

# ***KITURAMI-BUMYANG***

## ***K DESIGN BD-SERIES CENTRIFUGAL FAN***



# ***K DESIGN BD-SERIES***

DOUBLE INLET CENTRIFUGAL FAN with Backwardly Wheel

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■ 귀뚜라미 범양냉방 원심식 후향익 양흡입 송풍기

귀뚜라미 범양냉방의 풍부한 경험과 KNOW-HOW 바탕으로 BD-SERIES FAN은 귀뚜라미 범양냉방의 기술적 전통에서 이룩한 우수성과 신뢰성으로 제작된 제품입니다.

귀뚜라미 범양냉방에서 제작되는 K DESIGN BD-SERIES FAN은 축적된 기술력을 바탕으로 생산되는 제품으로 질적 우수성, 신뢰성, 성능 그리고 단납기에 신속한 대처가 가능한 제품입니다.

■ AMCA

□ AMCA 인증



본 카다로그에 있어서 K Design BD-Series 송풍기는 AMCA SEAL을사용하도록 라이선스 되었음을 보증합니다.

본 카다로그는 AMCA 211/311 절차에 의거하여 AMCA 보증평가 프로그램의 요구사항과 일치합니다.

Kiturami-Bumyang Corporation certifies that the K Design BD-Series fans shown herein are licensed to bear the AMCA Seal.

The ratings shown based on tests and procedures performed in accordance with AMCA Publication 211, AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

□ AMCA의 권위

- 1)AMCA성능 규정에 합격하면 그 제품은 AMCA가 보증하는 AMCA SEAL을 부착하여 판매할 수 있으며, 이 SEAL은 국제적으로 인정되는 유일한 것입니다.
- 2)AMCA의 표준은 곧바로 ASHRAE(미국냉난방공조협회)의 표준으로 되며, 이어서 ANSI 규격이 되어 ISO 규격으로 이어집니다.

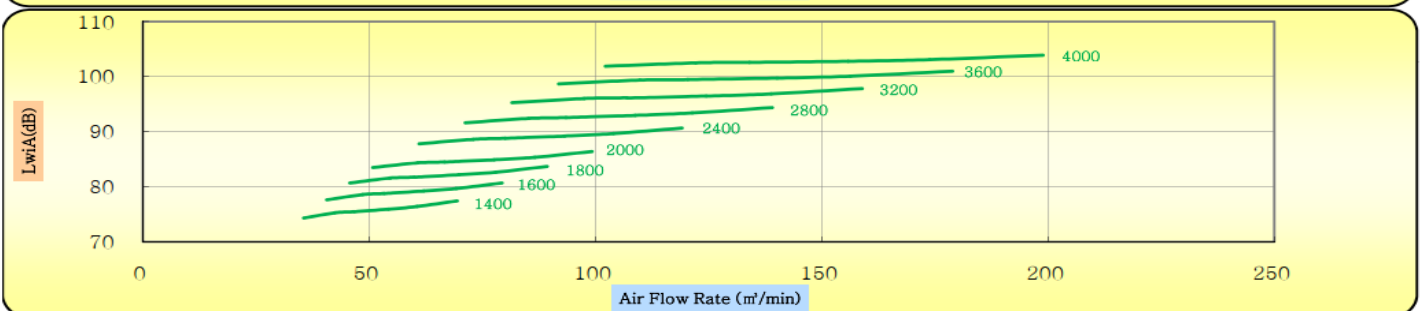
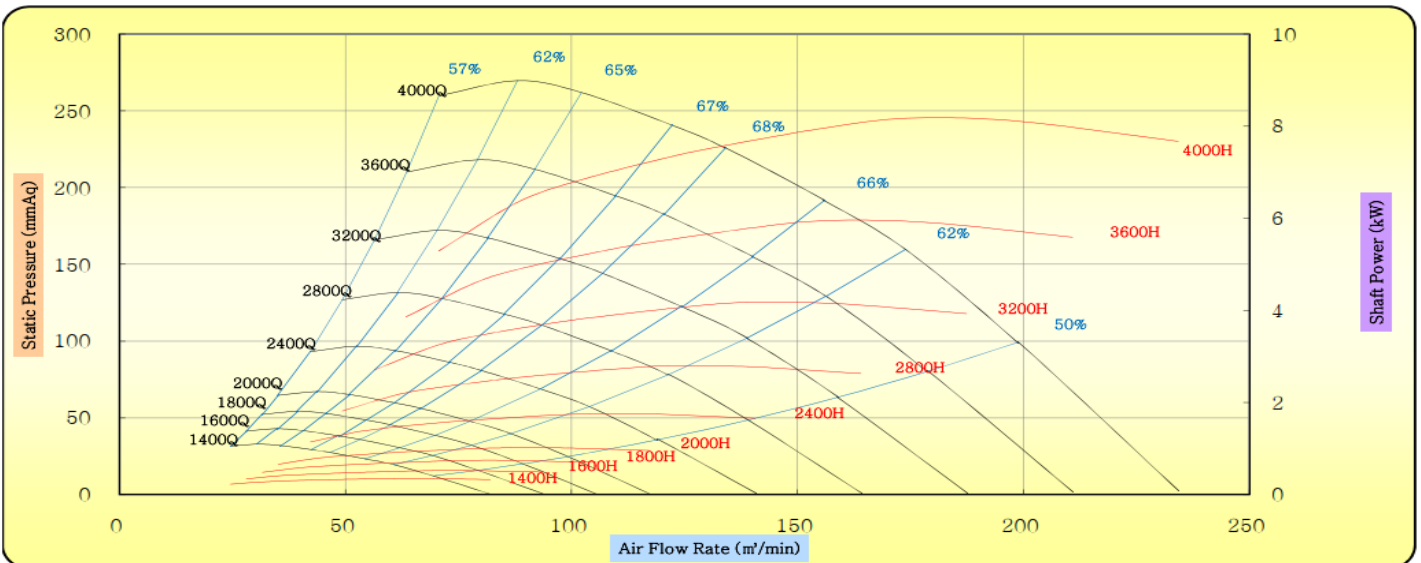
■ 고효율에너지기자재 인증



지식경제부(고효율에너지기자재 보급 촉진에 관한 규정)에 의하여 한국에너지공단에서 고효율 기자재로 인증받은 제품을 말하며 본 카다로그의 K Design BD-Series 송풍기는 원심식송풍기(후향익형/양흡입형/벨트구동식) 인증 취득하였습니다.

BD 032

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



OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
60	6.1			1571	0.483	1794	0.690	1996	0.915	2181	1.155	2352	1.400	2514	1.660
70	7.2	1454	0.395	1676	0.600	1889	0.834	2077	1.075	2253	1.330	2418	1.600	2572	1.890
80	8.2	1598	0.520	1798	0.750	1990	0.995	2172	1.260	2338	1.535	2492	1.820	2644	2.130
90	9.2	1746	0.674	1931	0.927	2101	1.190	2273	1.480	2433	1.775	2582	2.080	2722	2.395
100	10.2	1898	0.865	2069	1.138	2227	1.425	2380	1.725	2534	2.045	2679	2.375	2815	2.725
110	11.2	2053	1.085	2213	1.385	2361	1.695	2501	2.015	2639	2.345	2780	2.710	2912	3.070
120	12.3	2210	1.350	2360	1.675	2499	2.000	2631	2.345	2758	2.695	2885	3.060	3014	3.460
130	13.3	2368	1.655	2510	2.010	2641	2.355	2766	2.725	2885	3.100	3002	3.475	3119	3.868
140	14.3	2528	2.010	2662	2.380	2786	2.755	2905	3.148	3018	3.550	3128	3.940	3236	4.355
150	15.3	2689	2.420	2816	2.815	2934	3.210	3047	3.630	3155	4.035	3260	4.455	3362	4.895
160	16.4	2852	2.870	2972	3.300	3084	3.715	3192	4.145	3295	4.590	3395	5.040	3493	5.490
170	17.4	3014	3.385	3129	3.850	3237	4.300	3339	4.735	3438	5.210	3534	5.680	3627	6.150

