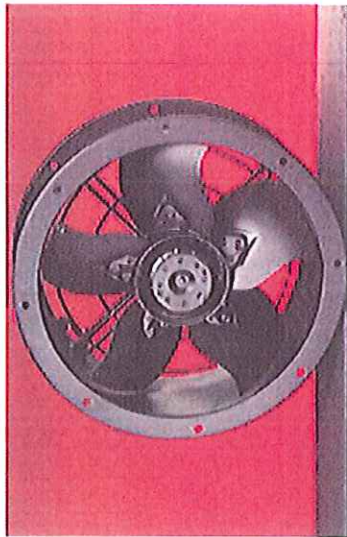


VENT-AXIA BLACK SABRE SLIM CASE SICKLE FANS (BSC)



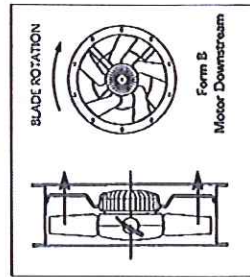
- ✓ Sizes 250 to 710 dia are protected to IP54.
- ✓ Motor insulation Class F up to +70°C
- ✓ 450 to 710 dia, 3 phase motors, 2 speed as standard.
- ✓ All weather epoxy paint finish.
- ✓ Standard Thermal Overload Protection (S.T.O.P.).
- ✓ Performance tested to BS 848 Part 1.
- ✓ 5 Year Guarantee.

protected to IP54, against dust and moisture complying with BS EN 60529. They have ribbed aluminium body castings for efficient cooling with Motor insulation to Class 'F' (from -40°C to +70°C). Speed controlled sizes 450 to 710, 6 & 8 pole motors are only suitable for operating temperatures of up to 40°C.

ELECTRICAL

The Sabre range is available for either single phase 220-240V 50 Hz capacitor start and run or three phase 380-415V 50Hz. Motors are fitted with Standard Thermal Overload Protection (S.T.O.P.) which should be wired into all controller circuits and into starter contactors to prevent motor damage due to overloading / overheating. Three phase 380-415V 50Hz units, from 450 to 710 diameter are fitted as standard with 2 speed Delta/Star connection motors. Most units are suitable for speed control by either electronic, voltage reduction or frequency inverters where permissible.

FORM OF RUNNING



IMPELLERS

The motors and impellers are factory matched, statically and dynamically balanced to VDI 2060 Quality Class G6.3.

MOTORS

The external rotor motors are specifically designed and styled for this range of fan. Ball bearings are greased for life. Sizes 250-710 motors are

Cased mounted fans (ex-stock) are supplied for extract use (Form 'B' running).

TERMINAL BOX

An IP65 terminal box is supplied with all models with 20mm and PGII entry offering protection against dust and water jets from any angle.

PERFORMANCE

The fan performance, is in accordance with tests to BS 848 Part 1.

SOUND LEVELS

Fan sound levels, measured in a reverberant chamber, in accordance with BS 848 Part 2. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2 x 10⁻¹²Pa (20 micro-Pascal). The sound power level spectra figures are dB with a reference level of 10⁻¹² Watts (1 pico-watt). To ensure minimum noise levels during speed control, an auto transformer speed control is recommended.

ACCESSORIES

A full range of accessories is available with the Sabre Slim Cased Sickle fans: Electronic Speed Controllers. Auto Transformer Speed Controllers. Inverter Speed Controller, where permissible. D.O.L. Starters. Ancillary Packs. Flexible Connections. Mounting Feet. Coupling Flanges. Anti-Vibration Mounts. Attenuators.

BLACK SABRE SLIM CASE SICKLE FANS (BSC)

