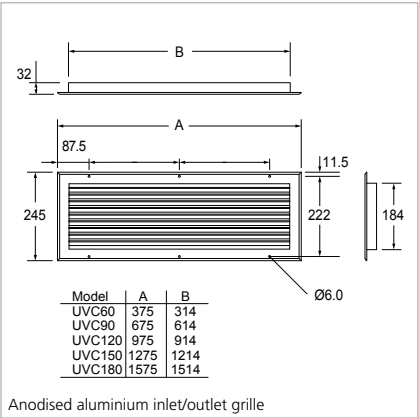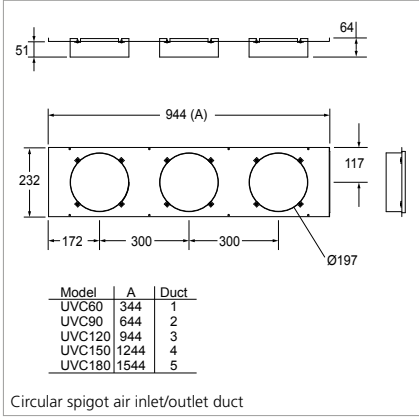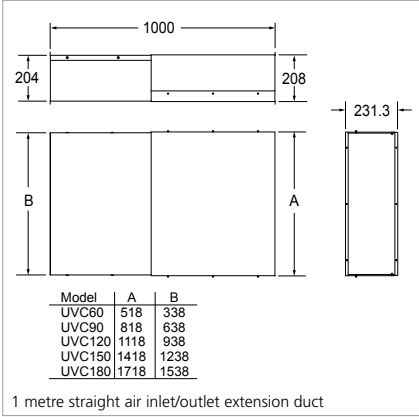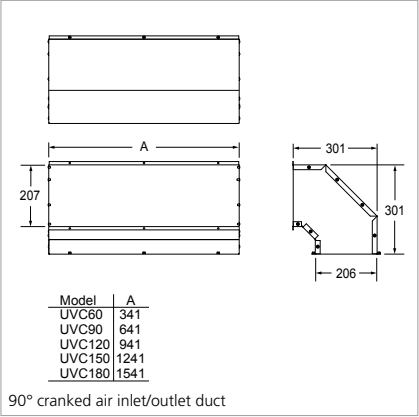Suspended with spigots application

Heat output See page 11

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

Model	A
UVC60	341
UVC90	641
UVC120	941
UVC150	1241
UVC180	1541

90° cranked air inlet/outlet duct

Model	A	B
UVC60	518	338
UVC90	818	638
UVC120	1118	938
UVC150	1418	1238
UVC180	1718	1538

1 metre straight air inlet/outlet extension duct

Model	A	Duct
UVC60	344	1
UVC90	644	2
UVC120	944	3
UVC150	1244	4
UVC180	1544	5

Circular spigot air inlet/outlet duct

Model	A	B
UVC60	375	314
UVC90	675	614
UVC120	975	914
UVC150	1275	1214
UVC180	1575	1514

Anodised aluminium inlet/outlet grille

Model	A
UVC60	361
UVC90	661
UVC120	961
UVC150	1261
UVC180	1561

Powder coated steel inlet/outlet grille

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 Wt (kg)	Product Codes
AC Codes		
CASPIAN UVC 60 AC	23	HPCA27001
CASPIAN UVC 90 AC	36	HPCA27002
CASPIAN UVC 120 AC	45	HPCA27003
CASPIAN UVC 150 AC	60	HPCA27004
CASPIAN UVC 180 AC	78	HPCA27005
EC Codes		
CASPIAN UVC 60 EC	23	HPCA26001
CASPIAN UVC 90 EC	36	HPCA26002
CASPIAN UVC 120 EC	45	HPCA26003
CASPIAN UVC 150 EC	60	HPCA26004
CASPIAN UVC 180 EC	78	HPCA26005

