ELTA SELECT

Compact SCDA

t: **01384 275800**
f: **01384 275810**
e: **bs@eltafans.co.uk**
visit: **eltaselect.com**

Catalogue Guide

Icon Key

info

The Select Catalogue has a number of symbols and icons, designed to make the catalogue quicker and easier to use. An explanation of these are listed below:

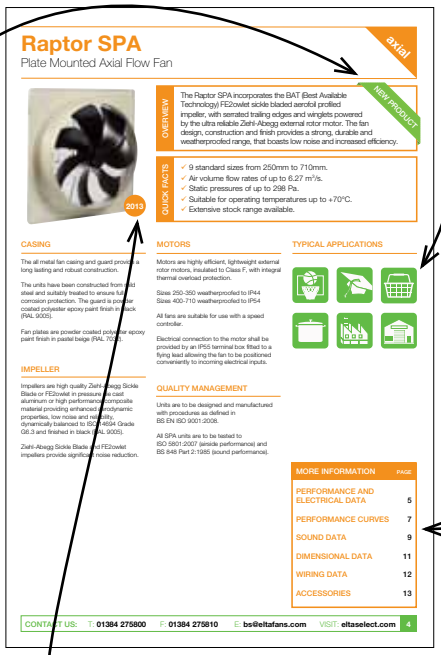
Application Icons

Applications are now represented via a set of pictorial icons. The application icons key is featured on the facing page. Some applications have been grouped together, where the environmental conditions have similarities.

New Products

NEW PRODUCT

The icon to the right indicates a new addition to the Select product range. This will be displayed on the introductory page of each product and can also be seen on the contents page for each category.



Raptor SPA

Plate Mounted Axial Flow Fan

Axial

NEW PRODUCT

OVERVIEW

The Raptor SPA incorporates the BAT (Best Available Technology) FE2owlet sickle bladed aerofoil profiled impeller, with serrated trailing edges and winglets powered by the ultra reliable Ziehl-Abegg external rotor motor. The fan design, construction and finish provides a strong, durable and weatherproofed range, that boasts low noise and increased efficiency.

QUICK FACTS

- 9 standard sizes from 250mm to 710mm.
- Air volume flow rates of up to 6.27 m³/s.
- Static pressures of up to 298 Pa.
- Suitable for operating temperatures up to +70°C.
- Extensive stock range available.

2013

CASING

The all metal fan casing and guard provide a long lasting and robust construction.

The units have been constructed from mild steel and suitably treated to ensure full corrosion protection. The guard is powder coated polyester epoxy paint finish in black (RAL 9005).

Fan plates are powder coated polyester epoxy paint finish in pastel beige (RAL 7032).

IMPELLER

Impellers are high quality Ziehl-Abegg Sickle Blade or FE2owlet in pressure cast aluminum or high performance composite material providing enhanced aerodynamic properties, low noise and reliability, dynamically balanced to ISO 21940 Grade G6.3 and finished in black (RAL 9005).

Ziehl-Abegg Sickle Blade and FE2owlet impellers provide significant noise reduction.

MOTORS

Motors are highly efficient, lightweight external rotor motors, insulated to Class F, with integral thermal overload protection.

Sizes 250-350 weatherproofed to IP44
Sizes 400-710 weatherproofed to IP54

All fans are suitable for use with a speed controller.

Electrical connection to the motor shall be provided by an IP55 terminal box fitted to a flying lead allowing the fan to be positioned conveniently to incoming electrical inputs.

QUALITY MANAGEMENT

Units are to be designed and manufactured with procedures as defined in BS EN ISO 9001:2008.

All SPA units are to be tested to ISO 5801:2007 (airside performance) and BS 848 Part 2:1985 (sound performance).

TYPICAL APPLICATIONS

MORE INFORMATION PAGE

PERFORMANCE AND ELECTRICAL DATA	5
PERFORMANCE CURVES	7
SOUND DATA	9
DIMENSIONAL DATA	11
WIRING DATA	12
ACCESSORIES	13

CONTACT US: T: 01384 275800 F: 01384 275810 E: bs@eltafans.com VISIT: eltaselect.com 4

More Information Box

A more information box now also features on each introductory product page. This makes it easier to locate any further information you may require by displaying the page number to refer to, or directing you to the website - www.eltaselect.com.

2013

2013

New legislation has driven change in the Elta Select range of products. Elta Fans have revolutionised both their new and existing product range to meet legislation directives, but also to incorporate the 'Best Available Technology'; creating a reliable efficient and powerful range of products. The products which conform to the 2013 legislation are indicated with the above logo. This logo is pictured both on the main product page and the category contents page.

