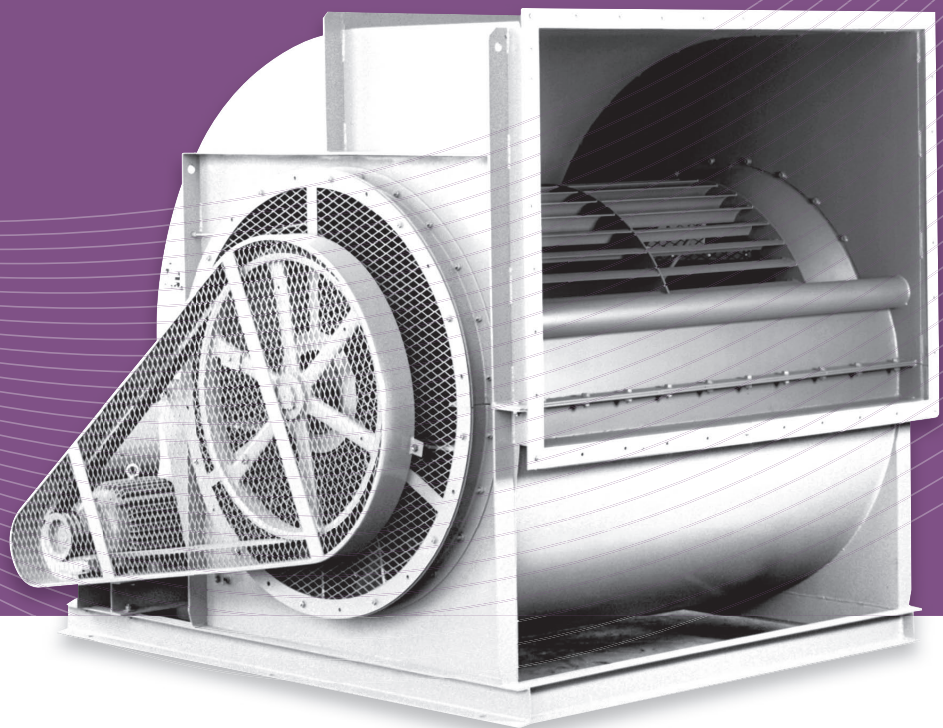


DOUBLE SUCTION

SIROCCO FAN

BSI "D" SERIES



東海技研(株)
Dong Hae Engineering Co., LTD.

Contents

날개형상 <i>Impeller Shape</i>	3
제품특징 <i>Product Characteristic</i>	3
AMCA Seal 정보 <i>AMCA Seal Information</i>	3
주요용도 <i>Main Application</i>	4
Fan 구조 <i>Fan Structure</i>	4
Fan 선정 방법 <i>Fan Select Method</i>	5
성능곡선 <i>Performance Data</i>	6
치수표 <i>Overall Dimension</i>	15

동해기연(주)는 25년 동안 아파트 건물 냉난방 및 플랜트 건설 분야를 포함한 다양한 프로젝트를 담당하고 있다.

우리는 뛰어난 능력과 각 프로젝트에서 얻은 다양한 경험을 가진 최고의 기술자들을 보유하고 있다. 건설 회사에서 요구하는 새로운 제품과 기술을 위한 연구 개발에 지속적인 투자를 한다.

Dong Hae Engineering Co., Ltd. is in charge of various projects including apartment building and plant construction during the 25years of working in the field of HVAC. We hold the best engineers who have high ability and various experiences in each project. We are doing continuous investment on R&D for new technology and product, according to the needs of various construction enterprises.

날개형상 (Impeller Shape)

- 날개 길의 길이가 짧고 폭이 넓다.
- 날개의 끝이 회전방향으로 곡선을 이루고 있다.
- 날개 매수가 타 기종 보다 많다.
- The length of blades is short and broad.
- The tip of blades curves in rotation direction.
- A lot of blades than other product



제품특징 (Product Features)

- 타 기종에 비해 설치면적이 적고, 대풍량, 저정압이다.
- 저속운전으로 저소음 및 낮은 진동으로 운전상태가 정숙하다.
- 풍량 변동에 의한 풍압의 변화는 작다.
- Vane Damper의 설치로서 풍량 및 정압 조절이 용이해서, Position에 따라 효율적인 에너지 관리가 용의 하다.
- 기준사양 정압 이하 운전시 동력이 급격히 상승한다.
- Compared with other centrifugal fans, Installation area is small and large air, low pressure.
- Driving at low speed, not generating unpleasant noise, vibration, and offering the optimum operation.
- The change in the wind pressure by the airflow fluctuation is small.
- It adjusts easily air and pressure as installation of Vane damper and manages easily efficient of energy by position.
- Power rises suddenly at the time of driving below standard pressure.

AMCA Seal 정보 (AMCA Seal Information)



국제 공기 유동 및 제어 협회(AMCA)는 세계 공조 시스템 설비 제조업체의 비영리 협회입니다. 또한, 협회는 산업용, 상업용, 주거용 시장의 팬, 루버, 댐퍼, 에어 커튼, 공기 측정 장소, 음향 감쇠기 등의 다른 공조 시스템 구성요소도 포함합니다.

협회의 목표는 공기 유동 및 제어 산업의 번영과 공공의 이익과 성장을 촉진하는 것입니다. AMCA는 공조산업을 위해 자체 규정을 제시합니다. 팬, 댐퍼, 루버 구매자는 AMCA 국제 인증의 의미를 인식하고 있을 필요가 있습니다.

- 환기 장치인 원심형 팬은 인증에 근거하여 AMCA SEAL이 부착됩니다. 표시된 등급은 AMCA 발행물 211과 AMCA 발행물 311과 AMCA 등급인증 프로그램(AMCA CRP) 필요조건에 따라 실험 및 절차가 진행되는 것을 근거로 합니다.
- 표시된 성능은 흡입구, 덕트 토출구로 설치된 B타입입니다. 성능 비율은 부속품이 기류의 영향을 받는 것을 포함하지 않는다. 동력 비율 kW는 운전손실을 포함하지 않습니다.

The Air Movement and Control Association (AMCA) International, Inc. is a not-for-profit international association of the world's manufacturers of related air system equipment-primarily, but not limited to: fans, louvers, dampers, air curtains, airflow measurement stations, acoustic attenuators, and other air system components for the industrial, commercial and residential markets.

