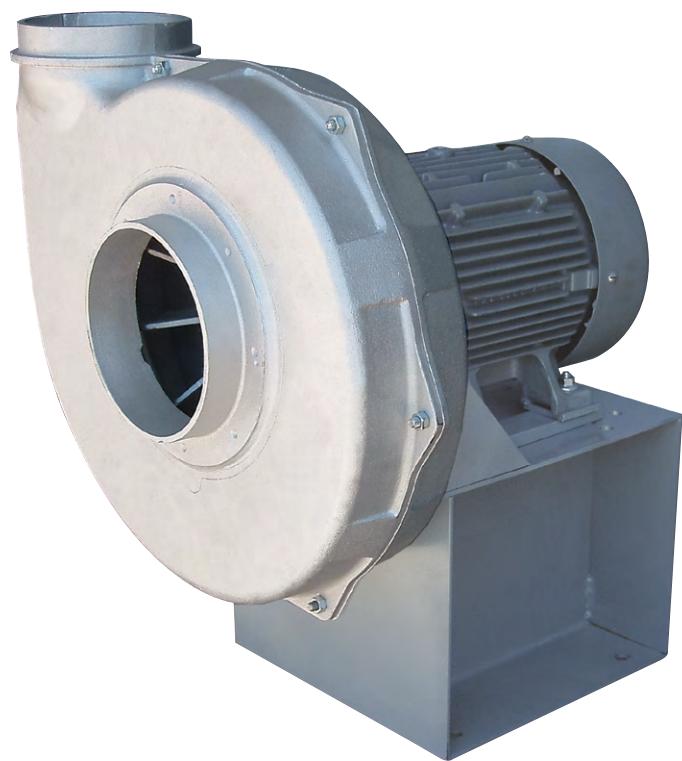


AEROVENT >>
INDUSTRIAL VENTILATION SYSTEMS



**Model CA
Direct Drive**

CAST ALUMINUM PRESSURE BLOWERS
Direct Drive & Belt Driven
Model CA / CABD

CA/CABD Cast Aluminum Pressure Blowers

Aerovent's Cast Aluminum Pressure Blowers are the perfect choice for providing low volume, high pressure air for cooling, ventilating and exhaust systems which handle dust, materials or corrosive fumes. These direct drive (CA) or belt driven (CABD) blowers feature heavy duty cast aluminum housings with cast aluminum wheels for extra long life and trouble-free service.

Capabilities

- Seven housing sizes: 8", 9", 10", 12", 14", 15" and 18"
- Airflow capacities to 3,800 CFM
- Static pressures to 20"
- Arrangements 1, 4, 4 HI, and 9 available
- Temperatures to 150°F for Arrangements 4 and 4 HI and 200°F for Arrangements 1 and 9

Features

- Rugged cast aluminum housing is inherently corrosion resistant
- Cast aluminum radial blade and backward curved wheels are corrosion and spark resistant
- Rotatable to 7 discharge positions
- 200,000 hour average life bearings on belt driven units
- Round inlet and discharge for easy duct connections
- Heavy housings reduce noise levels

Applications

- Laboratory fume hood exhaust
- Polishing and grinding machine dust removal
- Welding fume exhaust
- Combustion air supply
- Raw materials, waste, and fibers conveying
- Drying processes
- General exhaust applications

Arrangement 4 CA Cast Aluminum Pressure Blower with Optional Weather Hood & Screen



Arrangement 4 CA Cast Aluminum Pressure Blower with Optional Inlet and Discharge Flanges



Type "B" Backward Curved Wheel



Type "R" Radial Blade Wheel

Dust Collecting & Pneumatic Conveying

Pneumatic conveying embraces both dust collecting and conveying. In a typical system the amount of material transported is low compared to the amount of air used. Usually, a large quantity of fast-flowing air is needed to assure entrainment of material. Consequently, the materials moved have little effect on the performance of the fan.

Where the sole purpose of the pneumatic system is to convey as much material as possible, different factors are involved.

Dust Collecting & Fume Removal

All airborne material, except fumes and the finest of dusts, will settle in ducts and fans if a minimum velocity is not maintained. In dust collecting, the air quantity is determined by the hood size and velocity, therefore it is usually most economical to maintain the lowest duct velocity that will keep the material in suspension. Raising the velocity raises the horsepower. For example, assume 1,000 CFM through a 12" pipe at 1,280 FPM with 0.2" resistance per 100 feet. Doubling the velocity while maintaining the same CFM would require an 8½" pipe at 1.2" resistance per 100 feet.

Some state codes give minimum velocities. Where no code applies, the figures shown in Table 1 may be used.

When choosing the fan size for a dust collecting system, be certain that the velocity at the fan inlet and outlet is not lower than the minimum velocity required to keep the dust suspended.

Material Conveying

The problem of inducing the material into a conveying system is often a difficult one. The best overall method is one that feeds the material into the airstream evenly by either mechanical or gravity means. It is often required that the fan pick the material up as well as convey it. One misbelief frequently encountered is that the ability of a system to pick up material is due to the fan's suction pressure. Suction in itself is useless. It is the velocity moving past the material that induces it to flow. For this reason, it is important not to plug up the entrance of the duct with material to be conveyed.

When figuring entrance loss to a conveying system, it should be remembered that where an appreciable amount of bulky material is to be moved, it may reduce the effective area of the inlet and thus increase the entrance velocity and loss.

Since the purpose of a conveying system is to move a lot of material (as contrasted to dust collecting), the ratio of material to air volume is quite important. Experience has established good minimum velocities for common materials and these are given in Table 2. For those applications not listed, Chart B gives CFM/lb. of material and minimum velocities based on the weight of the material.

Table 1. Dust Collecting & Fume Removal Duct Velocities

MATERIAL	VELOCITY (FPM)
1. GRINDING DUST	5000
2. FOUNDRY	4500
3. SANDBLAST DUST	4000
4. WOOD FLOUR	2000
5. SANDER DUST	2000
6. SHAVINGS, DRY	3000
7. SHAVINGS, WET	4000
8. SAWDUST, DRY	3000
9. SAWDUST, WET	4000
10. WOOD BLOCKS	4500
11. HOG WASTE	4500
12. BUFFING LINT, DRY	3000
13. BUFFING LINT, WET	4000
14. METAL TURNINGS	5000
15. LEAD DUST	5000
16. COTTON	3000
17. COTTON LINT	2000
18. WOOL	4000
19. JUTE LINT	3000
20. JUTE DUST	3500
21. GRAIN DUST	3000
22. SHOE DUST	4000
23. RUBBER DUST	3500
24. RUBBER BUFFINGS	4500
25. BAKELITE MOULDING POWDER	3500
26. BAKELITE MOULDING DUST	2500
27. OVEN HOOD	2000
28. TAIL PIPE EXHAUST	3000
29. MELTING POT & FURNACE	2000
30. METALLIZING BOOTH	3500
31. SOLDERING FUMES	2000
32. PAINT SPRAY	2000
33. CARBON BLACK	3500
34. PAPER	3500

Table 2. Material Conveying Duct Velocities

MATERIAL	VELOCITY (FPM)
1. WOOD CHIPS	4500
2. RAGS	4500
3. GROUND FEED	5000
4. POWDERED COAL	4000
5. SAND	7500
6. WOOD FLOUR	4000
7. SAWDUST	4000
8. HOG WASTE	4500
9. PULP CHIPS	4500
10. WOOD BLOCKS	5000
11. CEMENT	6000
12. COTTON	4000
13. WOOL	4500
14. JUTE	4500
15. HEMP	4500
16. VEGETABLE PULP, DRY	4500
17. PAPER	5000
18. FLOUR	3500
19. SALT	6000
20. GRAIN	5000
21. COFFEE BEANS	3500
22. SUGAR	6000

Dust Collecting & Pneumatic Conveying

Wherever material is airborne, the fan must provide the energy to move the material. In small concentrations this is negligible, but in most conveying systems it is important. It is reflected as an increased resistance. Chart A gives the ratio of friction loss of the conveying system to the same system handling clean air.

The material conveying capacity of a system varies as the square of the velocity since it is a function of the velocity pressure. The economics of a given installation determine whether the minimum or a higher velocity shall be used.

It is sometimes thought that a larger fan is naturally better than a smaller one. This is far from correct, since material is just as liable to settle in a fan as in a duct. If the inlet and outlet velocities of a fan are at least as high as the minimum conveying velocity, no settling should occur in the fan.