Catalogue Guide

Application Key

info

Each product has an indication of typical applications via a set of icons.
Every icon is displayed below, along with the definition of what it represents.

Sports Hall
Squash Courts
Gymnasium

Schools
Colleges

Shopping Mall

Shops
Retail Parks
Commercial

Kitchens

Factories
Industrial Units

Warehousing

Shower Rooms
Bathrooms
Toilets
Changing Rooms

Marine

Agriculture

Airports

Corrosive
Atmospheres

Banks

Hospitals

Hotels

Restaurants
Cafes
Cafeterias
Pubs

Theatres

Air Conditioning

Residential
Public Buildings
Entrance Halls

Underground
Stations

Libraries

Offices

Laundries
Utility Rooms

Temporary
Ventilation
Construction
Sites

Enclosed Car
Parks

Stairwell
Pressurisation

Workshops
Foundries
Welding Bays
Machine Shops
Spray Booths
Lift Motor Rooms

Marquees

Conference Halls

Cooling Towers
Stations
Boiler Houses
Heavy Industrial

Hot Gas
Situations

General HVAC

Compact SCDA

Duct Mounted Axial Fan

axial

OVERVIEW

The Compact SCDA is a duct mounted axial fan with a 10 bladed aluminium impeller, offering improved performance and pressure development, whilst being ideal for speed control. The fan design, construction and finish provide a strong, durable and weatherproofed range.

QUICK FACTS

- ✓ 7 standard sizes from 315mm to 630mm.
- ✓ Air volume flow rates of up to 4.16 m^3/s.
- ✓ Static pressures of up to 250 Pa.
- ✓ Suitable for operating temperatures up to +70°C.
- ✓ Extensive stock range available.

CASING

The all metal fan casing provides a long lasting and robust construction.

The units have been constructed from mild steel and suitably treated to ensure full corrosion protection, with both motors and axial impellers mounted within the length of the unit casing.

All casing parts shall have a powder coated polyester epoxy paint finish in pastel beige (RAL 7032).

IMPELLER

Adjustable pitch aerofoil impellers are provided with blades made from high quality pressure die cast aluminium (LM6), natural finish.

Impellers are factory set at an angle to provide maximum performance. The hubs are manufactured from die cast aluminium alloy (LM24).

Assembled impellers are to be dynamically balanced to ISO 14694 Grade G6.3.

MOTORS

Motors are highly efficient, lightweight induction motors with sealed for life, maintenance free ball bearings, which allows the fan to be installed at any angle.

Each motor is matched to the aerodynamic performance of the impeller. Motors are Class F insulated to EN 60034-5, weatherproofed to IP55 and all suitable for speed control. Each motor has integral thermal overload protection.

Fans are suitable for operating temperatures between -20°C and +70°C fixed speed and -20°C and +50°C when used with a speed controller.

Electrical connection to the motor is provided by an IP55 terminal box which is fitted onto the outer side of the fan casing.

QUALITY MANAGEMENT

Units are to be designed and manufactured with procedures as defined in BS EN ISO 9001:2008.

All SCDA units are to be tested to ISO 5801:2007 (airside performance) and BS 848 Part 2:1985 (sound performance).

TYPICAL APPLICATIONS

MORE INFORMATION

MORE INFORMATION	PAGE
PERFORMANCE AND ELECTRICAL DATA	5
PERFORMANCE CURVES	5
SOUND DATA	5
DIMENSIONAL DATA	6
WIRING DATA	6
ACCESSORIES	7