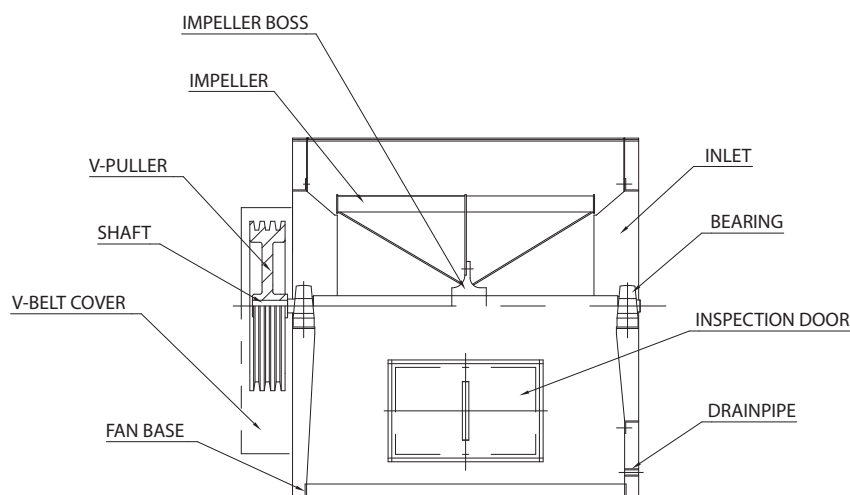
The association's mission is to promote the health and growth of the air movement and control industry consistent with the interest of the public. AMCA International is a valuable resource and a strong means of self regulation for our industry. People who buy and specify fans, dampers, and louvers need to be aware of the value of the AMCA International seal.

- Ventilator certifies that the Centrifugal Fans shown here in is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.
- Performance shown is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. Power rating kW does not include transmission losses.

주요용도 (Main application)

- 지하주차장 급,배기, 기계실, 발전기실, 전기실 급배기
- 소방 제연용 급배기, 정화조, 주방 급배기
- 냉난방 공기 조화기 내장용, 지하철 환기용
- 기타 국소부위 배기
- Underground parking supply. exhaust fan, Machine room, generator room, electricity room supply. exhaust fan,
- Firefighting smoke control supply. exhaust fan,
- The inside use of Air conditioning and heating A.H.U, subway ventilation
- The diverse local exhaust fan

Fan 구조 (Fan Structure)



How to read Air Performance Data-Typical example

Model Reference

BSI 560 D

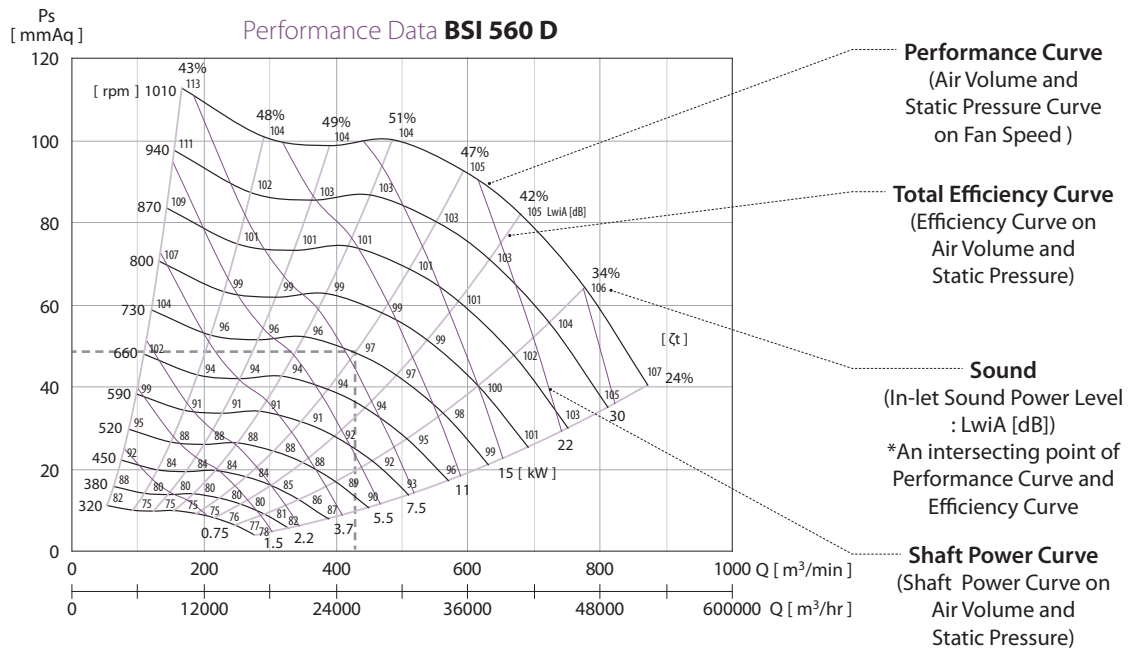
Double Suction

Impeller Dia (mm)

FAN Series (Sirocco Fan)

ex)

Air Volume	Static Pressure	Fan Speed	Total Efficiency	Shaft Power	Sound
428 CMM	48 mmAq	730 rpm	47%	7.9 kW	97 dB



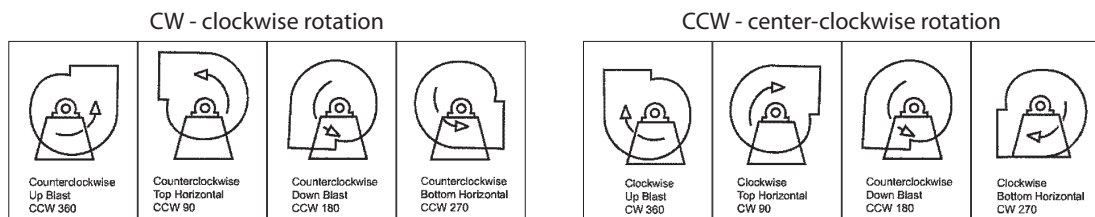
팬 회전 과 토출방향 (Fan Rotation and Discharge)

팬의 회전과 토출방향은 AMCA 표준 99-2406-03에 따릅니다.

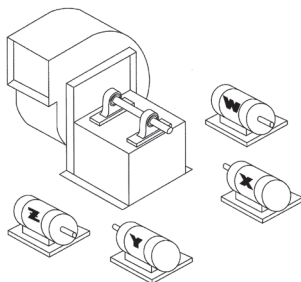
회전 방향은 팬의 구동 측으로 부터 결정됩니다 :

The rotation and discharge of the fan is in accordance with AMCA standard 99-2406-03.

The direction of rotation is determined from the drive side of the fan :



모터 위치 (Motor Position)



벨트 구동 원심형 팬의 모터 방향은 AMCA 표준 99-2407-03에 따릅니다.

모터의 위치는 팬의 구동측 면과 지정된 위치인 W, X, Y, Z 로 결정됩니다.

The position of the motor for belt drive centrifugal fan is in accordance with AMCA standard 99-2407-03.

