

## DOUBLE INLET CENTRIFUGAL FAN

**SF**

DOUBLE INLET  
CENTRIFUGAL FAN  
**with Forward wheels**



## Definitions

Fan is a device for moving air which utilizes a power driven rotating impeller.  
A fan shall have at least one inlet opening and at least one outlet opening.  
The openings may or may not have elements for connection to ductwork.

## Fan Performance Variables

- Fan Air Density :  $\rho$

Fan air density is the density of the air corresponding to the total pressure and the stagnation temperature of the air at the fan inlet.

$$\rho_x = \rho_0 \left( \frac{t_{d0} + 273.15}{t_{dx} + 273.15} \right) \left( \frac{P_{sx} + p_b}{p_b} \right)$$

$$\rho_x = \rho_0 \left( \frac{t_{d0} + 459.67}{t_{dx} + 459.67} \right) \left( \frac{P_{sx} + 13.63p_b}{13.63p_b} \right)$$

$$\rho = \rho_0 \left( \frac{P_{s1} + p_b}{p_b} \right) \left( \frac{t_{d0} + 273.15}{t_{s1} + 273.15} \right)$$

$$\rho = \rho_0 \left( \frac{P_{s1} + 13.63p_t}{13.63p_b} \right) \left( \frac{t_{d0} + 459.67}{t_{s1} + 459.67} \right)$$

- Fan Airflow Rate : Q

Fan Airflow rate is the volumetric airflow rate at fan air density.

Intake air properties is regarded as standard air properties unless otherwise specified.

- Standard Air is air with a density of  $1.2\text{kg/m}^3(0.075\text{lbm/ft}^3)$

- Standard Air Properties : Standard air has a ratio of specific heats of 1.4 and a viscosity of  $1.8185E03\text{Pa}\cdot\text{s}(1.222E-05\text{lbm/ft}\cdot\text{s})$ . Air at  $20^\circ\text{C}(68^\circ\text{F})$  temperature, 50% relative humidity, and  $101.325\text{kPa}(14.696\text{psi}, 29.92\text{in.Hg})$  barometric pressure has these properties, approximately.

- Fan total Pressure :  $P_t$

Fan total Pressure is the difference between the total pressure at the fan outlet and the total pressure at the fan inlet.

- Fan Velocity pressure = Dynamic Pressure :  $P_v$

Fan velocity pressure is the pressure corresponding to the average air velocity at the fan outlet. It is always positive.

$$Q_2 = Q(\rho/\rho_2) \quad V_2 = Q_2/A_2 \quad \text{and} \quad P_v = \frac{P_2V_2^2}{2}$$

$$P_v = \rho_2 \left( \frac{V_2}{1097} \right)^2$$

$$\text{or} \quad P_v = \left( \frac{Q\rho}{A_2} \right)^2 \frac{1}{2\rho_2}$$

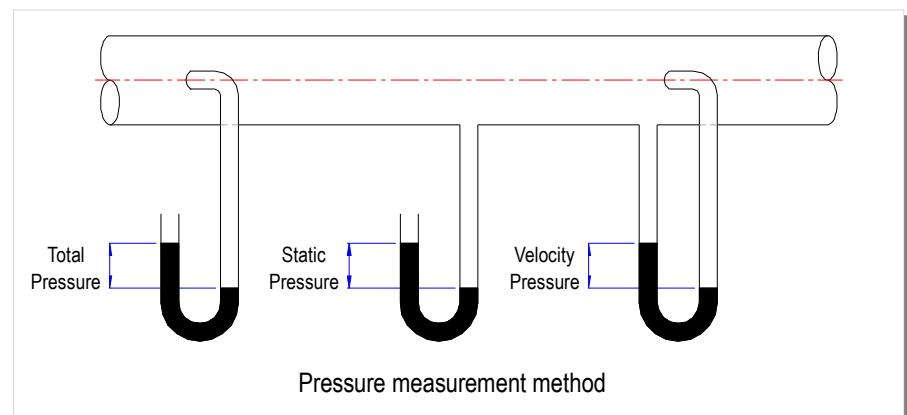
$$P_v = \left( \frac{Q\rho}{1097A_2} \right)^2 \frac{1}{\rho_2}$$

- Fan Static Pressure :  $P_s$

Fan Static pressure the difference between the fan total pressure and the fan velocity pressure. Therefore, fan Static pressure is the difference between the static pressure at the fan outlet and the total pressure at the fan inlet.

If the temperature of the intake gas is not standard, correction and conversion can be done as follows.

$$P_2 = P_1 \times \frac{\rho_1}{\rho_2} \quad L_2 = L_1 \times \frac{\rho_1}{\rho_2}$$



- Fan Speed : N

Fan speed is the rotational speed of the impeller. If a fan has more than one impeller, fan speeds are the rotational speeds of each impeller.

Fan Total Efficiency :  $\eta_t$

Fan total efficiency is the ratio of the fan power output to the fan power input.

- Fan Static Efficiency :  $\eta_s$

Fan static efficiency is the fan total efficiency multiplied by the ratio of the fan static pressure to fan total pressure.

- Efficiency of the fan is divided into total pressure efficiency and static pressure efficiency. Unless otherwise specified, this refers to the total pressure efficiency.

- Efficiency by fan type – applied for selection of fan in general

Type	Efficiency	Type	Efficiency
TURBO	60 ~ 80%	AXIAL	40 ~ 85%
AIR-FOIL	70 ~ 85%	WALL VENTILATOR	30 ~ 50%
SIROCCO	40 ~ 60%	PLATE	40 ~ 70%
ROOF VENTILATOR	40 ~ 50%	LIMIT LOAD	55 ~ 65%

- Conversion formulae

Actual test results may be converted to nominal test results using the following.

$$Q_c = Q \left( \frac{N_c}{N} \right) \left( \frac{K_p}{K_{pc}} \right)$$

$$P_{tc} = P_t \left( \frac{N_c}{N} \right)^2 \left( \frac{\rho_c}{\rho} \right) \left( \frac{K_p}{K_{pc}} \right)$$

$$P_{vc} = P_v \left( \frac{N_c}{N} \right)^2 \left( \frac{\rho_c}{\rho} \right)$$

$$P_{sc} = P_{tc} - P_{vc}$$

$$H_c = H \left( \frac{N_c}{N} \right)^3 \left( \frac{\rho_c}{\rho} \right) \left( \frac{K_p}{K_{pc}} \right)$$

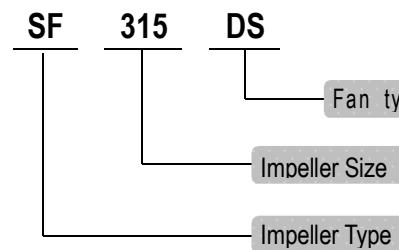
$$\eta_{tc} = \eta_{tb} \quad \text{and} \quad \eta_{sc} = \eta_{tc} \left( \frac{P_{sc}}{P_{tc}} \right)$$

- Sound Power Level : dB

This was tested in accordance with AMCA Publication 300.

