



Caspian Range

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

## Why Choose Smith's?

Smith's providing comfort for the built environment



Formed in 1991 Smith's Environmental Products has grown to become the leading supplier of domestic and light commercial fan-assisted hydronic heat emitters. The complete product range is manufactured inhouse in its specialist facilities in the UK. 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.

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.

In 2017 Smith's was 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.

In 2018 Smith's was awarded the prestigious ISO 14001 accreditation. ISO 14001 is concerned with setting an environmental framework for the company to work within. This means that Smith's has management processes and systems to ensure that they manufacture products that meet the customer and regulatory requirements and are working within designated environmental parameters.

Both ISO 9001 (2015) and ISO 14001 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 customers' 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.

#### **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.

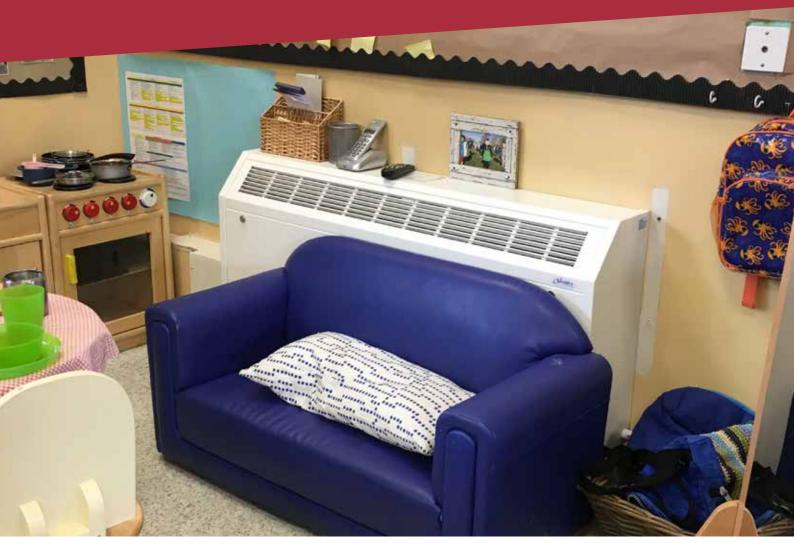
Inherent in the heat pump's design is that the smaller the temperature between the heat-source pump (air or ground) and the heat sink/emitter (under-floor heating, fan convector, radiator), the higher the energy efficiency of that heat pump. This higher efficiency means lower fuel bills and greater carbon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

- 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

## 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.

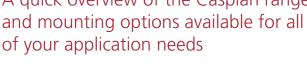
Using forced convection, fan convectors ensure that rooms heat up more quickly, delivering a more even temperature spread, than heat emitters using natural convection. They can be installed and positioned to suit each room's size and shape, rather than having to obey the installation rules that govern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



A quick overview of the Caspian range and mounting options available for all of your application needs





## **Caspian Commercial Range**





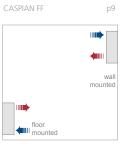


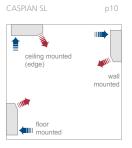


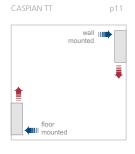


CASPIAN UV р8

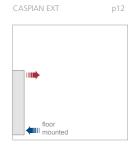








**Caspian Concealed** 



**Caspian Low Surface** Temperature



**Caspian Ceiling** Recessed





**Skyline Ceiling** 

Recessed



p14 CASPIAN LST



CASPIAN SKYLINE p16

ceiling recessed mounted

SKYLINE p18



CASPIAN UVC p20 ceiling or floor recessed mounted

Floor recessed mounted

## 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 quickly with much greater efficiency than other heat emitters



#### 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

### **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.

#### 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 not enough to activate the low temperature cut-out thermostat.

#### Controls

Variable heat output controller (mounted within the products).