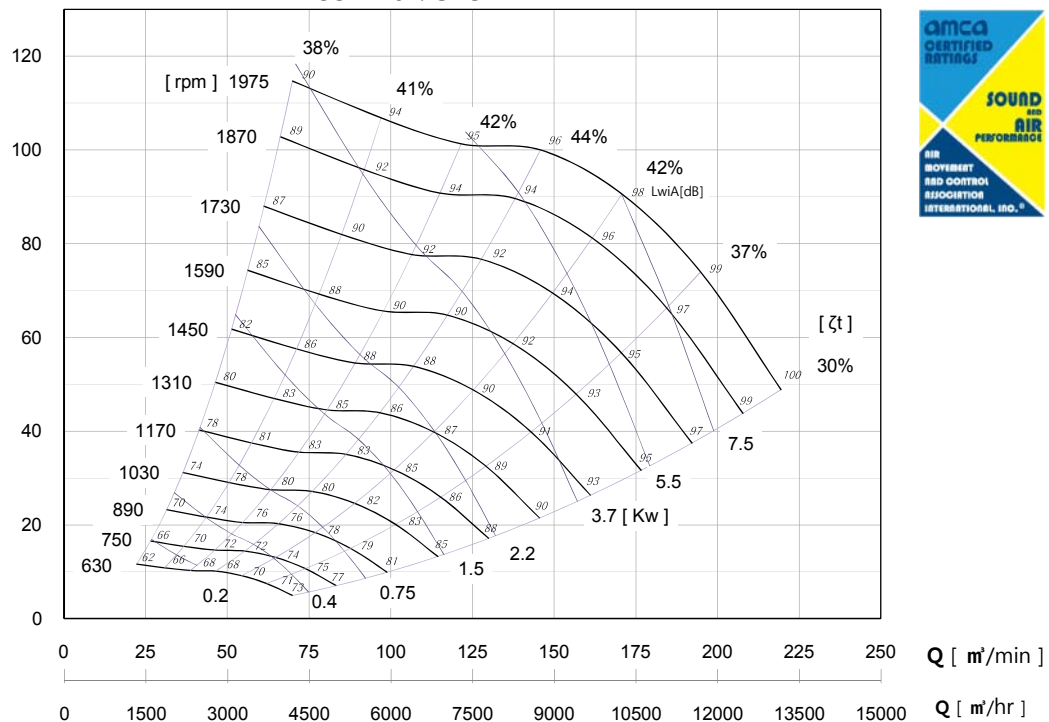
Location of motor is determined by facing the drive side of fan and designating the positions by letters W, X, Y, or Z.

Performance Data BSI 315 D

Ps [mmAq]

Wheel Dia : 315mm

$\rho = 1.2 \text{ kg/m}^3$



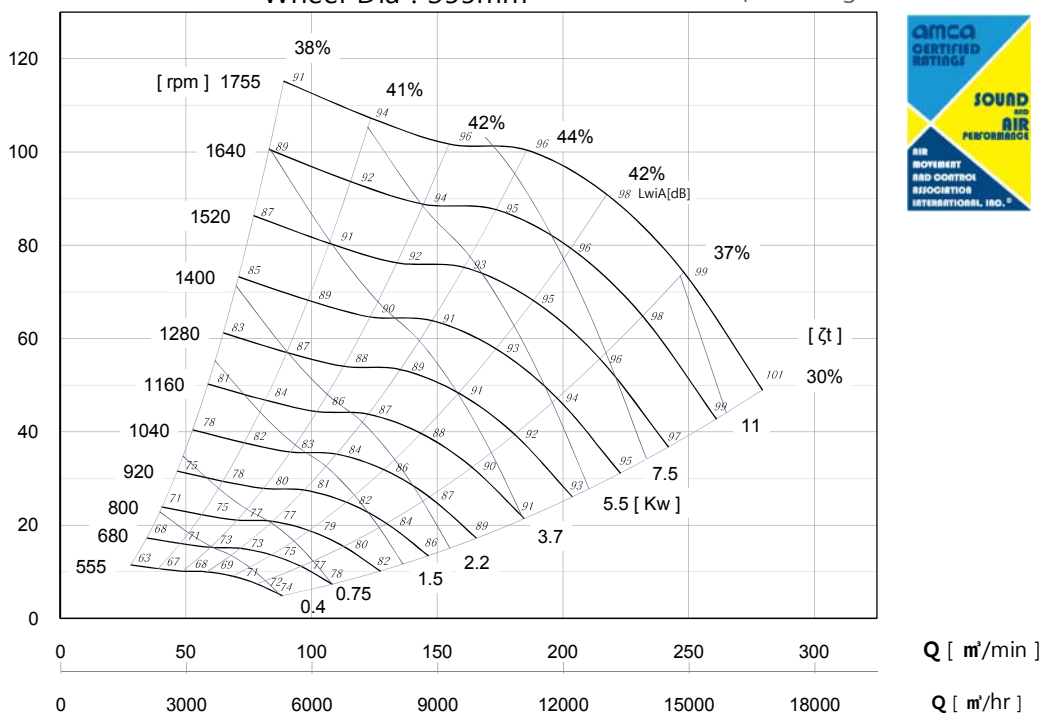
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BSI 355 D

Ps [mmAq]

Wheel Dia : 355mm

$\rho = 1.2 \text{ kg/m}^3$

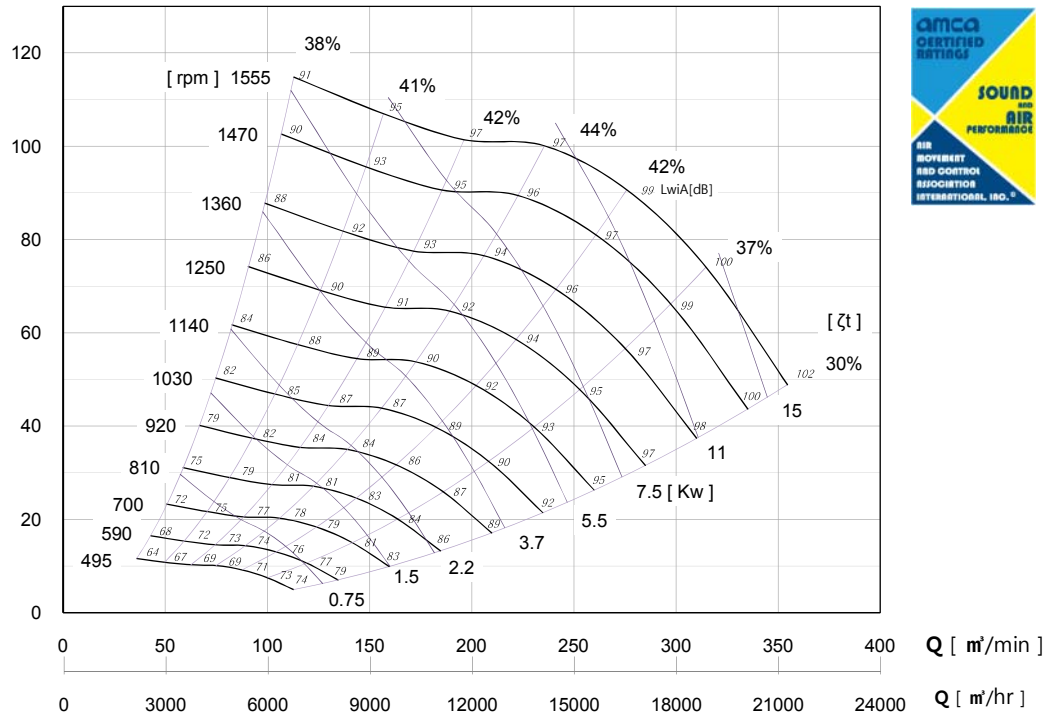


- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data **BSI 400 D**

Ps [mmAq]