Abrasion & Corrosion

Certain materials can be highly abrasive by nature and, depending on the concentration and properties of the abrasive, can greatly affect the selection of the type of fan and wheel design.

Proper fan and wheel selection alone may not satisfy the abrasive conditions. Special abrasive, impact, corrosion, and heat resistant materials or coatings may be required to further increase the life of the fan. Although Aerovent has the experience to recommend various materials or coatings to increase the life of the product, it must be recognized that to date no materials have been discovered that completely resist these conditions. Therefore, resistance to them is one of degree only.

Spark-Resistant Construction

Described below are three classifications as defined by AMCA Standards for spark resistant construction:

Type	Construction Details
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"A" All parts of the fan in contact with the air or gas being handled shall be made of nonferrous material. Steps must also be taken to ensure that the impeller, bearings, and shaft are adequately attached and/or restrained to prevent a lateral or axial shift in these components. Not available in Arr. 4.

"B" The fan shall have a nonferrous impeller and nonferrous ring about the opening through which the shaft passes. Ferrous hubs, shafts, and hardware are allowed provided construction is such that a shift of impeller or shaft will not permit two ferrous parts of the fan to rub or strike. Steps must also be taken to ensure that the impeller, bearings, and shaft are adequately attached and/or restrained to prevent a lateral or axial shift in these components.

"C" The fan shall be so constructed that a shift of the impeller or shaft will not permit two ferrous parts of the fan to rub or strike.

Chart A. Friction For Conveying

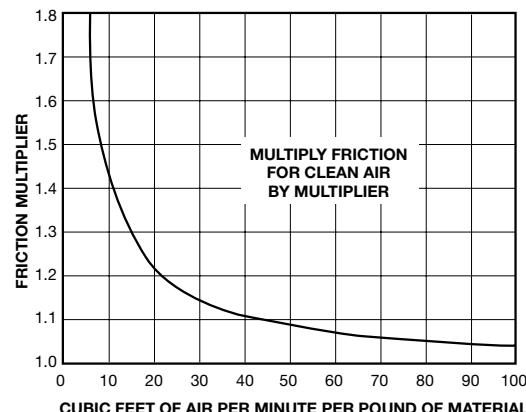
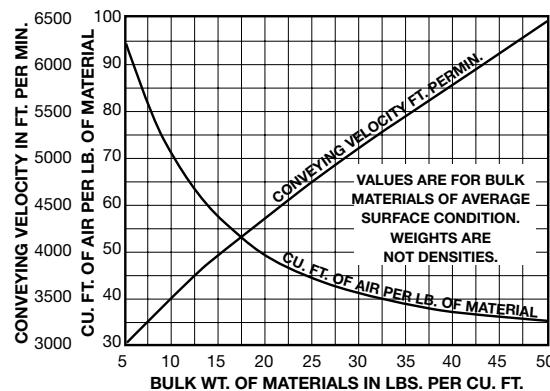


Chart B. Average Velocities & Air Volumes

For Conveying Materials



NOTES:

1. No bearings, drive components or electrical devices shall be placed in the gas stream unless they are constructed or enclosed in such a manner that failure of that component cannot ignite the surrounding gas stream.
2. The user shall electrically ground all fan parts.
3. For this standard, nonferrous material shall be any material with less than 5% iron or any other material with demonstrated ability to be spark resistant.
4. The use of aluminum or aluminum alloys in the presence of steel that has been allowed to rust requires special consideration. Research, by the U.S. Bureau of Mines and others, has shown that aluminum impellers rubbing on rust steel may cause high intensity sparking.

The use of the above standard in no way implies a guarantee of safety for any level of spark resistance. Spark resistant construction also does not protect against ignition of explosive gases caused by catastrophic failure or from any airstream material that may be present in a system.

Accessories

Belt Guard

OSHA belt guard covers the sheaves and belts, protecting personnel from moving drive parts. Solid sheet, painted steel construction.



Shaft & Bearing Guard

OSHA shaft and bearing guard protects personnel from moving drive parts. Features painted steel construction.

Inlet & Outlet Guards

Spiral wire type inlet and outlet guards, featuring an electrostatic zinc finish, are offered to protect personnel from the moving parts. Recommended for use when no ductwork is attached to the inlet and/or outlet. Not available on flanged connections.



Slide Gate Damper

Dampers feature cast aluminum frame with galvanized steel gate. Available on inlet or outlet. Slide gate type dampers provide manual adjustment of airflow and flexibility to meet any application.



Performance Data

Catalog Numbering System

To identify a specific fan for ordering or engineering specifications, it is necessary to show the complete information listed in the performance tables under the catalog number. Specify direct drive or belt drive in addition to the catalog number. All performance data is available in curve form upon request.

Inlet Filter

Filters are recommended where heavy dust conditions exist. Filter housing constructed of carbon steel with baked enamel finish. Polyester, paper, or wire-mesh filter media available as well as a powder coated steel hood. Specify standard stub inlet of fan for mounting.



Inlet & Outlet Flange

Cast aluminum flanges mount to either the inlet or outlet. Punched flanges, matching ANSI 125/150, are available upon request. Outlet flange not available in downblast discharge configuration.

Shaft Seal

A shaft seal reduces leakage and protects the bearings and motor from a contaminated airstream. Shaft seals are heavy Teflon type secured to the inside of the fan housing.

Housing Drain

½" diameter drain connection with plug.

Silencer

Silencers are designed to reduce noise emanating from the fan inlet. Silencers are constructed of a 2-ply aluminum outer shell over acoustical absorption material and a perforated aluminum core. Silencer has slip-on design for easy mounting to inlet of fan. Not for use with standard inlet filter. Combination inlet filter/silencer is available upon request.

Weather Hood

Weather Hood with bird screen provides protection from the elements. The enamel-finished steel hood is available for the inlet or outlet.

12 R 07 - 122

Housing Size	
Wheel Design	
Inlet Diameter	
Wheel Diameter	

CA Direct Drive at 3450 RPM (60 Hz) – Radial Blade

SIZE	CATALOG NUMBER	SELECTOR NUMBER	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP	
			CFM	BHP														
8	08R04-070 08R04-080	08R04A 08R04B	279	0.30	233	0.26	141	0.24										
9	09R05-080 09R05-084 09R05-090 09R05-096 09R05-105	09R05A 09R05B 09R05C 09R05D 09R05E	386	0.39	343	0.36	286	0.32	163	0.25								
10	10R06-090 10R06-096 10R06-105 10R06-110 10R06-114	10R06A 10R06B 10R06C 10R06D 10R06E	573	0.69	500	0.63	425	0.57	321	0.49	420	0.71	323	0.62	475	0.96	362	0.83
12	12R07-105 12R07-110 12R07-114 12R07-120 12R07-122 12R07-130	12R07A 12R07B 12R07C 12R07D 12R07E 12R07F	1059	1.61	983	1.46	886	1.38	794	1.22	673	1.13	550	0.97	372	0.78	550	1.24
14	14R06-122 14R06-130 14R07-122 14R07-130 14R08-122 14R08-130 14R06-140 14R07-140 14R06-146 14R08-140 14R07-146 14R08-146	14R06A 14R06B 14R07A 14R07B 14R08A 14R08B 14R06C 14R07C 14R06D 14R08C 14R07D 14R08D	1473	2.90	1388	2.72	1296	2.60	1206	2.44	1097	2.29	994	2.07	877	1.92	743	1.67
15	15R06-140 15R06-154 15R06-164 15R08-140 15R10-140 15R08-154 15R10-154 15R08-164 15R10-164	15R06A 15R06B 15R06C 15R08A 15R10A 15R08B 15R10B 15R08C 15R10C	2187	5.65	2111	5.51	2021	5.40	1903	5.14	1792	4.96	1713	4.73	1602	4.43	1469	4.05
18	18R06-140 18R08-140 18R06-164 18R10-140 18R06-180 18R08-164 18R08-180 18R10-164 18R10-180	18R06A 18R08A 18R06B 18R10A 18R06C 18R08B 18R10B 18R08C 18R10C	1598	4.82	1543	4.69	1483	4.54	1424	4.40	1357	4.23	1286	4.05	1215	3.87	1133	3.67
12	12R07-120 12R07-122 12R07-130	12R07D 12R07E 12R07F	547	1.31	633	1.51	433	1.19	723	1.78	564	1.53						
14	14R07-122 14R08-122 14R06-122 14R06-130 14R08-130 14R07-130 14R06-140 14R07-140 14R08-140 14R06-146 14R07-146 14R08-146	14R07A 14R08A 14R06A 14R06B 14R08B 14R07B 14R06C 14R07C 14R06D 14R07D 14R08D	561	1.41	572	1.71	234	0.87	717	1.83	705	1.72	726	1.83	1099	2.96	903	2.70
15	15R06-140 15R08-140 15R10-140 15R06-154 15R06-164 15R08-154 15R10-154 15R08-164 15R10-164	15R06A 15R08A 15R10A 15R06B 15R06C 15R08B 15R10B 15R08C 15R10C	1325	3.81	1172	3.46	1000	3.12	764	2.45	762	2.21	774	2.82	1195	4.63	669	2.92
18	18R06-140 18R08-140 18R10-140 18R06-164 18R06-180 18R08-164 18R10-164 18R08-180 18R10-180	18R06A 18R08A 18R10A 18R06B 18R06C 18R08B 18R10B 18R08C 18R10C	1049	3.46	962	3.26	873	3.05	758	2.76					1541	6.66	1287	5.73

