



**TECHNICAL DATA
TUBULAR CENTRIFUGAL**



IAP INC.

P.O. BOX 56
PHILLIPS, WI 54555
715/339-3024

MODEL TCFI

Tubular Centrifugal Fans

IAP Tubular Centrifugal fans have been designed for commercial and industrial applications that demand quiet, efficient and reliable air movement.

The high efficiency, low sound level, and non-overloading characteristics of IAP's airfoil wheels result from a careful matching of the inlet and wheel cones, optimum blade pitch and a well proportioned housing.

Rugged Tubular Centrifugal fan construction includes continuously welded housings and rigid support members for structural strength. Heavy duty bearings have an average life exceeding 200,000 hours. Fan wheels are mounted on accurately turned, ground and polished shafts. Each wheel is statically and dynamically balanced. Prior to shipment each fan is given a final balance test at operating speed to insure smooth, vibration free operation.

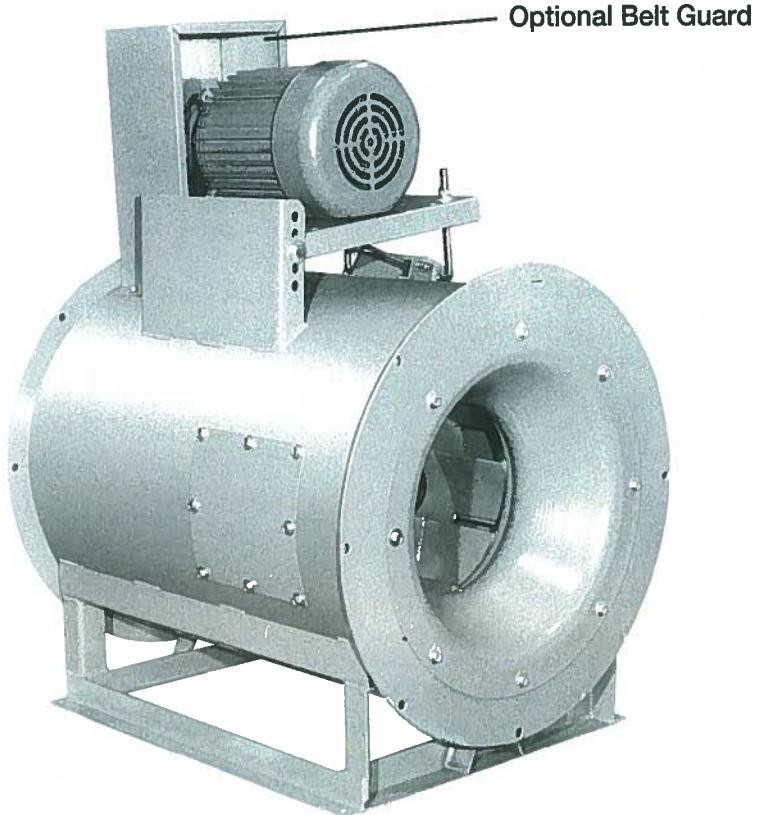
IAP's Tubular Centrifugal design has been engineered and tested to deliver years of dependable service with minimal maintenance. Extensive testing in a modern AMCA Registered research and development laboratory assures complete and accurate performance ratings.

IAP Tubular Centrifugal fans with airfoil wheels are available with capacities up to 127,000 CFM and static pressures to 8½" inch. They are offered with wheels from 18¼" inch to 73" inch in diameter in both Class I and Class II construction.

Arrangement 1 fans are available for horizontal base mount.

Arrangement 3 fans are available for horizontal ceiling hung or horizontal base mount.

Arrangement 9 fans are available for horizontal base mount, horizontal ceiling hung and vertical mount. In the vertical mount, fans can be positioned for either upblast or downblast discharge. Arrangement 9 vertical mount fans are also available with a wide, quick opening door for ease of access and cleaning.



IAP Inc. certifies that the tubular centrifugal fans shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



ARRANGEMENTS

ARRANGEMENT 1 HORIZONTAL BASE MOUNT

Arrangement 1 fans have the motor mounted on the fan base, either to the left or right of the discharge as specified. This arrangement results in maximum stability and in ease of access for service.

ARRANGEMENT 9 HORIZONTAL BASE MOUNT

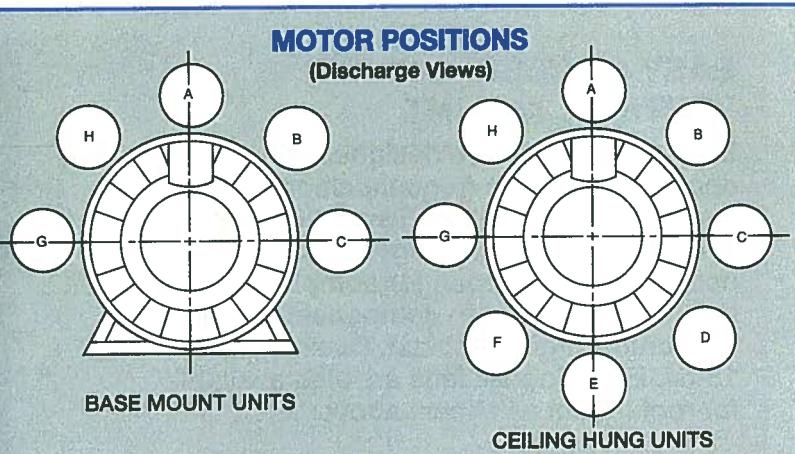
Arrangement 9 base mount fans are used in applications where floor space is limited. A rigid welded steel base provides a stable floor mount for the housing. Motors may be mounted in one of five positions on the fan housing. (See drawing below.) Motor positions must be specified.

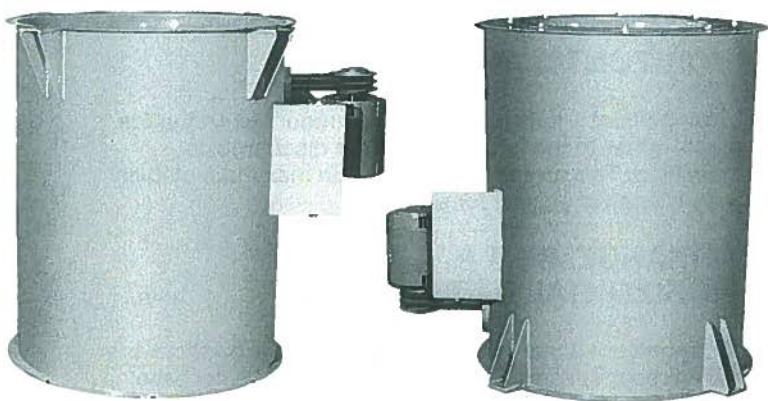
ARRANGEMENT 9 HORIZONTAL CEILING HUNG

In applications where it is desirable to suspend the fan horizontally from the ceiling, structural steel hanging brackets are welded to the fan housing. Motors may be mounted in one of the locations shown below. Positions B and H must be avoided, because they conflict with hanger bracket locations. See page 27 for hanger bracket locations.

ARRANGEMENT 3 HORIZONTAL BASE MOUNTED OR CEILING HUNG

Arrangement 3 fans are designed for installations where space is limited. Overall length of the housing is considerably shorter than other horizontal arrangements. The fan is constructed with the bearing on the inlet end in the airstream. This construction limits the fan to a maximum air temperature of 180°F and to non-sparking applications. Motor mounting positions are shown below. As with Arr. 9 ceiling hung fans, positions B and H must be avoided. See page 26 for hanger bracket locations.

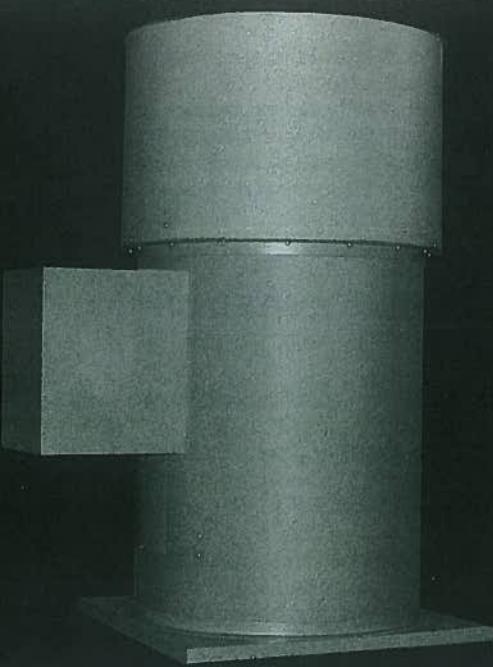
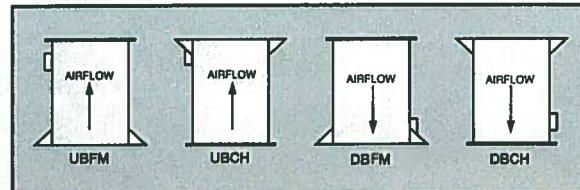




ARRANGEMENT 9 VERTICAL MOUNT

For vertical installation, fans are available with heavy duty steel brackets designed for either floor mounting or ceiling mounting. Both are available with either downblast or upblast discharge. Specify mounting position and discharge.

Arrangement 9 vertical mount fans are available in Class I only.



ARRANGEMENT 9 VERTICAL UPBLAST ROOF MOUNT

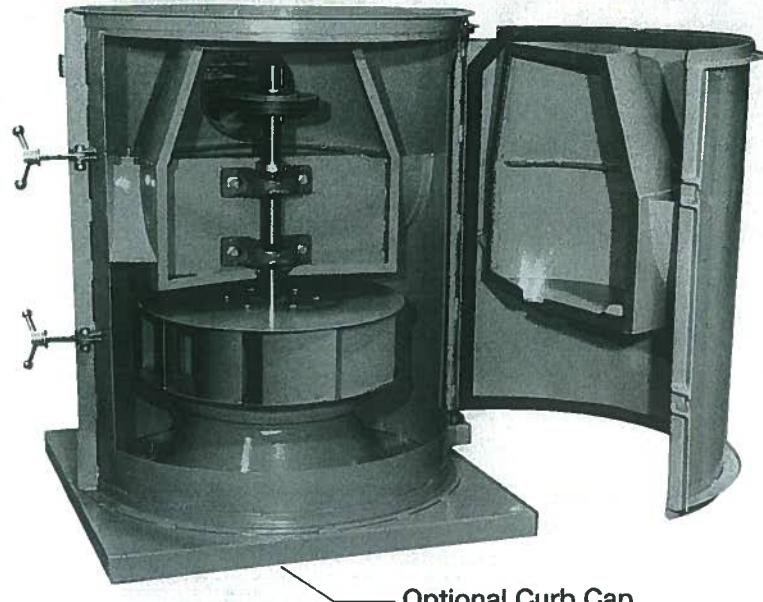
Vertical upblast roof fans discharge and disperse exhaust air well above the roofline. Model TCFI roof exhausters feature windbands with built-in butterfly dampers, a weatherproof motor cover, and a curb cap with prepunched mounting holes. Arrangement 9 fans are also available without curb caps for stack mounting. TCFI roof exhausters are offered in Class I construction only.

MINIMUM CFM
TO OPEN STEEL
BUTTERFLY DAMPERS

FAN SIZE	MINIMUM CFM
18	5730
20	6010
22	7430
24	9640
27	11700
30	13100
33	14700
36	18600
40	22600
44	25900
49	30000
54	33000

EASY ACCESS VERTICAL MOUNT

Easy Access fans are designed for applications where frequent cleaning and inspection are required. Two quick-open latches allow a wide, hinged section of the housing to swing open for complete accessibility to all fan components. Fans are vertical mount upblast, Class I, sizes 18-54. Easy Access fans are also available for roof mount as shown above.



Construction Features



- **HOUSING CONSTRUCTION**

Housings are constructed of heavy gauge, continuously welded steel to assure no air leakage. They are rigidly supported to prevent vibration and pulsation. Inlet cones are bolted to the inlet side of the housing and are removable for access to the wheel. A removable drive cover allows access to bearings, shaft and pulleys.

- **STRAIGHTENING VANES**

Welded steel vanes provide positive support for shafts and bearings and straighten the flow of air prior to leaving the fan.

- **FINISH**

All structural steel parts are phosphatized, primed and coated with a baked enamel finish.

- **BEARINGS**

Standard heavy duty bearings are grease lubricated, self aligning ball or roller type in pillow block mounts. Standard construction includes external lubrication lines. Bearings are selected for a minimum average life in excess of 200,000 hours operation at maximum catalogued conditions for each pressure class.

- **SHAFTS**

Turned, precision ground and polished steel shafts are sized so that the first critical speed is at least 25% over the maximum operating speed. Close tolerances where the shaft makes contact with the bearing result in longer bearing life.

- **ACCESS DOORS**

Bolted access doors provide access to the fan wheel for inspection or cleaning.

- **LIFTING LUGS**

Lifting lugs are provided on the housing for handling and ease of installation.

- **INLET AND OUTLET FLANGES**

Flanged inlets and outlets with mounting holes are provided for ductwork connection. Fan sizes 18 through 27 feature integral flanges. Fan sizes 30 and larger are supplied with hot rolled steel angles stitch welded to the housing.

- **AIRFOIL WHEELS**

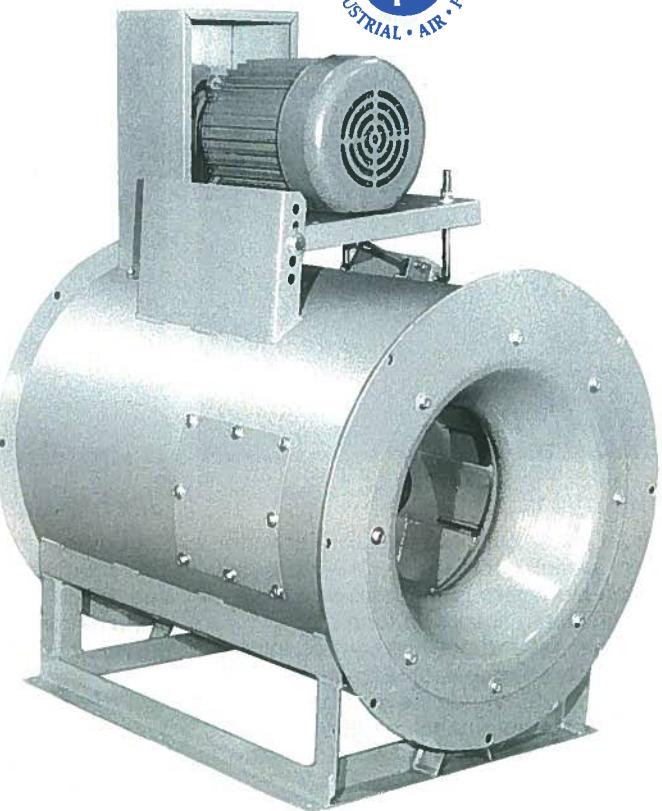
Non-overloading airfoil wheels are constructed of heavy gauge steel continuously welded to the wheel cone and to a heavy gauge backplate. The wheel cone and inlet cone are carefully matched for precise running tolerances and maximum efficiency.

- **BALANCING**

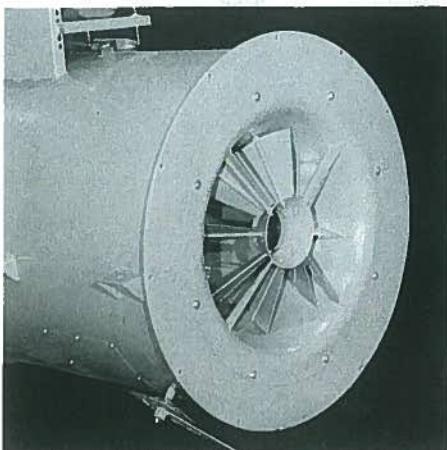
Each fan wheel is statically and dynamically balanced before assembly into the fan. After assembly, each fan is given a final balance test utilizing electronic balance equipment to insure smooth vibration free operation.

- **MOTOR SUPPORTS**

Rigid structural steel motor supports are welded to the fan housing and include heavy duty adjustment screws for belt tensioning.

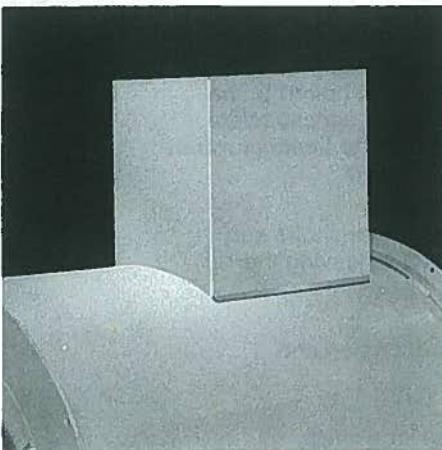


Accessories & Options



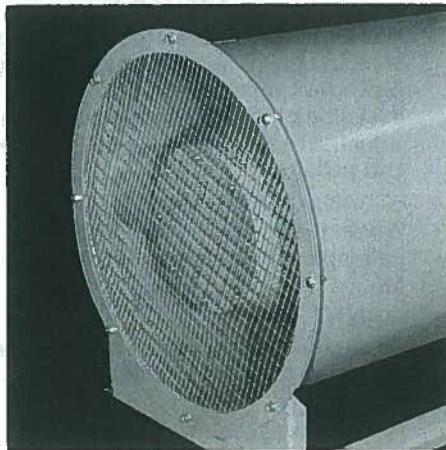
NESTED INLET VANES

Inlet vanes built into the fan inlet cone are available for fan sizes 18-60. Vanes feature steel rods with stainless steel bushings to assure uniform blade movement and positive control. Inlet vanes are suitable for air temperatures up to 200°F. Vanes are suitable for manual or automatic operation (controls furnished by others).



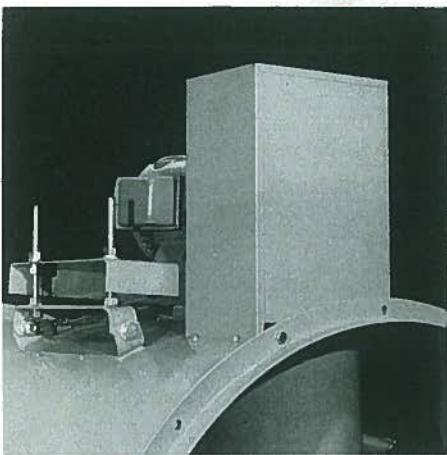
WEATHERPROOF MOTOR COVERS

For outdoor installations, motor covers are recommended to protect motors and drives from moisture and other adverse conditions. Ventilation slots are provided for motor cooling.



INLET AND OUTLET SCREENS

Removable inlet and outlet screens can be furnished to provide protection from rotating parts in non-ducted applications.



BELT GUARDS

Sturdy, fabricated, three sided steel belt guards are available for protection from rotating pulleys and belts. Optional totally enclosed belt guards are also available.

SPARK RESISTANT CONSTRUCTION

Spark resistant construction in accordance with AMCA standards is available.

AMCA Type C — An aluminum inlet cone and an aluminum rub ring around the shaft opening.

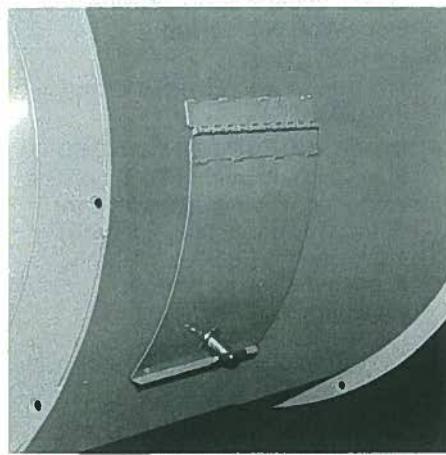
AMCA Type B — An aluminum backward inclined wheel and an aluminum rub ring around the shaft opening.

COMPANION FLANGES

Inlet and outlet companion flanges are available for duct connections. See drawings on pages 25, 26 and 27.

SPECIAL COATINGS

A wide selection of protective coatings are available for application to fans exposed to corrosive atmospheres.



HINGED ACCESS DOORS

In addition to the standard bolted access door, hinged doors are also available. Hinged doors open with quick release latches.

SHAFT SEAL

A shaft seal with an aluminum rub ring is available to protect bearings from heat and contaminants. The shaft seal is not gas tight.