## Specification of the fan and table of products

- Model name display method

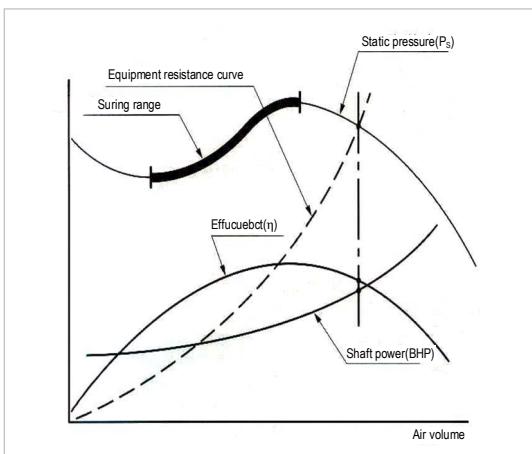


- DS : Double suction
- DSL : Double suction – Long shaft
- AF : Air-Foil
- SF : Forward

## Forward Fan features



Sirocco Fan impeller



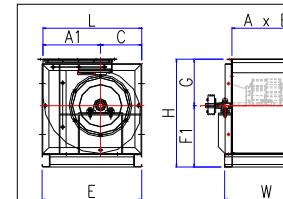
Characteristic curve of Sirocco Fan

- Forward Fan table of external dimensions

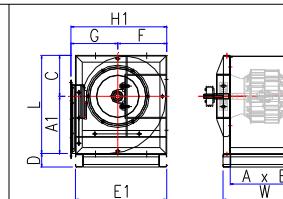
### Fan Rotation and discharge

CW - clockwise rotation

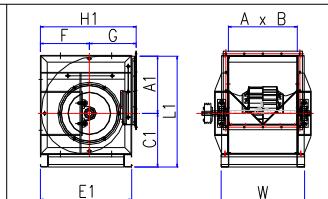
CW-360



CW-270

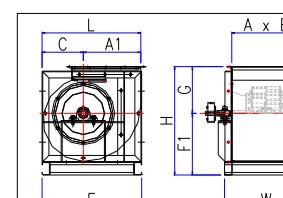


CW-90

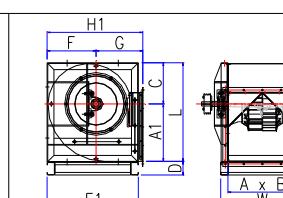


CCW - counter clockwise rotation

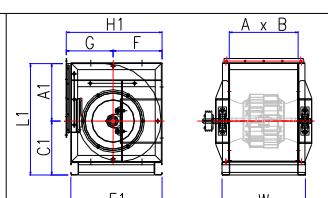
CCW-360



CCW-270



CCW-90



### Table of external dimensions

Model name	OUTLET				DIMENSION											
	A	B	L	C	A1	E	H	F1	G	F	W	H1	E1	L1	C1	D
SF 315 DS	404	404	579	241.7	337.3	584	636.5	362	274.5	287	484	561.5	535	654	316.7	80
SF 355 DS	451	451	650	270	380	655	698.8	398.2	300.6	323.2	531	632.8	655	725	345	80
SF 400 DS	507	507	735	306.5	428.5	740	767.5	438.5	329	363.5	587	692.5	658	810	381.5	80
SF 450 DS	569	569	825	343	482	830	843.5	483	360.5	408	649	768.5	735	900	418	80
SF 500 DS	638	638	916	380.7	535.3	921	917.9	528.1	389.8	453.1	718	842.9	800	991	455.7	80
SF 560 DS	715	715	1025	425.5	599.5	1030	998.4	581.6	416.8	506.6	795	923.4	890	1100	500.5	80
SF 630 DS	801	801	1153	478.3	674.7	1158	1115.4	644.1	471.3	569.1	881	1040.4	965	1228	553.3	80
SF 710 DS	898	898	1297	538.4	758.6	1302	1232.1	715	517.1	640	978	1157.1	1080	1372	613.4	80
SF 800 DS	1007	1007	1458	600.6	857.3	1040	1412.2	832	580.2	732	1107	1297	1040	1573	715.7	175
SF 900 DS	1130	1130	1640	675.6	964.3	1150	1564.6	921	643.6	821	1230	1450	1150	1755	790.7	175
SF 1000 DS	1267	1267	1822	751.2	1070.9	1270	1713.5	1011	702.5	911	1367	1598.2	1270	1936.9	866.1	175

The standard may be modified for improvement of the product.

