

GAMMA ULTRA EC SERIES



ULTRA
Range

ECO
Range

DESCRIPTION

The Gamma Ultra EC Series of Mixed-Flow roof mounted exhaust fans incorporates the latest state of the art, energy saving EC motor technology. They feature integrated infinitely variable speed control and eliminate the need for external VSDs, current overloads and motor phase protection.

The Gamma Ultra EC Series is a simple “plug and play” system which means installers do not need to have specialised control programming knowledge.

Matching sensors can easily be connected to monitor the ambient conditions in a space and provide real time feedback to the fan. The fan’s on-board microprocessor can adjust the speed and therefore modulate the ventilation rate to match the specific requirements of the area.

Models come in downflow or vertical discharge configurations and are available in 280 to 630mm fan sizes.

Typical Applications

Exhausts air from a wide range of commercial applications such as factories, warehouses and workshops, change rooms, bulk goods retail outlets and assembly halls.

Features

- EC motor features reverse polarity, locked rotor protection and soft start.
- No additional protection such as contactors are required.
- All models supplied standard with 0-10V control input.
- Diameter sizes 400mm and above can be pre-configured to suit specific sensors and specific applications.
- A full range of sensors are available including differential pressure, humidity, temperature, air velocity and pollutant.
- Can be run as an independent ventilation source or integrated into most building management systems.
- Robust and lightweight construction.
- Compact, low profile design.
- Designed for downflow or vertical exhaust applications.
- Can be mounted at angles up to 30°.

Construction

Cowls are UV-stabilised plastic.

Impellers are Mixed-Flow design and made from high performance injection moulded composite material.

Steel components have a corrosion resistant finish.

Bird-mesh guards are fitted as standard to both downflow and vertical exhaust models.

Motors

Type - electronic commutated (EC) motor.

Electricity supply - 200-277V single-phase, 50/60Hz for 280 to 450mm sizes.

- 380-480V three-phase, 50/60Hz for 500, 560 and 630mm sizes.

Bearings - sealed-for-life, ball.

See page O-7 for details on motors.

Integrated EC-Controller providing infinite speed control.

Internal Thermal Protection

Integral thermal overload protection is supplied as standard.

Testing

Air flow tests based on ISO 5801

Noise tests based on ISO 13347-3

Wiring Diagram

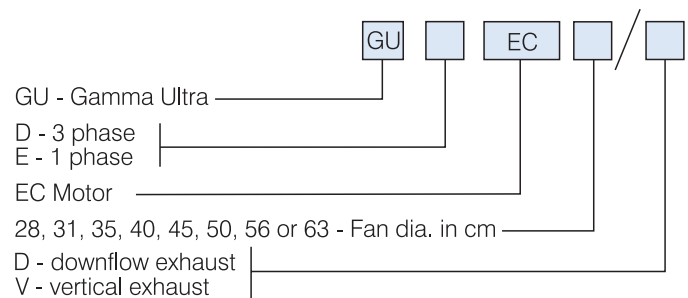
See pages D-4 and D-7

Special Note


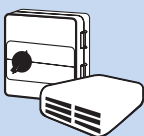
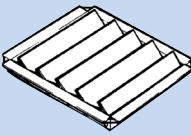
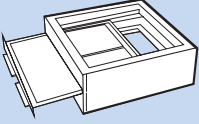
Diameter sizes from 400mm and above can be pre-configured to suit specific sensors and specific applications. Please advise Fantech of these parameters at the time of order.

EC motors should be directly connected to their appropriate AC supply. EC motors should not be regularly power cycled.

