

DOUBLE SUCTION

AIR FOIL FAN

BAI "D" SERIES



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

우리는 뛰어난 능력 과 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 깃의 길이가 길고 폭이 좁다.
- 날개의 깃 면이 회전방향의 뒤쪽으로 곡선을 이루고 있다. (익형단면)
- 날개 매수가 타기종 보다 적다.
- The length of blades is long and narrow.
- The side of blades curves in the rear of rotation direction. (cross section of Airfoil)
- Fewer blades than other product



제품특징 (Product Features)

- 동일 풍량과 정압 지점에서 가장 효율이 높다.
- 익형단면을 통해 원활한 유동장low 구성으로 고속 회전시에도 저소음이다.
- 풍량 변동에 의한 풍압의 변화가 약간 있으나, 동력의 변화는 없다.
- Suction vane damper의 설치로서 원활한 풍량조정이 가능하며 효율적인 에너지관리가 용이하다.
- Compared with other centrifugal fans, Efficiency is very high on the same airflow and pressure condition.
- Providing a smooth flow at high speed at the time of low noise, through the cross section of airfoil.
- The change of wind pressure by the airflow fluctuation is small, and the change of shaft power is never.
- It adjusts easily air and pressure as installation of Suction Vane damper and manages easily efficient of energy.

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.

- 동해기연(주)의 원심형 펌은 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 한다.
- 표시된 성능은 흡입구, 덕트 토출구로 설치된 BE타입입니다. 성능 비율은 부속품 영향을 받는 것을 포함하지 않는다. 동력 비율 kW는 운전손실을 포함하지 않는다.

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,aircurtains,airflowmeasurementstations,acousticattenuators,andotherairsystemcomponentsfor the industrial, commercial and residential markets.

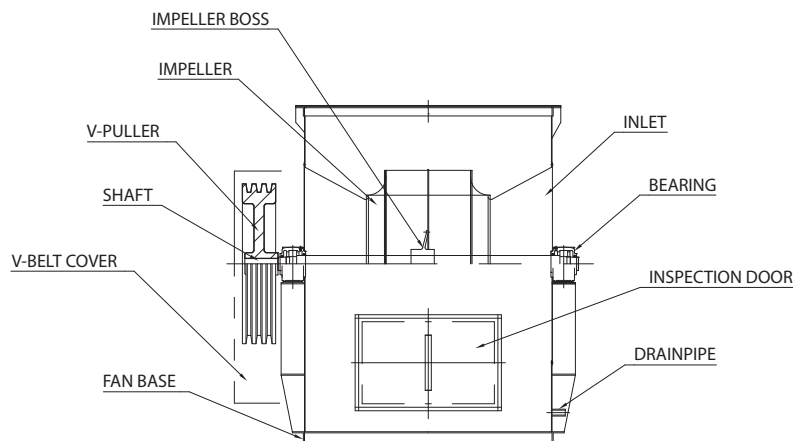
The association's mission is to promote the health and growth of the air movement and control industry consistent with the interest of the public. AMCA International is a valuable resource and a strong means of self regulation for our industry. People who buy and specify fans, dampers, and louvers need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

- Dong Hae Engineering Co., Ltd. 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 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 transmisson losses.

주요용도 (Main application)

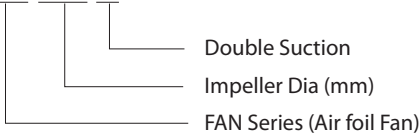
- 반도체 장비, hume hood 배기용
- Clean room booth 급. 배기용
- A.H.U 등 공조장비
- 건조장치 및 원자력발전소, 국소 환기용
- 지하철 유막 급. 배기용, Air washer용
- 기타 일반산업용 강제 송풍장치
- Semiconductor equipment, Hume hood exhaust fan
- Clean room booth supply. exhaust fan
- A.H.U and such air conditioning equipment
- The drying equipment and The nuclear power plant, The local ventilation
- Subway film of oil supply. exhaust fan, Air washer fan
- The diverse general industrial compulsion blower equipment

Fan 구조 (Fan Structure)



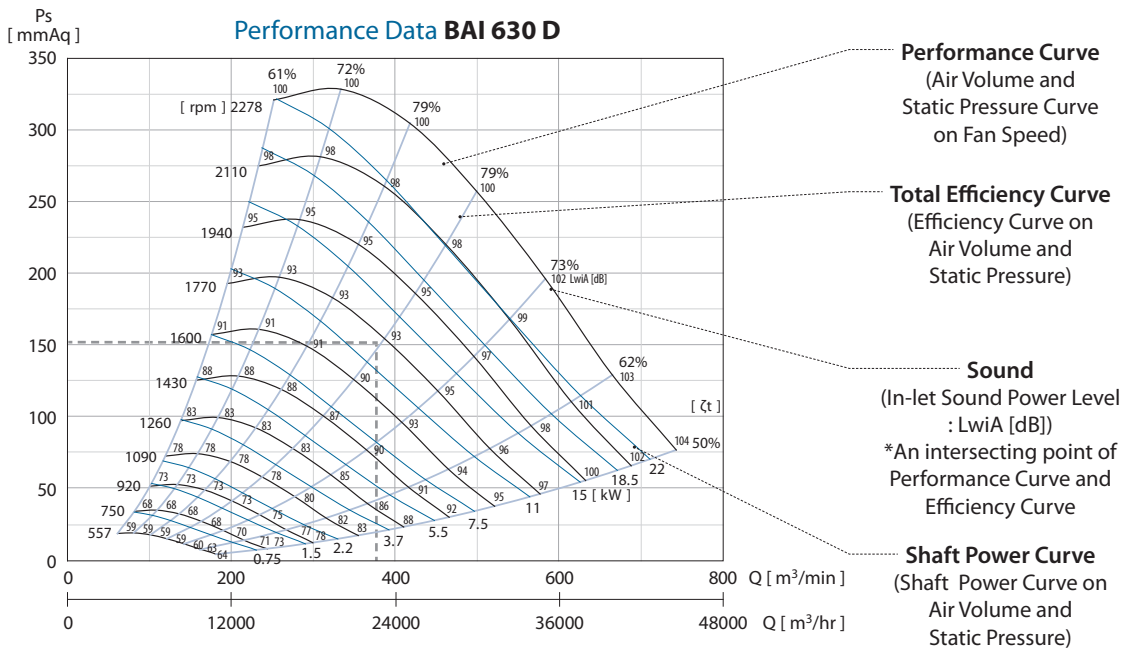
How to read Air Performance Data-Typical example

Model Reference **BAI 630 D**



ex)

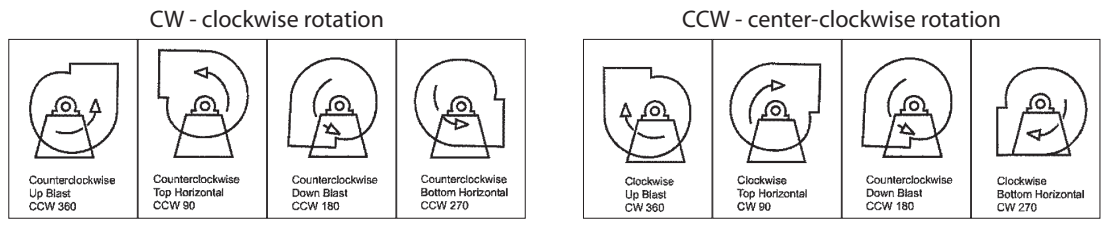
Air Volume	Static Pressure	Fan Speed	Total Efficiency	Shaft Power	Sound
377 CMM	153 mmAq	1770 rpm	79%	12.4 kW	93 dB



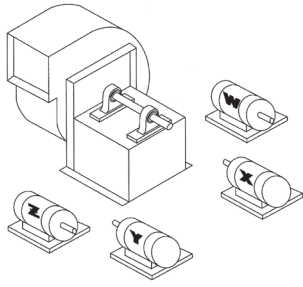
팬 회전 과 토출방향 (Fan Rotation and Discharge)