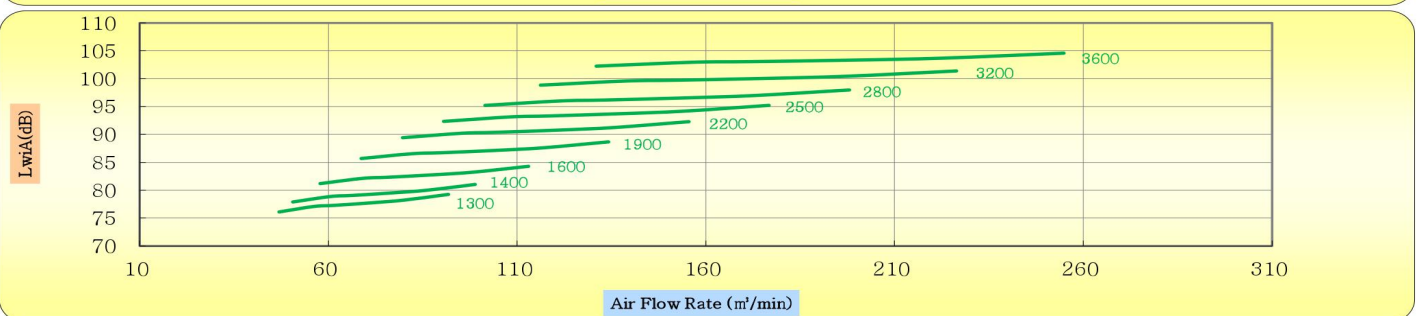
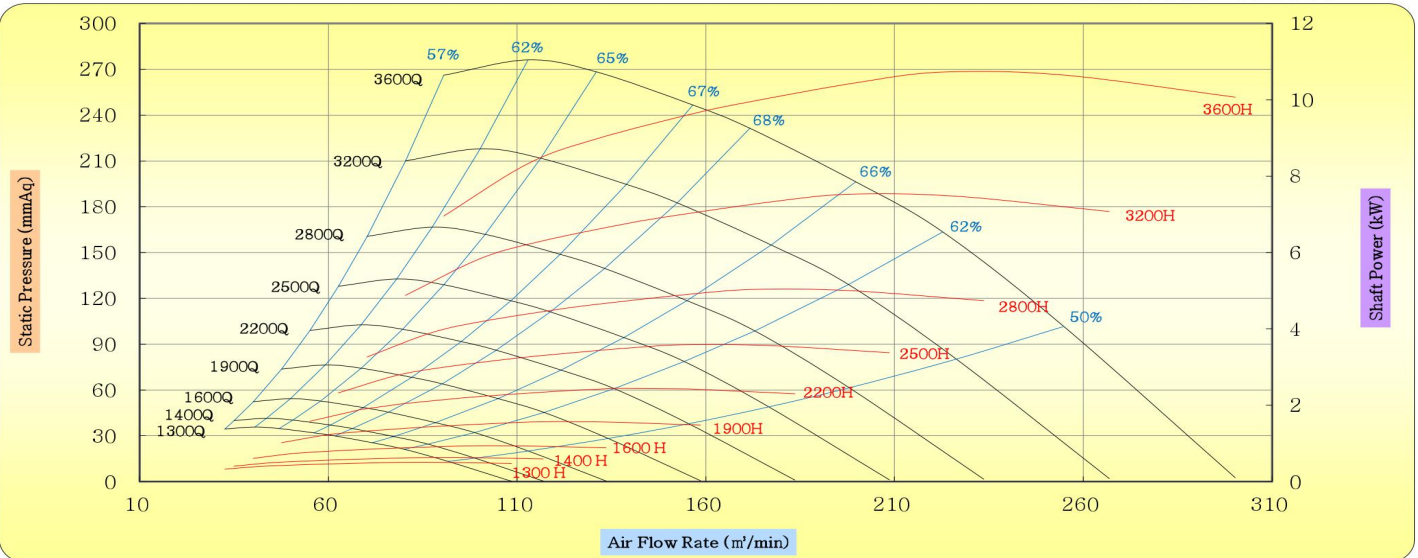
OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
60	6.1	2675	1.940												
70	7.2	2718	2.180	2859	2.480	2996	2.795	3134	3.109						
80	8.2	2785	2.440	2919	2.775	3048	3.095	3174	3.427	3295	3.775	3415	4.140	3535	4.507
90	9.2	2858	2.735	2990	3.067	3116	3.430	3237	3.795	3353	4.150	3466	4.528	3576	4.896
100	10.2	2943	3.055	3067	3.410	3189	3.780	3308	4.170	3422	4.565	3532	4.948	3638	5.350
110	11.2	3037	3.445	3157	3.800	3272	4.190	3384	4.590	3495	4.995	3603	5.410	3708	5.850
120	12.3	3136	3.845	3253	4.235	3365	4.655	3473	5.055	3578	5.480	3680	5.910	3781	6.333
130	13.3	3238	4.300	3353	4.710	3462	5.148	3568	5.580	3670	6.020	3769	6.460	3866	6.915
140	14.3	3345	4.780	3455	5.225	3564	5.700	3667	6.155	3767	6.615	3864	7.085	3958	7.555
150	15.3	3463	5.350	3564	5.795	3666	6.270	3769	6.750	3867	7.250	3962	7.735		
160	16.4	3588	5.950	3682	6.415	3777	6.910	3873	7.400	3969	7.920				
170	17.4	3719	6.620	3808	7.115	3897	7.610	3985	8.120						

- The color of the displayed chart is divided by class I, II (Class I Class II)
- Performance shown is for installation type-B(Free inlet, Ducted out let)
- Performance ratings do not include the effects of appurtenances(accessories)
- Power rating kW does not include transmission losses.
- Values shown are for inlet LwA(dB) sound power levels for installation type B - free inlet, ducted outlet, Ratings are not include the effect of duct end corrections.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.



BD 036

Outlet Area : 0.205 m<sup>2</sup>



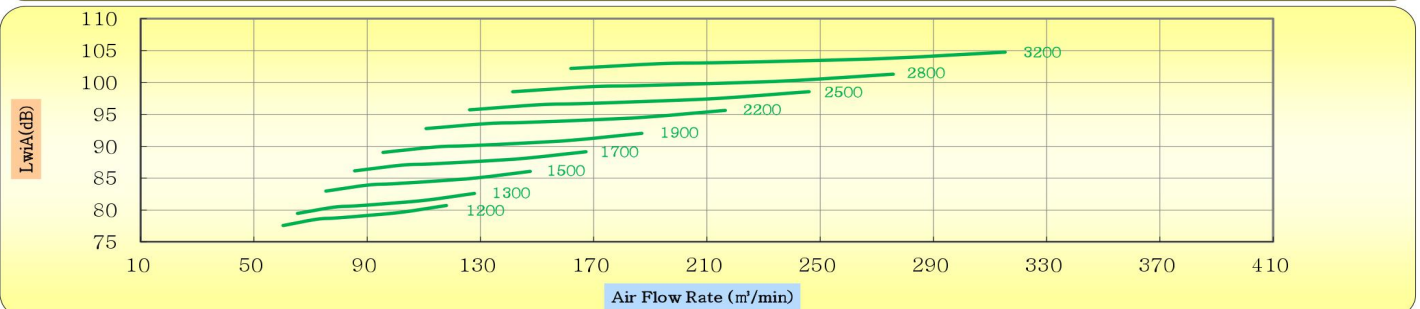
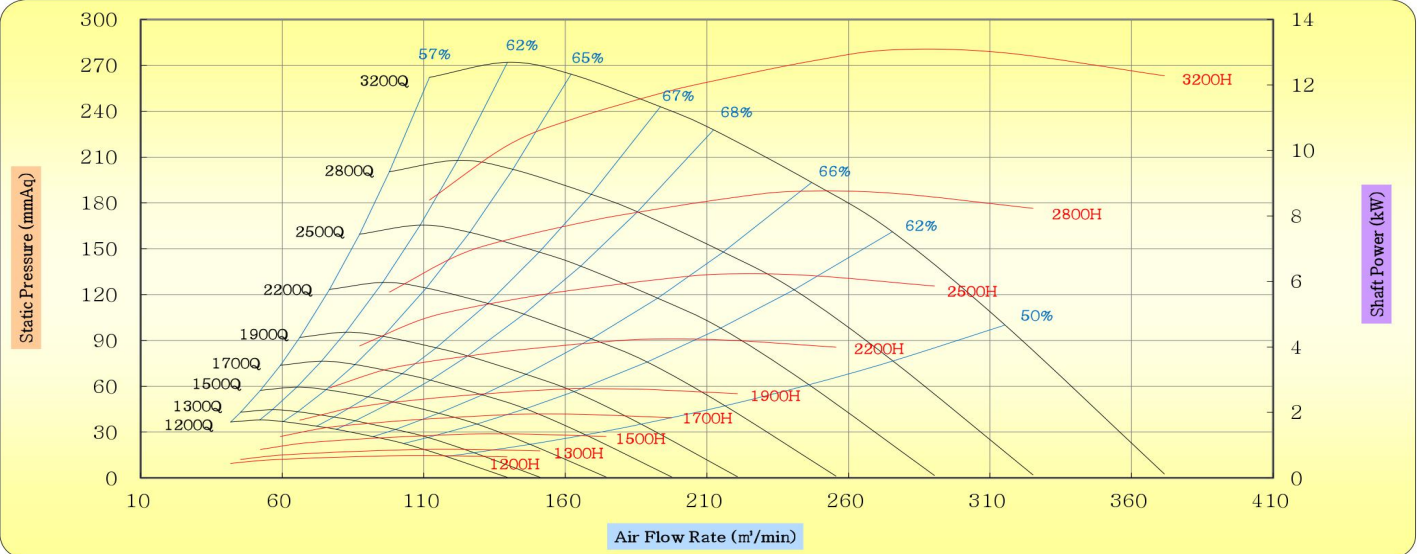
OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
80	6.5			1426	0.658	1621	0.927	1796	1.218	1959	1.533	2109	1.858	2250	2.200
90	7.3	1307	0.518	1501	0.780	1689	1.075	1856	1.385	2010	1.715	2157	2.064	2294	2.420
100	8.1	1408	0.643	1587	0.929	1761	1.242	1923	1.576	2070	1.917	2209	2.282	2344	2.670
110	8.9	1511	0.790	1680	1.102	1836	1.430	1993	1.785	2137	2.155	2270	2.528	2397	2.930
120	9.8	1617	0.967	1775	1.297	1921	1.645	2065	2.017	2206	2.415	2337	2.817	2459	3.230
130	10.6	1725	1.170	1874	1.526	2012	1.900	2144	2.280	2278	2.700	2406	3.165	2526	3.560
140	11.4	1834	1.400	1975	1.777	2106	2.170	2231	2.580	2353	2.995	2477	3.455	2595	3.910
150	12.2	1944	1.663	2078	2.064	2203	2.480	2321	2.905	2436	3.348	2551	3.810	2666	4.300
160	13.0	2055	1.955	2183	2.380	2302	2.820	2415	3.268	2524	3.735	2631	4.215	2739	4.710
170	13.8	2166	2.285	2289	2.740	2403	3.200	2512	3.685	2616	4.160	2717	4.650	2817	5.170
180	14.6	2279	2.660	2397	3.142	2506	3.620	2610	4.115	2710	4.620	2807	5.140	2892	5.620
190	15.4	2392	3.070	2505	3.574	2610	4.080	2710	4.600	2807	5.135	2900	5.670	2991	6.220

OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
80	6.5	2386	2.545	2522	2.920										
90	7.3	2423	2.800	2548	3.175	2668	3.570	2788	3.990						
100	8.1	2470	3.060	2590	3.470	2705	3.880	2817	4.310	2926	4.740	3033	5.190	3142	5.650
110	8.9	2521	3.345	2639	3.775	2751	4.210	2859	4.660	2964	5.120	3066	5.580	3165	6.040
120	9.8	2576	3.650	2690	4.095	2802	4.560	2908	5.030	3010	5.510	3109	6.000	3205	6.480
130	10.6	2639	4.000	2748	4.445	2854	4.925	2959	5.430	3060	5.930	3157	6.440	3251	6.940
140	11.4	2706	4.380	2813	4.860	2915	5.350	3014	5.840	3111	6.350	3208	6.900	3301	7.440
150	12.2	2775	4.800	2880	5.290	2980	5.795	3076	6.320	3170	6.845	3261	7.375	3352	7.940
160	13.0	2847	5.230	2949	5.765	3047	6.290	3142	6.840	3234	7.380	3323	7.935	3409	8.480
170	13.8	2919	5.695	3021	6.250	3117	6.810	3210	7.370	3300	7.935	3388	8.525	3472	9.100
180	14.6	2996	6.210	3093	6.780	3189	7.365	3280	7.950	3369	8.550	3455	9.145	3538	9.740
190	15.4	3079	6.760	3170	7.350	3261	7.950	3352	8.560	3439	9.195	3524	9.800		

- The color of the displayed chart is divided by class I, II ( Class I Class II )
- Performance shown is for installation type-B(Free inlet, Ducted out let)
- Performance ratings do not include the effects of appurtenances(accessories)
- Power rating kW does not include transmission losses.
- Values shown are for inlet LwA(dB) sound power levels for installation type B - free inlet, ducted outlet, Ratings are not include the effect of duct end corrections.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.

