



SKYFLOW SSRL

Roof Mounted
Axial Flow Fan

SKYFLOW SSRL

Product Overview

- UK Patent Number GB2577032
- 8 standard sizes from 315mm to 710mm
- Air volume flow rates up to 4.33 m³/s
- Static pressures up to 446 Pa
- Suitable for operating temperatures up to +60°C
- Available in IE5 **EC**

The Skyflow SSRL (UK Patent Number GB2577032) is a lightweight range of horizontal discharge roof extract units which balance the need to satisfy architects' modern day building needs against a low silhouette design. The Skyflow SSRL is fully compliant to latest regulations, has low running costs and is UV stabilised for a durable, long lasting product that delivers exceptional performance and energy savings.

Easy Installation

Designed to be suitable for either curb or purlin mounting, the Skyflow SSRL can be mounted on flat or inclined roofs with a maximum pitch angle of 35°.

Ecodesign Compliant

The fan and roof cowl installed together comply with Ecodesign directives, specifically EU Regulation 1253/2014 which sets out the minimum efficiency requirements for ventilation units including roof axial fans.

Efficient Performance

The combination of a high efficiency EC plate axial fan and a unique roof cowl design provides significant reductions in operating costs and electric power consumption, ideally suited to meet stringent Building Regulations requirements. The air operated backdraught shutter enables reductions in heat loss from the building when the SSRL is not operating.

Intelligent Design

The discharge diffuser provides static regain by gradually reducing the discharge velocity converting dynamic pressure into usable static pressure

resulting in increased efficiency and reduced noise levels. A bird guard mesh is fitted as standard to prevent damage caused by wildlife.

Controllability

The speed can be adjusted by the input signals to the motor

- DC voltage: 2 to 10V DC
- DC current: 4 to 20mA DC
- Frequency duty-cycle: 10 to 95%

The use of a potentiometer for manual control is also possible.

Warranty

Each SSRL has a 12 month warranty.

Construction

A robust and durable unit with the top cowl and fan support housing in UV stabilized GRP to provide a longer life. Zinc plated support arms provide strength and protection against corrosion.

Motor

Permanent magnet, electronically commutated motor with encapsulated electronics comply with the efficiency level IE5. Motors are pad mounted totally enclosed type to IP55 EC with sealed for life bearings for operating temperatures up to +60°C.

Impeller

Impellers are adjustable pitch aerofoil with blades made from high quality GRP. Combined with increased blade chord and twist, we have achieved 7% higher efficiency, reducing overall energy consumption. Increased blade root reduces stress levels making our range of impellers ideal for arduous fan applications.



Typical Applications

- Libraries
- Hospitals
- Offices
- Banks
- Small Industrial Units
- Retail Parks

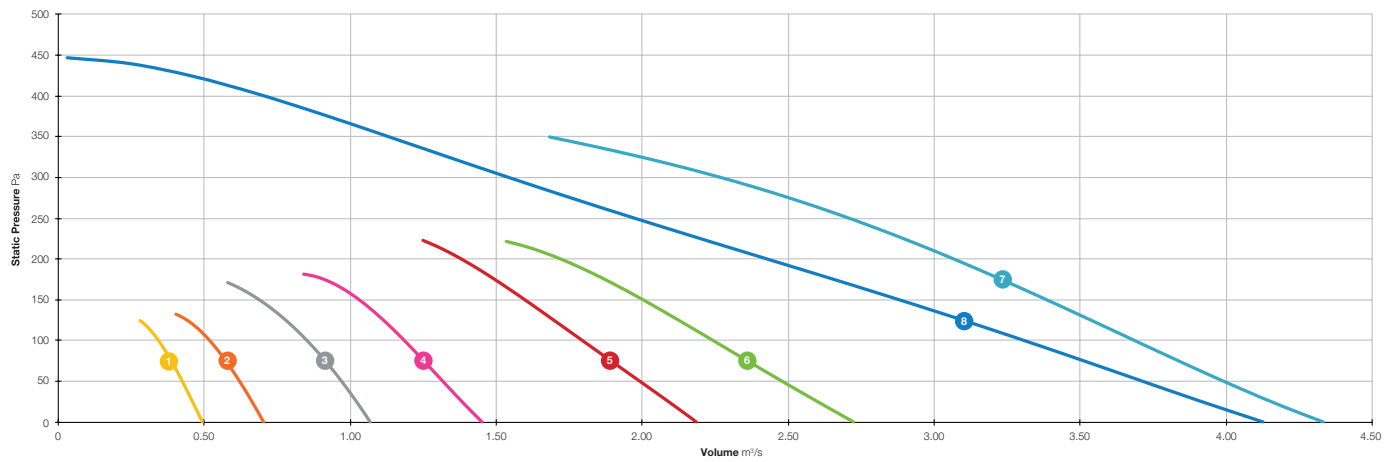
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Product Coding