DRAIN CONNECTIONS

A 1" threaded drain connection with a plug is available to drain moisture from the bottom of the fan housing.



ENGINEERING DATA

This catalog contains comprehensive air performance data for IAP's tubular centrifugal fans. Air performance is shown in both fan tables and fan curves. This engineering data section will assist the system designer in applying IAP tubular centrifugal fans in air conditioning, heating and ventilating systems.

SELECTION

The first consideration in any fan selection is the amount of air to be moved and the resistance to this air movement. Air volume requirements are established by specific codes, heating and cooling loads and accepted industry standards. Once the air volume is known, system resistance can be determined by summing up the losses through the system components. Duct layout, duct size, coils, filters, dampers and fan accessories all affect the system resistance. "ASHRAE Guide and Data Books" and manufacturer's data on individual system components are common sources of information available to the system designer.

The determination of airflow and system resistance defines the point of operation that the fan must be capable of providing. In most applications, several fans may meet the required airflow and system resistance conditions. Larger fans tend to turn slower and generate less noise. These fans generally have lower operating costs, however, this may be offset by higher initial costs when compared to a smaller fan. Smaller fans will have higher speeds for a given application and a steeper performance curve. The steeper performance curve minimizes airflow changes in the system as system resistance varies. Smaller fans also tend to have wider stable modulation ranges in variable air volume systems.

An optimum fan selection requires evaluation of the alternative fan sizes, as they relate to initial cost, horsepower, available space and allowable sound levels. In addition, air density, effect of installation on performance, volume control, temperature limitations and motor starting torque should be evaluated.

The relative importance of these factors varies with each system. The information presented in this section of the catalog is intended to assist the system designer in evaluating these factors.

SPEED CHANGES

A change in the speed of a fan in a fixed system will cause the volume, pressure, and horsepower to vary as follows:

$$CFM_2 = \left(\frac{RPM_2}{RPM_1} \right) \times CFM_1$$

NOTE: Subscript 1 indicates existing conditions subscript 2 indicates new conditions after speed change.

$$SP_2 = \left(\frac{RPM_2}{RPM_1} \right)^2 \times SP_1$$

$$BHP_2 = \left(\frac{RPM_2}{RPM_1} \right)^3 \times BHP_1$$

When changing the speed of a fan the actual running motor amperage should be checked against the motor's nameplate rating to prevent overloading. The fan speed should also be checked to make sure the RPM does not exceed the maximum RPM limits shown on the performance pages.

SOUND LEVEL

Sound has become an important design consideration. Fan specifications frequently contain limitations on sound levels. These limitations may be expressed in power or pressure levels, and multiple or single number ratings. For proper fan application, it is necessary to have the specified sound levels clearly identified.

Most sound ratings are derived from sound power levels for all eight octave bands. Sound power levels represent the total acoustical energy radiated from a source (in this case a fan). All eight octave bands allow a complete acoustical analysis of the conditioned room. IAP has complete sound power ratings on tubular centrifugal fans available on request.

The human ear does not respond to power levels. It is only sensitive to pressure variations. To obtain pressure levels, the fan sound power levels must be corrected for the attenuation effects of the room and distance from the fan to the listener. These attenuation and distance factors can be calculated through the use of the "ASHRAE Guide and Data" books or AMCA Publication 303, "Application of Sound Power Levels." The sound pressure level can only be determined if the acoustical qualities of the conditioned room are known.

Another method to simulate how the human ear responds to sound is the A-scale weighted sound power level. These ratings are attenuated much like the human ear to be less sensitive to lower frequencies (25-1000 Hz) and more sensitive to higher frequencies (1000-10000 Hz). A-scale weighted pressure levels can be obtained by correcting the power levels for the attenuation factors of the conditioned space.

Mechanical vibration can also be a source of noise problems. The fan should be placed where noise will not be transmitted through floors and walls. Flexible duct connections should be installed to prevent mechanical fan vibration from exciting the ductwork. Isolators should be used to dampen the vibrations that would be transmitted to floors or ceilings.

EFFECT OF AIR DENSITY

Ratings in the fan performance tables and curves of this catalog are based on standard air (clean, dry air with a density of 0.075 lbs./ft.³ at 70° F. and a barometric pressure of 29.92 in. mercury). A change in elevation, temperature or the type of gas handled will affect density.

With a fan at a constant speed and installed in a fixed system, a change in density will cause the fan pressure and horsepower to vary. The air volume delivered by the fan will remain constant.

The table below gives air density correction factors for calculating the effect of elevation and temperature on fan performance.

AIR DENSITY CORRECTION FACTORS

Air Temp. °F	ELEVATION (Feet Above Sea Level)										
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
0	0.87	0.90	0.94	0.97	1.01	1.05	1.08	1.13	1.17	1.22	1.26
50	0.96	1.00	1.04	1.08	1.11	1.15	1.20	1.24	1.30	1.34	1.40
70	1.00	1.04	1.08	1.12	1.16	1.22	1.25	1.30	1.35	1.40	1.45
100	1.06	1.10	1.14	1.18	1.22	1.27	1.32	1.37	1.42	1.48	1.54
150	1.15	1.19	1.24	1.30	1.33	1.38	1.44	1.49	1.55	1.61	1.67
200	1.25	1.29	1.34	1.40	1.44	1.50	1.56	1.61	1.68	1.75	1.81

The following example shows the procedure for selecting a fan at elevations and temperatures other than standard.

A TCFI 27 tubular centrifugal fan is to deliver 9000 CFM of air at 2 1/2" SP, 200° F and 3000 Ft. elevation above sea level.

1. Since the air volume delivered by the fan is not affected by density, airflow remains 9000 CFM.
2. The static pressure must be corrected for non-standard conditions. At 200° F and 3000 feet elevation the air density correction factor is 1.4. Multiply the static pressure by the correction factor. (2.5" SP x 1.4 = 3.5" SP)
3. From the fan performance table a TCFI 27 fan at 9000 CFM and 3.5" SP requires 1396 RPM and 8.01 BHP.
4. The 1396 RPM selected needs no correction.
5. The horsepower selected must be divided by the correction factor. BHP at 200° F = 8.01 BHP ÷ 1.40 = 5.72 BHP.

If a fan is selected to operate at high temperatures, the motor must be large enough to handle the increased BHP at any anticipated lower operating temperature where the air is more dense. Assume the air entering the TCFI 27 fan at start-up is 0° F. For 0° F and 3000 feet elevation the air density correction factor is 0.97. BHP at 0° F = 8.01 BHP ÷ 0.97 = 8.26, therefore, a 10 HP motor is required.

EFFECT OF INSTALLATION ON PERFORMANCE

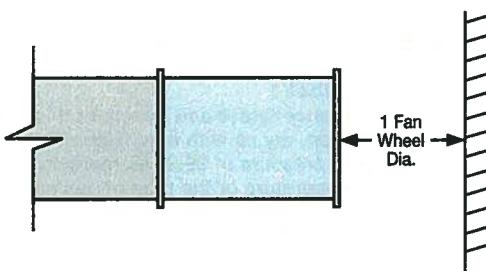
Ratings presented in the performance tables and curves of this catalog were derived from tests made in accordance with AMCA Standard 210—"Laboratory Method of Testing Fans for Ratings". The AMCA test procedure utilizes an open inlet and a straight outlet duct to assure maximum static regain.

Any installation with inlet or discharge configurations that deviates from this standard may result in reduced fan performance. Restricted or unstable flow at the fan inlet can cause pre-rotation of incoming air or uneven loading of the fan wheel yielding large system losses and increased sound levels. Free discharge or turbulent flow in the discharge ductwork will also result in system effect losses.

Static pressure losses due to inlet and discharge conditions can be expressed in terms of system effect factors. The static pressure for selection of the fans equals the system static pressure plus the system effect factor.

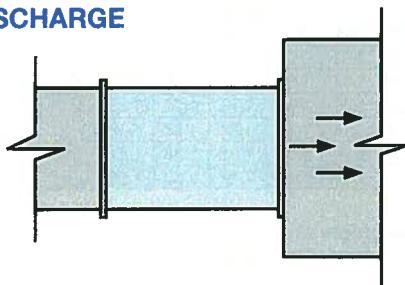
The most common inlet and discharge conditions which affect fan performance are:

NON-DUCTED INLET CLEARANCE



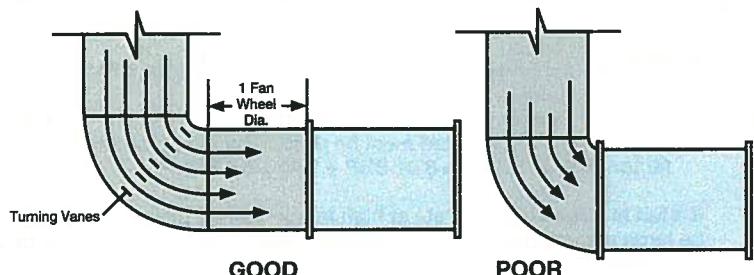
Installation of a fan with an open inlet too close to a wall or bulkhead will cause reduced fan performance. It is desirable to have one fan wheel diameter if possible and a minimum of three fourths of a wheel diameter between the fan inlet and the wall. System effect curve #2 depicts the pressure loss for one-half wheel diameter clearance.

FREE DISCHARGE



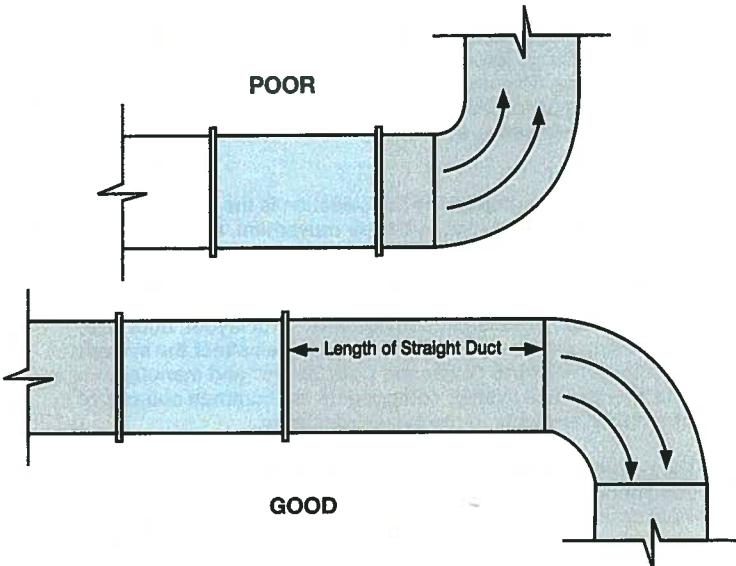
Free or abrupt discharge into a plenum results in a reduction in fan performance. The effect of static regain in discharge is not realized. System effect curve #3 depicts the pressure loss for free or abrupt discharge.

INLET DUCT TURNS



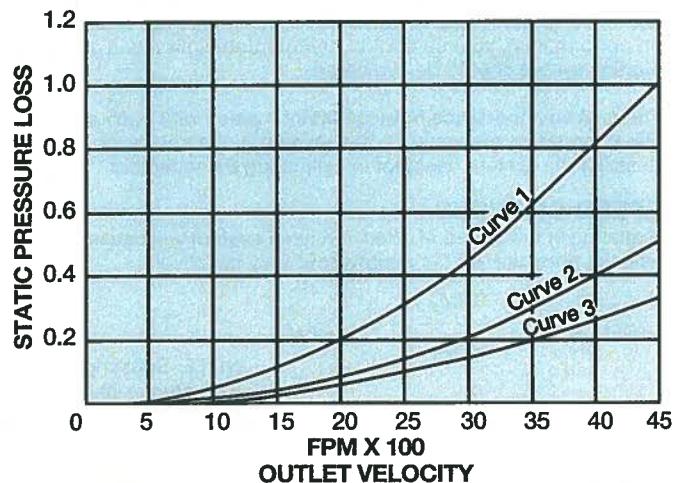
Installation of a duct turn or elbow too close to the fan inlet reduces fan performance because air is loaded unevenly into the fan wheel. To achieve full fan performance there should be at least one fan wheel diameter between the turn or elbow and the fan inlet. Curve #1 shows the system effect factor when less than one diameter is provided.

DISCHARGE DUCT TURNS



Fan performance is reduced when duct turns are made immediately off the fan discharge. To achieve cataloged fan performance there should be at least one equivalent duct diameter of straight ductwork between the fan discharge and any duct turns. Curve #3 shows the system effect factor for no discharge ductwork.

SYSTEM EFFECT FACTOR CURVES



Additional information on system effect factors can be found in AMCA publication 201—"Fans and Systems" and ASHRAE Guide and Data Books.

VOLUME CONTROL

Variable air volume systems require efficient, stable operation over the entire CFM modulation range.

IAP offers inlet vanes for use in variable volume systems. Inlet vanes provide better part load brake horsepower reduction, a wider CFM modulation range and more positive control than other types of volume control dampers.

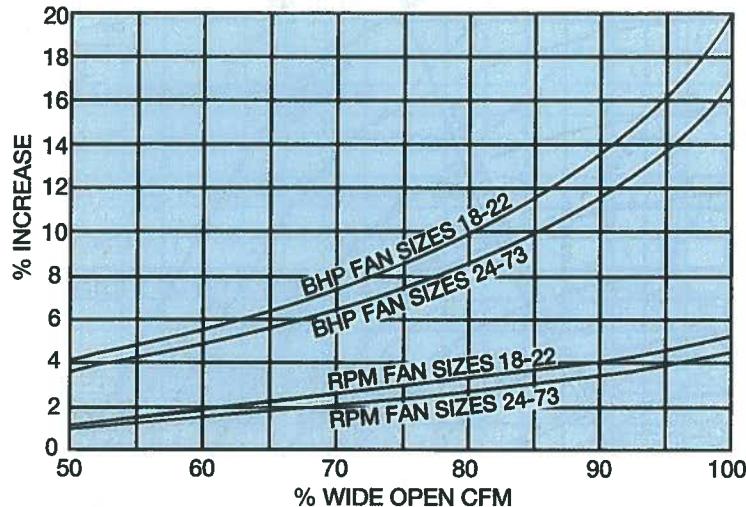
As inlet vanes close they impart a spin on the incoming air in the direction of wheel rotation. This reduces airflow, static pressure and brake horsepower as shown on page 9 in Fig. 2. The curves between point 1-4 show the effect on CFM, SP and BHP as inlet vanes are modulated from 100% open to 25% open in a typical variable air volume system.

Reductions to 30% of full load airflow are possible with inlet vanes.

Correction factors must be applied to the RPM and BHP at full load design conditions to overcome the pressure drop through the inlet vanes. These correction factors are shown on page 9.

FIG. 1

**RPM AND BHP CORRECTION FACTORS
FOR FANS WITH INLET VANES**

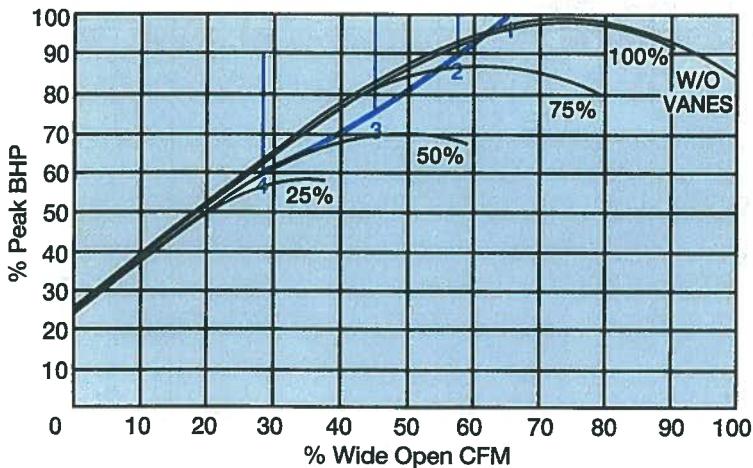
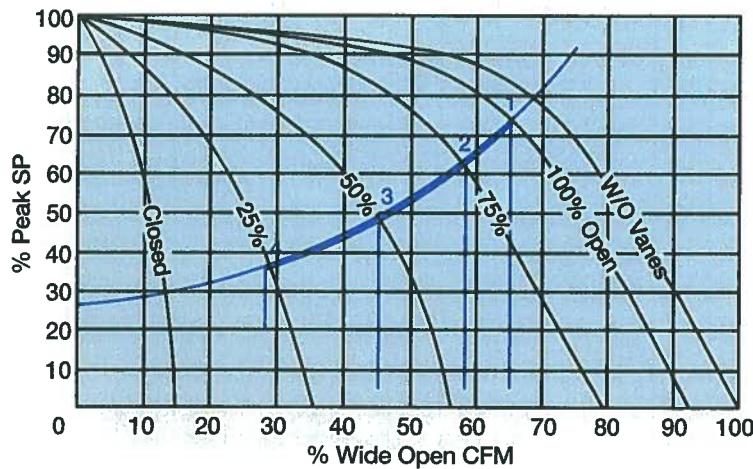


The AMCA Certified Ratings Seal does not apply when RPM And BHP Correction Factors For Fans With Inlet Vanes are used.

Inlet vanes can be manually operated or combined with a static pressure sensor in the ductwork and a damper operator for automatic operation.

FIG. 2

INLET VANE PERFORMANCE



HIGH TEMPERATURE OPERATING LIMITS

The high temperature operating limit for tubular centrifugal fans of standard construction is 200°F.

For applications over 200°F consult the factory.

MOTOR STARTING TORQUE

When selecting a motor for a tubular centrifugal fan, the motor must be capable not only of driving the fan at operating speed, but also must be capable of accelerating the fan wheel, shaft and drive to the operating speed.

The fan performance tables and curves in this catalog show the brake horsepower required to operate the fan once it is brought to speed. For applications requiring a large air volume at a low static pressure the BHP required at the fan's operating RPM may not be sufficient to initially start the fan. If the time required to bring the fan to speed is excessive, the motor winding insulation can be damaged due to excessive temperature rise and the life of the motor seriously affected.

For a belt drive tubular centrifugal fan the required motor starting torque capability can be expressed by the following formula:

$$WR_M^2 = WR_F^2 \left(\frac{FRPM}{MRPM} \right)^2 \quad (1.1)$$

Where:

WR_M^2 — The moment of inertia that the motor must be capable of turning at the motor shaft, LB-Ft.².

WR_F^2 — The moment of inertia of the fan wheel and shaft, LB-Ft.².

FRPM — Fan RPM

MRPM — Motor RPM

Minimum motor sizes are critical for tubular centrifugal fans, size 36 and larger, operating at low static pressures. Motor starting torque can vary greatly among motor manufacturers. When motors other than those supplied by IAP are used, the available WR_M^2 at the motor should be obtained from the motor manufacturer.

The table below shows the wheel and shaft moments of inertia for tubular centrifugal fans.

