



Skyflow SSFV

Product Brochure

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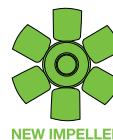
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Skyflow SSFV

Roof Mounted Vertical Discharge Centrifugal Fan



roof



OVERVIEW

Featuring our new high efficiency impeller, the Skyflow SSFV range is a range of vertical discharge axial flow roof extract units, which are designed to discharge the air at higher velocities away from roof levels, balancing the need to satisfy architect's modern day building needs against a vertical design.

MORE INFORMATION

AC

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QUICK FACTS

- ✓ 6 standard sizes from 400mm to 710mm.
- ✓ Air volume flow rates up to 4.445 m³/s.
- ✓ Static pressures up to 200 Pa.
- ✓ Suitable for operating temperatures up to +50°C.
- ✓ Fully speed controllable.

CASING

The vertical top cowl and fan support housing shall be manufactured from UV stabilised GRP finished in goose wing grey (BS 00-A-05). The all metal fan casing and guard provides a long lasting and robust construction.

The fans have been constructed from mild steel and suitably treated to ensure full corrosion protection, the guard shall be bright zinc plated. Fan plates and motors 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 GRP. 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 shall be provided by an IP55 terminal box fitted to a 550mm long flying lead.

QUALITY MANAGEMENT

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

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

TYPICAL APPLICATIONS

- Industrial Units
- Hospitals
- Fume Cupboard Extract
- Spray Booths and Paint Shops



Elta Fans Limited has a policy of continuous product development and improvement and therefore reserves the right to supply products which may differ from those illustrated and described in this publication. Confirmation of dimensions and data will be supplied on request.

SINGLE Phase - 220V to 240V / 50Hz

Product Code	Speed r/min	Airflow	Airflow m³/s @ Static Pressure Pa.					Overall Efficiency %	FMEG	Motor Electrical Data			dBA @ 3m	
			0	25	50	75	100			FLC Amps	SC Amps	Input kW		
SSFV400/4-1AC	1375	m³ / s	1.025	0.947	0.864	0.763	0.630	19.3	N28	1.80	-	0.35	Inlet	50
		W / (L/s)	0.33	0.36	0.40	0.45	0.52						Outlet	54
SSFV450/4-1AC	1315	m³ / s	1.307	1.210	1.104	0.985	0.831	20.5	N29	1.80	-	0.42	Inlet	52
		W / (L/s)	0.32	0.34	0.38	0.42	0.49						Outlet	57
SSFV500/4-1AC	1355	m³ / s	1.874	1.766	1.653	1.527		15.4	N22	3.60	-	0.75	Inlet	56
		W / (L/s)	0.40	0.43	0.45	0.49							Outlet	60
SSFV560/4-1AC	1315	m³ / s	2.447	2.313	2.169	2.010	1.828	24.7	N31	4.90	-	0.93	Inlet	58
		W / (L/s)	0.38	0.40	0.42	0.45	0.49						Outlet	62
SSFV630/4-1AC	1295	m³ / s	3.396	3.230	3.051	2.851	2.597	18.2	N23	6.50	-	1.48	Inlet	63
		W / (L/s)	0.43	0.45	0.48	0.51	0.55						Outlet	65

Data provided at standard air density of 1.2 kg/m³.

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.

N.B. Cowls can be ordered without fans, please refer to dimensional data for product code.

Motors wound for 220-240V/1Ph/60Hz supply are available upon request - Contact Elta Fans for these requirements.

Sound Data

SINGLE Phase - 220V to 240V / 50Hz

Product Code	Speed r/min		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz	
SSFV400/4-1AC	1375	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV450/4-1AC	1315	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV500/4-1AC	1355	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV560/4-1AC	1315	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV630/4-1AC	1295	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-

Please contact Elta Fans for sound data.

