

Caspian® TT

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



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

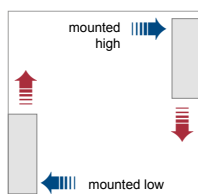
Commissioning

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 TT 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 TT 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 TT 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 TT 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 TT 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 TT 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 TT 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 TT 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 TT 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 TT 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 TT 60	22mm	3A	8	24	40	0.92	50	42	33	white
CASPIAN TT 90	22mm	3A	15	43	70	1.50	53	42	34	white
CASPIAN TT 120	22mm	3A	13	62	110	2.08	58	46	35	white
CASPIAN TT 150	22mm	3A	20	144	177	2.58	59	47	36	white
CASPIAN TT 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

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)

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

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.

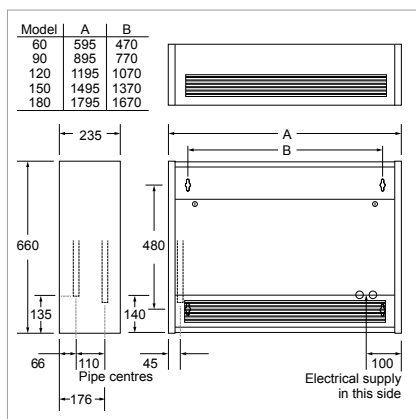
How to calculate Mean Water Temperature (ΔT)

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

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Ordering guide

Model	Packed Wt (kg)	Product Codes
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

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.

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

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

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