ALPHA & BETA INDUSTRIAL SERIES



DESCRIPTION

The Alpha & Beta Industrial Series of axial roof units are designed for a wide range of free intake and ducted supply and exhaust systems. These durable and robust units feature adjustable pitch impellers which allows for optimum air flow and power efficiency.

There are 6 sizes in each range extending from 500 to 1000mm diameter.

Typical Applications

Supplying or exhausting clean air, as well as a range of toxic, noxious, and corrosive gases in commercial and industrial applications.

Features

- Wide choice of speeds available.
- Adjustable pitch impellers provide a wide range of performances.
- Impeller blades can be GRP, aluminium, or anti-static to suit the application. GRP blades are standard.
- Shutters are standard on the RVLE range and an optional extra on the RDLE units. (See **Special Note**).
- Can be used for free intake or ducted systems.
- Can be mounted at angles up to 30°.
- All standard motors are speed-controllable using variable speed drives.
- Multi-speed motors as well as motors to meet Ex d, Ex e, Ex nA or Ex tD Standards can be supplied.
- For applications prone to high prevailing winds refer to **Special Note**.

Construction

Pressed galvanised steel base; cowls and windbands are of plastic, fibreglass or galvanised steel.

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

Impeller blades are GRP as standard with an option of aluminium or anti-static materials where required. Metal components have a corrosion resistant finish.

Motors

Type - squirrel cage induction motors.

Electricity supply - motors to suit a wide range of voltages and frequencies can be supplied.

Bearing - sealed-for life, ball.

Speed-controllable using variable speed drives.

See section O for details on these motors.

Motors with 2-speed windings or to meet Ex d, Ex e, Ex nA or Ex tD Standards can be supplied.

Internal Thermal Protection

Thermistors can be provided on all motors except where Standards prohibit their use.

Testing

Air flow tests to BS848:Part 1, 1980 Noise tests to BS848:Part 2, 1985

Wiring Diagram

See section N diagrams DD..

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Special Notes

Sites located in Bushfire Prone Areas are required to undergo a Bushfire Attack Level (BAL) assessment that will determine a building's potential exposure to ember attack, radiant heat and direct flame contact in accordance with AS3959-2018 Construction of buildings in bushfire-prone areas.

This standard specifies for BAL levels up to and including BAL-40 that roof ventilation openings, such as gable and roof vents, shall be fitted with ember guards made of non-combustible material or a mesh or perforated sheet with maximum aperture of 2mm, made from corrosion-resistant steel or bronze

Quick select envelope curves are shown on pages D-8/9. Accurate selections, including comprehensive noise data, can be obtained from your local Fantech office or by using the Fans by Fantech Product Selection Program. Refer to Fantech for performances at speeds other than shown.

When shutters are fitted ensure the roof unit is mounted with the shutter spindle pointing down the roof. When shutters are fitted to the Alpha series derate the performance by 15-20%.

Where prevailing winds are high we recommend the fitting of Magloks[®], see section J for details. For capacities greater than shown for the Alpha & Beta Industrial series, refer to the HC and SS series in section D.

SMOKE-SPILL APPLICATIONS

The Beta Industrial RSSL Series of smoke-spill fans has been fully tested to meet the air performance and high temperature test requirements of Standards AS/NZS1668.1:2015 & AS4429:1999.

For advice on smoke-spill wiring requirements refer to ASNZS1668.1:2015 See section C for details of the smoke-spill range.

