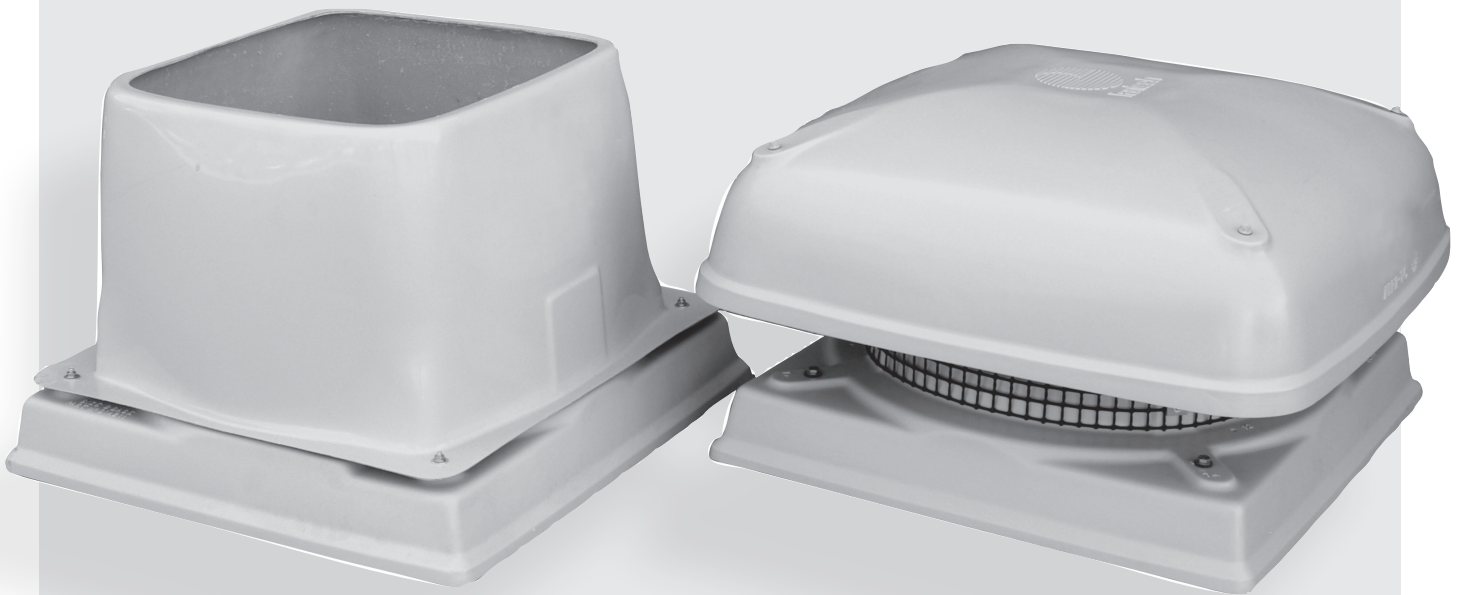


ALPHA & BETA

Axial Roof Unit

ELTA





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.

Construction

Cowls are of UV-stabilised plastic or fibreglass.

Impeller blades are GRP 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.

Motor

Type - Squirrel cage induction motors.

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

Ball Bearing - sealed for life.

Speed-controllable using electronic or auto-transformer controllers.

Internal Thermal Protection

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

Testing

Airflow testing to BS848:Part 1, 1980

Noise tests to BS848:Part 2, 1985

Technical Data

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

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.

Noise Levels

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

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

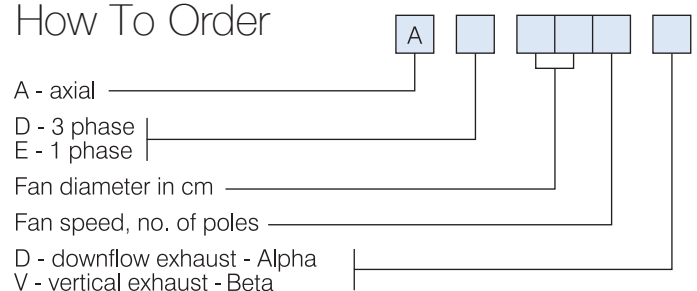
Additional Information

Refer to Elta 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%.