THREE Phase - 380V to 415V / 50Hz

Product Code	Speed r/min	Airflow	Airflow m³/s @ Static Pressure Pa.							Overall Efficiency %	FMEG	Motor Electrical Data				dBA @ 3m	
			0	25	50	75	100	150	200			FLC Amps	SC Amps	Input kW	Δ / Y		
SSFV400/4-3AC	1400	m³ / s	1.067	0.990	0.909	0.819	0.706			21.9	N31	0.68	-	0.33	-	Inlet	51
		W / (L/s)	0.31	0.34	0.36	0.40	0.46									Outlet	55
SSFV450/4-3AC	1390	m³ / s	1.298	1.207	1.107	0.998	0.877			23.8	N32	0.68	-	0.38	-	Inlet	53
		W / (L/s)	0.28	0.31	0.34	0.38	0.42									Outlet	58
SSFV500/4-3AC	1405	m³ / s	1.942	1.836	1.722	1.598	1.456			20.9	N28	1.35	-	0.73	-	Inlet	57
		W / (L/s)	0.37	0.40	0.42	0.45	0.48									Outlet	61
SSFV500/6-3AC	930	m³ / s	1.175	1.018	0.810					20.0	N30	0.94	-	0.20	-	Inlet	50
		W / (L/s)	0.17	0.20	0.25											Outlet	52
SSFV560/4-3AC	1410	m³ / s	2.584	2.462	2.332	2.190	2.033	1.602		26.0	N32	1.90	-	0.97	-	Inlet	60
		W / (L/s)	0.38	0.40	0.42	0.44	0.47	0.58								Outlet	64
SSFV560/6-3AC	880	m³ / s	1.603	1.398	1.139					20.0	N29	0.94	-	0.29	-	Inlet	54
		W / (L/s)	0.18	0.21	0.25											Outlet	56
SSFV630/4-3AC	1420	m³ / s	3.494	3.358	3.209	3.045	2.862	2.443		27.8	N33	2.70	-	1.37	-	Inlet	65
		W / (L/s)	0.39	0.41	0.43	0.45	0.47	0.54								Outlet	67
SSFV630/6-3AC	915	m³ / s	2.575	2.372	2.143	1.862				20.3	N27	2.00	-	0.71	-	Inlet	55
		W / (L/s)	0.28	0.30	0.33	0.37										Outlet	57
SSFV710/4/6-3AC	1240	m³ / s	4.445	4.275	4.097	3.909	3.711	3.273	2.769	25.9	N30	4.30	-	2.25	Δ	Inlet	65
		W / (L/s)	0.50	0.53	0.55	0.57	0.60	0.68	0.77							Outlet	67
	930	m³ / s	3.317	3.085	2.836	2.563	2.251			-	-	2.88	-	1.34	Y	Inlet	57
		W / (L/s)	0.40	0.43	0.47	0.52	0.57									Outlet	58

Data provided at standard air density of 1.2 kg/m³.

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.

N.B. Cowls can be ordered without fans, please refer to dimensional data for product code.

Motors wound for 220-240V/1Ph/60Hz supply are available upon request - Contact Elta Fans for these requirements.

THREE Phase - 380V to 415V / 50Hz

Product Code	Control Voltage		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz	
SSFV400/4-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV450/4-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV500/4-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV500/6-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV560/4-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV560/6-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV630/4-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV630/6-3AC	-	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
SSFV710/4/6-3AC	Δ	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
	Y	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-

Please contact Elta Fans for sound data.

For more information on Accessories & Wiring Diagrams, please see individual product downloads, or visit eltaselect.com/information-centre

SINGLE Phase - 220V to 240V / 50Hz

Product Code	Electronic Controller	Transformer Controller	Backdraft Shutter	Purlin Box	Soaker Sheet	Cowl Only (Standard)
SSFV400/4-1AC	149-EL31TK	149-TC14	039-SFSV-40/45	039B-PB40/45	039-SP40/45	SSR40/45
SSFV450/4-1AC	149-EL31TK	149-TC14	039-SFSV-40/45	039B-PB40/45	039-SP40/45	SSR40/45
SSFV500/4-1AC	149-EL61TK	149-TC18	039-SFSV-50/56	039B-PB50/56	039-SP50/56	SSR50/56
SSFV560/4-1AC	149-EL61TK	149-TC18	039-SFSV-50/56	039B-PB50/56	039-SP50/56	SSR50/56
SSFV630/4-1AC	-	149-TC110	039-SFSV-63/71	039B-PB63/71	039-SP63/71	SSR63/71

Product Code	Drop in Silencer 600mm Long	Drop in Silencer 900mm Long	Drop in Silencer 1200mm Long	Wiring Diagram No.no
SSFV400/4-1AC	068-SFDS-0600-B	068-SFDS-0900-B	068-SFDS-1200-B	152-500
SSFV450/4-1AC	068-SFDS-0600-B	068-SFDS-0900-B	068-SFDS-1200-B	152-500
SSFV500/4-1AC	068-SFDS-0600-C	068-SFDS-0900-C	068-SFDS-1200-C	152-500
SSFV560/4-1AC	068-SFDS-0600-C	068-SFDS-0900-C	068-SFDS-1200-C	152-500
SSFV630/4-1AC	068-SFDS-0600-D	068-SFDS-0900-D	068-SFDS-1200-D	152-500