Wheel Dia : 400mm

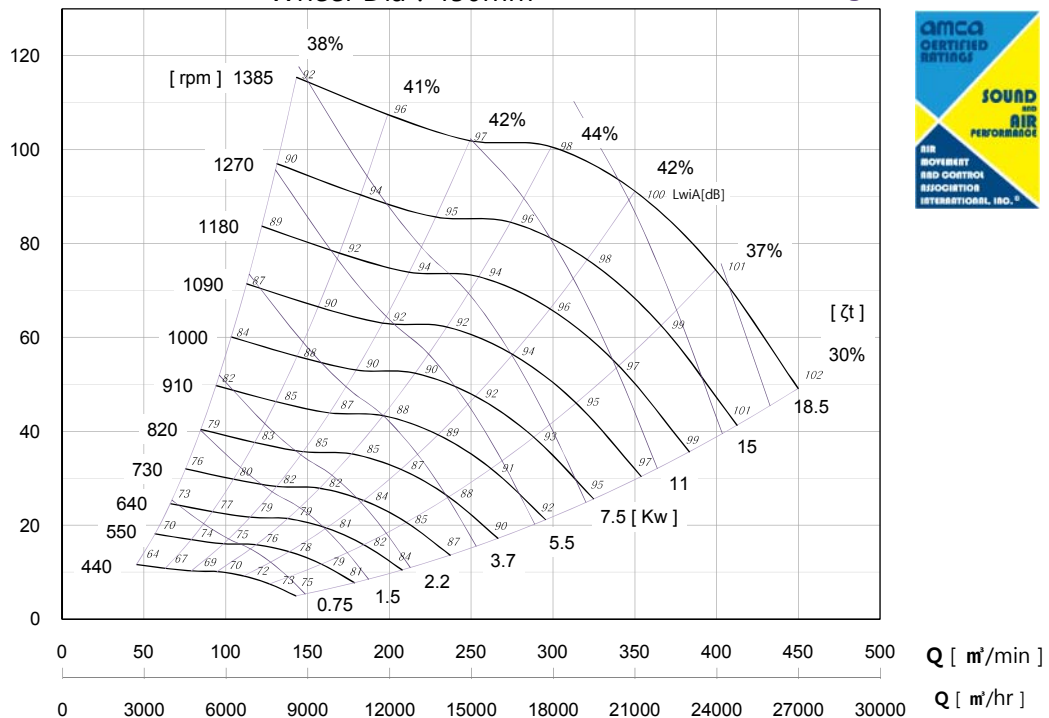
 $\rho = 1.2 \text{ kg/m}^3$ 

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data **BSI 450 D**

Ps [mmAq]

Wheel Dia : 450mm

 $\rho = 1.2 \text{ kg/m}^3$ 

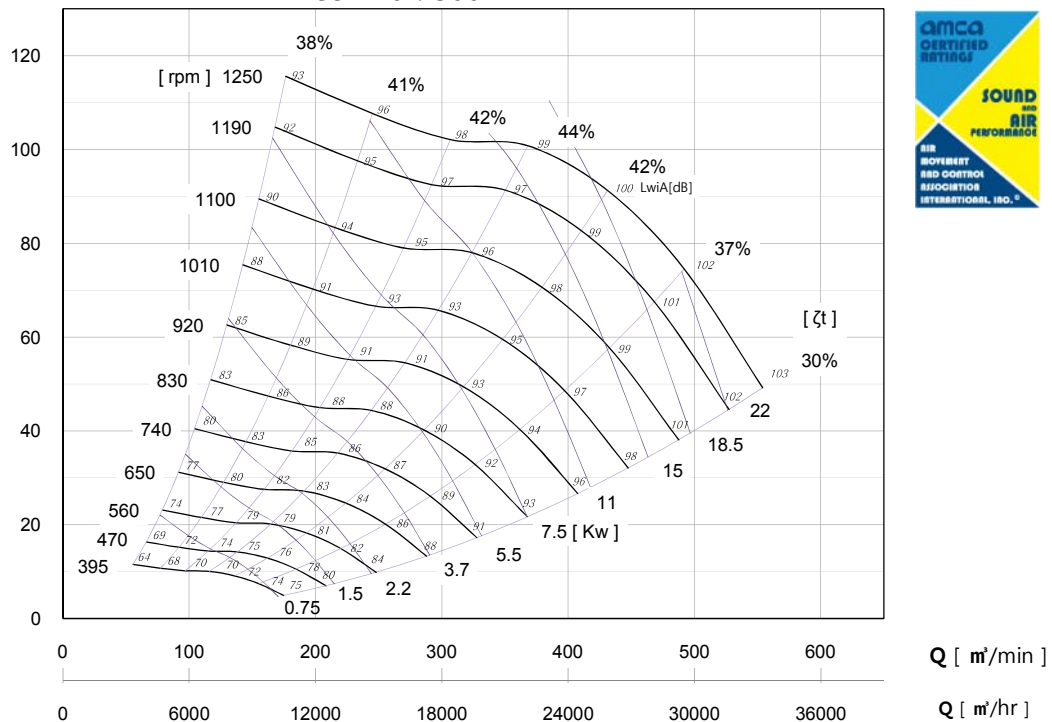
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

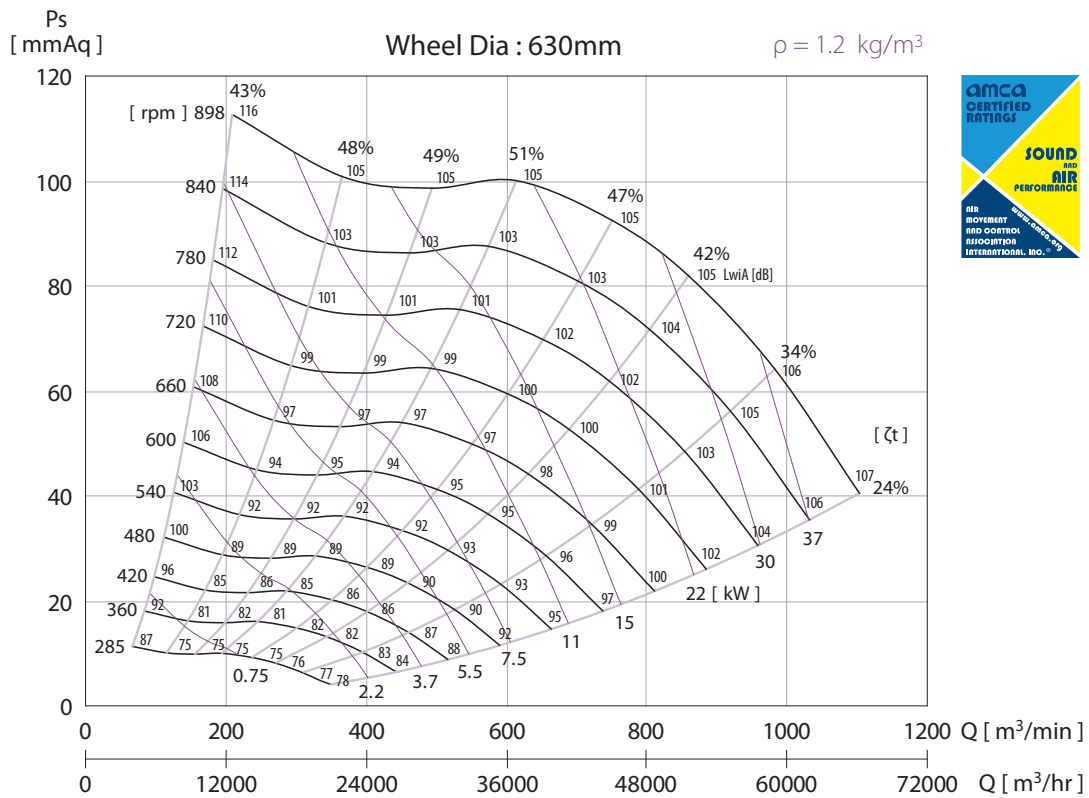
Performance Data BSI 500 D

Ps [mmAq]

