

# The Next Level in Energy Efficiency



EC<sup>o</sup>tronic



The ECOtronic EC Series of duct mounted, wall mounted and roof mounted fans incorporate an IE6\* 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.



# An Energy Saving Solution



Fantech is committed to developing innovative and energy efficient products and systems that are designed to optimise the indoor environment while lowering power consumption.

The ECOtronic range of EC fans achieves an IE6\* rated Electronically Commutated (EC) shaft motor delivering ultra-energy efficient operation with the benefit of in-built speed control. They are a more efficient, cost-effective ventilation solution that has lower energy requirements, can lead to a reduction in a building's running costs and have less environmental impact.

*\* Future IE6 level of efficiency, considering 20% less losses than IE5 according to IEC TS 60034-30-2 for variable speed electric motors.*

They are a more efficient, cost-effective ventilation solution



# Helps Reduce On-site Commissioning

The ECOtronic fan range features fully integrated infinite variable speed control and eliminates the need for external VSDs, current overloads and motor phase protection. They include reverse polarity protection, locked rotor protection, soft start and can be run as an independent ventilation source or integrated into most building management systems.

ECOtronic fan models can be supplied with the Fantech Aviator range of controls that can be configured to suit a large range of sensors and parameters provided by the customer. This can reduce considerable on-site commissioning time as installers do not need to have specialised control programming knowledge. The sensors monitor the ambient conditions in a space providing real time feedback and adjusts the fan speed to modulate the ventilation rate and match the specified requirements of the area.

The ECOtronic range of EC fans includes duct mounted, wall mounted and roof mounted models.



## Contents



ECOtronic Inline Axial,  
EC Series

4-5



ECOtronic Powerline,  
EC Series

6-7



ECOtronic Square Plate,  
EC Series

8-9



ECOtronic Heritage,  
EC Series

10-11



Ancillaries

12

# ECOtronic Adjustable Pitch Axial

The ECOtronic EC Series of adjustable pitch axial fans incorporate an IE6\* 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.

ECOtronic adjustable pitch axial fans are available in a number of diameters and mounting types, including duct mount, roof mount and wall mount.



ECOtronic



## Features

- Ability to select a fan with a specific impeller pitch angle ensures selections can be made accurately to the specification
- Can be run as an independent ventilation source or integrated into most building management systems
- Impeller materials range from GRP (standard) or aluminium
- 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)
- Maximum operating speed can be limited
- Integrated "Fire Mode" function forces motor to continue working under adverse conditions (at set speed)
- ECOtronic fans are not designed for hazardous or high temperature conditions



# Adjustable Pitch Axial Mounting types

## Duct Mount Axial Series

The ECOtronic range of horizontal duct mount, adjustable pitch fans (APEC) comes with in-built variable speed control to meet an extensive number of performances and applications.



## Vertical Duct Mount Axial Series

The ECOtronic range of duct mount, adjustable pitch fans can be supplied for applications where the fan is installed vertically (APVEC). The casing is designed with integral outriggers to facilitate vertical mounting.



## Roof Mount New Generation Axial Series

Available in both vertical (RVEEC) and downflow (RDEEC) configurations for exhaust, and downflow (RDSEC) for supply. The hot dip galvanised heavy-gauge steel base incorporates a bell-mouth entry to optimise the air flow. Downflow cowls are generally plastic and vertical discharge windbands are galvanised steel.



## Roof Mount Alpha & Beta Lightweight Industrial Axial Series

The lightweight series is available in both vertical (RVLEEC) and downflow (RDLEEC) configurations for exhaust, and downflow (RDLSEC) for supply. Cowls on the downflow units are made from plastic and the vertical discharge windbands are made from galvanised steel. All models incorporate a pressed galvanised steel base.



## Wall Mount SQ Axial Series

Available in Type A (SQAEC) and Type B (SQBEC) configurations, all square-plate fans, irrespective of air flow direction, incorporate a bell-mouth entry; the direction of air flow must be nominated at the time of order. The square plates are of heavy-gauge hot dip galvanised steel.



# ECOtronic Powerline

The quiet and high performance, ECOtronic PowerLine incorporates an IE6\* rated Electronically Commutated (EC) shaft motor delivering ultra-energy efficient operation with the benefit of in-built variable speed control. It uses a centrifugal impeller that results in producing a more efficient air flow with greater pressure.