**MOMENTS OF INERTIA (LB-Ft²)
TUBULAR CENTRIFUGAL FANS**

FAN SIZE	CLASS I	CLASS II
18	11	11
20	16	16
22	29	30
24	40	40
27	62	63
30	95	96
33	146	147
36	209	210
40	409	411
44	580	600
49	810	860
54	1440	1520
60	2010	2140
66	2790	2980
73	4260	4280



18 TCFI

Performance Data

Wheel Diameter = 18 $\frac{1}{4}$ inches

Outlet Area = 3.45 Square Feet

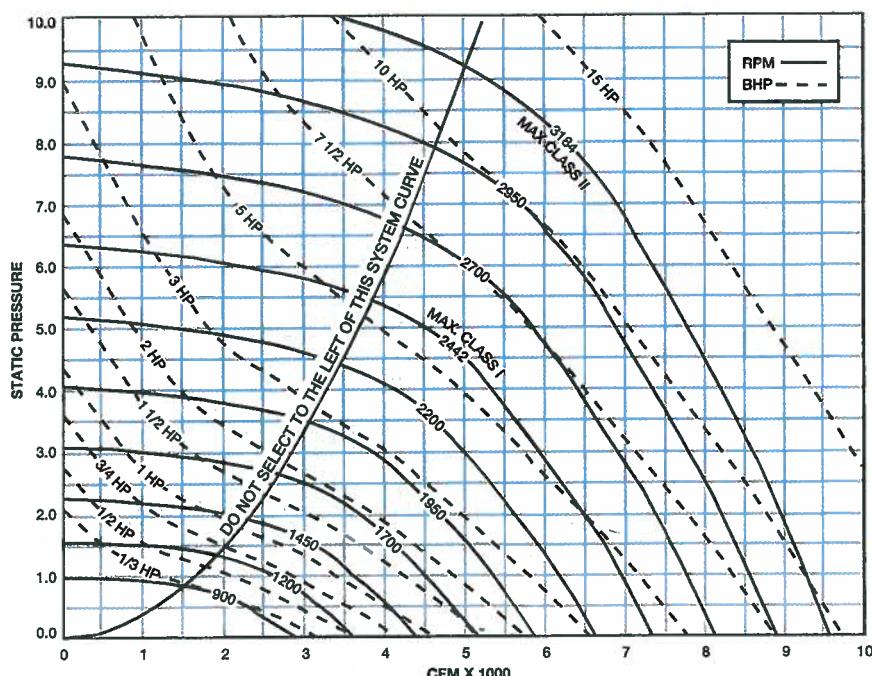
Tip Speed, FPM = 4.78 X RPM

Maximum BHP = (RPM/1371)³

Pressure Class Limits

Class	Max. RPM
I	2442
II	3184

Maximum Motor Frame Sizes
Arr. 1 = 254T, Arr. 9 = 254T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																						
		3"		3 1/4"		4"		4 1/4"		5"		5 1/4"		6"		6 1/4"		7"		7 1/4"		8"		8 1/4"
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1600	464	675	0.11	804	0.20	930	0.30																	
1800	522	728	0.14	844	0.23	955	0.34	1068	0.46	1192	0.64													
2000	580	782	0.17	890	0.27	993	0.38	1093	0.50			1307	0.84	1391	1.00									
2200	638	837	0.21	939	0.31	1033	0.42	1126	0.55	1217	0.69	1332	0.91	1415	1.07	1492	1.24							
2400	696	893	0.25	991	0.38	1079	0.48	1164	0.61	1246	0.75													
2600	754	952	0.29	1044	0.41	1127	0.54	1205	0.67	1285	0.82	1359	0.97	1440	1.14	1517	1.32	1589	1.50	1660	1.68			
2800	812	1013	0.35	1098	0.47	1177	0.61	1262	0.74	1325	0.89	1398	1.05	1466	1.22	1542	1.41	1614	1.60	1682	1.79	1748	1.99	
3000	870	1073	0.41	1152	0.54	1230	0.68	1300	0.83	1369	0.98	1438	1.14	1505	1.32	1589	1.50	1659	1.69	1739	1.89	1772	2.10	
3200	928	1135	0.48	1308	0.82	1283	0.77	1350	0.92	1417	1.07	1480	1.24	1545	1.42	1608	1.61	1687	1.80	1733	2.00	1798	2.22	
3400	986	1198	0.55	1264	0.70	1337	0.88	1403	1.02	1465	1.18	1527	1.35	1686	1.52	1648	1.72	1707	1.92	1763	2.12	1823	2.34	
3600	1043	1259	0.64	1324	0.79	1391	0.96	1458	1.13	1518	1.29	1575	1.47	1632	1.65	1688	1.84	1748	2.05	1802	2.26	1866	2.47	
3800	1101	1322	0.73	1384	0.89	1446	1.06	1510	1.24	1568	1.42	1623	1.60	1680	1.79	1733	1.98	1787	2.18	1842	2.40	1895	2.62	
4000	1159	1385	0.84	1444	1.00	1502	1.18	1564	1.37	1621	1.56	1675	1.74	1728	1.93	1781	2.13	1831	2.34	1882	2.55	1935	2.78	
4200	1217	1449	0.95	1505	1.13	1559	1.31	1618	1.50	1675	1.70	1728	1.90	1778	2.09	1829	2.30	1878	2.51	1926	2.72	1975	2.95	
4400	1275	1513	1.08	1588	1.26	1619	1.45	1673	1.65	1728	1.86	1781	2.06	1830	2.26	1878	2.47	1926	2.69	1974	2.91	2019	3.14	
4600	1333	1577	1.21	1628	1.40	1679	1.60	1729	1.80	1783	2.02	1834	2.24	1883	2.45	1929	2.66	1975	2.88	2022	3.11	2068	3.34	
4800	1391	1642	1.36	1689	1.56	1739	1.76	1786	1.97	1838	2.19	1888	2.42	1936	2.64	1982	2.87	2028	3.09	2070	3.32	2114	3.56	
5000	1449	1706	1.62	1752	1.72	1799	1.93	1845	2.15	1893	2.38	1943	2.61	1990	2.85	2035	3.08	2078	3.31	2120	3.55	2163	3.79	
5200	1507	1771	1.70	1815	1.90	1860	2.12	1908	2.35	1949	2.58	1997	2.82	2044	3.07	2088	3.31	2131	3.55	2172	3.79	2212	4.04	
5400	1565	1835	1.88	1878	2.10	1922	2.32	1985	2.55	2006	2.79	2052	3.04	2098	3.28	2142	3.55	2184	3.80	2224	4.05	2284	4.30	
5600	1623	1900	2.08	1941	2.31	1983	2.54	2025	2.78	2068	3.02	2108	3.27	2153	3.53	2198	3.80	2238	4.06	2276	4.32	2316	4.58	
5800	1681	1965	2.30	2005	2.53	2045	2.76	2086	3.01	2125	3.26	2164	3.52	2208	3.79	2250	4.06	2291	4.34	2331	4.61	2389	4.87	
6000	1739	2030	2.53	2068	2.78	2107	3.01	2147	3.26	2185	3.52	2223	3.78	2263	4.05	2305	4.33	2345	4.62	2386	4.91	2422	5.18	
6200	1797	2095	2.77	2133	3.02	2169	3.27	2208	3.53	2246	3.79	2282	4.06	2318	4.34	2360	4.62	2400	4.92	2439	5.21	2478	5.50	
6400	1855	2160	3.03	2197	3.28	2232	3.54	2269	3.81	2308	4.08	2342	4.36	2377	4.64	2415	4.93	2455	5.23	2493	5.53	2530	5.84	
6600	1922	2225	3.31	2260	3.56	2295	3.92	2330	4.19	2365	4.46	2400	4.73	2435	5.00	2470	5.27	2505	5.54	2542	5.81	2579	6.09	
6800	1971	2274	3.67	2311	3.92	2346	4.28	2381	4.55	2416	4.82	2451	5.09	2486	5.36	2519	5.63	2554	5.90	2589	6.17	2625	6.44	
7000	2029	2278	3.75	2395	4.07	2456	4.56	2500	4.95	2545	5.27	2586	5.61	2620	5.93	2654	6.25	2688	6.53	2722	6.81	2756	7.09	
7200	2087	2782	7.65	2849	8.34	2912	9.01	2973	9.67	3031	10.35	3080	11.04	3150	11.76									
7400	2145	2837	8.07	2893	8.73	2701	7.33	2767	7.95	2834	8.59	2897	9.24	2959	9.89	3028	10.61	3090	11.34	3154	12.09			
7600	2203	2892	8.51	2857	9.23	3019	9.96	3079	10.65	3136	11.36													
7800	2261	2948	8.97	3012	9.70	3073	10.44	3132	11.17															
8000	2319	3003	9.44	3068	10.19	3127	10.85																	
8200	2377	3059	9.94	3121	10.70	3182	11.47																	

Performance shown is for Model TCFI with outlet duct and inlet duct.
BHP does not include drive losses.

20 TCFI

Performance Data

Wheel Diameter = 20 inches

Outlet Area = 4.14 Square Feet

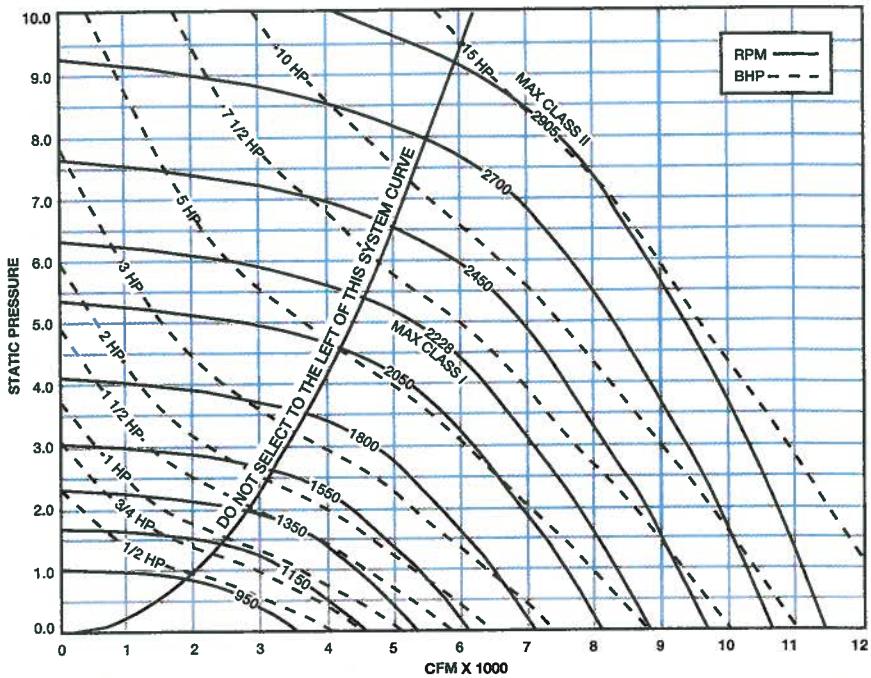
Tip Speed, FPM = 5.24 X RPM

Maximum BHP = (RPM/1177)³

Pressure Class Limits

Class	Max. RPM
I	2228
II	2905

Maximum Motor Frame Sizes
Arr. 1 = 256T, Arr. 9 = 256T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																														
		1/4"			5/8"			3/4"			1"			1 1/8"			1 1/4"			2"			2 1/8"			2 1/4"			2 1/2"			3"
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP			
1750	423	584	0.12	710	0.22	833	0.34	960	0.52	1074	0.73	1179	0.97	1203	1.04	1278	1.24	1302	1.33	1372	1.53	1440	1.75	1524	2.09	1622	2.46	1686	2.71			
2000	483	632	0.15	745	0.25	856	0.38	980	0.52	1094	0.73	1192	0.97	1259	1.03	1326	1.22	1396	1.41	1462	1.66	1548	2.22	1607	2.46	1666	2.71					
2250	543	682	0.18	785	0.28	883	0.42	983	0.57	1007	0.62	1097	0.79	1179	0.97	1203	1.04	1278	1.24	1326	1.33	1396	1.65	1468	2.22	1548	2.61	1688	2.87			
2500	604	734	0.22	830	0.34	921	0.47	1007	0.62	1097	0.79	1276	1.24	1335	1.44	1396	1.65	1453	1.88	1510	2.11	1572	2.36	1631	2.61	1712	3.03					
2750	664	786	0.27	878	0.40	960	0.53	1042	0.69	1121	0.86	1203	1.04	1278	1.24	1344	1.79	1491	2.02	1545	2.25	1597	2.50	1655	2.76	1712	3.03					
3000	725	841	0.32	928	0.46	1006	0.61	1080	0.78	1154	0.94	1227	1.13	1302	1.33	1372	1.53	1440	1.75	1524	2.09	1622	2.46	1686	2.71							
3250	785	898	0.39	979	0.54	1052	0.69	1122	0.85	1204	1.03	1259	1.22	1326	1.42	1396	1.64	1462	1.86	1548	2.22	1607	2.46	1666	2.71							
3500	845	956	0.46	1030	0.62	1101	0.78	1168	0.95	1231	1.13	1298	1.33	1358	1.53	1420	1.75	1488	1.98	1548	2.22	1607	2.46	1666	2.71							
3750	906	1014	0.54	1082	0.70	1152	0.88	1214	1.06	1276	1.24	1335	1.44	1396	1.65	1453	1.88	1510	2.11	1572	2.36	1631	2.61	1712	3.03							
4000	966	1072	0.63	1135	0.80	1203	0.99	1263	1.18	1321	1.37	1378	1.57	1434	1.79	1491	2.02	1545	2.25	1597	2.50	1655	2.76	1712	3.03							
4250	1027	1131	0.73	1181	0.92	1254	1.11	1314	1.31	1368	1.51	1423	1.72	1476	1.93	1529	2.17	1582	2.41	1633	2.66	1682	2.92	1736	3.19							
4500	1087	1191	0.85	1248	1.04	1306	1.24	1364	1.46	1418	1.66	1469	1.88	1521	2.10	1570	2.33	1620	2.58	1671	2.84	1719	3.10	1766	3.37							
4750	1147	1251	0.98	1305	1.18	1359	1.38	1416	1.61	1468	1.83	1518	2.05	1567	2.28	1615	2.52	1661	2.78	1709	3.02	1757	3.30	1803	3.68							
5000	1208	1312	1.12	1383	1.32	1413	1.54	1487	1.77	1519	2.01	1568	2.24	1614	2.48	1661	2.72	1706	2.97	1750	3.23	1795	3.50	1841	3.79							
5250	1268	1372	1.27	1421	1.49	1469	1.71	1520	1.95	1670	2.20	1618	2.45	1663	2.69	1707	2.94	1752	3.20	1795	3.46	1836	3.73	1878	4.02							
5500	1329	1433	1.44	1479	1.68	1528	1.90	1572	2.14	1622	2.40	1669	2.68	1713	2.92	1758	3.17	1788	3.44	1840	3.71	1881	3.99	1921	4.27							
5750	1389	1494	1.62	1538	1.86	1583	2.10	1628	2.35	1674	2.62	1720	2.89	1764	3.16	1805	3.43	1845	3.70	1886	3.98	1926	4.26	1968	4.55							
6000	1449	1555	1.82	1597	2.06	1641	2.32	1682	2.58	1726	2.88	1771	3.13	1815	3.42	1856	3.70	1895	3.97	1933	4.26	1972	4.55	2011	4.85							
6250	1510	1617	2.04	1657	2.29	1899	2.55	1739	2.82	1779	3.10	1823	3.39	1868	3.69	1908	3.98	1945	4.27	1983	4.55	2019	4.86	2057	5.16							
6500	1570	1678	2.27	1717	2.53	1757	2.80	1766	3.08	1834	3.37	1876	3.66	1917	3.97	1958	4.28	1998	4.58	2033	4.88	2068	5.19	2103	5.49							
6750	1630	1740	2.53	1777	2.80	1815	3.07	1854	3.38	1890	3.65	1928	3.96	1969	4.27	2009	4.59	2047	4.91	2083	5.22	2118	5.54	2153	5.85							
7000	1691	1801	2.80	1838	3.07	1874	3.36	1911	3.66	1947	3.96	1982	4.27	2022	4.59	2060	4.92	2098	5.25	2134	5.58	2168	5.90	2203	6.23							
7250	1751	1863	3.09	1989	3.37	1933	3.67	1969	3.97	2004	4.28	2038	4.60	2074	4.93	2122	5.26	2149	5.61	2185	5.96	2219	6.29	2253	6.63							
7500	1812	1925	3.40	1959	3.68	1992	3.99	2027	4.31	2062	4.63	2095	4.98	2127	5.28	2165	5.63	2201	5.99	2238	6.34	2270	6.70	2303	7.04							
7750	1872	1987	3.73	2020	4.03	2052	4.34	2088	4.67	2119	5.00	2152	5.33	2183	5.67	2217	6.02	2253	6.38	2288	6.75	2322	7.12	2354	7.48							

CFM	OV	STATIC PRESSURE IN INCHES W.G.																																	
		3"			3 1/8"			4"			4 1/8"			5"			5 1/8"			6"			6 1/8"			7"			7 1/8"			8"			8 1/8"
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP						
4000	966	1712	3.03	1818	3.58	1920	4.14	2037	4.95																										
4250	1027	1736	3.19	1842	3.78	1941	4.35	2058	5.18	2148	6.81																								
4500	1087	1786	3.37	1866	3.95	1965	4.56	2058	5.18	2170	6.07	2255	6.74																						
4750	1147	1803	3.58	1891	4.15	1988	4.77	2082	5.41	2170	6.07	2278	7.03	2358	7.74																				
5000	1208	1841	3.79	1928	4.38	2014	5.00	2108	5.66	2194	6.33	2278	7.03	2382	7.74																				
5250	1268	1879	4.02	1986	4.83	2047	5.25	2131	5.91	2218	6.60	2302	7.31	2382	8.04	2459	8.78	2537	9.52																
5500	1329	1921	4.27	2004	5.68	2057	5.62	2161	6.18	2243	6.88	2328	7.61	2406	8.38	2482	9.12	2558	9.89	2630	10.68														
5750	1389	1966	4.56	2042	5.15	2122	5.81	2198	6.49	2271	7.18	2350	7.82	2430	8.68	2506	9.46	2580	10.25	2652	11.08	2721	11.87	2793	12.67										
6000	1449	2011	4.85	2085	5.46	2161	6.11																												