BD 040

Outlet Area : 0.256 m<sup>2</sup>



OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
115	7.5			1361	1.010	1527	1.385	1676	1.773	1812	2.190	1943	2.635	2065	3.090
130	8.5	1300	0.877	1456	1.245	1605	1.645	1749	2.075	1880	2.520	2001	2.975	2119	3.460
145	9.4	1413	1.124	1558	1.523	1692	1.950	1826	2.410	1953	2.890	2071	3.380	2182	3.895
160	10.4	1528	1.412	1664	1.853	1788	2.308	1908	2.785	2030	3.302	2145	3.835	2252	4.365
175	11.4	1646	1.757	1772	2.230	1890	2.725	2001	3.235	2110	3.755	2221	4.330	2327	4.900
190	12.4	1764	2.150	1884	2.672	1994	3.190	2099	3.735	2200	4.290	2301	4.870	2404	5.495
205	13.3	1884	2.613	1997	3.165	2102	3.725	2201	4.300	2297	4.890	2390	5.490	2484	6.110
220	14.3	2005	3.145	2112	3.730	2212	4.330	2306	4.925	2397	5.560	2485	6.190	2572	6.850
235	15.3	2127	3.740	2228	4.375	2323	4.990	2414	5.640	2501	6.300	2585	6.975	2667	7.645
250	16.3	2249	4.410	2346	5.080	2437	5.755	2523	6.420	2606	7.105	2687	7.820	2765	8.535
265	17.3	2372	5.165	2465	5.880	2552	6.585	2634	7.300	2714	8.020	2791	8.750	2866	9.485
280	18.2	2496	6.010	2585	6.760	2668	7.505	2747	8.245	2824	8.986	2898	9.795	2968	10.520

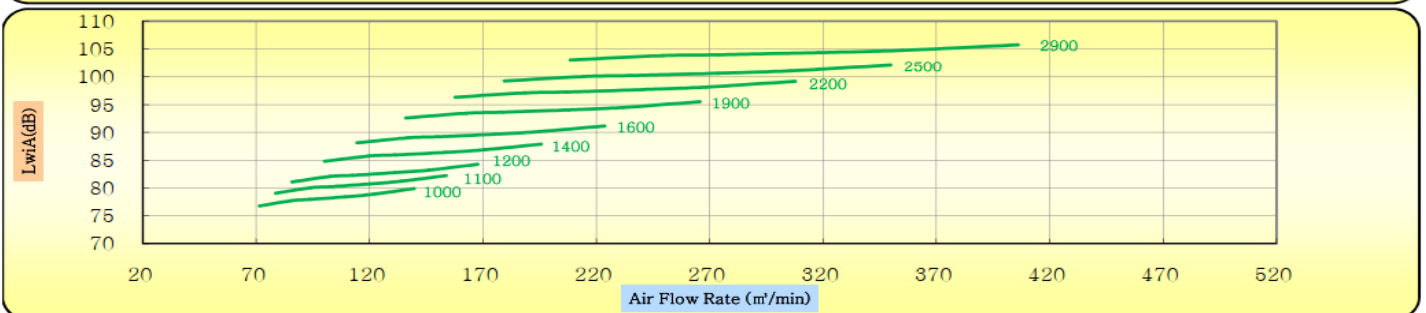
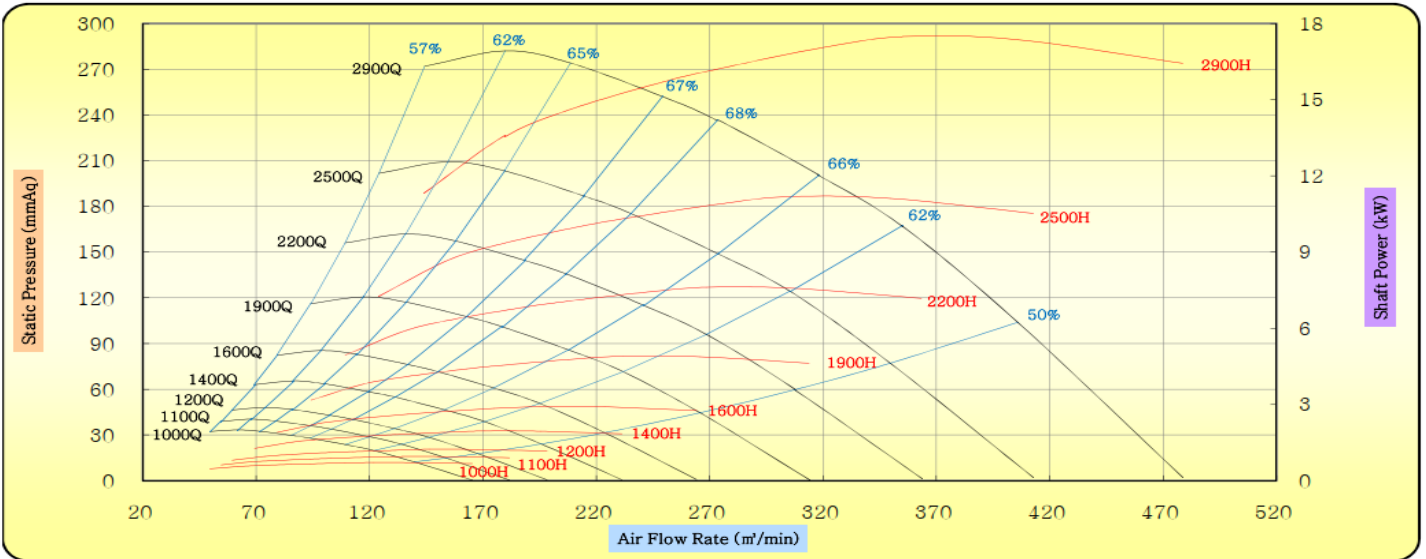
OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
115	7.5	2180	3.560	2290	4.040	2396	4.535	2501	5.050	2607	5.590				
130	8.5	2232	3.970	2339	4.480	2440	5.010	2539	5.560	2635	6.105	2727	6.680	2820	7.240
145	9.4	2288	4.405	2393	4.950	2493	5.530	2589	6.110	2681	6.680	2770	7.280	2857	7.880
160	10.4	2355	4.920	2452	5.470	2548	6.080	2643	6.715	2734	7.300	2821	7.935	2905	8.560
175	11.4	2426	5.480	2521	6.075	2613	6.660	2702	7.315	2789	7.950	2876	8.625	2959	9.295
190	12.4	2501	6.105	2594	6.720	2684	7.370	2769	8.020	2853	8.680	2934	9.355	3015	10.055
205	13.3	2579	6.770	2670	7.450	2757	8.130	2842	8.820	2923	9.510	3002	10.210	3079	10.920
220	14.3	2659	7.500	2747	8.200	2834	8.920	2916	9.670	2996	10.380	3073	11.130	3148	11.860
235	15.3	2747	8.330	2829	9.050	2911	9.785	2993	10.570	3071	11.320	3147	12.100		
250	16.3	2842	9.250	2918	9.990	2994	10.745	3071	11.530	3149	12.340				
265	17.3	2940	10.250	3012	10.995	3083	11.780	3155	12.595						
280	18.2	3041	11.320	3110	12.130	3178	12.925								

- The color of the displayed chart is divided by class I, II (Class I Class II)
- Performance shown is for installation type-B(Free inlet, Ducted out let)
- Performance ratings do not include the effects of appurtenances(accessories)
- Power rating kW does not include transmission losses.
- Values shown are for inlet LwA(dB) sound power levels for installation type B - free inlet, ducted outlet, Ratings are not include the effect of duct end corrections.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.