CA Direct Drive at 2850 RPM (50 Hz) – Radial Blade

SIZE	CATALOG NUMBER	SELECTOR NUMBER	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP	
			CFM	BHP														
8	08R04-070	08R04A	212	0.16	124	0.15												
	08R04-080	08R04B	263	0.20	194	0.16												
9	09R05-080	09R05A	339	0.25	273	0.21			220	0.20								
	09R05-090	09R05C	387	0.28	319	0.24	304	0.36	226	0.30								
	09R05-096	09R05D	433	0.44	375	0.40	362	0.35	308	0.30								
	09R05-105	09R05E	470	0.46	424	0.42												
10	10R06-090	10R06A	441	0.38	359	0.33	229	0.26										
	10R06-096	10R06B	563	0.55	494	0.50	399	0.45	278	0.36								
	10R06-105	10R06C	661	0.75	578	0.68	501	0.61	404	0.54								
	10R06-110	10R06D	663	0.77	600	0.69	532	0.62	450	0.54	340	0.47						
	10R06-114	10R06E	707	0.84	649	0.77	561	0.71	490	0.63	395	0.56						
	10R06-120	10R06F	745	1.06	702	0.98	639	0.97	569	0.90	493	0.82	373	0.71				
	10R06-122	10R06G	778	1.18	744	1.08	697	1.02	641	0.99	557	0.91	468	0.81	207	0.51		
12	12R07-105	12R07A	844	0.89	742	0.79	619	0.69	471	0.55								
	12R07-110	12R07B	918	1.03	805	0.96	681	0.84	539	0.69	349	0.53						
	12R07-114	12R07C	1002	1.30	901	1.14	784	1.04	668	0.95	526	0.81						
	12R07-120	12R07D	1040	1.37	941	1.24	836	1.15	730	1.00	615	0.93	482	0.78				
	12R07-122	12R07E	1078	1.57	992	1.40	879	1.29	781	1.11	662	1.02	545	0.89	270	0.60		
	12R07-130	12R07F	1158	1.71	1078	1.58	986	1.51	882	1.36	777	1.24	678	1.11	569	0.98		
	12R07-140	12R07G	1291	2.57	1211	2.38	1110	2.22	1025	1.97	934	1.87	830	1.69	722	1.56	614	1.38
14	14R06-122	14R06A	1183	1.58	1079	1.44	961	1.36	834	1.16	692	1.04	514	0.86				
	14R07-122	14R07A	1252	1.79	1137	1.62	1021	1.57	883	1.31	725	1.19	506	0.84				
	14R06-130	14R06B	1207	1.93	1132	1.78	1050	1.70	967	1.54	858	1.40	730	1.19	543	0.99		
	14R08-122	14R08A	1294	1.87	1182	1.71	1053	1.58	917	1.39	737	1.22	513	0.97				
	14R07-130	14R07B	1260	1.98	1181	1.82	1104	1.74	1020	1.56	903	1.43	748	1.20	564	1.00		
	14R08-130	14R08B	1309	2.04	1228	1.87	1147	1.76	1048	1.57	927	1.44	750	1.20	541	0.94		
	14R06-140	14R06C	1332	2.54	1273	2.39	1196	2.27	1105	2.10	1011	2.04	924	1.83	809	1.63	665	1.30
	14R07-140	14R07C	1475	2.83	1406	2.63	1332	2.49	1223	2.31	1104	2.05	996	1.90	861	1.68	704	1.43
	14R06-146	14R06D	1497	3.18	1418	3.01	1335	2.90	1259	2.74	1185	2.64	1092	2.43	975	2.26	854	1.99
	14R08-140	14R08C	1606	2.99	1504	2.78	1396	2.64	1279	2.42	1145	2.22	1001	1.91	859	1.74	701	1.40
	14R07-146	14R07D	1599	3.45	1527	3.30	1435	3.15	1339	2.90	1247	2.77	1151	2.55	1037	2.37	927	2.12
	14R08-146	14R08D	1700	3.73	1624	3.51	1507	3.26	1407	2.98	1297	2.78	1191	2.55	1079	2.39	958	2.13
15	15R06-140	15R06A	1779	3.16	1677	3.01	1531	2.86	1425	2.66	1289	2.41	1122	2.14	933	1.91	687	1.46
	15R06-154	15R06B	1924	4.51	1841	4.34	1767	4.26	1664	4.02	1558	3.85	1467	3.67	1359	3.41	1248	3.09
	15R08-140	15R08A	2341	4.35	2162	4.01	1970	3.70	1773	3.30	1559	2.95	1351	2.51	1043	2.06	714	1.51
	15R10-140	15R10A	2397	4.55	2255	4.24	2082	3.94	1888	3.50	1638	3.09	1383	2.55	1061	2.03		
	15R06-164	15R06C	2117	5.42	2039	5.24	1952	5.10	1860	4.87	1761	4.71	1669	4.48	1551	4.35	1439	4.15
	15R08-154	15R08B	2628	6.48	2502	6.15	2371	5.85	2237	5.53	2084	5.16	1914	4.62	1712	4.12	1528	3.66
	15R10-154	15R10B	2796	7.05	2690	6.72	2561	6.36	2426	5.87	2240	5.47	2022	4.85	1804	4.33	1617	3.88
	15R08-164	15R08C	2921	7.56	2817	7.31	2701	7.10	2569	6.76	2419	6.41	2273	5.98	2078	5.57	1856	4.90
	15R10-164	15R10C	3001	7.87	2927	7.69	2831	7.50	2727	7.20	2588	6.86	2437	6.39	2253	5.91	2057	5.40
18	18R06-140	18R06A	1117	2.29	1062	2.20	989	2.14	920	1.99	846	1.93	769	1.79	683	1.71	587	1.55
	18R08-140	18R08A	1453	2.74	1366	2.58	1276	2.52	1190	2.37	1092	2.31	1000	2.15	886	2.02	778	1.87
	18R06-164	18R06B	1453	4.09	1419	3.96	1367	3.88	1320	3.71	1263	3.65	1211	3.49	1150	3.36	1092	3.15
	18R10-140	18R10A	1539	2.92	1461	2.79	1366	2.65	1260	2.44	1149	2.33	1041	2.14	923	2.03	802	1.87
	18R06-180	18R06C	1592	5.35	1552	5.20	1503	5.09	1454	5.00	1403	4.84	1356	4.64	1302	4.53	1252	4.38
	18R08-164	18R08B	1901	5.40	1835	5.21	1756	5.09	1681	4.88	1594	4.74	1520	4.50	1436	4.36	1360	4.12
	18R10-164	18R10B	2086	6.06	2022	5.91	1940	5.76	1875	5.49	1782	5.27	1694	5.04	1598	4.92	1499	4.66
	18R08-180	18R08C	2047	6.96	2001	6.74	1944	6.55	1891	6.28	1829	6.14	1765	5.88	1689	5.63	1614	5.40
	18R10-180	18R10C	2334	7.37	2282	7.13	2212	6.93	2144	6.60	2069	6.46	1993	6.25	1906	6.06	1828	5.86
18	18R06-164	18R06B	1018	3.03	940	2.83	843	2.66	716	2.38	522	2.06	738	3.15	579	2.84	267	1.83
	18R06-180	18R06C	1198	4.27	1143	4.08	1071	3.93	993	3.69	873	3.47						
	18R08-164	18R08B	1270	3.88	1186	3.58	1094	3.36	953	2.91	712	2.39						
	18R10-164	18R10B	1402	4.44	1309	4.18	1202	3.97	1062	3.63	831	3.22						
	18R08-180	18R08C	1529	5.20	1450	4.94	1369	4.76	1294	4.48	1188	4.24	1055	3.88	879	3.50		
	18R10-180	18R10C	1729	5.67	1632	5.40	1529	5.15	1429	4.86	1314	4.56	1180	4.16	1000	3.77		