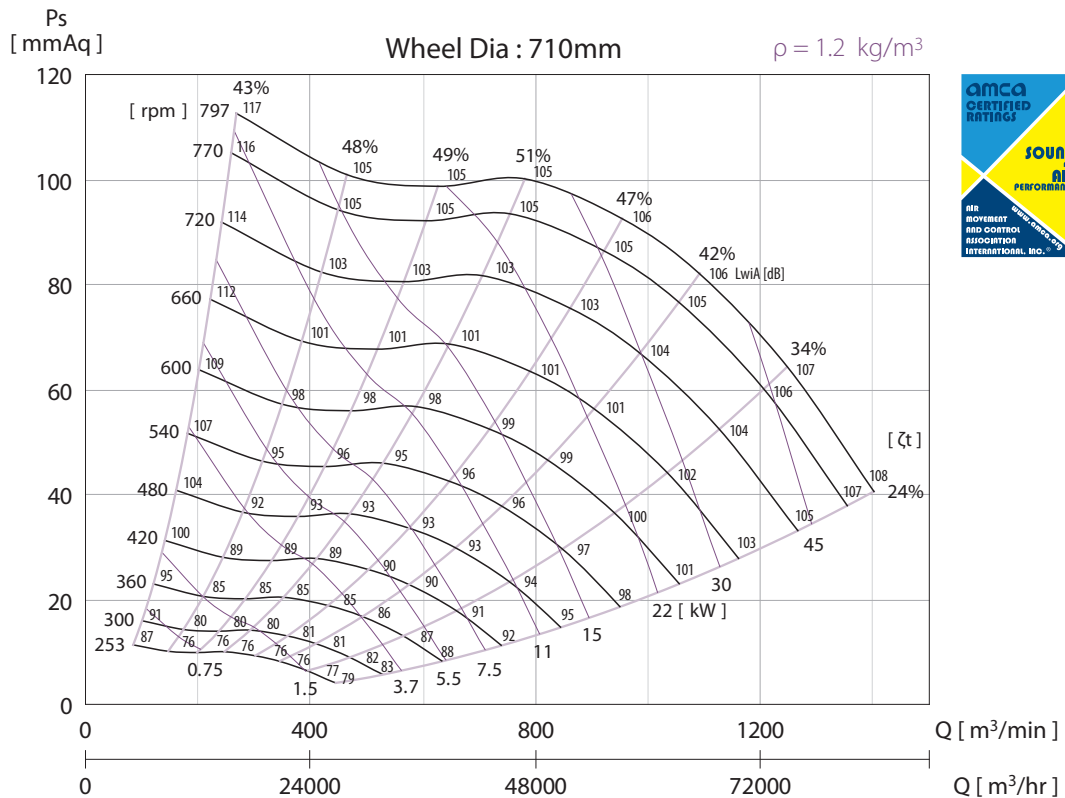
Wheel Dia : 500mm

$\rho = 1.2 \text{ kg/m}^3$



Performance Data BSI 630 D

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BSI 710 D

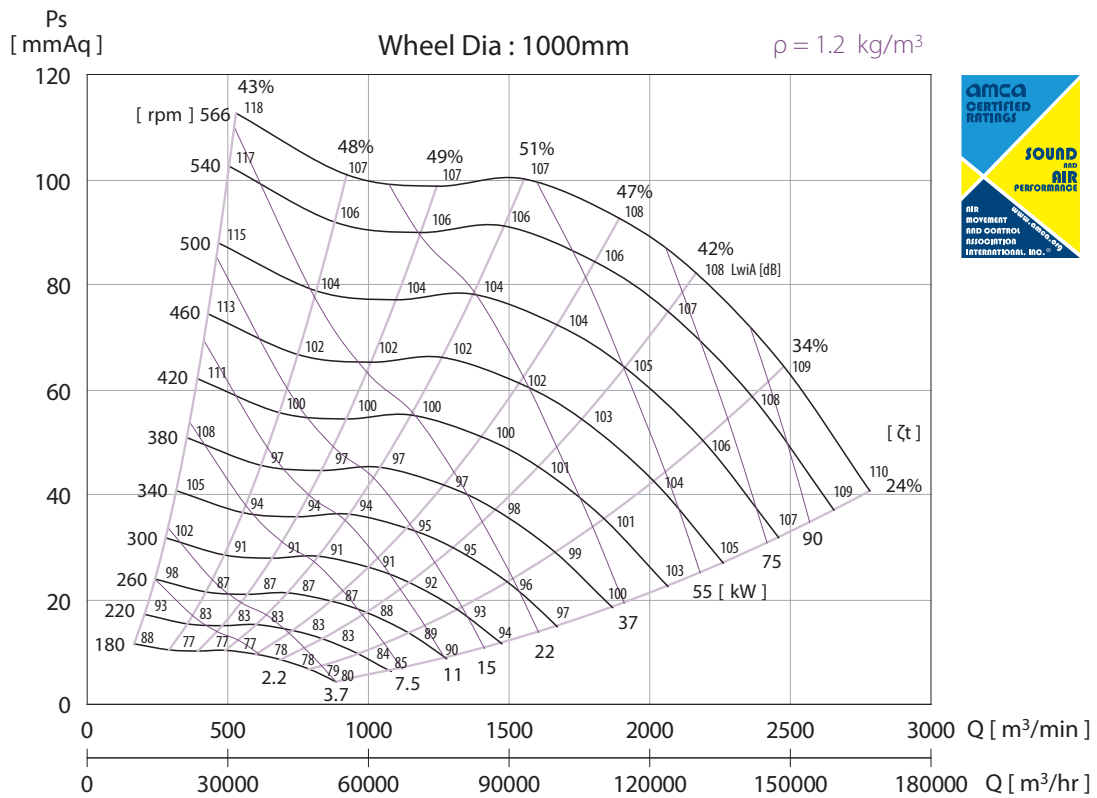
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data **BSI 800 D**