BD 045

Outlet Area : 0.323 m<sup>2</sup>



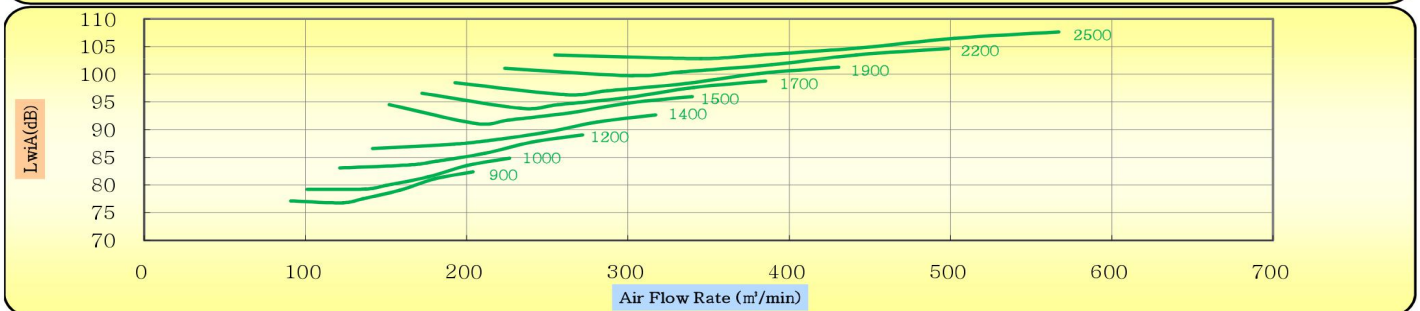
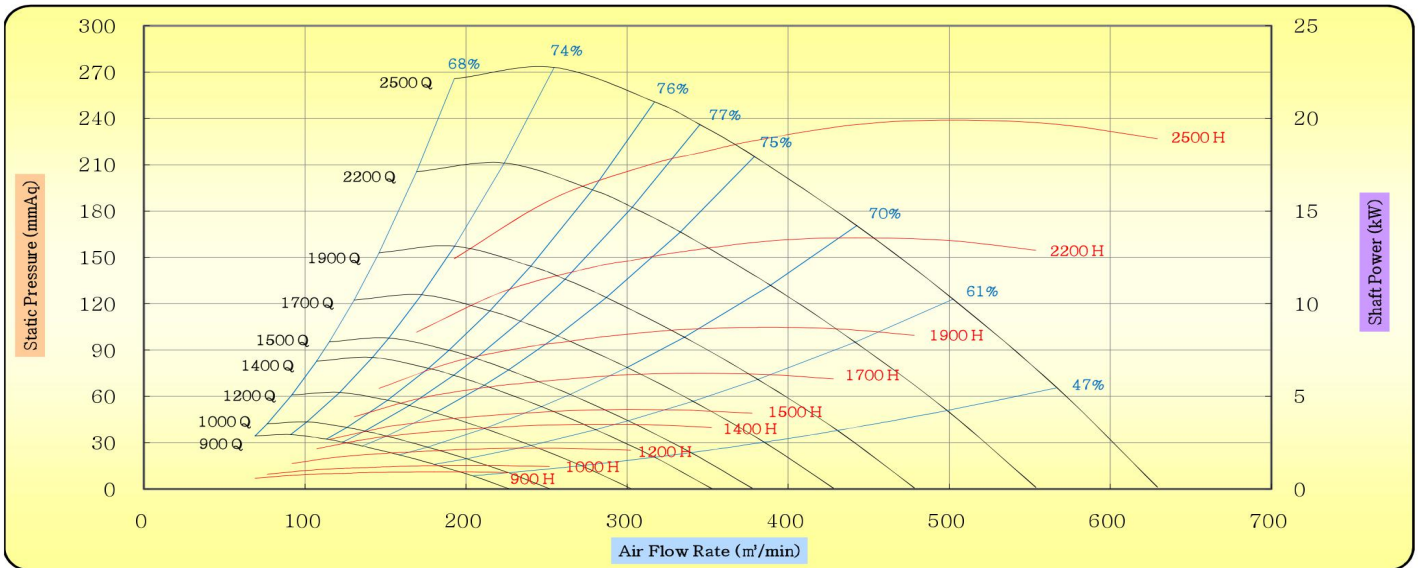
OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
125	6.4			1133	1.028	1289	1.450	1429	1.910	1559	2.400	1678	2.910	1792	3.450
150	7.7	1082	0.915	1231	1.350	1376	1.835	1507	2.340	1626	2.860	1741	3.430	1849	4.020
175	9.0	1213	1.278	1346	1.765	1470	2.285	1595	2.860	1709	3.445	1815	4.050	1915	4.660
200	10.3	1347	1.737	1469	2.295	1581	2.865	1689	3.470	1798	4.110	1900	4.775	1997	5.455
225	11.6	1485	2.315	1596	2.920	1699	3.550	1797	4.210	1893	4.890	1990	5.610	2084	6.350
250	12.9	1624	3.015	1728	3.685	1823	4.375	1914	5.080	2002	5.820	2087	6.550	2175	7.350
275	14.2	1766	3.860	1862	4.590	1951	5.330	2036	6.110	2118	6.890	2197	7.690	2275	8.500
300	15.5	1908	4.850	1998	5.660	2082	6.460	2162	7.280	2239	8.110	2313	8.970	2386	9.835
325	16.8	2052	6.010	2137	6.880	2216	7.740	2291	8.620	2364	9.540	2434	10.430	2502	11.350
350	18.1	2197	7.360	2276	8.290	2351	9.230	2423	10.170	2491	11.100	2558	12.080	2623	13.040
375	19.3	2342	8.880	2418	9.910	2488	10.890	2556	11.890	2621	12.880	2685	13.910	2747	14.950
400	20.6	2489	10.650	2560	11.710	2627	12.780	2692	13.860	2754	14.920	2814	15.980	2873	17.070

OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
125	6.4	1900	4.000	2010	4.570										
150	7.7	1950	4.625	2047	5.250	2141	5.880	2231	6.530	2322	7.210				
175	9.0	2014	5.335	2108	6.020	2197	6.710	2283	7.415	2366	8.130	2447	8.825	2526	9.630
200	10.3	2088	6.140	2175	6.860	2262	7.590	2346	8.360	2427	9.140	2504	9.892	2580	10.730
225	11.6	2172	7.090	2256	7.855	2337	8.630	2415	9.445	2492	10.240	2568	11.031	2643	11.950
250	12.9	2261	8.160	2343	8.970	2421	9.840	2497	10.650	2570	11.525	2641	12.350	2711	13.275
275	14.2	2353	9.340	2433	10.230	2510	11.130	2584	12.020	2655	12.940	2724	13.813	2791	14.790
300	15.5	2457	10.740	2528	11.600	2601	12.580	2674	13.560	2743	14.515	2811	15.440	2876	16.520
325	16.8	2569	12.290	2635	13.240	2701	14.210	2767	15.180	2834	16.230	2898	17.170		
350	18.1	2686	14.050	2749	15.080	2810	16.070	2870	17.080						
375	19.3	2807	15.975	2866	17.090										
400	20.6														

- The color of the displayed chart is divided by class I, II (Class I Class II)
- Performance shown is for installation type-B(Free inlet, Ducted out let)
- Performance ratings do not include the effects of appurtenances(accessories)
- Power rating kW does not include transmission losses.
- Values shown are for inlet LwA(dB) sound power levels for installation type B - free inlet, ducted outlet, Ratings are not include the effect of duct end corrections.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.

BD 050

Outlet Area : 0.402 m<sup>2</sup>



OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
100	4.1					1018	1.03	1187	1.44						
140	5.8			933	0.97	1074	1.41	1202	1.87	1320	2.36	1438	2.88	1561	3.45
180	7.5			1036	1.39	1164	1.90	1278	2.43	1383	3.00	1486	3.60	1580	4.20
220	9.1	1021	1.35	1151	1.93	1268	2.54	1374	3.17	1471	3.80	1563	4.45	1650	5.14
260	10.8	1158	1.96	1275	2.63	1382	3.34	1480	4.06	1572	4.79	1658	5.53	1739	6.81
300	12.4	1300	2.75	1405	3.52	1503	4.32	1594	5.14	1680	5.96	1761	6.80	1839	7.63
340	14.1	1447	3.77	1541	4.63	1631	5.51	1715	6.41	1795	7.33	1872	8.28	1945	9.21
380	15.8	1596	5.03	1680	5.97	1789	7.27	1841	7.93	1917	8.96	1988	9.95	2057	11.01
420	17.4	1747	6.58	1823	7.60	1898	8.64	1972	9.74	2042	10.84	2110	11.95	2175	13.08
460	19.1	1899	8.42	1969	9.53	2038	10.67	2106	11.82	2172	13.02	2236	14.23	2298	15.47
500	20.7	2051	10.58	2117	11.78	2180	13.01	2243	14.26	2305	15.53	2366	16.82	2424	18.12
540	22.4	2206	13.14	2266	14.40	2325	15.74	2383	17.03	2441	18.38	2498	19.79		