Vent-Axia BLACK SABRE SLIM CASE SICKLE FANS PERFORMANCE GUIDE

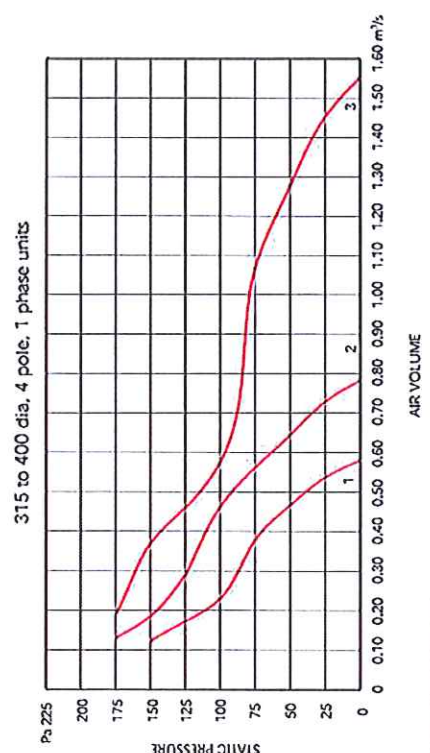
Dia	Motor Poles	RPM	RPM Range	IP	m³/s at Pa												Motor SC	FLC	dB(A)					
					0	25	50	75	100	125	150	175	200	225	250	300				350	400	450	500	
315	1 phase	1500	IP54	0.581	0.532	0.483	0.381	0.252	0.179	0.123	0.057								0.12	2.12	0.53	47		
					0.584	0.535	0.465	0.382	0.253	0.180	0.123	0.057									0.13	2.26	0.46	
					0.587	0.538	0.468	0.385	0.256	0.183	0.126	0.060										0.14	2.40	0.39
355	1 phase	1800	IP54	0.784	0.727	0.638	0.564	0.453	0.328	0.198	0.116								0.12	2.20	0.55	49		
					0.791	0.682	0.592	0.488	0.352	0.225	0.152	0.083								0.15	2.52	0.56		
					0.798	0.689	0.599	0.495	0.359	0.232	0.159	0.086									0.16	2.66	0.49	
400	1 phase	2100	IP54	1.055	1.021	0.921	0.821	0.721	0.621	0.521	0.421								0.12	2.20	0.55	52		
					1.062	0.962	0.862	0.762	0.662	0.562	0.462	0.362								0.15	2.52	0.56		
					1.069	0.969	0.869	0.769	0.669	0.569	0.469	0.369								0.16	2.66	0.49		
450	1 phase	2400	IP54	1.362	1.328	1.228	1.128	1.028	0.928	0.828	0.728								0.12	2.20	0.55	54		
					1.369	1.269	1.169	1.069	0.969	0.869	0.769	0.669								0.15	2.52	0.56		
					1.376	1.276	1.176	1.076	0.976	0.876	0.776	0.676								0.16	2.66	0.49		
500	1 phase	2700	IP54	1.667	1.633	1.533	1.433	1.333	1.233	1.133	1.033								0.12	2.20	0.55	59		
					1.670	1.570	1.470	1.370	1.270	1.170	1.070	0.970								0.15	2.52	0.56		
					1.673	1.573	1.473	1.373	1.273	1.173	1.073	0.973								0.16	2.66	0.49		
560	1 phase	3000	IP54	2.021	1.987	1.887	1.787	1.687	1.587	1.487	1.387								0.12	2.20	0.55	63		
					1.994	1.894	1.794	1.694	1.594	1.494	1.394	1.294								0.15	2.52	0.56		
					1.997	1.897	1.797	1.697	1.597	1.497	1.397	1.297								0.16	2.66	0.49		
630	1 phase	3300	IP54	2.377	2.343	2.243	2.143	2.043	1.943	1.843	1.743								0.12	2.20	0.55	67		
					2.356	2.256	2.156	2.056	1.956	1.856	1.756	1.656								0.15	2.52	0.56		
					2.365	2.265	2.165	2.065	1.965	1.865	1.765	1.665								0.16	2.66	0.49		
710	1 phase	3600	IP54	2.728	2.694	2.594	2.494	2.394	2.294	2.194	2.094								0.12	2.20	0.55	67		
					2.701	2.601	2.501	2.401	2.301	2.201	2.101	2.001								0.15	2.52	0.56		
					2.704	2.604	2.504	2.404	2.304	2.204	2.104	2.004								0.16	2.66	0.49		

NOTE: All * models are supplied with 2 speed connection motors as standard. (Sizes 450-630 dia. are 4/6 pole, 710 are 6/8 pole).
 DELTA Δ (HIGH SPEED)
 STAR * (LOW SPEED)