THREE Phase - 380V to 415V / 50Hz

Product Code	Transformer Controller	Inverter Controller 1PH-3PH IP55	Inverter Controller 1PH-3PH IP20	Inverter Controller 3PH-3PH IP55	Inverter Controller 3PH-3PH IP20
SSFV400/4-3AC	149-TC33	149-ODE-2-14075-1KB1S	149-ODE-2-12037-1KB12	149-ODE-2-14075-3KA1S	149-ODE-2-14075-3KA12
SSFV450/4-3AC	149-TC33	149-ODE-2-14075-1KB1S	149-ODE-2-12037-1KB12	149-ODE-2-14075-3KA1S	149-ODE-2-14075-3KA12
SSFV500/4-3AC	149-TC33	-	-	149-ODE-2-14075-3KA1S	149-ODE-2-14075-3KA12
SSFV500/6-3AC	149-TC33	149-ODE-2-14075-18B1S	149-ODE-2-12075-1KB12	149-ODE-2-14075-3KA1S	149-ODE-2-14075-3KA12
SSFV560/4-3AC	149-TC33	-	-	149-ODE-2-14075-3KA1S	149-ODE-2-14075-3KA12
SSFV560/6-3AC	149-TC35	149-ODE-2-14075-1KB1S	149-ODE-2-12075-1KB12	149-ODE-2-14075-3KA1S	149-ODE-2-14075-3KA12
SSFV630/4-3AC	149-TC35	-	-	149-ODE-2-14075-3KA1S	149-ODE-2-14075-3KA12
SSFV630/6-3AC	149-TC35	149-ODE-2-14075-1KB1S	149-ODE-2-12150-1KB12	149-ODE-2-24150-3KA4S	149-ODE-2-24150-3KA42
SSFV710/4/6-3AC	149-TC35	-	-	149-ODE-2-24220-3KA4S	149-ODE-2-24220-3KA42

Product Code	Backdraft Shutter	Purlin Box	Soaker Sheet	Cowl Only (Standard)	Drop in Silencer 600mm Long	Drop in Silencer 900mm Long	Drop in Silencer 1200mm Long	Wiring Diagram No.
SSF400/4-3AC	039-SFSV-40/45	039B-PB40/45	039-SP40/45	SSFV-40/45	068-SFDS-0600-B	068-SFDS-0900-B	068-SFDS-1200-B	152-611
SSF450/4-3AC	039-SFSV-40/45	039B-PB40/45	039-SP40/45	SSFV-40/45	068-SFDS-0600-B	068-SFDS-0900-B	068-SFDS-1200-B	152-611
SSF500/4-3AC	039-SFSV-50/56	039B-PB50/56	039-SP50/56	SSFV-50/56	068-SFDS-0600-C	068-SFDS-0900-C	068-SFDS-1200-C	152-608
SSF500/6-3AC	039-SFSV-50/56	039B-PB50/56	039-SP50/56	SSFV-50/56	068-SFDS-0600-C	068-SFDS-0900-C	068-SFDS-1200-C	152-611
SSF560/4-3AC	039-SFSV-50/56	039B-PB50/56	039-SP50/56	SSFV-50/56	068-SFDS-0600-C	068-SFDS-0900-C	068-SFDS-1200-C	152-608
SSF560/6-3AC	039-SFSV-50/56	039B-PB50/56	039-SP50/56	SSFV-50/56	068-SFDS-0600-C	068-SFDS-0900-C	068-SFDS-1200-C	152-611
SSF630/4-3AC	039-SFSV-63/71	039B-PB63/71	039-SP63/71	SSFV-63/71	068-SFDS-0600-D	068-SFDS-0900-D	068-SFDS-1200-D	152-608
SSF630/6-3AC	039-SFSV-63/71	039B-PB63/71	039-SP63/71	SSFV-63/71	068-SFDS-0600-D	068-SFDS-0900-D	068-SFDS-1200-D	152-611
SSF710/4/6-3AC	039-SFSV-63/71	039B-PB63/71	039-SP63/71	SSFV-63/71	068-SFDS-0600-D	068-SFDS-0900-D	068-SFDS-1200-D	152-614