Heat output - EC For other heat output data please download the data sheet from our website

Model		Heat Output at 75	jo		Heat Output at 45	o
	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)
CASPIAN 60	2.9	4.0	5.0	1.1	1.5	1.9
CASPIAN 90	5.0	7.0	10.0	2.0	3.0	4.1
CASPIAN 120	8.0	11.0	13.0	3.0	4.2	5.4
CASPIAN 150	11.0	14.0	18.0	4.9	6.6	8.3
CASPIAN 180	15.0	19.0	24.0	6.1	7.5	9.0

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

			Tota			
Model	Flow & return Fusi connections spu		Low (Watts)	Medium (Watts)	High (Watts)	Water Capacity (Litres)
CASPIAN 60	22mm	3A	8.0	24	40.0	0.92
CASPIAN 90	22mm	3A	15.0	42.5	70.0	1.50
CASPIAN 120	22mm	3A	41.8	75.9	110.0	2.08
CASPIAN 150	22mm	3A	59.2	118.1	177.0	2.58
CASPIAN 180	22mm	3A	74.5	147.2	220.0	3.18

## Heat output - AC For other heat output data please download the data sheet from our website

	Heat Output at 75°			Heat Output at 45°		
Model	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)
CASPIAN 60	3.6	4.0	5.0	1.4	1.6	1.8
CASPIAN 90	6.0	7.0	8.0	2.5	2.8	3.1
CASPIAN 120	10.0	12.0	13.0	4.2	4.9	5.2
CASPIAN 150	14.0	14.0	15.0	6.2	6.9	7.5
CASPIAN 180	16.0	17.0	18.0	8.4	9.1	9.4

			Tota			
Model	Flow & return connections	Fused spur	Low (Watts)	Medium (Watts)	High (Watts)	Water Capacity (Litres)
CASPIAN 60	22mm	3A	29	36	51	0.92
CASPIAN 90	22mm	3A	53	60	98	1.50
CASPIAN 120	22mm	3A	99	135	151	2.08
CASPIAN 150	22mm	3A	149	203	227	2.58
CASPIAN 180	22mm	3A	198	270	302	3.18

#### **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	

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

M = H / CP x (Flow °C - Return °C)

M = Mass flow rate (US) H = Output of product (W) CP = Specific heat capacity [J/(kg·°C)]. Varies upon system temperature, Approx. 4187 if fluid is water.

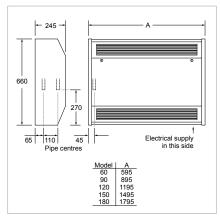
#### How to calculate Mean Water Temperature ( $\Delta T$ )

Flow temperature + Return temperature Mean water temperature ( $\Delta T$ ) - Ambient Temperature

# Caspian UV

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







## 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	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:

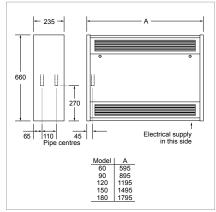
Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian UV 60/90/120/150/180.

Accessories	Product Codes
CASPIAN UV/LST 60 PLINTH WHITE (150MM)	HACA33006
CASPIAN UV/LST 90 PLINTH WHITE (150MM)	HACA33007
CASPIAN UV/LST 120 PLINTH WHITE (150MM)	HACA33008
CASPIAN UV/LST 150 PLINTH WHITE (150MM)	HACA33009
CASPIAN UV/LST 180 PLINTH WHITE (150MM)	HACA33010
CASPIAN UV/LST 60 PLINTH BLACK (150MM)	HACA33097
CASPIAN UV/LST 90 PLINTH BLACK (150MM)	HACA33098
CASPIAN UV/LST 120 PLINTH BLACK (150MM)	HACA33099
CASPIAN UV/LST 150 PLINTH BLACK (150MM)	HACA33100
CASPIAN UV/LST 180 PLINTH BLACK (150MM)	HACA33101
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN THERMOSTAT (T1) (EC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C REMOTE SENSOR (EC)	HACA33118
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT HARD WIRED SIEMENS	HACA33104
ROOM THERMOSTAT RF SIEMENS	HACA33074
ROOM THERMOSTAT TAMPER PROOF SIEMENS	HACA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003

## 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







## Ordering guide

Model	Packed Wt (kg)	AC Codes	EC Codes			
CASPIAN FF 60	24	HPCA23001	HPCA22001			
CASPIAN FF 90	39	HPCA23002	HPCA22002			
CASPIAN FF 120	46	HPCA23003	HPCA22003			
CASPIAN FF 150	61	HPCA23004	HPCA22004			
CASPIAN FF 180	76	HPCA23005	HPCA22005			
Rear Outlet	Rear Outlet					
CASPIAN FF 60	24	HPCA23006	HPCA22006			
CASPIAN FF 90	39	HPCA23007	HPCA22007			
CASPIAN FF 120	46	HPCA23008	HPCA22008			
CASPIAN FF 150	61	HPCA23009	HPCA22009			
CASPIAN FF 180	76	HPCA23010	HPCA22010			

### **Specification**

To specify state:

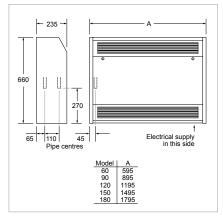
Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian FF 60/90/120/150/180.