The series is available in 6 sizes ranging from 315 to 560mm diameter.



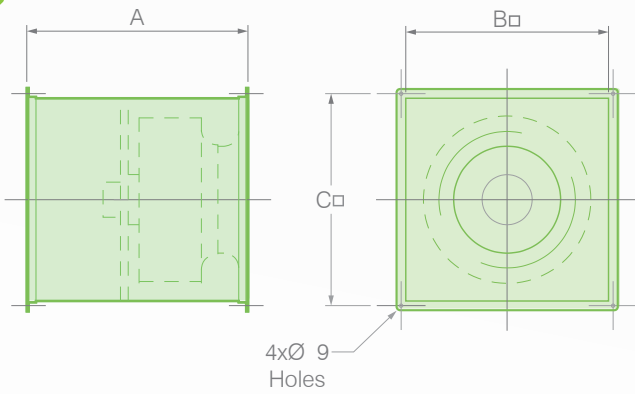
ECOtronic



## Features

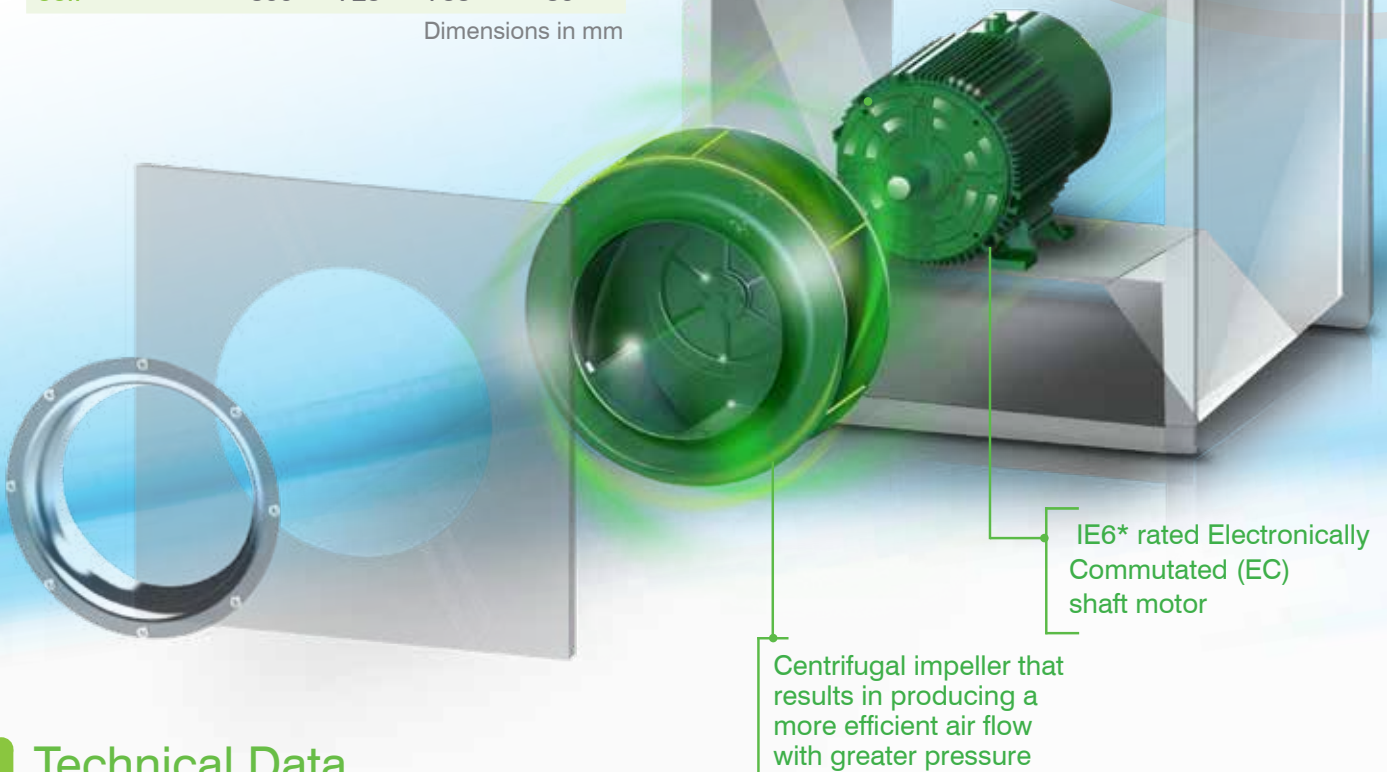
- EC motor features reverse polarity protection, locked rotor protection and soft start
- Can be run as an independent ventilation source or integrated into most building management systems
- Can be manually speed controlled by pressing 2 internal motor buttons
- Can be remote speed controlled with either a 2-10V, 4-20mA, or frequency duty cycle 10-95% (80Hz, 10-24Vpk)
- Maximum operating speed can be limited
- Integrated "Fire Mode" function forces motor to continue working under adverse conditions (at full speed)
- Easy to fit 35mm TDF profile flange connections.
- Robust, yet lightweight galvanised steel construction.
- ECOtronic fans are not designed for hazardous or high temperature conditions