Code	Reference
SSRL	Product Range
400	Diameter (315/350/400...)
-	
1	Voltage Supply (Single Phase / Three Phase)
EC	Motor Type (AC/EC)
A - Z	Additional Coding (A - Z) Product Variants
e.g.	SSRL400-1EC

Performance Range Curves



- 1 SSRL315-1EC
- 2 SSRL350-1EC
- 3 SSRL400-1EC

- 4 SSRL450-1EC
- 5 SSRL500-1EC
- 6 SSRL560-1EC

- 7 SSRL630-1EC
- 8 SSRL710-1EC

SKYFLOW SSRL



Performance, SFP & Electrical Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow	Airflow m³/s @ Static Pressure Pa							At Best Efficiency Point		Electrical Data	dBA @ 3m	
				0	25	50	75	100	150	200	Overall Eff %	Input kW	Peak Amps		
SSRL315-1EC	10	1790	m³/s	0.494	0.460	0.425	0.387	0.344	-	-	36.2	0.113	0.94	Inlet	53
			W/(L/s)	0.18	0.21	0.24	0.28	0.33	-	-				Outlet	50
	8	1405	m³/s	0.385	0.343	0.293	-	-	-	-	32.1	0.060	0.54	Inlet	46
			W/(L/s)	0.13	0.17	0.21	-	-	-	-				Outlet	43
	5	795	m³/s	0.217	-	-	-	-	-	-	17.1	0.019	0.22	Inlet	34
			W/(L/s)	0.09	-	-	-	-	-	-				Outlet	32
	2	235	m³/s	0.060	-	-	-	-	-	-	1.2	0.007	0.10	Inlet	29
			W/(L/s)	0.12	-	-	-	-	-	-				Outlet	23
SSRL350-1EC	10	1780	m³/s	0.702	0.662	0.620	0.573	0.518	-	-	37.9	0.165	1.30	Inlet	56
			W/(L/s)	0.20	0.23	0.25	0.28	0.32	-	-				Outlet	54
	8	1405	m³/s	0.545	0.503	0.448	0.368	-	-	-	35.7	0.090	0.76	Inlet	49
			W/(L/s)	0.14	0.17	0.20	0.25	-	-	-				Outlet	47
	5	800	m³/s	0.310	0.204	-	-	-	-	-	22.0	0.028	0.28	Inlet	41
			W/(L/s)	0.08	0.14	-	-	-	-	-				Outlet	37
	2	240	m³/s	0.093	-	-	-	-	-	-	2.2	0.007	0.10	Inlet	40
			W/(L/s)	0.07	-	-	-	-	-	-				Outlet	34
SSRL400-1EC	10	1780	m³/s	1.067	1.020	0.969	0.913	0.850	0.686	-	43.5	0.264	2.17	Inlet	60
			W/(L/s)	0.18	0.20	0.23	0.27	0.32	0.40	-				Outlet	56
	8	1405	m³/s	0.866	0.784	0.701	0.610	0.486	-	-	41.8	0.131	1.12	Inlet	55
			W/(L/s)	0.12	0.15	0.19	0.23	0.28	-	-				Outlet	51
	5	795	m³/s	0.485	0.332	-	-	-	-	-	30.1	0.036	0.34	Inlet	42
			W/(L/s)	0.06	0.11	-	-	-	-	-				Outlet	40
	2	240	m³/s	0.135	-	-	-	-	-	-	3.8	0.007	0.10	Inlet	40
			W/(L/s)	0.05	-	-	-	-	-	-				Outlet	36
SSRL450-1EC	10	1765	m³/s	1.450	1.381	1.315	1.250	1.183	1.027	-	43.8	0.387	3.35	Inlet	60
			W/(L/s)	0.24	0.27	0.30	0.33	0.36	0.42	-				Outlet	57
	8	1400	m³/s	1.105	1.037	0.959	0.866	0.743	-	-	40.3	0.206	1.73	Inlet	53
			W/(L/s)	0.16	0.19	0.22	0.25	0.29	-	-				Outlet	51
	5	795	m³/s	0.639	0.494	-	-	-	-	-	30.8	0.054	0.49	Inlet	45
			W/(L/s)	0.07	0.11	-	-	-	-	-				Outlet	40
	2	240	m³/s	0.185	-	-	-	-	-	-	3.9	0.010	0.12	Inlet	42
			W/(L/s)	0.05	-	-	-	-	-	-				Outlet	39
SSRL500-1EC	10	1800	m³/s	2.183	2.088	1.990	1.892	1.794	1.598	1.382	48.4	0.634	4.47	Inlet	63
			W/(L/s)	0.21	0.23	0.26	0.29	0.32	0.39	0.47				Outlet	59
	8	1420	m³/s	1.711	1.594	1.476	1.356	1.228	-	-	47.6	0.317	2.31	Inlet	58
			W/(L/s)	0.14	0.16	0.19	0.23	0.26	-	-				Outlet	55
	5	805	m³/s	0.912	0.742	-	-	-	-	-	39.8	0.074	0.69	Inlet	44
			W/(L/s)	0.06	0.10	-	-	-	-	-				Outlet	41
	2	250	m³/s	0.299	-	-	-	-	-	-	9.5	0.010	0.13	Inlet	33
			W/(L/s)	0.03	-	-	-	-	-	-				Outlet	30