22 TCFI

Performance Data

Wheel Diameter = 22½ inches

Outlet Area = 5.12 Square Feet

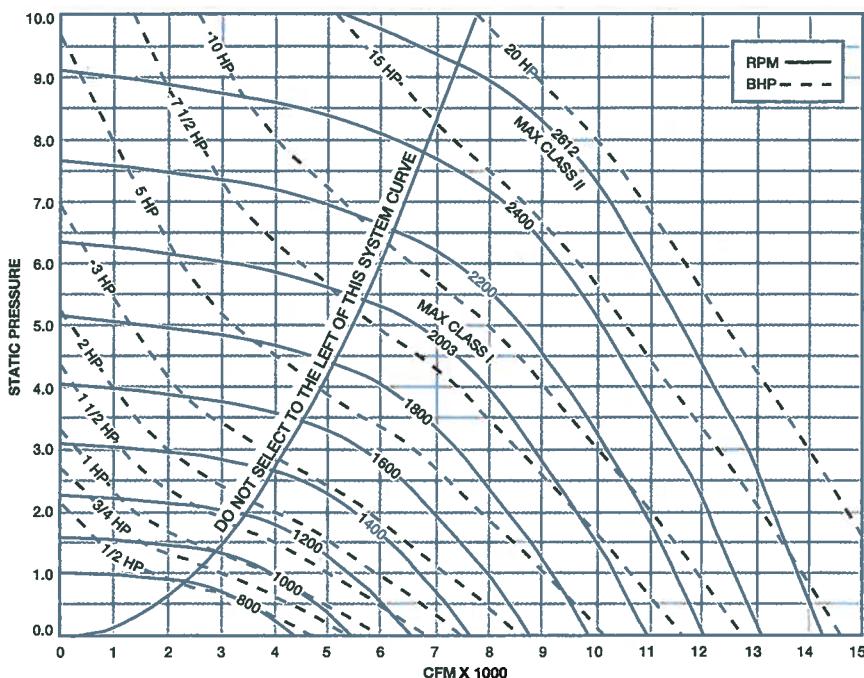
Tip Speed, FPM = 5.83 X RPM

Maximum BHP = (RPM/985)³

Pressure Class Limits

Class	Max. RPM
I	2003
II	2612

Maximum Motor Frame Sizes
Arr. 1 = 256T, Arr. 9 = 256T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		⅜"		⅝"		⅞"		1"		1¼"		1½"		1¾"		2"		2½"		2¾"		3"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	469	557	0.17	682	0.30	784	0.48																
2700	527	601	0.21	695	0.35	785	0.51	877	0.69														
3000	586	645	0.26	734	0.40	817	0.57	988	0.75	980	0.96	1055	1.17										
3300	645	691	0.31	774	0.47	850	0.63	926	0.83	1001	1.04	1074	1.28	1143	1.49								
3600	703	738	0.37	817	0.54	889	0.72	959	0.91	1025	1.12	1085	1.36	1183	1.60	1225	1.85						
3900	762	787	0.44	862	0.63	929	0.81	993	1.01	1088	1.23	1118	1.46	1184	1.71	1248	1.98	1305	2.25	1363	2.52		
4200	820	837	0.53	906	0.72	971	0.91	1032	1.12	1091	1.34	1151	1.58	1207	1.84	1288	2.11	1326	2.39	1382	2.68	1438	2.98
4500	879	887	0.62	951	0.82	1014	1.03	1072	1.24	1128	1.47	1184	1.72	1239	1.98	1291	2.25	1348	2.54	1403	2.84	1456	3.15
4800	937	938	0.72	997	0.93	1059	1.16	1114	1.38	1168	1.62	1219	1.86	1272	2.13	1324	2.41	1372	2.70	1425	3.00	1477	3.32
5100	996	998	0.84	1045	1.06	1103	1.30	1207	1.54	1258	1.78	1306	2.03	1357	2.29	1405	2.58	1451	2.88	1499	3.19	1549	3.84
5400	1055	1041	0.97	1094	1.20	1148	1.45	1201	1.70	1250	1.96	1298	2.21	1345	2.49	1390	2.77	1438	3.08	1483	3.39	1527	3.71
5700	1113	1083	1.11	1144	1.36	1194	1.61	1246	1.88	1294	2.14	1339	2.41	1385	2.69	1428	2.98	1471	3.28	1516	3.61	1560	3.94
6000	1172	1146	1.27	1194	1.52	1240	1.79	1291	2.07	1338	2.35	1382	2.63	1425	2.92	1468	3.22	1509	3.52	1550	3.84	1593	4.18
6300	1230	1199	1.45	1244	1.71	1288	1.98	1336	2.27	1382	2.57	1426	2.86	1486	3.16	1508	3.47	1548	3.78	1587	4.10	1626	4.43
6600	1289	1252	1.64	1285	1.91	1337	2.20	1381	2.49	1427	2.81	1469	3.11	1510	3.42	1548	3.73	1588	4.06	1627	4.39	1664	4.72
6900	1348	1305	1.85	1345	2.13	1387	2.42	1428	2.73	1472	3.05	1514	3.38	1553	3.70	1591	4.02	1628	4.35	1666	4.69	1703	5.04
7200	1408	1358	2.07	1387	2.37	1437	2.67	1475	2.99	1517	3.32	1559	3.68	1588	4.00	1635	4.33	1671	4.67	1707	5.01	1743	5.37
7500	1465	1411	2.32	1448	2.62	1487	2.94	1524	3.26	1563	3.60	1603	3.95	1642	4.31	1679	4.66	1714	5.00	1748	5.38	1783	5.72
7800	1523	1465	2.58	1501	2.90	1538	3.22	1574	3.56	1609	3.90	1649	4.27	1687	4.64	1723	5.00	1758	5.36	1792	5.73	1824	6.09
8100	1582	1518	2.87	1553	3.19	1588	3.53	1624	3.88	1658	4.23	1694	4.60	1732	4.98	1768	5.37	1802	5.74	1835	6.12	1867	6.50
8400	1641	1572	3.17	1608	3.51	1639	3.85	1674	4.21	1707	4.58	1741	4.95	1777	5.34	1813	5.74	1847	6.14	1879	6.53	1911	6.92
8700	1699	1626	3.50	1688	3.85	1691	4.20	1724	4.57	1766	4.96	1787	5.33	1823	5.73	1858	6.14	1891	6.56	1924	6.96	1955	7.38
9000	1758	1679	3.85	1711	4.21	1742	4.57	1774	4.95	1808	5.34	1837	5.73	1869	6.14	1903	6.56	1938	6.99	1968	7.42	1999	7.83
9300	1816	1733	4.23	1764	4.59	1794	4.97	1825	5.36	1856	5.76	1888	6.16	1915	6.57	1949	7.00	1981	7.44	2013	7.88	2044	8.32
9600	1875	1787	4.62	1817	5.00	1846	5.39	1876	5.79	1906	6.20	1935	6.61	1964	7.03	1994	7.48	2027	7.91	2058	8.37	2088	8.83

CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		3"		3½"		4"		4½"		5"		5½"		6"		6½"		7"		7½"		8"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	937	1528	3.65	1624	4.32																		
5100	996	1549	3.84	1645	4.53	1734	5.26																
5400	1055	1571	4.05	1668	4.76	1755	5.50	1838	6.25														
5700	1113	1602	4.28	1687	4.99	1776	5.75	1859	6.53	1938	7.33	2018	8.13										
6000	1172	1634	4.53	1713	6.25	1797	6.01	1880	6.82	1959	7.64	2034	8.48	2110	9.32								
6300	1230	1667	4.79	1745	5.53	1819	6.29	1901	7.11	1980	7.98	2056	8.82	2127	9.71	2199	10.58						
6600	1289	1701	6.07	1778	5.83	1851	6.61	1923	7.42	2001	8.29	2076	9.17	2148	10.08	2217	11.00	2285	11.93				
6900	1348	1739	5.39	1812	6.14	1884	6.94	1963	7.78	2023	8.62	2097	9.53	2169	10.46	2238	11.41	2304	12.37	2389	13.35	2435	14.31
7200	1406	1778	5.73	1845	6.47	1917	7.29	1985	8.13	2050	9.00	2119	9.90	2180	10.85	2256	11.82	2325	12.80	2389	13.81	2451	14.83
7500	1465	1818	6.09	1884	6.65	1950	7.68	2018	8.52	2083	9.40	2145	10.30	2211	11.25	2280	12.24	2348	13.25	2410	14.27	2472	15.32
7800	1523	1858	6.47	1923	7.25	1988	8.05	2051	8.92	2116	9.83	2177	10.75	2237	11.69	2301	12.68	2367	13.71	2431	14.76	2493	15.82
8100	1582	1899	6.88	1963	7.68	2025	8.49	2085	9.34	2149	10.26	2210	11.21	2289	12.17	2356	13.15	2421	14.18	2482	15.25	2514	17.43
8400	1641	1942	7.31	2003	8.12	2064	8.98	2123	9.81	2182	10.72	2243	11.69	2302	12.67	2358	13.67	2413	14.68	2473	15.75	2535	17.98
8700	1698	1985	7.77	2044	8.59	2104	9.45	2162	10.32	2218	11.21	2277	12.18	2335	13.19	2391	14.21	2448	15.24	2499	16.29	2566	17.40
9000	1758	2028	8.25	2087	9.09	2144	9.96	2202	10.85	2257	11.77	2310	12.70	2388	13.72	2424	14.76	2478	15.82	2531	16.89	2582	17.98
9300	1816	2073	6.75	2130	9.61	2185	10.49	2241	11.41	2296	12.34	2349	13.29	2									

24 TCFI

Performance Data

Wheel Diameter = 24½ inches

Outlet Area = 6.21 Square Feet

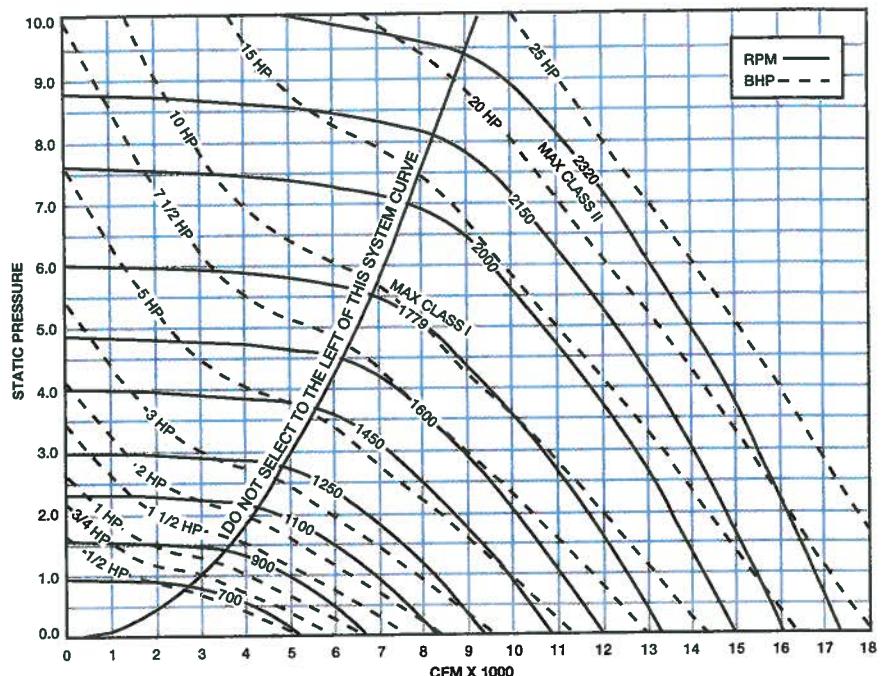
Tip Speed, FPM = 6.41 X RPM

Maximum BHP = (RPM/819)³

Pressure Class Limits

Class	Max. RPM
I	1779
II	2320

Maximum Motor Frame Sizes
Arr. 1 = 284T, Arr. 9 = 284T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		3"		3 1/2"		4"		4 1/2"		5"		5 1/2"		6"		6 1/2"		7"		7 1/2"		8"	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3000	483	606	0.23	698	0.39	680	0.56	760	0.75	849	1.05	832	1.40	1010	1.78	1083	2.20	1153	2.67	1202	2.99		
3350	539	642	0.28	629	0.45	706	0.64	779	0.83	849	1.05	832	1.40	1010	1.78	1083	2.20	1153	2.67	1202	2.99		
3700	596	581	0.33	662	0.52	735	0.72	802	0.93	868	1.15	951	1.51	1010	1.78	1083	2.20	1153	2.67	1202	2.99		
4050	652	621	0.40	698	0.60	765	0.81	830	1.04	890	1.26	951	1.61	1010	1.78	1083	2.20	1153	2.67	1202	2.99		
4400	709	661	0.48	732	0.69	798	0.91	858	1.15	917	1.40	972	1.66	1028	1.92	1083	2.20	1153	2.67	1202	2.99		
4750	765	703	0.57	768	0.79	832	1.02	891	1.28	946	1.54	999	1.80	1050	2.07	1102	2.37	1124	2.56	1172	2.86	1220	3.18
5100	821	746	0.67	807	0.80	867	1.15	924	1.42	977	1.69	1028	1.97	1077	2.26	1124	2.56	1172	2.86	1220	3.18	1287	3.52
5450	878	789	0.78	846	1.02	903	1.29	957	1.56	1009	1.86	1058	2.15	1105	2.45	1151	2.75	1195	3.06	1239	3.39	1285	3.74
5800	934	832	0.91	888	1.16	939	1.43	992	1.72	1042	2.03	1089	2.34	1135	2.66	1179	2.98	1223	3.30	1284	3.63	1304	3.96
6150	990	878	1.05	926	1.32	977	1.60	1028	1.90	1076	2.21	1122	2.54	1166	2.88	1209	3.21	1251	3.55	1292	3.89	1331	4.24
6500	1047	920	1.21	968	1.49	1016	1.78	1064	2.09	1111	2.42	1156	2.76	1199	3.11	1240	3.46	1280	3.82	1320	4.18	1369	4.54
6850	1103	964	1.39	1010	1.68	1068	1.98	1101	2.30	1146	2.64	1190	2.99	1232	3.35	1272	3.72	1311	4.10	1349	4.47	1387	4.85
7200	1159	1009	1.58	1053	1.88	1096	2.20	1139	2.53	1182	2.88	1225	3.24	1266	3.61	1305	3.99	1343	4.39	1380	4.78	1417	5.17
7550	1216	1053	1.79	1096	2.11	1136	2.43	1179	2.76	1219	3.13	1260	3.51	1300	3.89	1339	4.28	1376	4.69	1412	5.10	1447	5.51
7900	1272	1098	2.01	1139	2.35	1178	2.68	1218	3.04	1257	3.41	1296	3.79	1336	4.19	1373	4.59	1410	5.01	1445	5.43	1479	5.88
8250	1329	1143	2.26	1183	2.61	1220	2.98	1268	3.33	1298	3.71	1333	4.10	1371	4.51	1408	4.92	1443	5.35	1478	5.79	1512	6.23
8600	1385	1188	2.53	1226	2.80	1283	3.26	1328	3.63	1338	4.03	1371	4.43	1407	4.86	1443	5.28	1478	5.71	1512	6.16	1546	6.61
8950	1441	1233	2.82	1270	3.20	1308	3.58	1340	3.96	1375	4.37	1410	4.79	1444	5.21	1479	5.65	1514	6.10	1547	6.55	1579	7.02
9300	1498	1278	3.13	1314	3.53	1349	3.92	1382	4.32	1415	4.73	1450	5.16	1482	5.60	1515	6.05	1549	6.51	1582	6.98	1614	7.45
9650	1554	1324	3.46	1359	3.89	1392	4.24	1424	4.70	1458	5.12	1499	5.56	1521	6.01	1552	6.47	1585	6.94	1617	7.42	1649	7.91
10000	1610	1369	3.82	1403	4.26	1436	4.68	1487	5.10	1497	5.53	1529	5.98	1561	6.45	1591	6.91	1621	7.39	1653	7.89	1684	8.39
10350	1667	1415	4.20	1446	4.66	1479	5.10	1510	5.53	1539	5.97	1569	6.43	1600	6.81	1630	7.39	1659	7.88	1689	8.39	1720	8.89
10700	1723	1460	4.61	1492	5.08	1523	5.54	1553	5.99	1581	6.44	1610	6.90	1640	7.39	1669	7.88	1698	8.39	1726	8.90	1756	9.42
11050	1779	1506	5.05	1537	5.53	1567	6.01	1596	6.47	1624	6.94	1651	7.41	1680	7.81	1709	8.42	1737	8.93	1764	9.45	1792	9.98
11400	1836	1552	5.51	1582	6.01	1611	6.51	1639	6.98	1667	7.48	1693	7.95	1720	8.45	1749	8.97	1776	9.50	1803	10.03	1830	10.57

CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		3"		3 1/2"		4"		4 1/2"		5"		5 1/2"		6"		6 1/2"		7"		7 1/2"			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
6150	990	1369	4.59	1450	5.37	1528	6.17	1764	8.93	1828	10.82	1891	11.83	1951	12.87	2008	13.92	2027	14.46	2083	15.58		
6500	1047	1396	4.90	1469	5.68	1546	6.49	1819	7.34	1707	8.59	1726	8.89	1791	9.93	1872	11.36	1932	12.37				
6850	1103	1424	5.23	1495	6.00	1565	6.82	1838	7.69	1725	8.89	1791	10.03	1848	11.26	1909	13.38	1969	13.38	2027	14.46		
7200	1159	1452	5.57	1522	6.37	1588	7.18	1657	8.06	1725	9.03	1846	10.42	1847	11.41	1902	12.41	1956	13.43	2007	14.46		
7550	1216	1482	5.92	1550	6.75	1618	7.60	1678	8.46	1744	9.40	1809	10.37	1872	11.36	1932	12.37						
7900	1272	1513	6.30	1579	7.16	1643	8.03	1705	8.92	1764	9.83	1828	10.82	1891	11.83	1951	12.87	2008	13.92	2027	14.46		
8250	1329	1545	6.68	1609	7.56	1671	8.49	1733	9.40	1791	10.33	1848	11.26	1909	12.32	1969	13.38	2027	14.46	2083	15.58		
8600	1385	1578	7.08	1640	8.02	1701	8.98	1761	9.90	1819	10.86	1875	11.84	1929	12.83	1988	13.81	2046	15.02	2101	16.14	2155	17.28
8950	1441	1611	7.50	1672	8.47	1732	9.44	1790	10.42	1847	11.41	1902	12.41	1956	13.43	2007	14.46	2065	15.59	2120	16.74	2174	17.91
9300	1498	1645	7.94	1705	8.93	1783	9.96	1820	10.86	1875	11.99	1930	13.01	1983	14.06	2034	15.11	2084	16.18	2139	17.36	2183	18.65
9650	1554	1679	8.40	1739	9.42	1795	10.47	1851	11.52	1905	12.57	1958	13.64	2011	14.71	2062	15.79	2111	16.89	2159	18.00	2212	19.21
10000	1610	1714	8.90	1772	9.83	1828	11.01	1882	12.10	1938	13.19	1988	14.28	2039	15.39	2089	16.49	2138	17.				

27 TCFI

Performance Data

Wheel Diameter = 27 inches

Outlet Area = 7.54 Square Feet

Tip Speed, FPM = 7.07 X RPM

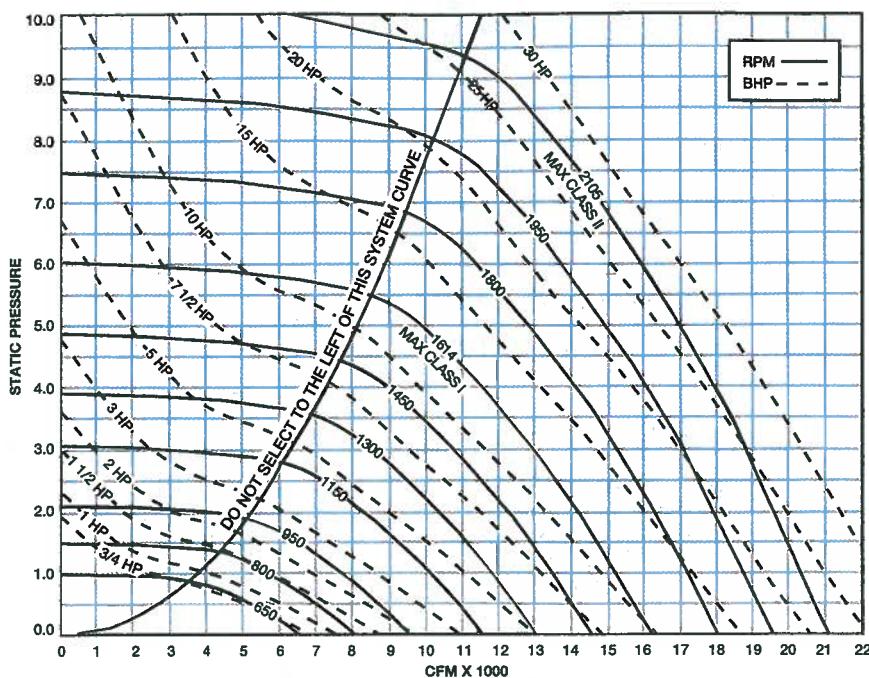
Maximum BHP = (RPM/697)³

Pressure Class Limits

Class	Max. RPM
I	1614
II	2105

Maximum Motor Frame Sizes

Arr. 1 = 284T, Arr. 9 = 284T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		1/4"		1/2"		3/4"		1"		1 1/4"		1 1/2"		1 3/4"		2"		2 1/4"		2 1/2"		2 3/4"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3800	504	471	0.30	553	0.50	626	0.71	696	0.95														
4200	557	603	0.36	680	0.57	648	0.80	712	1.04	776	1.32												
4600	610	638	0.42	669	0.65	674	0.80	734	1.16	792	1.43	850	1.73										
5000	663	570	0.50	638	0.75	700	1.01	758	1.29	812	1.57	868	1.87	919	2.19								
5400	716	605	0.59	668	0.85	729	1.13	783	1.42	836	1.72	885	2.02	935	2.35	985	2.70	1032	3.06				
5800	769	641	0.70	699	0.96	757	1.25	810	1.67	861	1.88	909	2.20	954	2.53	1001	2.89	1048	3.26	1092	3.66		
6200	822	677	0.81	733	1.09	787	1.40	839	1.72	887	2.06	933	2.40	978	2.74	1020	3.09	1064	3.47	1108	3.87	1150	4.28
6600	875	714	0.94	768	1.24	818	1.55	887	1.89	914	2.24	959	2.60	1002	2.97	1044	3.33	1083	3.71	1124	4.10	1168	4.53
7000	928	751	1.09	800	1.39	849	1.72	897	2.07	943	2.44	985	2.82	1027	3.20	1067	3.59	1107	3.98	1145	4.37	1182	4.79
7400	981	788	1.25	835	1.57	881	1.91	927	2.27	971	2.65	1013	3.05	1053	3.45	1093	3.86	1131	4.26	1168	4.68	1204	5.09
7800	1034	826	1.43	870	1.76	915	2.12	958	2.49	1001	2.88	1042	3.28	1081	3.71	1119	4.14	1156	4.56	1192	4.99	1227	5.43
8200	1088	864	1.62	908	1.97	948	2.34	989	2.72	1031	3.13	1071	3.55	1109	3.98	1146	4.43	1182	4.88	1217	5.32	1251	5.78
8600	1141	902	1.84	942	2.20	982	2.58	1022	2.98	1062	3.40	1101	3.83	1138	4.27	1174	4.74	1209	5.21	1243	5.67	1278	6.14
9000	1194	940	2.07	979	2.45	1017	2.84	1055	3.25	1093	3.68	1131	4.13	1167	4.59	1203	5.08	1237	5.54	1269	6.04	1302	6.53
9400	1247	978	2.32	1016	2.72	1052	3.12	1089	3.55	1125	3.99	1161	4.45	1197	4.92	1232	5.40	1266	5.90	1298	6.41	1329	6.83
9800	1300	1016	2.59	1063	3.01	1088	3.42	1123	3.86	1168	4.32	1192	4.79	1228	5.27	1261	5.77	1294	6.28	1326	6.80	1357	7.33
10200	1353	1054	2.88	1090	3.32	1124	3.75	1157	4.20	1192	4.67	1224	5.15	1258	5.65	1291	6.16	1323	6.68	1355	7.22	1385	7.76
10600	1406	1083	3.20	1128	3.65	1160	4.10	1192	4.55	1225	5.04	1257	5.64	1289	6.05	1322	6.57	1353	7.11	1384	7.65	1414	8.21
11000	1459	1132	3.53	1166	4.01	1197	4.47	1227	4.94	1269	5.44	1301	5.95	1321	6.47	1352	7.01	1383	7.56	1413	8.12	1443	8.68
11400	1512	1170	3.90	1203	4.40	1234	4.87	1263	5.36	1294	5.86	1324	6.39	1354	6.92	1383	7.47	1414	8.03	1443	8.60	1472	9.18
11800	1565	1209	4.29	1241	4.80	1271	5.30	1300	5.79	1328	6.31	1358	6.85	1387	7.40	1415	7.95	1445	8.53	1474	9.12	1502	9.71
12200	1618	1248	4.70	1279	5.23	1308	5.75	1336	6.26	1363	6.78	1392	7.34	1421	7.90	1449	8.47	1476	9.05	1504	9.68	1532	10.27
12600	1671	1287	5.14	1317	5.69	1345	6.23	1373	6.76	1399	7.29	1427	7.85	1455	8.43	1482	9.02	1508	9.61	1535	10.22	1563	10.85
13000	1724	1328	5.61	1355	6.18	1383	6.73	1410	7.28	1438	7.83	1461	8.39	1489	8.98	1515	9.58	1541	10.20	1567	10.82	1584	11.48
13400	1777	1365	6.11	1393	6.69	1420	7.27	1447	7.83	1472	8.40	1497	8.97	1523	9.57	1549	10.19	1575	10.82	1600	11.45	1624	12.08

CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		3"		3 1/4"		4"		4 1/4"		5"		5 1/4"		6"		6 1/4"		7"		7 1/4"		8"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7400	981	1238	5.52	1313	6.46	1384	7.43			1592	11.69	1651	12.89	1708	14.11	1762	15.35						
7800	1034	1282	5.87	1330	6.79	1400	7.79	1466	8.82	1544	10.31												
8200	1088	1285	6.23	1350	7.16	1418	8.16	1482	9.22	1560	10.76	1619	11.89										
8600	1141	1309	6.62	1373	7.58	1433	8.56	1498	9.64	1560	10.76	1635	12.38	1692	13.57								
9000	1194	1334	7.02	1396	8.01	1458	9.02	1514	10.07	1576	11.21	1635	12.38										
9400	1247	1380	7.44	1420	8.47	1480	9.61	1536	10.58	1592	11.69	1651	12.89	1708	14.11	1762	15.35						
9800	1300	1386	7.87	1448	8.94	1503	10.02	1560	11.11	1613	12.23	1668	13.41	1724	14.68	1778	15.93	1831	17.23	1881	18.54		
10200	1353	1415	8.32	1472	9.43	1528	10.56	1583	11.67	1636	12.82	1687	13.98	1740	15.22	1794	16.53	1847	17.85	1897	19.20	1948	20.58
10600	1406	1443	8.78	1499	9.84	1554	11.09	1607	12.26	1660	13.43	1710	14.63	1759	15.84	1811	16.94	1863	18.49	1913	19.87	1962	21.26
11000	1459	1471	9.27	1527	10.46	1580	11.66	1632	12.86	1684	14.07	1734	15.30	1782	16.54	1829	17.80	1879	19.15	1929	20.56	1976	21.98
11400	1512	1500	9.78	1585	11.00	1607	12.24	1668	13.48	1708	14.73	1758	15.99	1808	17.26	1852	18.55	1897	19.88	1945	21.27	1984	22.72
11800	1565	1530	10.32	1583	11.56	1635	12.84	1685	14.13	1734	15.41	1782	16.71	1828	18.01	1876	19.34	1920	20.67	1984	22.03	2010	23.48
12200	1618	1560	10.88	1612	12.15	1663	13.46	1712	14.79	1760	16.12	1807	17.48	1853	18.79	1909	20.14	1944	21.51	1987	22.90	2029	24.30
12600	1671	1590	11.48	1641	12.76	1692	14.10	1740	15.48	1788	16.85	1833	18.21	1878	19.59	1923	20.98	1987	22.38	2010	23.79	2052	25.22
13000	1724	1620	12.10	1671	13																		

30 TCFI

Performance Data

Wheel Diameter = 30 inches

Outlet Area = 9.31 Square Feet

Tip Speed, FPM = 7.85 X RPM

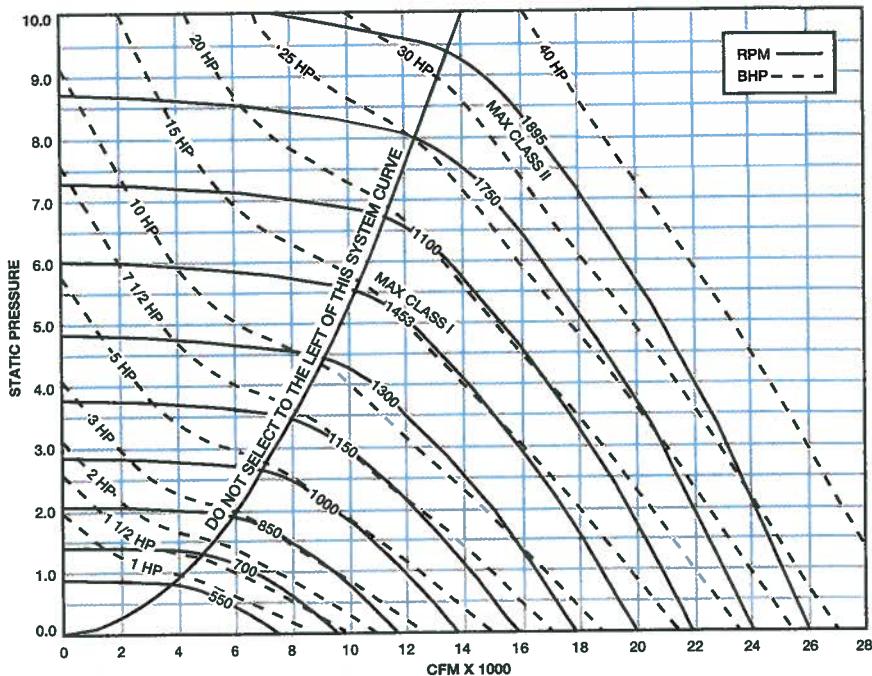
Maximum BHP = $(RPM/585)^3$

Pressure Class Limits

Class	Max. RPM
I	1453
II	1895

Maximum Motor Frame Sizes

Arr. 1 = 286T, Arr. 9 = 286T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																			
		1/4"		1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/4"		2 1/2"		3"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
4500	483	413	0.34	488	0.58	655	0.84	621	1.13	693	1.57	780	2.06	811	2.65	852	3.05	896	3.49	938	3.95
5000	537	441	0.41	512	0.67	678	0.95	635	1.26	707	1.71	774	2.24	822	2.64	857	3.00	912	3.73	953	4.20
5500	591	471	0.49	538	0.77	588	1.07	653	1.38	724	1.87	774	2.24	822	2.64	857	3.00	912	3.73	953	4.20
6000	644	502	0.59	565	0.88	621	1.20	674	1.53	745	2.08	790	2.43	837	2.84	882	3.26	938	3.95	978	4.41
6500	698	534	0.69	592	1.00	647	1.34	697	1.70	745	2.08	805	2.43	841	2.84	877	3.26	978	4.41	1030	5.19
7000	752	566	0.82	620	1.14	673	1.50	721	1.88	787	2.26	811	2.65	852	3.05	896	3.49	938	3.95	978	4.41
7500	806	599	0.98	680	1.30	700	1.67	747	2.06	790	2.47	833	2.88	873	3.30	912	3.73	953	4.20	992	4.69
8000	859	633	1.11	880	1.47	728	1.86	773	2.27	815	2.70	856	3.14	895	3.58	933	4.02	969	4.48	1007	4.88
8500	913	666	1.29	711	1.66	756	2.06	800	2.49	841	2.94	880	3.41	918	3.87	954	4.34	990	4.81	1024	5.30
9000	967	700	1.49	742	1.87	785	2.29	827	2.74	867	3.20	905	3.68	941	4.18	977	4.67	1012	5.16	1045	5.67
9500	1020	734	1.70	774	2.10	815	2.54	855	3.00	884	3.48	931	3.98	966	4.50	1001	5.01	1034	5.53	1067	6.06
10000	1074	769	1.94	807	2.36	846	2.81	883	3.28	921	3.79	957	4.30	992	4.83	1025	5.38	1058	5.92	1089	6.47
10500	1128	803	2.20	840	2.84	877	3.11	913	3.60	949	4.11	984	4.64	1018	5.19	1051	5.75	1082	6.33	1113	6.90
11000	1182	838	2.48	874	2.95	908	3.43	943	3.94	977	4.46	1012	5.01	1044	5.57	1077	6.15	1107	6.75	1137	7.35
11500	1235	873	2.79	907	3.28	939	3.77	974	4.30	1008	4.84	1039	5.40	1072	5.98	1103	6.58	1133	7.19	1162	7.81
12000	1289	907	3.12	941	3.64	972	4.14	1004	4.88	1038	5.24	1067	5.82	1099	6.42	1130	7.03	1159	7.66	1188	8.30
12500	1343	942	3.49	975	4.02	1005	4.55	1036	5.10	1067	5.68	1098	6.27	1127	6.88	1157	7.51	1188	8.15	1214	8.81
13000	1398	977	3.87	1009	4.43	1038	4.98	1067	5.54	1097	6.14	1126	6.75	1155	7.37	1185	8.02	1213	8.68	1240	9.35
13500	1450	1013	4.29	1043	4.88	1072	5.44	1099	6.02	1128	6.83	1157	7.28	1184	7.90	1212	8.56	1240	9.24	1268	9.92
14000	1504	1048	4.74	1077	5.35	1105	5.94	1132	6.53	1158	7.15	1187	7.80	1214	8.46	1241	9.13	1268	9.83	1295	10.53
14500	1557	1083	5.22	1112	6.88	1139	6.48	1165	7.08	1191	7.70	1218	8.37	1244	9.05	1270	9.73	1296	10.44	1323	11.17
15000	1611	1118	5.73	1146	6.39	1173	7.02	1198	7.65	1223	8.29	1249	8.98	1275	9.67	1300	10.38	1324	11.09	1356	11.84
15500	1665	1154	6.28	1181	6.98	1207	7.62	1232	8.27	1256	8.93	1300	9.61	1330	10.35	1354	11.78	1378	12.54	1403	13.31
16000	1719	1189	6.88	1218	7.56	1241	8.25	1265	8.92	1289	9.59	1312	10.29	1337	11.02	1361	11.78	1384	12.52	1407	13.27
16500	1772	1225	7.48	1250	8.20	1276	8.91	1299	9.60	1322	10.30	1344	11.01	1368	11.75	1391	12.51	1414	13.28	1437	14.06

CFM	OV	STATIC PRESSURE IN INCHES W.G.																							
		3"		3 1/4"		4"		4 1/4"		5"		5 1/4"		6"		6 1/4"		7"		7 1/4"		8"		8 1/4"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9000	967	1110	6.71	1178	7.87	1241	9.06	1315	10.76	1386	12.59	1447	14.95	1498	16.42	1549	17.98	1597	19.52	1846	21.11	1886	22.76	1704	24.37
9500	1020	1130	7.13	1193	8.27	1256	9.50	1330	11.28	1400	13.14	1454	14.84	1519	16.61	1612	20.26	1659	21.89	1705	23.54	1749	25.22	1725	26.38
10000	1074	1151	7.58	1209	8.72	1270	9.96	1330	11.28	1400	13.14	1454	14.84	1519	16.61	1612	20.26	1659	21.89	1705	23.54	1749	25.22	1725	26.38
10500	1128	1173	8.05	1230	9.23	1285	10.44	1344	11.78	1400	13.65	1455	15.35	1579	18.40	1827	21.02	1674	22.68	1719	24.38	1763	26.10	1806	27.83
11000	1182	1195	8.55	1252	9.77	1306	11.01	1369	12.31	1415	13.71	1468	15.15	1619	16.81	1827	20.27	1842	21.82	1688	23.51	1734	25.24	1778	26.99
11500	1235	1219	9.07	1274	10.33	1327	11.81	1378	12.92	1430	14.30	1483	15.77	1534	17.32	1774	18.80	1686	20.44	1704	22.18	1864	22.76	1704	24.37
12000	1289	1243	9.61	1297	10.91	1349	12.24	1389	13.58	1447	14.95	1498	16.42	1549	17.98	1597	19.52	1846	21.11	1886	22.73	1725	25.38	1784	27.05
12500	1343	1268	10.18	1320	11.52	1371	12.90	1421	14.28	1469	15.68	1614	17.11	1563	18.66	1612	20.26	1659	21.89	1705	23.54	1749	25.22	1725	26.38
13000	1398	1294	10.74	1344	12.16	1394	13.57	1442	15.00	1490	16.45	1535	17.92	1579	19.40	1827	21.02	1674	22.68	1719	24.38	1763	26.10	1806	27.83
13500	1450	1320	11.34	1370	12.80	1418	14.27	1465	16.15	1512	17.24	1557	18.75	1600	20.27	1842	21.82	1688	23.51	1734	25.24	1778	26.99	1820	28.77
14000	1504	1348	11.97	1395	13.47	1442	14.01	1489	16.52	1534	18.06	1578	19.81	1622	21.18	1864	22.76	1704	24.37	1749	26.12	1792	27.81	1835	28.72
14500	1557	1373	12.64	1421	14.17	1488	15.74	1513	17.33	1557	18.91	1600	20.51	1843	22.11	1886	23.73	1725	25.38	1784	27.05	1807	28.85	1850	30.71
15000	1611	1400	13.35	1448	14.90	1494	16.51	1537	18.15	1581	19.78	1624	21.42	1665	23.08	1705	24.74	1747	26.42	1785	28.13	1823	29.85	1864	31.71
15500	1665	1428	14.09	1474	15.67	1519</																			

33 TCFI

Performance Data

Wheel Diameter = 33 inches

Outlet Area = 11.27 Square Feet

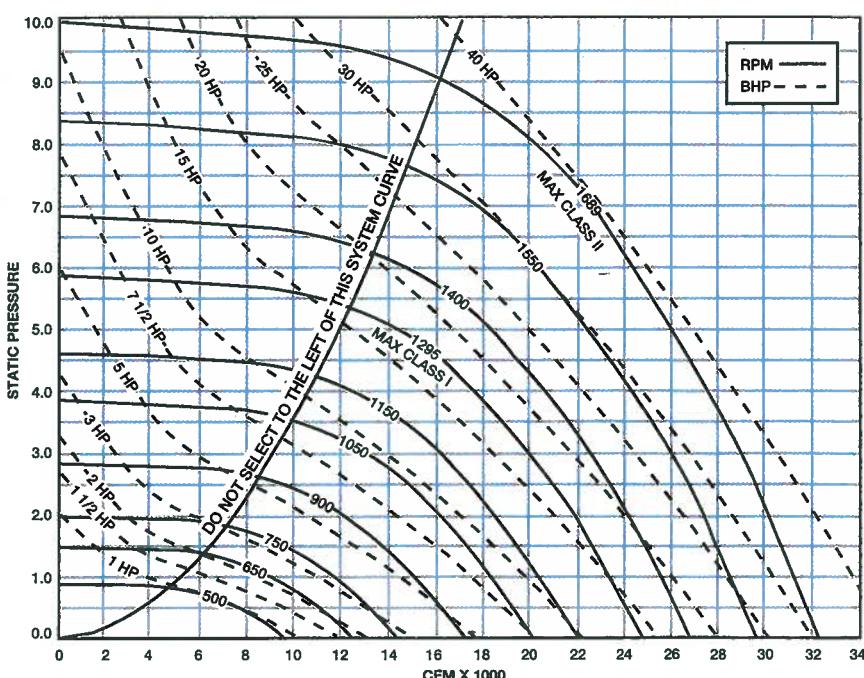
Tip Speed, FPM = 8.64 X RPM

Maximum BHP = $(RPM/499)^3$

Pressure Class Limits

Class	Max. RPM
I	1295
II	1689

Maximum Motor Frame Sizes
Arr. 1 = 326T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		1/4"		1/2"		3/4"		1"		1 1/4"		1 1/2"		1 3/4"		2"		2 1/4"		2 1/2"		2 3/4"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5400	479	362	0.38	434	0.65	500	0.97	563	1.33														
6000	532	385	0.45	452	0.75	514	1.08	574	1.45	629	1.85												
6600	586	410	0.53	473	0.85	531	1.20	585	1.58	639	2.00	689	2.44										
7200	639	436	0.63	494	0.97	549	1.33	601	1.73	650	2.18	700	2.62	745	3.10								
7800	692	463	0.74	518	1.10	569	1.49	618	1.90	665	2.34	711	2.81	756	3.31	799	3.83						
8400	745	490	0.87	541	1.25	590	1.65	637	2.08	682	2.54	724	3.02	767	3.53	810	4.07	860	4.62				
9000	799	518	1.02	568	1.41	613	1.84	657	2.29	699	2.75	741	3.26	780	3.77	821	4.32	880	4.90	898	5.49	934	6.09
9600	852	547	1.18	591	1.58	638	2.04	678	2.51	719	3.00	758	3.51	797	4.05	834	4.60	871	5.18	909	5.80	945	6.42
10200	905	576	1.38	618	1.79	660	2.25	700	2.75	739	3.26	777	3.78	814	4.33	850	4.91	885	5.50	920	6.11	956	6.76
10800	958	606	1.57	644	2.01	684	2.49	723	3.00	760	3.53	797	4.08	832	4.64	867	5.24	902	5.85	934	6.47	967	7.11
11400	1012	635	1.79	671	2.25	709	2.75	747	3.28	782	3.83	818	4.40	852	4.99	888	5.58	918	6.21	951	6.86	982	7.51
12000	1065	665	2.04	699	2.52	735	3.04	770	3.58	806	4.18	839	4.74	872	5.35	906	5.97	938	6.60	968	7.27	998	7.94
12600	1118	694	2.31	727	2.81	761	3.35	795	3.91	828	4.50	861	5.11	893	5.73	926	6.37	966	7.03	995	7.70	1015	8.39
13200	1171	724	2.81	756	3.12	788	3.68	820	4.26	853	4.87	885	5.50	915	6.14	945	6.81	975	7.48	1004	8.18	1032	8.87
13800	1224	754	2.93	785	3.47	815	4.04	846	4.64	877	5.28	908	5.92	938	6.58	966	7.28	996	7.96	1024	8.66	1052	9.38
14400	1278	784	3.28	814	3.84	842	4.42	873	5.05	901	5.69	932	6.38	961	7.04	989	7.74	1017	8.46	1045	9.19	1072	9.92
15000	1331	815	3.68	843	4.24	870	4.84	899	5.48	927	6.14	956	6.82	985	7.53	1012	8.25	1038	8.99	1065	9.74	1092	10.50
15600	1384	845	4.07	872	4.67	908	5.29	926	5.94	954	6.63	980	7.32	1008	8.06	1035	8.79	1061	9.55	1087	10.31	1113	11.10
16200	1437	876	4.51	902	5.13	937	5.77	953	6.44	980	7.14	1006	7.86	1032	8.60	1059	9.36	1085	10.14	1109	10.93	1134	11.72
16800	1491	906	4.98	931	5.62	956	6.28	980	6.96	1007	7.69	1032	8.43	1056	9.18	1083	9.86	1108	10.78	1133	11.57	1168	12.39
17400	1544	937	5.49	961	6.15	986	6.83	1008	7.52	1033	8.27	1058	9.03	1083	9.80	1107	10.59	1132	11.41	1166	12.24	1179	13.08
18000	1597	967	6.03	981	6.71	1014	7.41	1037	8.12	1060	8.88	1086	9.66	1108	10.45	1131	11.26	1156	12.10	1280	12.95	1320	13.81
18600	1650	998	6.60	1021	7.31	1044	8.03	1065	8.76	1088	9.52	1112	10.33	1135	11.14	1157	11.97	1180	12.82	1203	13.69	1226	14.57
19200	1704	1029	7.22	1051	7.84	1073	8.68	1094	9.44	1115	10.21	1138	11.03	1161	11.87	1183	12.72	1204	13.57	1227	14.47	1250	15.37
19800	1757	1059	7.87	1081	8.61	1103	9.38	1123	10.15	1143	10.94	1165	11.77	1188	12.63	1209	13.50	1230	14.38	1251	15.28	1274	16.20
20400	1810	1319	18.03	1360	19.98	1400	21.96	1439	23.98	1479	26.04	1517	28.14	1554	30.28	1590	32.43	1628	34.68	1665	36.96		
21000	1863	1343	18.96	1384	20.95	1423	22.98	1460	25.03	1499	27.14	1537	29.27	1574	31.44	1609	33.63	1645	35.89	1682	38.21		
21600	1917	1367	19.83	1408	21.97	1446	24.03	1483	26.13	1520	28.27	1558	30.45	1594	32.68	1630	34.89	1664	37.16				
22200	1970	1392	20.95	1431	23.02	1470	25.13	1506	27.27	1542	29.45	1579	31.67	1615	33.92	1650	36.20	1684	38.50				
22800	2023	1418	22.02	1455	24.11	1493	26.27	1530	28.46	1565	30.67	1600	32.93	1635	35.22	1670	37.54						
23400	2076	1444	23.14	1479	25.25	1517	27.45	1553	29.68	1588	31.94	1622	34.23	1656	38.57								
24000	2130	1470	24.30	1504	26.44	1541	28.68	1577	30.95	1611	33.25	1644	35.69	1677	37.95								
24600	2183	1498	25.51	1530	27.70	1565	29.95	1600	32.28	1635	34.81	1668	36.99										
25200	2236	1523	26.77	1566	29.00	1589	31.28	1624	33.62	1658	38.01												
25800	2289	1549	28.08	1682	30.34	1614	32.64	1648	35.03	1682	37.47												

Performance shown is for Model TCFI with outlet duct and inlet duct.
BHP does not include drive losses.