## Dimensions



Model PCEEC..DD PCDEC..DD	A	B	C	App Weight Kg
31..	500	400	433	25
35..	550	450	483	30
40..	550	500	533	36
45..	600	550	583	50
50..	700	650	683	58
56..	800	725	758	80

Dimensions in mm



## Technical Data

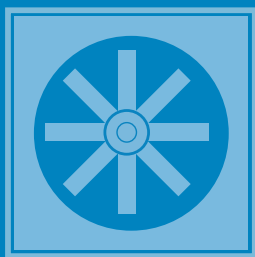
Model PCDEC..DD PCEEC..DD	Max.Fan Speed rev/sec*	dB(A) @3m	PCEEC..DD		PCDEC..DD	
			1ph kW	1ph Amps	3ph kW	3ph Amps
31	30	54	0.37	3.2	-	-
35	30	57	0.55	4.2	-	-
40	30	60	1.10	8.9	-	-
45	25	59	-	-	1.50	2.92
50	25	63	-	-	1.50	2.92
56	25	67	-	-	3.00	5.68

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

# ECOtronic Compact Square Plate

ECOtronic Compact Square Plate fans combine an IE6\* rated electronically Commutated (EC) shaft motor with a high-performance Aerofoil "Series 1" impeller. This delivers ultra-energy efficient operation with the benefit of in-built variable speed control via a range of common control signals.

The series is available in 8 sizes ranging from 250 to 630mm diameter.



ECOtronic



## Features

- A compact, external rotor motor fan with external grille and powder coated, cowl mount plate
- 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 limited
- Integrated "Fire Mode" function forces motor to continue working under adverse conditions (at set speed)
- Units are light weight and can be mounted at any angle
- Robust galvanised steel construction with polyester epoxy finish.
- ECOtronic fans are not designed for hazardous or high temperature conditions



