

## DOUBLE SUCTION CENTRIFUGAL FAN and PLENUM FAN



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.

### **AAF**

DOUBLE INLET  
CENTRIFUGAL FAN  
with Air-foil wheels



### **PRL**

SINGLE INLET  
PLENUM FAN  
with 3D Blade Wheels



### **ASF**

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.

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

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

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

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

- 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 1.2kg/m<sup>3</sup>(0.075lbm/ft<sup>3</sup>)
- Standard Air Properties : Standard air has a ratio of specific heats of 1.4 and a viscosity of 1.8185E-03Pa·s(1.222E-05lbm/ft·s). Air at 20°C(68°F) temperature, 50% relative humidity, and 101.325kPa(14.696psi, 29.92in.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.

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

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

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

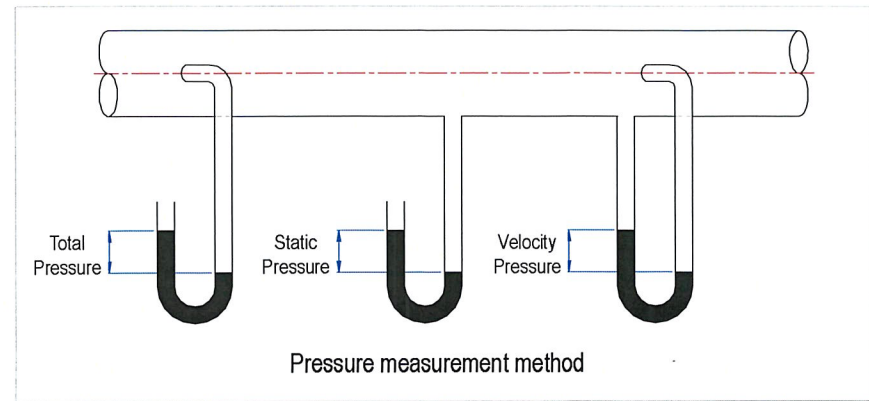
$$P_v = \left( \frac{Q\rho}{1097A_2} \right)^2 \frac{1}{\rho_2}$$

- 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.

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

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

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

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

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

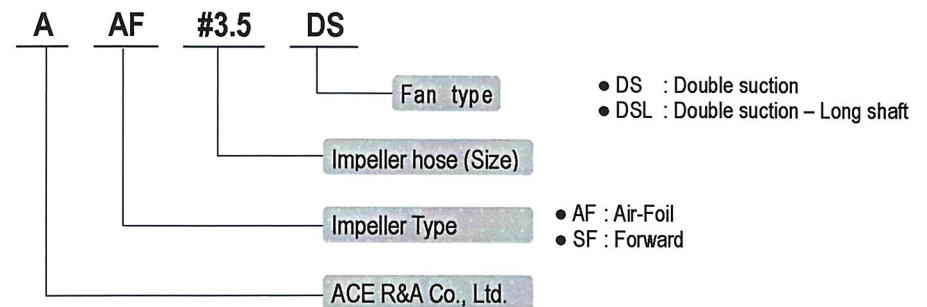
$$\eta_{tc} = \eta_t \quad \text{and} \quad \eta_{sc} = \eta_{tc} \left( \frac{P_{sc}}{P_{tc}} \right)$$

- 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



- Conversion formulae

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

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

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

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

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

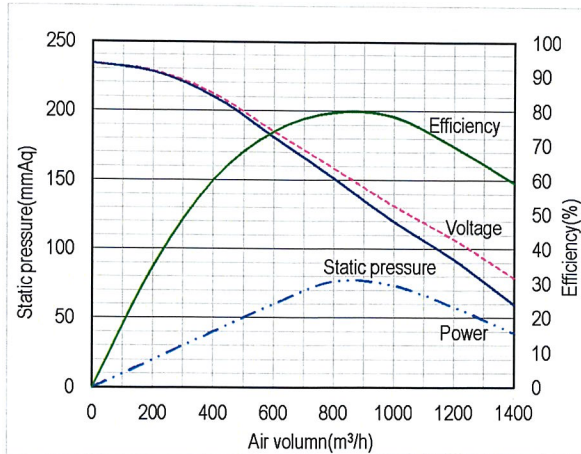
$$H_c = H \left( \frac{N_c}{N} \right)^3 \left( \frac{\rho_c}{\rho} \right) \left( \frac{K_p}{K_{pc}} \right)$$

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

## Air-foil fan Features of the



Air-Foil Fan impeller



Selection Program of Air-Foil Fan

### ● Features

1. Air-Foil fan applied the shape of the airplane blades on top of the shape of the blade, which has the best efficiency among existing centrifugal blowers, low noise, possible for high speed rotation and diameter of the impeller can also be decreased. This brings an advantage that the total unit can get smaller.
2. When handling gas with limit load characteristic and some foreign materials, the structure can be changed to a abrasion resistant structure.
3. Impeller has a structure where 8~16 blades are welded on to the main plate-side plate and the width of the blades are manufactured wide by bending the steel plate
4. Normally the structure of casing is similar to that of blower; however the intake cone has a shape of bell-mouth.
5. In terms of performance, the power curve has Limit load characteristic at the maximum efficiency point as shown in the figure below (Selection Program) and the pressure curve is shaped with a good safety level as the turbo fan.
6. Selection Program of ACE Air-Foil supplies the fan data very quickly and accurately according to the customer specification.

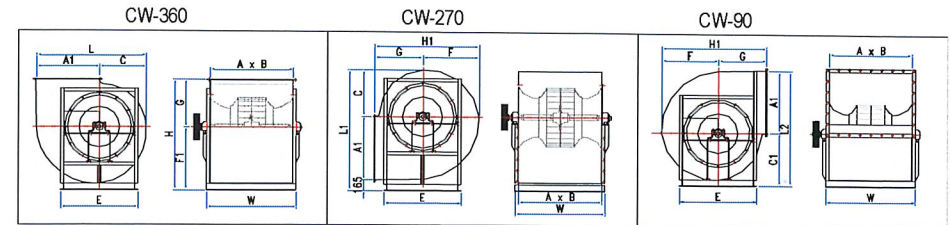
### ● Purpose

1. Air handling for buildings – AHU, etc., air handling equipment, semiconductor equipment, Fume Hood exhaust, etc.
2. Boiler pressing-inflow, subway oil film supply and exhaust, Air Washer
3. General industry, drying device and nuclear power plant, local ventilation, etc.

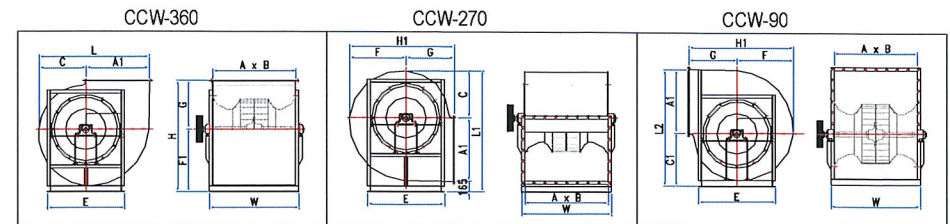
### ● Air-Foil Fan table of external dimensions

#### Fan Rotation and discharge

#### CW - clockwise rotation



#### CCW - counter clockwise rotation



#### Table of external dimensions

Model name	OUTLET			DIMENSION												
	A	B	C	L	E	F	F1	G	H	H1	W	C1	L1	L2	A1	L2
AAF #3.5DS	560	755	423	1003	740	510	585	435	1020	933	840	498	1168	1078	580	1168
AAF #4DS	640	860	483	1145	820	583	658	487	1145	1066	945	558	1310	1220	662	1310
AAF #4.5DS	725	975	544	1287	900	631	731	538	1269	1175	1060	644	1452	1387	743	1452
AAF #5DS	800	1075	603	1413	1010	728	828	600	1428	1331	1182	703	1533	1523	765	1588
AAF #5.5DS	880	1185	665	1571	1115	802	902	685	1587	1467	1292	765	1736	1671	906	1736
AAF #6DS	960	1295	725	1712	1195	875	975	746	1721	1600	1402	825	1877	1812	987	1877
AAF #7DS	1130	1500	846	1996	1370	1020	1120	870	1990	1866	1607	946	2161	2096	1150	2161
AAF #8DS	1293	1715	967	2280	1570	1166	1291	995	2286	2133	1852	1092	2445	2405	1313	2445
AAF #9DS	1456	1930	1088	2564	1740	1312	1437	1120	2557	2400	2070	1213	2729	2689	1476	2729
AAF #10DS	1610	2145	1209	2849	1910	1457	1582	1243	2825	2666	2285	1334	3014	2974	1640	3014

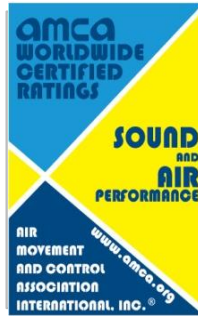
The standard may be modified for improvement of the product.

## AAF #2.5DS

Wheel DIA.	375mm
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Outlet Dim	400 x 545
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Outlet Area	0.218m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	400	16	14	23	0.011	58	49	1	600	36	31	35	0.04	58	60
2	400	18	17	22	0.011	61	47	2	600	42	38	33	0.04	61	58
3	400	22	20	21	0.012	65	46	3	600	49	45	31	0.04	65	57
4	400	24	23	19	0.012	67	46	4	600	55	52	29	0.04	67	57
5	400	27	26	18	0.012	68	46	5	600	62	59	26	0.04	68	57
6	400	32	31	15	0.012	66	47	6	600	71	70	22	0.04	66	58
7	400	34	33	12	0.011	61	47	7	600	76	75	18	0.04	61	58
1	800	63	56	47	0.086	58	68	1	1000	99	87	59	0.17	58	74
2	800	74	67	44	0.089	61	66	2	1000	115	105	56	0.17	61	72
3	800	86	80	41	0.092	65	65	3	1000	135	125	52	0.18	65	71
4	800	97	92	39	0.094	67	65	4	1000	152	144	48	0.18	67	71
5	800	110	105	35	0.095	68	65	5	1000	171	165	44	0.18	68	71
6	800	127	124	29	0.094	66	66	6	1000	198	194	37	0.18	66	72
7	800	135	133	24	0.090	61	66	7	1000	211	208	31	0.18	61	72
1	1200	142	125	70	0.290	58	79	2	1400	194	170	82	0.46	58	83
2	1200	166	151	67	0.302	61	77	1	1400	226	205	78	0.48	61	81
3	1200	194	181	62	0.311	65	76	2	1400	264	246	72	0.49	65	80
4	1200	219	208	58	0.317	67	76	3	1400	298	283	67	0.50	67	80
5	1200	247	237	53	0.320	68	76	4	1400	336	323	62	0.51	68	80
6	1200	285	279	44	0.317	66	77	5	1400	389	379	51	0.50	66	81
7	1200	304	300	37	0.305	61	77	6	1400	414	408	43	0.48	61	81
1	1550	237	209	91	0.626	58	86	1	1650	269	237	97	0.75	58	88
2	1550	277	252	86	0.651	61	84	2	1650	314	285	92	0.79	61	86
3	1550	324	302	80	0.670	65	83	3	1650	367	342	85	0.81	65	85
4	1550	366	346	75	0.683	67	83	4	1650	415	393	80	0.82	67	85
5	1550	412	396	68	0.689	68	83	5	1650	467	448	73	0.83	68	85
6	1550	477	465	57	0.683	66	84	6	1650	540	527	61	0.82	66	86
7	1550	508	500	47	0.657	61	84	7	1650	576	567	50	0.79	61	86
1	1800	320	282	106	0.980	58	90	1	1850	338	297	109	1.06	58	91
2	1800	374	339	100	1.020	61	88	2	1850	395	358	103	1.11	61	89
3	1800	437	407	93	1.050	65	87	3	1850	462	430	96	1.14	65	88
4	1800	493	467	87	1.070	67	87	4	1850	521	494	89	1.16	67	88
5	1800	556	534	79	1.080	68	87	5	1850	587	564	82	1.17	68	88
6	1800	643	628	66	1.070	66	88	6	1850	679	663	68	1.16	66	89
7	1800	685	675	55	1.030	61	88	7	1850	724	713	57	1.12	61	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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #3DS

Wheel DIA.	450mm
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Outlet Dim	480 x 650
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Outlet Area	0.312m <sup>2</sup>
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Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	400	16	12	46	0.03	47	52	1	600	36	28	69	0.09	47	63
2	400	23	20	41	0.03	58	51	2	600	51	45	61	0.09	58	62
3	400	27	24	38	0.03	61	50	3	600	60	54	58	0.09	61	61
4	400	31	29	36	0.03	65	49	4	600	70	65	54	0.10	65	60
5	400	35	33	33	0.03	67	50	5	600	79	75	50	0.10	67	61
6	400	39	38	30	0.03	68	50	6	600	89	85	46	0.10	68	61
7	400	46	45	25	0.03	66	50	7	600	103	100	38	0.10	66	61
1	800	64	50	92	0.21	47	71	1	1000	100	78	115	0.41	47	77
2	800	91	80	81	0.21	58	69	2	1000	142	125	101	0.42	58	76
3	800	106	96	77	0.22	61	69	3	1000	166	151	96	0.43	61	75
4	800	124	116	72	0.23	65	68	4	1000	194	181	89	0.45	65	74
5	800	140	133	67	0.23	67	68	5	1000	219	207	83	0.46	67	75
6	800	158	152	61	0.24	68	69	6	1000	247	237	76	0.46	68	75
7	800	183	178	51	0.23	66	69	7	1000	285	279	63	0.46	66	75
1	1200	144	112	138	0.70	47	82	1	1400	197	153	161	1.11	47	86
2	1200	205	180	122	0.72	58	81	2	1400	279	245	142	1.15	58	85
3	1200	239	217	115	0.75	61	80	3	1400	326	295	134	1.19	61	84
4	1200	279	260	107	0.77	65	79	4	1400	380	354	125	1.23	65	83
5	1200	316	299	100	0.79	67	80	5	1400	430	407	117	1.25	67	84
6	1200	355	341	91	0.80	68	80	6	1400	484	465	107	1.26	68	84
7	1200	411	401	76	0.79	66	80	7	1400	560	546	89	1.25	66	84
1	1550	241	187	178	1.51	47	89	1	1650	273	212	190	1.82	47	91
2	1550	342	301	157	1.56	58	88	2	1650	388	341	167	1.88	58	89
3	1550	399	362	149	1.62	61	87	3	1650	453	410	159	1.95	61	89
4	1550	466	434	139	1.67	65	86	4	1650	529	492	148	2.01	65	88
5	1550	527	499	129	1.70	67	87	5	1650	597	565	137	2.05	67	88
6	1550	593	570	118	1.72	68	87	6	1650	672	646	126	2.07	68	89
7	1550	686	670	98	1.70	66	87	7	1650	778	759	105	2.05	66	89
1	1790	321	250	206	2.33	47	93	1	1850	343	267	213	2.57	47	94
2	1790	456	401	182	2.40	58	92	2	1850	487	428	188	2.65	58	92
3	1790	533	483	172	2.50	61	91	3	1850	569	516	178	2.76	61	92
4	1790	622	579	160	2.57	65	90	4	1850	665	619	166	2.84	65	91
5	1790	703	665	149	2.62	67	91	5	1850	751	711	154	2.89	67	91
6	1790	791	760	136	2.64	68	91	6	1850	845	812	141	2.92	68	92
7	1790	916	894	114	2.62	66	91	7	1850	978	955	118	2.89	66	92