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



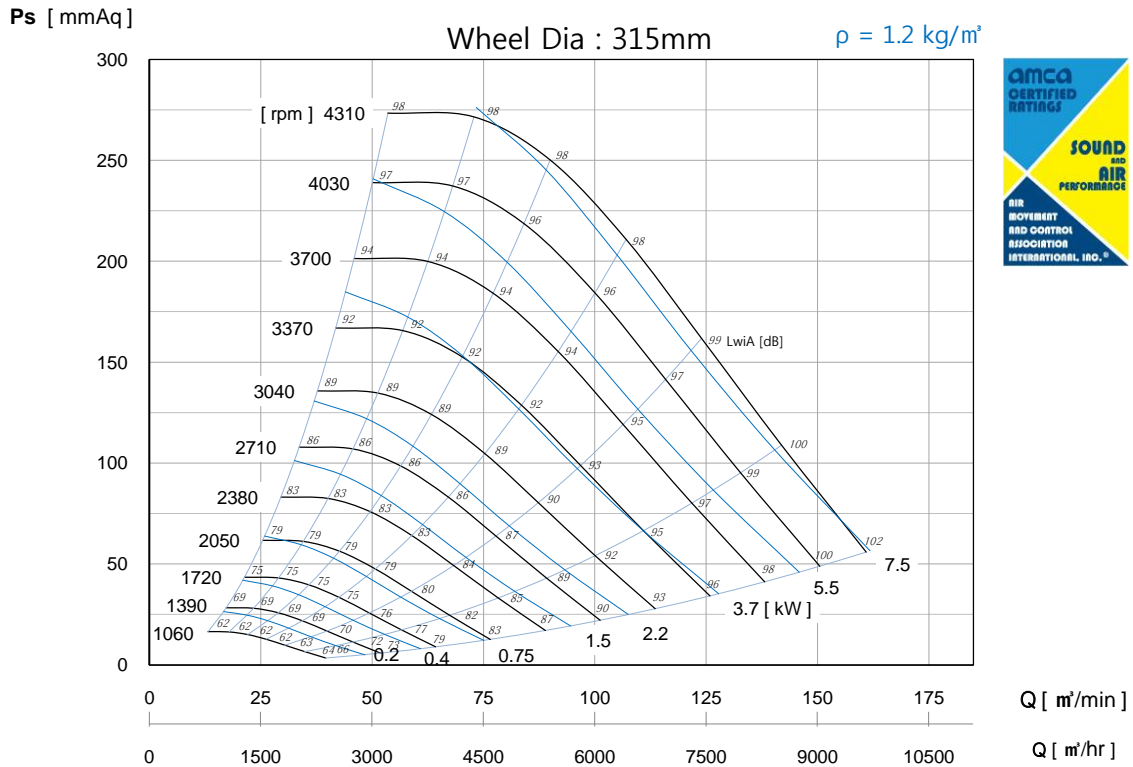
모터 위치 (Motor Position)



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.

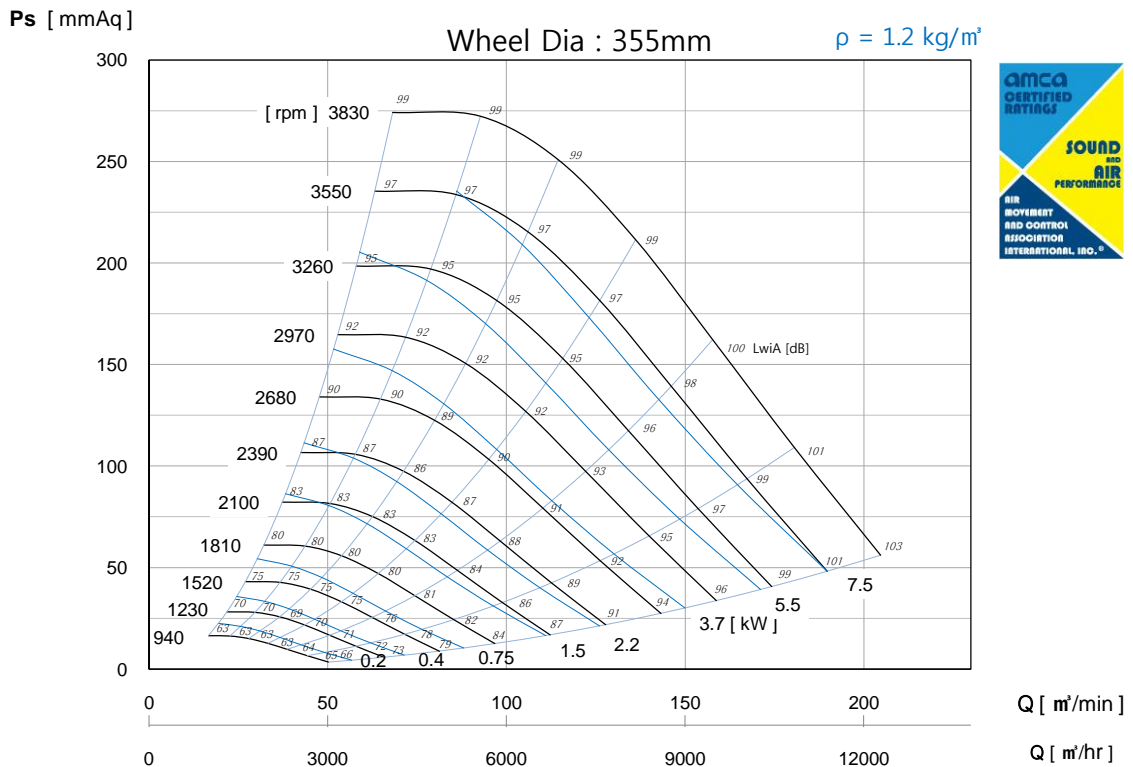
The position of the motor for belt drive centrifugal fan is in accordance with AMCA standard 99-2407-03.
Location of motor is determined by facing the drive side of fan and designating the positions by letters W, X, Y, or Z.

Performance Data BAI 315 D



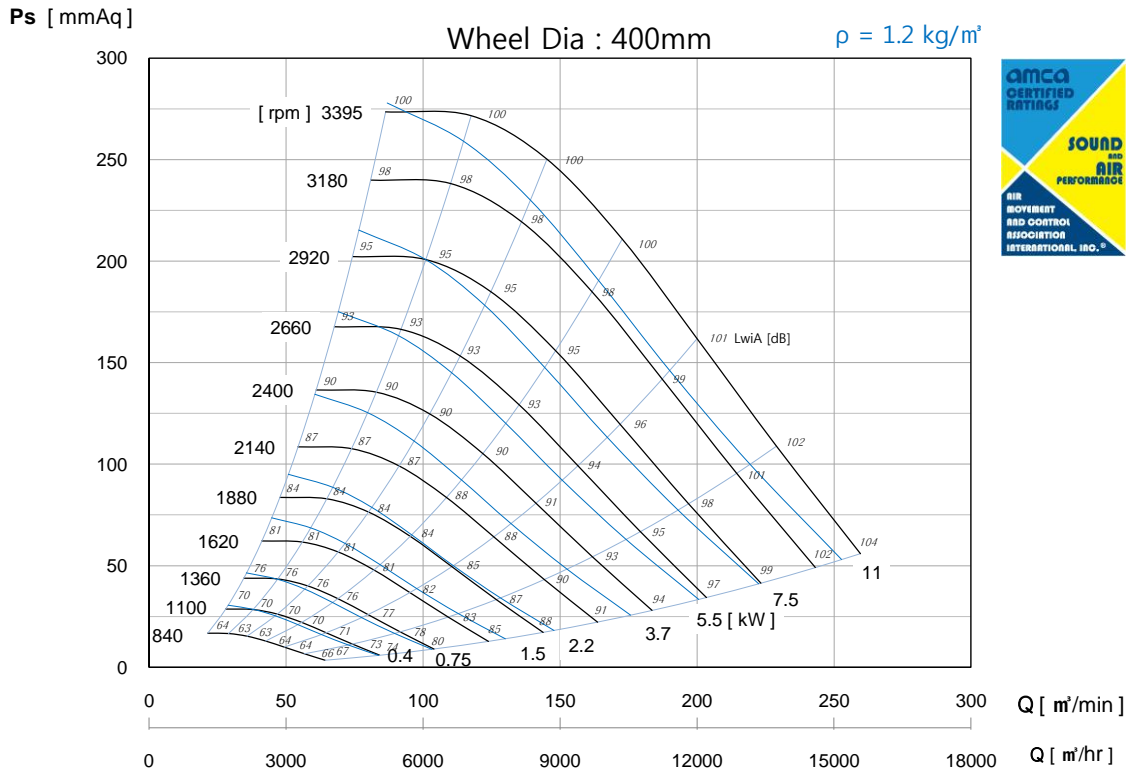
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values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