CA Direct Drive at 3450 RPM (60Hz) – Backward Curved

SIZE	CATALOG NUMBER	SELECTOR NUMBER	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
9	09B05-102	09B05A	512	0.56	460	0.50	401	0.45	349	0.42	283	0.39	213	0.33				
10	10B06-102	10B06A	605	0.77	544	0.70	477	0.64	398	0.58	294	0.52	128	0.42				
10	10B06-110	10B06B	727	1.04	678	0.99	633	0.96	582	0.87	503	0.79	425	0.70	301	0.59		
12	12B07-110	12B07A	867	1.07	802	0.97	728	0.97	638	0.87	538	0.80	419	0.70	177	0.51		
	12B07-130	12B07B	1283	2.53	1229	2.42	1153	2.35	1089	2.22	1010	2.14	941	2.01	861	1.92	790	1.77
14	14B06-130	14B06A	1304	2.44	1240	2.32	1169	2.26	1105	2.14	1026	2.07	944	1.90	847	1.77	735	1.54
	14B07-130	14B07A	1348	2.43	1274	2.32	1196	2.25	1127	2.11	1051	2.03	959	1.87	853	1.76	742	1.58
	14B08-130	14B08A	1402	2.46	1318	2.36	1229	2.28	1144	2.13	1054	2.05	964	1.89	861	1.77	759	1.59
	14B06-140	14B06B	1580	3.81	1510	3.64	1435	3.53	1360	3.35	1280	3.22	1206	3.03	1126	2.90	1036	2.67
	14B07-140	14B07B	1655	4.01	1576	3.79	1497	3.67	1417	3.47	1327	3.35	1242	3.14	1150	3.00	1065	2.81
	14B08-140	14B08B	1723	4.04	1646	3.86	1564	3.73	1483	3.55	1394	3.45	1305	3.23	1205	3.06	1116	2.86
15	15B06-140	15B06A	1762	3.40	1678	3.51	1588	3.22	1484	2.98	1365	2.82	1245	2.62	1122	2.50	997	2.25
	15B08-140	15B08A	2090	4.28	1987	4.06	1865	3.85	1750	3.53	1600	3.29	1438	2.98	1255	2.69	1077	2.39
	15B10-140	15B10A	2151	4.35	2035	4.12	1899	3.91	1784	3.67	1625	3.39	1449	2.97	1266	2.72	1077	2.45
	15B06-154	15B06B	2040	5.31	1959	5.11	1872	4.96	1796	4.71	1696	4.57	1592	4.41	1511	4.26	1437	4.06
	15B06-164	15B06C	2227	6.39	2171	6.27	2100	6.19	2023	6.01	1931	5.86	1833	5.60	1701	5.28	1620	5.07
	15B08-154	15B08B	2663	7.28	2555	7.02	2426	6.77	2301	6.43	2173	6.11	2047	5.71	1917	5.38	1790	5.01
	15B08-164	15B08C	2682	7.68	2614	7.53	2530	7.39	2450	7.15	2363	6.94	2264	6.64	2152	6.40	2046	6.09
	15B10-154	15B10B	2786	7.75	2682	7.47	2567	7.20	2452	6.82	2323	6.55	2185	6.12	2036	5.70	1887	5.24
	15B10-164	15B10C	2788	7.75	2726	7.56	2648	7.42	2566	7.20	2453	7.01	2343	6.74	2224	6.47	2110	6.15
	18B06-140	18B06A	1131	2.70	1092	2.63	1033	2.61	974	2.53	907	2.51	857	2.40	800	2.38	723	2.26
18	18B08-140	18B08A	1497	3.66	1441	3.55	1371	3.46	1299	3.31	1225	3.16	1139	2.97	1042	2.85	954	2.67
	18B06-164	18B06B	1523	5.41	1482	5.36	1437	5.30	1398	5.18	1349	5.16	1308	5.07	1250	4.95	1199	4.76
	18B10-140	18B10A	1579	3.77	1503	3.59	1428	3.50	1342	3.30	1257	3.18	1186	2.95	1089	2.88	1005	2.74
	18B06-180	18B06C	1581	6.27	1540	6.18	1495	6.19	1450	6.04	1406	5.99	1367	5.89	1328	5.88	1285	5.73
	18B08-164	18B08B	2022	7.31	1980	7.13	1913	7.01	1851	6.78	1774	6.66	1703	6.39	1621	6.22	1549	5.99
	18B10-164	18B10B	2190	7.97	2144	7.75	2072	7.63	2006	7.45	1929	7.30	1857	7.07	1781	6.82	1711	6.51
	18B08-180	18B08C	2266	8.99	2218	8.86	2150	8.69	2089	8.46	2024	8.30	1965	8.07	1878	8.00	1797	7.87
	18B10-180	18B10C	2532	10.34	2492	10.16	2432	10.07	2380	9.91	2304	9.49	2234	9.02	2183	8.96	2138	8.83
	18B06-140	18B06A	630	2.24	569	2.06	458	1.92	353	1.72								
	18B08-140	18B08A	848	2.55	738	2.38	586	2.18	441	1.91								
	18B10-140	18B10A	907	2.58	764	2.38	559	2.16										
18	18B06-164	18B06B	1136	4.74	1078	4.65	999	4.55	927	4.39	764	4.19	608	3.96	394	3.42		
	18B06-180	18B06C	1233	5.68	1186	5.57	1129	5.47	1078	5.32	990	5.03	841	4.53	692	4.03	543	3.53
	18B08-164	18B08B	1467	5.82	1396	5.64	1311	5.50	1233	5.30	1025	4.90	797	4.36	460	3.61		
	18B10-164	18B10B	1614	6.32	1523	6.06	1435	5.86	1353	5.59	1173	5.03	943	4.59	528	3.82		
	18B08-180	18B08C	1730	7.60	1668	7.28	1591	7.04	1520	6.73	1361	6.19	1193	5.54	1000	4.95	718	4.01
	18B10-180	18B10C	2069	8.58	2006	8.27	1924	7.92	1847	7.50	1657	6.87	1542	6.33	1308	5.71	1021	4.89