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #3.5DS

Wheel DIA.	525mm
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Outlet Dim	560 x 755
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Outlet Area	0.423m <sup>2</sup>
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Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	400	21	16	73	0.05	48	55	1	600	47	36	109	0.18	48	66
2	400	32	28	64	0.06	62	53	2	600	72	64	97	0.19	62	65
3	400	44	41	56	0.06	71	53	3	600	98	92	84	0.19	71	65
4	400	54	52	49	0.06	75	51	4	600	121	116	73	0.20	75	62
5	400	62	60	40	0.06	72	52	5	600	139	136	60	0.19	72	64
6	400	64	63	35	0.05	69	52	6	600	144	141	52	0.18	69	63
7	400	64	64	25	0.05	56	51	7	600	145	144	37	0.16	56	63
1	800	84	65	145	0.42	48	74	1	1000	131	101	181	0.82	48	80
2	800	128	113	129	0.45	62	73	2	1000	201	177	161	0.87	62	79
3	800	175	163	112	0.46	71	73	3	1000	273	255	140	0.90	71	79
4	800	215	207	97	0.47	75	71	4	1000	337	324	122	0.91	75	77
5	800	247	241	80	0.45	72	72	5	1000	386	377	100	0.89	72	78
6	800	256	251	70	0.43	69	72	6	1000	400	393	87	0.84	69	78
7	800	258	256	49	0.38	56	71	7	1000	403	400	62	0.74	56	78
1	1200	189	146	218	1.42	48	86	1	1400	257	199	254	2.25	48	90
2	1200	289	255	194	1.51	62	84	2	1400	394	347	226	2.39	62	89
3	1200	394	368	168	1.55	71	84	3	1400	536	501	196	2.46	71	89
4	1200	485	466	146	1.58	75	82	4	1400	660	635	170	2.51	75	86
5	1200	556	543	120	1.53	72	83	5	1400	757	740	140	2.43	72	87
6	1200	576	566	105	1.45	69	83	6	1400	784	770	123	2.31	69	87
7	1200	581	576	74	1.27	56	83	7	1400	791	784	87	2.03	56	88
1	1550	315	244	281	3.05	48	93	1	1650	357	276	300	3.68	48	94
2	1550	483	426	250	3.25	62	91	2	1650	547	482	266	3.92	62	93
3	1550	657	614	217	3.34	71	91	3	1650	745	696	231	4.03	71	93
4	1550	810	778	189	3.41	75	89	4	1650	918	882	201	4.11	75	91
5	1550	929	907	155	3.30	72	90	5	1650	1053	1028	165	3.99	72	92
6	1550	962	945	136	3.13	69	90	6	1650	1090	1071	145	3.78	69	92
7	1550	970	961	96	2.75	56	90	7	1650	1099	1090	102	3.32	56	92
1	1790	420	325	325	4.70	48	96	1	1850	449	347	336	5.19	48	97
2	1790	644	568	289	5.00	62	95	2	1850	688	607	299	5.52	62	96
3	1790	877	820	251	5.14	71	95	3	1850	937	876	259	5.68	71	96
4	1790	1081	1039	218	5.25	75	93	4	1850	1155	1110	225	5.80	75	94
5	1790	1240	1211	179	5.09	72	94	5	1850	1325	1294	185	5.62	72	95
6	1790	1284	1261	157	4.83	69	94	6	1850	1372	1347	162	5.33	69	95
7	1790	1294	1283	111	4.24	56	94	7	1850	1382	1371	115	4.68	56	95

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #4DS

Wheel DIA.	600mm
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Outlet Dim	640 x 860
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Outlet Area	0.550m <sup>2</sup>
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Air-Foil Fan



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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	400	27	21	108	0.10	48	59	1	600	62	48	162	0.34	48	70
2	400	42	37	96	0.11	62	57	2	600	94	83	144	0.37	62	69
3	400	57	53	84	0.11	71	57	3	600	128	120	125	0.38	71	69
4	400	70	68	72	0.11	75	55	4	600	158	152	109	0.38	75	67
5	400	81	79	59	0.11	72	56	5	600	181	177	89	0.37	72	68
6	400	83	82	52	0.10	69	56	6	600	188	184	78	0.35	69	67
7	400	84	83	37	0.09	56	55	7	600	189	188	55	0.31	56	67
1	800	109	85	217	0.82	48	78	1	1000	171	132	271	1.60	48	84
2	800	168	148	193	0.87	62	77	2	1000	262	231	241	1.70	62	83
3	800	228	213	167	0.89	71	77	3	1000	357	334	209	1.75	71	83
4	800	281	270	145	0.91	75	75	4	1000	440	423	181	1.78	75	81
5	800	323	315	119	0.88	72	76	5	1000	504	492	149	1.73	72	82
6	800	334	328	104	0.84	69	76	6	1000	522	513	131	1.64	69	82
7	800	337	334	74	0.74	56	76	7	1000	526	522	92	1.44	56	82
1	1200	246	191	325	2.76	48	90	1	1400	335	260	379	4.38	48	94
2	1200	378	333	289	2.94	62	88	2	1400	514	453	337	4.66	62	93
3	1200	514	481	251	3.02	71	88	3	1400	700	654	293	4.79	71	93
4	1200	633	609	218	3.08	75	86	4	1400	863	829	254	4.89	75	91
5	1200	726	709	179	2.99	72	87	5	1400	989	966	209	4.74	72	91
6	1200	752	739	157	2.83	69	87	6	1400	1024	1006	183	4.50	69	92
7	1200	758	752	111	2.49	56	87	7	1400	1033	1024	129	3.95	56	92
1	1550	411	318	420	5.95	48	97	1	1650	466	361	447	7.18	48	98
2	1550	630	556	373	6.33	62	96	2	1650	715	630	398	7.64	62	97
3	1550	858	803	324	6.51	71	96	3	1650	973	910	345	7.85	71	97
4	1550	1058	1017	282	6.64	75	93	4	1650	1199	1152	300	8.01	75	95
5	1550	1213	1185	231	6.44	72	94	5	1650	1375	1343	246	7.77	72	96
6	1550	1256	1234	203	6.11	69	94	6	1650	1424	1399	216	7.37	69	96
7	1550	1266	1256	143	5.36	56	94	7	1650	1435	1423	153	6.47	56	96
1	1790	549	424	485	9.17	48	100	1	1850	586	453	501	10.12	48	101
2	1790	841	742	431	9.75	62	99	2	1850	899	793	446	10.77	62	100
3	1790	1145	1071	375	10.03	71	99	3	1850	1224	1144	387	11.07	71	100
4	1790	1412	1357	325	10.23	75	97	4	1850	1508	1450	336	11.30	75	98
5	1790	1620	1582	267	9.93	72	98	5	1850	1730	1690	276	10.96	72	99
6	1790	1677	1647	234	9.41	69	98	6	1850	1792	1760	242	10.39	69	99
7	1790	1690	1676	166	8.26	56	98	7	1850	1806	1790	171	9.13	56	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 apputenances(accessories), Power rating Kw does not include transmission losses.



# AAF #4.5DS

Wheel DIA.	675mm
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Outlet Dim	725 x 975
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Outlet Area	0.707m <sup>2</sup>
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Air-Foil Fan



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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	400	60	52	152	0.23	65	59	1	600	134	116	228	0.78	65	71
2	400	79	73	130	0.23	74	57	2	600	178	165	195	0.78	74	69
3	400	94	90	114	0.23	78	57	3	600	212	202	172	0.78	78	68
4	400	107	104	93	0.22	75	57	4	600	240	234	140	0.74	75	69
5	400	110	108	77	0.20	69	57	5	600	247	242	115	0.68	69	69
6	400	110	109	63	0.18	63	57	6	600	248	245	94	0.62	63	69
7	400	110	110	43	0.15	52	57	7	600	249	247	65	0.52	52	69
1	800	238	207	303	1.86	65	79	1	1000	372	324	379	3.63	65	85
2	800	317	294	259	1.85	74	77	2	1000	496	460	324	3.62	74	83
3	800	377	359	229	1.85	78	76	3	1000	589	562	286	3.61	78	82
4	800	427	415	186	1.76	75	77	4	1000	668	650	233	3.45	75	83
5	800	439	431	154	1.62	69	77	5	1000	686	673	193	3.17	69	83
6	800	442	436	126	1.48	63	77	6	1000	691	682	157	2.89	63	83
7	800	442	440	87	1.24	52	77	7	1000	691	688	109	2.42	52	83
1	1200	536	466	456	6.27	65	91	1	1440	773	672	547	10.84	65	96
2	1200	715	663	390	6.26	74	89	2	1440	1030	955	468	10.84	74	94
3	1200	849	809	344	6.25	78	88	3	1440	1224	1167	413	10.81	78	93
4	1200	963	936	280	5.96	75	88	4	1440	1388	1350	336	10.31	75	94
5	1200	988	970	231	5.49	69	88	5	1440	1425	1399	278	9.50	69	94
6	1200	995	983	189	4.99	63	88	6	1440	1435	1417	227	8.63	63	94
7	1200	996	991	131	4.18	52	88	7	1440	1436	1428	157	7.23	52	94
1	1550	896	779	589	13.52	65	97	1	1650	1016	883	627	16.32	65	99
2	1550	1194	1107	504	13.52	74	96	2	1650	1354	1255	537	16.32	74	97
3	1550	1419	1353	445	13.49	78	95	3	1650	1609	1534	474	16.28	78	96
4	1550	1609	1565	362	12.87	75	95	4	1650	1825	1775	386	15.54	75	97
5	1550	1652	1622	299	11.85	69	95	5	1650	1873	1839	319	14.30	69	97
6	1550	1664	1643	244	10.77	63	95	6	1650	1886	1863	260	13.00	63	97
7	1550	1665	1655	169	9.02	52	95	7	1650	1887	1877	180	10.89	52	97
1	1790	1196	1040	681	20.85	65	101	1	1850	1278	1111	704	23.02	65	102
2	1790	1594	1478	583	20.85	74	99	2	1850	1703	1580	602	23.02	74	100
3	1790	1895	1807	514	20.80	78	98	3	1850	2025	1931	532	22.97	78	99
4	1790	2150	2091	419	19.86	75	99	4	1850	2297	2234	433	21.93	75	100
5	1790	2207	2167	346	18.28	69	99	5	1850	2358	2315	358	20.19	69	100
6	1790	2222	2194	283	16.62	63	99	6	1850	2374	2345	292	18.35	63	100
7	1790	2223	2210	195	13.92	52	99	7	1850	2375	2362	202	15.37	52	100

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #5DS

Wheel DIA.	750mm
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Outlet Dim	800 x 1075
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Outlet Area	0.860m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	1000	460	400	520	6.14	65	88	2	1150	608	529	599	9.34	65	93
2	1000	612	568	445	6.14	74	87	3	1150	810	751	512	9.34	74	91
3	1000	727	693	393	6.12	78	86	4	1150	962	918	452	9.31	78	90
4	1000	825	802	319	5.84	75	86	5	1150	1091	1061	368	8.88	75	90
5	1000	847	831	264	5.37	69	86	6	1150	1120	1100	304	8.18	69	90
6	1000	853	842	216	4.89	63	86	7	1150	1128	1114	248	7.44	63	90
7	1000	854	849	149	4.10	52	86	8	1150	1129	1123	172	6.23	52	90
1	1250	719	625	651	12.00	65	95	2	1350	839	729	703	15.12	65	97
2	1250	957	888	557	11.99	74	93	3	1350	1117	1036	602	15.11	74	96
3	1250	1138	1085	491	11.96	78	102	4	1350	1328	1266	531	15.07	78	95
4	1250	1290	1255	400	11.41	75	93	5	1350	1505	1464	432	14.38	75	95
5	1250	1324	1300	331	10.51	69	93	6	1350	1545	1517	357	13.24	69	95
6	1250	1334	1317	270	9.55	63	93	7	1350	1556	1537	292	12.04	63	95
7	1250	1335	1327	187	8.01	52	93	8	1350	1558	1549	202	10.09	52	95
1	1450	968	841	756	18.75	65	99	2	1550	1106	962	808	22.90	65	101
2	1450	1289	1195	646	18.73	74	98	3	1550	1474	1367	691	22.89	74	99
3	1450	1532	1461	570	18.69	78	96	4	1550	1752	1670	610	22.84	78	98
4	1450	1738	1690	464	17.83	75	97	5	1550	1987	1932	496	21.80	75	98
5	1450	1784	1751	384	16.42	69	97	6	1550	2040	2002	411	20.07	69	99
6	1450	1796	1774	314	14.93	63	97	7	1550	2054	2028	335	18.24	63	99
7	1450	1798	1788	217	12.51	52	97	8	1550	2055	2044	232	15.28	52	99
1	1650	1254	1090	860	27.64	65	102	2	1750	1411	1227	913	32.99	65	105
2	1650	1671	1550	736	27.63	74	100	3	1750	1881	1744	781	32.98	74	104
3	1650	1986	1894	650	27.57	78	99	4	1750	2236	2132	690	32.91	78	103
4	1650	2253	2191	529	26.31	75	100	5	1750	2536	2467	561	31.41	75	102
5	1650	2313	2271	438	24.22	69	100	6	1750	2603	2556	464	28.92	69	102
6	1650	2329	2300	357	22.02	63	100	7	1750	2621	2588	379	26.29	63	102
7	1650	2330	2317	247	18.45	52	101	8	1750	2622	2608	262	22.02	52	102
1	1850	1577	1371	965	38.98	65	105	2	1950	1753	1524	1018	45.67	65	107
2	1850	2103	1950	826	38.99	74	103	3	1950	2338	2168	872	45.68	74	105
3	1850	2500	2384	730	38.91	78	102	4	1950	2780	2651	770	45.60	78	104
4	1850	2836	2759	594	37.14	75	103	5	1950	3153	3067	626	43.53	75	105
5	1850	2911	2858	491	34.19	69	103	6	1950	3237	3178	518	40.07	69	105
6	1850	2931	2895	401	31.08	63	104	7	1950	3259	3218	423	36.42	63	105
7	1850	2932	2916	277	26.03	52	104	8	1950	3260	3241	292	30.50	52	105