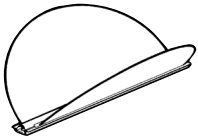
How To Order



ALPHA



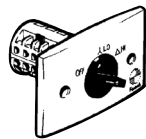
Ancillary Equipment



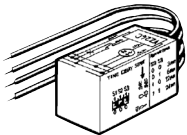
ABD - Butterfly shutters



VA - Speed controller



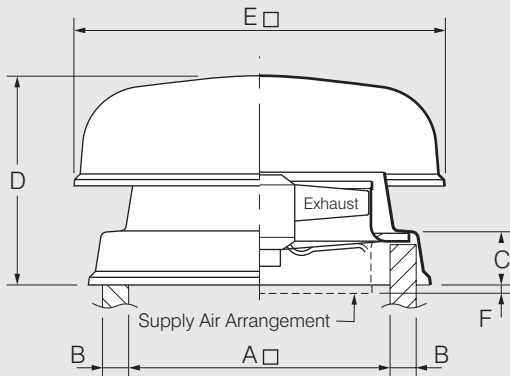
SD - Star/Delta switch



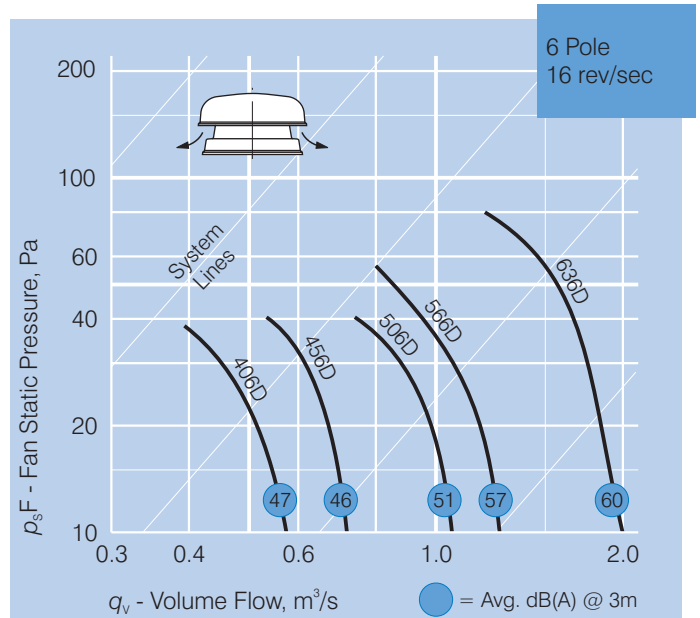
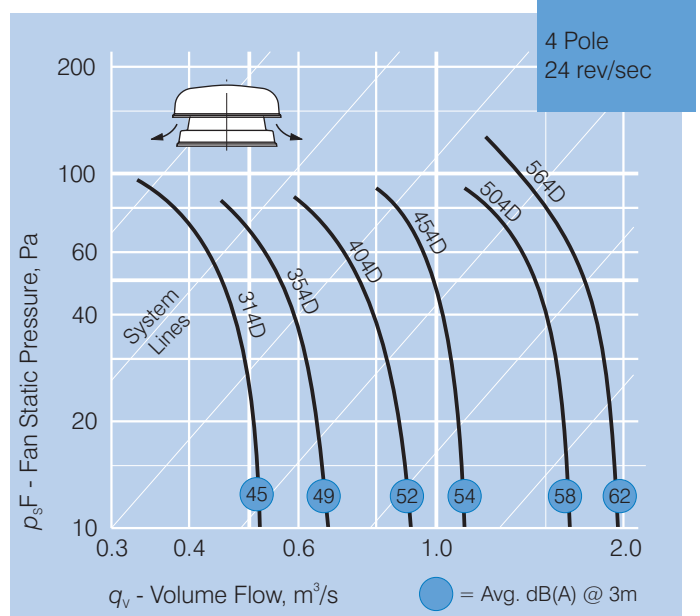
VZ - Run-on timer

Dimensions

Alpha



Model	Dimensions, mm						App. wt	App. vol.
AD...	A	B	C	D	E	F	max kg.	m ³
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 Elta.

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.

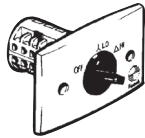
All models shall be fully tested to BS848:Part 1, 1980 for airflow and BS848:Part 2, 1985 for noise.