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

Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: C

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

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.

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Performance, SFP & Electrical Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow	Airflow m³/s @ Static Pressure Pa											At Best Efficiency Point		Electrical Data	dBA @ 3m		
				0	25	50	75	100	150	200	250	300	350	400	Overall Eff %	Input kW	Peak Amps			
SSRL560-1EC	10	1795	m³/s	2.722	2.598	2.478	2.359	2.242	2.003	1.722	-	-	-	-	44.9	0.829	6.13	Inlet	67	
			W/(L/s)	0.26	0.29	0.32	0.35	0.38	0.44	0.51	-	-	-	-				Outlet	64	
	8	1410	m³/s	2.147	1.982	1.836	1.690	1.535	-	-	-	-	-	-	43.7	0.421	3.46	Inlet	60	
			W/(L/s)	0.17	0.20	0.23	0.26	0.29	-	-	-	-	-	-				Outlet	58	
	5	795	m³/s	1.185	0.947	0.590	-	-	-	-	-	-	-	-	39.1	0.088	0.85	Inlet	48	
			W/(L/s)	0.07	0.10	0.15	-	-	-	-	-	-	-	-				Outlet	44	
	2	235	m³/s	0.353	-	-	-	-	-	-	-	-	-	-	-	9.3	0.010	0.14	Inlet	31
			W/(L/s)	0.03	-	-	-	-	-	-	-	-	-	-	-				Outlet	31
SSRL630-1EC	10	1800	m³/s	4.331	4.153	3.990	3.836	3.685	3.385	3.067	2.710	2.271	1.683	-	55.5	1.300	8.84	Inlet	69	
			W/(L/s)	0.23	0.25	0.27	0.30	0.33	0.39	0.45	0.52	0.59	0.73	-				Outlet	65	
	8	1415	m³/s	3.430	3.210	3.004	2.804	2.605	2.187	1.667	-	-	-	-	56.7	0.638	4.92	Inlet	63	
			W/(L/s)	0.14	0.17	0.19	0.22	0.25	0.32	0.39	-	-	-	-				Outlet	59	
	5	800	m³/s	1.920	1.564	1.210	-	-	-	-	-	-	-	-	51.2	0.137	1.20	Inlet	50	
			W/(L/s)	0.05	0.08	0.12	-	-	-	-	-	-	-	-				-	Outlet	46
	2	240	m³/s	0.549	-	-	-	-	-	-	-	-	-	-	-	16.4	0.011	0.16	Inlet	31
			W/(L/s)	0.02	-	-	-	-	-	-	-	-	-	-	-				Outlet	32
SSRL710-1EC	10	1555	m³/s	4.126	3.915	3.713	3.512	3.307	2.878	2.426	1.972	1.541	1.129	0.703	43.3	1.236	8.65	Inlet	72	
			W/(L/s)	0.26	0.29	0.31	0.34	0.37	0.43	0.51	0.63	0.79	1.07	1.71				Outlet	68	
	8	1225	m³/s	3.274	3.035	2.770	2.486	2.196	1.627	1.077	0.484	-	-	-	44.2	0.607	1.54	Inlet	67	
			W/(L/s)	0.17	0.19	0.22	0.25	0.28	0.38	0.55	1.21	-	-	-				Outlet	63	
	5	710	m³/s	1.891	1.424	0.947	0.455	-	-	-	-	-	-	-	39.5	0.137	1.21	Inlet	53	
			W/(L/s)	0.07	0.10	0.15	0.29	-	-	-	-	-	-	-				-	Outlet	49
	2	200	m³/s	0.532	-	-	-	-	-	-	-	-	-	-	-	11.3	0.013	0.15	Inlet	33
			W/(L/s)	0.02	-	-	-	-	-	-	-	-	-	-	-				Outlet	30

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

Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: C

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

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.