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

## AAF #5.5DS

Wheel DIA.	825mm
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Outlet Dim	880 x 1185
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Outlet Area	1.043m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	900	450	392	623	7.21	65	88	2	1000	556	483	693	9.89	65	91
2	900	600	556	533	7.20	74	86	3	1000	741	687	592	9.88	74	89
3	900	713	679	470	7.18	78	86	4	1000	880	839	523	9.85	78	89
4	900	808	786	382	6.85	75	86	5	1000	998	970	425	9.40	75	89
5	900	829	814	316	6.31	69	86	6	1000	1024	1006	352	8.66	69	89
6	900	835	825	258	5.74	63	86	7	1000	1032	1019	287	7.87	63	89
7	900	836	832	179	4.81	52	86	8	1000	1033	1027	199	6.60	52	89
1	1100	673	585	762	13.17	65	94	2	1200	801	697	832	17.10	65	97
2	1100	897	831	652	13.16	74	92	3	1200	1067	990	711	17.09	74	95
3	1100	1065	1016	575	13.12	78	91	4	1200	1268	1209	628	17.04	78	94
4	1100	1208	1175	468	12.52	75	92	5	1200	1438	1399	511	16.26	75	94
5	1100	1240	1217	387	11.52	69	92	6	1200	1476	1449	422	14.97	69	94
6	1100	1249	1233	316	10.48	63	92	7	1200	1487	1468	345	13.61	63	95
7	1100	1250	1243	219	8.78	52	92	8	1200	1488	1480	239	11.41	52	95
1	1300	941	818	901	21.75	65	99	2	1400	1091	949	971	27.17	65	101
2	1300	1253	1162	771	21.73	74	97	3	1400	1454	1348	831	27.15	74	100
3	1300	1489	1420	680	21.67	78	96	4	1400	1728	1647	733	27.08	78	99
4	1300	1689	1642	553	20.68	75	97	5	1400	1959	1906	596	25.84	75	99
5	1300	1734	1702	458	19.04	69	97	6	1400	2012	1975	493	23.80	69	99
6	1300	1746	1724	374	17.31	63	97	7	1400	2026	2000	403	21.63	63	99
7	1300	1747	1738	259	14.51	52	97	8	1400	2027	2016	279	18.13	52	99
1	1500	1253	1089	1041	33.43	65	103	2	1600	1426	1240	1110	40.58	65	104
2	1500	1670	1548	890	33.41	74	101	3	1600	1901	1763	950	40.57	74	103
3	1500	1985	1892	786	33.33	78	100	4	1600	2259	2154	839	40.47	77	102
4	1500	2251	2189	639	31.81	75	101	5	1600	2562	2492	682	38.63	75	102
5	1500	2311	2268	529	29.28	69	101	6	1600	2631	2583	565	35.56	69	102
6	1500	2327	2298	432	26.62	63	101	7	1600	2649	2616	461	32.33	63	103
7	1500	2328	2315	299	22.30	52	101	8	1600	2650	2636	319	27.08	52	103
1	1700	1611	1400	1180	48.69	65	106	2	1800	1806	1571	1250	57.82	65	107
2	1700	2147	1991	1010	48.68	74	104	3	1800	2408	2233	1070	57.82	74	106
3	1700	2552	2433	892	48.57	77	103	4	1800	2863	2730	945	57.70	77	105
4	1700	2895	2815	725	46.36	75	104	5	1800	3247	3159	769	55.07	75	105
5	1700	2972	2917	600	42.68	69	104	6	1800	3334	3273	636	50.70	69	106
6	1700	2992	2955	490	38.80	62	104	7	1800	3357	3315	519	46.09	62	106
7	1700	2993	2977	339	32.50	52	104	8	1800	3358	3339	359	38.60	52	106

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

## AAF #6DS

Wheel DIA.	895mm
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Outlet Dim	960 x 1295
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Outlet Area	1.243m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwIA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwIA [dB]
1	450	116	97	417	1.35	60	74	1	550	173	145	510	2.47	60	80
2	450	149	134	372	1.37	67	73	2	550	222	200	455	2.50	67	78
3	450	193	182	309	1.33	74	70	3	550	288	272	378	2.44	74	76
4	450	238	231	251	1.30	77	69	4	550	355	345	307	2.37	77	75
5	450	267	263	198	1.20	73	68	5	550	399	393	242	2.19	73	74
6	450	261	258	146	0.97	65	69	6	550	390	386	179	1.78	65	74
7	450	265	264	111	0.86	57	69	7	550	396	394	136	1.58	57	74
1	650	242	203	603	4.08	60	85	1	750	323	270	696	6.26	60	89
2	650	311	279	538	4.13	67	83	2	750	414	371	621	6.34	67	88
3	650	402	380	447	4.03	74	81	3	750	536	507	516	6.19	74	85
4	650	497	482	363	3.91	77	80	4	750	662	642	419	6.01	77	84
5	650	558	549	286	3.62	73	79	5	750	743	731	330	5.57	73	83
6	650	545	540	211	2.94	65	79	6	750	726	719	244	4.52	65	83
7	650	553	551	161	2.60	57	79	7	750	737	734	186	4.00	57	83
1	850	415	347	788	9.12	60	92	1	1000	574	481	928	14.85	60	96
2	850	531	477	704	9.23	67	91	2	1000	736	661	829	15.04	67	95
3	850	689	651	585	9.01	74	88	3	1000	954	902	689	14.68	74	93
4	850	850	826	476	8.75	77	87	4	1000	1178	1144	560	14.26	77	91
5	850	955	940	374	8.11	73	86	5	1000	1323	1302	441	13.22	73	90
6	850	933	924	277	6.58	65	86	6	1000	1292	1280	326	10.73	65	91
7	850	947	943	211	5.83	57	86	7	1000	1312	1306	248	9.50	57	91
1	1150	759	636	1068	22.60	60	100	1	1300	971	814	1208	32.66	60	104
2	1150	974	875	954	22.90	67	99	2	1300	1246	1119	1079	33.10	67	103
3	1150	1263	1194	793	22.35	74	97	3	1300	1615	1528	897	32.32	74	100
4	1150	1560	1515	645	21.71	77	95	4	1300	1996	1938	730	31.41	77	99
5	1150	1752	1724	508	20.13	73	94	5	1300	2242	2206	575	29.12	73	98
6	1150	1711	1695	375	16.33	65	94	6	1300	2189	2169	425	23.62	65	98
7	1150	1737	1729	285	14.47	57	94	7	1300	2222	2212	323	20.92	57	98
1	1450	1209	1013	1348	45.35	60	107	1	1600	1473	1235	1488	60.97	60	110
2	1450	1551	1393	1205	45.97	67	106	2	1600	1890	1698	1331	61.82	67	108
3	1450	2012	1903	1002	44.90	74	104	3	1600	2453	2320	1107	60.41	74	106
4	1450	2487	2415	815	43.65	77	102	4	1600	3033	2946	901	58.74	77	105
5	1450	2794	2750	642	40.48	73	101	5	1600	3408	3354	710	54.48	73	104
6	1450	2727	2702	475	32.82	65	101	6	1600	3326	3295	524	44.17	65	104
7	1450	2768	2756	361	29.07	57	101	7	1600	3375	3360	399	39.11	57	104

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #7DS

Wheel DIA.	1045mm
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Outlet Dim	1130 x 1500
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Outlet Area	1.695m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	800	501	419	1181	16.49	60	95	1	860	579	485	1270	20.49	60	97
2	800	642	576	1055	16.70	67	94	2	860	742	666	1134	20.75	67	96
3	800	832	786	876	16.30	74	92	3	860	961	909	942	20.25	74	93
4	800	1026	997	712	15.82	77	90	4	860	1187	1152	766	19.67	77	92
5	800	1153	1134	561	14.67	73	89	5	860	1333	1311	603	18.23	73	91
6	800	1126	1115	415	11.90	65	89	6	860	1301	1289	446	14.79	65	91
7	800	1143	1138	315	10.55	57	89	7	860	1322	1316	339	13.10	57	91
1	920	662	555	1359	25.09	60	99	1	990	767	643	1462	31.27	60	101
2	920	849	762	1214	25.41	67	97	2	990	983	883	1306	31.68	67	99
3	920	1100	1040	1009	24.80	74	95	3	990	1275	1205	1086	30.91	74	97
4	920	1359	1319	820	24.08	77	94	4	990	1574	1528	882	30.03	77	96
5	920	1526	1501	645	22.33	73	93	5	990	1768	1740	695	27.83	73	95
6	920	1490	1476	477	18.11	65	93	6	990	1726	1710	514	22.58	65	95
7	920	1513	1506	363	16.05	57	93	7	990	1753	1745	391	20.01	57	95
1	1060	879	737	1566	38.39	60	103	1	1140	1017	853	1685	47.77	60	105
2	1060	1128	1013	1399	38.89	67	101	2	1140	1305	1172	1505	48.40	67	103
3	1060	1462	1382	1163	37.96	74	99	3	1140	1692	1600	1251	47.24	74	101
4	1060	1805	1753	945	36.87	77	98	4	1140	2089	2029	1017	45.90	77	100
5	1060	2028	1995	744	34.18	73	97	5	1140	2347	2310	801	42.55	73	99
6	1060	1980	1962	550	27.73	65	97	6	1140	2292	2270	592	34.52	65	99
7	1060	2010	2001	419	24.57	57	97	7	1140	2327	2316	450	30.58	57	100
1	1220	1166	977	1803	58.57	60	107	1	1300	1324	1110	1922	70.88	60	109
2	1220	1495	1343	1612	59.34	67	105	2	1300	1698	1525	1718	71.83	67	107
3	1220	1939	1833	1340	57.94	74	103	3	1300	2202	2083	1429	70.14	74	105
4	1220	2395	2326	1089	56.29	77	102	4	1300	2721	2643	1162	68.16	77	104
5	1220	2690	2647	858	52.19	73	101	5	1300	3056	3008	915	63.20	73	103
6	1220	2626	2602	634	42.33	65	101	6	1300	2984	2956	676	51.26	65	103
7	1220	2666	2654	482	37.50	57	101	7	1300	3029	3016	514	45.40	57	103
1	1380	1492	1251	2041	84.81	60	110	1	1460	1671	1401	2160	100.47	60	112
2	1380	1914	1720	1824	85.96	67	109	2	1460	2144	1926	1931	101.84	67	111
3	1380	2483	2348	1517	83.95	74	107	3	1460	2781	2630	1606	99.48	74	109
4	1380	3068	2980	1234	81.60	77	105	4	1460	3437	3339	1307	96.71	77	107
5	1380	3447	3393	972	75.66	73	104	5	1460	3862	3801	1029	89.68	73	106
6	1380	3365	3334	718	61.36	65	105	6	1460	3770	3735	761	72.72	65	106
7	1380	3416	3401	546	54.35	57	104	7	1460	3826	3809	578	64.40	57	106

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #8DS

Wheel DIA.	1195mm
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Outlet Dim	1293 x 1715
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Outlet Area	2.217m <sup>2</sup>
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Air-Foil Fan



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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	620	393	329	1368	15.01	60	92	1	690	487	408	1523	20.69	60	95
2	620	504	452	1222	15.20	67	91	2	690	624	560	1360	20.95	67	94
3	620	653	617	1015	14.82	74	88	3	690	808	764	1130	20.44	74	92
4	620	805	782	825	14.39	77	87	4	690	998	969	918	19.84	77	90
5	620	904	890	649	13.34	73	86	5	690	1121	1103	723	18.39	73	89
6	620	883	875	480	10.82	65	86	6	690	1095	1084	534	14.92	65	90
7	620	897	893	365	9.59	57	86	7	690	1112	1107	407	13.22	57	89
1	760	591	495	1678	27.65	60	98	1	830	705	590	1833	36.02	60	100
2	760	757	680	1498	28.00	67	97	2	830	903	811	1637	36.48	67	99
3	760	981	928	1245	27.32	74	94	3	830	1171	1107	1360	35.59	74	96
4	760	1211	1176	1012	26.52	77	93	4	830	1445	1403	1105	34.56	77	95
5	760	1360	1338	796	24.58	73	92	5	830	1623	1597	870	32.04	73	94
6	760	1328	1316	589	19.95	65	92	6	830	1585	1570	643	25.99	65	94
7	760	1349	1343	448	17.68	57	92	7	830	1610	1602	489	23.03	57	94
1	900	829	694	1987	45.93	60	102	1	980	983	823	2165	59.31	60	104
2	900	1062	954	1775	46.52	67	101	2	980	1260	1132	1934	60.08	67	103
3	900	1377	1302	1475	45.39	74	98	3	980	1633	1544	1607	58.63	74	101
4	900	1700	1651	1199	44.09	77	97	4	980	2017	1958	1306	56.95	77	99
5	900	1909	1879	944	40.87	73	96	5	980	2265	2229	1029	52.79	73	99
6	900	1864	1847	698	33.16	65	96	6	980	2212	2191	760	42.83	65	99
7	900	1893	1885	531	29.38	57	96	7	980	2246	2236	578	37.95	57	99
1	1060	1150	964	2342	75.08	60	107	1	1140	1330	1115	2519	93.41	60	109
2	1060	1475	1324	2092	76.05	67	105	2	1140	1706	1533	2251	94.64	67	107
3	1060	1912	1807	1739	74.23	74	103	3	1140	2212	2092	1871	92.38	74	105
4	1060	2361	2293	1414	72.11	77	102	4	1140	2732	2653	1521	89.76	77	104
5	1060	2651	2609	1113	66.85	73	101	5	1140	3069	3020	1198	83.21	73	103
6	1060	2589	2565	823	54.23	65	101	6	1140	2997	2969	886	67.50	65	103
7	1060	2629	2617	626	48.04	57	101	7	1140	3043	3029	674	59.80	57	103
1	1220	1524	1277	2697	114.53	60	111	1	1300	1731	1451	2875	138.61	60	113
2	1220	1955	1756	2410	116.04	67	109	2	1300	2221	1995	2569	140.46	67	111
3	1220	2535	2397	2004	113.29	74	107	3	1300	2880	2723	2136	137.15	74	109
4	1220	3131	3041	1629	110.08	76	106	4	1300	3558	3456	1737	133.29	76	108
5	1220	3517	3462	1283	102.06	73	105	5	1300	3997	3934	1368	123.59	73	107
6	1220	3434	3402	948	82.79	65	105	6	1300	3902	3866	1011	100.23	65	107
7	1220	3487	3471	721	73.33	57	105	7	1300	3962	3944	769	88.78	57	107