Skyflow SSFV

Optimum Energy Efficiency Point



SINGLE Phase - 220V to 240V / 50Hz

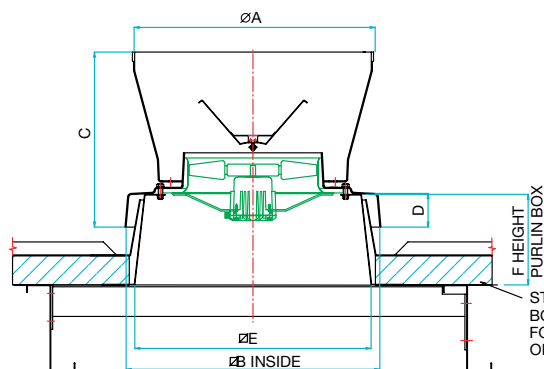
Product Code	Volume m³/s	Pressure Pa	Input kW	Speed r/min	Efficiency %	FMEG
SSFV400/4-1AC	0.630	100	0.328	1375	19.3	N28
SSFV450/4-1AC	0.831	100	0.407	1315	20.5	N29
SSFV500/4-1AC	1.527	75	0.746	1355	15.4	N22
SSFV560/4-1AC	0.706	213	0.609	1315	24.7	N31
SSFV630/4-1AC	2.597	100	1.430	1295	18.2	N23

THREE Phase - 380V to 415V / 50Hz

Product Code	Volume m³/s	Pressure Pa	Input kW	Speed r/min	Efficiency %	FMEG
SSFV400/4-3AC	0.706	100	0.324	1400	21.9	N31
SSFV450/4-3AC	0.877	100	0.369	1390	23.8	N32
SSFV500/4-3AC	1.456	100	0.698	1405	20.9	N28
SSFV500/6-3AC	0.810	50	0.203	930	20.0	N30
SSFV560/4-3AC	1.602	150	0.927	1410	26.0	N32
SSFV560/6-3AC	1.139	50	0.285	880	20.0	N29
SSFV630/4-3AC	2.443	150	1.315	1420	27.8	N33
SSFV630/6-3AC	1.862	75	0.689	915	20.3	N27
SSFV710/4/6-3AC	2.769	200	2.135	1240	25.9	N30

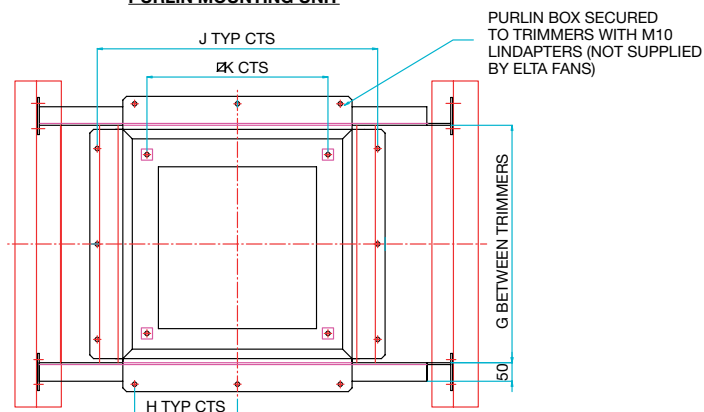
Data provided at standard air density of 1.2 kg/m³.
Values are per ISO 12759 installation category A (static).

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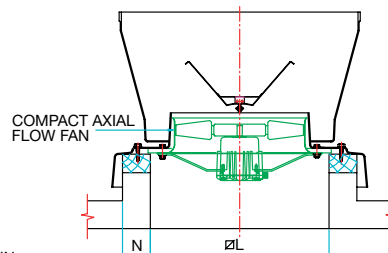


PURLIN MOUNTING UNIT

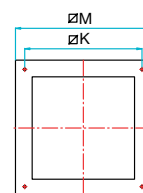
STANDARD PURLIN BOX IS SUITABLE FOR ROOF THICKNESS OF 50-75mm



PURLIN BOX SECURED TO TRIMMERS WITH M10 LINDAPTERS (NOT SUPPLIED BY ELTA FANS)



CURB MOUNTING UNIT



SECURE UNIT TO HARDWOOD SILL WITH M10 COACH BOLTS (NOT SUPPLIED BY ELTA FANS)

Product Code	A	B	C	D	E	F	G	H	J	K	L	M	N	Weight kg
SSFV400	768	784	525	90	730	250	756	300	870	600	550	700	75	28
SSFV450	768	784	525	90	730	250	756	300	870	600	550	700	75	39
SSFV500	981	934	660	100	860	250	886	350	1000	745	700	850	75	45
SSFV560	981	934	660	100	860	250	886	350	1000	745	700	850	75	55
SSFV630	1156	1054	7580	105	1000	250	1026	350	1140	870	830	980	75	55
SSFV710	1156	1054	7580	105	1000	250	1026	435	1140	870	830	980	75	64

All dimensions are shown in mm.



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