

ECOTRONIC INLINE AXIAL, EC SERIES

ANCILLARY EQUIPMENT



DESCRIPTION

The ECOtronic EC Series of inline axial fans incorporates an IE5* rated Electronically Commutated (EC) shaft motor delivering ultra energy efficient operation with the benefit of in-built variable speed control. Via a range of common control signals, the ECOtronic can be easily designed into a Demand Control Ventilation system without the need for a VSD or motor overload protection. The ECOtronic EC fan is a simple "plug and play" system which means installers do not need to have specialised control programming knowledge. The series is available in 7 sizes ranging from 315 to 630mm diameter.

Typical Applications


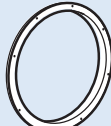
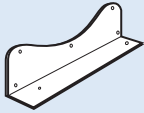



Exhausting or supplying air in a wide range of commercial and industrial applications. Also where demand control ventilation is required.

Features

- Ultra energy efficient by combining aerofoil "Series 1" impeller blades and IE5* rated EC motor
- Ability to select a fan with a specific impeller pitch angle ensures selections can be made accurately to the specification.
- Impeller materials range from GRP (standard), aluminium, nylon and anti-static.
- EC motor features reverse polarity protection, locked rotor protection and soft start
- No additional protection such as motor overload protection is required
- Can be manually speed controlled by pressing 2 internal motor buttons
- Can be remote speed controlled with the following input signals: 2-10V, 4-20mA, or frequency duty cycle 10-95% (80Hz, 10-24Vpk)
- Can be run as an independent ventilation source or integrated into most building management systems
- Maximum operating speed can be adjusted from 1800rpm to 200rpm
- On board fault identification LED will flash according to fault type
- Integrated "Fire Mode" function forces motor to continue working under adverse conditions (at set speed)
- Operating temperature: -20 °C to +60 °C when air velocity exceeds 5 m/s, otherwise -20 °C to +40 °C

Construction

Casings are pre-galvanised steel.
Impellers are of high performance composite material.

 Vibration Isolators Ref. J-1	 MF - Matching flange Ref. J-4	 F - Mounting Foot Ref. J-6
 IC - Inlet cone Ref. J-7	 DG - Finger Guards Ref. J-9	 0-10V Speed Controller, Ref. M-20

Motors

Type - electronic commutated (EC) motor.
Electricity supply - 200-277V single-phase, 50/60Hz.
Bearings - sealed-for-life, ball.
See page O-7 for details on motors.
IP55 rating.

Internal Thermal Protection

Motor overload protection is supplied as standard.

Testing

Air flow tests to ISO5801: 2007
Noise tests to BS848:Part 2, 1985 at 50% peak pressure

Special Notes

EC motors should be directly connected to their appropriate AC supply. EC motors should not be regularly power cycled.
* At time of publication the IE5 Efficiency level is not currently defined by the IEC Standard, however the intent is for IE5 motors to have approximately a 20% reduction in losses against IE4 motors.

SUGGESTED SPECIFICATION

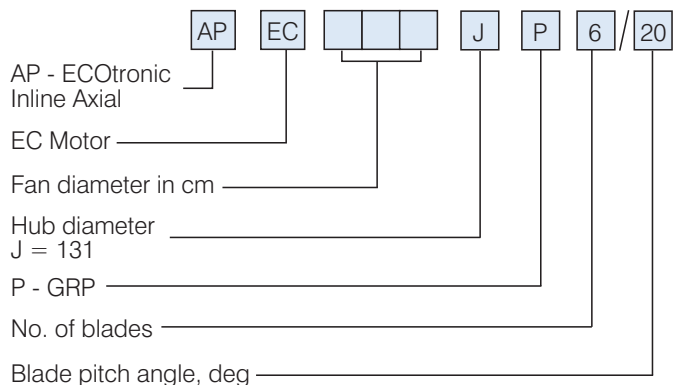
The inline axial fans shall be of the ECOtronic EC Series as designed and manufactured by Fantech Pty Ltd and be of the model numbers shown on the schedule/drawings.