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #9DS

Wheel DIA.	1345mm
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Outlet Dim	1456 x 1930
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Outlet Area	2.810m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	580	436	365	1825	22.19	60	94	1	640	531	444	2014	29.82	60	97
2	580	558	501	1630	22.47	67	92	2	640	680	611	1798	30.19	67	95
3	580	723	684	1354	21.91	74	90	3	640	881	833	1494	29.45	74	93
4	580	893	867	1100	21.28	77	89	4	640	1087	1056	1214	28.59	77	92
5	580	1002	987	866	19.72	73	88	5	640	1221	1202	956	26.50	73	91
6	580	979	970	640	16.00	65	88	6	640	1193	1182	707	21.50	65	91
7	580	995	990	487	14.18	57	88	7	640	1211	1206	538	19.06	57	91
1	700	635	532	2203	39.02	60	101	1	770	768	644	2424	51.94	60	102
2	700	814	731	1967	39.51	67	98	2	770	985	884	2165	52.60	67	101
3	700	1054	997	1634	38.54	74	96	3	770	1276	1206	1798	51.31	74	98
4	700	1301	1264	1328	37.42	77	94	4	770	1575	1529	1461	49.83	77	97
5	700	1461	1438	1046	34.69	73	93	5	770	1769	1741	1151	46.18	73	96
6	700	1427	1414	773	28.14	65	94	6	770	1727	1711	851	37.47	65	96
7	700	1450	1443	588	24.94	57	93	7	770	1754	1746	647	33.21	57	96
1	830	893	748	2613	65.06	60	104	1	900	1050	880	2834	82.96	60	106
2	830	1144	1028	2334	65.89	67	102	2	900	1346	1209	2531	84.03	67	104
3	830	1483	1402	1939	64.29	74	100	3	900	1744	1649	2103	81.99	74	102
4	830	1831	1778	1576	62.43	77	99	4	900	2153	2091	1709	79.63	77	101
5	830	2056	2023	1241	57.87	73	98	5	900	2418	2380	1346	73.81	73	100
6	830	2008	1989	917	46.95	65	98	6	900	2362	2340	995	59.89	65	100
7	830	2039	2030	698	41.60	57	98	7	900	2399	2388	757	53.06	57	100
1	960	1195	1001	3023	100.70	60	107	1	1030	1375	1153	3244	124.40	60	109
2	960	1532	1376	2701	102.00	67	106	2	1030	1764	1584	2898	126.02	67	108
3	960	1985	1877	2244	99.54	74	104	3	1030	2286	2162	2409	122.99	74	106
4	960	2451	2380	1824	96.68	76	102	4	1030	2823	2742	1958	119.47	76	104
5	960	2753	2709	1436	89.62	73	102	5	1030	3171	3120	1542	110.75	73	104
6	960	2688	2663	1062	72.71	65	102	6	1030	3096	3067	1140	89.85	65	104
7	960	2730	2718	808	64.42	57	102	7	1030	3144	3130	867	79.60	57	104
1	1100	1569	1315	3466	151.56	60	111	1	1160	1745	1463	3655	177.78	60	113
2	1100	2012	1807	3096	153.54	67	110	2	1160	2238	2010	3266	180.11	67	112
3	1100	2609	2466	2574	149.87	74	108	3	1160	2902	2744	2715	175.83	74	109
4	1100	3222	3129	2092	145.60	76	106	4	1160	3584	3481	2207	170.83	76	108
5	1100	3618	3561	1648	134.98	73	105	5	1160	4026	3962	1739	158.38	73	107
6	1100	3533	3500	1218	109.50	65	106	6	1160	3931	3895	1285	128.47	65	107
7	1100	3588	3571	926	97.00	57	105	7	1160	3991	3973	977	113.81	57	107

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# AAF #10DS

Wheel DIA.	1495mm
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Outlet Dim	1610 x 2145
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Outlet Area	3.453m <sup>2</sup>
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Air-Foil Fan



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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	500	400	335	2160	24.12	60	93	1	560	502	420	2420	33.88	60	96
2	500	513	460	1929	24.42	67	91	2	560	643	577	2161	34.31	67	95
3	500	664	628	1602	23.81	74	89	3	560	833	788	1795	33.46	74	92
4	500	819	796	1301	23.12	77	88	4	560	1028	998	1458	32.49	77	91
5	500	920	905	1025	21.43	73	87	5	560	1154	1136	1148	30.11	73	90
6	500	899	890	758	17.39	65	87	6	560	1128	1117	849	24.43	65	90
7	500	913	909	577	15.41	57	87	7	560	1145	1140	646	21.65	57	90
1	620	615	515	2679	45.99	60	99	1	680	740	620	2939	60.68	60	102
2	620	788	708	2392	46.57	67	98	2	680	949	852	2624	61.45	67	100
3	620	1021	966	1987	45.42	74	95	3	680	1229	1162	2180	59.94	74	98
4	620	1261	1224	1615	44.10	77	94	4	680	1517	1473	1771	58.20	77	97
5	620	1416	1393	1271	40.87	73	93	5	680	1703	1676	1395	53.94	73	96
6	620	1383	1370	940	33.17	65	93	6	680	1664	1648	1031	43.77	65	96
7	620	1404	1398	715	29.39	57	93	7	680	1690	1682	785	38.79	57	96
1	740	876	734	3198	78.21	60	104	1	800	1024	858	3458	98.84	60	106
2	740	1123	1009	2856	79.20	67	103	2	800	1313	1179	3089	100.09	67	105
3	740	1456	1376	2373	77.27	74	100	3	800	1702	1609	2566	97.65	74	102
4	740	1797	1745	1928	75.03	77	99	4	800	2101	2040	2085	94.83	77	101
5	740	2018	1986	1518	69.54	73	98	5	800	2359	2322	1642	87.90	73	100
6	740	1971	1953	1123	56.43	65	98	6	800	2304	2283	1214	71.32	65	100
7	740	2002	1993	854	50.00	57	98	7	800	2340	2329	924	63.19	57	100
1	860	1184	992	3718	122.80	60	108	1	920	1355	1136	3978	150.36	60	110
2	860	1518	1363	3321	124.37	67	107	2	920	1738	1560	3554	152.29	67	108
3	860	1967	1860	2760	121.35	74	104	3	920	2252	2129	2953	148.61	74	106
4	860	2429	2359	2242	117.85	76	103	4	920	2780	2700	2400	144.33	76	104
5	860	2727	2684	1766	109.24	73	102	5	920	3123	3073	1890	133.79	73	104
6	860	2664	2639	1305	88.63	65	102	6	920	3050	3021	1397	108.55	65	104
7	860	2705	2693	993	78.53	57	102	7	920	3097	3083	1063	96.17	57	104
1	980	1538	1289	4238	181.77	60	111	1	1040	1732	1452	4499	217.28	60	113
2	980	1972	1771	3786	184.12	67	110	2	1040	2222	1995	4019	220.10	67	112
3	980	2556	2417	3147	179.68	74	108	3	1040	2880	2723	3340	214.82	74	109
4	980	3156	3065	2557	174.52	76	106	4	1040	3556	3454	2715	208.67	76	108
5	980	3545	3488	2014	161.78	73	105	5	1040	3994	3931	2138	193.45	73	107
6	980	3462	3430	1489	131.25	65	106	6	1040	3900	3864	1581	156.93	65	107
7	980	3515	3499	1133	116.29	57	105	7	1040	3961	3942	1202	139.03	57	107

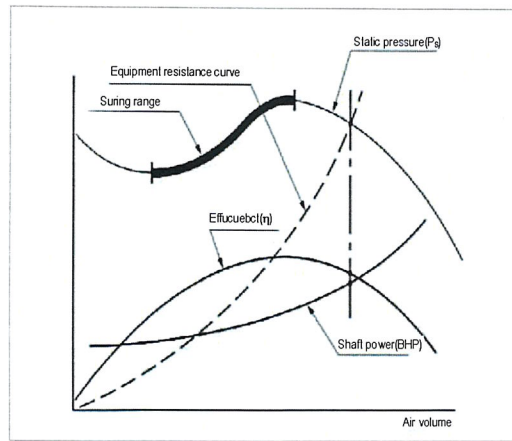
- The A-weighted sound rating shown have been calculated per AMCA standard 301.
- Value shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet.
- Performance certified is for installation type B - free inlet, ducted outlet.
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## Forward Fan features



Sirocco Fan impeller



Characteristic curve of Sirocco Fan

### ● Features

1. Forward Fan is a centrifugal blower that has multiple conversion Blades which is most appropriate for handling a large quantity of air or gas at lower than static pressure 80mmAq. Additionally, as the air flow is smooth, noise is low and operation is silent.
2. By the structure of impeller, efficiency is low because pressure is overly increased in fluid mechanics point of view. The efficiency normally ranges 40~60%. Further, as the product is not suitable for high speed rotation, maximum pressure ranges about 70mmAq ~ 80mmAq level.
3. The model is most appropriate for small types.
4. The structure of the impeller is such that multiple conversion Blades that have half the length of the diameter of the impeller are connected to the main plate and side plate.
5. When compared with other centrifugal blowers, the size of impeller for the same air flow and static pressure is smaller, and thus requires smaller installation space.
6. ACE Forward Fan has the most air flow at the same hose and rotation speed compared with other centrifugal blowers, which makes the fan the optimal blower for low static pressure – high air flow application.
7. ACE Forward Fan, reinforced with state bolts, satisfies high static pressure requirements.
8. Selection Program for ACE Forward Fan provides fast and accurate fan data for the customer specification.

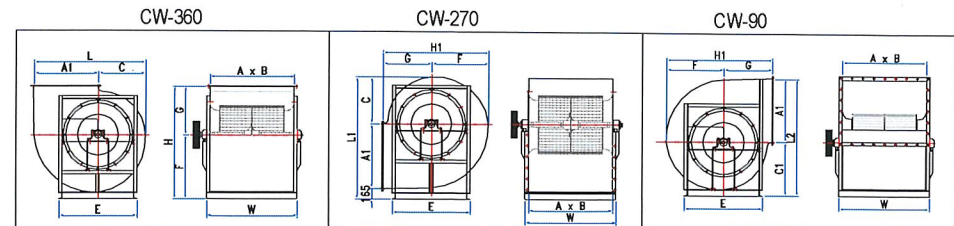
### ● Purpose

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

### ● Forward Fan table of external dimensions

#### Fan Rotation and discharge

##### CW - clockwise rotation



##### CCW - counter clockwise rotation

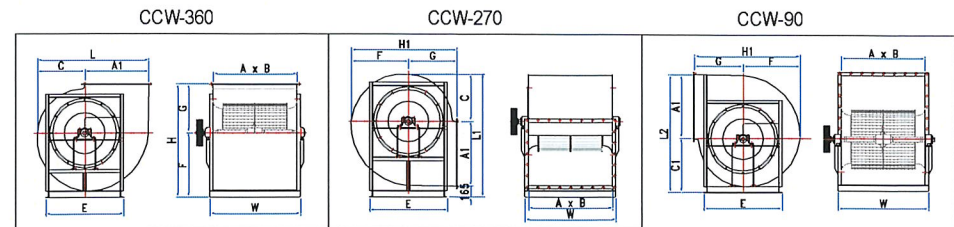


Table of external dimensions

Model name	OUTLET		DIMENSION													
	A	B	C	L	E	F	F1	G	H	H1	W	C1	L1	L2	A1	L2
ASF #2.5DS	400	545	303	720	575	365	440	323	763	668	630	378	885	795	417	885
ASF #3DS	480	650	363	863	655	437	512	368	880	800	735	438	1028	938	500	1028
ASF #3.5DS	560	755	423	1003	740	510	585	435	1020	933	840	498	1168	1078	580	1168
ASF #4DS	640	860	483	1145	820	583	658	487	1145	1066	945	558	1310	1220	662	1310
ASF #4.5DS	725	975	544	1287	900	631	731	538	1269	1200	1060	619	1452	1362	743	1362
ASF #5DS	800	1075	603	1413	1010	728	828	600	1428	1331	1182	703	1533	1523	765	1588
ASF #5.5DS	880	1185	665	1571	1115	802	902	685	1587	1467	1292	765	1736	1671	906	1736
ASF #6DS	960	1295	725	1712	1195	875	975	746	1721	1600	1402	825	1877	1812	987	1877
ASF #7DS	1130	1500	846	1996	1370	1020	1120	870	1990	1866	1607	946	2161	2096	1150	2161
ASF #8DS	1293	1715	967	2280	1570	1166	1291	995	2286	2133	1852	1092	2445	2405	1313	2445
ASF #9DS	1456	1930	1088	2564	1740	1312	1437	1120	2557	2400	2070	1213	2729	2689	1476	2729
ASF #10DS	1610	2145	1209	2849	1910	1457	1582	1243	2825	2666	2285	1334	3014	2974	1640	3014

The standard may be modified for improvement of the product.

