

# Caspian UV

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



## 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
- Caspian 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
- Industrial

## Motor

EC (BMS compliant) or AC

## Finish

Casing: zinc-coated steel 1.2mm

Polyester powdercoated: white RAL 9010

Available to special order in any colour and with anti-microbial or anti-bacterial paint

## Filter

Class G3, 100% polyester, non-washable

## Installation

Suitable for two-pipe central heating systems

Maximum installation height for high or ceiling mounting, - 4m to underside

Pipework access holes on the rear and underside

Key operated front access panels

Bleed valve accessible on removal of front casing

Unit must be earthed

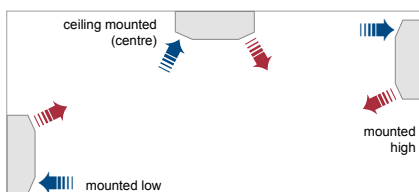
## Commissioning

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

## Controls

Variable heat output controller (mounted within the products)

## Mounting options



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## Heat output

Model	Heat Output at 80°			Heat Output at 75°			Heat Output at 70°			Heat Output at 65°			Heat Output at 60°		
	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)
Caspian 60	3.2	4.4	5.9	2.9	4.1	5.3	2.6	3.7	4.8	2.3	3.2	4.2	2.0	2.8	3.6
Caspian 90	5.2	7.8	10.3	4.8	7.2	9.6	4.4	6.7	8.9	3.9	6.0	8.0	3.5	5.3	7.1
Caspian 120	6.7	10.7	14.5	6.1	9.7	13.2	5.6	8.7	11.9	4.9	7.7	10.6	4.1	6.8	9.4
Caspian 150	14.8	15.4	16.2	13.7	14.2	15.2	12.5	13.1	14.0	11.3	11.9	12.8	9.9	10.8	11.6
Caspian 180	17.2	18.2	19.2	16.2	17.0	18.0	14.9	15.7	16.7	13.6	14.4	15.4	12.4	13.3	14.1

Model	Heat Output at 55°			Heat Output at 50°			Heat Output at 45°			Heat Output at 40°		
	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)	Low (kW)	Medium (kW)	High (kW)
Caspian 60	1.7	2.4	3.1	1.4	2.0	2.5	1.1	1.5	1.9	0.8	1.0	1.2
Caspian 90	3.0	4.6	6.2	2.6	3.9	5.3	2.0	3.1	4.1	1.5	2.2	2.9
Caspian 120	3.4	5.8	8.1	2.7	4.8	6.9	2.0	3.7	5.4	1.3	2.6	3.9
Caspian 150	8.8	9.7	10.4	7.5	8.2	9.0	6.2	6.9	7.5	4.8	5.4	6.1
Caspian 180	11.3	12.0	12.8	9.8	10.5	11.2	8.4	9.1	9.4	6.6	7.3	7.8

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

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

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

## 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

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

$$M = H / CP \times (\text{Flow } ^\circ\text{C} - \text{Return } ^\circ\text{C})$$

M = Mass flow rate (L/S)

H = Output of product (W)

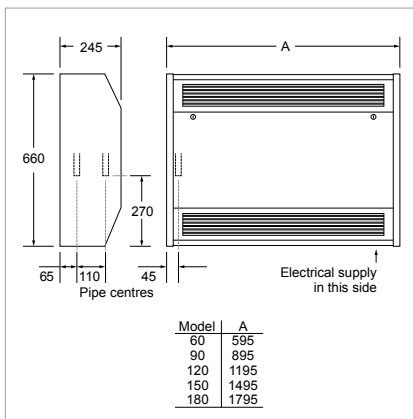
CP = Specific heat capacity [J/(kg·°C)]. Varies upon system temperature, Approx. 4187 if fluid is water.

## How to calculate Mean Water Temperature (ΔT)

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

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## Ordering guide

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

## Specification

To specify state:

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

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

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

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