Accessories	Product Codes
CASPIAN UVC 60 1M ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT	HACA33016
CASPIAN UVC 90 1M ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT	HACA33017
CASPIAN UVC 120 1M ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT	HACA33018
CASPIAN UVC 150 1M ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT	HACA33019
CASPIAN UVC 180 1M ADJUSTABLE STRAIGHT AIR INLET/OUTLET EXTENSION DUCT	HACA33020
CASPIAN UVC 60 90° CRANKED AIR INLET/OUTLET DUCT	HACA33011
CASPIAN UVC 90 90° CRANKED AIR INLET/OUTLET DUCT	HACA33012
CASPIAN UVC 120 90° CRANKED AIR INLET/OUTLET DUCT	HACA33013
CASPIAN UVC 150 90° CRANKED AIR INLET/OUTLET DUCT	HACA33014
CASPIAN UVC 180 90° CRANKED AIR INLET/OUTLET DUCT	HACA33015
CASPIAN UVC 60 CIRCULAR SPIGOT (200MM X 2) AIR INLET/OUTLET DUCT	HACA33021
CASPIAN UVC 90 CIRCULAR SPIGOT (200MM X 2) AIR INLET/OUTLET DUCT	HACA33022
CASPIAN UVC 120 CIRCULAR SPIGOT (200MM X 3) AIR INLET/OUTLET DUCT	HACA33023
CASPIAN UVC 150 CIRCULAR SPIGOT (200MM X 4) AIR INLET/OUTLET DUCT	HACA33024
CASPIAN UVC 180 CIRCULAR SPIGOT (200MM X 5) AIR INLET/OUTLET DUCT	HACA33025
CASPIAN UVC 60 INLET/OUTLET GRILLE ANODISED ALUMINIUM	HACA33031
CASPIAN UVC 90 INLET/OUTLET GRILLE ANODISED ALUMINIUM	HACA33032
CASPIAN UVC 120 INLET/OUTLET GRILLE ANODISED ALUMINIUM	HACA33033
CASPIAN UVC 150 INLET/OUTLET GRILLE ANODISED ALUMINIUM	HACA33034
CASPIAN UVC 180 INLET/OUTLET GRILLE ANODISED ALUMINIUM	HACA33035
CASPIAN UVC 60 INLET/OUTLET GRILLE POWDER COATED WHITE	HACA33026
CASPIAN UVC 90 INLET/OUTLET GRILLE POWDER COATED WHITE	HACA33027
CASPIAN UVC 120 INLET/OUTLET GRILLE POWDER COATED WHITE	HACA33028
CASPIAN UVC 150 INLET/OUTLET GRILLE POWDER COATED WHITE	HACA33029
CASPIAN UVC 180 INLET/OUTLET GRILLE POWDER COATED WHITE	HACA33030
FLEXIBLE HOSES 22MM PAIR	HAGA95003
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT TAMPER PROOF	HACA95004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21° REMOTE SENSOR (EC)	HACA33118
BLANK CONFIGURABLE PROPORTIONAL HEAT OUTPUT CONTROLLER (PROGRAMMED AT FACTORY)	HACA33126
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN EC LINKING KIT (MASTER/SLAVE)	HACA33068
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)	HACA33127
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN THERMOSTAT (T1) (EC & AC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036

Caspian® LST

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

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 contact with 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

Available with antibacterial paint (see page 17)

Caspian LST range is patented (UK Patent No. 2,555,566)

Applications
Education, healthcare, office and hospitality

Motor
EC (BMS compliant).

Finish
Casing: zinc-coated steel 1.2mm.
Polyester powder-coated: white RAL 9010.
Available to special order in any colour and with anti-microbial or anti-bacterial paint (see page 17).

Filter
Class G2, 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 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).