Performance Data BAI 355 D



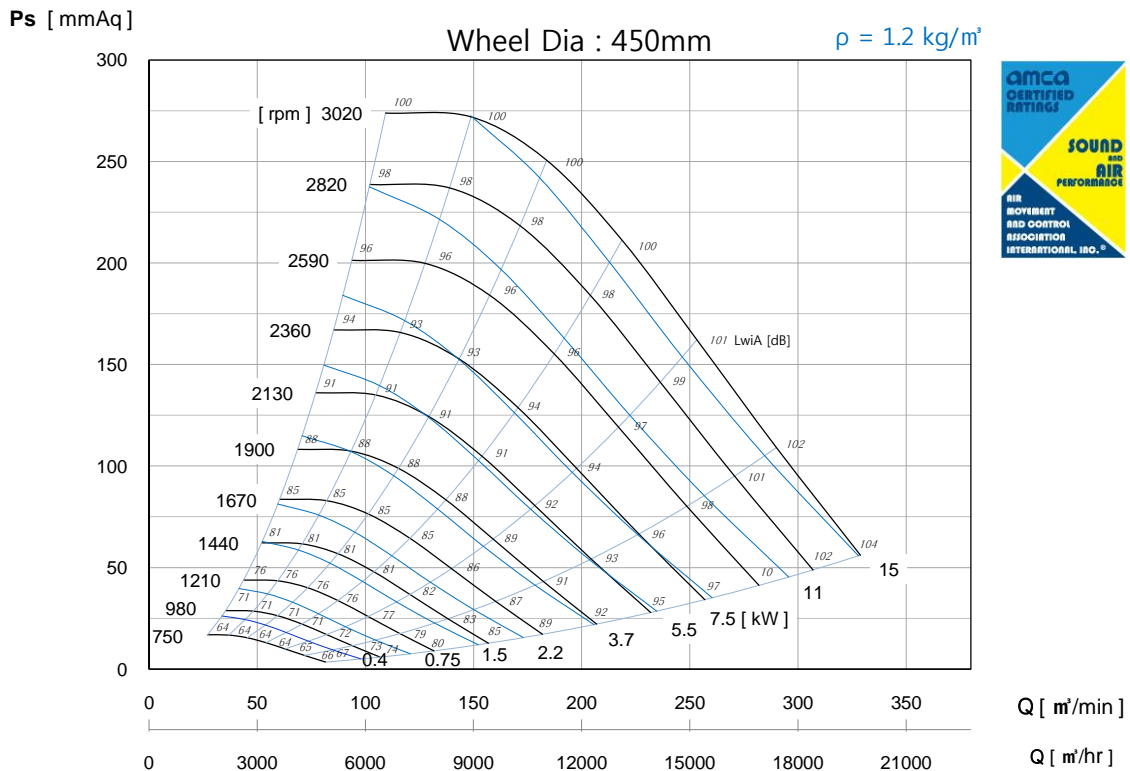
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values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

Performance Data BAI 400 D



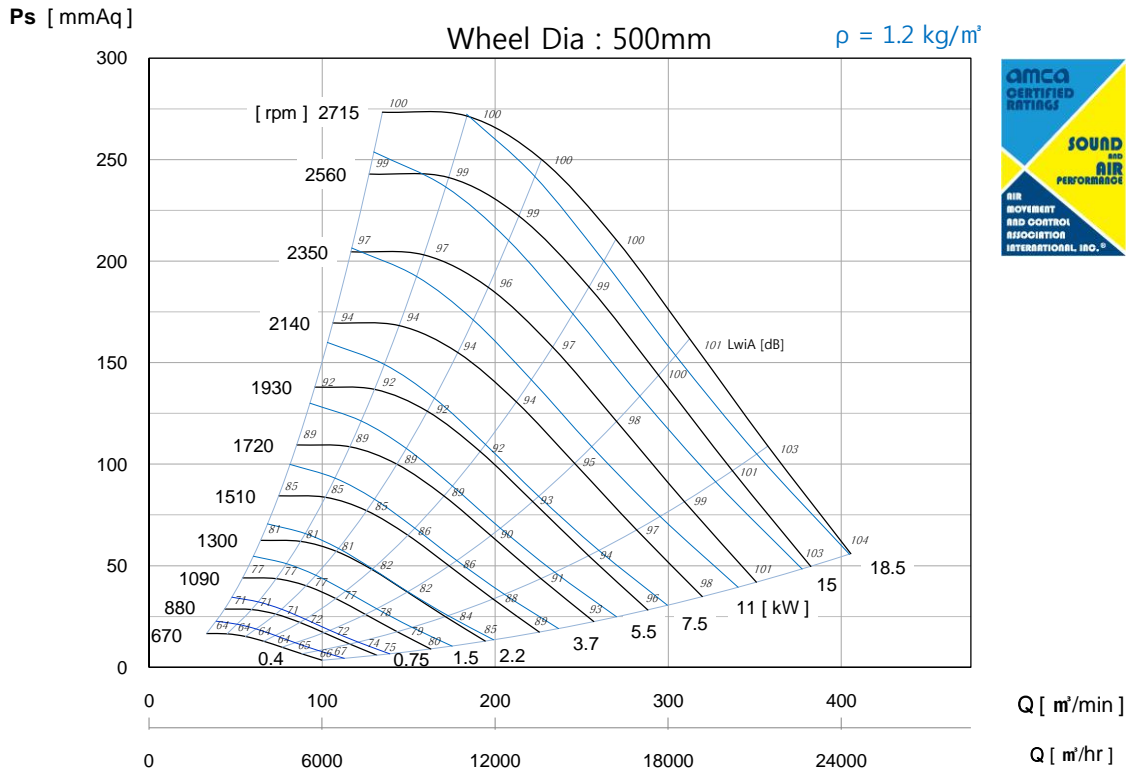
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values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

Performance Data BAI 450 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 LwIA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