Accessories	Product Codes
CASPIAN FF/EXT/SL/TT 60 PLINTH WHITE (150MM)	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH WHITE (150MM)	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH WHITE (150MM)	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH WHITE (150MM)	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH WHITE (150MM)	HACA33096
CASPIAN FF/EXT/SL/TT 60 PLINTH BLACK (150MM)	HACA33082
CASPIAN FF/EXT/SL/TT 90 PLINTH BLACK (150MM)	HACA33083
CASPIAN FF/EXT/SL/TT 120 PLINTH BLACK (150MM)	HACA33084
CASPIAN FF/EXT/SL/TT 150 PLINTH BLACK (150MM)	HACA33085
CASPIAN FF/EXT/SL/TT 180 PLINTH BLACK (150MM)	HACA33086
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN THERMOSTAT (T1) (EC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C REMOTE SENSOR (EC)	HACA33118
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT HARD WIRED SIEMENS	HACA33104
ROOM THERMOSTAT RF SIEMENS	HACA33074
ROOM THERMOSTAT TAMPER PROOF SIEMENS	HACA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003

## 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







### 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:

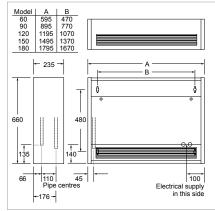
Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian SL 60/90/120/150/180.

Accessories	Product Codes
CASPIAN FF/EXT/SL/TT 60 PLINTH WHITE (150MM)	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH WHITE (150MM)	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH WHITE (150MM)	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH WHITE (150MM)	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH WHITE (150MM)	HACA33096
CASPIAN FF/EXT/SL/TT 60 PLINTH BLACK (150MM)	HACA33082
CASPIAN FF/EXT/SL/TT 90 PLINTH BLACK (150MM)	HACA33083
CASPIAN FF/EXT/SL/TT 120 PLINTH BLACK (150MM)	HACA33084
CASPIAN FF/EXT/SL/TT 150 PLINTH BLACK (150MM)	HACA33085
CASPIAN FF/EXT/SL/TT 180 PLINTH BLACK (150MM)	HACA33086
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN THERMOSTAT (T1) (EC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C REMOTE SENSOR (EC)	HACA33118
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT HARD WIRED SIEMENS	HACA33104
ROOM THERMOSTAT RF SIEMENS	HACA33074
ROOM THERMOSTAT TAMPER PROOF SIEMENS	HACA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003

## **Caspian TT**

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







### Ordering guide

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

### **Specification**

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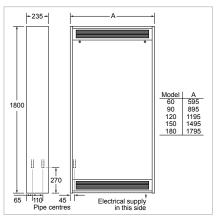
Fan Convector with EC motor (or AC), in 1.2mm zinc coated steel, 660mm high and 595mm, 895mm, 1195mm, 1495mm or 1795mm wide. With variable heat output controller. As Smith's Caspian TT 60/90/120/150/180.

Accessories	Product Codes
CASPIAN FF/EXT/SL/TT 60 PLINTH WHITE (150MM)	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH WHITE (150MM)	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH WHITE (150MM)	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH WHITE (150MM)	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH WHITE (150MM)	HACA33096
CASPIAN FF/EXT/SL/TT 60 PLINTH BLACK (150MM)	HACA33082
CASPIAN FF/EXT/SL/TT 90 PLINTH BLACK (150MM)	HACA33083
CASPIAN FF/EXT/SL/TT 120 PLINTH BLACK (150MM)	HACA33084
CASPIAN FF/EXT/SL/TT 150 PLINTH BLACK (150MM)	HACA33085
CASPIAN FF/EXT/SL/TT 180 PLINTH BLACK (150MM)	HACA33086
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN THERMOSTAT (T1) (EC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C REMOTE SENSOR (EC)	HACA33118
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT HARD WIRED SIEMENS	HACA33104
ROOM THERMOSTAT RF SIEMENS	HACA33074
ROOM THERMOSTAT TAMPER PROOF SIEMENS	HACA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003

# Caspian EXT

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







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.