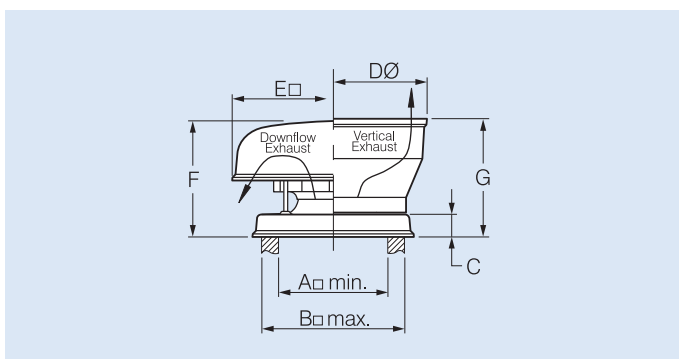
HOW TO ORDER



ANCILLARY EQUIPMENT

 <p>DCV-CU - Premium Module on-board control pack Ref. Section M</p>	 <p>Controllers & Sensors Ref. Section M</p>	 <p>CBD - Backdraft shutter Ref. Section J</p>
 <p>BASEBFC Bushfire Base Ref. Section J</p>		

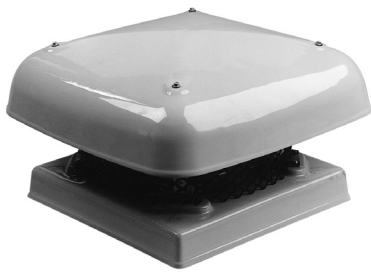
DIMENSION DRAWING



Model	Dimensions, mm							App. Weight
GUDEC...	A	B	C	DØ	E	F	G	kg
280	310	410	75	500	570	345	341	9
315-355	400	500	75	640	670	390	433	14
400-500	620	720	75	908	890	532	537	32
560-630	710	810	75	1260	1180	642	674	83

FANTECH
Intelligent Ventilation

GAMMA ULTRA EC SERIES



SUGGESTED SPECIFICATION Downflow Exhaust Series

The roof ventilators shall be of the Gamma Ultra EC Series downflow exhaust type as designed and manufactured by Fantech Pty Ltd and be of the model numbers shown on the schedule/drawings.

Impellers shall be made from high performance injection moulded composite material. They shall be Mixed-Flow design and driven by EC external rotor motors with integrated EC Controller and integral thermal overload protection. Diameter sizes from 400mm and above shall be pre-configured to suit the selected sensors and the required applications.

The cowls shall be of the downflow exhaust design and manufactured from UV-stabilised plastic. Steel components shall be corrosion protected.

All performance data shall be for a complete assembled unit based on ISO5801 for air flow and ISO 13347-3 for noise.

SUGGESTED SPECIFICATION Vertical Exhaust Series

The roof ventilators shall be of the Gamma Ultra EC Series vertical exhaust type as designed and manufactured by Fantech Pty Ltd and be of the model numbers shown on the schedule/drawings.

Impellers shall be made from high performance injection moulded composite material. They shall be Mixed-Flow design and driven by EC external rotor motors with integrated EC Controller and integral thermal overload protection. Diameter sizes from 400mm and above shall be pre-configured to suit the selected sensors and the required applications.

The windband shall be of the vertical exhaust design and manufactured from UV-stabilised plastic. Steel components shall be corrosion protected.

All performance data shall be for a complete assembled unit based on ISO5801 for air flow and ISO 13347-3 for noise.