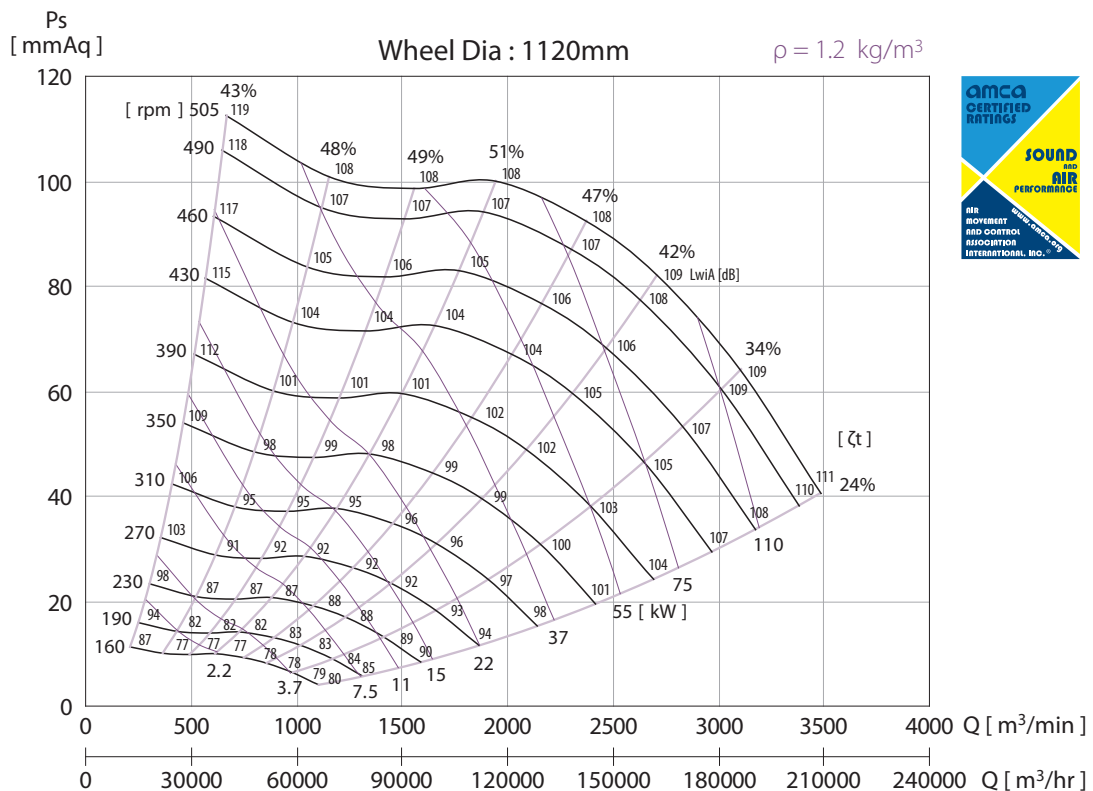
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data **BSI 900 D**

- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

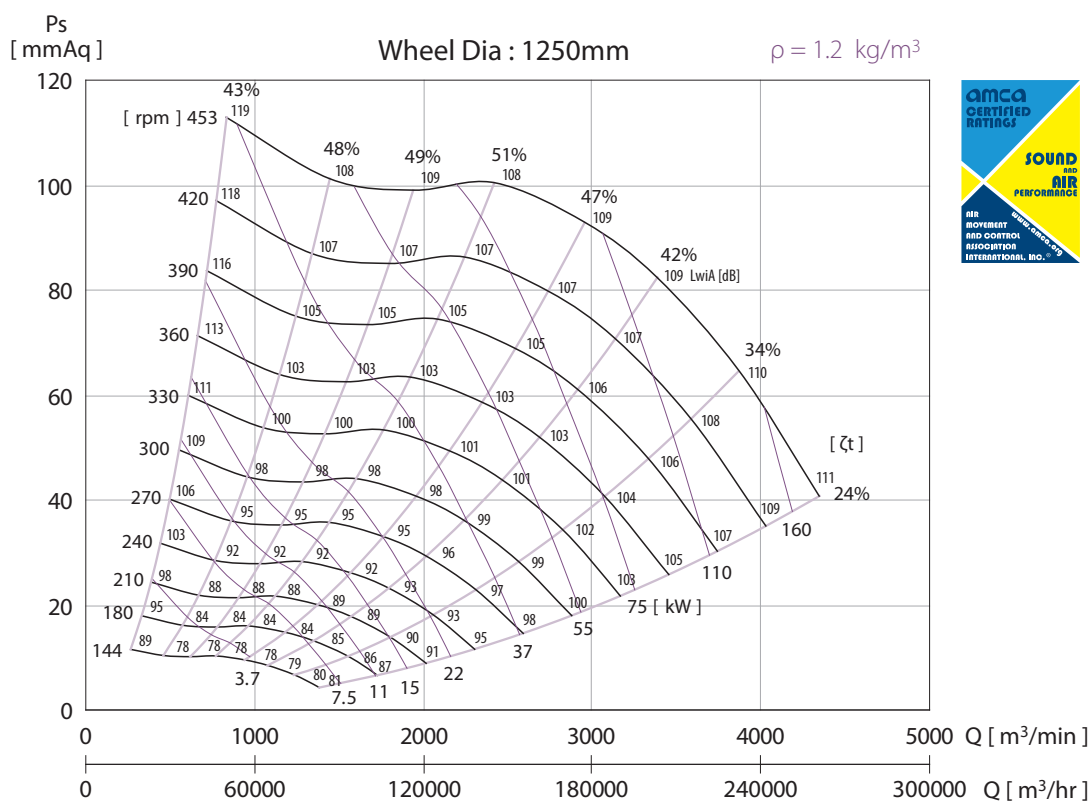
Performance Data BSI 1000 D

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BSI 1120 D

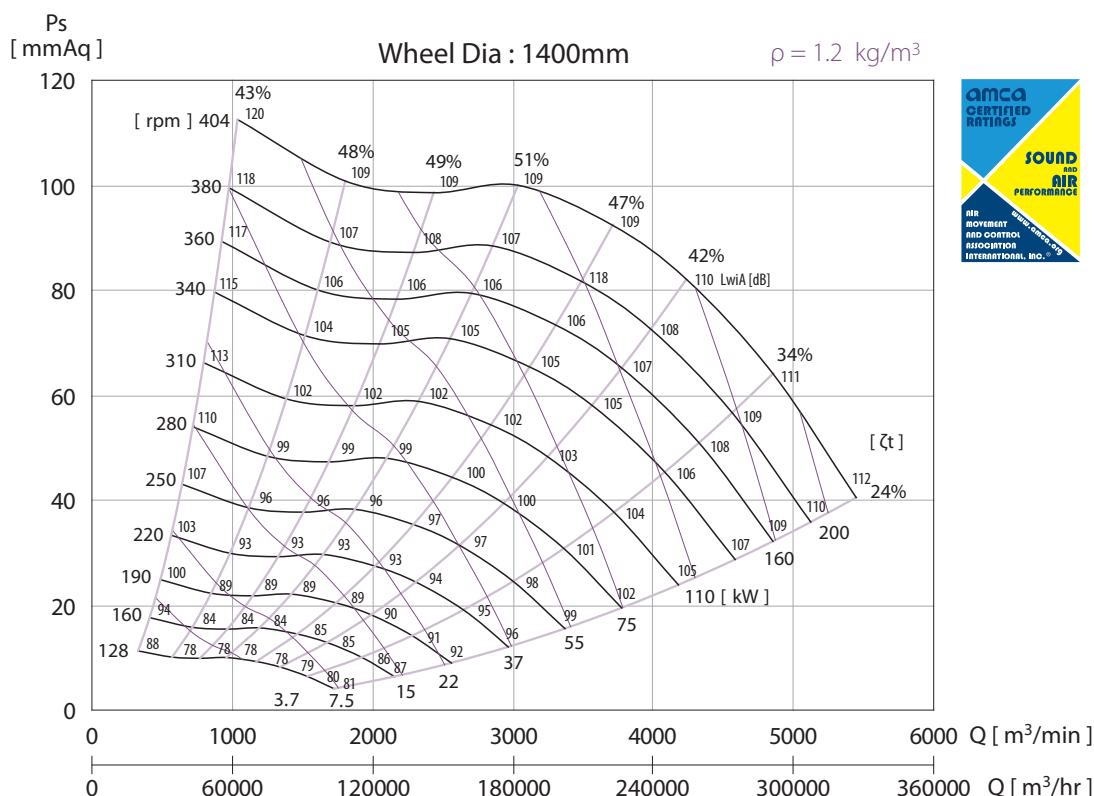
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data **BSI 1250 D**