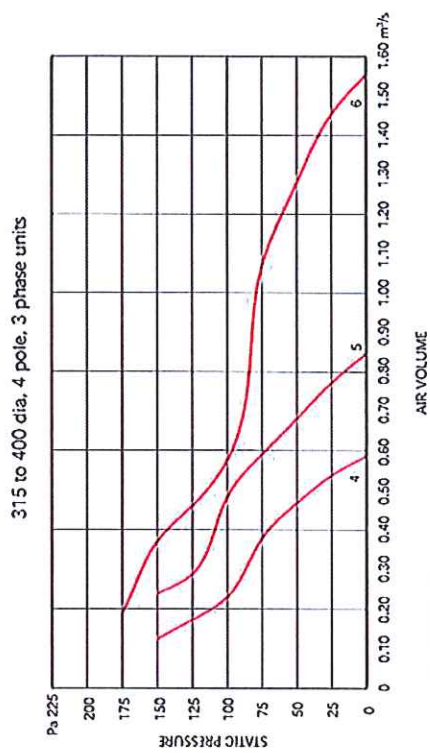
ONLY SELECT THE FANS TYPED IN RED WHEN CONFIDENT OF YOUR SYSTEM RESISTANCE DATA.

Vent-Axia

BLACK SABRE SLIM CASE SICKLE FANS PERFORMANCE CURVES



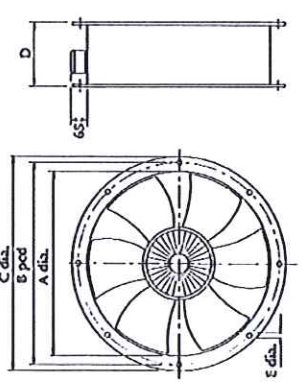
Size	315	355	400
1			
2			
3			



Size	315	355	400
4			
5			
6			

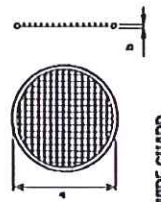
VENT-AXIA

BLACK SABRE SLIM CASE SICKLE FANS DIMENSIONS (mm)



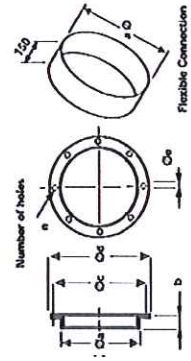
Stock Ref. No.	OA	OB	OC	D	OE	No. Holes	Weight kg
BSC 315	315	355	306	170	10	8	10.5
BSC 355	355	395	426	170	10	8	13
BSC 400	400	450	487	170	12	8	15.5
BSC 450	450	500	537	180	12	8	20.5
BSC 500	500	560	595	180	12	12	33
BSC 560	560	620	655	240	12	12	31
BSC 630	630	690	725	240	12	12	38
BSC 710/4	710	770	806	350	12	16	65
BSC 710/6	710	770	806	240	12	16	65

Please note: Dimension D is 240mm on 6-pole & 350mm on 4-pole version.



INLET WIRE GUARD
K factor loss 0.25

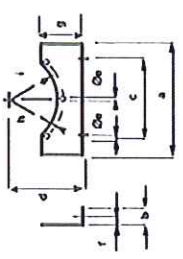
Stock Ref. No.	Øa	b
105 06 315	300	3
105 06 355	420	3
105 06 400	475	3
105 06 450	525	3
105 06 500	595	3
105 06 560	655	3
105 06 630	725	3
105 06 710	784	5



COUPLING FLANGE

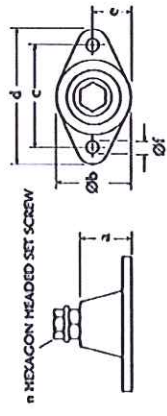
Stock Ref. No.	Øa	b	Øc	Ød	Øe	n
105 06 315	306	30	365	315	10	8
105 06 355	426	45	395	355	10	8
105 06 400	487	45	450	400	12	8
105 06 450	537	60	500	450	12	8
105 06 500	595	60	560	500	12	8
105 06 560	655	75	620	560	12	12
105 06 630	725	75	690	630	12	12
105 06 710A	800	40	770	710	12	16

ACCESSORY DIMENSIONS (mm)



MOUNTING FEET

Stock Ref. No.	a	b	c	d	e	f	g	h	i
105 03 315	275	24	274	10	14	115	127.5	167	
105 03 355	303	24	290	250	10	14	127.5	187	
105 03 400	348	24	290	280	17	14	135	225	213
105 03 450	384	24	315	315	17	14	155	250	238
105 03 500	475	24	315	315	17	14	135	280	268
105 03 560	475	24	355	355	17	14	155	310	298
105 03 630	570	24	400	400	17	14	175	345	333
105 03 710A	710	40	610	435	13	18	240	385	365