### Purpose

1. Building air handling or ventilation
2. Low wind pressure and low power ventilation exhaust
3. General industry

## Forward Fan

### SF 315 DS

Wheel DIA. 320mm

Outlet Dim 404 x 404



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 0.163m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	500	76	45	1.17	0.250	36%	73	1	570	98	58	1.33	0.370	36%	76
2	500	81	57	1.01	0.210	41%	70	2	570	105	75	1.16	0.300	41%	73
3	500	82	64	0.90	0.180	43%	68	3	570	107	83	1.03	0.260	43%	71
4	500	81	66	0.80	0.150	43%	68	4	570	105	86	0.91	0.230	43%	71
5	500	78	66	0.73	0.140	42%	68	5	570	101	85	0.83	0.200	42%	71
6	500	77	67	0.64	0.120	42%	67	6	570	100	87	0.73	0.180	42%	70
1	640	124	74	1.49	0.52	36%	79	1	710	153	91	1.66	0.71	36%	81
2	640	132	94	1.30	0.43	41%	76	2	710	162	116	1.44	0.58	41%	78
3	640	134	104	1.16	0.37	43%	74	3	710	166	129	1.28	0.50	43%	76
4	640	132	108	1.03	0.32	43%	73	4	710	162	133	1.14	0.43	43%	75
5	640	127	108	0.94	0.29	42%	73	5	710	157	132	1.04	0.39	42%	76
6	640	126	110	0.82	0.25	42%	73	6	710	154	136	0.91	0.34	42%	75
1	780	184	109	1.82	0.94	36%	83	1	850	219	130	1.98	1.22	36%	85
2	780	196	140	1.58	0.77	41%	81	2	850	233	166	1.72	0.99	41%	83
3	780	200	155	1.41	0.66	43%	79	3	850	237	184	1.53	0.85	43%	81
4	780	196	161	1.25	0.57	43%	78	4	850	233	191	1.36	0.74	43%	80
5	780	189	160	1.14	0.52	42%	78	5	850	225	190	1.24	0.67	42%	80
6	780	186	164	1.00	0.45	42%	78	6	850	221	195	1.09	0.58	42%	79
1	920	256	152	2.15	1.54	36%	87	1	1000	303	180	2.33	1.97	36%	89
2	920	273	195	1.86	1.26	41%	85	2	1000	322	230	2.03	1.61	41%	87
3	920	278	216	1.66	1.08	43%	83	3	1000	328	255	1.81	1.38	43%	85
4	920	273	224	1.48	0.93	43%	82	4	1000	322	264	1.60	1.19	43%	84
5	920	263	222	1.35	0.84	42%	82	5	1000	311	263	1.46	1.08	42%	84
6	920	259	228	1.18	0.73	42%	81	6	1000	306	269	1.28	0.93	42%	83
1	1050	334	198	2.45	2.28	36%	90	1	1100	366	218	2.57	2.63	36%	91
2	1050	355	253	2.13	1.86	41%	88	2	1100	390	278	2.23	2.14	41%	89
3	1050	362	281	1.90	1.60	43%	86	3	1100	397	308	1.99	1.84	43%	87
4	1050	355	291	1.68	1.38	43%	85	4	1100	390	320	1.76	1.59	43%	86
5	1050	343	290	1.54	1.24	42%	85	5	1100	376	318	1.61	1.43	42%	86
6	1050	338	297	1.35	1.08	42%	85	6	1100	371	326	1.41	1.24	42%	86
1	1150	400	238	2.68	3.00	36%	92	1	1200	436	259	2.80	3.41	36%	93
2	1150	426	304	2.33	2.44	41%	90	2	1200	464	331	2.43	2.78	41%	91
3	1150	434	337	2.08	2.10	43%	88	3	1200	473	367	2.17	2.39	43%	89
4	1150	426	349	1.84	1.81	43%	87	4	1200	464	380	1.92	2.06	43%	88
5	1150	411	347	1.68	1.64	42%	87	5	1200	448	378	1.76	1.86	42%	88
6	1150	405	356	1.48	1.42	42%	87	6	1200	441	388	1.54	1.61	42%	88
1	1250	473	281	2.92	3.85	36%	94	1	1300	511	304	3.03	4.33	36%	95
2	1250	504	359	2.53	3.14	41%	92	2	1300	545	388	2.63	3.53	41%	93
3	1250	513	398	2.26	2.70	43%	90	3	1300	555	431	2.35	3.04	43%	91
4	1250	503	413	2.00	2.33	43%	89	4	1300	544	446	2.08	2.62	43%	90
5	1250	486	410	1.83	2.10	42%	90	5	1300	526	444	1.90	2.36	42%	91
6	1250	479	421	1.61	1.82	42%	89	6	1300	518	455	1.67	2.05	42%	90

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301
- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.
- Performance certified is for installation type B - free inlet, ducted outlet.
- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

### SF 355 DS

Wheel DIA. 357mm

Outlet Dim 451 x 451



Sirocco Fan Impeller



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The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 0.203m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	500	94	56	1.62	0.430	36%	76	1	560	118	70	1.81	0.600	36%	79
2	500	100	72	1.41	0.350	41%	73	2	560	126	90	1.58	0.490	41%	76
3	500	102	79	1.25	0.300	43%	72	3	560	128	99	1.40	0.420	43%	74
4	500	100	82	1.11	0.260	43%	71	4	560	126	103	1.25	0.370	43%	73
5	500	97	82	1.02	0.240	42%	71	5	560	121	103	1.14	0.330	42%	73
6	500	95	84	0.89	0.210	42%	70	6	560	120	105	1.00	0.290	42%	73
1	610	140	83	1.98	0.78	36%	81	1	660	164	98	2.14	0.99	36%	82
2	610	149	106	1.72	0.63	41%	78	2	660	175	125	1.86	0.80	41%	80
3	610	152	118	1.53	0.55	43%	76	3	660	178	138	1.65	0.69	43%	78
4	610	149	122	1.36	0.47	43%	75	4	660	175	143	1.47	0.60	43%	77
5	610	144	122	1.24	0.43	42%	75	5	660	169	142	1.34	0.54	42%	77
6	610	142	125	1.09	0.37	42%	75	6	660	166	146	1.18	0.47	42%	77
1	710	190	113	2.30	1.23	36%	84	1	760	218	129	2.46	1.50	36%	86
2	710	202	144	2.00	1.00	41%	82	2	760	232	165	2.14	1.22	41%	83
3	710	206	160	1.78	0.86	43%	80	3	760	236	183	1.91	1.05	43%	81
4	710	202	166	1.58	0.74	43%	79	4	760	232	190	1.69	0.91	43%	80
5	710	195	165	1.44	0.67	42%	79	5	760	224	189	1.55	0.82	42%	81
6	710	192	169	1.27	0.58	42%	78	6	760	220	194	1.36	0.71	42%	80
1	810	247	147	2.62	1.82	36%	87	1	860	279	166	2.79	2.17	36%	89
2	810	263	188	2.28	1.48	41%	85	2	860	297	212	2.42	1.77	41%	86
3	810	268	208	2.03	1.27	43%	83	3	860	302	235	2.16	1.52	43%	84
4	810	263	216	1.80	1.10	43%	82	4	860	297	243	1.91	1.31	43%	83
5	810	254	214	1.65	0.99	42%	82	5	860	286	242	1.75	1.18	42%	84
6	810	250	220	1.44	0.86	42%	82	6	860	282	248	1.53	1.03	42%	83
1	900	305	181	2.92	2.49	36%	90	1	940	333	198	3.05	2.83	36%	91
2	900	325	232	2.53	2.02	41%	87	2	940	354	253	2.64	2.31	41%	88
3	900	331	257	2.26	1.74	43%	86	3	940	361	280	2.36	1.98	43%	87
4	900	325	266	2.00	1.50	43%	85	4	940	354	291	2.09	1.71	43%	86
5	900	314	265	1.83	1.35	42%	85	5	940	342	289	1.91	1.54	42%	86
6	900	309	271	1.60	1.18	42%	84	6	940	337	296	1.68	1.34	42%	85
1	980	362	215	3.18	3.21	36%	92	1	1020	392	233	3.30	3.62	36%	93
2	980	385	275	2.76	2.61	41%	89	2	1020	417	298	2.87	2.95	41%	90
3	980	392	305	2.46	2.25	43%	88	3	1020	425	330	2.56	2.53	43%	89
4	980	385	316	2.18	1.94	43%	87	4	1020	417	342	2.27	2.19	43%	88
5	980	372	314	1.99	1.75	42%	87	5	1020	403	340	2.07	1.97	42%	88
6	980	366	322	1.75	1.52	42%	86	6	1020	397	349	1.82	1.71	42%	87
1	1060	423	252	3.43	4.06	36%	94	1	1100	456	271	3.56	4.54	36%	94
2	1060	451	321	2.98	3.31	41%	91	2	1100	485	346	3.10	3.69	41%	92
3	1060	459	356	2.66	2.84	43%	90	3	1100	494	384	2.76	3.18	43%	90
4	1060	450	369	2.36	2.45	43%	89	4	1100	485	398	2.45	2.74	43%	90
5	1060	435	367	2.16	2.21	42%	89	5	1100	468	396	2.24	2.47	42%	90
6	1060	429	377	1.89	1.92	42%	88	6	1100	461	405	1.96	2.15	42%	89