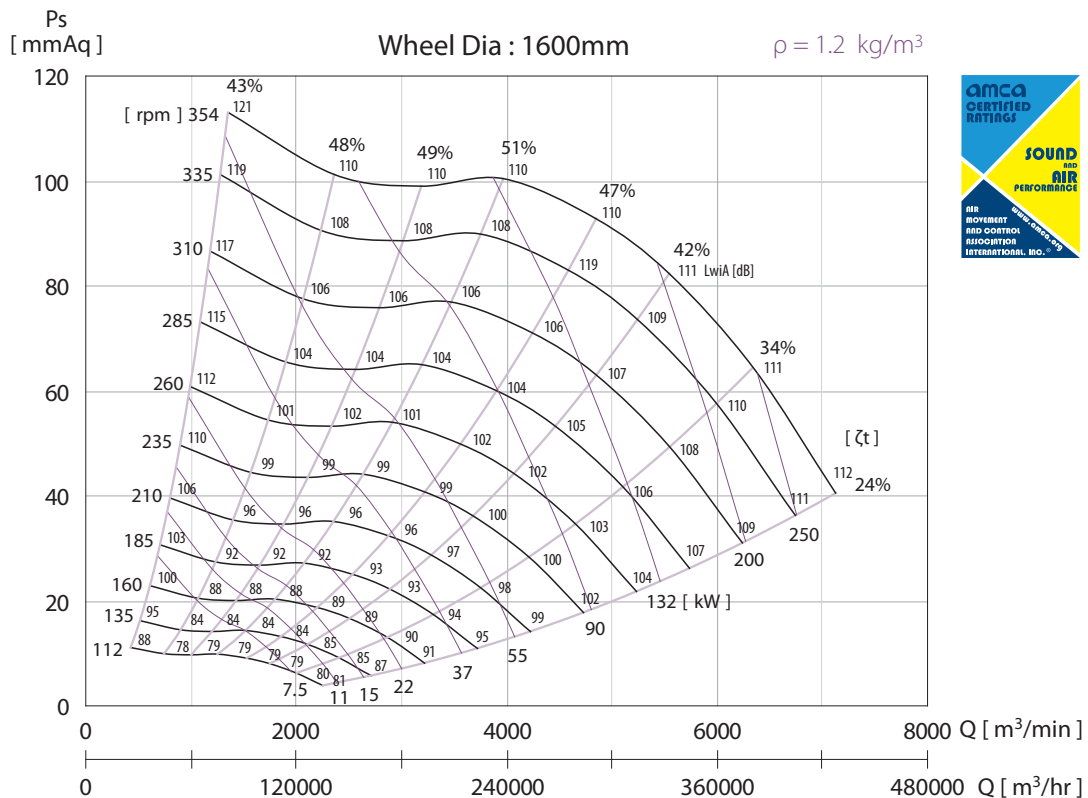


- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

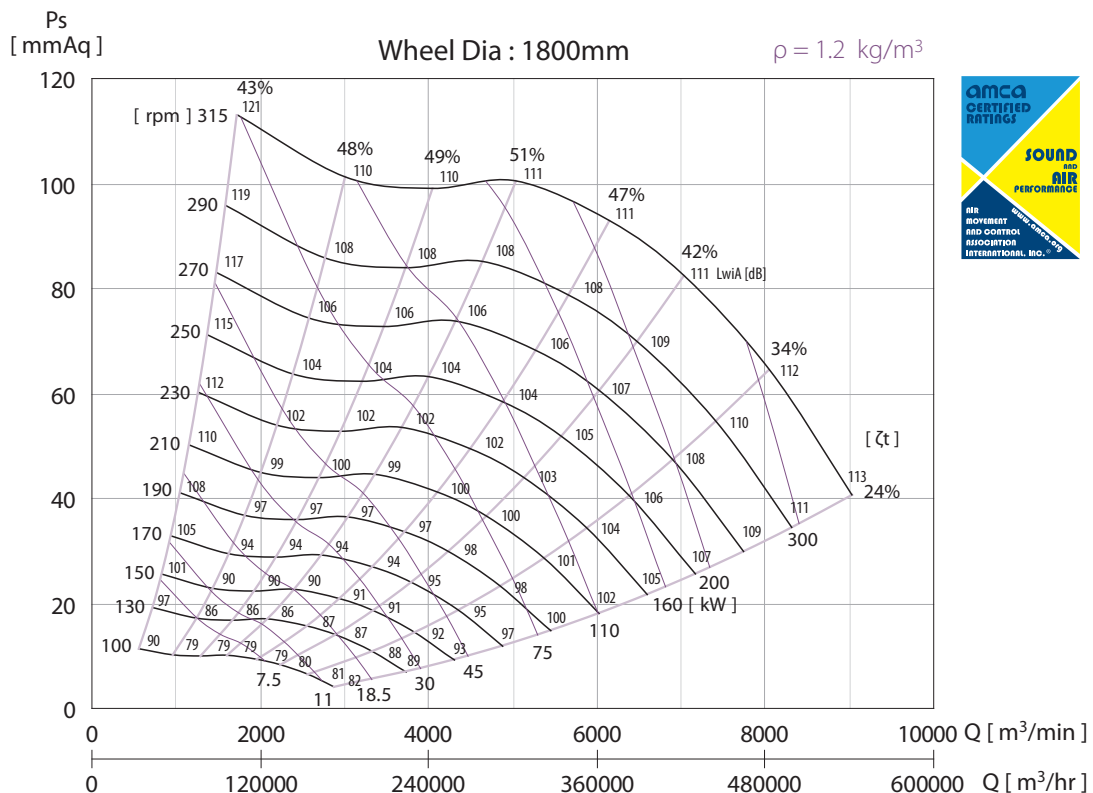
Performance Data **BSI 1400 D**



- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

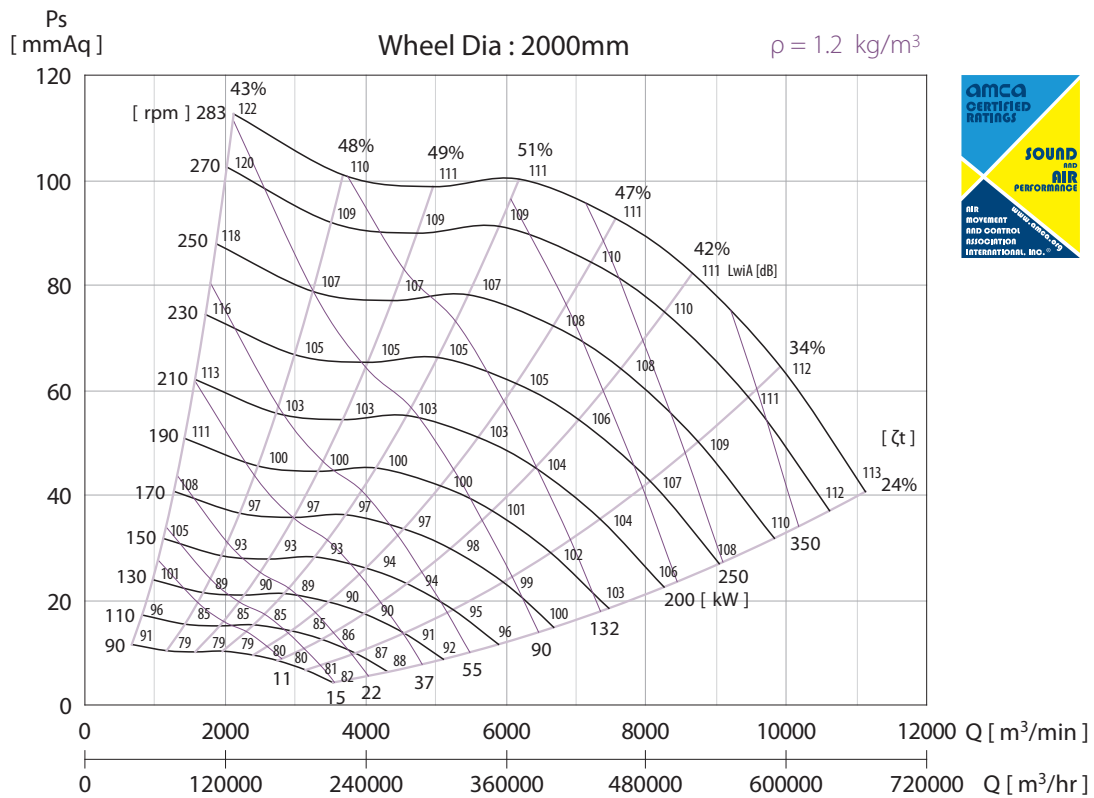
Performance Data BSI 1600 D

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

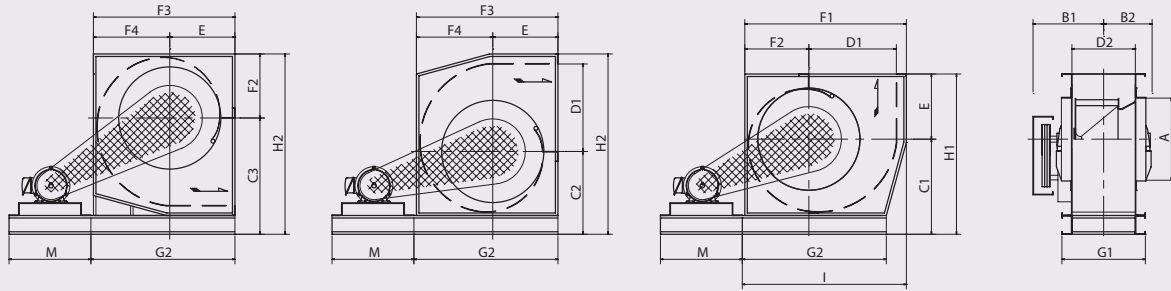
Performance Data BSI 1800 D

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data **BSI 2000 D**



OVERALL DIMENSION - BSI "D" SERIES



Fan Model		BSI 315D	BSI 355D	BSI 400D	BSI 450D	BSI 500D	BSI 560D	BSI 630D	BSI 710D	BSI 800D
Inlet	A	330	370	420	470	520	580	650	730	830
Width	B1	400	430	460	520	560	606	669	749	832
	B2	307	337	371	409	447	491	554	614	697
Center Height	C1	358	395	435	475	517	575	635	702	777
	C2	335	365	400	440	475	530	582	647	712
	C3	430	470	515	565	615	677	748	828	918
Outlet	D1	315	355	402	452	502	562	633	713	803
	D2	475	536	604	679	755	845	951	1071	1207
Outlet Length	E	257	290	325	365	408	405	455	513	578
Side Length	F1	615	685	765	855	940	1057	1180	1325	1480
	F2	260	290	325	365	400	455	507	572	637
	F3	540	610	685	765	850	905	1015	1140	1280
	F4	283	320	360	400	442	500	560	627	702
FAN Base (G2+M)	G1	555	616	684	759	835	925	1031	1151	1287
	G2	560	630	705	785	870	925	1035	1160	1300
	I	635	705	785	875	960	1077	1200	1345	1500
Total Height	H1	615	685	760	840	925	980	1090	1215	1355