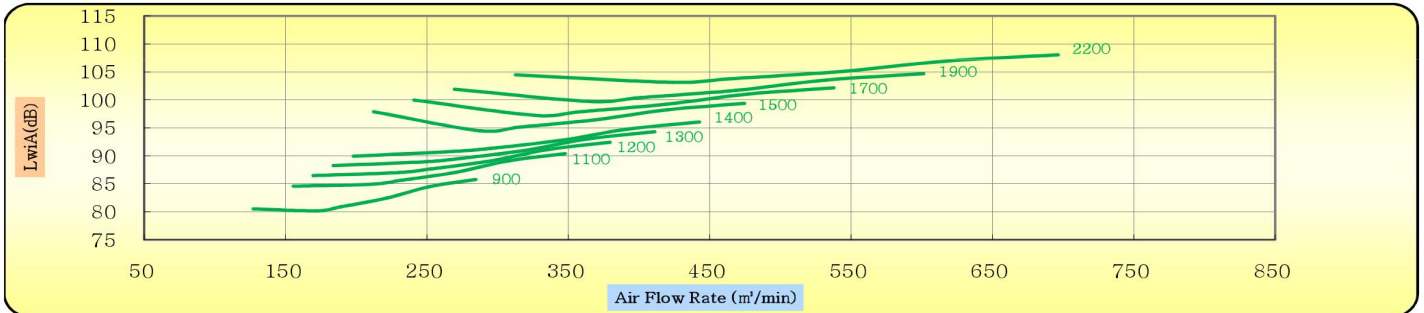
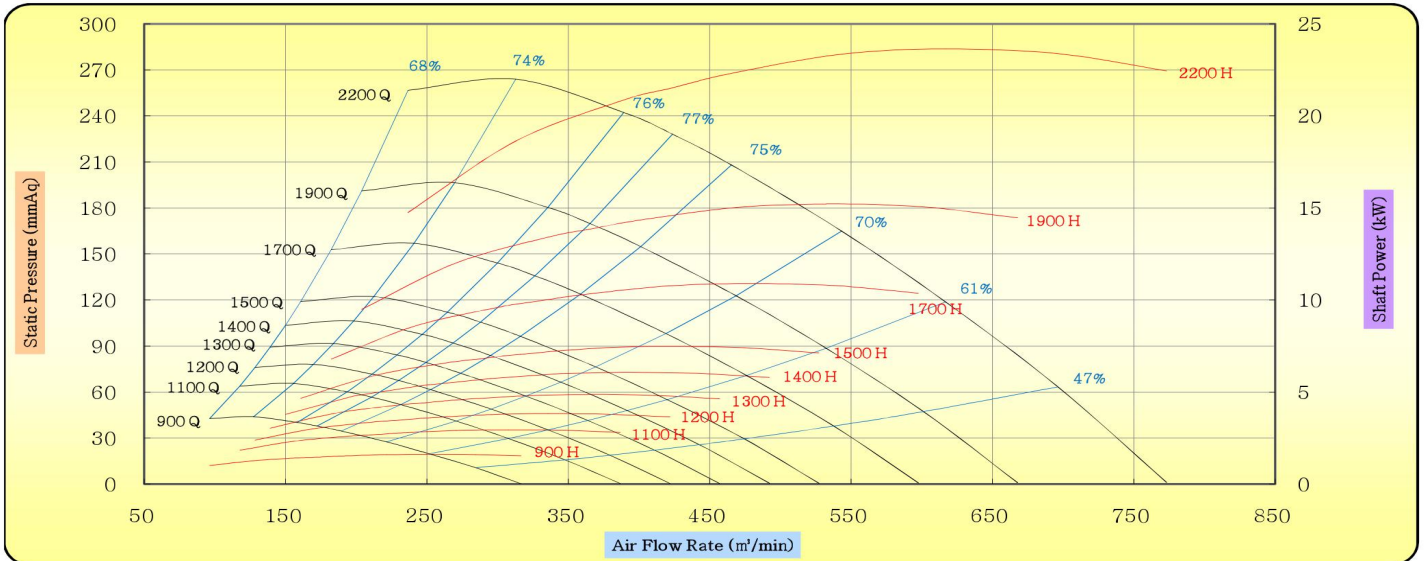
OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
100	4.1														
140	5.8														
180	7.5	1672	4.84	1762	5.51	1856	6.21	1951	6.90						
220	9.1	1735	5.86	1817	6.59	1895	7.36	1970	8.10	2045	8.87	2119	9.67	2193	10.49
260	10.8	1817	7.05	1893	7.84	1964	8.68	2036	9.53	2107	10.39	2174	11.25	2239	12.13
300	12.4	1912	8.48	1983	9.35	2051	10.25	2118	11.15	2183	12.06	2245	13.01	2306	13.95
340	14.1	2015	10.16	2083	11.11	2148	12.09	2211	13.05	2272	14.05	2331	15.06	2390	16.04
380	15.8	2124	12.06	2188	13.12	2251	14.19	2312	15.27	2371	16.33	2428	17.41	2483	18.50
420	17.4	2239	14.24	2300	15.39	2359	16.55	2417	17.70	2475	18.90				
460	19.1	2358	16.68	2416	17.91	2473	19.20								
500	20.7	2482	19.45												
540	22.4														

- The color of the displayed chart is divided by class I, II (Class I Class II)
- Performance shown is for installation type-B(Free inlet, Ducted out let)
- Performance ratings do not include the effects of appurtenances(accessories)
- Power rating kW does not include transmission losses.
- Values shown are for inlet LwA(dB) sound power levels for installation type B - free inlet, ducted outlet, Ratings are not include the effect of duct end corrections.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.



BD 056

Outlet Area : 0.506 m<sup>2</sup>



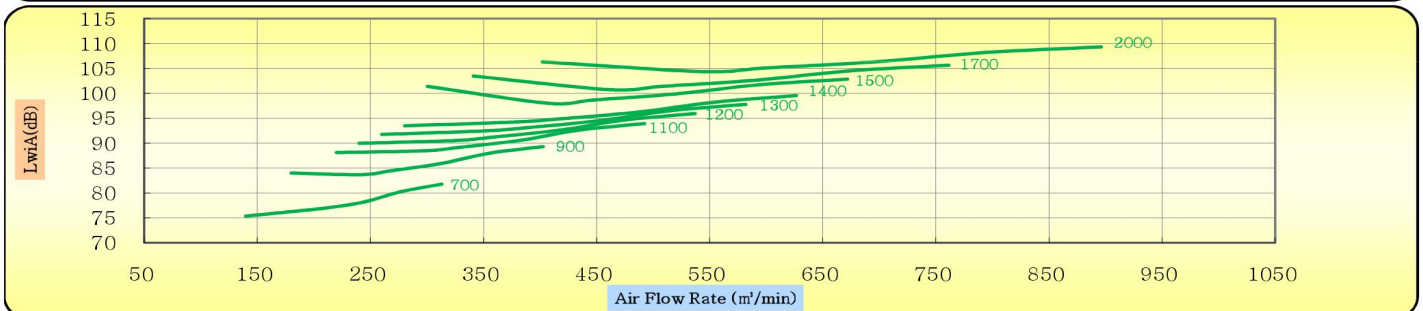
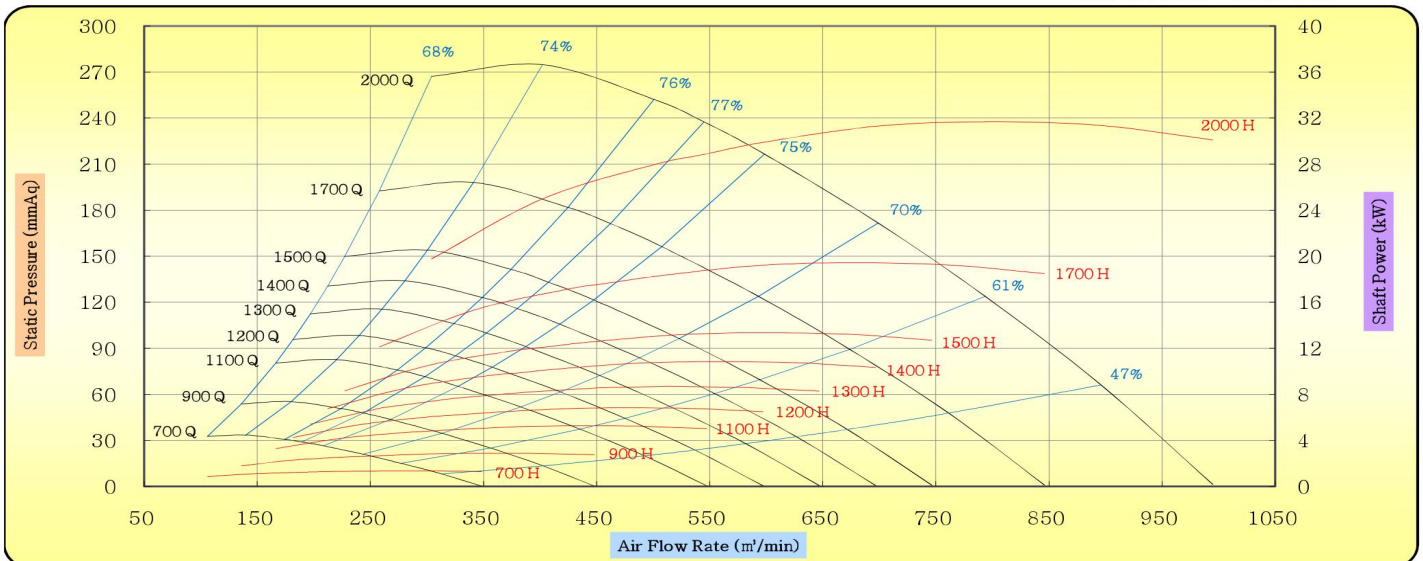
OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
180	5.9					968	1.81	1082	2.40	1186	3.03	1288	3.69	1394	4.39
220	7.2					1033	2.31	1137	2.97	1232	3.67	1324	4.40	1410	5.17
260	8.6			999	2.20	1106	2.92	1203	3.67	1292	4.43	1377	5.22	1457	6.07
300	9.9	974	2.03	1085	2.83	1185	3.65	1276	4.49	1361	5.35	1440	6.21	1516	7.11
340	11.2	1074	2.72	1177	3.61	1269	4.51	1355	5.46	1436	6.41	1512	7.38	1583	8.34
380	12.5	1177	3.56	1270	4.53	1357	5.53	1438	6.56	1514	7.61	1587	8.68	1655	9.73
420	13.8	1282	4.57	1367	5.63	1448	6.72	1524	7.84	1596	8.98	1666	10.17	1732	11.32
460	15.2	1389	5.78	1466	6.92	1543	8.13	1614	9.31	1686	10.56	1748	11.79	1812	13.09
500	16.5	1497	7.23	1568	8.44	1639	9.72	1706	11.01	1772	12.33	1835	13.69	1894	15.05
540	17.8	1605	8.87	1671	10.17	1736	11.53	1801	12.93	1863	14.33	1923	15.79	1980	17.19
580	19.1	1714	10.78	1776	12.18	1837	13.66	1898	15.09	1957	16.60	2014	18.11	2069	19.66
620	20.4	1824	12.97	1882	14.46	1939	15.96	1996	17.53	2052	19.11	2107	20.72	2160	22.37

OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
180	5.9														
220	7.2	1492	5.93	1576	6.76	1662	7.59	1750	8.50						
260	8.6	1535	6.93	1609	7.80	1680	8.69	1750	9.62	1820	10.57	1892	11.55	1965	12.55
300	9.9	1588	8.03	1657	8.99	1727	9.98	1793	10.99	1856	11.99	1918	13.02	1979	14.09
340	11.2	1651	9.33	1717	10.34	1782	11.38	1842	12.44	1904	13.58	1965	14.69	2023	15.81
380	12.5	1721	10.81	1784	11.91	1844	13.01	1904	14.12	1962	15.29	2017	16.44	2072	17.69
420	13.8	1795	12.49	1856	13.67	1914	14.85	1971	16.06	2026	17.31	2079	18.49	2132	19.76
460	15.2	1872	14.34	1930	15.61	1988	16.93	2042	18.19	2095	19.49	2147	20.85	2197	22.18
500	16.5	1953	16.43	2009	17.79	2064	19.16	2117	20.56						
540	17.8	2036	18.65	2090	20.13	2142	21.62								
580	19.1	2122	21.21	2174	22.76										
620	20.4														

- The color of the displayed chart is divided by class I, II (Class I Class II)
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- Performance ratings do not include the effects of appurtenances(accessories)
- Power rating kW does not include transmission losses.
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- The A-weighted sound ratings shown have been calculated per AMCA standard 301.