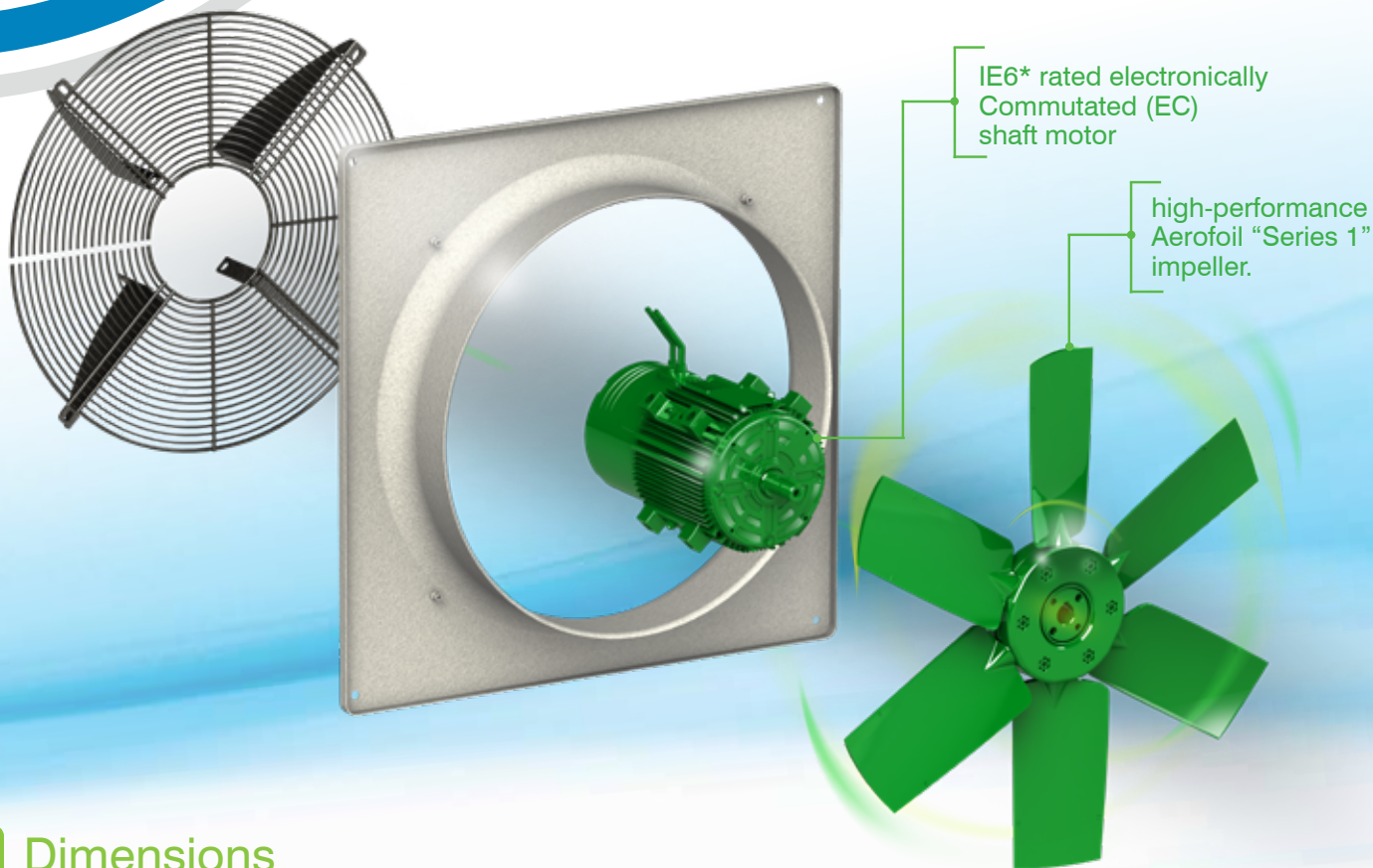


## Technical Data

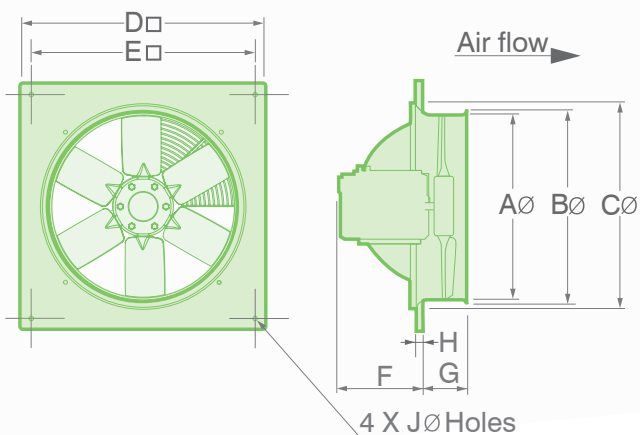
Model CPEEC..	Max.Fan Speed rev/sec*	Max Air flow @ 0Pa m <sup>3</sup> /s	Avg.dB(A) @ 3m		kW#	Peak Amps
			Inlet	Outlet		
25DD	30	0.24	45	44	0.06	0.53
31DD	30	0.52	52	52	0.11	1.03
35DD	30	0.76	56	55	0.18	1.54
40DD	30	1.14	60	59	0.26	2.61
45DD	30	2.04	60	60	0.42	3.99
50DD	30	2.22	63	63	0.64	5.29
56DD	30	2.98	67	67	0.93	7.55
63DD	30	4.16	66	69	1.34	10.45