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.
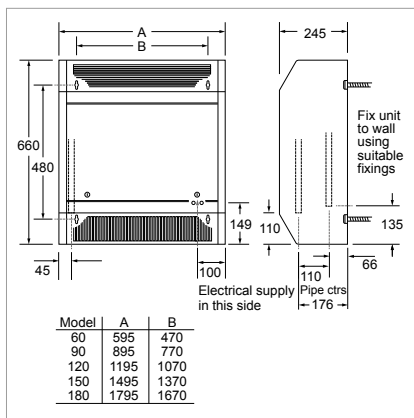
Model	A	B
60	595	470
90	895	770
120	1195	1070
150	1495	1370
180	1795	1670

Heat output For other heat output data please visit our website

Model	Heat Output at 75°			Heat Output at 50°			Pressure Drop		
	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)	High (kPa)	Medium (kPa)	Low (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

Model	Flow & return connections	Fused spur	Total Power Consumption				Sound Levels			Casting colour	Fan only
			Low (Watts)	Medium (Watts)	High (Watts)	Water Capacity (Litres)	High (dBA)	Medium (dBA)	Low (dBA)		
CASPIAN LST 60	22mm	3A	26	41	55	0.92	50	43	35	white	•
CASPIAN LST 90	22mm	3A	33	59	85	1.50	53	45	37	white	•
CASPIAN LST 120	22mm	3A	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, 20°C entering air temperature, 10° temperature drop.
Sound levels measured at 3m in front of the floor mounted model.

Ordering guide

Model	Packed Wt (kg)	Product Codes
CASPIAN LST 60 EC	24	HPCA28001
CASPIAN LST 90 EC	37	HPCA28002
CASPIAN LST 120 EC	46	HPCA28003
CASPIAN LST 150 EC	60	HPCA28004
CASPIAN LST 180 EC	78	HPCA28005

Plinths	Product Codes			
	100mm Black	100mm White	150mm Black	150mm White
CASPIAN UV/LST 60 PLINTH	HACA33106	HACA33111	HACA33097	HACA33006
CASPIAN UV/LST 90 PLINTH	HACA33107	HACA33112	HACA33098	HACA33007
CASPIAN UV/LST 120 PLINTH	HACA33108	HACA33113	HACA33099	HACA33008
CASPIAN UV/LST 150 PLINTH	HACA33109	HACA33114	HACA33100	HACA33009
CASPIAN UV/LST 180 PLINTH	HACA33110	HACA33115	HACA33101	HACA33010

Accessories	Product Codes
FLEXIBLE HOSES 22MM PAIR	HAGA95003
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)	HACA33127

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

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

Now available with Smart Control (see page 6)

Applications
Education, healthcare, leisure and sport, office, hospitality, retail and showroom

Motor
EC (BMS compliant) or AC.

Finish
Casing: galvanised steel 1.2mm.
Grille: eggcrate core, white RAL 9010 complete with touch catches.

Filter
Class G2, 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.
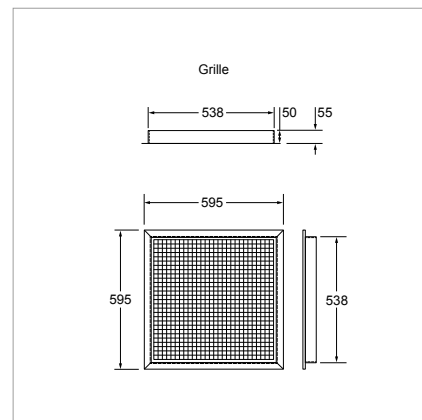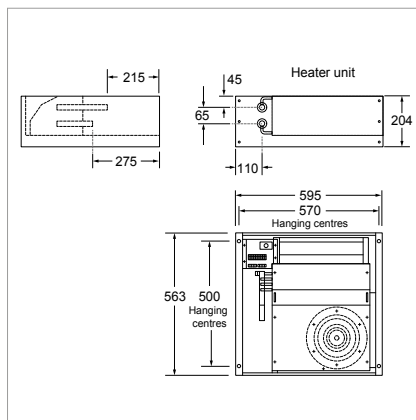
Controls
See accessories table.

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.