CA Direct Drive at 2850 RPM (50 Hz) – Backward Curved

SIZE	CATALOG NUMBER	SELECTOR NUMBER	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP	
			CFM	BHP														
9	09B05-102	09B05A	402	0.30	338	0.26	265	0.23	184	0.19								
10	10B06-102	10B06A	474	0.43	401	0.37	296	0.32	139	0.25								
10	10B06-110	10B06B	580	0.58	529	0.53	455	0.48	361	0.41	203	0.31						
12	12B07-110	12B07A	691	0.59	609	0.55	493	0.48	362	0.40								
	12B07-130	12B07B	1044	1.40	960	1.29	878	1.24	787	1.12	692	1.05	596	0.96	443	0.86		
	12B07-140	12B07C	1083	1.67	995	1.52	901	1.45	816	1.32	717	1.24	625	1.09	522	1.01	386	0.84
14	14B06-130	14B06A	1051	1.34	973	1.24	888	1.20	790	1.06	672	0.98	511	0.79	301	0.56		
	14B07-130	14B07A	1084	1.34	996	1.24	905	1.18	805	1.05	677	0.98	530	0.85				
	14B08-130	14B08A	1125	1.36	1023	1.25	915	1.19	809	1.06	684	0.99	526	0.82				
	14B06-140	14B06B	1277	2.11	1193	1.96	1096	1.86	1006	1.70	907	1.59	793	1.40	658	1.24	480	0.98
	14B07-140	14B07B	1334	2.19	1244	2.04	1140	1.93	1037	1.76	928	1.65	821	1.47	685	1.29	516	0.95
	14B08-140	14B08B	1393	2.23	1300	2.07	1195	1.98	1090	1.82	971	1.68	861	1.52	698	1.33	506	0.99
15	15B06-140	15B06A	1423	1.88	1320	1.79	1189	1.64	1044	1.46	895	1.38	737	1.11	502	0.99		
	15B08-140	15B08A	1692	2.36	1550	2.14	1396	1.94	1209	1.67	986	1.44	776	1.25	514	1.00		
	15B10-140	15B10A	1736	2.41	1579	2.18	1423	2.01	1220	1.68	998	1.49	753	1.22				
	15B06-154	15B06B	1655	2.94	1554	2.76	1455	2.61	1325	2.47	1228	2.37	1126	2.20	1001	2.05	837	1.78
	15B06-164	15B06C	1820	3.56	1741	3.45	1639	3.36	1531	3.17	1383	2.93	1284	2.76	1165	2.63	1032	2.43
	15B08-154	15B08B	2157	4.04	2015	3.79	1857	3.55	1707	3.23	1548	2.96	1388	2.69	1212	2.43	1024	2.08
	15B10-154	15B10B	2260	4.30	2131	4.03	1982	3.79	1822	3.46	1643	3.12	1448	2.74	1217	2.42	1047	2.12
	15B08-164	15B08C	2188	4.29	2099	4.13	1995	3.99	1884	3.74	1749	3.54	1617	3.30	1451	3.10	1250	2.77
	15B10-164	15B10C	2278	4.32	2196	4.16	2081	4.02	1949	3.80	1806	3.58	1658	3.33	1477	3.12	1275	2.81
18	18B06-140	18B06A	918	1.50	859	1.44	781	1.43	715	1.34	639	1.32	539	1.23	445	1.15	317	0.98
	18B08-140	18B08A	1214	2.04	1140	1.92	1047	1.83	951	1.66	837	1.57	722	1.42	575	1.32	398	1.09
	18B10-140	18B10A	1274	2.08	1186	1.94	1079	1.83	989	1.65	876	1.59	768	1.44	586	1.32		
	18B06-164	18B06B	1240	3.03	1192	2.95	1138	2.91	1086	2.84	1018	2.75	951	2.64	872	2.61	783	2.47
	18B06-180	18B06C	1289	3.50	1239	3.45	1182	3.41	1135	3.31	1084	3.29	1030	3.18	965	3.13	903	3.00
	18B08-164	18B08B	1652	4.07	1587	3.92	1503	3.80	1416	3.59	1319	3.46	1229	3.27	1134	3.17	1038	2.99
	18B10-164	18B10B	1791	4.44	1719	4.27	1630	4.17	1543	3.98	1451	3.78	1352	3.55	1238	3.39	1138	3.17
	18B08-180	18B08C	1852	5.03	1783	4.87	1703	4.73	1631	4.54	1529	4.48	1442	4.29	1359	4.07	1273	3.82
	18B10-180	18B10C	2075	5.78	2016	5.64	1939	5.49	1854	5.10	1791	5.02	1724	4.83	1637	4.61	1544	4.27

Wheel Diameter: 8.00" O.D. Inlet = 4"

Catalog Number = 08R04-080

Selector Number = 08R04A

Size 8 CABD Belt Driven – Radial Blade

VOLUME CFM	0.5" SP		1" SP		1.5" SP		2" SP		2.5" SP		3" SP		3.5" SP		4" SP		4.5" SP		5" SP	
	RPM	BHP	RPM	BHP																
50	1240	0.01	1725	0.03	2107	0.05	2427	0.08	2714	0.10	2970	0.14	3207	0.17	3425	0.20	3634	0.24	3830	0.29
100	1458	0.02	1853	0.04	2187	0.06	2483	0.09	2751	0.12	3003	0.15	3235	0.19	3450	0.23	3658	0.28	3853	0.32
150	1757	0.04	2111	0.07	2405	0.10	2658	0.12	2897	0.15	3121	0.19	3334	0.22	3532	0.27	3728	0.31	3912	0.36
200	2129	0.08	2411	0.11	2680	0.14	2918	0.18	3139	0.21	3339	0.26	3527	0.30	3708	0.34	3882	0.38		
250	2597	0.15	2750	0.17	2985	0.21	3207	0.26	3413	0.30	3605	0.34	3786	0.39	3953	0.43				
300	3073	0.26	3171	0.28	3325	0.31	3516	0.35	3713	0.40	3894	0.45								
350	3555	0.39	3641	0.41	3723	0.44	3863	0.48	4031	0.53										

Wheel Diameter: 9.00" O.D. Inlet = 5"

Catalog Number = 09R05-090

Selector Number = 09R05A

Size 9 CABD Belt Driven – Radial Blade

VOLUME CFM	1" SP		1.5" SP		2" SP		2.5" SP		3" SP		3.5" SP		4" SP		4.5" SP		5" SP		6" SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP													
50	1526	0.02	1870	0.04	2159	0.06	2417	0.09	2647	0.12	2858	0.15	3052	0.17	3239	0.20	3414	0.24	3740	0.32	
100	1577	0.03	1892	0.05	2168	0.07	2249	0.09	2477	0.11	2686	0.14	2889	0.17	3076	0.20	3255	0.23	3423	0.28	
150	1724	0.05	2003	0.07	2249	0.09	2477	0.11	2797	0.17	2983	0.21	3155	0.24	3321	0.28	3475	0.32	3744	0.35	
200	1910	0.07	2171	0.09	2398	0.12	2607	0.15												2776	0.40
250	2126	0.10	2361	0.13	2574	0.16	2773	0.19	2956	0.22	3128	0.27	3287	0.30	3440	0.34	3592	0.38	3876	0.46	
300	2372	0.15	2576	0.18	2771	0.21	2956	0.26	3132	0.29	3297	0.33	3449	0.37	3601	0.41	3743	0.45	4007	0.53	
350	2663	0.22	2818	0.26	2990	0.29	3162	0.33	3326	0.37	3478	0.41	3628	0.45	3774	0.50	3911	0.54			
400	2985	0.32	3081	0.35	3232	0.38	3387	0.42	3534	0.46	3684	0.51	3822	0.55	3957	0.60					
450	3310	0.44	3399	0.47	3483	0.49	3630	0.54	3767	0.58	3897	0.63	4029	0.68							
500	3639	0.59	3721	0.62	3798	0.65	3880	0.68	4012	0.73											
550	3971	0.78																			

Wheel Diameter: 10.625" O.D. Inlet = 6"

Catalog Number = 10R06-105

Selector Number = 10R06A

Size 10 CABD Belt Driven – Radial Blade

VOLUME CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP	
	RPM	BHP	RPM	BHP																
100	1298	0.04	1819	0.10	2223	0.17	2559	0.26	2860	0.34	3127	0.44	3378	0.54	3607	0.65	3826	0.78	4030	0.90
200	1432	0.07	1866	0.13	2260	0.21	2597	0.32	2898	0.42	3165	0.54	3415	0.65	3644	0.79	3862	0.92		
300	1681	0.12	2066	0.21	2383	0.31	2669	0.41	2935	0.51	3203	0.64	3452	0.78	3682	0.92	3901	1.05		
400	2000	0.23	2314	0.33	2618	0.45	2866	0.56	3104	0.69	3327	0.82	3541	0.95	3737	1.02	3938	1.20		
500	2330	0.39	2600	0.50	2862	0.62	3118	0.78	3337	0.91	3534	1.00	3731	1.19	3912	1.33				
600	2649	0.59	2944	0.77	3143	0.87	3363	0.97	3587	1.17	3792	1.33	3971	1.52						
700	2985	0.88	3271	1.03	3491	1.24	3653	1.33	3841	1.51	4030	1.67								
800	3325	1.20	3596	1.43	3831	1.69	4002	1.85												
900	3668	1.65	3919	1.90																

Wheel Diameter: 12.25" O.D. Inlet = 7"

