

# ALPHA & BETA SERIES



## TECHNICAL DATA

Model	Fan Speed rev/sec	Avg. dB(A) @ 3m	AE...1ph.		AD...3ph.	
AD..	AE..		kW	Amps*	kW	Amps*
<b>314</b>	22	45	0.09	0.90	0.12	0.50
<b>354</b>	21	49	0.09	0.90	0.12	0.50
<b>404</b>	23	52	0.25	1.80	<b>0.37</b>	<b>1.40</b>
<b>406</b>	16	47	0.12	1.05	0.16	0.93
<b>454</b>	22	54	0.25	1.80	<b>0.37</b>	<b>1.40</b>
<b>456</b>	16	46	0.12	1.05	0.16	0.93
<b>504</b>	23	58	0.55	3.60	<b>0.55</b>	<b>1.75</b>
<b>506</b>	16	51	0.18	1.55	0.25	0.94
<b>564</b>	22	62	0.75	4.90	<b>0.75</b>	<b>2.00</b>
<b>566</b>	16	57	0.25	2.20	0.25	0.94
<b>634</b>	22	66	-	-	<b>1.50</b>	<b>4.30</b>
<b>636</b>	16	60	0.55	6.00	<b>0.55</b>	<b>2.00</b>

Electrical data in **bold** type refers to fans fitted with 2-speed star/delta motors as standard.

Maximum ambient temperature is 70°C or 50°C when being speed controlled.

\* Amperages shown are a guide only. Refer to our Sales Department for accurate figures at time of order.

## DESCRIPTION

The Alpha & Beta Series of axial roof units are designed for a wide range of free intake and ducted exhaust air installations. These robust but lightweight exhaust units are available in 7 sizes in each range extending from 315 to 630mm diameter.

## Typical Applications

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

## Features

- Wide choice of speeds available.
- All motors are speed-controllable.
- Some 3-phase motors are 2-speed star/delta design.
- Protective bird-mesh guards are fitted as standard on Alpha model unless fitted with optional shutters.
- Shutters are fitted as standard to the Beta Series.
- Robust, lightweight construction.
- Can be used for free intake and ducted applications.
- Can be mounted at angles up to 30°.
- Supply air units can be supplied, refer to pages D-13/15.

## Construction

Cowls are of UV-stabilised plastic or fibreglass.

Impeller blades are GFRP as standard with an option of aluminium where required.

Metal components have a corrosion-resistant finish.

Shutters are fitted as standard to the beta series and are an optional extra on the Alpha series.

A bird-mesh guard is fitted on the Alpha model unless fitted with optional shutters.

## Motors

Type - Squirrel cage induction motors

Electricity supply - 230V, single or 415V, 3-phase, 50Hz

Bearings- sealed-for-life, ball

Speed-controllable using electronic or auto-transformer controllers

See pages O-3/4 for details on these motors

## Internal Thermal Protection

Manual-reset thermal protection is supplied as standard on all motors.

## Testing

Air flow testing to BS848:Part 1, 1980

Noise tests to BS848:Part 2, 1985

## Wiring Diagram

See pages N-6/7, diagrams DD 4, 5, 6, 7.

## NOISE LEVELS

Model	In-duct Sound Power Levels							
	AD..	L <sub>w</sub> dB re 1pW						
AE..	63	125	250	500	1k	2k	4k	8k
<b>314</b>	69	67	63	63	60	57	53	49
<b>354</b>	71	70	65	67	66	59	55	54
<b>404</b>	71	72	68	70	69	64	61	56
<b>406</b>	68	66	64	64	65	59	54	47
<b>454</b>	74	75	72	71	70	67	64	56
<b>456</b>	66	64	66	64	61	58	54	45
<b>504</b>	77	81	78	73	72	72	69	62
<b>506</b>	72	67	69	68	69	63	57	51
<b>564</b>	81	83	80	79	78	75	73	67
<b>566</b>	76	73	76	76	73	71	60	56
<b>634</b>	81	82	86	84	80	78	77	72
<b>636</b>	83	80	78	77	76	73	68	59

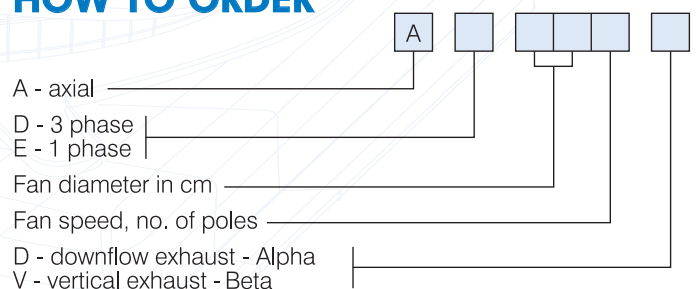
Sound Power Levels shown are for the Inlet Side of the unit.

## Special note

Refer to Fantech for fan selections at speeds other than shown. When shutters are fitted ensure the roof unit is mounted with the shutter hinge pointing down the slope of the roof.