36 TCFI

Performance Data

Wheel Diameter = 36½ inches

Outlet Area = 13.79 Square Feet

Tip Speed, FPM = 9.56 X RPM

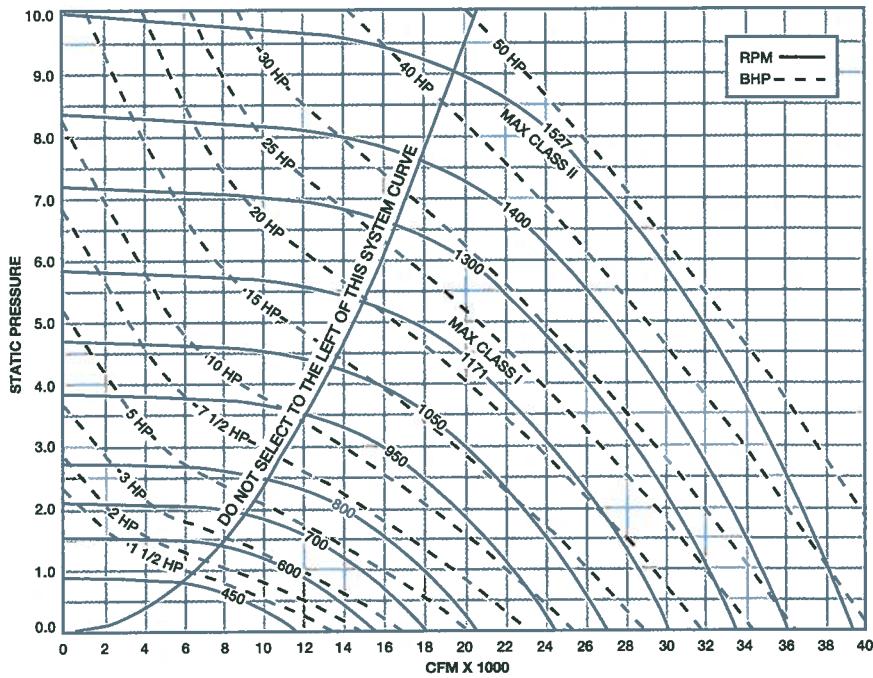
Maximum BHP = (RPM/421)³

Pressure Class Limits

Class	Max. RPM
I	1171
II	1527

Maximum Motor Frame Sizes

Arr. 1 = 365T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																													
		3"		3 1/4"		3 1/2"		4"		4 1/4"		4 1/2"		5"		5 1/4"		6"		6 1/4"		7"		7 1/4"		8"		8 1/4"			
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP				
6700	486	330	0.47	394	0.61	454	1.21	510	1.65	569	2.28	623	2.99	674	3.79	722	4.67	767	5.62	808	6.66	843	7.40	876	8.55	906	9.51	935	10.34		
7400	537	350	0.56	410	0.92	468	1.33	519	1.79	578	2.45	633	3.20	683	4.04	731	4.95	771	5.82	810	6.66	843	7.40	876	8.55	906	9.51	935	10.34		
8100	587	372	0.66	428	1.05	480	1.47	529	1.94	588	2.64	642	3.42	693	4.26	741	5.15	781	6.02	820	7.02	852	7.78	883	8.67	912	9.51	941	10.34		
8800	638	394	0.77	447	1.18	496	1.63	543	2.12	600	2.85	647	3.60	698	4.44	746	5.33	786	6.21	826	7.20	858	7.96	890	8.83	920	9.67	949	10.45		
9500	689	417	0.90	467	1.34	514	1.81	558	2.31	600	2.85	652	3.66	701	4.53	749	5.42	787	6.30	827	7.29	860	8.04	892	8.90	922	9.77	951	10.57		
10200	740	440	1.05	487	1.50	531	2.00	574	2.52	615	3.08	663	3.86	713	4.79	761	5.68	801	6.56	841	7.32	873	8.08	904	8.94	934	9.81	963	10.69		
10900	790	465	1.21	508	1.69	551	2.21	591	2.78	630	3.33	668	4.04	718	4.93	766	5.81	806	6.62	846	7.38	878	8.22	909	9.07	939	9.93	969	10.80		
11600	841	489	1.40	530	1.90	571	2.44	609	3.01	646	3.60	682	4.23	726	4.99	774	5.85	814	6.71	854	7.47	886	8.33	916	9.19	946	10.03	976	10.89		
12300	892	615	1.61	533	2.13	591	2.69	628	3.28	664	3.90	704	4.54	752	5.21	799	6.05	837	6.92	877	7.70	917	8.55	947	9.42	977	10.45	1007	10.97		
13000	943	540	1.84	576	2.38	612	2.96	648	3.58	682	4.22	715	4.89	767	5.57	811	6.30	851	7.08	881	7.85	921	8.66	951	9.51	981	10.41	1011	10.91		
13700	993	566	2.10	599	2.65	633	3.26	668	3.90	700	4.56	733	5.25	764	5.96	804	6.69	826	7.45	854	8.23	882	9.02	911	9.85	941	10.76	971	10.66		
14400	1044	581	2.38	622	2.95	655	3.58	688	4.24	720	4.93	751	5.64	782	6.37	811	7.12	840	7.89	869	8.70	907	9.51	937	10.43	967	11.33	1007	12.33		
15100	1095	616	2.68	646	3.28	678	3.93	709	4.61	740	5.32	770	6.06	809	6.81	838	7.58	868	8.37	898	9.19	928	9.91	958	10.80	988	11.65	1028	12.54	1068	13.44
15800	1148	642	3.01	671	3.63	701	4.30	730	5.00	761	5.74	790	6.50	827	7.27	864	8.07	893	8.88	923	9.71	953	10.57	983	11.45	1023	12.34	1063	13.24	1103	13.54
16500	1197	688	3.37	696	4.02	724	4.71	753	5.43	781	6.19	810	6.97	837	7.77	864	8.59	891	9.42	921	10.27	951	11.14	981	11.97	1021	12.04	1061	13.54	1101	13.64
17200	1247	694	3.77	721	4.44	747	5.14	775	5.89	802	6.66	830	7.47	857	8.29	882	9.13	908	9.99	934	10.87	964	11.76	992	12.66	1032	13.56	1072	14.46	1112	15.36
17900	1298	720	4.19	746	4.88	771	5.60	798	6.37	824	7.17	851	7.99	877	8.84	902	9.71	928	10.59	952	11.49	982	12.41	1020	13.33	1060	14.21	1100	15.11	1140	16.00
18600	1349	746	4.64	771	5.38	795	6.10	821	6.89	848	7.71	851	8.55	887	9.43	922	10.32	946	11.22	976	12.15	1006	13.09	1047	14.04	1087	14.94	1127	15.83	1167	16.73
19300	1400	772	5.13	796	5.87	820	6.63	844	7.44	869	8.29	893	9.15	918	10.04	942	10.96	966	11.89	996	12.83	1032	13.80	1072	14.77	1112	15.67	1152	16.57	1192	17.47
20000	1450	798	5.66	822	6.42	845	7.21	868	8.03	892	8.90	915	9.78	939	10.69	963	11.63	988	12.59	1028	13.56	1068	14.54	1108	15.54	1148	16.44	1188	17.34	1228	18.24
20700	1501	825	6.21	847	7.00	870	7.82	911	8.65	915	9.54	938	10.45	960	11.38	983	12.34	1008	13.32	1028	14.32	1050	15.32	1071	16.34	1111	17.24	1151	18.14	1191	19.04
21400	1552	851	6.81	873	7.83	913	8.65	948	9.31	938	10.22	960	11.16	982	12.11	1004	13.08	1027	14.09	1048	15.11	1069	16.14	1090	17.19	1130	18.07	1170	18.97	1210	19.87
22100	1603	877	7.45	899	8.28	920	9.15	940	10.02	961	10.94	983	11.90	1005	12.88	1025	13.86	1047	14.89	1068	15.94	1090	17.00	1130	18.07	1170	18.97	1210	19.87		
22800	1653	904	8.12	925	8.98	945	9.87	965	10.77	991	11.70	1006	12.69	1027	13.68	1047	14.70	1068	15.74	1089	16.81	1120	17.89	1160	18.88	1200	19.78	1240	20.68		
23500	1704	930	8.84	951	9.72	970	10.64	990	11.56	1008	12.50	1029	13.51	1050	14.53	1070	15.57	1099	16.62	1110	17.71	1150	18.82	1180	19.72	1220	20.62	1260	21.52		

CFM	OV	STATIC PRESSURE IN INCHES W.G.																									
		3"		3 1/4"		3 1/2"		4"		4 1/4"		4 1/2"		5"		5 1/4"		6"		6 1/4"		7"		7 1/4"		8"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13700	993	911	9.85	970	11.60	1024	13.41	1122	15.26	1195	17.28	1238	20.06	1275	22.99	1313	27.77	1349	32.19	1389	34.77	1426	37.41	1466	40.08	1502	42.79
14400	1044	923	10.34	979	12.12	1033	13.98	1084	15.88	1142	18.53	1225	23.89	1269	26.00	1311	28.35	1352	30.74	1392	33.16	1438	36.71	1484	40.42	1524	43.13
15100	1095	938	10.88	989	12.65	1043	14.68	1094	16.52	1142	18.53	1225	24.52	1279	26.87	1321	29.27	1361	31.71	1400	34.20	1447	37.81	1484	41.44	1524	43.13
15800	1148	952	11.45	1002	13.25	1052	16.15																				

40 TCFI

Performance Data

Wheel Diameter = 40½ inches

Outlet Area = 16.77 Square Feet

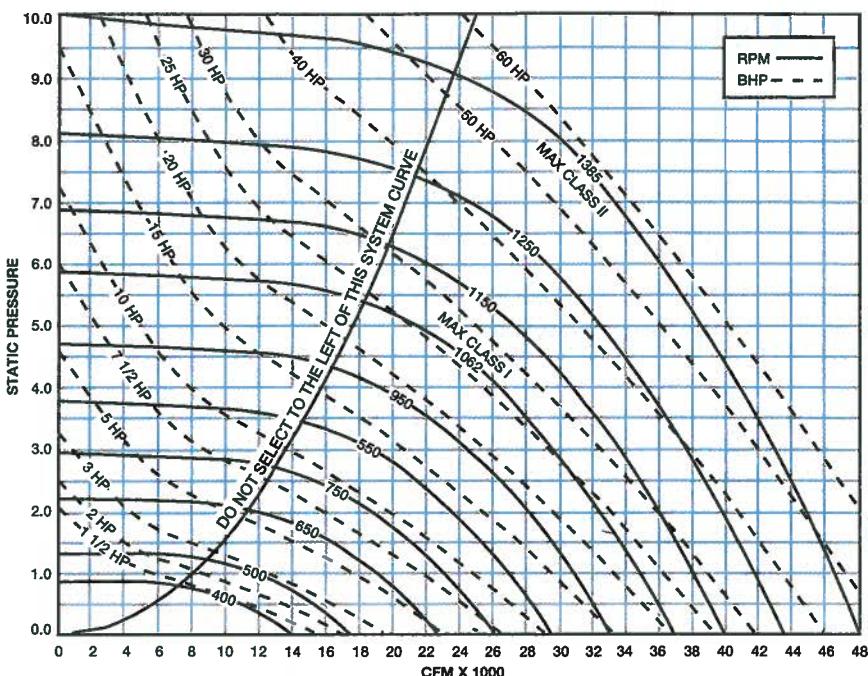
Tip Speed, FPM = 10.54 X RPM

$$\text{Maximum BHP} = (\text{RPM}/358)^3$$

Pressure Class Limits

Class	Max. RPM
I	1062
II	1385

Maximum Motor Frame Sizes
Arr. 1 = 365T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																							
		1/8"		1/4"		3/8"		1"		1 1/4"		1 1/2"		1 3/4"		2"		2 1/4"		2 1/2"		2 3/4"			
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
7500	447	285	0.50	347	0.90	405	1.37																		
8400	501	304	0.80	381	1.03	414	1.51	465	2.05																
9300	555	324	0.72	378	1.17	427	1.68	474	2.24	519	2.85														
10200	608	345	0.85	395	1.34	441	1.87	485	2.44	528	3.07	569	3.74												
11100	662	367	1.01	414	1.52	457	2.08	499	2.68	537	3.32	578	4.02	615	4.75										
12000	716	389	1.19	433	1.73	474	2.32	513	2.94	551	3.61	587	4.31	624	5.07	659	5.85	692	6.66						
12900	769	412	1.39	453	1.96	482	2.58	530	3.23	565	3.92	600	4.65	633	5.40	668	6.22	701	7.08	731	7.92				
13800	823	436	1.62	473	2.21	511	2.86	547	3.55	581	4.26	614	5.01	646	5.80	677	6.61	710	7.48	740	8.37	770	9.29	798	10.22
14700	877	460	1.88	495	2.50	530	3.18	564	3.89	597	4.63	628	5.40	660	6.22	690	7.05	719	7.91	749	8.84	779	9.79	807	10.75
15600	930	484	2.17	517	2.82	550	3.52	583	4.26	614	5.04	645	5.84	674	6.66	704	7.53	732	8.42	759	9.33	786	10.31	816	11.31
16500	984	508	2.49	539	3.16	570	3.89	602	4.67	632	5.47	662	6.30	690	7.15	718	8.04	746	8.96	772	9.90	798	10.88	825	11.88
17400	1038	533	2.84	561	3.54	592	4.30	622	5.10	651	5.94	679	6.80	707	7.68	733	8.59	760	9.53	786	10.50	812	11.49	836	12.50
18300	1091	557	3.23	584	3.95	613	4.74	642	5.57	670	6.44	697	7.33	724	8.24	750	9.18	775	10.13	800	11.13	826	12.15	850	13.19
19200	1145	582	3.66	608	4.41	635	5.23	662	6.08	690	6.97	716	7.90	741	8.84	767	9.81	792	10.79	815	11.80	840	12.84	864	13.92
20100	1198	607	4.12	632	4.91	658	5.74	683	6.63	709	7.54	735	8.50	760	9.47	784	10.47	808	11.49	832	12.53	854	13.58	878	14.68
21000	1252	631	4.63	656	5.44	680	6.30	705	7.22	729	8.15	755	9.14	779	10.15	802	11.18	825	12.23	849	13.29	871	14.38	892	15.48
21900	1306	656	5.18	680	6.02	702	6.90	727	7.85	750	8.82	774	9.82	798	10.86	821	11.92	843	13.00	868	14.10	888	15.22	909	16.35
22800	1360	682	5.77	704	6.65	726	7.55	749	8.52	772	9.52	794	10.55	818	11.62	840	12.71	862	13.82	883	14.95	905	16.10	926	17.26
23700	1413	707	6.41	729	7.32	749	8.25	771	9.24	794	10.27	815	11.33	837	12.42	860	13.55	881	14.69	901	15.84	922	17.02	943	18.22
24600	1467	732	7.09	753	8.04	773	9.00	794	10.00	816	11.07	837	12.16	857	13.27	879	14.42	900	15.60	920	16.79	940	17.89	960	18.22
25500	1521	757	7.83	778	8.80	797	9.80	816	10.82	838	11.92	868	13.03	887	14.17	909	15.35	920	16.65	939	17.78	959	19.01	977	20.27
26400	1574	782	8.62	802	9.62	821	10.65	840	11.70	860	12.81	880	13.98	900	15.13	919	16.32	939	17.56	959	18.81	978	20.08	996	21.37
27300	1628	808	9.48	827	10.49	846	11.56	864	12.63	882	13.76	902	14.84	921	16.14	940	17.36	959	18.62	978	19.80	997	21.21	1018	22.52
28200	1682	833	10.38	852	11.42	870	12.51	887	13.62	905	14.78	924	15.98	943	17.21	961	18.48	979	19.72	998	21.05	1017	22.38	1035	23.73
29100	1735	859	11.31	876	12.40	894	13.53	911	14.67	928	15.83	947	17.07	965	18.33	983	19.61	1000	20.91	1018	22.24	1038	23.61	1054	24.99