BD 063

Outlet Area : 0.634 m<sup>2</sup>



OUTLET	15 mmAq				30 mmAq				45 mmAq				60 mmAq				75 mmAq				90 mmAq				105 mmAq			
CMM	Vel	rpm	shaft power		rpm	shaft power			rpm	shaft power			rpm	shaft power			rpm	shaft power			rpm	shaft power			rpm	shaft power		
200	5.3				721	1.36			838	2.02			944	2.70			1048	3.45										
250	6.6				782	1.82			888	2.55			984	3.34			1074	4.17			1158	5.04			1240	5.94		
300	7.9	736	1.57		850	2.40			949	3.24			1038	4.11			1123	5.05			1199	5.99			1274	7.01		
350	9.2	819	2.17		924	3.11			1016	4.08			1100	5.05			1178	6.07			1251	7.11			1320	8.19		
400	10.5	906	2.91		1002	3.97			1088	5.06			1167	6.17			1241	7.29			1310	8.43			1376	9.61		
450	11.8	996	3.85		1083	5.01			1163	6.21			1238	7.45			1308	8.70			1375	9.98			1438	11.26		
500	13.1	1087	4.99		1167	6.26			1243	7.59			1313	8.93			1379	10.30			1442	11.68			1503	13.09		
550	14.5	1181	6.37		1254	7.75			1324	9.16			1391	10.62			1454	12.12			1514	13.63			1571	15.14		
600	15.8	1275	7.98		1342	9.45			1408	11.00			1471	12.57			1531	14.18			1588	15.81			1643	17.44		
650	17.1	1370	9.87		1432	11.46			1493	13.09			1553	14.79			1610	16.48			1665	18.25			1717	19.99		
700	18.4	1466	12.07		1524	13.76			1581	15.51			1637	17.30			1691	19.11			1744	20.99			1794	22.82		
750	19.7	1563	14.58		1617	16.37			1670	18.20			1723	20.13			1774	22.06			1825	24.02			1873	26.01		

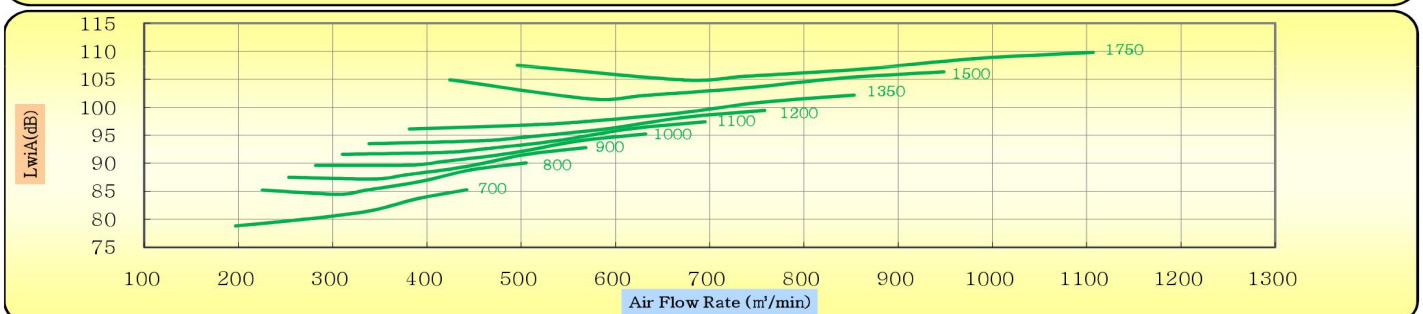
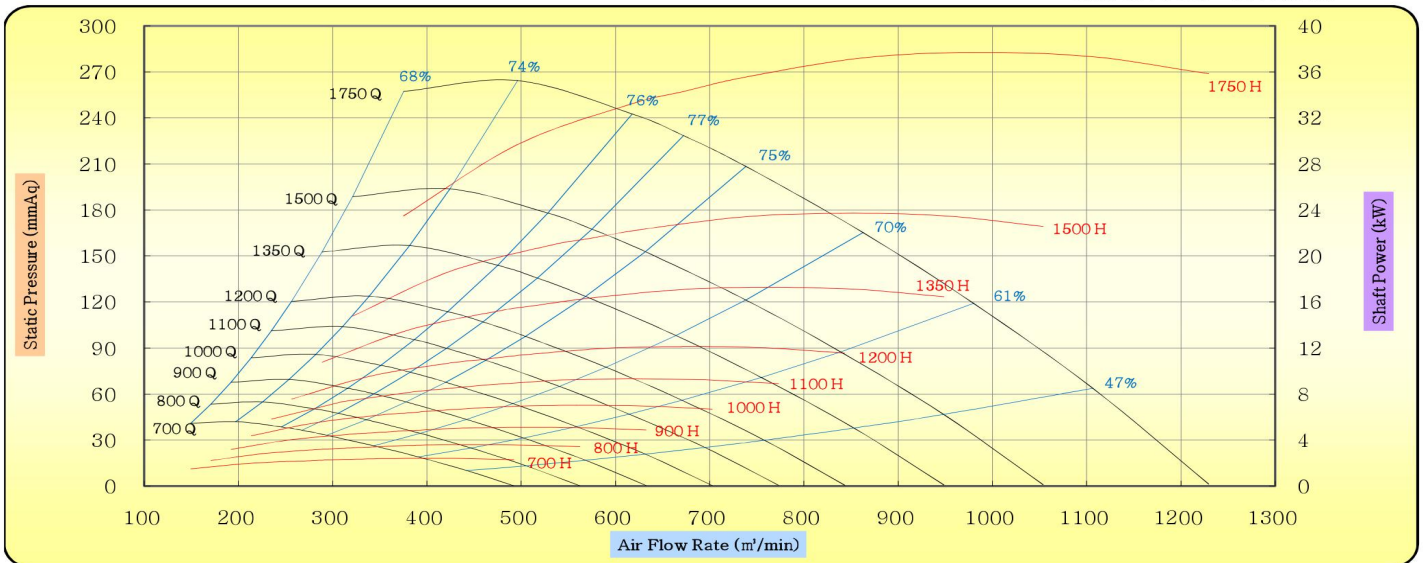
OUTLET	120 mmAq				135 mmAq				150 mmAq				165 mmAq				180 mmAq				195 mmAq				210 mmAq			
CMM	Vel	rpm	shaft power		rpm	shaft power			rpm	shaft power			rpm	shaft power			rpm	shaft power			rpm	shaft power			rpm	shaft power		
200	5.3																											
250	6.6	1325	6.91																									
300	7.9	1345	8.04		1414	9.09			1482	10.18			1551	11.31			1623	12.48			1695	13.72			1765	14.97		
350	9.2	1387	9.33		1453	10.51			1515	11.69			1575	12.89			1633	14.11			1691	15.33			1750	16.63		
400	10.5	1438	10.78		1499	12.03			1557	13.33			1616	14.63			1672	15.95			1726	17.30			1779	18.69		
450	11.8	1497	12.53		1555	13.87			1611	15.21			1665	16.55			1717	17.99			1769	19.46			1821	20.95		
500	13.1	1561	14.51		1616	15.92			1669	17.35			1721	18.84			1771	20.29			1820	21.79			1868	23.34		
550	14.4	1627	16.70		1680	18.21			1732	19.77			1782	21.33			1830	22.91			1877	24.53			1923	26.13		
600	15.8	1696	19.09		1748	20.78			1798	22.45			1846	24.11			1893	25.81			1938	27.49			1983	29.24		
650	17.1	1768	21.78		1818	23.59			1866	25.35			1913	27.21			1959	29.01										
700	18.4	1843	24.74		1890	26.61			1937	28.59			1982	30.51														
750	19.7	1920	27.99		1966	30.05																						