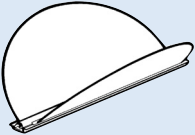

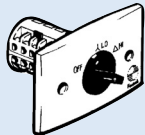
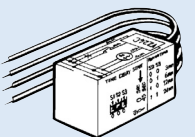
When shutters are fitted to the Alpha series derate performance by 15-20%.

## HOW TO ORDER



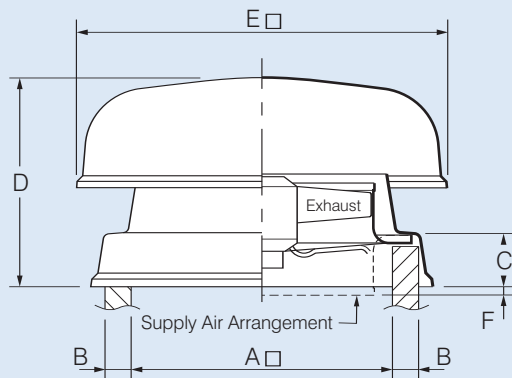


## ANCILLARY EQUIPMENT

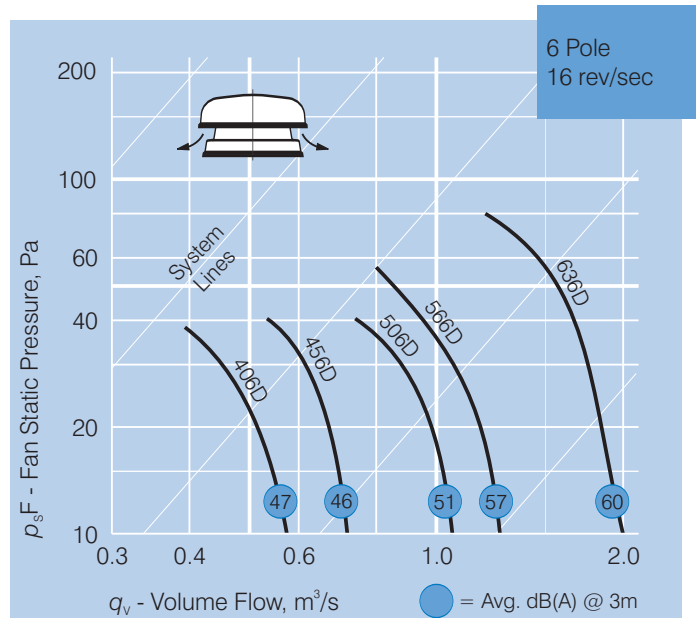
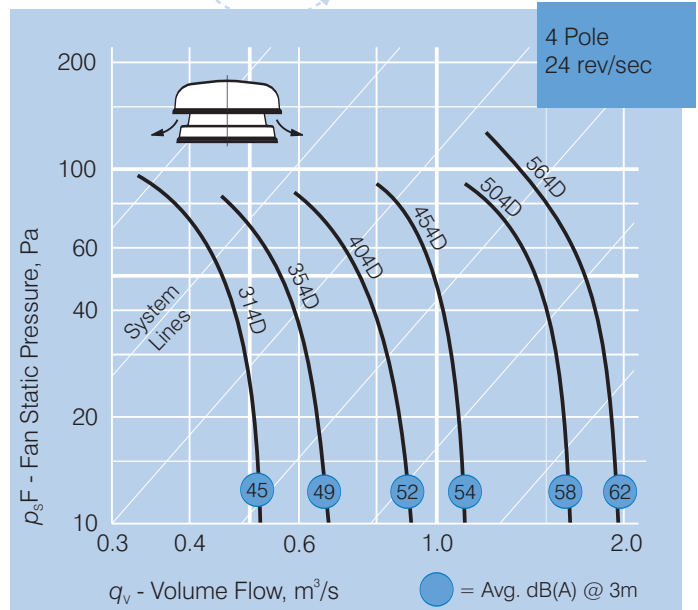
 ABD - Butterfly shutters Ref. J-2	 VA - Speed controller Ref. M-5	 SD - Star/Delta switch Ref. M-7
 VZ - Run-on timer Ref. M-14		

## DIMENSIONS

### Alpha



Model	Dimensions, mm						App. wt kg.	App. vol. m <sup>3</sup>
AD... AE...	A	B	C	D	E	F max		
31.D							10	
35.D	400	50	95	380	670	10	12	0.21
40.D							16	
45.D	510	50	90	450	770	25	18	0.32
50.D							28	
56.D	670	50	90	560	890	30	34	0.52
63.D	780	100	85	640	1180	45	50	1.10



## SUGGESTED SPECIFICATION

The axial roof units shall be of the Alpha Series as designed and manufactured by Fantech Pty Ltd.

The axial impellers shall be of GRP (unless specified otherwise) and driven by speed-controllable motors with manual-reset thermal protection. The impellers run in pressed steel plates ensuring a certifiable performance.

The cowl shall be of the downflow discharge type and constructed from plastic and/or fibreglass. Steel components shall be corrosion protected.