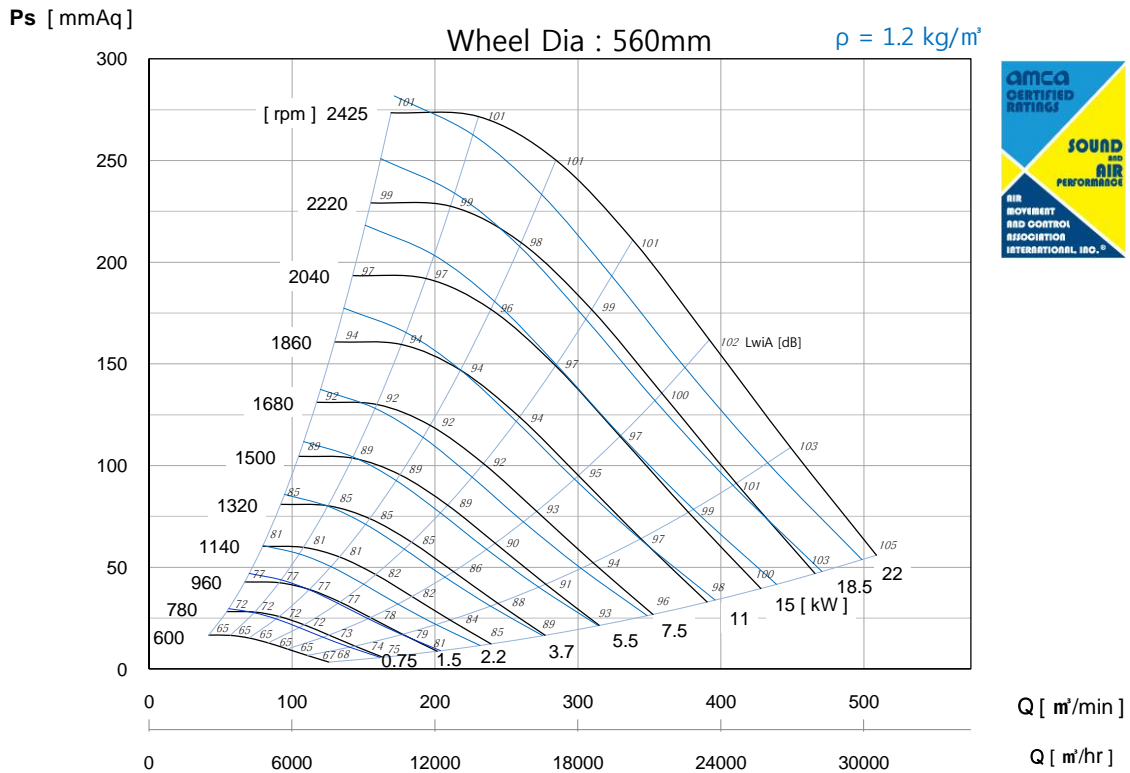
Performance Data BAI 500 D



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



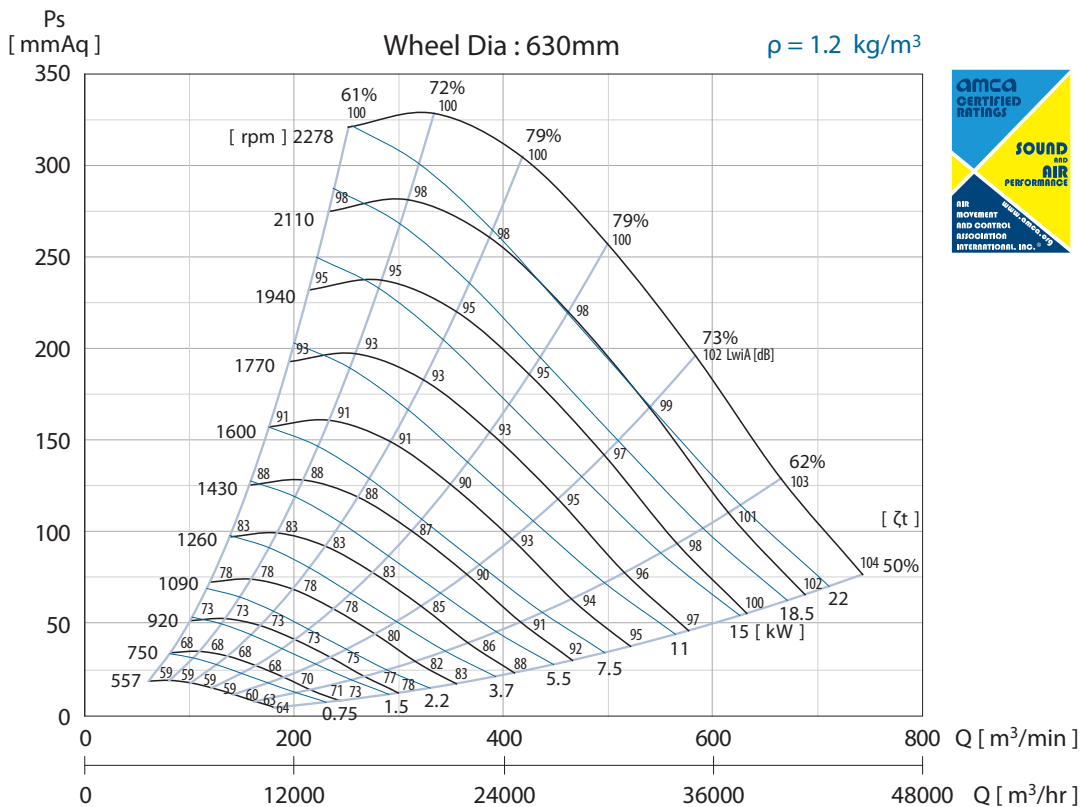
Performance Data BAI 560 D



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

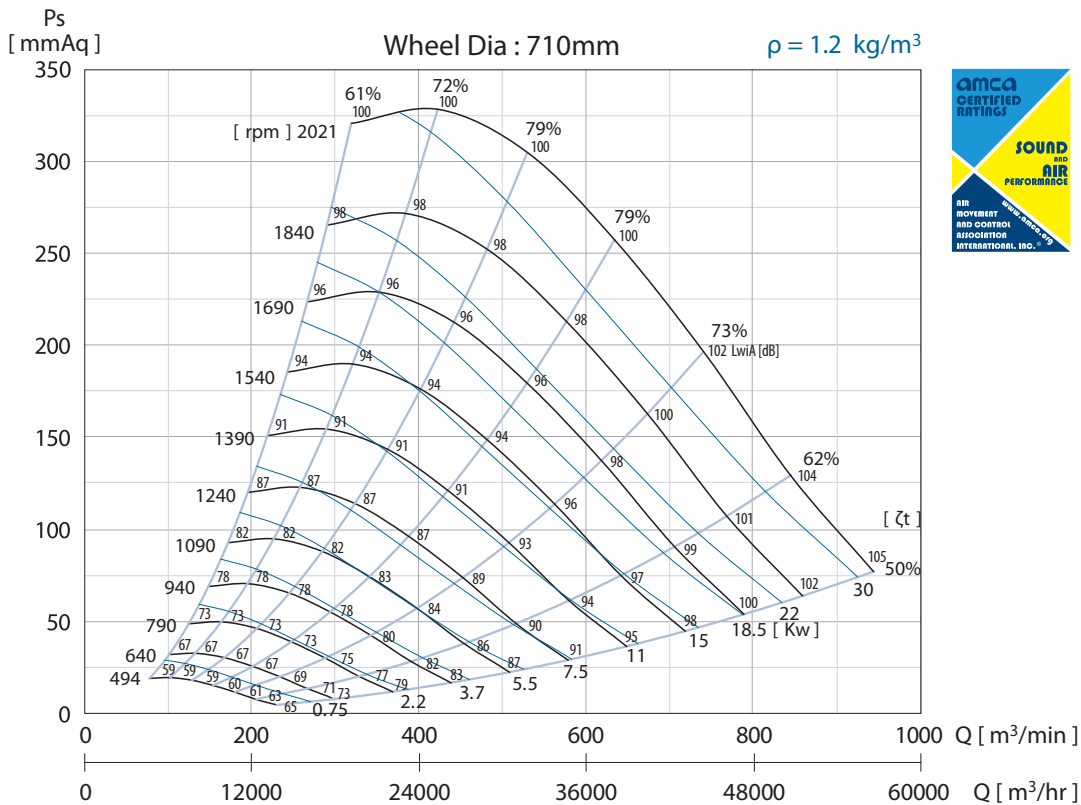


Performance Data **BAI 630 D**