Compact SCDA

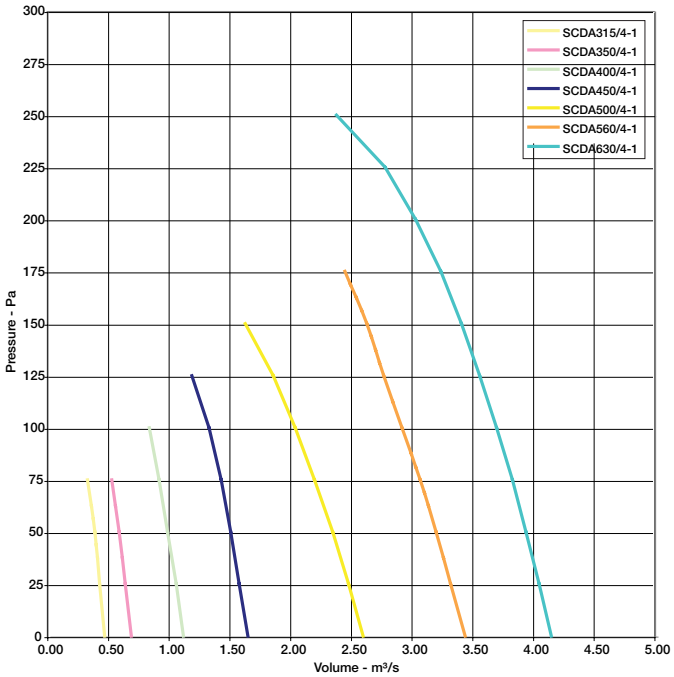
Performance and Electrical Data

SINGLE Phase - 220V-240V / 50Hz

Product Code	Speed r/min	Airflow	Airflow m³/s @ Static Pressure Pa.										Motor Electrical Data			A.V. Mounts
			0	25	50	75	100	125	150	175	200	250	FLC Amps	SC Amps	Output kW	
SCDA315/4-1	1370	m³/s	0.48	0.44	0.40	0.34							0.90	1.45	0.09	S1B
SCDA350/4-1	1290	m³/s	0.70	0.65	0.60	0.54							0.90	1.45	0.09	S1B
SCDA400/4-1	1385	m³/s	1.13	1.07	1.00	0.93	0.85						1.80	3.60	0.25	S1B
SCDA450/4-1	1340	m³/s	1.66	1.59	1.52	1.44	1.34	1.20					3.00	9.00	0.37	S1B
SCDA500/4-1	1375	m³/s	2.61	2.49	2.36	2.21	2.05	1.87	1.64				4.90	15.00	0.75	S1G
SCDA560/4-1	1340	m³/s	3.45	3.33	3.21	3.08	2.93	2.78	2.64	2.46			7.90	19.75	1.10	S1G
SCDA630/4-1	1310	m³/s	4.16	4.06	3.95	3.84	3.71	3.57	3.42	3.25	3.04	2.39	7.90	19.75	1.10	S1G

Performance Curves

SINGLE Phase - 4 Pole



Sound Data

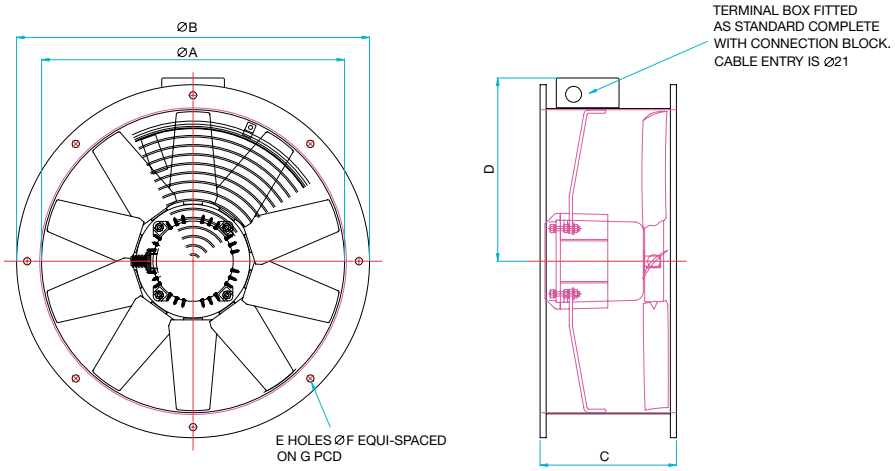
SINGLE Phase - 220V-240V / 50Hz

Product Code	In-Sound Power Level dBA @ Octave Band Hz								dBA @ 3m
	63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz	
SCDA315/4-1	69	79	80	70	66	65	63	56	54
SCDA350/4-1	70	80	83	73	69	68	65	57	57
SCDA400/4-1	72	81	83	77	72	71	69	63	59
SCDA450/4-1	84	85	88	81	73	74	71	61	63
SCDA500/4-1	82	82	89	85	79	78	77	70	66
SCDA560/4-1	78	82	88	89	76	77	73	70	67
SCDA630/4-1	83	79	84	87	84	80	76	70	68

Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The In-Duct Sound Power Level Spectra are in dB re-1pW.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

Compact SCDA

Dimensional Data



Product Code	A	B	C	D	E	F	G	Weight kg
SCDA315	315	382	180	207	8	9.5	356	10
SCDA350	350	421	180	224	8	9.5	395	10
SCDA400	400	466	190	249	12	9.5	438	14
SCDA450	450	515	190	274	12	9.5	487	16
SCDA500	500	567	250	300	12	9.5	541	23
SCDA560	560	636	250	330	16	11.5	605	26
SCDA630	630	709	250	365	16	11.5	674	28

All dimensions are expressed in mm.