Catalog Number = 12R07-122

Selector Number = 12R07A

Size 12 CABD Belt Driven – Radial Blade

VOLUME CFM	2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP														
100	1518	0.08	1855	0.14	2136	0.21	2387	0.29	2610	0.38	2819	0.46	3010	0.56	3193	0.66	3361	0.77	3679	0.95
200	1555	0.11	1890	0.18	2169	0.27	2419	0.36	2642	0.45	2851	0.55	3041	0.66	3225	0.78	3394	0.90	3712	1.10
300	1636	0.16	1943	0.26	2209	0.35	2458	0.45	2680	0.55	2887	0.66	3076	0.78	3257	0.90	3426	0.98	3745	1.26
400	1781	0.24	2050	0.34	2290	0.44	2521	0.55	2727	0.67	2928	0.81	3117	0.94	3298	1.05	3465	1.16	3781	1.46
500	1940	0.36	2200	0.47	2420	0.58	2627	0.69	2815	0.82	3008	0.97	3184	1.06	3352	1.24	3508	1.37	3823	1.53
600	2116	0.50	2358	0.63	2574	0.78	2770	0.91	2946	0.99	3120	1.16	3279	1.28	3440	1.46	3596	1.60	3889	1.96
700	2304	0.68	2528	0.83	2734	0.99	2926	1.13	3099	1.26	3263	1.45	3414	1.57	3564	1.77	3705	1.90	3977	2.25
800	2478	0.89	2720	1.07	2902	1.19	3088	1.41	3257	1.57	3419	1.79	3566	1.94	3710	2.14	3843	2.29		
900	2669	1.10	2898	1.37	3093	1.54	3257	1.73	3420	1.91	3578	2.15	3724	2.35	3865	2.58	3997	2.76		
1000	2880	1.45	3073	1.68	3278	1.93	3449	2.17	3594	2.33	3742	2.57	3886	2.79	4025	3.05				
1100	3094	1.86	3267	2.09	3450	2.34	3636	2.66	3786	2.87	3922	3.09								
1200	3310	2.34	3477	2.60	3628	2.80	3809	3.15	3972	3.45										
1300	3530	2.88	3690	3.18	3834	3.40	3984	3.70												
1400	3753	3.54	3906	3.85																
1500	3979	4.27				</td														

Wheel Diameter: 14.00" O.D. Inlet = 7"
 Catalog Number = 14R07-140
 Selector Number = 14R07A

Size 14 CABD Belt Driven – Radial Blade

VOLUME CFM	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP		20" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
200	1362	0.10	1908	0.22	2328	0.37	2683	0.54	2994	0.72	3276	0.92	3536	1.08	3777	1.30	4004	1.53		
400	1476	0.22	1974	0.42	2374	0.61	2727	0.84	3039	1.01	3321	1.25	3581	1.49	3822	1.75				
600	1682	0.41	2120	0.67	2481	0.97	2812	1.20	3106	1.49	3370	1.78	3626	2.09	3867	2.43				
800	1939	0.70	2326	1.00	2656	1.34	2956	1.72	3222	2.11	3483	2.50	3725	2.88	3952	3.27				
1000	2209	1.10	2576	1.49	2872	1.95	3147	2.37	3401	2.81	3640	3.29	3860	3.78						
1200	2514	1.72	2834	2.25	3123	2.67	3369	3.24	3609	3.74	3829	4.23								
1400	2846	2.62	3106	3.13	3381	3.71	3625	4.22	3841	4.89										
1600	3187	3.80	3399	4.26	3646	5.01	3884	5.61												
1800	3532	5.28	3727	5.83	3924	6.45														

Wheel Diameter: 15.50" O.D. Inlet = 8"
 Catalog Number = 15R08-154
 Selector Number = 15R08A

Size 15 CABD Belt Driven – Radial Blade

VOLUME CFM	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP		20" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
200	1207	0.12	1702	0.29	2082	0.47	2402	0.68	2684	0.91	2940	1.11	3177	1.40	3397	1.71	3603	2.04	3798	2.39
400	1245	0.20	1728	0.45	2103	0.71	2420	0.95	2702	1.26	2957	1.57	3192	1.91	3410	2.26	3614	2.61	3809	2.98
600	1324	0.33	1773	0.62	2136	0.95	2451	1.27	2730	1.65	2982	2.05	3213	2.47	3428	2.90	3632	3.34	3826	3.79
800	1454	0.51	1853	0.87	2196	1.20	2495	1.62	2763	2.05	3015	2.53	3246	3.02	3461	3.52	3663	4.04	3854	4.57
1000	1585	0.75	1973	1.13	2280	1.57	2567	2.06	2822	2.56	3063	3.08	3286	3.62	3495	4.17	3697	4.76		
1200	1714	1.03	2103	1.54	2401	2.05	2653	2.57	2906	3.15	3136	3.74	3347	4.35	3550	4.96	3745	5.59		
1400	1871	1.46	2233	2.04	2531	2.64	2782	3.24	3004	3.85	3220	4.49	3431	5.17	3628	5.86	3813	6.55		
1600	2035	2.00	2361	2.65	2660	3.34	2913	4.03	3134	4.71	3334	5.40	3520	6.08	3712	6.85				
1800	2208	2.64	2506	3.41	2792	4.15	3042	4.94	3264	5.70	3464	6.48	3648	7.25	3820	8.01				
2000	2387	3.44	2663	4.33	2920	5.12	3174	5.97	3394	6.85	3595	7.70	3779	8.56						
2200	2571	4.41	2826	5.39	3066	6.28	3302	7.19	3525	8.11	3724	9.08								
2400	2758	5.55	2998	6.59	3224	7.62	3434	8.57	3653	9.59	3855	10.60								
2600	2947	6.87	3171	7.97	3385	9.15	3589	10.20	3783	11.24										
2800	3138	8.40	3351	9.58	3552	10.86	3746	12.05												

Wheel Diameter: 18.00" O.D. Inlet = 8"
 Catalog Number = 18R08-180
 Selector Number = 18R08A

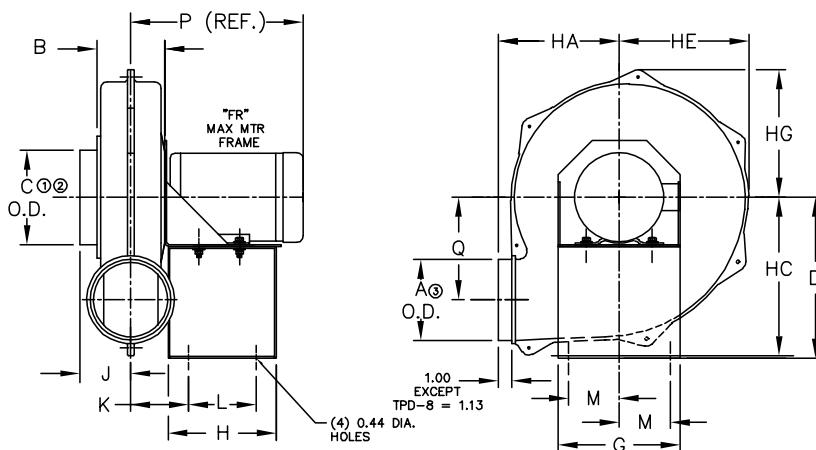
Size 18 CABD Belt Driven – Radial Blade

VOLUME CFM	4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP		20" SP		22" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
200	1447	0.28	1771	0.45	2044	0.64	2286	0.87	2503	1.06	2704	1.32	2890	1.58	3065	1.86	3231	2.15	3389	2.46
400	1468	0.44	1782	0.68	2054	0.96	2296	1.19	2513	1.49	2713	1.80	2899	2.12	3073	2.45	3239	2.79	3396	3.14
600	1547	0.65	1832	0.97	2085	1.26	2317	1.61	2527	1.97	2724	2.36	2910	2.76	3085	3.17	3250	3.59	3408	4.03
800	1701	0.95	1937	1.29	2164	1.68	2375	2.10	2577	2.55	2761	3.00	2940	3.47	3109	3.94	3268	4.42	3421	4.91
1000	1889	1.45	2103	1.85	2298	2.27	2478	2.70	2662	3.21	2834	3.72	3002	4.26	3163	4.82	3316	5.38	3461	5.95
1200	2085	2.10	2291	2.60	2471	3.08	2636	3.56	2796	4.08	2945	4.60	3099	5.19	3249	5.80	3391	6.43	3530	7.06
1400	2295	3.00	2485	3.54	2659	4.11	2817	4.67	2963	5.23	3104	5.80	3241	6.41	3371	7.02	3497	7.64		
1600	2515	4.14	2690	4.73	2853	5.36	3007	6.01	3149	6.66	3282	7.30	3408	7.94	3530	8.59				
1800	2752	5.62	2904	6.23	3056	6.90	3202	7.60	3340	8.34	3470	9.08	3593	9.80						
2000	2995	7.42	3129	8.06	3269	8.78	3405	9.53	3535	10.30										
2200	3240	9.58	3366	10.30	3487	11.01	3617	11.84												
2400	3489	12.15	3608	12.94																



Dimensional Data

Direct Drive — Arrangement 4



①CA-14 ALSO AVAILABLE WITH 6" AND 8" INLETS

②CA-15 AND TPB-18 ALSO AVAILABLE WITH 6" AND 10" INLETS

③ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

NOTES:

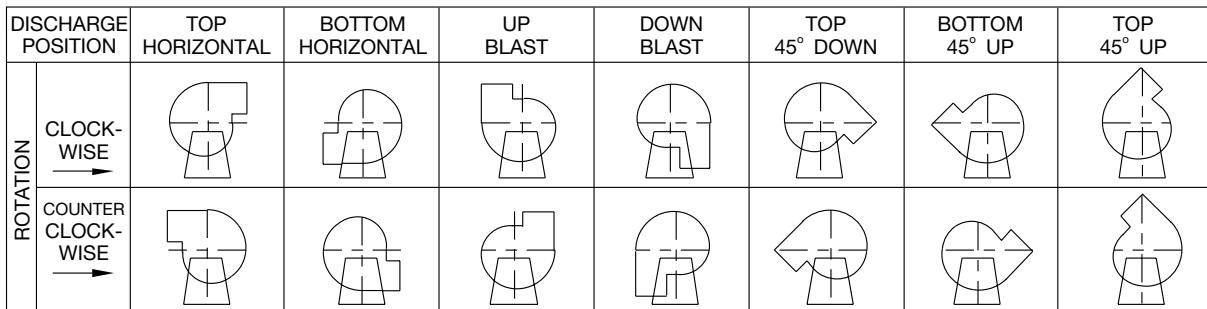
01. CW SHOWN, CCW SIMILAR BUT OPPOSITE

02. SEE R33865 FOR INLET FLANGE AND OPTIONAL OUTLET FLANGE DIMENSIONS.

**03. NOMINAL INLET & OUTLET DIAMETER

HOUSING SIZE	DIMENSIONS (IN.)																
	A** ③	B	C** ①②	D	FR	G	H	HA	HC	HE	HG	J	K	L	M	P	Q
CA-8	4.00	3.75	4.00	8.56	56C	7.00	7.13	5.75	7.13	5.56	4.88	2.88	3.19	5.00	2.75	13.38	4.31
CA-9	4.00	4.13	5.00	10.44 11.88	56C	7.00	7.88	7.44	8.94	7.50	6.63	3.13	3.38	5.75	2.75	13.56	5.63
					143-145TC	9.00	8.00						4.19	5.00	3.75	14.19	
CA-10	5.00	4.25	6.00	10.44 11.88	56C	7.00	7.88	7.88	10.25	9.44	7.81	3.38	3.56	5.75	2.75	13.94	6.56
					143-145TC	9.00	8.00						4.25	5.00	3.75	14.56	
CA-12	6.00	5.00	7.00	11.88	56C	9.00	8.00	8.88	11.38	9.63	9.44	3.75	4.63	5.00	3.75	14.25	7.25
					143-145TC	9.00	8.00						4.63	5.00	3.75	14.88	
					182-184T	12.00	11.75						5.00	8.75	4.94	16.25	
CA-14	6.00	6.00	7.00	15.19	143-145T	12.00	11.75	9.81	12.00	10.25	10.25	4.25	5.50	8.75	4.94	15.13	8.06
					182-184T								5.50	8.75	4.94	16.50	
					213-215T								5.50	8.75	4.94	19.81	
CA-15	8.00	7.25	8.00	15.19	182-184T	12.00	11.75	11.00	13.00	11.38	10.81	4.88	6.13	8.75	4.94	17.32	7.88
					213-215T								6.13	8.75	4.94	20.63	
					254-256T								6.13	8.75	4.94	25.19	
CA-18	6.00	6.25	8.00	15.19	182-184T	12.00	11.75	11.50	14.50	12.69	11.38	4.38	5.63	8.75	4.94	16.69	10.69
					213-215T								5.63	8.75	4.94	20.00	
					254-256T								5.63	8.75	4.94	24.56	

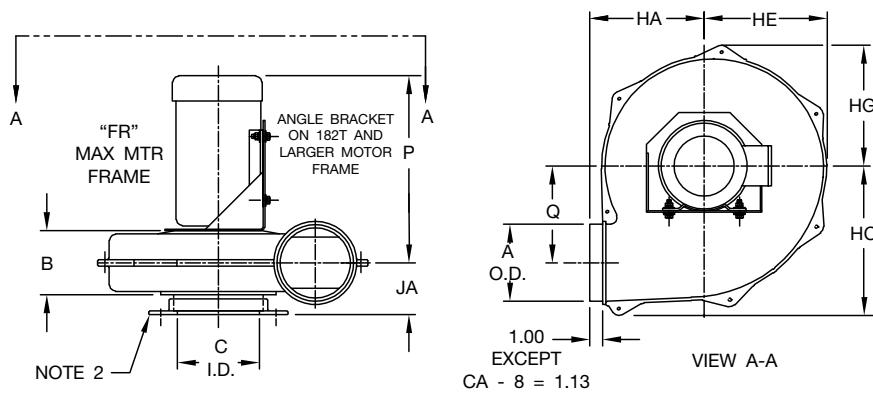
R33842D



NOTE: Arrangement 1 - Less Motor
Arrangement 9 - With Motor

Dimensional Data

Direct Drive — Arrangement 4 HI



①CA-14 ALSO AVAILABLE WITH 5.50" AND 7.50" INLETS

②CA-15 AND CA-18 ALSO AVAILABLE WITH 5.50" AND 9.69" INLETS

NOTES:

01. CW SHOWN, CCW SIMILAR BUT OPPOSITE

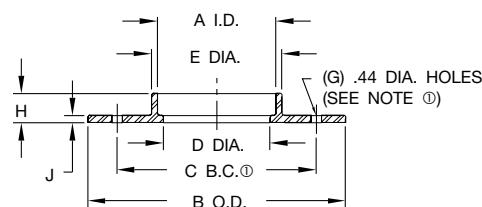
02. SEE R33865A FOR INLET FLANGE AND OPTIONAL OUTLET FLANGE DIMENSIONS.

*03. NOMINAL OUTLET DIAMETER

HOUSING SIZE	DIMENSIONS (IN.)	
	FR	P
CA-8	56C	13.38
	56C	13.41
	143-145TC	14.32
CA-10	56C	14.50
	143-145TC	14.75
	56C	14.50
CA-12	143-145TC	14.75
	182-184T	16.08
	143-145T	14.81
CA-14	182-184T	16.19
	213-215T	18.94
	182-184T	16.94
CA-15	213-215T	19.69
	182-184T	17.06
CA-18	213-215T	19.81

Accessories

Inlet & Outlet Flange



SIZE	DIMENSIONS (IN.)							
	A	B	C	D	E	G	H	J
4	4.06	9.00	7.50	3.69	4.56	4.00	1.25	0.34
5	5.06	11.00	8.50	4.56	5.56	4.00	1.25	0.31
6	6.06	11.00	9.50	5.50	6.56	4.00	1.38	0.31
7	7.06	11.00	9.00	6.44	7.69	8.00	1.25	0.34
8	8.06	13.50	11.75	7.50	8.63	8.00	1.28	0.31
10	10.06	16.00	14.25	9.69	10.65	8.00	1.34	0.38

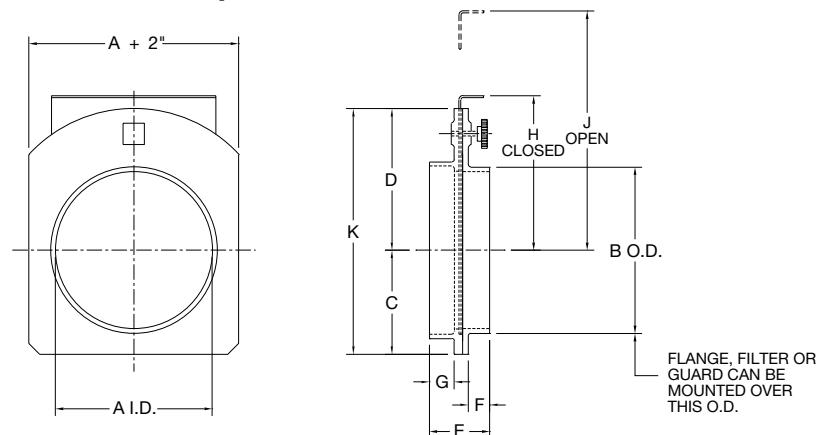
R33865A

NOTE:

① Holes will not be drilled unless customer specifies. If drilled per standard dimensions shown, holes will be on centerline unless otherwise specified. Custom hole patterns available at additional charge.