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Sound Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SSRL315-1EC	10	Inlet	66	69	66	70	69	66	62	58	76
		Outlet	65	69	69	69	64	61	59	56	75
	8	Inlet	54	61	66	61	63	60	55	52	70
		Outlet	58	62	68	60	57	55	52	49	70
	5	Inlet	52	54	53	48	50	49	39	38	59
		Outlet	57	58	54	47	47	45	38	37	62
	2	Inlet	41	37	33	33	34	48	34	33	50
		Outlet	41	40	35	33	35	41	33	31	47
SSRL350-1EC	10	Inlet	63	68	72	75	71	69	64	62	79
		Outlet	68	69	71	74	67	65	62	60	78
	8	Inlet	58	67	68	65	64	64	58	55	73
		Outlet	61	65	69	64	61	59	56	53	72
	5	Inlet	56	61	59	52	53	58	46	43	65
		Outlet	56	63	58	51	52	52	41	40	65
	2	Inlet	39	41	32	37	48	59	39	37	60
		Outlet	42	48	38	39	48	52	37	35	55
SSRL400-1EC	10	Inlet	68	71	75	77	76	73	69	67	82
		Outlet	70	71	76	74	71	68	66	65	81
	8	Inlet	67	67	72	73	71	67	63	61	78
		Outlet	65	66	74	67	65	62	60	58	76
	5	Inlet	54	60	60	57	56	59	49	45	66
		Outlet	59	67	60	56	53	55	47	45	69
	2	Inlet	41	39	46	42	50	59	42	41	60
		Outlet	52	57	49	43	48	54	41	39	60
SSRL450-1EC	10	Inlet	71	76	79	77	74	73	71	69	84
		Outlet	72	76	77	75	70	69	69	67	82
	8	Inlet	65	73	73	68	68	67	65	63	78
		Outlet	68	74	70	66	65	64	63	60	77
	5	Inlet	61	62	59	54	60	62	51	49	68
		Outlet	59	64	59	54	57	54	45	44	67
	2	Inlet	44	54	46	45	59	59	42	39	63
		Outlet	44	55	44	43	58	52	40	37	61
SSRL500-1EC	10	Inlet	70	78	83	80	79	76	74	72	87
		Outlet	72	76	77	76	73	72	70	68	83
	8	Inlet	64	79	80	73	71	71	69	65	84
		Outlet	66	73	80	69	66	67	65	62	82
	5	Inlet	63	61	61	59	61	59	53	48	69
		Outlet	63	65	59	55	56	55	50	46	69
	2	Inlet	59	49	43	38	50	49	42	40	60
		Outlet	66	54	40	37	47	45	38	38	66

Data provided at standard air density of 1.2 kg/m³.
 Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
 The Sound Power Level Spectra are in dB re-1pW.

SKYFLOW SSRL



Sound Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SSRL560-1EC	10	Inlet	74	81	86	83	83	79	77	76	90
		Outlet	76	82	85	82	78	76	74	74	89
	8	Inlet	69	78	78	75	75	74	72	70	84
		Outlet	73	83	77	76	72	70	69	67	85
	5	Inlet	68	63	65	61	64	63	58	54	73
		Outlet	66	68	63	58	59	59	55	51	72
	2	Inlet	48	43	42	38	49	46	38	37	54
		Outlet	44	43	42	36	49	45	37	36	53
SSRL630-1EC	10	Inlet	75	84	89	86	84	82	79	79	93
		Outlet	75	79	84	83	79	78	75	76	89
	8	Inlet	69	84	80	80	78	76	75	73	88
		Outlet	68	79	77	74	73	72	71	70	83
	5	Inlet	70	70	67	65	65	66	61	57	76
		Outlet	65	73	66	60	62	60	54	52	75
	2	Inlet	46	43	48	38	48	45	39	37	54
		Outlet	47	41	47	38	47	48	42	40	54
SSRL710-1EC	10	Inlet	74	88	89	86	88	87	83	81	95
		Outlet	75	87	84	82	82	83	80	78	92
	8	Inlet	69	83	84	81	83	82	78	76	90
		Outlet	70	82	79	77	77	78	75	73	87
	5	Inlet	74	74	67	68	69	68	64	58	79
		Outlet	65	73	65	64	64	64	61	56	75
	2	Inlet	48	47	46	41	48	50	41	38	55
		Outlet	46	49	46	43	45	46	37	33	54

Data provided at standard air density of 1.2 kg/m³.
 Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
 The Sound Power Level Spectra are in dB re-1pW.