# ASF #2.5DS

Wheel DIA.	375mm
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Outlet Dim	400 x 545
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Outlet Area	0.218m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	300	46	33	63	0.10	48	62	1	410	85	61	86	0.26	48	70
2	300	48	38	54	0.08	52	60	2	410	89	72	73	0.21	52	68
3	300	49	43	44	0.07	55	58	3	410	92	80	60	0.17	55	67
4	300	50	46	35	0.05	57	53	4	410	93	86	48	0.13	57	62
5	300	45	43	26	0.04	50	58	5	410	85	81	35	0.10	50	66
1	520	137	98	109	0.52	48	76	1	630	201	144	132	0.93	48	81
2	520	144	116	93	0.43	52	74	2	630	211	170	113	0.76	52	79
3	520	148	129	76	0.34	55	72	3	630	217	189	92	0.60	55	77
4	520	150	138	61	0.27	57	68	4	630	221	203	74	0.48	57	72
5	520	136	130	45	0.20	50	72	5	630	200	191	54	0.36	50	77
1	740	277	199	155	1.50	48	85	1	850	366	262	178	2.28	48	89
2	740	292	234	133	1.24	52	83	2	850	385	309	152	1.87	52	86
3	740	299	261	108	0.98	55	81	3	850	395	344	124	1.48	55	85
4	740	305	280	87	0.78	57	77	4	850	402	369	100	1.18	57	81
5	740	276	263	63	0.58	50	81	5	850	365	347	73	0.88	50	85
1	960	467	335	201	3.28	48	91	1	1070	580	416	224	4.55	48	94
2	960	491	394	172	2.70	52	89	2	1070	610	490	192	3.74	52	92
3	960	503	439	140	2.13	55	88	3	1070	625	546	156	2.96	55	90
4	960	513	471	113	1.69	57	84	4	1070	638	585	126	2.35	57	86
5	960	465	443	82	1.26	50	88	5	1070	578	551	92	1.75	50	90
1	1155	676	485	242	5.72	48	96	1	1280	830	596	268	7.79	48	98
2	1155	711	571	207	4.71	52	94	2	1280	874	702	229	6.41	52	96
3	1155	729	636	168	3.72	55	92	3	1280	896	781	186	5.06	55	95
4	1155	743	682	136	2.95	57	88	4	1280	913	838	151	4.02	57	91
5	1155	674	642	99	2.20	50	92	5	1280	828	789	110	3.00	50	94
1	1410	1008	723	296	10.42	48	101	1	1540	1203	863	323	13.58	48	103
2	1410	1060	852	253	8.57	52	98	2	1540	1266	1017	276	11.17	52	101
3	1410	1087	949	205	6.77	55	97	3	1540	1298	1132	224	8.83	55	99
4	1410	1108	1017	166	5.38	57	93	4	1540	1323	1214	182	7.01	57	96
5	1410	1005	957	121	4.01	50	97	5	1540	1200	1143	132	5.23	50	99
1	1660	1398	1004	348	17.01	48	105	1	1780	1608	1155	374	20.98	48	106
2	1660	1471	1182	298	13.99	52	103	2	1780	1692	1360	320	17.26	52	104
3	1660	1509	1316	242	11.06	55	102	3	1780	1736	1515	260	13.64	55	103
4	1660	1538	1412	196	8.78	57	98	4	1780	1769	1624	210	10.83	57	99
5	1660	1394	1328	143	6.55	50	101	5	1780	1604	1528	153	8.08	50	103

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #3DS

Wheel DIA.	450mm
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Outlet Dim	480 x 650
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Outlet Area	0.312m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwA [dB]
1	400	117	84	145	0.59	48	75	1	470	161	115	170	0.96	48	79
2	400	123	98	124	0.49	52	73	2	470	169	136	145	0.79	52	77
3	400	126	110	100	0.38	55	71	3	470	174	151	118	0.62	55	75
4	400	128	118	81	0.30	57	66	4	470	177	162	95	0.49	57	71
5	400	116	111	59	0.23	50	71	5	470	161	153	70	0.37	50	75
1	540	213	152	195	1.45	48	83	1	610	271	195	221	2.10	48	86
2	540	224	179	167	1.20	52	80	2	610	285	229	189	1.72	52	83
3	540	229	200	136	0.94	55	79	3	610	292	255	153	1.36	55	82
4	540	234	214	110	0.75	57	74	4	610	298	274	124	1.08	57	77
5	540	212	202	80	0.56	50	78	5	610	270	258	90	0.81	50	82
1	680	337	242	246	2.90	48	89	1	750	410	294	271	3.90	48	91
2	680	355	285	210	2.39	52	86	2	750	431	346	232	3.20	52	89
3	680	363	317	171	1.89	55	85	3	750	442	386	188	2.53	55	87
4	680	370	340	138	1.50	57	80	4	750	451	414	152	2.01	57	83
5	680	336	320	101	1.12	50	85	5	750	409	389	111	1.50	50	87
1	850	527	378	308	5.67	48	94	1	950	658	472	344	7.92	48	97
2	850	554	445	263	4.66	52	92	2	950	692	556	294	6.51	52	94
3	850	568	496	213	3.69	55	91	3	950	710	619	239	5.15	55	93
4	850	579	531	173	2.93	57	86	4	950	723	664	193	4.08	57	89
5	850	525	500	126	2.18	50	91	5	950	656	625	141	3.05	50	93
1	1155	973	698	418	14.24	48	101	1	1220	1086	779	442	16.78	48	103
2	1155	1024	822	358	11.71	52	99	2	1220	1143	918	378	13.80	52	100
3	1155	1050	916	290	9.25	55	98	3	1220	1171	1022	307	10.91	55	99
4	1155	1070	982	235	7.35	57	94	4	1220	1194	1096	248	8.66	57	95
5	1155	971	924	171	5.48	50	98	5	1220	1083	1032	181	6.46	50	99
1	1280	1196	858	464	19.39	48	104	1	1330	1291	927	482	21.75	48	105
2	1280	1258	1010	397	15.94	52	102	2	1330	1358	1091	412	17.89	52	103
3	1280	1290	1125	322	12.60	55	100	3	1330	1393	1215	334	14.14	55	101
4	1280	1315	1207	261	10.00	57	96	4	1330	1420	1303	271	11.22	57	97
5	1280	1192	1136	190	7.47	50	100	5	1330	1288	1226	197	8.38	50	101
1	1380	1390	998	500	24.30	48	106	1	1430	1493	1072	518	27.04	48	106
2	1380	1463	1175	428	19.99	52	103	2	1430	1571	1262	443	22.24	52	104
3	1380	1500	1309	347	15.80	55	102	3	1430	1611	1405	360	17.58	55	103
4	1380	1529	1403	281	12.54	57	98	4	1430	1642	1507	291	13.95	57	99
5	1380	1386	1321	205	9.36	50	102	5	1430	1489	1418	212	10.42	50	103

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #3.5DS

Wheel DIA.	525mm
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Outlet Dim	560 x 755
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Outlet Area	0.423m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	350	123	69	245	1.02	49	80	1	420	178	99	294	1.76	49	85
2	350	133	91	214	0.85	56	77	2	420	191	131	257	1.46	56	82
3	350	138	108	183	0.68	62	74	3	420	199	155	220	1.18	62	79
4	350	140	119	152	0.52	67	72	4	420	201	171	182	0.91	67	77
5	350	138	125	120	0.38	71	72	5	420	198	180	144	0.66	71	76
6	350	125	117	92	0.27	71	73	6	420	180	169	110	0.47	71	77
7	350	119	115	70	0.20	72	73	7	420	172	165	84	0.34	72	78
1	490	242	135	343	2.80	49	89	1	560	316	177	392	4.18	49	92
2	490	260	178	300	2.33	56	86	2	560	340	233	343	3.47	56	89
3	490	271	211	257	1.88	62	83	3	560	355	276	294	2.80	62	87
4	490	274	232	212	1.44	67	81	4	560	357	304	243	2.15	67	85
5	490	270	245	168	1.06	71	81	5	560	353	320	192	1.58	71	84
6	490	245	230	129	0.74	71	82	6	560	320	300	147	1.11	71	85
7	490	234	225	99	0.54	72	82	7	560	305	294	113	0.80	72	86
1	745	559	313	522	9.85	49	99	1	820	677	379	575	13.14	49	101
2	745	602	413	457	8.18	56	96	2	820	730	501	503	10.91	56	98
3	745	628	489	391	6.60	62	94	3	820	761	593	431	8.80	62	96
4	745	633	538	323	5.07	67	92	4	820	767	652	356	6.76	67	94
5	745	625	566	255	3.71	71	91	5	820	757	686	281	4.95	71	94
6	745	567	532	196	2.62	71	92	6	820	687	645	216	3.49	71	95
7	745	541	520	150	1.88	72	92	7	820	656	630	165	2.51	72	95
1	890	798	447	624	16.81	49	103	1	960	929	520	673	21.10	49	105
2	890	860	590	546	13.96	56	100	2	960	1001	687	589	17.52	56	102
3	890	897	699	467	11.26	62	98	3	960	1044	813	504	14.13	62	100
4	890	904	768	386	8.65	67	96	4	960	1052	895	417	10.85	67	98
5	890	893	808	305	6.34	71	96	5	960	1039	941	329	7.95	71	98
6	890	810	760	234	4.46	71	97	6	960	943	884	253	5.61	71	99
7	890	773	743	179	3.21	72	97	7	960	899	864	193	4.03	72	99
1	1030	1070	599	722	26.06	49	106	1	1100	1220	684	772	31.76	49	108
2	1030	1152	791	633	21.65	56	104	2	1100	1315	903	676	26.38	56	106
3	1030	1202	937	541	17.46	62	102	3	1100	1372	1069	578	21.28	62	104
4	1030	1212	1030	447	13.41	67	100	4	1100	1383	1176	478	16.34	67	102
5	1030	1197	1084	353	9.83	71	100	5	1100	1366	1237	377	11.98	71	102
6	1030	1085	1019	271	6.93	71	101	6	1100	1239	1162	290	8.44	71	102
7	1030	1036	995	208	4.98	72	101	7	1100	1182	1136	222	6.07	72	103

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #4DS

Wheel DIA.	600mm
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Outlet Dim	640 x 860
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Outlet Area	0.550m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	300	118	66	313	1.25	49	81	1	360	170	95	376	2.17	49	85
2	300	127	87	274	1.04	56	78	2	360	183	126	329	1.80	56	82
3	300	133	103	235	0.84	62	75	3	360	191	149	282	1.45	62	79
4	300	134	114	194	0.64	67	73	4	360	193	164	233	1.11	67	77
5	300	132	120	153	0.47	71	72	5	360	190	172	184	0.82	71	76
6	300	120	113	118	0.33	71	73	6	360	173	162	141	0.57	71	78
7	300	114	110	90	0.24	72	74	7	360	165	158	108	0.41	72	78
1	420	232	130	439	3.44	49	89	1	490	316	177	512	5.46	49	93
2	420	250	171	384	2.86	56	86	2	490	340	233	448	4.53	56	90
3	420	260	203	329	2.30	62	83	3	490	354	276	384	3.66	62	87
4	420	262	223	271	1.77	67	81	4	490	357	304	317	2.81	67	85
5	420	259	235	214	1.30	71	80	5	490	353	319	250	2.06	71	85
6	420	235	221	165	0.91	71	81	6	490	320	300	192	1.45	71	86
7	420	224	216	126	0.66	72	82	7	490	305	294	147	1.04	72	86
1	560	412	231	585	8.15	49	96	1	620	505	283	648	11.07	49	99
2	560	444	305	512	6.77	56	93	2	620	544	373	567	9.19	56	96
3	560	463	361	438	5.46	62	91	3	620	568	442	485	7.41	62	93
4	560	467	397	362	4.19	67	89	4	620	572	486	401	5.69	67	92
5	560	461	417	286	3.07	71	88	5	620	565	512	317	4.17	71	91
6	560	418	392	220	2.17	71	89	6	620	513	481	243	2.94	71	92
7	560	399	383	168	1.56	72	90	7	620	489	470	186	2.11	72	92
1	680	608	340	711	14.60	49	101	1	740	720	403	774	18.82	49	103
2	680	655	449	623	12.13	56	98	2	740	776	532	678	15.63	56	100
3	680	683	532	533	9.78	62	96	3	740	809	630	580	12.60	62	98
4	680	689	585	440	7.51	67	94	4	740	816	693	479	9.68	67	96
5	680	680	616	347	5.50	71	93	5	740	805	729	378	7.09	71	95
6	680	617	579	267	3.88	71	94	6	740	731	686	291	5.00	71	96
7	680	589	566	204	2.79	72	94	7	740	697	670	222	3.60	72	96
1	820	885	495	858	25.62	49	105	1	880	1019	571	921	31.67	49	107
2	820	953	654	751	21.28	56	102	2	880	1098	753	806	26.30	56	104
3	820	994	774	643	17.16	62	100	3	880	1145	892	690	21.21	62	102
4	820	1002	852	531	13.18	67	98	4	880	1154	981	570	16.29	67	100
5	820	989	896	419	9.66	71	98	5	880	1140	1032	450	11.94	71	100
6	820	898	842	322	6.81	71	99	6	880	1034	970	346	8.41	71	100
7	820	856	823	247	4.90	72	99	7	880	987	948	265	6.05	72	101