1. Discharge flanges not available on downblast discharge configurations.

Slide Gate Damper



SIZE	DIMENSIONS (IN.)				
	A	B	C	D	E
4	4.06	3.91	3.25	4.50	2.69
5	5.06	4.91	3.50	5.50	2.56
6	6.06	5.91	4.00	5.50	2.69
7	7.06	6.91	4.50	5.50	2.88
8	8.06	7.91	5.00	6.75	2.81
10	10.06	9.91	6.00	8.00	3.06

SIZE	DIMENSIONS (IN.)				
	F	G	H	J	K
4	1.00	1.06	5.63	9.00	7.75
5	1.13	0.88	6.13	10.50	9.00
6	1.06	1.00	6.25	11.50	9.50
7	1.13	1.13	6.25	12.50	10.00
8	1.00	1.19	7.75	15.00	11.75
10	1.31	1.00	9.00	18.50	14.00

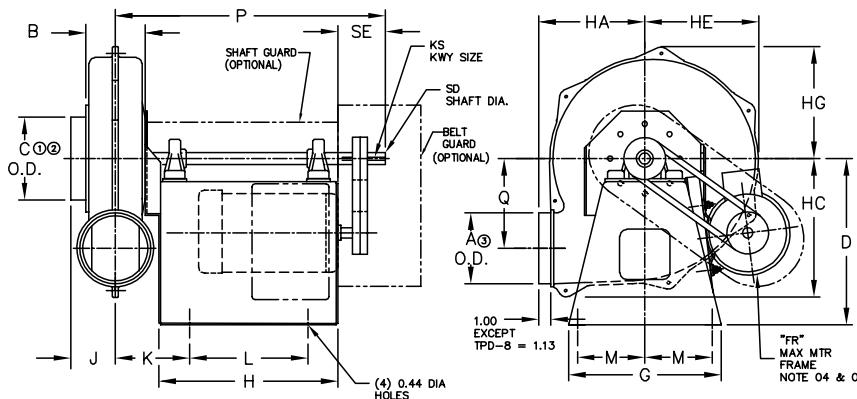
R33866

NOTE:

Slide Damper Gate not available on downblast or bottom angular down discharge positions.

Dimensional Data

Belt Drive — Arrangements 1 or 9



①CA-14 ALSO AVAILABLE WITH 6" AND 8" INLETS

②CA-15 AND CA-18 ALSO AVAILABLE WITH 6" AND 10" INLETS

③ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

NOTES:

01. CW SHOWN, CCW SIMILAR BUT OPPOSITE
02. SEE R33865 FOR OPTIONAL INLET FLANGE AND OUTLET FLANGE DIMENSIONS.
- **03. NOMINAL INLET & OUTLET DIMENSIONS
04. ARR.1-LESS MOTOR
ARR.9-WITH MOTOR
05. STANDARD MOTOR IS ON RIGHT (AS SHOWN) REGARDLESS OF ROTATION. LEFT SIDE OPTIONAL

HOUSING SIZE	DIMENSIONS (IN.)									
	A** ③	B	C** ①②	D	G	H	HA	HC	HE	HG
CA-8	4.00	3.75	4.00	14.00	12.88	14.75	5.75	7.13	5.56	4.88
CA-9	4.00	4.13	5.00	14.00	12.88	14.75	7.44	8.94	7.50	6.63
CA-10	5.00	4.25	6.00	14.00	12.88	14.75	7.88	10.25	9.44	7.81
CA-12	6.00	5.00	7.00	18.00	17.50	17.75	8.88	11.38	9.63	9.44
CA-14	6.00	6.00	7.00	18.00	17.50	17.75	9.81	12.00	10.25	10.25
CA-15	8.00	7.25	8.00	23.00	19.00	24.25	11.00	13.00	11.38	10.81
CA-18	6.00	6.25	8.00	23.00	19.00	24.25	11.50	14.50	12.69	11.38

HOUSING SIZE	DIMENSIONS (IN.)									
	J	K	L	M	P	Q	SE	SD	KS	FR
CA-8	2.88	5.38	10.00	5.69	21.13	4.13	3.00	0.75	.19 x .09	56-145T
CA-9	3.13	5.81	10.00	5.69	21.31	5.63	3.00	0.75	.19 x .09	56-145T
CA-10	3.38	5.88	10.00	5.69	21.44	6.56	3.00	0.75	.19 x .09	56-145T
CA-12	3.75	6.25	13.00	8.00	25.25	7.25	4.00	1.00	.25 x .13	56-145T
CA-14	4.25	6.75	13.00	8.00	25.81	8.06	4.00	1.44	.38 x .19	56-145T
CA-15	4.88	7.38	19.50	8.63	32.94	7.88	4.00	1.44	.38 x .19	182-256T
CA-18	4.38	6.88	19.50	8.63	32.44	10.68	4.00	1.69	.38 x .19	182-256T

R33841D

Typical Specifications – Type CA/CABD

Furnish and install Model CA/CABD Cast Aluminum Pressure Blowers, as manufactured by Aerovent, Minneapolis, Minnesota. Fans shall be of the size and arrangement as indicated in the fan schedule.

HOUSINGS — All housings shall be heavy duty cast aluminum construction. All units shall be built with an adjustable discharge housing which can be field rotated to any of the eight standard positions.

WHEELS — The wheel shall be of the radial bladed backplate or backward curved design, and shall be cast aluminum construction. Wheels shall be suitable for exhaust purposes where low volume and high pressure applications exist.

BEARINGS — Bearings on belt driven units shall be selected to have a minimum average life of 200,000 hours (L-10 minimum life of 40,000 hours) based on AFBMA rating designations. The bearings shall be pillow block type, heavy duty, anti-friction, self-aligning ball bearings.

SHAFTS — Fan shafts on belt driven units shall be per AISI 1040 or 1045 hot rolled steel, accurately turned, ground, polished, and ring-gauged for accuracy. Shafts shall be sized so that the first critical speed will be at least 1.40 times the maximum operating speed.

MOTORS — Fan motors shall be foot-mounted or C-Face NEMA Design B, standard industrial, continuous duty, ball bearing, variable torque type suitable for operation on voltage, phase and hertz, as listed in the fan schedule. Motor bearings shall have a minimum L-10 life, as defined by AFBMA, of at least 40,000 hours (200,000 hours average life). For arrangement 4, sizes 8-12, motors must be C-Face only with feet. For arrangement 4, sizes 15 and 18, the minimum motor frame is 182T.

BALANCING — Prior to shipment all fans shall be completely assembled and test run as a unit at the operating speed. Final balance of the completed fan assembly shall be taken by electronic equipment. Records of the vibration readings in the axial, vertical, and horizontal planes shall be maintained and a written copy of this record shall be available upon request.

SUBMITTALS — Submittals for approval of equipment shall include copies of outline drawings and pressure-volume performance curves showing point of operation.

ACCESSORIES — The fans shall be supplied with the following optional accessories:

- | | |
|--|---|
| <input type="checkbox"/> Slide Gate Damper (Inlet or Outlet) | <input type="checkbox"/> OSHA Belt Guard (Arr. 1 or 9) |
| <input type="checkbox"/> Drain With Plug | <input type="checkbox"/> OSHA Shaft and Bearing Guard (Arr. 1 or 9) |
| <input type="checkbox"/> Flanged Inlet (Drilling Optional) | <input type="checkbox"/> Floor Mount Isolators, RIS |
| <input type="checkbox"/> Flanged Outlet (Drilling Optional) | <input type="checkbox"/> Floor Mount Isolators, Spring |
| <input type="checkbox"/> Inlet or Outlet Guard | <input type="checkbox"/> Teflon Shaft Seal |
| <input type="checkbox"/> Inlet Filter | <input type="checkbox"/> Weather Hood (Inlet or Outlet) |
| <input type="checkbox"/> Inlet Silencer | <input type="checkbox"/> CE Mark |

Fan Weights Without Motor

ARRANGEMENT	Size 8	Size 9	Size 10	Size 12	Size 14	Size 15	Size 18
4	30	35	40	50	85	105	115
4HI	25	30	35	44	77	96	105
1 and 9	85	90	110	120	175	205	220

Motor Weights

FRAME	48	56	143T	145T	182T	184T
ODP	30	33	35	44	66	68
TEFC	30	33	35	44	67	75



**PROPELLER FANS | TUBEAXIAL & VANEAXIAL FANS | CENTRIFUGAL FANS & BLOWERS | ROOF VENTILATORS
INDUSTRIAL AIR HANDLERS | AIR MAKE-UP | FIBERGLASS FANS | CUSTOM FANS**



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