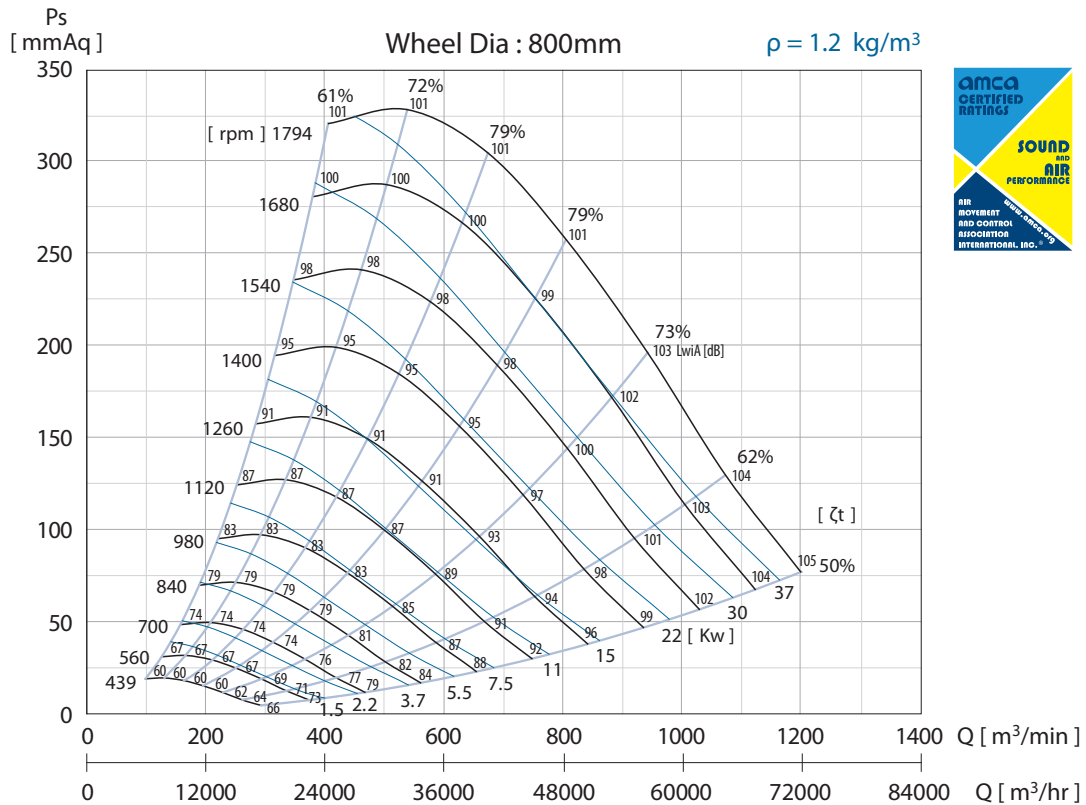
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 **BAI 710 D**



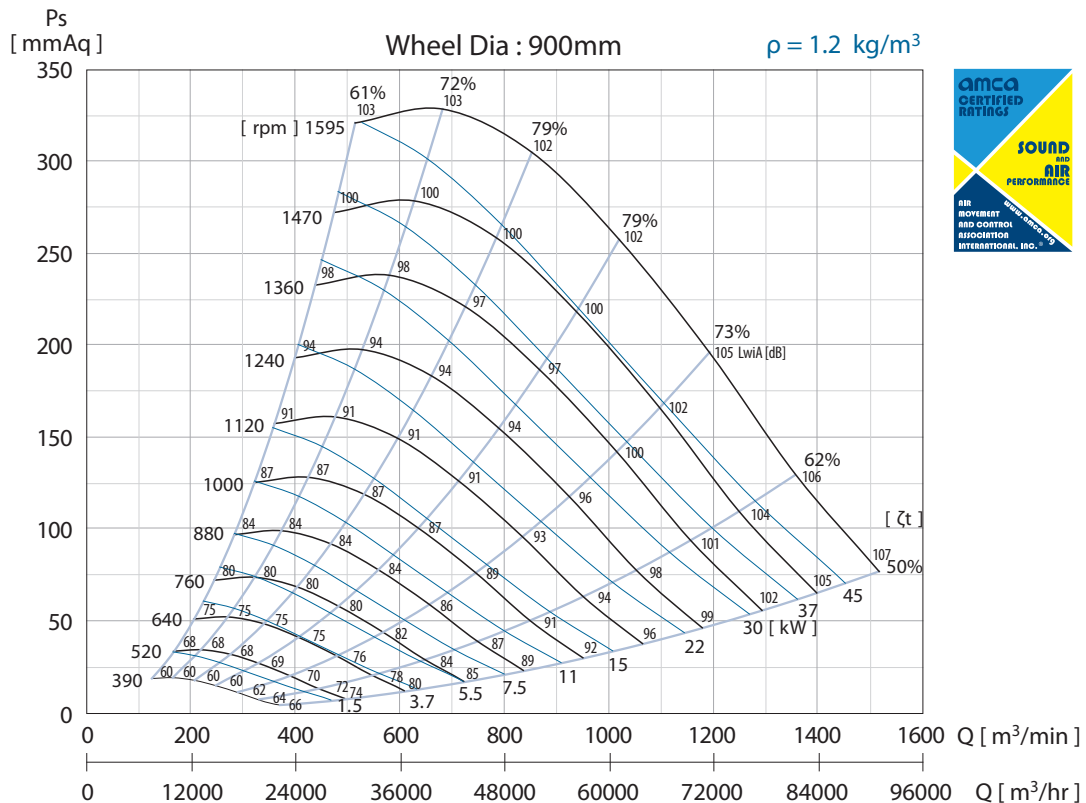
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 BAI 800 D



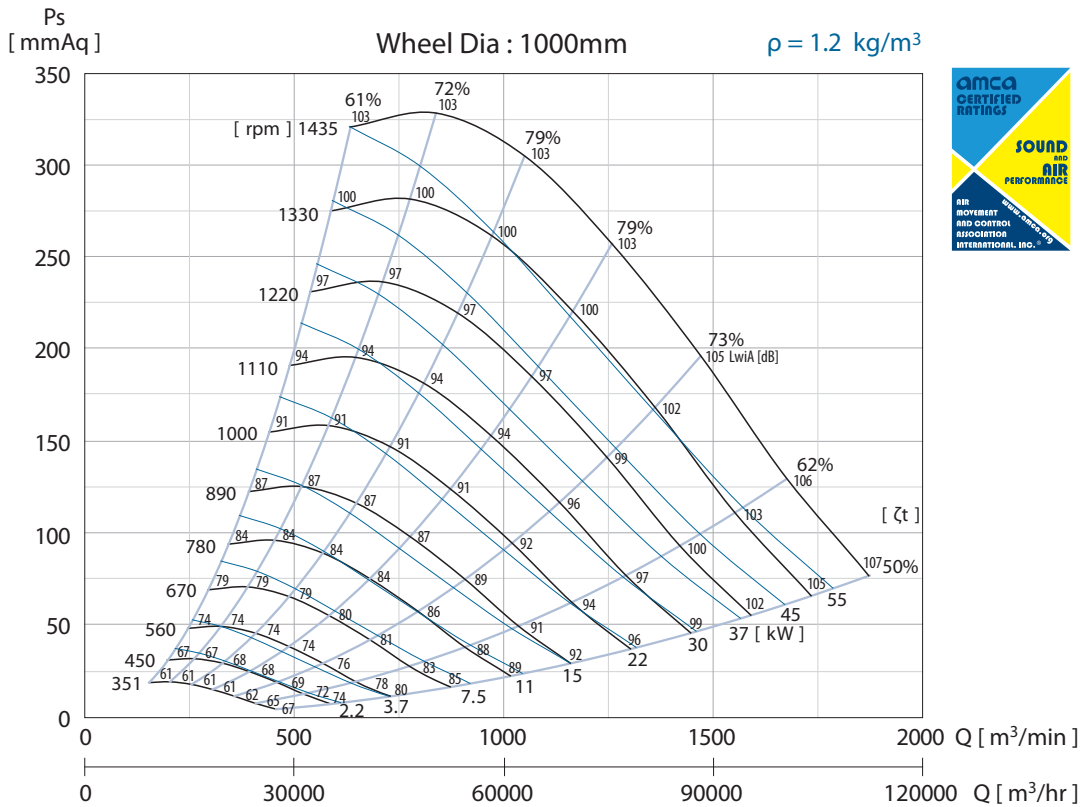
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 BAI 900 D