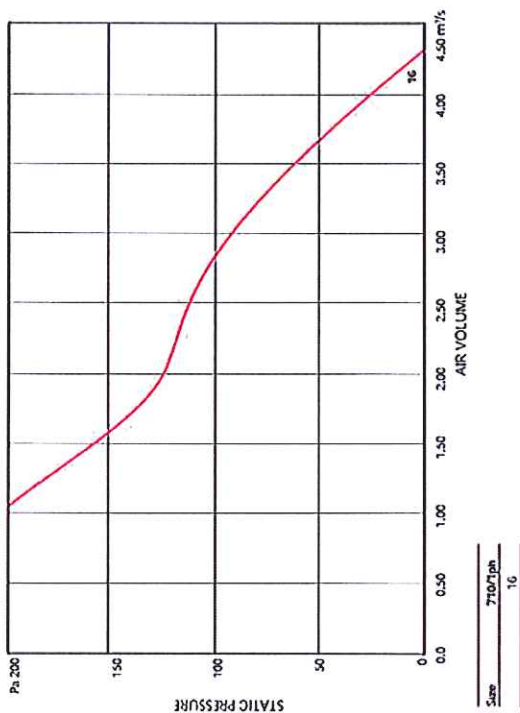
ANTI-VIBRATION MOUNTS

Stock Ref. No.	a	Øb	c	d	e	Øf	n	Max load kg
105 22 003	27	37	54	67	18.5	7	N8	23
105 22 005	27	37	54	67	18.5	7	N8	26
105 22 133	35	57	76	95	28.5	10.5	M12	91

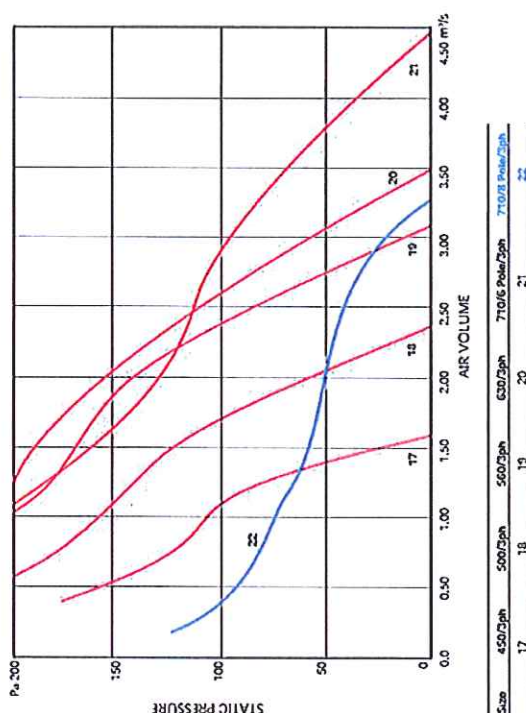
Vent-Axia

BLACK SABRE SLIM CASE SICKLE FANS PERFORMANCE CURVES

710 dia, 6 pole, 1 phase units



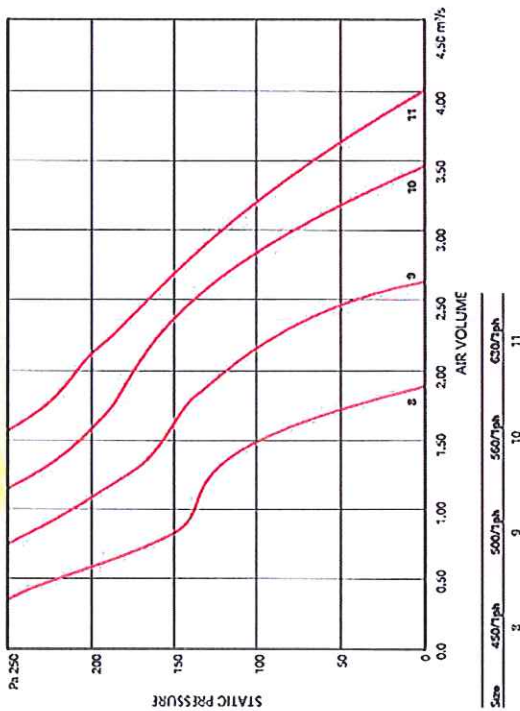
450 to 710 dia, 6 pole 3 phase & 710 dia 8 pole 3 phase units



VENT-AXIA

BLACK SABRE SLIM CASE SICKLE FANS PERFORMANCE CURVES

450 to 630 dia, 4 pole, 1 phase units



450 to 630 dia, 4 pole, 3 phase units