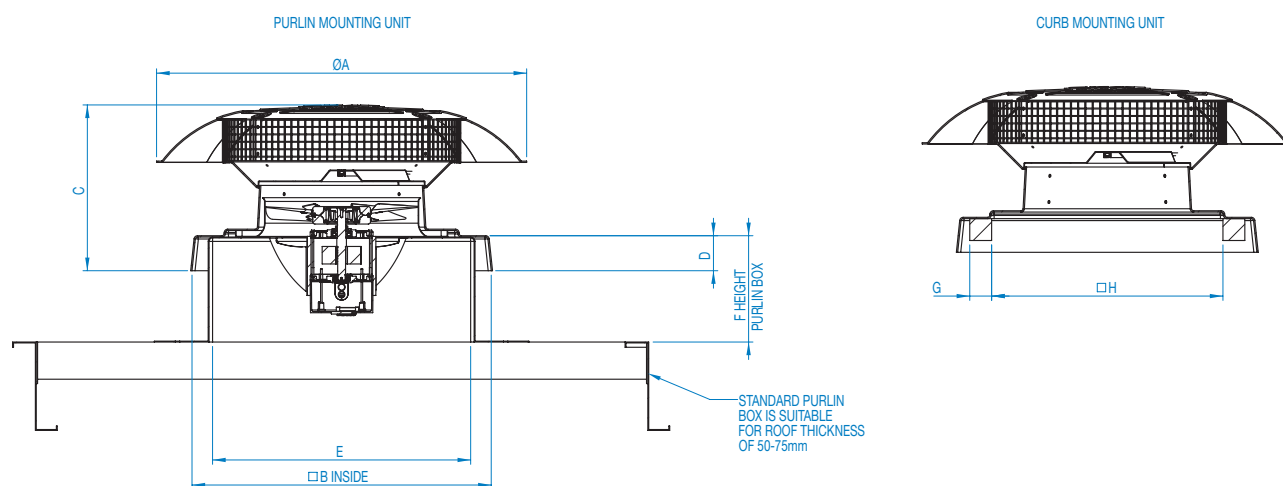
SKYFLOW SSRL



Dimensional Data

Single Phase

Product Code	A	B	C	D	E	F	G	H	Weight kg
SSRL315-1EC	846	684	379	85	610	240	75	460	23
SSRL350-1EC	846	684	379	85	610	240	75	460	23
SSRL400-1EC	1059	784	479	90	730	250	75	550	31
SSRL450-1EC	1059	784	479	90	730	250	75	550	34
SSRL500-1EC	1279	934	576	100	860	250	75	700	40
SSRL560-1EC	1279	934	576	100	860	250	75	700	43
SSRL630-1EC	1615	1054	661	105	1000	250	75	830	48
SSRL710-1EC	1615	1054	661	105	1000	250	75	830	50



Dimensions are in mm.

Single Phase

Product Code	Backdraught Shutters	EC Electronic Controller	Purlin Box	Wiring Diagrams
SSRL315-1EC	039-SFSV-31/35	149-POT-10-MI	039B-PB31/35	152-711
SSRL350-1EC	039-SFSV-31/35	149-POT-10-MI	039B-PB31/35	152-711
SSRL400-1EC	039-SFSV-40/45	149-POT-10-MI	039B-PB40/45	152-711
SSRL450-1EC	039-SFSV-40/45	149-POT-10-MI	039B-PB40/45	152-711
SSRL500-1EC	039-SFSV-50/56	149-POT-10-MI	039B-PB50/56	152-711
SSRL560-1EC	039-SFSV-50/56	149-POT-10-MI	039B-PB50/56	152-711
SSRL630-1EC	039-SFSV-63/71	149-POT-10-MI	039B-PB63/71	152-711
SSRL710-1EC	039-SFSV-63/71	149-POT-10-MI	039B-PB63/71	152-711

SKYFLOW SSRL

Notes

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Notes

[illegible]

Building Services

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