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301
- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.
- Performance certified is for installation type B - free inlet, ducted outlet.
- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

### SF 400 DS

Wheel DIA. 405mm

Outlet Dim 507 x 507



Sirocco Fan Impeller



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Outlet Area 0.257m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	400	78	46	1.89	0.420	36%	75	1	460	103	61	2.18	0.630	36%	78
2	400	83	59	1.64	0.340	41%	72	2	460	109	78	1.89	0.510	41%	75
3	400	84	65	1.46	0.290	43%	70	3	460	111	86	1.68	0.440	43%	74
4	400	83	68	1.30	0.250	43%	70	4	460	109	90	1.50	0.380	43%	73
5	400	80	67	1.19	0.230	42%	70	5	460	105	89	1.37	0.340	42%	73
6	400	79	69	1.04	0.200	42%	70	6	460	104	91	1.20	0.300	42%	73
1	510	126	75	2.41	0.85	36%	80	1	560	152	90	2.65	1.13	36%	82
2	510	134	96	2.10	0.70	41%	78	2	560	162	115	2.30	0.92	41%	80
3	510	137	106	1.87	0.60	43%	76	3	560	165	128	2.05	0.79	43%	78
4	510	134	110	1.66	0.52	43%	75	4	560	162	133	1.82	0.69	43%	77
5	510	130	109	1.51	0.47	42%	75	5	560	156	132	1.66	0.62	42%	77
6	510	128	112	1.33	0.41	42%	75	6	560	154	135	1.46	0.54	42%	77
1	610	180	107	2.89	1.46	36%	84	1	660	211	126	3.12	1.85	36%	86
2	610	192	137	2.51	1.19	41%	82	2	660	225	160	2.71	1.50	41%	84
3	610	196	152	2.23	1.02	43%	80	3	660	229	178	2.42	1.30	43%	82
4	610	192	157	1.98	0.88	43%	79	4	660	225	184	2.15	1.12	43%	81
5	610	185	157	1.81	0.80	42%	79	5	660	217	183	1.96	1.01	42%	81
6	610	183	160	1.59	0.69	42%	79	6	660	214	188	1.72	0.88	42%	81
1	710	244	145	3.36	2.30	36%	88	1	760	280	166	3.60	2.81	36%	90
2	710	260	186	2.92	1.87	41%	85	2	760	298	213	3.12	2.29	41%	87
3	710	265	206	2.60	1.61	43%	84	3	760	304	236	2.78	1.97	43%	85
4	710	260	213	2.31	1.39	43%	83	4	760	298	244	2.47	1.70	43%	84
5	710	251	212	2.11	1.25	42%	83	5	760	288	243	2.26	1.53	42%	84
6	710	247	217	1.85	1.09	42%	82	6	760	284	249	1.98	1.33	42%	84
1	800	310	184	3.78	3.28	36%	91	1	840	342	203	3.97	3.80	36%	92
2	800	330	236	3.29	2.67	41%	88	2	840	364	260	3.45	3.09	41%	90
3	800	337	261	2.93	2.30	43%	87	3	840	371	288	3.07	2.66	43%	88
4	800	330	271	2.60	1.98	43%	85	4	840	364	299	2.73	2.30	43%	87
5	800	319	269	2.37	1.79	42%	86	5	840	351	297	2.49	2.07	42%	87
6	800	314	276	2.08	1.55	42%	85	6	840	346	304	2.19	1.80	42%	86
1	880	375	223	4.16	4.37	36%	93	1	920	410	244	4.35	4.99	36%	94
2	880	400	285	3.62	3.55	41%	91	2	920	437	312	3.78	4.06	41%	92
3	880	407	316	3.22	3.06	43%	89	3	920	445	346	3.37	3.49	43%	90
4	880	400	328	2.86	2.64	43%	88	4	920	437	358	2.99	3.02	43%	89
5	880	386	326	2.61	2.38	42%	88	5	920	422	356	2.73	2.72	42%	89
6	880	380	334	2.29	2.06	42%	87	6	920	415	365	2.39	2.36	42%	89
1	960	447	266	4.54	5.67	36%	95	1	1000	485	288	4.73	6.41	36%	96
2	960	476	339	3.94	4.61	41%	93	2	1000	516	368	4.11	5.21	41%	94
3	960	485	376	3.51	3.97	43%	91	3	1000	526	408	3.66	4.49	43%	92
4	960	476	390	3.12	3.43	43%	90	4	1000	516	423	3.25	3.87	43%	91
5	960	459	388	2.85	3.09	42%	90	5	1000	498	421	2.97	3.49	42%	91
6	960	452	397	2.50	2.68	42%	90	6	1000	491	431	2.60	3.03	42%	91

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301
- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.
- Performance certified is for installation type B - free inlet, ducted outlet.
- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