**Performance shown is for Model TCFI with outlet duct and inlet duct.
BHP does not include drive losses.**

44 TCFI

Performance Data

Wheel Diameter = 44½ inches

Outlet Area = 20.49 Square Feet

Tip Speed, FPM = 11.65 X RPM

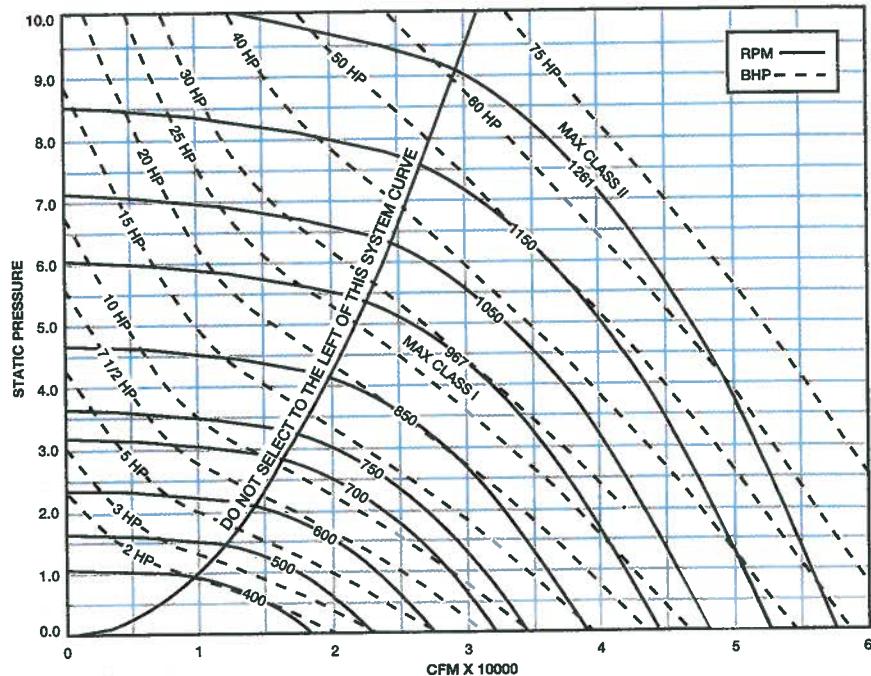
Maximum BHP = (RPM/313)³

Pressure Class Limits

Class	Max. RPM
I	967
II	1261

Maximum Motor Frame Sizes

Arr. 1 = 365T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																	
		¼"		⅛"		⅜"		1"		1⅛"		1⅓"		2"		2⅓"		3"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9000	439	258	0.65	315	1.02	367	1.54												
10100	493	276	0.68	328	1.16	376	1.70	422	2.31	471	3.20								
11200	547	284	0.78	343	1.31	388	1.80	430	2.53	479	3.48	516	4.22						
12300	600	314	0.93	359	1.48	401	2.11	441	2.77	489	3.77	524	4.65	558	5.38				
13400	654	335	1.09	375	1.68	416	2.34	453	3.04										
14500	708	355	1.29	393	1.90	431	2.59	467	3.33	501	4.10	533	4.89	567	5.74	598	6.61		
15600	761	377	1.51	412	2.15	447	2.86	482	3.64	514	4.45	546	5.28	575	6.14	607	7.05	636	7.99
16700	815	399	1.78	432	2.43	464	3.16	497	3.97	529	4.82	559	5.70	588	6.59	615	7.51	644	8.49
17800	869	420	2.04	452	2.74	482	3.50	513	4.33	544	5.21	573	6.13	601	7.08	628	8.03	654	9.01
18900	922	443	2.35	472	3.08	501	3.88	530	4.73	559	5.64	588	6.59	614	7.58	641	8.58	666	9.59
20000	976	465	2.70	493	3.45	521	4.28	548	5.18	576	6.10	603	7.08	629	8.10	654	9.15	679	10.21
21100	1030	487	3.09	514	3.88	541	4.72	566	5.63	592	6.59	619	7.80	644	8.86	669	9.74	692	10.85
22200	1083	510	3.51	538	4.32	561	5.21	586	6.15	610	7.13	635	8.17	659	9.25	684	10.37	707	11.51
23300	1137	533	3.96	557	4.82	581	5.73	605	7.07	628	7.71	651	8.77	676	9.88	699	11.03	722	12.21
24400	1191	556	4.46	579	5.38	602	6.29	626	7.28	647	8.34	669	9.42	692	10.55	715	11.73	737	12.94
25500	1245	579	5.01	601	5.95	623	6.88	645	7.93	666	9.01	688	10.12	709	11.27	731	12.48	753	13.72
26600	1298	602	5.60	623	6.58	644	7.56	666	8.82	688	9.72	707	10.87	727	12.05	748	13.27	769	14.54
27700	1352	625	6.23	646	7.26	666	8.28	688	9.35	706	10.49	726	11.66	746	12.88	765	14.11	785	15.41
28800	1406	649	6.92	668	7.99	688	9.04	707	10.13	727	11.31	745	12.51	765	13.75	783	15.03	802	16.33
29900	1459	672	7.66	691	8.77	710	9.86	728	10.97	747	12.18	766	13.41	784	14.88	802	15.99	820	17.32
31000	1513	695	8.45	713	9.80	732	10.74	750	11.88	768	13.10	784	14.37	803	15.68	821	17.00	839	18.37
32100	1567	718	9.30	736	10.49	754	11.87	771	12.84	789	14.07	806	15.38	823	16.71	840	18.07	857	19.47
33200	1620	742	10.20	759	11.43	776	12.88	793	13.87	809	15.10	827	16.45	844	17.81	860	19.20	876	20.63
34300	1674	765	11.16	782	12.43	798	13.71	815	14.96	831	16.22	848	17.57	864	18.97	880	20.40	896	21.85
35400	1728	789	12.19	805	13.50	821	14.82	837	16.10	853	17.40	868	18.76	884	20.20	900	21.66	915	23.13

CFM	OV	STATIC PRESSURE IN INCHES W.G.																	
		3"		3⅓"		4"		4⅓"		5"		5⅓"		6"		6⅓"		7"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20800	1015	758	14.04	804	16.44	848	18.93	890	21.49	938	25.15	984	28.05						
21900	1069	770	14.83	812	17.24	856	19.81	896	22.45	943	26.21	982	30.21	1028	33.18	1071	37.58		
23000	1122	783	15.65	824	18.13	865	20.72	907	23.43	946	28.21	982	30.21	1036	34.46	1071	37.58		
24100	1176	798	16.50	837	19.07	876	21.70	915	24.45	955	27.30	992	30.21	1001	31.41				
25200	1230	810	17.37	850	20.04	888	22.74	925	26.51	963	28.42	1001	31.41	1036	34.46	1071	37.58		
26300	1284	825	18.28	863	21.04	901	23.83	937	26.87	972	29.58	1009	32.64	1045	35.77	1079	38.86	1112	42.18
27400	1337	840	19.23	878	22.08	914	24.96	950	27.88	984	30.88	1018	33.91	1053	37.11	1088	40.36	1121	43.87
28500	1391	855	20.22	893	23.13	928	26.11	963	29.13	987	32.18	1030	35.29	1062	38.49	1096	41.82	1129	45.20
29600	1445	871	21.27	908	24.24	943	27.29	976	30.42	1010	33.56	1042	36.73	1074	39.98	1105	43.31	1138	46.77
30700	1498	887	22.38	923	25.39	957	28.52	992	31.71	1023	34.97	1055	38.23	1086	41.54	1118	44.91	1147	48.37
31800	1552	904	23.53	938	26.81	972	29.80	1005	33.07	1038	36.41	1088	39.77	1099	43.16	1128	46.80	1168	50.10
32900	1606	920	24.74	955	27.89	988	31.12	1020	34.48	1051	37.88	1081	41.38	1112	44.83	1141	48.34	1170	51.91
34000	1659	938	26.02	971	29.22	1003	32.52	1035	35.92	1084	39.44	1098	42.66	1125	46.55	1154	50.14	1183	53.78
35100	1713	956	27.38	988	30.61	1020	33.98	1050	37.42	1081	40.97	1110	44.59	1139	48.28	1167	51.99	1196	55.71
36200	1767	975	28.81	1004	32.05	1038	35.49	1068	39.06	1096	42.61	1125	46.30	1154	50.05	1181	53.87	1209	57.89
37300	1820	994	30.30	1023	33.61	1052	37.07	1082	40.85	1111	44.29	1140	48.06	1168	51.88	1196	55.77	1222	59.71
38400	1874	1013	31.86	1041	35.24	1068	38.70	1099	42.38	1127	46.07	1156	49.88	1184	53.77	1211	57.73	1237	61.75
39500	1928	1032	33.48	1060	36.83	1087	40.45	1115	44.13	1144	47.92	1171	51.77	1199	55.73	1225	59.75	1251	63.84
40600	1981	1052	35.18	1079	38.69	1106	42.28	1132	46.96	1160	49.83	1187	53.78	1214	57.74	1240	61.84		
41700	2035	1072	36.98	1098	40.52	1124	44.18	1150	47.80	1177	51.80	1204	55.79	1230	59.85	1256	63.99		
42800	2089	1092	38.82	1117	42.43	1143	46.16	1168	49.95	1193	53.84	1220	57.91	1246	62.03				
43900	2143	1112	40.75	1137	44.41	1162	48.21	1187	52.07	1211	55.99	1238	60.09						
45000	2196	1133	42.76	1157	46.49	1181	50.33	1206	54.27	1229									

49 TCFI

Performance Data

Wheel Diameter = 49 inches

Outlet Area = 24.85 Square Feet

Tip Speed, FPM = 12.83 X RPM

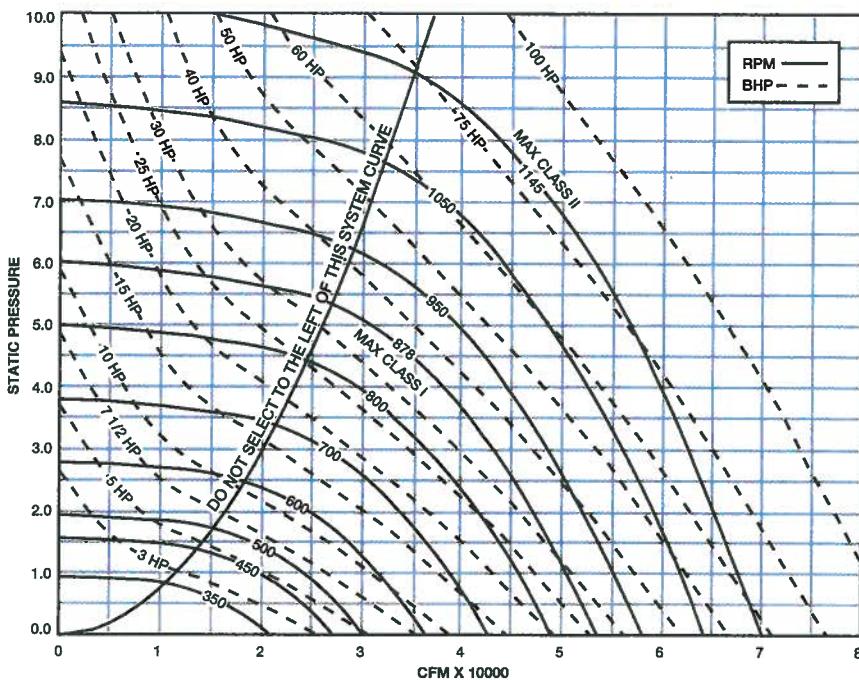
Maximum BHP = $(RPM/266)^3$

Pressure Class Limits

Class	Max. RPM
I	878
II	1145

Maximum Motor Frame Sizes

Arr. 1 = 404T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																					
		1/4"		1/2"		3/4"		1"		1 1/8"		1 1/4"		1 1/2"		2"		2 1/8"		2 1/4"		2 1/2"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
10600	427	231	0.64	284	1.19	332	1.82																
12000	483	247	0.77	296	1.37	340	2.03	382	2.75														
13400	539	268	0.92	310	1.56	351	2.27	390	3.03	426	3.84												
14800	596	284	1.11	325	1.78	363	2.54	399	3.33	435	4.19	468	5.08										
16200	652	303	1.32	340	2.03	377	2.82	411	3.68	444	4.56	476	5.50	507	6.48								
17600	708	323	1.56	358	2.31	392	3.14	425	4.04	456	4.98	485	5.94	515	6.87	543	7.82						
19000	765	343	1.84	376	2.63	407	3.49	439	4.43	468	5.43	497	6.44	523	7.48	551	8.59						
20400	821	384	2.17	394	2.98	423	3.88	453	4.86	482	5.80	509	6.97	535	8.06	560	9.18	586	10.36	611	11.57		
21800	877	385	2.53	413	3.38	441	4.32	469	5.33	496	6.40	522	7.52	547	8.68	572	9.84	596	11.04	620	12.29		
23200	934	408	2.84	433	3.82	459	4.80	486	5.84	511	6.95	537	8.11	561	9.32	584	10.54	608	11.79	630	13.06		
24600	990	428	3.39	463	4.31	477	5.33	502	6.40	527	7.55	551	8.75	575	9.99	597	11.28	620	12.58	642	13.89		
26000	1046	449	3.80	473	4.85	497	5.91	520	7.02	542	8.19	566	9.43	589	10.71	612	12.04	633	13.40	654	14.78		
27400	1103	471	4.45	493	5.45	518	6.54	538	7.89	560	8.89	582	10.18	604	11.49	626	12.85	647	14.26	667	15.89		
28800	1159	493	5.05	514	6.11	536	7.22	557	8.41	578	9.66	598	10.94	620	12.31	640	13.71	661	15.16	681	16.64		
30200	1215	515	5.71	535	6.82	555	7.98	576	9.20	596	10.48	616	11.81	635	13.19	656	14.64	676	16.12	695	17.84		
31600	1272	537	6.43	556	7.80	576	8.76	595	10.04	614	11.36	634	12.73	662	14.14	672	15.82	691	17.14	710	18.89		
33000	1328	559	7.21	577	8.43	598	9.84	615	10.84	633	12.31	652	13.72	670	15.17	687	16.85	707	18.22	725	19.82		
34400	1384	581	8.06	599	9.34	617	10.59	635	11.91	653	13.32	670	14.76	688	16.26	705	17.78	722	19.36	740	21.00		
35800	1441	603	8.97	620	10.31	638	11.61	655	12.94	672	14.40	689	15.89	706	17.42	723	18.99	739	20.58	756	22.25		
37200	1497	626	9.98	642	11.34	659	12.70	675	14.07	692	15.65	708	17.08	724	18.84	741	20.28	757	21.90	772	23.56		
38600	1553	647	11.02	664	12.45	680	13.87	698	15.28	712	16.77	728	18.35	743	19.95	759	21.60	775	23.28	790	25.00		
40000	1610	670	12.18	685	13.83	701	15.11	716	16.87	731	18.06	747	19.69	763	21.34	777	23.02	793	24.76	808	26.61		
41400	1666	692	13.37	707	14.90	722	16.43	737	17.94	752	18.47	767	21.11	782	22.80	796	24.53	811	26.29	826	28.09		
42800	1722	714	14.68	729	16.24	744	17.94	758	19.39	773	20.98	787	22.60	802	24.35	816	26.12	830	27.91	844	29.75		
44200																							
45600	1835	808	37.27	834	41.30	960	45.60	987	49.86	1013	54.31	1040	58.88	1065	63.54	1090	68.27	1113	73.07	1137	77.89		
47000	1891	926	38.28	951	43.40	976	47.60	1003	52.08	1029	56.80	1054	61.22	1079	66.97	1104	70.79	1128	75.68				
48400	1948	944	41.37	968	45.69	984	49.88	1019	54.34	1044	58.97	1069	63.68	1094	68.49	1118	73.40	1142	78.38				
49800	2004	963	43.58	988	47.87	1011	52.25	1034	56.71	1060	61.43	1085	66.23	1108	71.10	1132	76.09						
51200	2060	982	45.89	1008	50.24	1029	54.72	1052	59.27	1078	63.98	1100	68.87	1124	73.83								
52600	2117	1002	48.30	1024	52.71	1047	57.28	1070	61.92	1092	66.63	1116	71.61	1139	76.66								
54000	2173	1021	50.81	1043	56.31	1066	60.94	1088	64.68	1109	69.48	1132	74.43										
55400	2229	1041	53.42	1062	58.02	1084	62.71	1106	67.53	1127	72.43												
56800	2286	1060	56.14	1082	60.83	1102	65.69	1124	70.50														
58200	2342	1080	58.97	1101	63.75	1122	68.80	1142	73.57														

54 TCFI

Performance Data

Wheel Diameter = 54½ inches

Outlet Area = 30.46 Square Feet

Tip Speed, FPM = 14.20 X RPM

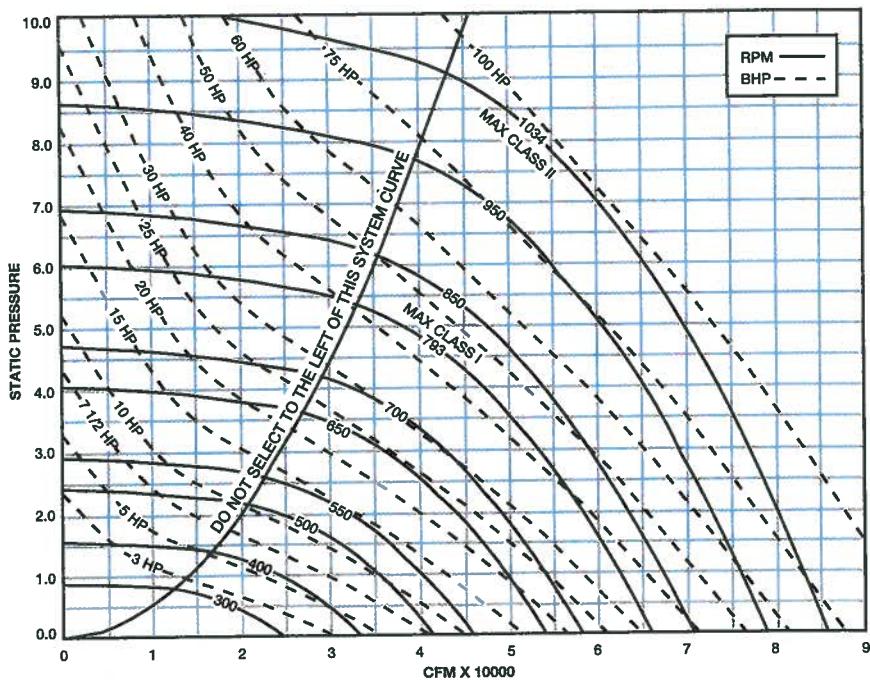
Maximum BHP = $(RPM/225)^3$

Pressure Class Limits

Class	Max. RPM
I	793
II	1034

Maximum Motor Frame Sizes

Arr. 1 = 404T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																							
		1/8"		1/4"		3/8"		1"		1 1/8"		1 1/4"		1 3/8"		2"		2 1/8"		2 1/4"		2 3/8"		3"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14000	460	217	0.87	262	1.59	304	2.38																		
15700	515	233	1.05	274	1.81	312	2.65	349	3.57																
17400	571	249	1.25	287	2.06	323	2.97	356	3.91	389	4.84														
19100	627	266	1.50	301	2.34	335	3.30	367	4.32	397	5.38	427	6.51	454	7.69										
20800	683	284	1.78	316	2.67	348	3.67	378	4.75	407	5.86	434	7.03	462	8.28	487	9.54								
22500	739	302	2.09	332	3.03	361	4.08	390	5.21	417	6.39	444	7.60	469	8.87	495	10.20	519	11.57						
24200	794	320	2.47	348	3.44	375	4.53	403	5.70	429	6.95	454	8.23	478	9.54	502	10.90	526	12.33	549	13.79	571	15.28		
25900	850	339	2.88	365	3.91	391	5.03	417	6.25	442	7.54	466	8.90	489	10.27	512	11.67	533	13.12	556	14.64	578	16.19	599	17.77
27600	906	358	3.35	382	4.42	407	5.59	431	6.84	455	8.18	478	9.59	500	11.04	522	12.50	543	13.99	563	15.52	585	17.13	606	18.77
29300	962	377	3.88	400	4.98	423	6.20	445	7.49	469	8.88	491	10.33	513	11.83	533	13.38	554	14.93	573	16.51	593	18.13	613	19.81
31000	1018	398	4.46	418	5.60	440	6.87	461	8.21	483	9.63	504	11.12	526	12.68	548	14.28	565	15.92	585	17.56	604	19.23	622	20.83
32700	1074	415	5.10	436	6.29	457	7.60	477	8.99	497	10.44	518	11.98	539	13.58	559	15.23	578	16.93	598	18.68	615	20.39	633	22.15
34400	1129	435	5.79	455	7.06	475	8.40	494	9.83	513	11.34	532	12.90	552	14.55	571	16.24	590	17.99	608	19.78	626	21.61	644	23.42
36100	1185	454	6.56	473	7.89	492	9.26	511	10.75	529	12.30	547	13.90	566	15.68	585	17.32	603	19.12	621	20.96	638	22.84	655	24.75
37800	1241	474	7.39	492	8.79	510	10.19	528	11.73	546	13.32	563	14.98	580	16.88	599	18.48	616	20.31	634	22.20	651	24.13	667	26.10
39500	1297	494	8.30	511	9.76	528	11.21	546	12.79	562	14.43	579	16.13	596	17.88	613	19.70	630	21.69	647	23.51	664	25.49	680	27.52
41200	1353	513	9.29	530	10.82	547	12.32	563	13.92	580	15.62	596	17.38	612	19.16	628	21.00	644	22.93	661	24.91	677	26.92	693	29.00
42900	1408	533	10.35	549	11.95	566	13.51	581	15.13	597	16.88	612	18.67	628	20.52	643	22.41	658	24.35	675	26.38	691	28.45	708	30.55
44600	1464	553	11.50	568	13.16	584	14.79	599	16.43	615	18.23	630	20.07	644	21.96	660	23.91	674	25.89	693	27.93	704	30.08	720	32.21
46300	1520	573	12.73	584	14.45	603	16.15	617	17.85	632	18.88	647	21.56	661	23.49	676	25.48	690	27.52	704	29.59	719	31.74	733	33.95
48000	1576	593	14.06	607	15.84	622	17.60	636	19.36	650	21.18	664	23.14	678	25.12	692	27.15	706	29.24	720	31.36	733	33.51	747	35.77
49700	1632	613	15.47	627	17.31	641	19.16	656	20.86	668	22.80	682	24.80	696	26.84	709	28.91	722	31.05	736	33.23	749	35.43	762	37.87
51400	1687	633	16.98	646	18.88	660	20.79	673	22.66	686	24.56	700	26.56	713	28.66	726	30.79	739	32.95	752	35.18	765	37.44	777	39.73
53100	1743	653	18.59	666	20.55	679	22.54	692	24.46	705	26.41	717	28.42	731	30.58	743	32.76	758	34.97	768	37.24	781	39.55	793	41.90
54800	1799	673	20.30	686	22.32	698	24.38	711	26.37	723	28.38	735	30.41	748	32.59	761	34.83	773	37.10	785	39.39	797	41.76	809	44.16