The axial impellers shall be made from high performance composite material. They shall be driven by an EC shaft motor with integrated speed controller and motor overload protection. Fan casings shall be of pre-galvanised steel.

All models shall be fully tested to ISO5801:2007 for air flow and to BS848:Part 2, 1985 for noise at 50% peak pressure.

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HOW TO ORDER



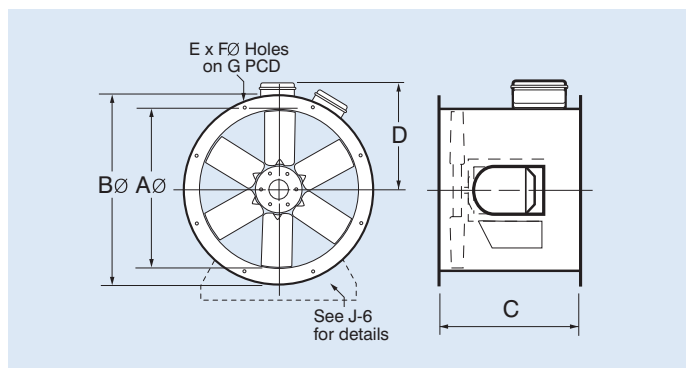
TECHNICAL DATA

Model Number APEC...	Max. Fan Speed rev/sec*	Avg. dB(A) Inlet	3m Outlet	Input kW#	Peak Amps
031JP6	30	46	47	0.11	0.92
035JP6	30	53	53	0.11	1.09
040JP6	30	55	57	0.29	2.54
045JP6	30	59	59	0.42	3.65
050JP6	30	59	59	0.59	4.63
056JP6	30	63	63	0.82	6.45
063JP6	30	66	67	1.24	9.49

* The fan will maintain the set speed whether run on 50 or 60Hz supply.

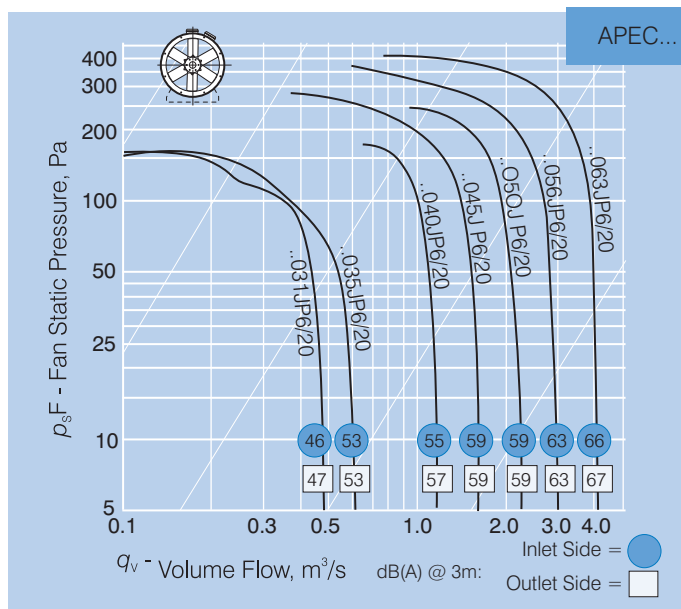
At best efficiency point.

DIMENSIONS



Model Number APEC...	Dimensions, mm							App. wt. kg
	AØ	BØ	C	D	E	FØ	G	
031JP6..	315	380	400	229	8	10	355	15
035JP6..	355	425	400	250	8	10	395	19
040JP6..	400	485	400	272	8	12	450	25
045JP6..	450	530	400	298	8	12	500	30
050JP6..	500	585	400	323	12	12	560	35
056JP6..	560	645	400	353	12	12	620	37
063JP6..	630	715	400	388	12	12	690	37

PERFORMANCE CURVE



Scan the QR code to view more information online.