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

# At best efficiency point.



## Dimensions



Model PCEEC..	AØ	BØ	CØ	D□	E□	F	G	H	JØ	Approx. weight kg
25DD	250	263	285	370	320	197	74	15	6	10
31DD	315	325	330	430	380	201	85	10	9	11
35DD	350	360	370	485	435	194	85	10	9	11
40DD	400	410	420	540	490	170	95	12	9	13
45DD	450	460	470	575	535	198	95	12	11	15
50DD	500	510	535	655	615	231	100	15	11	21
56DD	560	575	600	725	670	247	100	15	11	24
63DD	630	645	670	805	750	251	105	20	11	27

Dimensions in mm

# ECOtronic Heritage

The ECOtronic Heritage Series of vertical exhaust roof units has been designed for use in ducted exhaust applications. It combines a high-performance centrifugal fan with an IE6\* rated electronically Commutated (EC) shaft motor that delivers ultra-energy efficient operation with the benefit of in-built variable speed control.

The series is available in 6 sizes ranging from 315 to 560mm diameter.



## Features

- EC motor features reverse polarity protection, locked rotor protection and soft start
- Can be run as an independent ventilation source or integrated into most building management systems
- Windband can be easily removed to allow easy access for cleaning and maintenance
- Can be remote speed controlled with either a 2-10V, 4-20mA, or frequency duty cycle 10-95% (80Hz, 10-24Vpk)
- Can be manually speed controlled by pressing 2 internal motor buttons
- ECOtronic fans are not designed for hazardous or high temperature conditions
- Maximum operating speed can be limited
- Motor is mounted out of the airstream
- Can be mounted at angles up to 15°
- Robust, yet lightweight galvanised steel construction

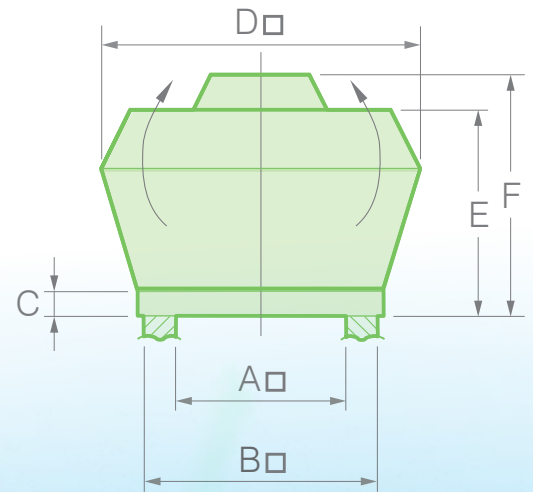


ECOtronic

## Dimensions

Model CHDEC..DD CHEEC..DD	A□	B□	C	D□	E	F Max	Approx. weight kg
<b>31</b>	310	410	50	520	310	540	30
<b>35</b>	400	500	50	665	420	550	35
<b>40</b>	400	500	50	665	420	570	37
<b>45</b>	620	720	60	900	540	790	49
<b>50</b>	620	720	60	900	540	820	51
<b>56</b>	620	720	60	900	540	850	56