Wiring Data

Please see our Wiring Diagrams download on www.eltaselect.com for more information.

SINGLE Phase - 220V-240V / 50Hz

Product Code	Wiring Diagram No.
SCDA315/4-1	152-500
SCDA350/4-1	152-500
SCDA400/4-1	152-500
SCDA450/4-1	152-500
SCDA500/4-1	152-500
SCDA560/4-1	152-500
SCDA630/4-1	152-500

Compact SCDA

Accessories

Please see our Axial Accessories download on www.eltaselect.com for more information.

SINGLE Phase - 220V-240V / 50Hz

Product Code	Electronic Controller	Transformer Controller	Impeller Side Guard	Wall Cowl	Ancillary Pack	Mounting Feet (each)	Matching Flanges (each)	Flexible Connections (each)
SCDA315/4-1	149-EL31TK	149-TC12	078C-0315-C	SWC25/31	APK315SCD/S1B	060A-0315-C	061A-0315-C	063-0315-MAN150
SCDA350/4-1	149-EL31TK	149-TC12	078C-0350-C	SWC35/40	APK350SCD/S1B	060A-0350-C	061A-0350-C	063-0350-MAN150
SCDA400/4-1	149-EL31TK	149-TC14	078C-0400-C	SWC35/40	APK400SCD/S1B	060A-0400-C	061A-0400-C	063-0400-MAN150
SCDA450/4-1	149-EL61TK	149-TC14	078C-0450-C	SWC45/50	APK450SCD/S1B	060A-0450-C	061A-0450-C	063-0450-MAN150
SCDA500/4-1	149-EL61TK	149-TC18	078C-0500-C	SWC45/50	APK500SCD/S1G	060A-0500-C	061A-0500-C	063-0500-MAN150
SCDA560/4-1	-	149-TC110	078C-0560-C	SWC56/63	APK560SCD/S1G	060A-0560-C	061A-0560-C	063-0560-MAN150
SCDA630/4-1	-	149-TC110	078C-0630-C	SWC56/63	APK630SCD/S1G	060A-0630-C	061A-0630-C	063-0630-MAN200

Product Code	AV Mounts (set of 4)	Silencer 1D Podded	Silencer 1D Unpodded	Silencer 2D Podded	Silencer 2D Unpodded
SCDA315/4-1	062-S1B	068-0315-1DEP	068-0315-1DENP	068-0315-2DEP	068-0315-2DENP
SCDA350/4-1	062-S1B	068-0350-1DEP	068-0350-1DENP	068-0350-2DEP	068-0350-2DENP
SCDA400/4-1	062-S1B	068-0400-1DEPC	068-0400-1DENPC	068-0400-2DEPC	068-0400-2DENPC
SCDA450/4-1	062-S1B	068-0450-1DEPC	068-0450-1DENPC	068-0450-2DEPC	068-0450-2DENPC
SCDA500/4-1	062-S1G	068-0500-1DEPC	068-0500-1DENPC	068-0500-2DEPC	068-0500-2DENPC
SCDA560/4-1	062-S1G	068-0560-1DEPC	068-0560-1DENPC	068-0560-2DEPC	068-0560-2DENPC
SCDA630/4-1	062-S1G	068-0630-1DEPC	068-0630-1DENPC	068-0630-2DEPC	068-0630-2DENPC

BUILDING SERVICES

Tel: +44 (0) 1384 275800
Fax: +44 (0) 1384 275810
e-mail: bs@eltafans.co.uk

46 Third Avenue
Pensnett Trading Estate
Kingswinford, West Midlands
DY6 7US, United Kingdom

APPLIED TECHNOLOGY

Tel: +44 (0) 1489 566500
Fax: +44 (0) 1489 566555
e-mail: at@eltafans.co.uk

17 Barnes Wallis Road
Segnesworth East Industrial Estate
Fareham, Hampshire
PO15 5ST, United Kingdom

EXPORT

Tel: +44 (0) 1489 566500
Fax: +44 (0) 1489 566555
e-mail: export@eltafans.co.uk

17 Barnes Wallis Road
Segnesworth East Industrial Estate
Fareham, Hampshire
PO15 5ST, United Kingdom

www.eltafans.com

BS EN ISO 9001:2008
FM 556465

A member of
HEVAC ASSOCIATION

PATRONS

A member of ELTA GROUP LIMITED