TECHNICAL DATA

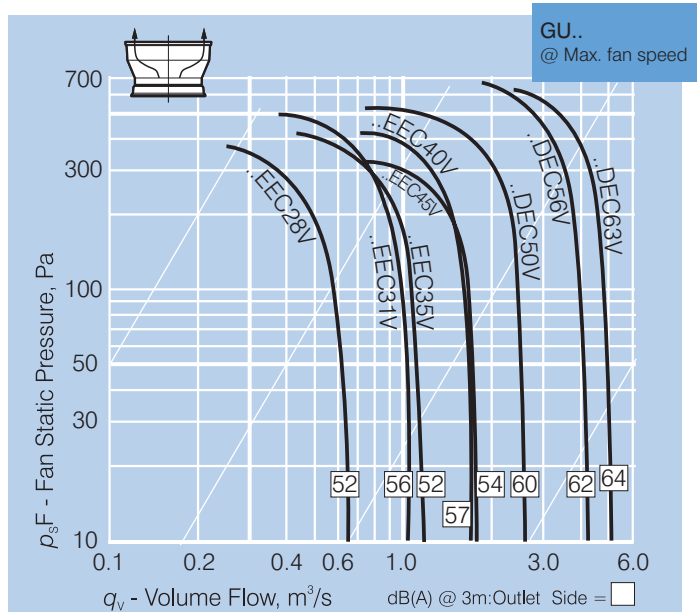
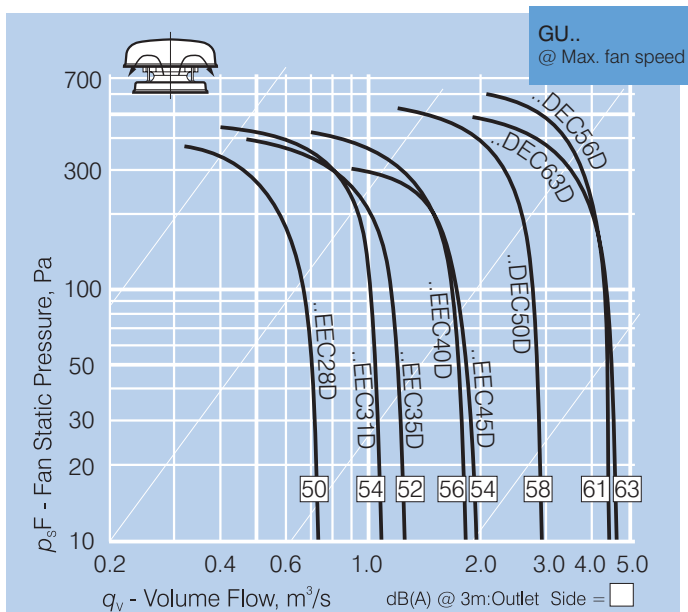
Model	*Max. Fan Speed r/s	*Max. operating temp (deg °C)	Air flow @0Pa @ 3m m ³ /s	Avg. dB(A) @ 3m	GUEEC..1ph. kW Amps		GUDEC..3ph. kW Amps	
GUDEC.D	GUDEC.D	GUDEC.D	GUDEC.D	GUDEC.D	GUDEC.D	GUDEC.D	GUDEC.D	GUDEC.D
28	34	60	0.74	50	0.29	1.26	-	-
31	35	55	1.10	54	0.55	2.42	-	-
35	28	55	1.23	52	0.50	2.19	-	-
40	26	55	1.85	56	0.84	3.68	-	-
45	20	60	1.93	54	0.65	2.84	-	-
50	23	40	2.95	58	-	-	1.40	2.21
56	24	60	4.60	61	-	-	2.65	4.05
63	22	40	4.75	63	-	-	3.52	5.36

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

TECHNICAL DATA

Model	*Max. Fan Speed r/s	*Max. operating temp (deg °C)	Air flow @0Pa @ 3m m ³ /s	Avg. dB(A) @ 3m	GUEEC..1ph. kW Amps		GUDEC..3ph. kW Amps	
GUDEC.V	GUDEC.V	GUDEC.V	GUDEC.V	GUDEC.V	GUDEC.V	GUDEC.V	GUDEC.V	GUDEC.V
28	34	60	0.65	52	0.29	1.26	-	-
31	35	55	1.05	56	0.55	2.42	-	-
35	28	55	1.19	52	0.50	2.19	-	-
40	26	55	1.75	57	0.84	3.68	-	-
45	20	60	1.85	54	0.65	2.84	-	-
50	23	40	2.60	60	-	-	1.40	2.21
56	24	60	4.25	62	-	-	2.65	4.05
63	22	40	5.20	64	-	-	3.52	5.36

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



Scan the QR Code to view wiring diagrams or more information online.



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