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #4.5DS

Wheel DIA.	675mm
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Outlet Dim	725 x 975
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Outlet Area	0.707m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	300	153	84	449	2.26	51	81	1	400	272	150	599	5.35	51	88
2	300	162	106	406	1.94	57	79	2	400	289	189	541	4.59	57	86
3	300	173	135	333	1.46	66	76	3	400	308	240	445	3.47	66	83
4	300	174	145	291	1.21	70	74	4	400	310	258	388	2.87	70	82
5	300	173	151	256	1.01	73	74	5	400	307	268	342	2.40	73	81
6	300	169	154	212	0.77	78	73	6	400	301	274	283	1.83	78	81
7	300	153	141	186	0.64	74	75	7	400	272	252	248	1.51	74	82
1	500	425	235	749	10.45	51	94	1	575	562	311	861	15.90	51	98
2	500	451	296	677	8.98	57	92	2	575	597	391	779	13.66	57	95
3	500	481	376	556	6.79	66	89	3	575	636	497	640	10.33	66	92
4	500	484	404	485	5.61	70	88	4	575	640	534	558	8.54	70	91
5	500	480	419	427	4.69	73	87	5	575	635	554	491	7.13	73	91
6	500	471	428	354	3.57	78	87	6	575	623	566	407	5.43	78	90
7	500	426	393	310	2.96	74	88	7	575	563	520	357	4.50	74	92
1	628	671	371	941	20.71	51	100	1	680	787	435	1019	26.30	51	101
2	628	712	467	851	17.80	57	97	2	680	835	548	922	22.60	57	99
3	628	759	593	699	13.46	66	94	3	680	890	696	757	17.09	66	96
4	628	764	637	610	11.12	70	93	4	680	896	748	661	14.13	70	95
5	628	758	661	537	9.29	73	93	5	680	889	775	582	11.80	73	95
6	628	743	676	445	7.08	78	92	6	680	872	793	482	8.99	78	94
7	628	672	621	390	5.87	74	94	7	680	788	728	422	7.45	74	96
1	730	907	501	1094	32.55	51	103	1	780	1036	573	1170	39.72	51	105
2	730	963	631	990	27.98	57	101	2	780	1099	721	1058	34.14	57	103
3	730	1026	802	813	21.16	66	98	3	780	1172	917	869	25.82	66	100
4	730	1033	862	710	17.49	70	97	4	780	1180	985	759	21.34	70	99
5	730	1025	894	625	14.61	73	96	5	780	1171	1021	668	17.83	73	98
6	730	1005	914	518	11.13	78	96	6	780	1148	1044	553	13.58	78	98
7	730	908	839	454	9.22	74	97	7	780	1037	959	485	11.25	74	99
1	830	1173	649	1245	47.87	51	106	1	880	1319	730	1320	57.07	51	108
2	830	1245	817	1126	41.15	57	104	2	880	1400	919	1194	49.06	57	106
3	830	1328	1038	925	31.12	66	101	3	880	1493	1168	981	37.11	66	103
4	830	1337	1116	808	25.72	70	100	4	880	1503	1255	857	30.67	70	102
5	830	1326	1157	711	21.49	73	100	5	880	1492	1301	754	25.62	73	101
6	830	1301	1182	589	16.38	78	99	6	880	1463	1330	625	19.53	78	101
7	830	1175	1086	516	13.56	74	101	7	880	1322	1221	548	16.17	74	102

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #5DS

Wheel DIA.	750mm	Outlet Dim	800 x 1075	Outlet Area	0.860m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	230	111	61	472	1.72	51	77	1	280	164	91	575	3.11	51	83
2	230	118	77	427	1.48	57	75	2	280	174	114	520	2.67	57	80
3	230	125	98	351	1.12	66	72	3	280	186	145	427	2.02	66	77
4	230	126	105	306	0.92	70	71	4	280	187	156	372	1.67	70	76
5	230	125	109	269	0.77	73	70	5	280	186	162	328	1.39	73	75
6	230	123	112	223	0.59	78	69	6	280	182	165	272	1.06	78	75
7	230	111	103	196	0.49	74	71	7	280	165	152	238	0.88	74	77
1	330	228	126	678	5.08	51	87	1	380	303	167	780	7.76	51	90
2	330	242	159	613	4.37	57	84	2	380	321	211	706	6.67	57	88
3	330	258	202	503	3.30	66	81	3	380	343	268	579	5.04	66	85
4	330	260	217	439	2.73	70	80	4	380	345	288	506	4.17	70	84
5	330	258	225	386	2.28	73	79	5	380	342	298	445	3.48	73	83
6	330	253	230	320	1.74	78	79	6	380	336	305	369	2.65	78	82
7	330	229	211	281	1.44	74	80	7	380	303	280	323	2.20	74	84
1	430	388	214	883	11.25	51	93	1	480	483	267	986	15.65	51	96
2	430	412	270	799	9.67	57	91	2	480	513	336	892	13.45	57	94
3	430	439	343	656	7.31	66	88	3	480	547	427	732	10.17	66	91
4	430	442	368	572	6.04	70	87	4	480	550	459	639	8.40	70	90
5	430	438	382	504	5.05	73	86	5	480	546	476	562	7.02	73	89
6	430	430	391	417	3.84	78	86	6	480	536	487	466	5.35	78	89
7	430	388	359	366	3.19	74	87	7	480	484	447	409	4.43	74	90
1	540	612	338	1110	22.29	51	99	1	600	756	418	1233	30.59	51	102
2	540	650	426	1003	19.16	57	97	2	600	802	526	1115	26.29	57	100
3	540	692	541	824	14.48	66	94	3	600	855	668	916	19.88	66	97
4	540	697	581	719	11.97	70	93	4	600	861	718	799	16.43	70	96
5	540	692	603	633	10.00	73	92	5	600	854	745	704	13.72	73	95
6	540	678	616	525	7.62	78	92	6	600	838	761	583	10.46	78	95
7	540	613	566	460	6.31	74	94	7	600	757	699	511	8.66	74	96
1	660	915	506	1357	40.73	51	104	1	720	1089	602	1481	52.89	51	106
2	660	971	637	1227	35.00	57	102	2	720	1156	758	1339	45.45	57	104
3	660	1035	809	1008	26.47	66	99	3	720	1233	964	1100	34.37	66	101
4	660	1042	869	880	21.87	70	98	4	720	1241	1035	960	28.41	70	100
5	660	1034	902	774	18.27	73	97	5	720	1231	1073	845	23.73	73	99
6	660	1014	922	642	13.92	78	97	6	720	1207	1097	700	18.08	78	99
7	660	916	847	562	11.53	74	98	7	720	1091	1008	614	14.98	74	100

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #5.5DS

Wheel DIA.	825mm	Outlet Dim	880 x 1185	Outlet Area	1.043m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	200	101	56	546	1.82	51	76	1	250	159	88	683	3.56	51	82
2	200	108	71	494	1.57	57	74	2	250	168	110	618	3.06	57	80
3	200	115	90	406	1.18	66	71	3	250	179	140	507	2.31	66	77
4	200	116	96	354	0.98	70	70	4	250	181	151	443	1.91	70	76
5	200	115	100	312	0.82	73	69	5	250	179	156	390	1.60	73	75
6	200	112	102	258	0.62	78	68	6	250	176	160	323	1.22	78	75
7	200	102	94	226	0.52	74	70	7	250	159	147	283	1.01	74	76
1	300	228	126	820	6.15	51	87	1	350	311	172	957	9.77	51	91
2	300	242	159	741	5.29	57	85	2	350	330	216	865	8.39	57	89
3	300	258	202	609	4.00	66	82	3	350	352	275	710	6.35	66	85
4	300	260	217	531	3.30	70	81	4	350	354	295	620	5.24	70	84
5	300	258	225	468	2.76	73	80	5	350	351	306	546	4.38	73	84
6	300	253	230	387	2.10	78	79	6	350	344	313	452	3.34	78	83
7	300	229	211	340	1.74	74	81	7	350	311	288	396	2.77	74	85
1	400	406	224	1093	14.59	51	94	1	450	514	284	1230	20.77	51	97
2	400	431	282	989	12.53	57	92	2	450	546	358	1112	17.85	57	95
3	400	459	359	812	9.47	66	89	3	450	582	454	914	13.49	66	92
4	400	462	386	708	7.83	70	88	4	450	585	488	797	11.15	70	91
5	400	459	400	624	6.54	73	87	5	450	581	506	702	9.31	73	90
6	400	450	409	517	4.98	78	87	6	450	570	518	582	7.10	78	90
7	400	407	376	453	4.13	74	88	7	450	515	476	510	5.88	74	91
1	500	635	351	1367	28.50	51	100	1	550	768	424	1504	37.94	51	103
2	500	674	442	1236	24.49	57	98	2	550	815	535	1360	32.60	57	100
3	500	718	561	1015	18.51	66	95	3	550	869	679	1117	24.65	66	98
4	500	723	603	886	15.30	70	94	4	550	875	730	975	20.37	70	97
5	500	717	625	780	12.78	73	93	5	550	868	757	858	17.02	73	96
6	500	703	639	646	9.74	78	93	6	550	851	774	711	12.97	78	95
7	500	636	587	567	8.07	74	94	7	550	769	711	623	10.74	74	97
1	600	915	505	1641	49.26	51	105	1	650	1074	593	1778	62.65	51	106
2	600	971	636	1484	42.33	57	102	2	650	1140	747	1608	53.84	57	104
3	600	1035	809	1219	32.01	65	100	3	650	1215	950	1321	40.71	65	101
4	600	1041	869	1064	26.45	70	99	4	650	1223	1020	1153	33.65	70	100
5	600	1033	901	937	22.10	73	98	5	650	1213	1058	1015	28.11	73	100
6	600	1013	921	776	16.84	78	97	6	650	1190	1081	841	21.42	78	99
7	600	916	846	680	13.95	74	99	7	650	1075	994	737	17.74	74	101

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.



# ASF #6DS

Wheel DIA.	895mm
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Outlet Dim	960 x 1295
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Outlet Area	1.243m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	180	97	53	628	2.00	51	76	1	230	158	87	802	4.17	51	83
2	180	103	67	568	1.71	57	74	2	230	168	110	725	3.58	57	80
3	180	109	85	466	1.30	66	70	3	230	179	140	596	2.70	66	77
4	180	110	92	407	1.07	70	69	4	230	180	150	520	2.24	70	76
5	180	109	95	358	0.89	73	68	5	230	178	156	458	1.87	73	75
6	180	107	97	297	0.68	78	68	6	230	175	159	379	1.42	78	75
7	180	97	89	260	0.56	74	69	7	230	158	146	332	1.18	74	76
1	280	234	129	977	7.52	51	88	1	330	325	180	1151	12.30	51	92
2	280	248	163	883	6.46	57	86	2	330	345	226	1041	10.57	57	90
3	280	265	207	725	4.88	66	83	3	330	368	287	855	7.99	66	86
4	280	267	222	633	4.03	70	82	4	330	370	309	746	6.60	70	85
5	280	264	231	557	3.37	73	81	5	330	367	320	657	5.52	73	85
6	280	259	236	462	2.57	78	80	6	330	360	327	544	4.20	78	84
7	280	234	217	405	2.13	74	82	7	330	326	301	477	3.48	74	86
1	380	431	238	1326	18.79	51	95	1	430	552	305	1501	27.23	51	99
2	380	458	300	1199	16.14	57	93	2	430	586	384	1357	23.40	57	96
3	380	488	381	985	12.20	66	90	3	430	625	488	1114	17.69	66	93
4	380	491	410	859	10.09	70	89	4	430	629	525	972	14.62	70	92
5	380	487	425	756	8.42	73	88	5	430	624	544	856	12.21	73	92
6	380	478	434	627	6.42	78	88	6	430	612	556	709	9.30	78	91
7	380	432	399	549	5.32	74	89	7	430	553	511	622	7.71	74	93
1	480	689	380	1676	37.88	51	102	1	530	840	464	1850	51.01	51	104
2	480	731	479	1515	32.55	57	99	2	530	891	584	1673	43.83	57	102
3	480	779	609	1244	24.61	65	96	3	530	950	742	1374	33.14	65	99
4	480	784	654	1086	20.34	70	95	4	530	956	798	1199	27.39	70	98
5	480	778	678	956	16.99	73	95	5	530	949	827	1056	22.88	73	97
6	480	763	693	792	12.95	78	94	6	530	930	845	875	17.43	78	97
7	480	689	637	694	10.72	74	96	7	530	841	777	767	14.44	74	98
1	580	1006	556	2025	66.86	51	106	1	630	1187	656	2201	85.71	51	108
2	580	1067	700	1832	57.45	57	104	2	630	1260	826	1990	73.65	57	106
3	580	1138	889	1504	43.44	65	101	3	630	1343	1050	1635	55.69	65	103
4	580	1145	956	1313	35.90	70	100	4	630	1352	1128	1427	46.03	70	102
5	580	1136	991	1156	29.99	73	100	5	630	1341	1169	1256	38.45	73	102
6	580	1114	1013	958	22.85	78	99	6	630	1315	1195	1041	29.30	78	101
7	580	1007	931	839	18.93	74	101	7	630	1189	1098	912	24.27	74	103

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #7DS

Wheel DIA.	1048mm
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Outlet Dim	1130 x 1500
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Outlet Area	1.695m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	160	105	58	896	3.09	51	78	1	200	164	90	1120	6.03	51	84
2	160	111	73	810	2.65	57	75	2	200	174	114	1013	5.18	57	81
3	160	119	93	665	2.00	66	72	3	200	185	145	832	3.91	66	78
4	160	119	99	580	1.66	70	71	4	200	186	155	726	3.24	70	77
5	160	118	103	511	1.38	73	70	5	200	185	161	639	2.70	73	76
6	160	116	105	423	1.05	78	70	6	200	181	165	529	2.06	78	76
7	160	105	97	371	0.87	74	71	7	200	164	151	464	1.71	74	77
1	240	236	130	1344	10.42	51	89	1	280	321	177	1568	16.54	51	93
2	240	250	164	1215	8.95	57	86	2	280	341	223	1418	14.21	57	91
3	240	267	208	998	6.77	66	83	3	280	363	284	1164	10.74	66	87
4	240	268	224	871	5.59	70	82	4	280	365	305	1016	8.88	70	86
5	240	266	232	767	4.67	73	81	5	280	363	316	894	7.42	73	86
6	240	261	237	635	3.56	78	81	6	280	356	323	741	5.65	78	85
7	240	236	218	557	2.95	74	82	7	280	321	297	650	4.68	74	87
1	320	419	232	1793	24.70	51	96	1	360	531	293	2017	35.17	51	99
2	320	445	292	1621	21.22	57	94	2	360	563	369	1824	30.22	57	97
3	320	474	371	1331	16.04	66	90	3	360	600	469	1498	22.84	66	93
4	320	477	398	1161	13.26	70	89	4	360	604	504	1307	18.88	70	92
5	320	474	413	1022	11.07	73	89	5	360	600	523	1150	15.77	73	92
6	320	464	422	847	8.44	78	88	6	360	588	534	953	12.02	78	91
7	320	420	388	743	6.99	74	90	7	360	531	491	836	9.95	74	93
1	400	655	362	2241	48.25	51	102	1	450	830	458	2522	68.71	51	105
2	400	696	456	2027	41.45	57	99	2	450	880	577	2280	59.03	57	102
3	400	741	579	1664	31.34	65	96	3	450	939	733	1873	44.63	65	99
4	400	746	622	1452	25.90	70	95	4	450	945	788	1634	36.88	70	98
5	400	740	645	1278	21.63	73	94	5	450	937	817	1439	30.81	73	98
6	400	726	660	1059	16.48	78	94	6	450	919	835	1192	23.48	78	97
7	400	656	606	929	13.66	74	96	7	450	831	768	1045	19.45	74	99
1	500	1024	566	2802	94.27	51	107	1	550	1240	685	3083	125.49	51	110
2	500	1087	713	2534	81.00	57	105	2	550	1316	863	2788	107.83	57	108
3	500	1159	906	2081	61.24	65	102	3	550	1403	1096	2290	81.53	65	105
4	500	1166	973	1816	50.61	70	101	4	550	1412	1178	1998	67.38	69	104
5	500	1157	1009	1599	42.27	73	101	5	550	1401	1221	1759	56.28	73	103
6	500	1135	1032	1325	32.21	78	100	6	550	1374	1249	1458	42.89	77	103
7	500	1026	948	1161	26.68	74	102	7	550	1241	1147	1278	35.53	74	104