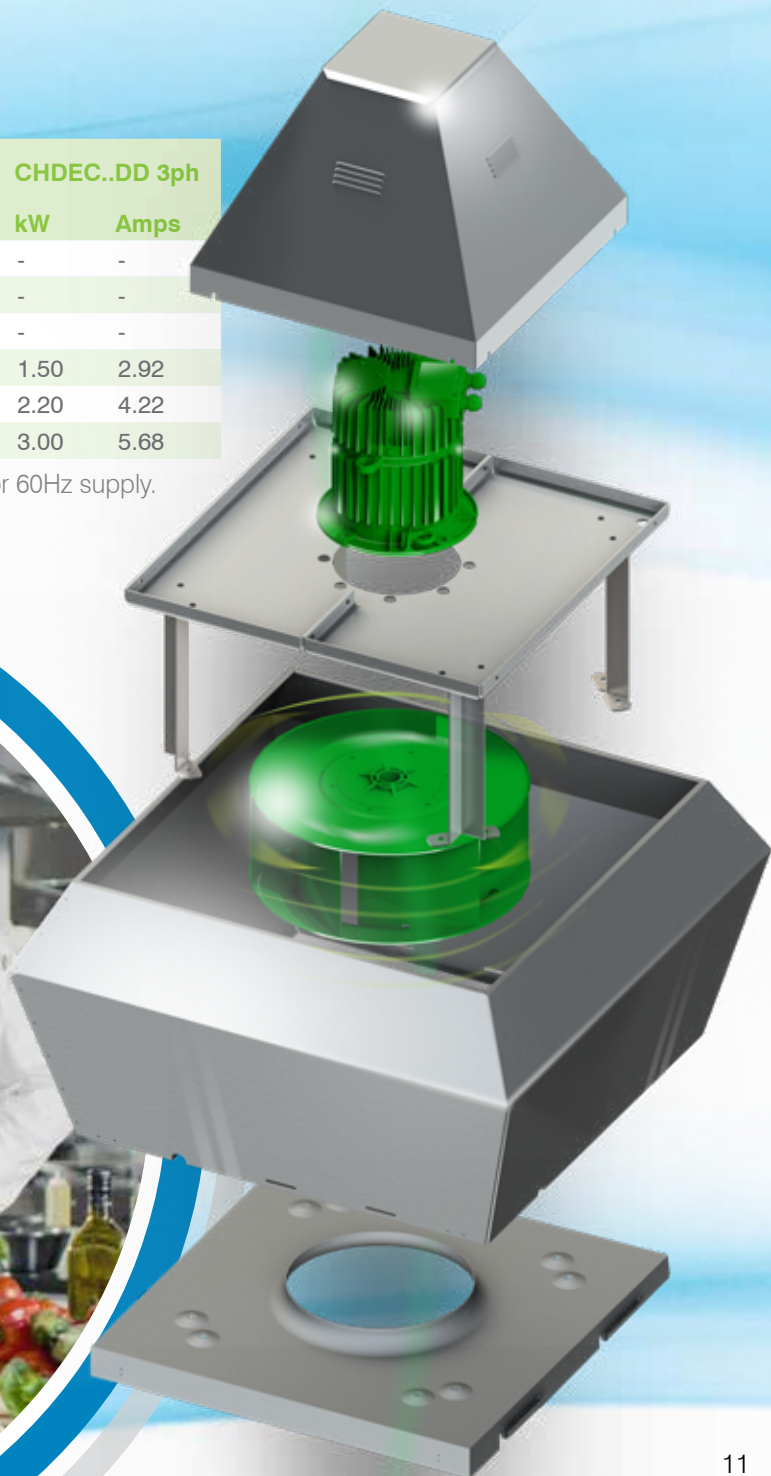
Dimensions in mm



## Technical Data

Model CHDEC..DD CHEEC..DD	Max.Fan Speed rev/sec*	Avg. dB(A) @ 3m	CHEEC..DD 1ph		CHDEC..DD 3ph	
			kW	Amps	kW	Amps
<b>31..</b>	30	60	0.37	3.2	-	-
<b>35..</b>	30	63	0.55	4.2	-	-
<b>40..</b>	30	69	1.10	8.9	-	-
<b>45..</b>	25	58	-	-	1.50	2.92
<b>50..</b>	25	62	-	-	2.20	4.22
<b>56..</b>	25	66	-	-	3.00	5.68

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



# Ancillaries

## Fan Mounting Feet

All feet are galvanised steel and designed to support the fan horizontally. They are available in a F configuration for duct mounted axial pitch fans and an FT configuration for in-line fan mounting.



F - Axial Fan Mounting Feet



FT - In-Line Mounting Feet



## Vibration Isolators

Easy to install, rubber and spring mount, vibration isolators to give a wide range of load-deflection characteristics and provide effective isolation of noise and vibration.



Rubber-In-Shear Mounts



Spring Mounts  
25mm / 50mm Deflection



## 0-10V EC Speed Controller

The manually adjustable, 0-10V speed controller has been specially developed for stepless speed adjustment of EC fans, VSDs, or controllers that accept a 0-10V control signal.



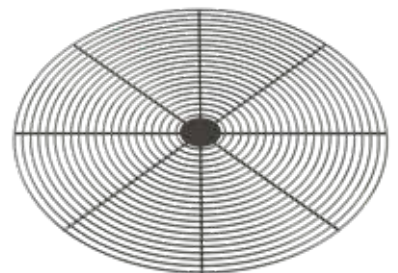
Wall mounted



Standalone

## Finger Guards

A full range of finger guards for plate mounted and duct fans.



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Specifications and design subject to change without notice.

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