	H2	690	760	840	930	1015	1132	1255	1400	1555

Fan Model		BSI 900D	BSI 1000D	BSI 1120D	BSI 1250D	BSI 1400D	BSI 1600D	BSI 1800D	BSI 2000D	BSI 2240D
Inlet	A	930	1040	1160	1300	1450	1660	1870	2070	2320
Width	B1	907	993	1104	1202	1343	1513	1664	1842	2023
	B2	772	858	949	1047	1188	1338	1489	1667	1848
Center Height	C1	895	982	1085	1196	1352	1528	1698	1894	2100
	C2	821	906	1000	1100	1244	1408	1562	1746	1935
	C3	1054	1154	1275	1405	1596	1797	1998	2224	2465
Outlet	D1	904	1004	1125	1255	1406	1607	1808	2009	2250
	D2	1358	1509	1690	1886	2113	2414	2716	3018	3380
Outlet Length	E	635	698	790	874	988	1137	1277	1416	1590
Side Length	F1	1675	1860	2075	2305	2590	2955	3310	3670	4100
	F2	721	806	900	1000	1119	1283	1437	1596	1785
	F3	1430	1580	1775	1970	2215	2540	2850	3160	3540
	F4	795	882	985	1096	1227	1403	1573	1744	1950
FAN Base (G2+M)	G1	1458	1609	1790	1986	2243	2544	2846	3148	3510
	G2	1450	1600	1795	1990	2235	2560	2870	3180	3560
	I	1695	1880	2095	2325	2610	2975	3330	3690	4120
Total Height	H1	1530	1680	1875	2070	2340	2665	2975	3310	3690
	H2	1775	1960	2175	2405	2715	3080	3435	3820	4250

Motor Base	Fr. No.	80M	90L	100L	112M	132S	132M	160M	160L
	M	390	390	390	460	460	460	510	510
	Fr. No.	180M	180L	200L	225S	250S	250M		
	M	650	650	750	750	890	890		



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Dong Hae Engineering Co.,Ltd.

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공 장

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