

Caspian EXT

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

- 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 EXT 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
- Caspian EXT can be installed in a recess to allow a flush finish to wall. It 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
- Can be installed as a freestanding appliance
- Warm air is delivered at 1.7m from the base/floor level

Applications

- Showrooms and shops
- Waiting room
- Changing room
- Place of worship
- Care home/Hospital
- Entrance hall/Corridor
- Meeting room/Hall/Club
- Public house
- School/Nursery
- Library

Motor

EC (BMS compliant) or AC (on request)

Finish

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

Filter

Class G3, 100% polyester, non-washable

Installation

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

Controls

Variable heat output controller (mounted within the product)

Accessories

Thermostat T1 (low level models with EC motors)
Thermostat (T1) & auto-speed Control (T2) (Low Level models with AC motors)
Plinth (150mm high) to suit each model, available in black or white - AC and EC
Proportional heat output controller, integral and remote - EC only
Standard room thermostat - AC and EC
Tamper proof thermostat - AC and EC
External control harness (for up to 4 products) - EC only
Caspian EC linking kit - EC only
Siemens RF thermostat - AC and EC
Adjustable low temperature cut-out (30°C to 90°C)
22mm flexible hoses (pair) - AC and EC

Specification

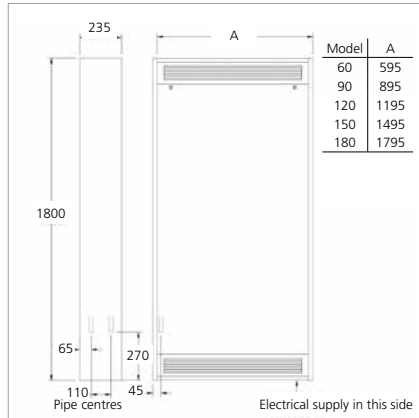
To specify state:

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

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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	4.5	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	9.6	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

Correction factors

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

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

How to calculate Mass Flow Rate (L/S)

$$\text{Flowrate (L/S)} = \left[\frac{\text{Total heat emitted from product (kW)}}{(\text{Flow temperature} - \text{Return temperature})} \right] \times 4.186 \text{ (Specific heat)}$$

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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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	2.54	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

Ordering guide

For a full listing of products and accessories available please visit our website for the most up to date information

Model	Packed wt (kg)	AC Codes	EC Codes	Accessories	Product Codes
Caspian EXT 60	30	HPCA25001	HPCA24001	Plinth to suit low level 60 models - 150mm high (Black or White)	HACA33006
Caspian EXT 90	49	HPCA25002	HPCA24002	Plinth to suit low level 90 models - 150mm high (Black or White)	HACA33007
Caspian EXT 120	58	HPCA25003	HPCA24003	Plinth to suit low level 120 models - 150mm high (Black or White)	HACA33008
Caspian EXT 150	76	HPCA25004	HPCA24004	Plinth to suit low level 150 models - 150mm high (Black or White)	HACA33009
Caspian EXT 180	95	HPCA25005	HPCA24005	Plinth to suit low level 180 models - 150mm high (Black or White)	HACA33010
				Thermostat T1 (low level models with EC motors)	HACA33002
				Thermostat (T1) & auto-speed Control (T2) (Low Level models with AC motors)	HACA33003
				Proportional Heat Output Controller (models with EC motors) Integral	HACA33005
				Proportional Heat Output Controller (models with EC motors) Remote Sensor	HACA33037
				Remote Room Thermostat	HAGA95001
				Siemens Room Thermostat (Tamper Proof)	HAGA95004
				External Control Harness (models with EC motors)	HACA33004
				Caspian EC Linking Kit (EC Only)	HACA33068
				Siemens Room Thermostat (RF)	HACA33074
				Adjustable low temperature cut-out (all Caspian models)	HACA33001
				22mm flexible hoses (pair)	HAGA95003

Accessories



External control harness (for up to 4 products)



Plinth (150mm high) in black or white



Adjustable low temperature cut-out (30°C to 90°C)



Wall mounted room thermostat



22mm flexible hoses (pair)