# SF 450 DS

Wheel DIA. 460mm

Outlet Dim 569 x 569



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal.  
The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 0.324m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	350	78	57	1.91	0.350	43%	71	1	400	102	75	2.19	0.530	43%	74
2	350	81	66	1.66	0.300	47%	69	2	400	106	86	1.90	0.440	47%	72
3	350	82	69	1.53	0.270	48%	67	3	400	107	90	1.75	0.400	48%	71
4	350	81	70	1.40	0.240	48%	67	4	400	106	91	1.60	0.360	48%	70
5	350	79	70	1.25	0.220	47%	67	5	400	103	91	1.43	0.320	47%	70
6	350	78	71	1.10	0.190	46%	66	6	400	102	93	1.25	0.280	46%	69
1	450	129	95	2.46	0.75	43%	77	1	500	160	117	2.73	1.02	43%	79
2	450	135	108	2.14	0.62	47%	75	2	500	166	134	2.38	0.85	47%	77
3	450	136	114	1.97	0.56	48%	74	3	500	168	140	2.19	0.77	48%	76
4	450	134	115	1.80	0.51	48%	73	4	500	165	143	2.00	0.70	48%	76
5	450	130	116	1.61	0.45	47%	73	5	500	161	143	1.79	0.62	47%	76
6	450	129	117	1.41	0.40	46%	72	6	500	159	145	1.57	0.54	46%	75
1	540	186	136	2.95	1.29	43%	81	1	580	215	157	3.17	1.60	43%	83
2	540	194	156	2.57	1.07	47%	79	2	580	224	180	2.76	1.33	47%	81
3	540	195	163	2.36	0.97	48%	78	3	580	225	189	2.54	1.20	48%	80
4	540	193	166	2.16	0.88	48%	77	4	580	223	192	2.32	1.08	48%	79
5	540	188	166	1.94	0.78	47%	77	5	580	217	192	2.08	0.97	47%	79
6	540	185	169	1.69	0.68	46%	76	6	580	214	195	1.82	0.84	46%	78
1	620	245	180	3.39	1.95	43%	84	1	660	278	204	3.61	2.34	43%	86
2	620	255	206	2.95	1.62	47%	82	2	660	289	233	3.14	1.95	47%	84
3	620	258	216	2.71	1.47	48%	81	3	660	292	244	2.89	1.76	48%	83
4	620	254	219	2.48	1.32	48%	81	4	660	288	248	2.64	1.59	48%	82
5	620	248	219	2.22	1.18	47%	81	5	660	281	249	2.37	1.42	47%	82
6	620	244	223	1.94	1.03	46%	80	6	660	277	252	2.07	1.23	46%	81
1	700	313	229	3.82	2.80	43%	87	1	740	350	256	4.04	3.30	43%	89
2	700	326	262	3.33	2.33	47%	85	2	740	364	293	3.52	2.75	47%	87
3	700	328	275	3.06	2.10	48%	84	3	740	367	307	3.24	2.48	48%	86
4	700	324	279	2.80	1.90	48%	84	4	740	362	312	2.96	2.24	48%	85
5	700	316	280	2.51	1.69	47%	84	5	740	353	312	2.65	2.00	47%	85
6	700	311	284	2.20	1.47	46%	83	6	740	348	317	2.32	1.74	46%	84
1	780	388	285	4.26	3.87	43%	90	1	820	429	315	4.48	4.49	43%	91
2	780	404	326	3.71	3.22	47%	88	2	820	447	360	3.90	3.74	47%	89
3	780	408	341	3.41	2.91	48%	87	3	820	451	377	3.59	3.38	48%	88
4	780	403	347	3.12	2.63	48%	86	4	820	445	383	3.28	3.05	48%	88
5	780	392	347	2.80	2.34	47%	86	5	820	433	384	2.94	2.72	47%	88
6	780	387	353	2.45	2.04	46%	85	6	820	427	390	2.57	2.37	46%	87
1	860	472	346	4.70	5.18	43%	92	1	900	517	379	4.92	5.94	43%	93
2	860	491	396	4.09	4.31	47%	90	2	900	538	434	4.28	4.94	47%	91
3	860	496	415	3.76	3.90	48%	89	3	900	543	454	3.94	4.47	48%	90
4	860	490	422	3.44	3.52	48%	89	4	900	536	462	3.60	4.04	48%	90
5	860	476	422	3.08	3.13	47%	89	5	900	522	462	3.23	3.59	47%	90
6	860	470	429	2.70	2.73	46%	88	6	900	515	469	2.82	3.13	46%	89

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301
- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.
- Performance certified is for installation type B - free inlet, ducted outlet.
- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

### SF 500 DS

Wheel DIA. 515mm

Outlet Dim 638 x 638



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal.  
The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 0.407m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	350	98	72	2.68	0.620	43%	74	1	420	141	103	3.22	1.070	43%	79
2	350	102	82	2.33	0.520	47%	72	2	420	147	118	2.80	0.890	47%	77
3	350	103	86	2.15	0.470	48%	71	3	420	148	124	2.58	0.800	48%	75
4	350	102	88	1.97	0.420	48%	70	4	420	146	126	2.36	0.730	48%	75
5	350	99	88	1.76	0.380	47%	70	5	420	142	126	2.11	0.650	47%	75
6	350	98	89	1.54	0.330	46%	69	6	420	141	128	1.85	0.560	46%	74
1	490	192	141	3.76	1.69	43%	82	1	560	251	184	4.29	2.52	43%	85
2	490	200	161	3.27	1.41	47%	80	2	560	261	210	3.73	2.10	47%	83
3	490	202	169	3.01	1.27	48%	79	3	560	263	220	3.44	1.90	48%	82
4	490	199	172	2.75	1.15	48%	79	4	560	260	224	3.15	1.71	48%	82
5	490	194	172	2.46	1.02	47%	79	5	560	253	224	2.82	1.53	47%	82
6	490	191	174	2.16	0.89	46%	78	6	560	250	228	2.47	1.33	46%	81
1	600	288	211	4.60	3.10	43%	87	1	640	328	240	4.91	3.76	43%	89
2	600	300	242	4.00	2.58	47%	85	2	640	341	275	4.27	3.13	47%	87
3	600	302	253	3.69	2.33	48%	84	3	640	344	288	3.93	2.82	48%	85
4	600	299	257	3.37	2.11	48%	83	4	640	340	293	3.60	2.55	48%	85
5	600	291	257	3.02	1.88	47%	83	5	640	331	293	3.22	2.27	47%	85
6	600	287	261	2.64	1.63	46%	82	6	640	326	297	2.82	1.98	46%	84
1	680	370	271	5.21	4.51	43%	90	1	720	415	304	5.52	5.35	43%	91
2	680	385	310	4.53	3.75	47%	88	2	720	432	348	4.80	4.45	47%	89
3	680	388	325	4.18	3.39	48%	87	3	720	435	364	4.42	4.02	48%	88
4	680	384	331	3.82	3.06	48%	86	4	720	430	371	4.05	3.63	48%	88
5	680	373	331	3.42	2.72	47%	86	5	720	418	371	3.62	3.23	47%	88
6	680	368	336	2.99	2.37	46%	86	6	720	413	377	3.17	2.82	46%	87
1	760	462	339	5.83	6.29	43%	93	1	800	512	375	6.13	7.34	43%	94
2	760	481	388	5.07	5.24	47%	91	2	800	533	430	5.33	6.11	47%	92
3	760	485	406	4.67	4.73	48%	90	3	800	538	450	4.91	5.52	48%	91
4	760	479	413	4.27	4.27	48%	89	4	800	531	458	4.50	4.98	48%	90
5	760	466	413	3.82	3.80	47%	89	5	800	517	458	4.02	4.44	47%	90
6	760	460	420	3.35	3.31	46%	88	6	800	510	465	3.52	3.86	46%	90

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301

- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.

- Performance certified is for installation type B - free inlet, ducted outlet.

- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

# SF 560 DS

Wheel DIA. 582mm

Outlet Dim 715 x 715



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal.  
The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 0.511m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	300	100	78	3.10	0.670	47%	72	1	350	107	4	1.06	46.728	47%	76
2	300	101	84	2.75	0.580	49%	70	2	350	114	3	0.92	48.528	49%	74
3	300	100	86	2.52	0.520	49%	70	3	350	117	3	0.82	48.815	49%	74
4	300	98	86	2.28	0.470	48%	70	4	350	117	3	0.74	48.111	48%	74
5	300	96	86	2.05	0.420	47%	69	5	350	118	2	0.67	47.100	47%	73
6	300	95	88	1.70	0.360	46%	68	6	350	120	2	0.56	45.979	46%	72
1	400	178	139	4.14	1.58	47%	79	1	450	226	176	4.65	2.25	47%	82
2	400	180	149	3.67	1.37	49%	78	2	450	228	189	4.13	1.94	49%	81
3	400	178	152	3.35	1.23	49%	77	3	450	225	193	3.77	1.75	49%	80
4	400	174	153	3.04	1.10	48%	77	4	450	220	193	3.42	1.57	48%	80
5	400	171	154	2.74	1.00	47%	77	5	450	216	195	3.08	1.42	47%	80
6	400	169	157	2.27	0.84	46%	76	6	450	213	198	2.55	1.19	46%	79
1	500	279	218	5.17	3.09	47%	85	1	540	325	254	5.58	3.88	47%	87
2	500	281	233	4.59	2.66	49%	83	2	540	328	272	4.95	3.35	49%	85
3	500	278	238	4.19	2.39	49%	83	3	540	324	277	4.53	3.01	49%	85
4	500	272	239	3.80	2.15	48%	83	4	540	317	278	4.10	2.70	48%	84
5	500	267	240	3.42	1.95	47%	82	5	540	312	280	3.70	2.44	47%	84
6	500	263	245	2.84	1.63	46%	81	6	540	307	286	3.06	2.05	46%	83
1	580	375	293	6.00	4.81	47%	89	1	620	429	334	6.41	5.88	47%	90
2	580	379	314	5.32	4.15	49%	87	2	620	433	358	5.69	5.07	49%	89
3	580	374	320	4.86	3.73	49%	86	3	620	428	366	5.20	4.55	49%	88
4	580	366	321	4.41	3.35	48%	86	4	620	418	367	4.71	4.09	48%	88
5	580	359	323	3.97	3.03	47%	86	5	620	411	369	4.25	3.70	47%	88
6	580	354	329	3.29	2.53	46%	85	6	620	405	377	3.52	3.10	46%	87
1	660	486	379	6.82	7.09	47%	92	1	700	547	426	7.24	8.46	47%	93
2	660	490	406	6.05	6.11	49%	90	2	700	551	457	6.42	7.29	49%	92
3	660	485	414	5.53	5.49	49%	90	3	700	545	466	5.87	6.55	49%	91
4	660	474	416	5.02	4.94	48%	90	4	700	533	468	5.32	5.89	48%	91
5	660	465	419	4.52	4.46	47%	89	5	700	524	471	4.79	5.33	47%	91
6	660	459	427	3.74	3.74	46%	88	6	700	516	480	3.97	4.46	46%	90

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301

- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.

- Performance certified is for installation type B - free inlet, ducted outlet.

- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

### SF 630 DS

Wheel DIA. 648mm

Outlet Dim 801 x 801



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal.  
The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 0.642m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	250	86	67	3.57	0.660	47%	71	1	300	124	97	4.28	1.140	47%	75
2	250	87	72	3.17	0.570	49%	69	2	300	126	104	3.80	0.990	49%	74
3	250	86	74	2.89	0.520	49%	69	3	300	124	106	3.47	0.890	49%	73
4	250	84	74	2.62	0.460	48%	69	4	300	121	107	3.15	0.800	48%	73
5	250	83	74	2.36	0.420	47%	68	5	300	119	107	2.84	0.720	47%	73
6	250	82	76	1.96	0.350	46%	67	6	300	118	109	2.35	0.610	46%	72
1	350	169	132	5.00	1.81	47%	79	1	400	221	173	5.71	2.71	47%	83
2	350	171	142	4.43	1.56	49%	78	2	400	223	185	5.06	2.33	49%	81
3	350	169	144	4.05	1.41	49%	77	3	400	221	189	4.63	2.10	49%	80
4	350	165	145	3.67	1.26	48%	77	4	400	216	189	4.20	1.89	48%	80
5	350	162	146	3.31	1.14	47%	77	5	400	212	191	3.78	1.71	47%	80
6	350	160	149	2.74	0.96	46%	76	6	400	209	194	3.13	1.43	46%	79
1	450	280	218	6.42	3.85	47%	86	1	480	319	249	6.85	4.67	47%	87
2	450	282	234	5.70	3.32	49%	84	2	480	321	266	6.08	4.02	49%	85
3	450	279	239	5.21	2.98	49%	83	3	480	318	272	5.55	3.61	49%	85
4	450	273	240	4.72	2.68	48%	83	4	480	311	273	5.04	3.25	48%	85
5	450	268	241	4.25	2.43	47%	83	5	480	305	274	4.54	2.94	47%	84
6	450	264	246	3.52	2.03	46%	82	6	480	301	280	3.76	2.46	46%	83
1	510	360	281	7.28	5.60	47%	89	1	540	403	315	7.71	6.65	47%	90
2	510	363	301	6.46	4.82	49%	87	2	540	407	337	6.84	5.73	49%	88
3	510	359	307	5.90	4.34	49%	86	3	540	402	344	6.25	5.15	49%	88
4	510	351	308	5.35	3.90	48%	86	4	540	393	345	5.67	4.63	48%	88
5	510	345	310	4.82	3.52	47%	86	5	540	386	347	5.10	4.18	47%	87
6	510	340	316	3.99	2.95	46%	85	6	540	381	354	4.23	3.50	46%	86
1	570	449	350	8.13	7.82	47%	92	1	600	498	388	8.56	9.12	47%	93
2	570	453	375	7.22	6.74	49%	90	2	600	502	416	7.60	7.86	49%	91
3	570	448	383	6.60	6.05	49%	89	3	600	497	425	6.94	7.06	49%	91
4	570	438	385	5.98	5.44	48%	89	4	600	485	426	6.30	6.35	48%	90
5	570	430	387	5.39	4.92	47%	89	5	600	477	429	5.67	5.74	47%	90
6	570	424	394	4.46	4.12	46%	88	6	600	470	437	4.70	4.80	46%	89

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301

- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.

- Performance certified is for installation type B - free inlet, ducted outlet.

- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

### SF 710 DS

Wheel DIA. 736mm

Outlet Dim 898 x 898



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal.  
The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 0.806m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	250	114	89	5.28	1.260	48%	74	1	300	165	128	6.33	2.180	48%	79
2	250	115	93	4.90	1.150	49%	73	2	300	166	134	5.88	1.980	49%	78
3	250	115	97	4.49	1.030	50%	72	3	300	166	140	5.38	1.780	50%	77
4	250	115	99	4.10	0.930	51%	71	4	300	165	143	4.92	1.600	51%	76
5	250	111	98	3.74	0.840	50%	72	5	300	160	141	4.48	1.450	50%	76
6	250	110	99	3.34	0.750	49%	71	6	300	158	143	4.01	1.300	49%	76
1	350	224	174	7.39	3.45	48%	82	1	400	293	227	8.44	5.15	48%	86
2	350	226	183	6.86	3.14	49%	82	2	400	295	239	7.85	4.69	49%	85
3	350	226	190	6.28	2.82	50%	80	3	400	296	248	7.18	4.21	50%	84
4	350	225	195	5.74	2.54	51%	80	4	400	294	254	6.56	3.79	51%	83
5	350	218	192	5.23	2.30	50%	80	5	400	284	251	5.98	3.44	50%	83
6	350	215	195	4.67	2.06	49%	80	6	400	281	255	5.34	3.07	49%	83
1	450	370	287	9.50	7.33	48%	89	1	480	421	327	10.13	8.89	48%	90
2	450	374	302	8.83	6.68	49%	88	2	480	425	344	9.41	8.10	49%	90
3	450	374	314	8.08	5.99	50%	87	3	480	426	357	8.61	7.27	50%	88
4	450	372	322	7.38	5.40	51%	86	4	480	423	366	7.88	6.54	51%	88
5	450	360	318	6.72	4.89	50%	86	5	480	409	362	7.17	5.93	50%	88
6	450	356	322	6.01	4.36	49%	86	6	480	405	367	6.41	5.29	49%	88
1	510	476	369	10.77	10.67	48%	92	1	540	533	414	11.40	12.66	48%	93
2	510	480	388	10.00	9.71	49%	91	2	540	538	435	10.59	11.53	49%	93
3	510	481	403	9.15	8.72	50%	90	3	540	539	452	9.69	10.35	50%	91
4	510	478	413	8.37	7.85	51%	89	4	540	536	463	8.86	9.32	51%	91
5	510	462	408	7.62	7.11	50%	89	5	540	518	458	8.07	8.45	50%	91
6	510	457	414	6.81	6.34	49%	89	6	540	512	464	7.21	7.53	49%	91
1	570	594	461	12.03	14.89	48%	95	1	600	659	511	12.66	17.37	48%	96
2	570	600	485	11.18	13.56	49%	94	2	600	665	537	11.77	15.82	49%	95
3	570	600	504	10.23	12.17	50%	93	3	600	665	558	10.77	14.20	50%	94
4	570	597	516	9.35	10.96	51%	92	4	600	661	572	9.85	12.78	51%	93
5	570	577	510	8.52	9.93	50%	92	5	600	639	565	8.97	11.58	50%	94
6	570	571	517	7.61	8.86	49%	92	6	600	632	573	8.01	10.33	49%	93

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301

- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.

- Performance certified is for installation type B - free inlet, ducted outlet.

- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

### SF 800 DS

Wheel DIA. 825mm

Outlet Dim 1007 x 1007



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal.  
The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 1.014m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	200	92	71	5.95	1.140	48%	72	1	250	144	111	7.43	2.230	48%	77
2	200	93	75	5.52	1.040	49%	71	2	250	145	117	6.91	2.030	49%	77
3	200	93	78	5.06	0.940	50%	70	3	250	145	122	6.32	1.820	50%	75
4	200	92	80	4.62	0.840	51%	69	4	250	144	125	5.78	1.640	51%	75
5	200	89	79	4.21	0.760	50%	70	5	250	139	123	5.26	1.490	50%	75
6	200	88	80	3.76	0.680	49%	70	6	250	138	125	4.70	1.330	49%	75
1	300	207	160	8.92	3.85	48%	82	1	350	282	218	10.41	6.11	48%	86
2	300	209	169	8.29	3.50	49%	81	2	350	284	230	9.67	5.56	49%	85
3	300	209	175	7.58	3.15	50%	80	3	350	284	239	8.85	4.99	50%	84
4	300	208	180	6.93	2.83	51%	79	4	350	283	245	8.11	4.49	51%	83
5	300	201	178	6.31	2.57	50%	80	5	350	273	242	7.37	4.07	50%	83
6	300	199	180	5.64	2.29	49%	79	6	350	270	245	6.58	3.63	49%	83
1	400	368	285	11.89	9.11	48%	89	1	440	445	345	13.08	12.12	48%	92
2	400	371	300	11.05	8.30	49%	89	2	440	449	363	12.15	11.04	49%	91
3	400	371	312	10.11	7.45	50%	87	3	440	449	377	11.12	9.91	50%	90
4	400	369	319	9.24	6.70	51%	87	4	440	447	387	10.17	8.92	51%	89
5	400	357	316	8.42	6.08	50%	87	5	440	432	382	9.26	8.08	50%	89
6	400	353	320	7.52	5.42	49%	87	6	440	427	387	8.27	7.21	49%	89
1	480	530	411	14.27	15.73	48%	94	1	520	622	482	15.46	20.01	48%	96
2	480	534	432	13.26	14.33	49%	93	2	520	627	507	14.36	18.22	49%	95
3	480	535	449	12.13	12.86	50%	92	3	520	628	527	13.14	16.36	50%	94
4	480	532	460	11.09	11.58	51%	91	4	520	624	540	12.02	14.72	51%	93
5	480	514	455	10.10	10.50	50%	91	5	520	603	533	10.94	13.34	50%	93
6	480	508	461	9.03	9.36	49%	91	6	520	597	541	9.78	11.90	49%	93
1	560	721	559	16.65	24.99	48%	98	1	600	827	642	17.84	30.73	48%	99
2	560	727	588	15.47	22.75	49%	97	2	600	835	675	16.57	27.99	49%	99
3	560	728	611	14.16	20.43	50%	96	3	600	836	701	15.17	25.13	50%	97
4	560	724	626	12.94	18.38	51%	95	4	600	831	719	13.87	22.61	51%	97
5	560	700	619	11.79	16.67	50%	95	5	600	803	710	12.63	20.50	50%	97
6	560	692	627	10.53	14.86	49%	95	6	600	794	720	11.28	18.28	49%	97

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301

- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.

- Performance certified is for installation type B - free inlet, ducted outlet.

- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

### SF 900 DS

Wheel DIA. 933mm

Outlet Dim 1130 x 1130



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal.  
The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 1.277m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	200	117	91	8.59	2.100	48%	76	1	250	184	142	10.73	4.110	48%	81
2	200	119	96	7.98	1.920	49%	75	2	250	185	150	9.97	3.740	49%	80
3	200	119	100	7.30	1.720	50%	74	3	250	185	156	9.13	3.360	50%	79
4	200	118	102	6.67	1.550	51%	73	4	250	184	159	8.34	3.020	51%	79
5	200	114	101	6.08	1.410	50%	73	5	250	178	158	7.60	2.740	50%	79
6	200	113	102	5.43	1.250	49%	73	6	250	176	160	6.79	2.440	49%	79
1	300	264	205	12.88	7.09	48%	86	1	350	360	279	15.03	11.26	48%	90
2	300	267	216	11.97	6.46	49%	85	2	350	363	293	13.96	10.25	49%	89
3	300	267	224	10.95	5.80	50%	84	3	350	363	305	12.78	9.21	50%	88
4	300	265	230	10.01	5.22	51%	83	4	350	361	312	11.68	8.29	51%	87
5	300	257	227	9.12	4.73	50%	83	5	350	349	309	10.64	7.51	50%	87
6	300	254	230	8.15	4.22	49%	83	6	350	345	313	9.51	6.70	49%	87
1	400	470	364	17.17	16.80	48%	93	1	430	543	421	18.46	20.87	48%	95
2	400	474	383	15.96	15.30	49%	92	2	430	548	443	17.15	19.01	49%	94
3	400	475	398	14.60	13.74	50%	91	3	430	548	460	15.70	17.06	50%	93
4	400	472	408	13.35	12.37	51%	90	4	430	545	472	14.35	15.36	51%	92
5	400	456	403	12.16	11.21	50%	91	5	430	527	466	13.07	13.92	50%	92
6	400	451	409	10.86	10.00	49%	90	6	430	521	472	11.68	12.41	49%	92
1	460	621	482	19.75	25.55	48%	97	1	490	705	547	21.04	30.88	48%	98
2	460	627	507	18.35	23.27	49%	96	2	490	712	575	19.55	28.12	49%	97
3	460	628	527	16.79	20.89	50%	94	3	490	712	598	17.89	25.25	50%	96
4	460	624	540	15.35	18.80	51%	94	4	490	708	612	16.35	22.72	51%	95
5	460	603	533	13.98	17.04	50%	94	5	490	685	605	14.89	20.60	50%	96
6	460	597	541	12.49	15.20	49%	94	6	490	677	613	13.31	18.37	49%	95
1	520	794	616	22.32	36.91	48%	100	1	550	888	689	23.61	43.67	48%	101
2	520	801	648	20.74	33.61	49%	99	2	550	897	724	21.94	39.77	49%	100
3	520	802	673	18.98	30.17	50%	98	3	550	897	753	20.08	35.70	50%	99
4	520	798	690	17.35	27.16	51%	97	4	550	892	772	18.36	32.13	51%	98
5	520	771	682	15.80	24.62	50%	97	5	550	863	762	16.72	29.13	50%	99
6	520	762	691	14.12	21.95	49%	97	6	550	853	773	14.94	25.98	49%	98

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301

- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.

- Performance certified is for installation type B - free inlet, ducted outlet.

- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.

## Forward Fan

# SF 1000 DS

Wheel DIA. 1048mm

Outlet Dim 1267 x 1267



Sirocco Fan Impeller



ACE R&A Co., Ltd. certifies that the fans shown hereupon are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and 311 and comply with the requirements of the AMCA Certified rating program.

Outlet Area 1.605m<sup>2</sup>

Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]	Num	rpm [N]	pt [Pa]	ps [Pa]	Q [m <sup>3</sup> /s]	H [kW]	etat [%]	LwiA [dB]
1	200	149	115	12.22	3.790	48%	79	1	240	214	166	14.67	6.540	48%	84
2	200	150	121	11.36	3.450	49%	78	2	240	216	175	13.63	5.960	49%	83
3	200	150	126	10.39	3.100	50%	77	3	240	216	181	12.47	5.350	50%	82
4	200	149	129	9.50	2.790	51%	77	4	240	215	186	11.40	4.810	51%	81
5	200	144	128	8.65	2.530	50%	77	5	240	208	184	10.38	4.370	50%	81
6	200	143	129	7.73	2.260	49%	77	6	240	205	186	9.28	3.890	49%	81
1	280	291	226	17.11	10.39	48%	88	1	320	381	295	19.56	15.50	48%	91
2	280	294	238	15.90	9.46	49%	87	2	320	384	310	18.17	14.12	49%	90
3	280	294	247	14.55	8.49	50%	86	3	320	384	323	16.63	12.67	50%	89
4	280	293	253	13.30	7.64	51%	85	4	320	382	331	15.20	11.41	51%	88
5	280	283	250	12.11	6.93	50%	85	5	320	369	327	13.85	10.34	50%	89
6	280	280	254	10.82	6.18	49%	85	6	320	365	331	12.37	9.22	49%	88
1	350	455	353	21.39	20.28	48%	93	1	380	537	416	23.22	25.95	48%	95
2	350	459	371	19.87	18.47	49%	92	2	380	542	438	21.58	23.63	49%	95
3	350	460	386	18.19	16.58	50%	91	3	380	542	455	19.75	21.21	50%	93
4	350	457	395	16.63	14.92	51%	91	4	380	539	466	18.05	19.09	51%	93
5	350	442	391	15.14	13.53	50%	91	5	380	521	461	16.44	17.31	50%	93
6	350	437	396	13.53	12.06	49%	91	6	380	515	467	14.69	15.43	49%	93
1	410	625	485	25.06	32.59	48%	97	1	440	719	558	26.89	40.28	48%	99
2	410	630	509	23.28	29.68	49%	96	2	440	726	587	24.99	36.68	49%	98
3	410	631	530	21.30	26.64	50%	95	3	440	727	610	22.86	32.93	50%	97
4	410	627	543	19.48	23.98	51%	95	4	440	723	625	20.90	29.64	51%	96
5	410	607	536	17.74	21.74	50%	95	5	440	699	618	19.04	26.87	50%	97
6	410	600	544	15.85	19.39	49%	95	6	440	691	626	17.01	23.96	49%	96
1	470	821	637	28.72	49.10	48%	101	1	500	929	721	30.56	59.11	48%	102
2	470	828	669	26.69	44.71	49%	100	2	500	938	758	28.39	53.83	49%	101
3	470	829	696	24.42	40.14	50%	99	3	500	938	788	25.98	48.33	50%	100
4	470	825	713	22.33	36.12	51%	98	4	500	933	807	23.75	43.49	51%	99
5	470	797	705	20.34	32.75	50%	98	5	500	902	797	21.63	39.43	50%	100
6	470	788	714	18.17	29.20	49%	98	6	500	892	808	19.33	35.16	49%	99

- The A-Weighted sound rating shown have been calculated per AMCA Standard 301

- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.

- Performance certified is for installation type B - free inlet, ducted outlet.

- Performance ratings do not include the effects of appurtenances(accessories), Power rating kW does not include transmission losses.