Smith s CTFF60 Caspian CTFF Fan Convector Owner's Manual

Contents

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Caspian CTFF fits into 600mm x 600mm or 600mm x 1200mm ceiling tile, providing easy access for both installation and maintenance

- 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.
- 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
- EC versions are now available with Caspian Smart Controls, for more information please visit our website: **https://smithsep.co.uk/catalogue/caspian-smart-controls/**

Product Information

Motor
EC (BMS compliant).

Finish
Casing: zinc-coated steel 1.2mm. Polyester powder coated: white RAL 9010. Available to special order in any color.

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 the underside. Pipework access holes on the rear and underside. Key-operated front access panels. Bleed valve accessible on the removal of the front casing. The 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 Fan Convector with EC motor, in 1.2mm zinc coated steel, 595mm x 595mm or 595mm x 1195mm. With variable heat output controller. As Smith's Caspian CTFF60/120

Technical Data

Heat output – EC

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 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

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 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		

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 quarter sphere). 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

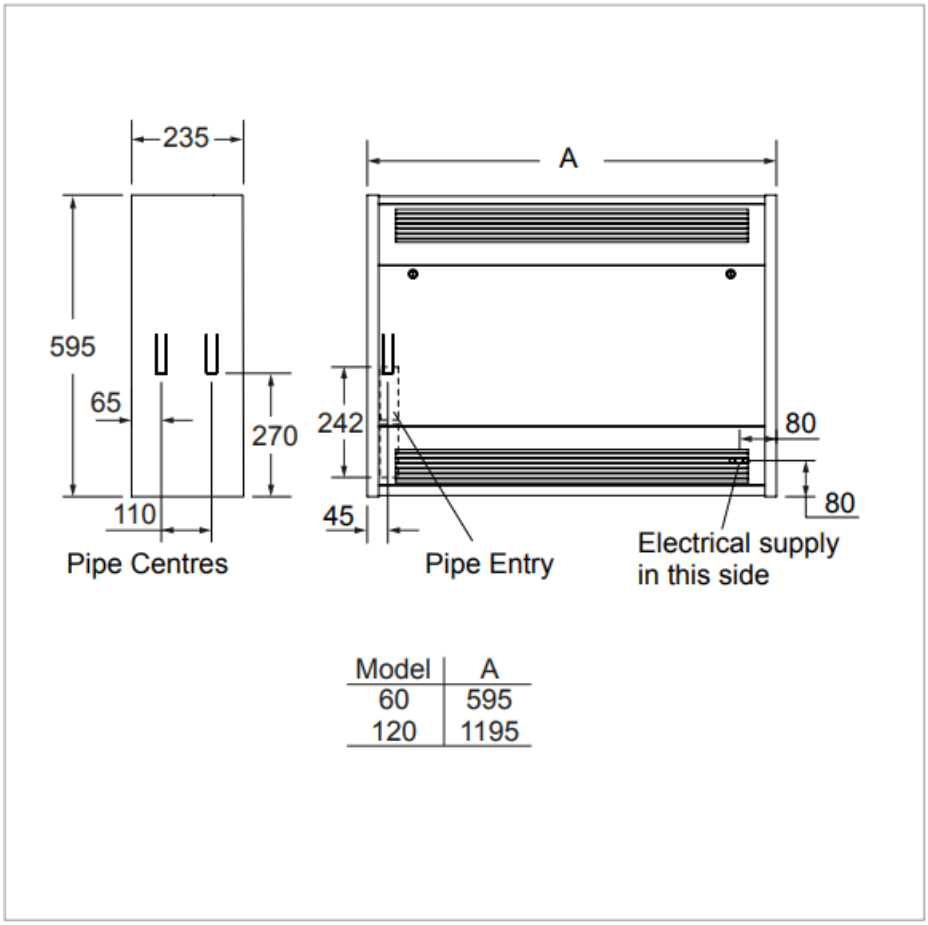
Mean Water Temp °C		45 - 80			
Water Temperature drop °C		5	10	15	20
Entering Air Temperature °C	15	1.13	1.10	1.07	1.05
	18	1.08	1.05	1.02	0.99
	20	1.04	1.00	0.95	0.89
	25	0.93	0.91	0.89	0.86

- Factors are approximate data based upon a standard coil

How to calculate Mean Water Temperature

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

Dimensions



Model	A
60	595
120	1195

Ordering Guide

Model	Packed Wt (kg)	Product Code
CASPIAN CTFF60EC	23	HPCA29004
CASPIAN CTFF60 C/W REMOTE SMART CONTROL	23	HPCA30005
CASPIAN CTFF120EC	45	HPCA29003
CASPIAN CTFF120 C/W REMOTE SMART CONTROL	45	HPCA30004

Accessories

FLEXIBLE HOSES 22MM PAIR	HAGA95003
ROOM THERMOSTAT HARD-WIRED	HAGA95001
ROOM THERMOSTAT TAMPER PROOF	HAGA95004
CASPIAN PROPORTIONAL HEAT OUTPUT CONTROLLER 15°-25° REMOTE SENSOR (EC)	HACA33037
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	HACA33001
CASPIAN EXTERNAL CONTROL HARNESS (EC)	HACA33004
CASPIAN EC LINKING KIT (MASTER/SLAVE)	HACA33068
CASPIAN REMOTE SWITCHING ON/OFF RELAY (24V AC COIL)	HACA33127

Specifications

- **Motor:** EC (BMS compliant)
- **Finish:** Casing – zinc-coated steel 1.2mm, Polyester powder-coated in white RAL 9010 (available in any color upon special order)
- **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 the underside, pipework access holes on the rear and underside, key-operated front access panels, bleed valve accessible on the removal of the front casing, the unit must be earthed

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FAQS

Q: Are Caspian fan convectors compatible with all types of heating systems?
A: Yes, Caspians are compatible with most types of wet central heating systems including conventional boilers, biomass technology, and ground or air source heat pumps.

Q: Can I integrate master and slave Caspian fan convectors?
A: Yes, it is possible to have master and slave Caspians that integrate the entire range of EC Caspian products. Contact the sales or technical team for correct specifications.

Documents / Resources

	Smith s CTFF60 Caspian CTFF Fan Convector [pdf] Owner's Manual CTFF60, CTFF120, CTFF60 Caspian CTFF Fan Convector, CTFF60, Caspian CTFF Fan Convector, CTFF Fan Convector, Fan Convector, Convector

References

- User Manual