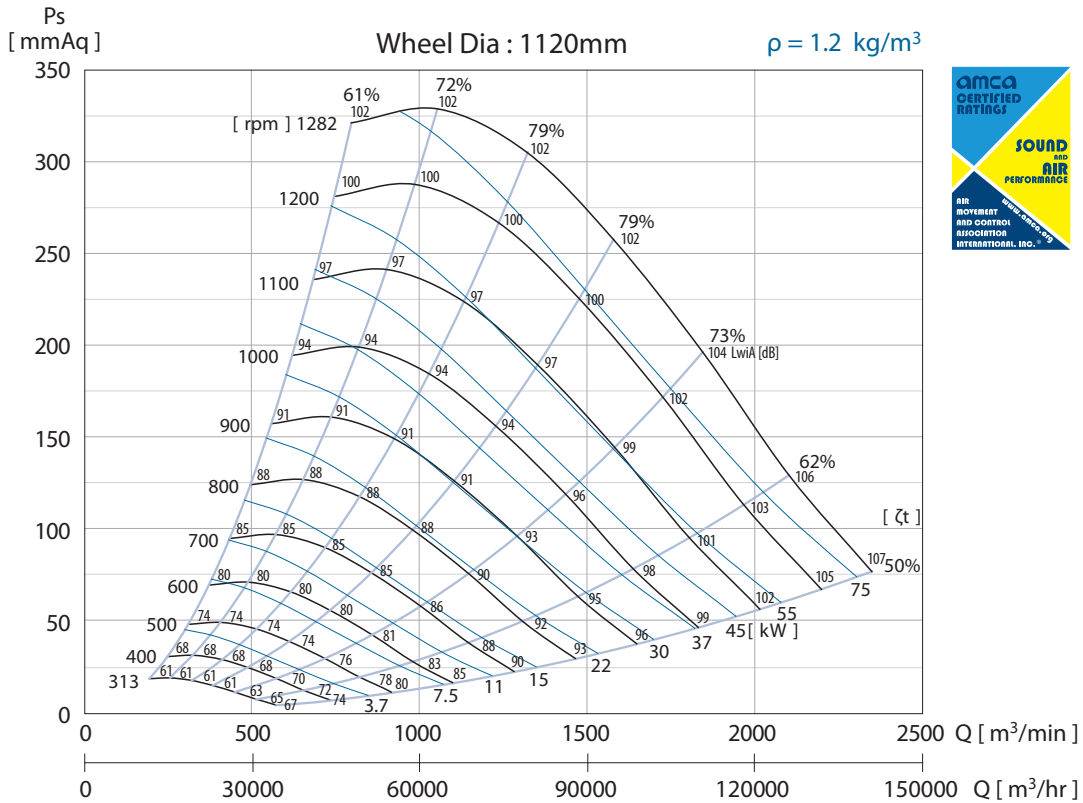
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 **BAI 1000 D**



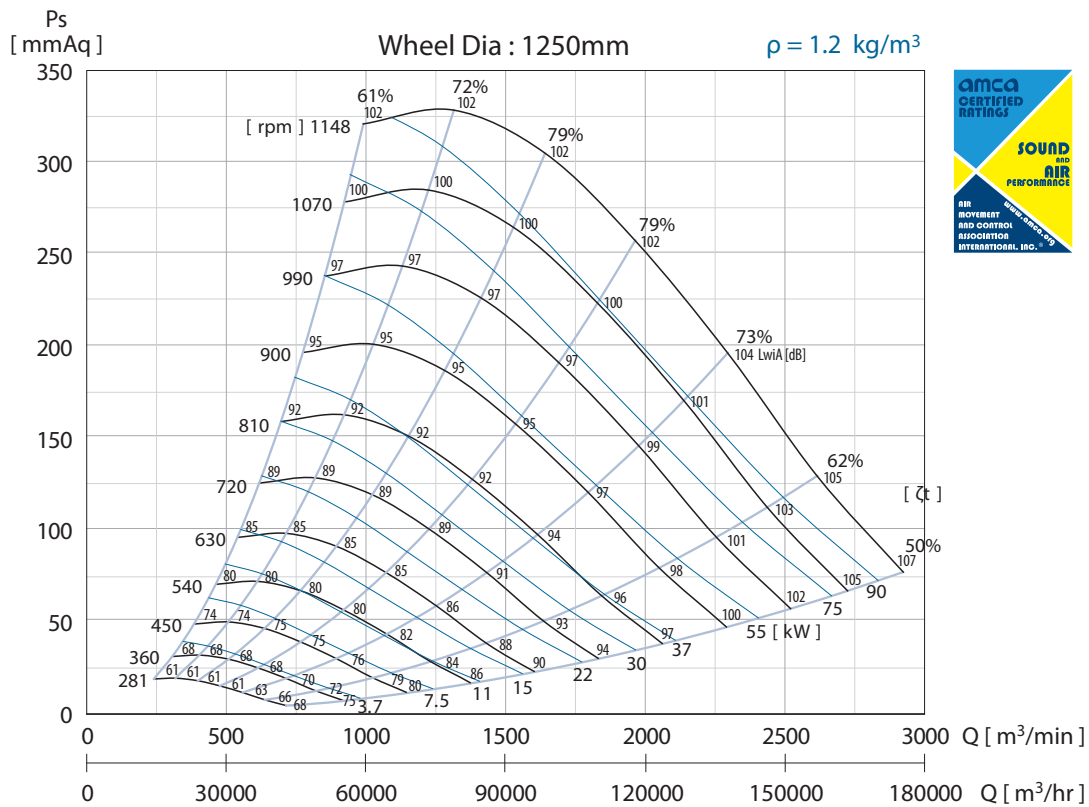
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 **BAI 1120 D**



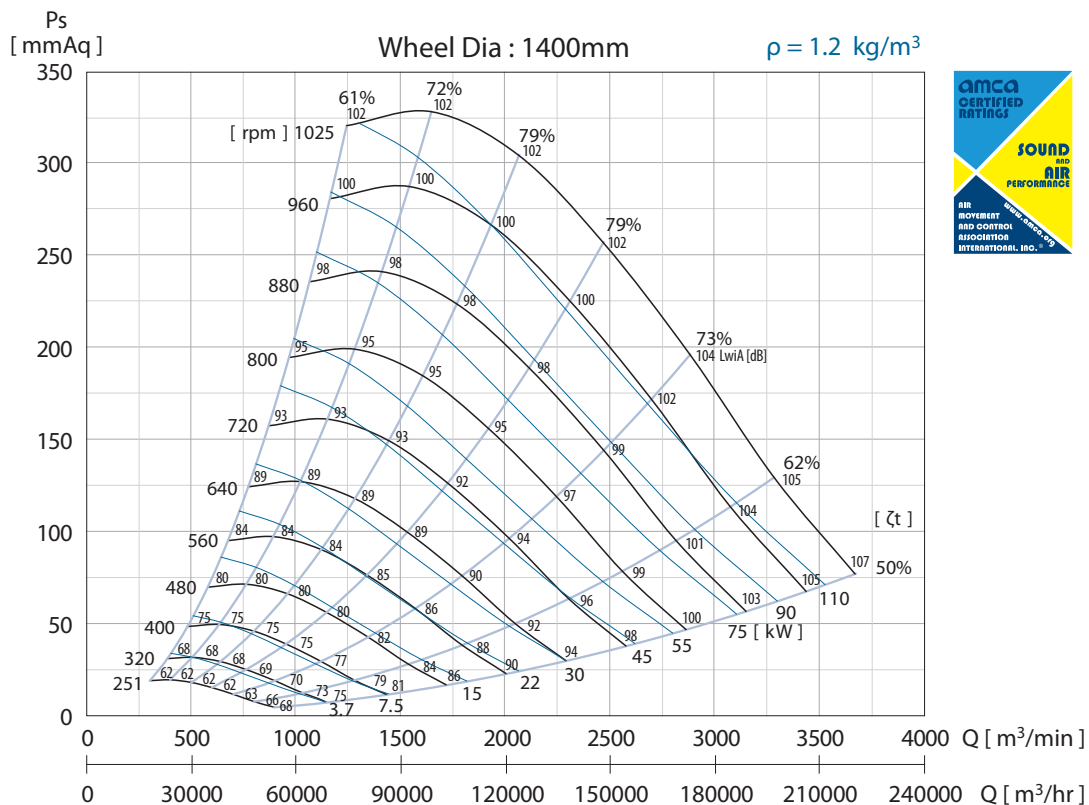
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 BAI 1250 D