TECHNICAL DATA

RDLE Fan Speed Max. Motor RDLS RSSL rev/sec kW 0506 24 1.5 0506 16 0.37 0564 24 2.2 0566 16 0.75 0634 24 4 0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1008 12 3	wodei		
RDLS rev/sec kW 0504 24 1.5 0506 16 0.37 0564 24 2.2 0566 16 0.75 0634 24 4 0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	RDLE RVLE	Fan Speed	Max. Motor
0504 24 1.5 0506 16 0.37 0564 24 2.2 0566 16 0.75 0634 24 4 0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1008 12 3	RDLS RSSL	rev/sec	kW
0506 16 0.37 0564 24 2.2 0566 16 0.75 0634 24 4 0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1008 12 3	0504	24	1.5
0564 24 2.2 0566 16 0.75 0634 24 4 0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0506	16	0.37
0566 16 0.75 0634 24 4 0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0564	24	2.2
0634 24 4 0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0566	16	0.75
0636 16 1.1 0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0808 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0634	24	4
0638 12 0.55 0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0636	16	1.1
0714 24 5.5 0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0638	12	0.55
0716 16 2.2 0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0714	24	5.5
0718 12 0.75 0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0716	16	2.2
0804 24 7.5 0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0718	12	0.75
0806 16 4 0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0804	24	7.5
0808 12 1.5 1004 24 7.5 1006 16 5.5 1008 12 3	0806	16	4
1004 24 7.5 1006 16 5.5 1008 12 3	0808	12	1.5
1006 16 5.5 1008 12 3	1004	24	7.5
1008 12 3	1006	16	5.5
	1008	12	3

Amperages for motors can be obtained at time of order.

HOW TO ORDER

RDLE - downflow exhaust RDLS - downflow supply RVLE - vertical exhaust RSSL - Vertical exhaust smoke-spill B - option for Bushfire code
Fan diameter in cm
Fan speed, no. of poles
Hub diameter code $A = 150$ $D = 400$ $K = 181$ $B = 250$ $G = 225$ $L = 251$ $C = 350$ $J = 131$
GRP, P Aluminium blades, A
No. of blades
Blade pitch angle, deg.

ALPHA INDUSTRIAL SERIES



SUGGESTED SPECIFICATION

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

The axial impellers shall be adjustable pitch manufactured and supplied with blades of GRP, aluminium or anti-static material. (GRP is standard).

The unit base shall be of pressed galvanised steel and shall incorporate an entry cone to minimise entry losses to the fan. Cowls shall be of plastic or fibreglass.

The base may be powder-coated if required (optional extra).

All models shall incorporate fans fully tested to BS848:Part 1, 1980 for air flow and BS848:Part 2, 1985 for noise.

DIMENSIONS



Model

D-8

RDLE	Dimensions, mm						
RDLS	A□	В	C max	ĸD	ED	F	
0504/6	670	50	182	540	890	80	
0564/6	670	50	182	540	890	80	
0634/6/8	780	100	285	600	1180	80	
0714/6/8	780	100	267	600	1180	80	
0804/6/8	860	100	338	700	1395	80	
1004/6/8	1080	100	338	776	1640	80	

Scan the QR

code to view

more information

online

ANCILLARY EQUIPMENT





800

4 Pole 24 rev/sec





ROOF MOUNTED FANS

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BETA INDUSTRIAL SERIES



SUGGESTED SPECIFICATION

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

The axial impellers shall be adjustable pitch manufactured with blades of GRP, aluminium or anti-static material. (GRP is standard).

The unit base shall be of pressed galvanised steel and shall incorporate an entry cone to minimise entry losses to the fan. Windbands shall be of fibreglass or galvanised steel.

The base may be powder-coated if required (optional extra).

All models shall incorporate fans fully tested to

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

Smoke-Spill Applications

The axial roof ventilators shall be of the RSSL vertical discharge Beta Industrial Series as designed and manufactured by Fantech Pty. Ltd.

The windbands shall be constructed from galvanised steel. Impellers shall be adjustable pitch manufactured from aluminium and constructed to suit the elevated temperatures, with blades pinned as required by the manufacturer.

All fans shall be tested to meet the air flow, temperature and structural requirements of AS/NZS1668.1:2015 and AS/NZS 4429:1999.

DIMENSIONS



Model RVLE	Dimens	sions, mr	n			
RSSL	A□	В	C max	D	F	
0504/6	670	50	182	550	80	
0564/6	670	50	182	550	80	
0634/6/8	780	100	285	690	80	
0714/6/8	780	100	267	690	80	
0804/6/8	860	100	338	765	80	
1004/6/8	1080	100	338	855	80	

ANCILLARY EQUIPMENT





Scan the QR

code to view



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