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



BD 071

Outlet Area : 0.799 m<sup>2</sup>



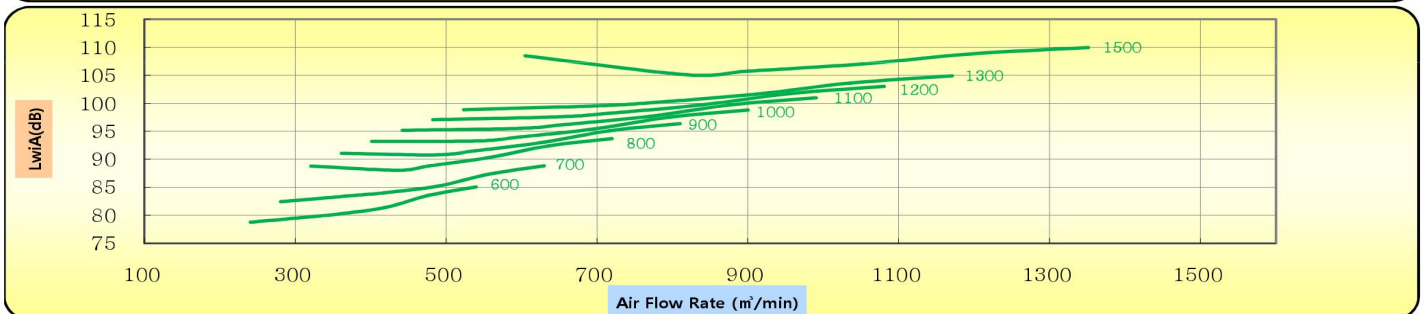
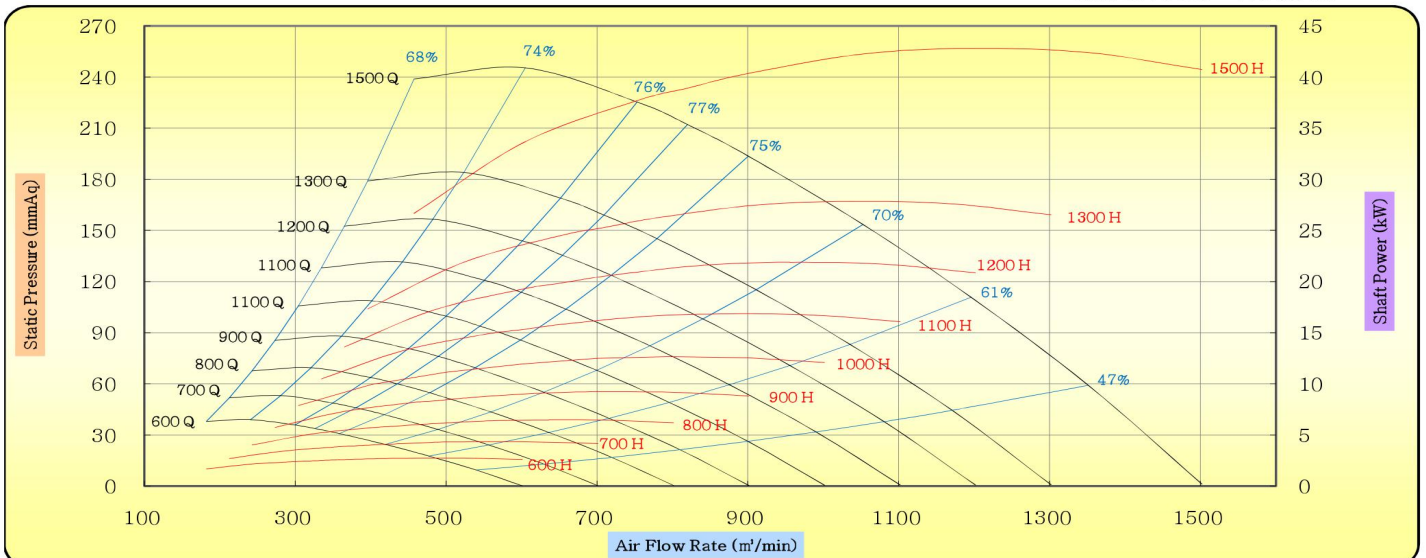
OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
280	5.8					766	2.82	857	3.76	940	4.73	1023	5.78	1110	6.90
340	7.1			721	2.57	813	3.54	897	4.59	974	5.68	1047	6.83	1116	8.01
400	8.3			781	3.32	867	4.43	945	5.58	1017	6.77	1084	8.02	1150	9.35
460	9.6	754	3.00	845	4.23	926	5.51	1000	6.79	1068	8.11	1131	9.45	1193	10.85
520	10.8	829	3.96	912	5.33	988	6.74	1057	8.17	1123	9.66	1184	11.11	1241	12.61
580	12.1	906	5.15	982	6.64	1053	8.18	1119	9.79	1181	11.39	1239	13.01	1295	14.66
640	13.4	984	6.58	1054	8.18	1120	9.86	1183	11.61	1241	13.34	1297	15.11	1351	16.93
700	14.6	1063	8.25	1127	9.99	1190	11.83	1249	13.68	1305	15.59	1358	17.48	1409	19.38
760	15.9	1143	10.21	1202	12.08	1261	14.04	1317	16.04	1371	18.08	1421	20.01	1470	22.19
820	17.1	1224	12.49	1279	14.50	1334	16.61	1387	18.71	1438	20.90	1487	23.09	1534	25.29
880	18.4	1305	15.11	1358	17.29	1409	19.49	1459	21.72	1507	24.03	1561	26.69	1599	28.70
940	19.6	1388	18.17	1436	20.39	1484	22.72	1531	25.09	1578	27.56	1623	30.02	1666	32.45

OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
280	5.8														
340	7.1	1183	9.23	1252	10.52	1323	11.87	1394	13.29						
400	8.3	1213	10.71	1272	12.04	1330	13.48	1387	14.91	1445	16.40	1505	17.95	1565	19.55
460	9.6	1250	12.29	1308	13.84	1363	15.36	1415	16.84	1467	18.49	1517	20.11	1566	21.70
520	10.8	1297	14.18	1350	15.72	1401	17.35	1452	19.08	1502	20.79	1550	22.51	1596	24.23
580	12.1	1348	16.31	1398	17.99	1447	19.71	1496	21.45	1542	23.25	1587	25.13	1632	27.02
640	13.4	1402	18.71	1451	20.55	1498	22.36	1544	24.25	1588	26.13	1632	28.01	1675	29.99
700	14.6	1458	21.37	1506	23.33	1552	25.32	1596	27.29	1639	29.31	1681	31.41	1721	33.37
760	15.9	1518	24.33	1564	26.44	1608	28.55	1651	30.68	1693	32.82	1735	35.06		
820	17.1	1579	27.59	1623	29.75	1666	32.11	1708	34.38	1748	36.62				
880	18.4	1643	31.11	1685	33.46	1726	35.92								
940	19.6	1708	35.01	1749	37.56										

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

BD 080

Outlet Area : 1.006 m<sup>2</sup>



OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
350	5.8					679	3.52	760	4.70	835	5.93	910	7.25	988	8.68
430	7.1			641	3.25	723	4.48	797	5.79	866	7.19	931	8.65	992	10.13
510	8.4	610	2.87	697	4.26	774	5.69	843	7.15	907	8.67	966	10.25	1025	11.93
590	9.8	677	3.91	757	5.49	829	7.13	894	8.77	954	10.45	1011	12.21	1065	13.96
670	11.1	747	5.23	820	6.98	887	8.82	948	10.68	1006	12.56	1060	14.45	1111	16.39
750	12.4	819	6.86	886	8.79	948	10.76	1006	12.84	1061	14.93	1112	17.01	1162	19.18
830	13.8	892	8.82	953	10.91	1012	13.12	1066	15.34	1118	17.61	1167	19.92	1215	22.29
910	15.1	967	11.18	1023	13.47	1077	15.79	1129	18.22	1178	20.67	1225	23.21	1270	25.69
990	16.4	1042	13.95	1094	16.41	1144	18.91	1194	21.52	1240	24.18	1285	26.82	1328	29.53
1070	17.7	1118	17.19	1166	19.78	1213	22.48	1259	25.21	1304	28.09	1347	31.03	1388	33.91
1150	19.1	1195	20.96	1239	23.69	1284	26.58	1327	29.51	1369	32.57	1410	35.52	1449	38.55
1230	20.4	1271	25.13	1313	28.05	1355	31.17	1395	34.25	1436	37.53	1475	40.69		

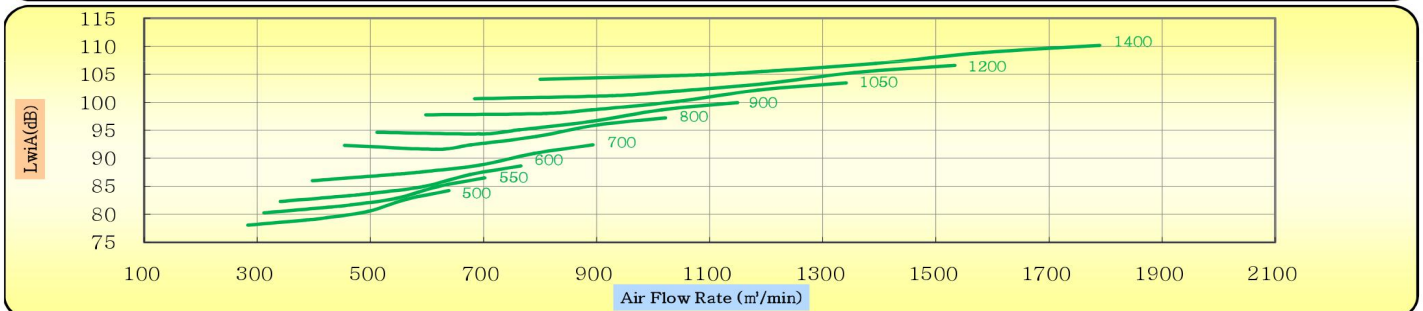
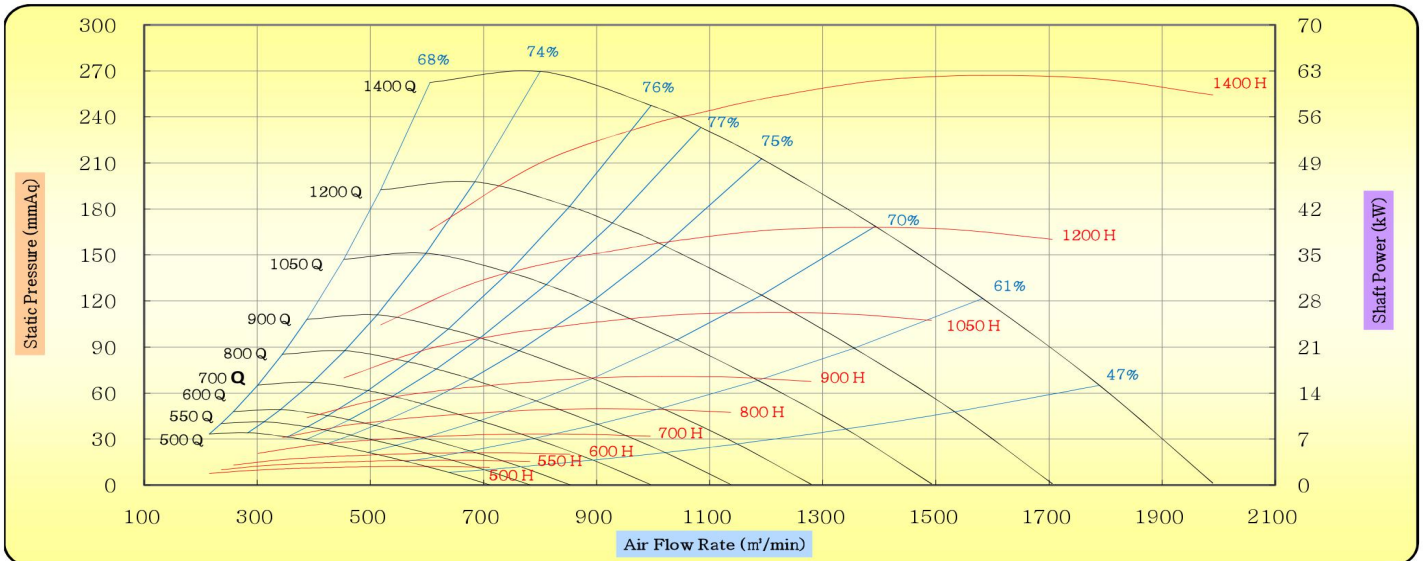
OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
350	5.8														
430	7.1	1052	11.71	1114	13.34										
510	8.4	1080	13.64	1133	15.42	1184	17.17	1234	19.01	1285	20.91	1338	22.86	1391	24.90
590	9.8	1116	15.82	1166	17.73	1215	19.69	1262	21.71	1307	23.71	1351	25.75	1395	27.89
670	11.1	1160	18.37	1207	20.39	1252	22.39	1296	24.61	1341	26.86	1383	29.02	1424	31.33
750	12.4	1208	21.28	1253	23.44	1296	25.65	1339	27.91	1380	30.19	1419	32.59	1458	35.03
830	13.8	1260	24.59	1303	26.91	1345	29.34	1385	31.67	1424	34.13	1462	36.59		
910	15.1	1313	28.25	1355	30.79	1396	33.39	1435	35.96	1472	38.51				
990	16.4	1369	32.26	1410	35.12	1449	37.81	1486	40.49						
1070	17.7	1427	36.74	1466	39.76										
1150	19.1	1488	41.82												
1230	20.4														