Accessories	Product Codes
CASPIAN FF/EXT/SL/TT 60 PLINTH WHITE (150MM)	HACA33092
CASPIAN FF/EXT/SL/TT 90 PLINTH WHITE (150MM)	HACA33093
CASPIAN FF/EXT/SL/TT 120 PLINTH WHITE (150MM)	HACA33094
CASPIAN FF/EXT/SL/TT 150 PLINTH WHITE (150MM)	HACA33095
CASPIAN FF/EXT/SL/TT 180 PLINTH WHITE (150MM)	HACA33096
CASPIAN FF/EXT/SL/TT 60 PLINTH BLACK (150MM)	HACA33082
CASPIAN FF/EXT/SL/TT 90 PLINTH BLACK (150MM)	HACA33083
CASPIAN FF/EXT/SL/TT 120 PLINTH BLACK (150MM)	HACA33084
CASPIAN FF/EXT/SL/TT 150 PLINTH BLACK (150MM)	HACA33085
CASPIAN FF/EXT/SL/TT 180 PLINTH BLACK (150MM)	HACA33086
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN THERMOSTAT (T1) (EC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C REMOTE SENSOR (EC)	HACA33118
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT HARD WIRED SIEMENS	HACA33104
ROOM THERMOSTAT RF SIEMENS	HACA33074
ROOM THERMOSTAT TAMPER PROOF SIEMENS	HACA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003



## 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



#### Features

- 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

#### **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.

#### 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 hot enough to activate the low temperature cut-out thermostat.

Regulate the flow to achieve maximum performance.

#### Controls

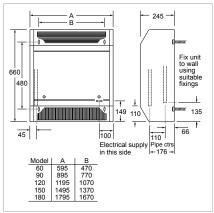
Variable heat output controller (mounted within the products).

#### **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.







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

	Heat Output at 75°			Heat Output at 50°			Pressure Drop		
Model	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

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

Accessories	Product Codes
CASPIAN UV/LST 60 PLINTH WHITE (150MM)	HACA33006
CASPIAN UV/LST 90 PLINTH WHITE (150MM)	HACA33007
CASPIAN UV/LST 120 PLINTH WHITE (150MM)	HACA33008
CASPIAN UV/LST 150 PLINTH WHITE (150MM)	HACA33009
CASPIAN UV/LST 180 PLINTH WHITE (150MM)	HACA33010
CASPIAN UV/LST 60 PLINTH BLACK (150MM)	HACA33097
CASPIAN UV/LST 90 PLINTH BLACK (150MM)	HACA33098
CASPIAN UV/LST 120 PLINTH BLACK (150MM)	HACA33099
CASPIAN UV/LST 150 PLINTH BLACK (150MM)	HACA33100
CASPIAN UV/LST 180 PLINTH BLACK (150MM)	HACA33101
FLEXIBLE HOSES 22MM PAIR	HAGA95003

## 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



#### Features

- 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

#### **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 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 not enough to activate the low temperature cut-out thermostat.

#### Controls

Variable heat output controller (mounted within the products).

### **Specification**

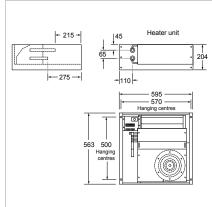
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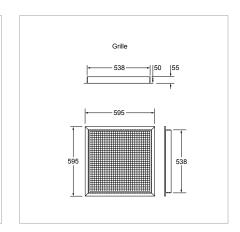
Ceiling mounted Fan Convector with EC (or AC) motor, in 1.2mm galvanised steel, egg crate core grille in white RAL 9010. To fit a standard 600mm x 600mm ceiling grid. With variable heat output controller.

As Smith's Caspian Skyline CT60.









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

	ŀ	leat Output at 75	5°	Heat Output at 45°		
Model	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

			Total Power Consumption							
Model	Flow & return connections	Fused spur	Low (Watts)	Medium (Watts)	High (Watts)	Water Capacity (Litres)	High (dBA)	Medium (dBA)	Low (dBA)	Grille 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 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 PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C REMOTE SENSOR (EC)	HACA33118
ROOM THERMOSTAT HARD WIRED	HAGA95001
ROOM THERMOSTAT HARD WIRED SIEMENS	HACA33104
ROOM THERMOSTAT RF SIEMENS	HACA33074
ROOM THERMOSTAT TAMPER PROOF SIEMENS	HACA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003

## 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



#### 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

#### Application

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.