Heater unit

Grille

Heat output For other heat output data please visit our website

Model	Heat Output at 75°			Heat Output at 45°		
	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)
CASPIAN SKYLINE CT60	2.7	3.7	4.6	0.5	0.9	1.3

Model	Flow & return connections	Fused spur	Total Power Consumption				Sound Levels			Grille colour
			Low (Watts)	Medium (Watts)	High (Watts)	Water Capacity (Litres)	High (dBA)	Medium (dBA)	Low (dBA)	
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

EAT°C	Mean water temperature °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 Wt (kg)	Product Codes
AC Codes		
CASPIAN SKYLINE CT60 AC	20	HPCA30001
EC Codes		
CASPIAN SKYLINE CT60 EC	20	HPCA29001

Accessories	Product Codes
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN SKYLINE CT60 PROPORTIONAL HEAT OUTPUT CONTROLLER 15-25 (REMOTE SENSOR)	HACA33125
CASPIAN SKYLINE CT60 PROPORTIONAL HEAT OUTPUT CONTROLLER 11-21 (REMOTE SENSOR)	HACA33123
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT TAMPER PROOF	HAGA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)	HACA33127
BLANK CONFIGURABLE PROPORTIONAL HEAT OUTPUT CONTROLLER (PROGRAMMED AT FACTORY)	HACA33126
CASPIAN EC LINKING KIT (MASTER/SLAVE)	HACA33068

Caspian Skyline® E

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

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

Applications
Education, healthcare, leisure and sport, office, hospitality, retail and showroom

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.
Mains powered wireless controller with temperature control, setback temperature and run back timer.

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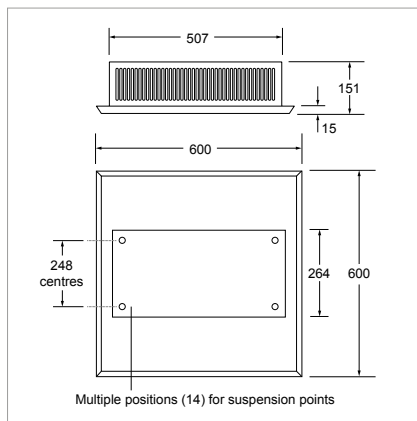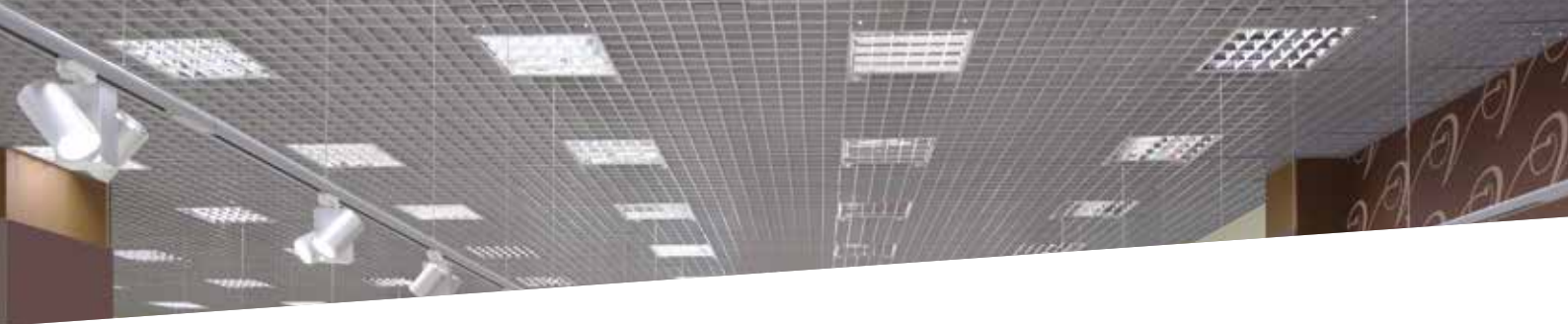Ceiling tile spacer (85mm).

Specification
To specify state:
Ceiling mounted heat emitter at 4kW in white 600x600mm.
As Smith's Skyline.

Multiple positions (14) for suspension points

Heat output For other heat output data please visit our website

Model	Heat Output (Kw)
SKYLINE E 4KW	4.0

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

Ordering guide

Model	Packed Wt (kg)	Product Codes
SKYLINE E 4KW	9	HPSK40003
Accessories		
SKYLINE SURFACE MOUNTING KIT (135MM)		HASK40102
SKYLINE CEILING TILE SPACER (85MM)		HASK40103

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 parts and labour guarantee with every product (see our website for more information). 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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