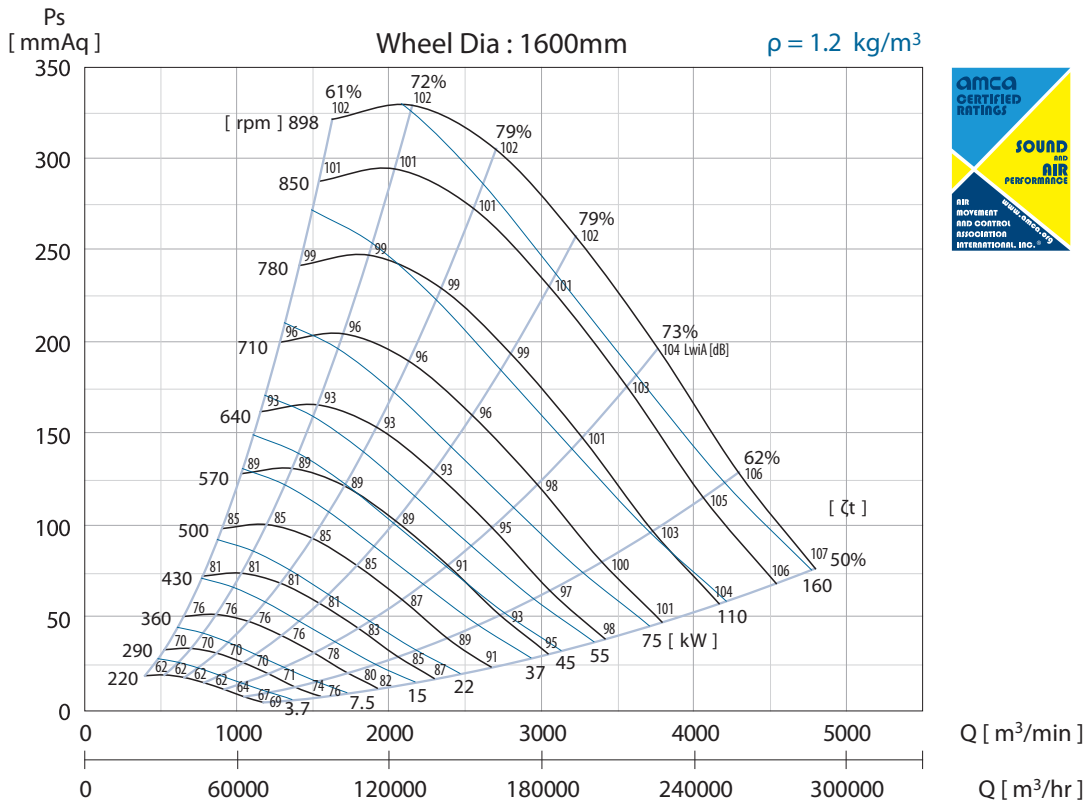
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 BAI 1400 D



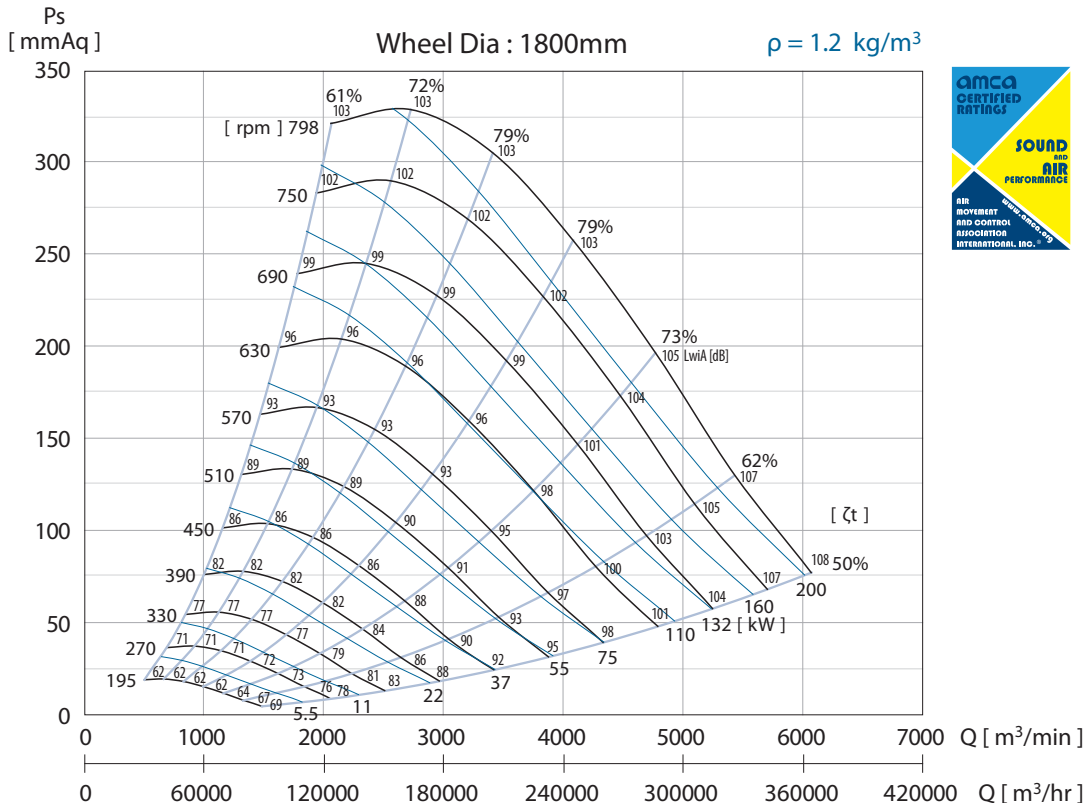
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 **BAI 1600 D**



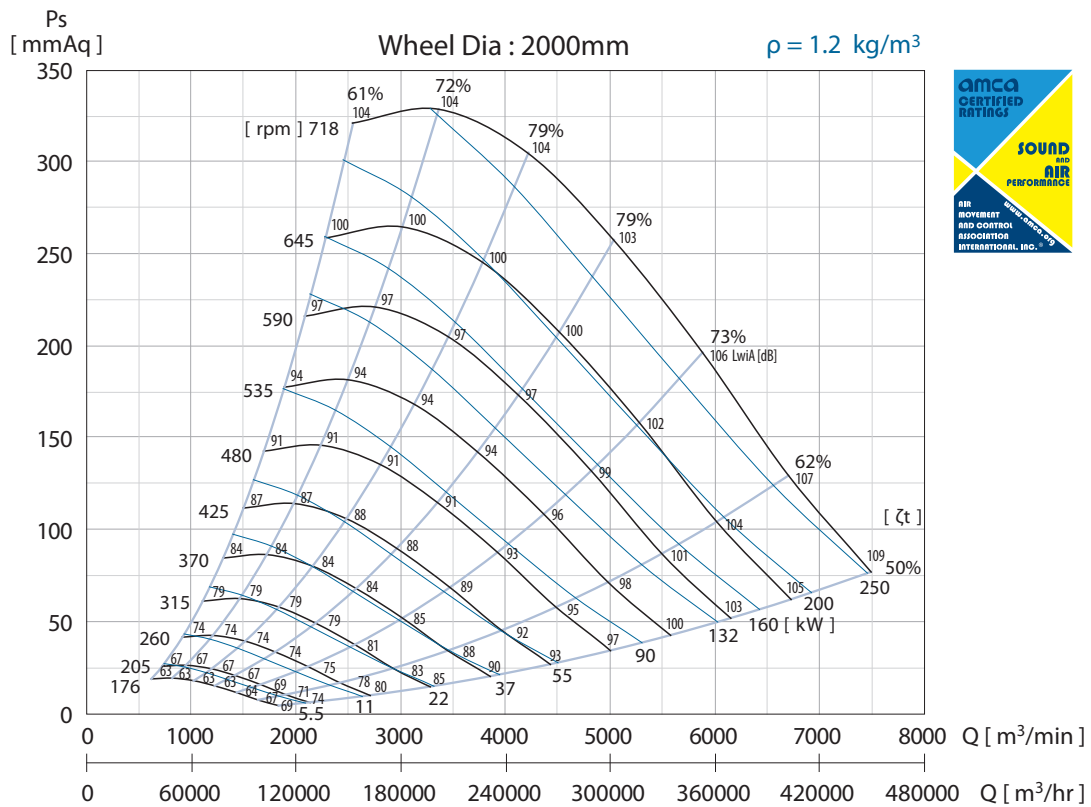
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 **BAI 1800 D**