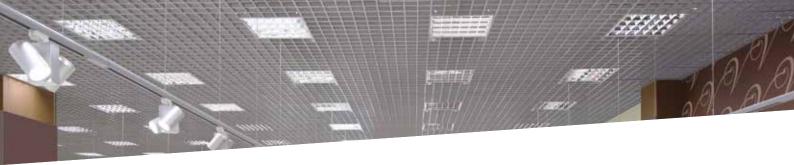
#### **Attachment**

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

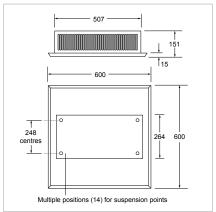
### Specification

To specify state:

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







## **Heat output** 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
Attachments		
SKYLINE SURFACE MOUNTING KIT (135MM)		HASK40102
SKYLINE CEILING TILE SPACER (85MM)		HASK40103

## 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



#### Features

- 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

#### **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 G3, 100% polyester, non-washable.

#### Installation

Suitable for two-pipe central heating systems. Unit must be earthed.

Maximum installation height 4m to underside.

#### Commissionina

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

#### **Controls**

Variable heat output controller (mounted within the products).

#### **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









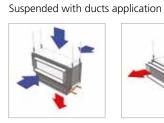


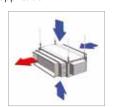


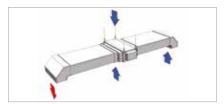


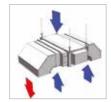


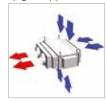
Suspended with spigots application











Heat output For other heat output data please visit our website

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

			Total Power Consumption			Sound Levels				
Model	Flow & return connections	Fused spur	Low (Watts)	Medium (Watts)	High (Watts)	Water Capacity (Litres)	High (dBA)	Medium (dBA)	Low (dBA)	Casting colour
CASPIAN UVC 60	22mm	3A	8	24	40	0.92	50	42	33	white
CASPIAN UVC 90	22mm	ЗА	15	43	70	1.50	53	42	34	white
CASPIAN UVC 120	22mm	ЗА	13	62	110	2.08	58	46	35	white
CASPIAN UVC 150	22mm	ЗА	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.

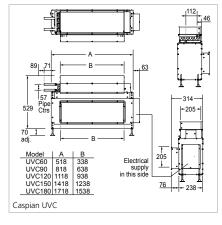
#### **Correction factors**

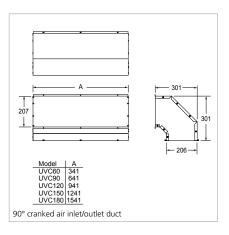
	Mean water temperature °C		
EAT°C	80 to 40		
15	1.10		
21	0.93		

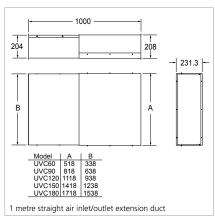
	Temperature drop °C				
	20	15	10	5	
Factor	0.89	0.95	1.00	1.04	

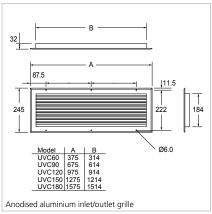
## Caspian UVC

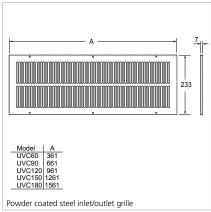
The Caspian UVC fan convector was developed for recessed or concealed heating projects and is suitable for high, low or ceiling concealed installations, can even be turned upside down

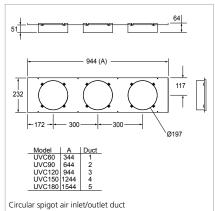












#### **Attachments**



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 and attachments	Product Codes
CASPIAN ADJUSTABLE LOW TEMPERATURE CUT-OUT (EC AND AC)	HACA33001
CASPIAN THERMOSTAT (T1 (EC LOW LEVEL)	HACA33002
CASPIAN THERMOSTAT (T2) (AC LOW LEVEL)	HACA33036
CASPIAN THERMOSTAT (T1) & AUTO-SPEED CONTROL (T2) (AC LOW LEVEL)	HACA33003
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C INTEGRAL (EC)	HACA33005
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25°C REMOTE SENSOR (EC)	HACA33037
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C INTEGRAL (EC)	HACA33117
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 11°-21°C REMOTE SENSOR (EC)	HACA33118
room thermostat hard wired	HAGA95001
room thermostat hard wired siemens	HACA33104
room thermostat RF siemens	HACA33074
ROOM THERMOSTAT TAMPER PROOF SIEMENS	HACA95004
FLEXIBLE HOSES 22MM PAIR	HAGA95003
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 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 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 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
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











### 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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