- The color of the displayed chart is divided by class I, II (Class I Class II)
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- Performance ratings do not include the effects of appurtenances(accessories)
- Power rating kW does not include transmission losses.
- Values shown are for inlet LwA(dB) sound power levels for installation type B - free inlet, ducted outlet, Ratings are not include the effect of duct end corrections.
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BD 090

Outlet Area : 1.266 m<sup>2</sup>

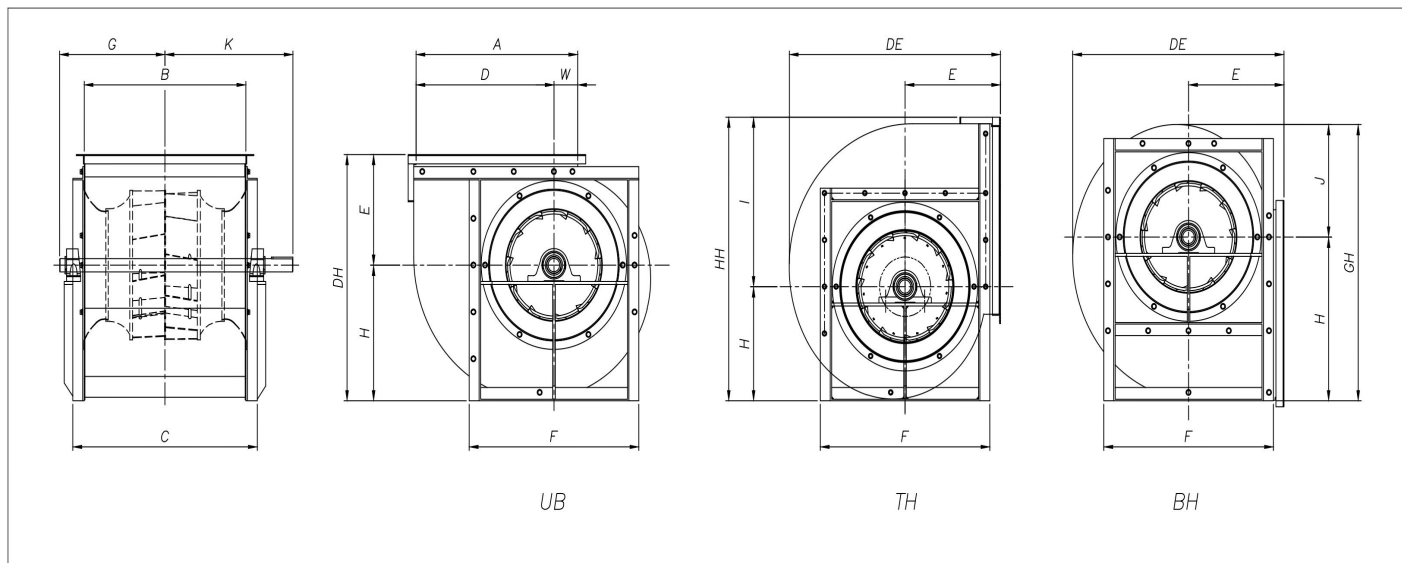


OUTLET		15 mmAq		30 mmAq		45 mmAq		60 mmAq		75 mmAq		90 mmAq		105 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
400	5.3			509	2.73	592	4.05	666	5.41	740	6.92	816	8.58		
500	6.6			551	3.64	626	5.11	694	6.71	759	8.42	818	10.14	876	12.03
600	7.9	518	3.14	599	4.81	669	6.50	732	8.26	791	10.11	846	12.07	899	14.07
700	9.2	576	4.32	650	6.21	716	8.17	776	10.17	830	12.16	882	14.27	931	16.43
800	10.5	636	5.80	705	7.94	766	10.11	822	12.34	875	14.62	924	16.93	970	19.28
900	11.8	699	7.65	761	9.99	819	12.42	872	14.93	922	17.47	969	19.98	1013	22.52
1000	13.2	763	9.91	820	12.46	874	15.13	924	17.85	971	20.59	1016	23.42	1059	26.21
1100	14.5	829	12.66	880	15.34	931	18.29	978	21.19	1023	24.18	1066	27.28	1107	30.34
1200	15.8	894	15.81	942	18.81	989	21.87	1034	25.08	1077	28.29	1118	31.61	1157	34.91
1300	17.1	961	19.59	1005	22.75	1049	26.08	1091	29.43	1132	32.88	1171	36.41	1209	40.02
1400	18.4	1028	23.89	1069	27.27	1110	30.83	1150	34.44	1189	38.13	1226	41.89	1262	45.57
1500	19.7	1095	28.82	1134	32.46	1173	36.26	1210	40.05	1247	43.96	1283	47.98	1317	51.76

OUTLET		120 mmAq		135 mmAq		150 mmAq		165 mmAq		180 mmAq		195 mmAq		210 mmAq	
CMM	Vel	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power	rpm	shaft power
400	5.3														
500	6.6	936	13.88	997	15.95										
600	7.9	950	16.19	998	18.26	1046	20.45	1096	22.79	1147	25.12	1198	27.64		
700	9.2	979	18.82	1025	21.08	1069	23.45	1112	25.89	1153	28.31	1194	30.79	1236	33.48
800	10.5	1015	21.70	1058	24.20	1099	26.75	1141	29.42	1180	32.11	1219	34.81	1256	37.59
900	11.8	1056	25.15	1097	27.83	1136	30.49	1175	33.34	1211	36.08	1248	39.09	1285	42.03
1000	13.2	1100	29.02	1139	31.87	1177	34.83	1213	37.78	1249	40.77	1284	43.78	1318	46.89
1100	14.5	1146	33.42	1184	36.46	1221	39.61	1256	42.73	1290	45.83	1324	49.28	1356	52.39
1200	15.8	1194	38.25	1231	41.59	1267	45.02	1301	48.33	1334	51.74	1367	55.19	1398	58.67
1300	17.1	1245	43.61	1280	47.21	1314	50.69	1347	54.36	1380	58.06				
1400	18.4	1297	49.47	1331	53.30	1363	56.99	1396	61.03						
1500	19.7	1351	55.99	1383	59.98										

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BD 032 ~ BD 090



FAN NO.	A	B	C	D	E	F	G	H			I	J	K	W	DE	DH	HH	GH	weight [kg]
								UB	TH	BH									
BD 032 [#2.25DS]	404	404	484	339	262	454	272	287	241.5	348	367	240	328	65	549	549	608.5	588	56
BD 036 [#2.5DS]	453	453	533	382	288	502	296.5	328	271	396	410	269	353.5	71	611	616	681	665	67
BD 040 [#2.75DS]	506	506	586	431	311	548	340	365	313	440	459	310	400	75	673	676	772	750	81
BD 045 [#3DS]	568	568	648	485	355	596	370.5	410	345	495	513	340.5	449.5	83	742	745	858	835.5	100
BD 050 [#3.5DS]	638	638	718	538	379	678	412	451	375	547	568	374	512	100	829	830	943	921	130
BD 056 [#4DS]	715	715	815	604	425	768	451.5	506	420	613	634	418	552.5	111	929	931	1054	1031	175
BD 063 [#4.5DS]	800	800	900	679	465	844	496	569	472	685	709	471	599	121	1032	1034	1181	1156	210
BD 071 [#5DS]	898	898	998	765	515	944	555	639	539	776	795	538	655	133	1153	1154	1334	1314	270
BD 080 [#5.5DS]	1007	1007	1012	862	555	1012	614.5	720	604	872	892	603	735.5	145	1275	1275	1496	1475	345
BD 090 [#6DS]	1130	1130	1140	970	615	1140	678	806	676	980	1000	674	797	160	1421	1421	1676	1654	420