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #8DS

Wheel DIA.	1198mm
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Outlet Dim	1293 x 1715
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Outlet Area	2.217m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	140	105	58	1171	4.04	51	78	1	180	173	96	1506	8.58	51	85
2	140	111	73	1059	3.47	57	76	2	180	184	121	1361	7.37	57	82
3	140	119	93	869	2.62	66	72	3	180	196	153	1118	5.57	66	79
4	140	119	100	759	2.17	70	71	4	180	197	165	975	4.60	70	78
5	140	118	103	668	1.81	73	71	5	180	196	171	859	3.85	73	77
6	140	116	106	553	1.38	78	70	6	180	192	174	712	2.93	78	77
7	140	105	97	485	1.14	74	70	7	180	174	160	624	2.43	74	78
1	220	259	143	1841	15.66	51	90	1	260	362	200	2175	25.86	51	95
2	220	275	180	1664	13.46	57	88	2	260	384	251	1967	22.21	57	93
3	220	293	229	1366	10.17	66	85	3	260	409	320	1615	16.79	66	89
4	220	295	246	1192	8.41	70	83	4	260	412	343	1409	13.88	70	88
5	220	292	255	1050	7.02	73	83	5	260	409	356	1241	11.59	73	88
6	220	287	261	870	5.35	78	82	6	260	401	364	1028	8.83	78	87
7	220	259	240	762	4.43	74	84	7	260	362	335	901	7.32	74	89
1	300	482	266	2510	39.72	51	99	1	340	619	342	2845	57.83	51	102
2	300	511	335	2270	34.13	57	96	2	340	657	430	2573	49.68	57	99
3	300	545	426	1864	25.80	65	93	3	340	700	547	2113	37.56	65	96
4	300	548	457	1626	21.32	70	92	4	340	704	587	1843	31.04	70	95
5	300	544	474	1432	17.81	73	91	5	340	699	609	1623	25.93	73	94
6	300	533	485	1186	13.57	78	91	6	340	685	623	1345	19.76	78	94
7	300	482	445	1040	11.24	74	92	7	340	619	572	1179	16.37	74	95
1	380	773	427	3180	80.74	51	104	1	420	944	522	3516	109.03	51	107
2	380	820	537	2876	69.37	57	102	2	420	1002	657	3179	93.68	57	105
3	380	874	683	2361	52.44	65	99	3	420	1068	835	2610	70.82	65	102
4	380	880	734	2061	43.34	70	98	4	420	1075	897	2278	58.53	70	101
5	380	873	761	1814	36.20	73	97	5	420	1067	930	2005	48.89	73	100
6	380	856	778	1503	27.59	78	97	6	420	1046	951	1662	37.25	78	99
7	380	774	715	1318	22.85	74	98	7	420	945	874	1457	30.86	74	101
1	460	1133	626	3851	143.26	51	109	1	500	1339	739	4186	184.01	51	111
2	460	1202	788	3482	123.09	57	107	2	500	1421	931	3785	158.10	56	109
3	460	1282	1001	2860	93.06	65	104	3	500	1514	1184	3109	119.54	65	106
4	460	1290	1076	2495	76.91	69	103	4	500	1524	1272	2713	98.79	69	105
5	460	1280	1116	2197	64.24	73	102	5	500	1512	1319	2388	82.52	73	104
6	460	1255	1141	1820	48.95	77	102	6	500	1483	1348	1979	62.88	77	104
7	460	1134	1048	1596	40.55	74	103	7	500	1340	1239	1735	52.09	74	106

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #9DS

Wheel DIA.	1347mm
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Outlet Dim	1456 x 1930
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Outlet Area	2.810m <sup>2</sup>
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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.

Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	120	97	54	1427	4.57	51	78	1	160	173	96	1903	10.83	51	85
2	120	103	68	1290	3.92	57	75	2	160	184	120	1720	9.30	57	83
3	120	110	86	1059	2.97	66	72	3	160	196	153	1412	7.03	66	79
4	120	111	92	924	2.45	70	70	4	160	197	164	1232	5.81	70	78
5	120	110	96	814	2.05	73	70	5	160	196	170	1085	4.85	73	78
6	120	108	98	674	1.56	78	69	6	160	192	174	899	3.70	78	77
7	120	97	90	591	1.29	74	71	7	160	173	160	788	3.06	74	79
1	200	271	149	2378	21.15	51	91	1	240	390	215	2854	36.54	51	96
2	200	287	188	2150	18.17	57	89	2	240	413	271	2581	31.39	57	94
3	200	306	239	1766	13.73	66	86	3	240	441	344	2119	23.73	65	91
4	200	308	257	1541	11.35	70	84	4	240	443	370	1849	19.61	70	90
5	200	306	266	1356	9.48	73	84	5	240	440	384	1628	16.38	73	89
6	200	300	272	1124	7.22	78	83	6	240	431	392	1349	12.48	78	88
7	200	271	250	985	5.98	74	85	7	240	390	360	1182	10.34	74	90
1	280	530	293	3330	58.03	51	101	1	320	693	383	3806	86.63	51	104
2	280	563	369	3011	49.86	57	98	2	320	735	482	3442	74.43	57	101
3	280	600	469	2472	37.69	65	95	3	320	784	612	2826	56.27	65	98
4	280	604	504	2157	31.15	70	94	4	320	789	658	2466	46.50	70	97
5	280	599	522	1899	26.02	73	93	5	320	782	682	2171	38.84	73	96
6	280	587	534	1574	19.82	78	93	6	320	767	697	1799	29.60	78	96
7	280	531	491	1380	16.42	74	94	7	320	694	641	1577	24.52	74	97
1	360	877	484	4283	123.36	51	107	1	400	1083	598	4759	169.24	51	109
2	360	931	610	3872	105.99	57	104	2	400	1149	753	4303	145.41	57	107
3	360	992	775	3180	80.13	65	101	3	400	1225	957	3534	109.93	65	104
4	360	998	833	2775	66.22	70	100	4	400	1233	1028	3084	90.85	69	103
5	360	990	863	2443	55.31	73	99	5	400	1223	1066	2714	75.88	73	102
6	360	971	883	2024	42.15	78	99	6	400	1199	1090	2249	57.83	77	102
7	360	878	811	1774	34.92	74	100	7	400	1084	1002	1972	47.90	74	103
1	440	1310	724	5235	225.29	51	112	1	480	1560	861	5712	292.53	51	114
2	440	1391	911	4734	193.57	56	109	2	480	1655	1085	5165	251.35	56	112
3	440	1482	1158	3888	146.34	65	106	3	480	1764	1379	4242	190.03	65	109
4	440	1492	1244	3393	120.94	69	105	4	480	1776	1481	3702	157.05	69	108
5	440	1480	1290	2986	101.02	73	105	5	480	1762	1536	3259	131.18	73	107
6	440	1451	1319	2475	76.98	77	104	6	480	1728	1570	2700	99.96	77	107
7	440	1312	1212	2169	63.77	74	106	7	480	1561	1443	2367	82.81	74	108

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# ASF #10DS

Wheel DIA.	1497mm
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Outlet Dim	1610 x 2145
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Outlet Area	3.453m <sup>2</sup>
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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.

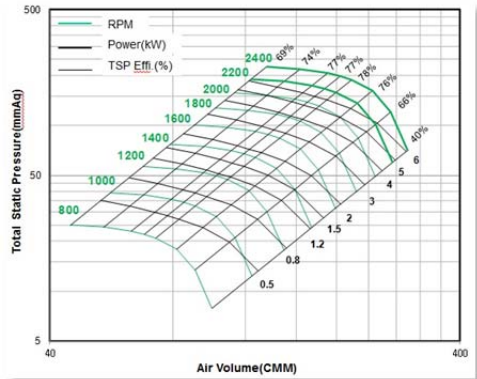
Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]	Num	N [r/min]	Pt [Pa]	Ps [Pa]	Q [m <sup>3</sup> /min]	H [kW]	etat [%]	LwiA [dB]
1	110	101	56	1795	5.96	51	78	1	145	176	97	2367	13.66	51	86
2	110	107	70	1623	5.12	57	76	2	145	186	122	2140	11.74	57	84
3	110	114	89	1333	3.87	66	72	3	145	199	155	1757	8.87	66	80
4	110	115	96	1163	3.20	70	71	4	145	200	167	1533	7.33	70	79
5	110	114	99	1024	2.67	73	70	5	145	198	173	1350	6.12	73	78
6	110	112	102	848	2.04	78	70	6	145	194	177	1118	4.67	78	78
7	110	101	93	744	1.69	74	71	7	145	176	162	980	3.87	74	79
1	175	256	141	2857	24.02	51	91	1	210	368	203	3428	41.50	51	96
2	175	271	178	2583	20.63	57	88	2	210	391	256	3099	35.65	57	93
3	175	289	226	2121	15.60	66	85	3	210	417	326	2545	26.95	65	90
4	175	291	243	1850	12.89	70	84	4	210	419	350	2221	22.27	70	89
5	175	289	252	1629	10.77	73	83	5	210	416	363	1955	18.60	73	88
6	175	283	257	1350	8.20	78	83	6	210	408	371	1620	14.18	78	88
7	175	256	237	1183	6.80	74	84	7	210	369	341	1420	11.74	74	89
1	240	481	266	3918	61.95	51	100	1	275	632	349	4490	93.21	51	103
2	240	511	335	3542	53.23	57	97	2	275	671	439	4059	80.08	57	101
3	240	544	425	2909	40.24	65	94	3	275	715	558	3333	60.54	65	98
4	240	548	457	2538	33.25	70	93	4	275	719	600	2909	50.03	70	97
5	240	543	474	2234	27.77	73	92	5	275	714	622	2560	41.79	73	96
6	240	533	484	1851	21.16	78	92	6	275	700	636	2122	31.84	78	95
7	240	482	445	1623	17.53	74	93	7	275	633	584	1860	26.38	74	97
1	305	777	429	4980	127.17	51	106	1	340	966	533	5552	176.19	51	108
2	305	825	540	4502	109.26	57	103	2	340	1025	672	5020	151.37	57	106
3	305	879	687	3697	82.60	65	100	3	340	1093	854	4122	114.43	65	103
4	305	885	738	3226	68.26	70	99	4	340	1100	917	3597	94.56	69	102
5	305	878	765	2840	57.01	73	98	5	340	1091	951	3166	78.99	73	101
6	305	861	782	2353	43.44	78	98	6	340	1070	972	2624	60.19	77	101
7	305	778	719	2063	35.99	74	100	7	340	967	894	2300	49.86	74	102
1	370	1144	632	6042	227.08	51	110	1	400	1337	739	6532	286.93	51	112
2	370	1214	796	5463	195.09	56	108	2	400	1419	930	5907	246.53	56	110
3	370	1294	1011	4486	147.49	65	105	3	400	1513	1182	4851	186.38	65	107
4	370	1302	1086	3915	121.88	69	104	4	400	1522	1270	4233	154.02	69	106
5	370	1292	1127	3446	101.81	73	103	5	400	1511	1317	3726	128.65	73	105
6	370	1267	1152	2856	77.58	77	103	6	400	1481	1346	3088	98.04	77	105
7	370	1145	1058	2503	64.27	74	104	7	400	1339	1237	2706	81.21	74	106

- 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 apputenances(accessories), Power rating Kw does not include transmission losses.

# Plenum Fan features



Plenum Fan impeller



Performance Curve of Plenum Fan

## ● Features - General

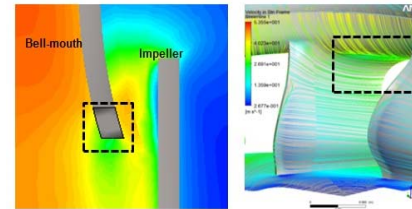
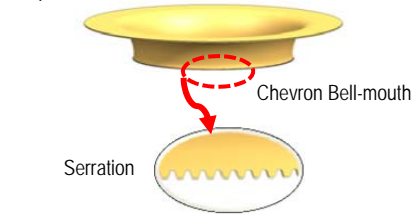
1. Plenum fan impeller is made of steel with the world's first 3D-blade.
2. The air and sound performance of 3D-blade are higher than other fan impeller.
3. Sound is minimized and efficiency is increased by minimizing pneumatic resistance.
4. Vibration and sound is decreased by reducing a value of unbalance as weight lightening.
5. Competitive price is secured by a simplification of production process and a reduction thickness of steel-blade.
6. The intake cone is made of sheet steel and it can lead air into impeller stably.
7. Plenum fan satisfies high static pressure requirements and has a wide operation range.

## ● Purpose

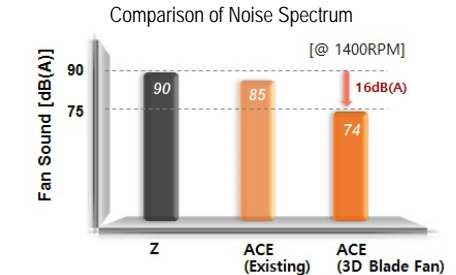
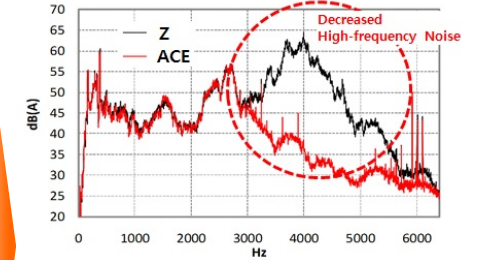
1. Air handling for buildings – AHU, etc., air handling equipment, semiconductor equipment, etc.
2. General industry, drying device and nuclear power plant, local ventilation, etc.
3. For a floor air distribution equipment.