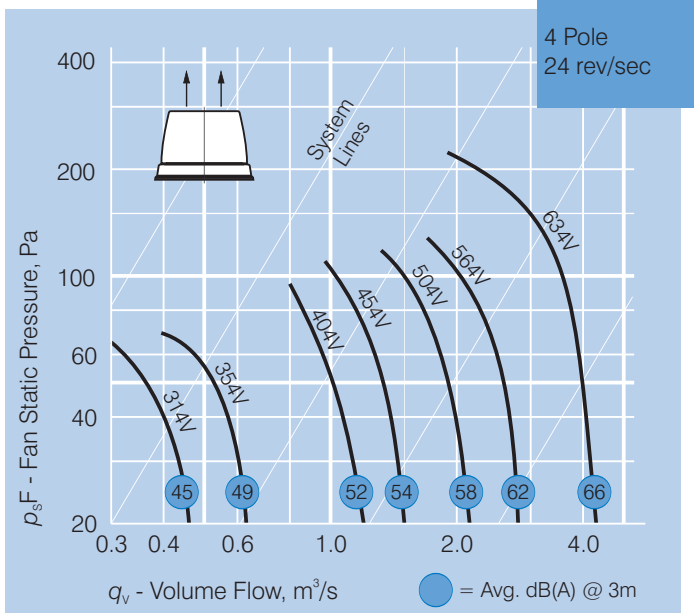
All models shall be fully tested to BS848:Part1, 1980 for air flow and BS848:Part 2, 1985 for noise.



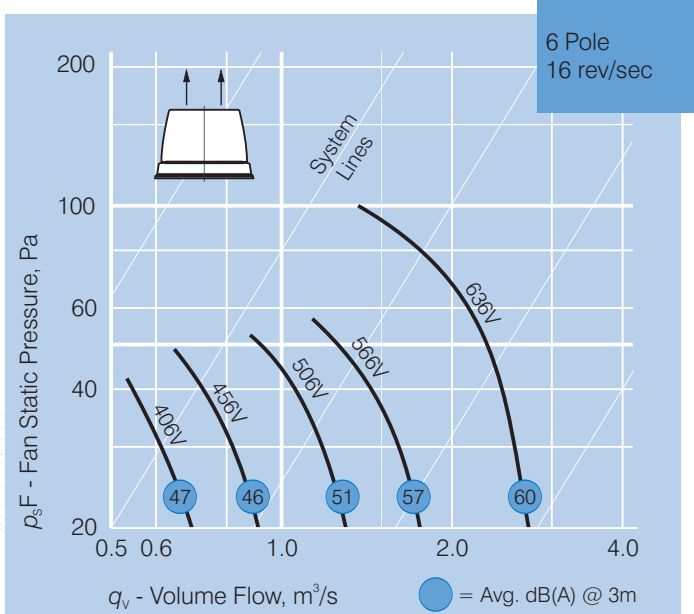
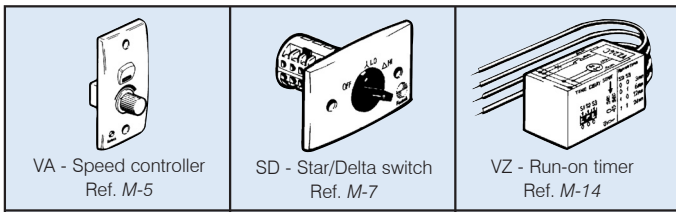
Scan the QR code to view more information online.



# BETA SERIES

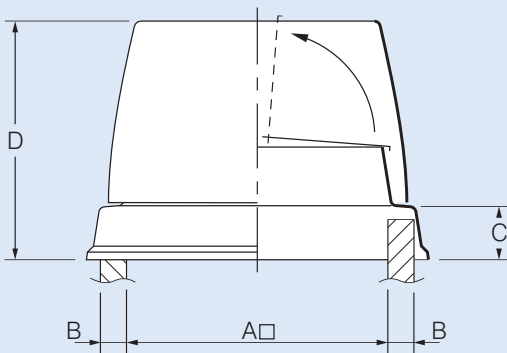


## ANCILLARY EQUIPMENT



## DIMENSIONS

### Beta



Model AD... AE...	Dimensions, mm				App. wt kg.	App. vol. m <sup>3</sup>
	A	B	C	D		
31.V	400	50	95	440	10	0.21
35.V	400	50	95	440	12	0.21
40.V	510	50	90	450	16	0.32
45.V	510	50	90	450	18	0.32
50.V	670	50	90	560	28	0.52
56.V	670	50	90	560	34	0.52
63.V	780	100	85	700	50	1.10

## SUGGESTED SPECIFICATION

The axial roof units shall be of the Beta Series as designed and manufactured by Fantech Pty Ltd.

The axial impellers shall be of GRP (unless specified otherwise) and driven by speed-controllable motors with Manual-reset thermal protection. The impellers run in pressed steel plates ensuring a certifiable performance.

The wind band shall be of the vertical discharge type, incorporating butterfly shutters as standard and constructed from fibreglass or galvanised steel. Steel components shall be corrosion protected.

All models shall be fully tested to BS848:Part1, 1980 for air flow and BS848:Part 2, 1985 for noise.



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