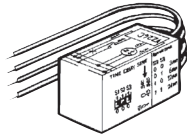
Ancillary Equipment



VA - Speed controller

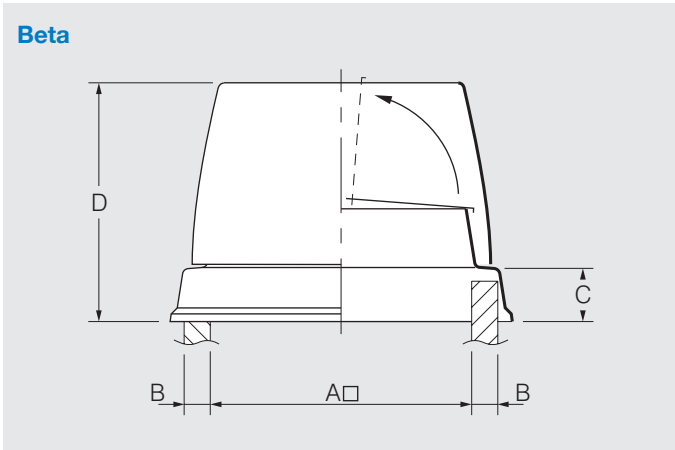


SD - Star/Delta switch

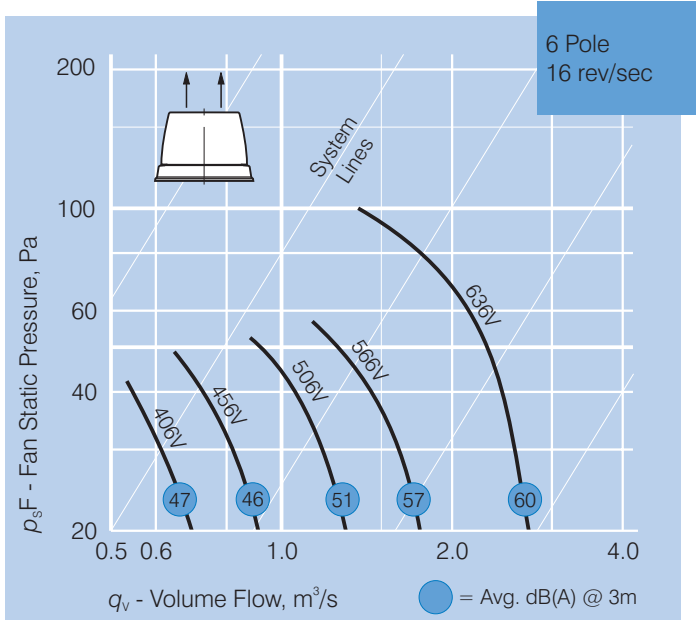
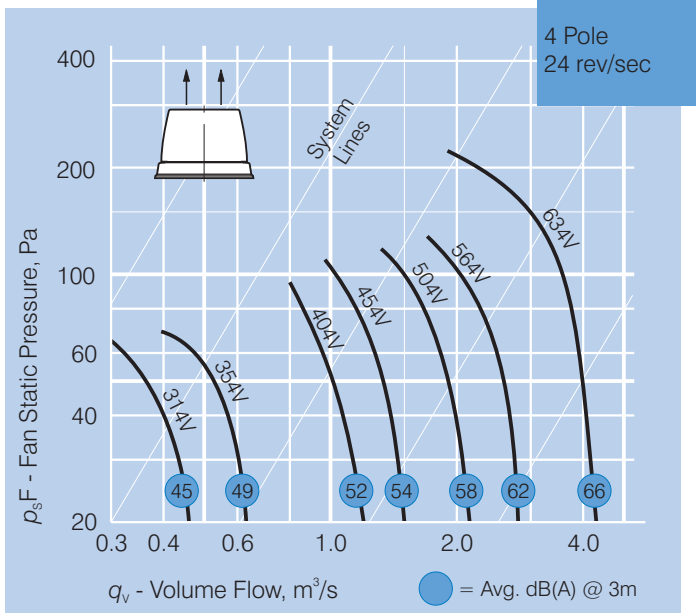


VZ - Run-on timer

Dimensions



Model	Dimensions, mm				App. wt	App. vol.
AD... AE...	A	B	C	D	kg.	m ³
31.V	400	50	95	440	10	0.21
35.V					12	
40.V	510	50	90	450	16	0.32
45.V					18	
50.V	670	50	90	560	28	0.52
56.V					34	
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 Elta.

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:Part 1, 1980 for airflow and BS848:Part 2, 1985 for noise.



Elta Asia Sdn Bhd

Tel **+603 7846 0340**

Email **info@elta.asia**

elta.asia

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