## ● Features – Noise

1. Plenum fan has a low sound value by developing a chevron bell-mouth and decreasing turbulent flow.
2. Specially, a high frequency sound is decreased 16dB(A) for other maker in practical measuring.

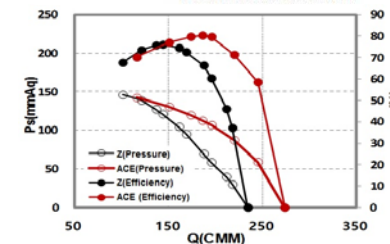
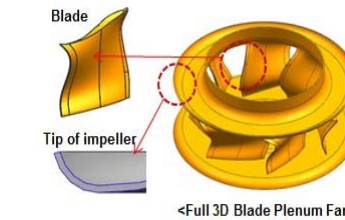


<Remove of Imperfect turbulent flow>

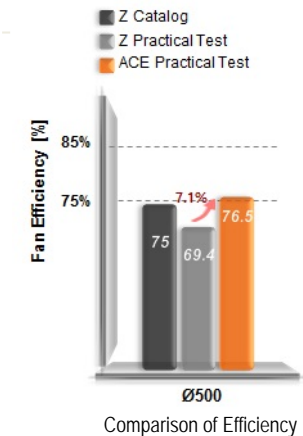


## ● Features – Efficiency

1. Plenum fan has the best efficiency by a optimum design of 3D-blade with a curved surface.
2. Compared with other maker, plenum fan has a high static pressure, a high efficiency and a wide operation range.



Comparison of Efficiency curve



# PRL-400L1

Impeller DIA. 400mm

Inlet Area 0.144m<sup>2</sup>

Outlet Area 0.138m<sup>2</sup>



Plenum Fan Impeller



Num	N	Pt	Ps	Q	H	Etat	LwoA	Num	N	Pt	Ps	Q	H	Etat	LwoA
	[r/min]	[Pa]	[Pa]	[m <sup>3</sup> /min]	[kW]	[%]	[dB]		[r/min]	[Pa]	[Pa]	[m <sup>3</sup> /min]	[kW]	[%]	[dB]
1	800	66	45	49	0.08	65.2	67.0	1	900	83	56	55	0.12	65.2	70.0
2	800	80	61	47	0.09	72.0	66.0	2	900	102	77	53	0.12	72.0	69.0
3	800	98	82	43	0.09	76.4	66.0	3	900	124	103	49	0.13	76.4	69.0
4	800	110	96	40	0.09	77.7	65.0	4	900	140	122	45	0.13	77.7	68.0
5	800	119	106	37	0.10	77.3	65.0	5	900	150	135	42	0.14	77.3	68.0
6	800	128	118	34	0.10	76.3	65.0	6	900	162	149	38	0.14	76.3	68.0
7	800	131	122	33	0.09	75.4	64.0	7	900	166	154	37	0.13	75.4	67.0
8	800	137	131	27	0.09	68.1	64.0	8	900	174	166	30	0.13	68.1	67.0
1	1000	103	70	62	0.16	65.2	73.0	1	1200	148	100	74	0.28	65.2	78.0
2	1000	125	95	59	0.17	72.0	72.0	2	1200	181	137	70	0.29	72.0	77.0
3	1000	153	128	54	0.18	76.4	72.0	3	1200	221	184	65	0.31	76.4	77.0
4	1000	173	151	50	0.18	77.7	71.0	4	1200	249	217	60	0.32	77.7	76.0
5	1000	186	166	47	0.19	77.3	71.0	5	1200	267	240	56	0.32	77.3	76.0
6	1000	200	184	43	0.19	76.3	71.0	6	1200	288	265	51	0.32	76.3	76.0
7	1000	205	191	41	0.18	75.4	70.0	7	1200	296	275	49	0.32	75.4	75.0
8	1000	215	205	34	0.18	68.1	70.0	8	1200	309	295	41	0.31	68.1	75.0
1	1400	202	136	86	0.44	65.2	82.0	1	1550	247	167	96	0.60	65.2	85.0
2	1400	246	187	82	0.47	72.0	81.0	2	1550	302	229	91	0.63	72.0	84.0
3	1400	301	251	76	0.50	76.4	81.0	3	1550	369	307	84	0.67	76.4	84.0
4	1400	339	296	70	0.51	77.7	80.0	4	1550	415	363	77	0.69	77.7	83.0
5	1400	364	326	66	0.51	77.3	80.0	5	1550	446	400	73	0.70	77.3	83.0
6	1400	392	361	60	0.51	76.3	80.0	6	1550	480	442	66	0.69	76.3	83.0
7	1400	402	374	57	0.51	75.4	79.0	7	1550	493	458	63	0.69	75.4	82.0
8	1400	421	401	47	0.49	68.1	79.0	8	1550	516	492	52	0.66	68.1	82.0
1	1650	280	190	102	0.73	65.2	87.0	1	1750	315	213	108	0.87	65.2	88.0
2	1650	342	259	97	0.77	72.0	86.0	2	1750	384	292	103	0.91	72.0	87.0
3	1650	418	348	89	0.81	76.4	86.0	3	1750	471	392	95	0.97	76.4	87.0
4	1650	471	411	82	0.83	77.7	85.0	4	1750	529	462	87	0.99	77.7	86.0
5	1650	506	453	77	0.84	77.3	85.0	5	1750	569	510	82	1.00	77.3	86.0
6	1650	545	501	70	0.84	76.3	84.0	6	1750	613	564	75	1.00	76.3	86.0
7	1650	559	520	67	0.83	75.4	84.0	7	1750	629	585	71	0.99	75.4	85.0
8	1650	585	558	56	0.80	68.1	84.0	8	1750	658	627	59	0.95	68.1	85.0

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.

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

# PRL-500L1

Impeller DIA. 520mm

Inlet Area 0.140m<sup>2</sup>

Outlet Area 0.250m<sup>2</sup>



Plenum Fan Impeller



Num	N	Pt	Ps	Q	H	Etat	LwoA	Num	N	Pt	Ps	Q	H	Etat	LwoA
	[r/min]	[Pa]	[Pa]	[m <sup>3</sup> /min]	[kW]	[%]	[dB]		[r/min]	[Pa]	[Pa]	[m <sup>3</sup> /min]	[kW]	[%]	[dB]
1	800	118	96	88	0.27	64.9	75.0	1	1000	184	150	110	0.519	64.9	80.0
2	800	151	132	82	0.286	71.7	74.0	2	1000	236	206	102	0.559	71.7	79.0
3	800	165	148	78	0.290	73.8	74.5	3	1000	259	232	97	0.566	73.8	79.5
4	800	184	170	72	0.296	74.7	73.6	4	1000	288	265	90	0.578	74.7	78.6
5	800	196	182	68	0.300	74.3	71.0	5	1000	306	285	86	0.586	74.3	77.0
6	800	210	199	62	0.298	73.5	71.0	6	1000	329	311	78	0.582	73.5	77.0
7	800	224	216	55	0.289	70.8	71.5	7	1000	351	337	68	0.564	70.8	77.5
8	800	229	221	52	0.284	69.1	71.5	8	1000	358	346	64	0.556	69.1	77.5
1	1200	265	217	132	0.896	64.9	86.0	1	1400	361	295	154	1.424	64.9	90.0
2	1200	340	297	123	0.966	71.7	85.0	2	1400	462	404	143	1.535	71.7	89.0
3	1200	372	334	116	0.978	73.8	85.5	3	1400	507	455	136	1.554	73.8	89.5
4	1200	415	382	108	0.999	74.7	84.6	4	1400	565	520	126	1.587	74.7	88.6
5	1200	440	410	103	1.013	74.3	82.0	5	1400	600	559	120	1.609	74.3	87.0
6	1200	474	449	94	1.005	73.5	82.0	6	1400	645	611	109	1.597	73.5	87.0
7	1200	505	486	82	0.976	70.8	82.5	7	1400	688	662	96	1.550	70.8	87.5
8	1200	515	498	77	0.961	69.1	82.5	8	1400	702	679	90	1.526	69.1	87.5
1	1550	443	362	170	1.932	64.9	93.0	1	1650	502	410	181	2.331	64.9	94.0
2	1550	567	496	158	2.084	71.7	92.0	2	1650	643	562	169	2.514	71.7	93.0
3	1550	622	558	150	2.110	73.8	92.5	3	1650	705	633	160	2.546	73.8	93.5
4	1550	692	637	140	2.155	74.7	91.6	4	1650	785	723	149	2.600	74.7	92.6
5	1550	735	685	133	2.185	74.3	89.0	5	1650	834	777	141	2.636	74.3	91.0
6	1550	791	749	121	2.169	73.5	89.0	6	1650	897	850	129	2.617	73.5	91.0
7	1550	844	811	106	2.105	70.8	89.0	7	1650	956	920	113	2.540	70.8	91.0
8	1550	861	833	100	2.072	69.1	89.5	8	1650	976	944	107	2.500	69.1	91.5
1	1750	565	461	192	2.782	65.0	96.0	4	1850	632	515	203	3.287	64.9	97.0
2	1750	723	632	179	3.000	71.6	95.2	2	1850	808	706	189	3.545	71.7	96.0
3	1750	793	712	170	3.038	73.8	95.5	3	1850	886	796	180	3.590	73.8	96.5
4	1750	883	813	158	3.103	75.0	94.6	4	1850	987	909	167	3.667	74.7	95.6
5	1750	938	874	150	3.146	74.5	93.0	5	1850	1049	977	159	3.718	74.3	94.0
6	1750	1009	956	137	3.123	73.8	93.0	6	1850	1128	1069	145	3.691	73.5	94.0
7	1750	1076	1035	120	3.031	70.8	93.5	7	1850	1203	1157	127	3.582	70.8	94.0
8	1750	1098	1062	113	2.984	69.3	93.5	8	1850	1228	1187	120	3.527	69.1	94.5

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.

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



# PRL-630L1

Impeller DIA. 630mm

Inlet Area 0.351m<sup>2</sup>

Outlet Area 0.359m<sup>2</sup>



Plenum Fan Impeller



Num	N	Pt	Ps	Q	H	Etat	LwoA	Num	N	Pt	Ps	Q	H	Etat	LwoA
	[r/min]	[Pa]	[Pa]	[m <sup>3</sup> /min]	[kW]	[%]	[dB]		[r/min]	[Pa]	[Pa]	[m <sup>3</sup> /min]	[kW]	[%]	[dB]
1	800	138	76	213	0.79	61.9	86.0	1	900	175	97	239	1.13	61.9	89.0
2	800	173	116	204	0.83	71.1	85.0	2	900	219	147	230	1.18	71.1	88.0
3	800	242	197	183	0.92	80.2	82.0	3	900	307	249	206	1.31	80.2	85.0
4	800	298	265	157	0.94	83.0	81.0	4	900	378	335	177	1.34	83.0	84.0
5	800	335	311	134	0.92	80.9	79.0	5	900	425	394	150	1.31	80.9	82.0
6	800	349	330	119	0.90	76.8	79.0	6	900	442	418	134	1.28	76.8	82.0
7	800	369	358	91	0.83	67.0	79.0	7	900	467	453	102	1.18	67.0	82.0
8	800	336	333	48	0.65	41.0	78.0	8	900	425	421	54	0.93	41.0	81.0
1	1000	216	119	266	1.54	61.9	92.0	1	1200	311	172	319	2.67	61.9	97.0
2	1000	270	182	255	1.62	71.1	91.0	2	1200	389	262	306	2.79	71.1	96.0
3	1000	379	307	229	1.80	80.2	88.0	3	1200	545	443	275	3.11	80.2	93.0
4	1000	466	414	197	1.84	83.0	87.0	4	1200	672	596	236	3.18	83.0	92.0
5	1000	524	486	167	1.80	80.9	85.0	5	1200	756	701	201	3.12	80.9	90.0
6	1000	546	516	148	1.76	76.8	85.0	6	1200	787	744	178	3.04	76.8	90.0
7	1000	577	559	113	1.63	67.0	85.0	7	1200	831	806	136	2.81	67.0	90.0
8	1000	525	520	60	1.27	41.0	84.0	8	1200	756	749	72	2.20	41.0	89.0
1	1400	423	234	373	4.24	61.9	101.0	1	1550	518	287	413	5.76	61.9	104.0
2	1400	530	357	358	4.44	71.1	99.0	2	1550	650	437	396	6.03	71.1	103.0
3	1400	743	603	321	4.94	80.2	97.0	3	1550	911	740	355	6.71	80.2	100.0
4	1400	915	812	276	5.05	83.0	96.0	4	1550	1123	996	305	6.86	83.0	99.0
5	1400	1029	955	234	4.96	80.9	94.0	5	1550	1263	1172	260	6.73	80.9	97.0
6	1400	1072	1014	208	4.83	76.8	94.0	6	1550	1315	1244	231	6.55	76.8	97.0
7	1400	1133	1098	159	4.47	67.0	94.0	7	1550	1389	1347	176	6.07	67.0	97.0
8	1400	1029	1019	84	3.50	41.0	93.0	8	1550	1262	1250	93	4.75	41.0	96.0
1	1650	588	326	439	6.94	61.9	106.0	1	1750	661	367	466	8.29	61.9	107.0
2	1650	737	496	422	7.27	71.1	105.0	2	1750	829	558	447	8.68	71.1	106.0
3	1650	1033	839	378	8.09	80.2	102.0	3	1750	1162	944	401	9.66	80.2	103.0
4	1650	1273	1129	325	8.28	83.0	101.0	4	1750	1432	1271	345	9.89	83.0	102.0
5	1650	1432	1328	277	8.12	80.9	99.0	5	1750	1611	1495	294	9.70	80.9	100.0
6	1650	1491	1410	246	7.91	76.8	99.0	6	1750	1679	1587	261	9.44	76.8	100.0
7	1650	1575	1528	188	7.32	67.0	99.0	7	1750	1773	1719	199	8.74	67.0	100.0
8	1650	1430	1417	99	5.73	41.0	98.0	8	1750	1609	1594	105	6.84	41.0	99.0

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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.

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