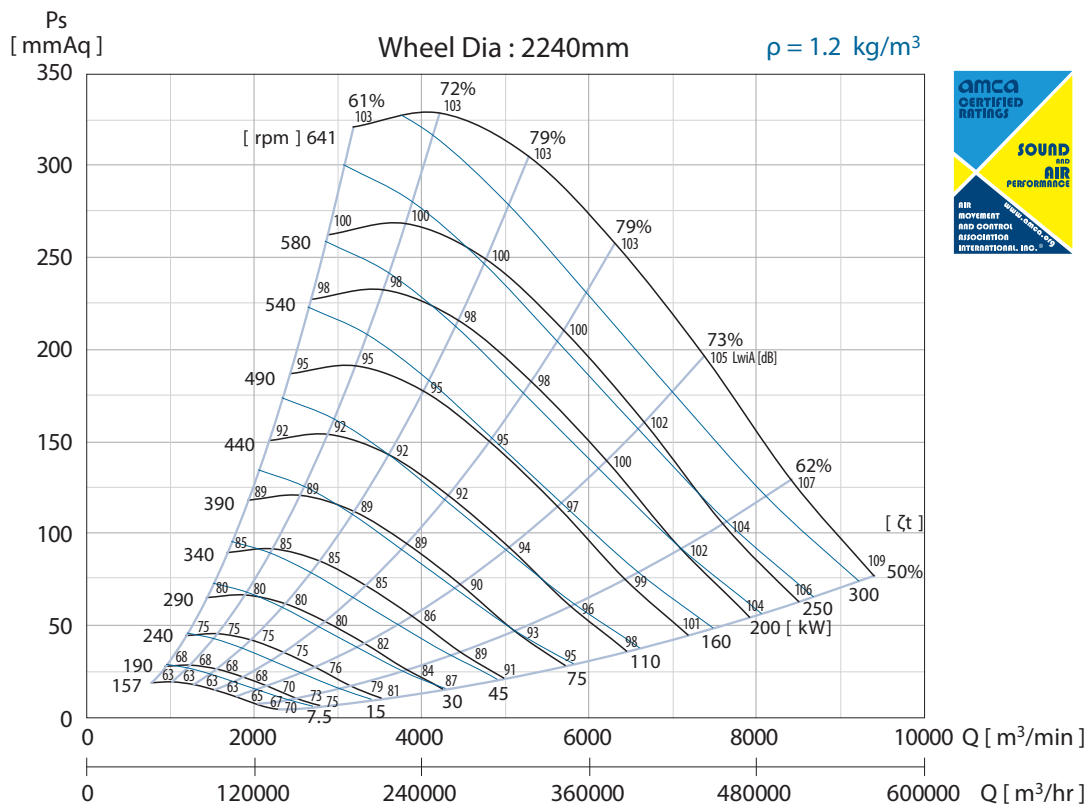
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances(accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 BAI 2000 D



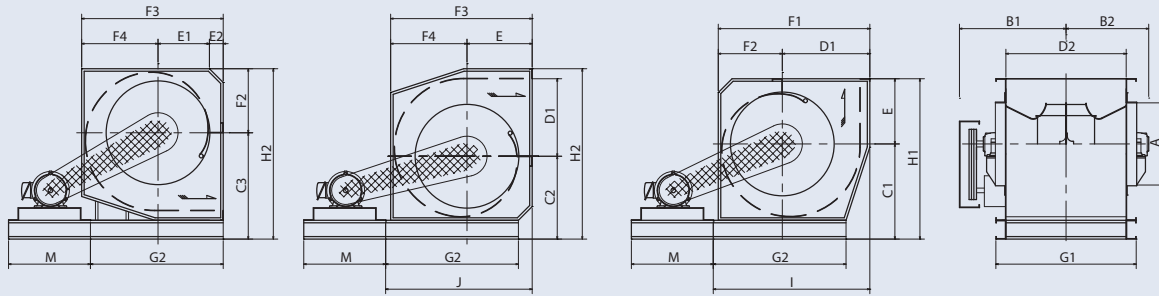
- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values 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 BAI 2240 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.

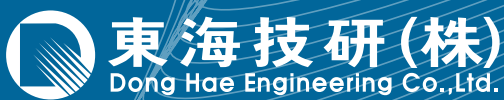
OVERALL DIMENSION - BAI "D" SERIES



Fan Model		BAI 315D	BAI 355D	BAI 400D	BAI 450D	BAI 500D	BAI 560D	BAI 630D	BAI 710D	BAI 800D
Inlet	A	330	370	420	470	520	580	650	730	830
Width	B1	411	442	486	544	587	633	696	777	858
	B2	336	367	411	449	492	538	601	662	743
Center Height	C1	380	418	460	508	552	612	675	749	832
	C2	331	362	398	439	480	526	577	643	709
	C3	424	463	507	556	605	664	733	812	901
Outlet	D1	309	348	392	441	490	549	618	697	786
	D2	480	541	610	686	762	853	960	1082	1219
Outlet Length	E	260	292	330	372	413	463	460	516	573
	E1	205	237	275	317	358	408	395	451	508
	E2	55	55	55	55	55	55	65	65	65
Side Length	F1	605	675	755	845	935	1040	1160	1305	1460
	F2	256	287	323	364	405	451	502	568	634
	F3	565	635	715	805	890	1000	1060	1190	1330
	F4	305	343	385	433	477	537	600	674	757
FAN Base (G2+M)	G1	560	621	690	766	842	933	1040	1162	1299
	G2	530	600	680	770	855	965	1015	1145	1285
	I	625	695	775	865	955	1060	1180	1325	1480
	J	585	655	735	825	910	1020	1080	1210	1350
Total Height	H1	640	710	790	880	965	1075	1135	1265	1405
	H2	680	750	830	920	1010	1115	1235	1380	1535

Fan Model		BAI 900D	BAI 1000D	BAI 1120D	BAI 1250D	BAI 1400D	BAI 1600D	BAI 1800D	BAI 2000D	BAI 2240D
Inlet	A	930	1040	1160	1300	1450	1660	1870	2070	2320
Width	B1	940	1023	1140	1241	1368	1550	1720	1887	2070
	B2	825	908	1005	1106	1233	1395	1565	1732	1915
Center Height	C1	924	1045	1155	1277	1445	1635	1843	2030	2260
	C2	786	893	990	1087	1235	1390	1575	1730	1915
	C3	1009	1132	1250	1378	1565	1760	1985	2180	2415
Outlet	D1	884	982	1100	1228	1375	1570	1770	1965	2200
	D2	1371	1524	1707	1905	2133	2438	2743	3048	3413
Outlet Length	E	646	715	800	913	1000	1145	1287	1430	1600
	E1	581	635	710	813	900	995	1137	1230	1400
	E2	65	80	90	100	100	150	150	200	200
Side Length	F1	1645	1825	2040	2265	2550	2900	3260	3610	4030
	F2	711	793	890	987	1110	1265	1425	1580	1765
	F3	1495	1660	1855	2090	2320	2655	2980	3310	3710
	F4	849	945	1055	1177	1320	1510	1693	1880	2110
FAN Base (G2+M)	G1	1471	1624	1807	2005	2263	2568	2873	3178	3543
	G2	1450	1600	1785	2010	2240	2525	2850	3130	3530
	I	1665	1845	2060	2285	2570	2920	3280	3630	4050
	J	1515	1680	1875	2110	2340	2675	3000	3330	3730
Total Height	H1	1570	1760	1955	2190	2445	2780	3130	3460	3860
	H2	1720	1925	2140	2365	2675	3025	3410	3760	4180

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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