CFM	OV	STATIC PRESSURE IN INCHES W.G.																3"		3 1/4"		4"		4 1/4"		
		3"		3 1/4"		4"		4 1/4"		5"		5 1/4"		6"		6 1/4"		7"		7 1/4"		8"		8 1/4"		
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
31000	1018	622	20.93	711	31.85	742	35.83	772	40.08	800	44.43	830	49.88	859	53.65	887	58.41	914	63.24							
32700	1074	633	22.15	724	33.24	753	37.60	782	41.96	810	46.42	837	50.97	866	55.74	894	60.61	921	65.56	948	70.59	973	75.89			
34400	1129	644	23.42	728	37.13	711	30.98	745	36.02	777	39.17	808	43.40	844	49.84											
36100	1185	655	24.75	728	38.56	720	32.61	752	36.80	784	40.88	815	45.21	844	51.82	880	56.26									
37800	1241	667	26.10	699	30.09	731	34.14	761	38.28	792	42.60	822	47.07	852	51.82											
39500	1287	680	27.52	711	31.85	742	35.83	772	40.08	800	44.43	830	49.88	859	53.65	887	58.41	914	63.24							
41200	1353	693	28.00	724	33.24	753	37.60	782	41.96	810	46.42	837	50.97	866	55.74	894	60.61	921	65.56	948	70.59	973	75.89			
42900	1408	706	30.55	736	34.91	763	39.38	793	43.92	821	48.49	848	53.15	874	57.80	902	62.88	929	67.95	955	73.09	980	78.31	1005	83.80	
44600	1464	720	32.21	749	36.65	778	41.23	805	45.92	832	50.83	859	55.41	884	60.27	909	65.21	936	70.39	962	75.65	987	80.98	1012	88.38	
46300	1520	733	33.95	762	38.46	793	43.15	817	47.98	843	52.86	870	57.75	895	62.72	920	67.77	944	72.90	969	78.27	995	83.73	1019	89.25	
48000	1576	747	35.77	776	40.39	803	45.16	830	50.07	856	55.08	881	60.17	906	65.25	931	70.42	954	75.68	977	80.98					

60 TCFI

Performance Data

Wheel Diameter = 60 inches

Outlet Area = 37.26 Square Feet

Tip Speed, FPM = 15.71 X RPM

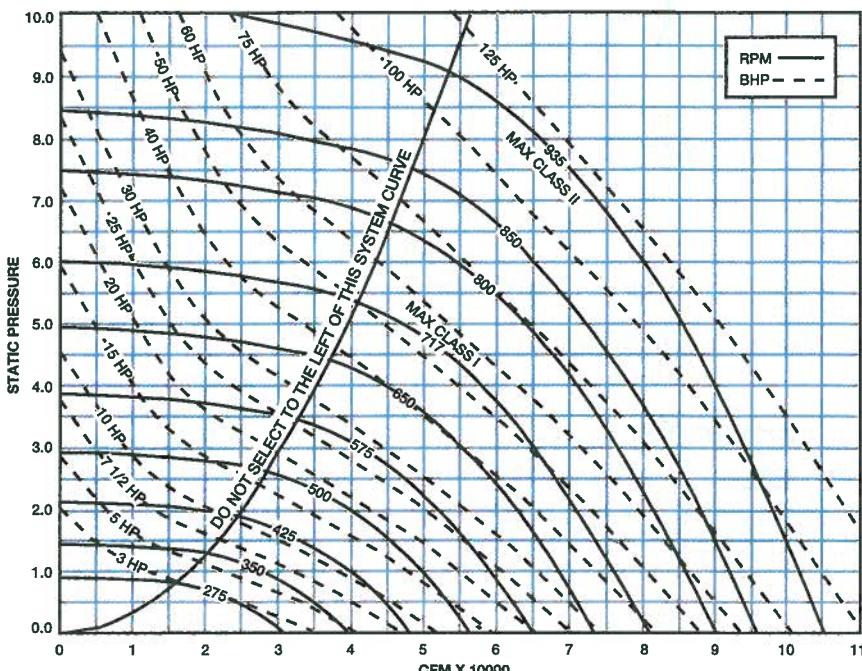
Maximum BHP = (RPM/190)³

Pressure Class Limits

Class	Max. RPM
I	717
II	935

Maximum Motor Frame Sizes

Arr. 1 = 405T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																							
		1/8"		1/4"		3/8"		1"		1 1/4"		1 1/2"		1 3/8"		2"		2 1/4"		2 1/2"		2 3/8"		3"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP				
18000	483	202	1.15	242	2.06	277	3.04	312	4.13	348	5.74	382	7.57	413	9.62	442	11.88								
20000	537	216	1.37	253	2.33	286	3.39	318	4.52																
22000	590	230	1.63	264	2.64	296	3.77	325	4.95	354	6.23	382	7.78	419	10.31	442	11.88								
24000	644	245	1.93	276	2.98	307	4.17	335	5.44	361	6.75	388	8.18												
26000	698	261	2.27	289	3.38	318	4.82	345	5.96	370	7.34	394	8.78	419	10.31	442	11.88								
28000	751	277	2.68	303	3.82	330	5.11	358	6.51	380	7.98	403	9.47	425	11.03	449	12.67	471	14.36	491	16.09				
30000	805	293	3.11	317	4.32	342	5.65	367	7.10	390	8.84	413	10.22	434	11.84	455	13.50	477	15.26	498	17.06	517	18.80		
32000	859	309	3.61	332	4.87	355	6.25	378	7.75	401	9.35	423	11.01	444	12.70	464	14.43	483	16.20	504	18.07	524	19.87	542	21.92
34000	913	325	4.17	348	5.48	369	6.92	391	8.46	413	10.10	434	11.83	454	13.61	474	15.41	493	17.25	511	19.12	530	21.09	549	23.11
36000	966	342	4.79	363	6.15	384	7.84	404	9.23	425	10.93	445	12.71	466	14.55	483	16.45	502	18.35	520	20.30	537	22.28	555	24.34
38000	1020	368	5.48	378	6.88	388	8.44	418	10.08	437	11.81	457	13.65	476	15.55	494	17.51	511	19.52	529	21.53	548	23.58	563	25.68
40000	1074	375	6.23	384	7.70	413	9.30	432	11.00	450	12.77	469	14.66	487	16.61	505	18.64	522	20.71	539	22.83	556	24.84	572	27.09
42000	1127	392	7.06	410	8.59	428	10.24	446	11.99	464	13.82	481	15.74	499	17.75	516	19.82	533	21.96	550	24.15	565	26.37	582	28.59
44000	1181	409	7.85	427	9.57	444	11.26	461	13.06	478	14.95	494	16.90	511	18.89	528	21.09	545	23.28	561	25.53	576	27.82	591	30.15
46000	1235	426	8.92	443	10.62	469	12.33	478	14.21	492	16.15	508	18.17	523	20.24	540	22.44	556	24.68	572	26.98	587	29.34	602	31.73
48000	1288	444	9.98	459	11.75	475	13.52	491	16.44	506	17.43	522	19.51	537	21.64	552	23.86	568	26.16	583	28.51	598	30.83	613	33.39
50000	1342	461	11.12	476	12.97	491	14.81	506	16.76	521	18.82	536	20.94	551	23.13	565	25.37	580	27.73	595	30.14	610	32.60	624	35.12
52000	1396	478	12.35	492	14.29	507	18.19	522	18.17	536	20.29	550	22.46	565	24.71	579	27.01	592	29.38	607	31.86	622	34.37	635	36.93
54000	1449	495	13.68	509	15.69	523	17.68	537	19.66	551	21.85	565	24.08	579	26.38	592	28.75	606	31.15	619	33.85	634	36.24	647	38.85
56000	1503	512	15.10	526	17.18	540	19.23	553	21.30	567	23.51	580	25.81	593	28.14	606	30.58	619	33.05	632	35.65	646	38.19	659	40.87
58000	1557	530	16.82	543	18.77	556	20.90	569	23.03	582	25.26	595	27.53	608	30.03	621	32.50	633	35.03	648	37.61	658	40.23	672	42.98
60000	1610	547	18.24	560	20.46	573	22.68	585	24.88	598	27.12	611	29.65	623	32.02	635	34.53	646	37.12	660	39.76	672	42.43	684	45.18
62000	1664	565	19.87	577	22.27	589	24.57	602	26.83	614	29.12	626	31.58	638	34.11	650	36.88	662	39.32	674	42.02	685	44.76	697	47.53
64000	1718	582	21.82	594	24.18	606	26.57	618	28.89	630	31.25	641	33.71	653	36.32	665	38.95	676	41.63	688	44.39	699	47.19	711	50.02
66000	1771	599	23.77	611	26.21	622	28.68	634	31.08	646	33.50	657	35.96	669	38.63	680	41.34	691	44.07	702	46.86	714	49.73	725	52.63

CFM	OV	STATIC PRESSURE IN INCHES W.G.																		3"					
		3 1/4"		4"		4 1/4"		5"		5 1/4"		6"		6 1/4"		7"		7 1/4"		8"		8 1/4"			
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP				
38000	1020	563	25.7	597	30.0	630	34.8																		
40000	1074	572	27.1	603	31.5	636	36.2																		
42000	1127	582	28.6	612	33.1	642	37.8	673	42.8	702	47.8	730	53.0												
44000	1181	591	30.2	622	34.8	650	39.8	679	44.6	709	48.8	736	55.1	763	60.5										
46000	1235	602	31.7	631	36.6	660	41.5	687	46.6	716	51.9	743	57.3	769	62.9	795	68.5								
48000	1288	613	33.4	641	38.4	669	43.5	696	48.7	722	54.0	748	59.8	776	65.3	801	71.0	828	76.9						
50000	1342	624	35.1	652	40.3	679	45.8	706	50.9	731	56.3	755	61.9	782	67.7	807	73.6	832	79.7	858	85.8	879	92.0		
52000	1396	635	36.9	663	42.2	689	47.7	715	53.2	740	58.7	765	64.4	788	70.2	814	76.3	838	82.4	862	88.7	885	95.1	907	101.6
54000	1449	647	38.9	674	44.3	700	49.8	725	55.5	750	61.2	774	67.0	797	72.9	820	79.0	845	85.3	888	91.7	981	98.2	913	104.8
56000	1503	659	40.9	685	46.4	711	52.1	736	57.9	759	63.8	783	69.8	807	75.8	829	81.9	851	88.2	975	94.8	987	101.4	920	108.1
58000	1557	672	43.0	697	48.6	722	54.4	747	60.3	770	66.4	793	72.6	816	78.7	838	85.0	880	91.4	981	97.9	904	104.7	928	111.6
60000	1610	684	45.2	709	50.9	734	58.8	758	62.9	781	68.1	803	75.4	825	81.8	848	88.2	869	94.7	989	101.3	910	108.0	932	116.0
62000	1664	697	47.5	721	53.4	745	59.4	769	65.5	792	71.9	814	78.4	835	84.9	857	91.5	878	98.1	989	104.8	919	111.6		
64000	1718	711	50.0	734	55.9	75																			

66 TCFI

Performance Data

Wheel Diameter = 66 inches

Outlet Area = 45.08 Square Feet

Tip Speed, FPM = 17.28 X RPM

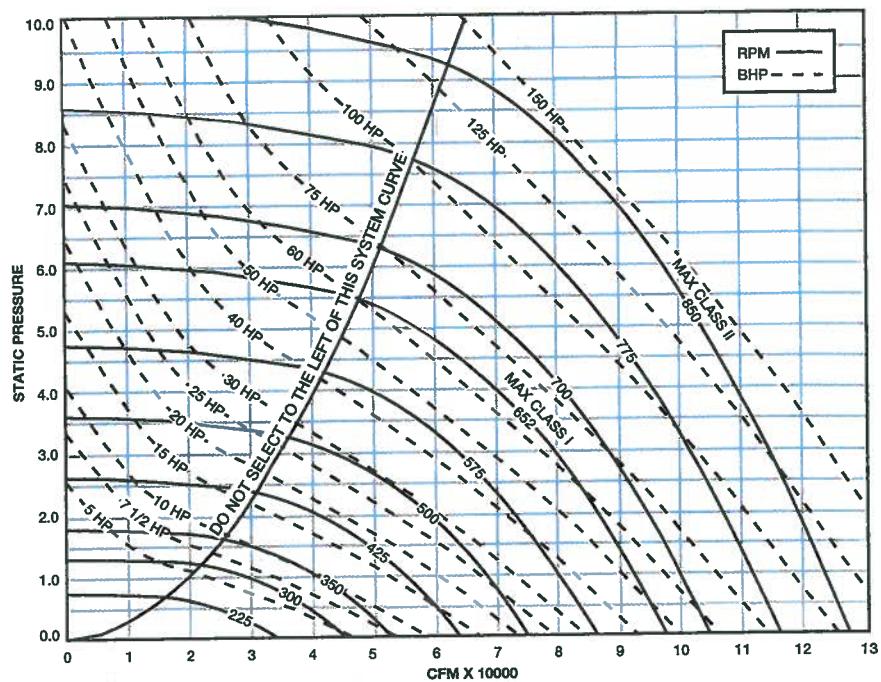
Maximum BHP = (RPM/162)³

Pressure Class Limits

Class	Max. RPM
I	652
II	850

Maximum Motor Frame Sizes

Arr. 1 = 444T, Arr. 9 = 326T



CFM	OV	STATIC PRESSURE IN INCHES W.G.																							
		1/8"		1/4"		3/8"		1"		1 1/8"		1 1/4"		1 1/2"		2"		2 1/8"		2 1/4"		2 1/2"			
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
20000	444	175	1.23	213	2.26	248	3.41	285	5.13	318	7.13	349	9.41	378	11.96	399	13.82	425	16.78	467	20.01	487	22.18		
22500	499	187	1.47	223	2.58	254	3.80	285	5.13	318	7.13	349	9.41	378	11.96	399	13.82	430	17.87	449	20.01	487	22.18		
25000	555	201	1.76	233	2.94	263	4.25	291	6.64	324	7.76	349	9.41	378	11.96	399	13.82	436	19.02	456	21.24	473	23.50	490	25.81
27500	610	214	2.10	244	3.34	272	4.73	299	6.20	324	7.76	349	9.41	378	11.96	399	13.82	444	20.26	461	22.53	479	24.88	496	27.27
30000	665	229	2.49	255	3.79	283	5.26	308	6.83	331	8.44	355	10.18	378	11.96	399	13.82	453	21.61	469	23.93	485	26.30	502	26.79
32500	721	243	2.94	268	4.31	293	5.83	318	7.49	340	9.21	362	10.97	384	12.84	408	14.78	425	16.78	467	20.01	487	22.18		
35000	776	258	3.46	282	4.89	305	6.48	328	8.20	350	10.02	371	11.88	390	13.79	411	15.79	430	17.87	449	20.01	487	22.18		
37500	832	273	4.08	295	5.55	317	7.19	339	8.97	360	10.67	380	12.84	399	14.83	418	16.88	436	19.02	456	21.24	473	23.50	490	25.81
40000	887	289	4.72	310	6.27	330	7.88	350	9.82	370	11.78	390	13.84	408	15.85	428	18.08	444	20.26	461	22.53	479	24.88	496	27.27
42500	943	304	5.46	324	7.08	343	8.86	362	10.74	381	12.78	400	14.80	418	17.10	435	19.35	453	21.61	469	23.93	485	26.30	502	26.79
45000	998	320	6.29	338	7.96	357	9.81	375	11.77	393	13.85	411	16.04	428	18.32	445	20.66	461	23.04	478	26.44	493	27.88	508	30.37
47500	1054	336	7.19	353	8.94	371	10.86	388	12.89	404	15.01	422	17.27	439	19.81	455	22.04	471	24.52	487	27.03	502	29.56	517	32.13
50000	1109	361	8.19	368	10.02	385	12.00	401	14.09	417	16.29	433	18.59	450	21.00	466	23.49	481	26.05	496	28.67	511	31.31	528	33.97
52500	1165	367	8.86	383	11.20	399	13.23	415	15.40	430	17.87	445	20.00	461	22.49	477	25.04	492	27.67	507	30.37	521	33.12	535	35.90
55000	1220	383	10.46	399	12.49	414	14.55	429	16.81	444	19.14	458	21.56	473	24.06	488	26.70	502	28.38	517	32.16	531	34.99	545	37.87
57500	1276	400	11.76	414	13.98	428	16.00	443	18.32	457	20.72	471	23.21	485	25.77	499	28.45	514	31.22	528	34.04	542	36.95	555	39.91
60000	1331	416	13.16	430	15.39	443	17.56	457	19.94	471	22.42	485	24.98	498	27.61	511	30.30	525	33.16	539	36.06	552	39.02	565	41.06
62500	1386	432	14.88	448	17.01	459	18.28	472	21.67	485	24.24	498	26.85	511	29.57	524	32.33	537	35.20	550	38.18	563	41.21	576	44.30
65000	1442	448	16.32	461	18.74	474	21.11	486	23.52	499	26.17	512	28.86	524	31.84	537	34.49	549	37.38	562	40.41	574	43.52	587	46.68
67500	1497	464	18.08	477	20.59	489	23.08	501	25.54	514	28.22	526	31.00	538	33.83	550	36.76	562	39.74	573	41.76	588	45.95	598	49.19
70000	1553	480	19.97	492	22.57	505	25.14	518	27.71	528	30.40	540	33.26	552	36.17	563	38.16	576	42.22	586	45.32	597	48.49	610	51.81
72500	1608	497	21.99	508	24.68	520	27.35	532	30.00	543	32.71	554	35.66	566	38.85	577	41.68	588	44.82	599	48.01	610	51.23	621	54.56
75000	1664	513	24.15	524	26.93	536	29.71	547	32.44	558	35.21	569	38.19	580	41.26	591	44.38	602	47.57	612	50.83	623	54.14	633	57.49
77500	1719	528	26.46	540	29.32	551	32.21	562	35.03	573	37.88	583	40.85	594	44.01	605	47.21	615	50.45	626	53.79	636	57.18	646	60.61
80000	1775	546	28.91	557	31.88	567	34.88	577	37.76	588	40.89	598	43.67	609	46.91	619	50.19	628	53.52	639	56.90	649	60.37	660	63.88

CFM	OV	STATIC PRESSURE IN INCHES W.G.																							
		3"		3 1/8"		4"		4 1/8"		5"		5 1/8"		6"		6 1/8"		7"		7 1/8"		8"		8 1/8"	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
45000	998	508	30.37	540	35.63	570	41.05	598	46.63	631	54.67	662	63.27	692	72.40	721	82.08	748	92.30	771	99.49				
47500	1054	517	32.13	546	37.44	576	43.04	604	48.79	631	54.67	662	65.91	692	72.40	721	82.08	748	92.30	771	99.49				
50000	1109	526	33.97	554	39.40	582	45.09	610	61.01	638	57.07	666	65.91	692	72.40	721	82.08	748	92.30	771	99.49				
52500	1165	535	35.90	563	41.50	589	47.26	618	61.01	649	68.54	668	68.76	698	72.40	721	82.08	748	92.30	771	99.49				
55000	1220	545	37.87	572	43.69	598	49.61	622	65.88	648	62.08	674	68.62	698	72.40	721	82.08	748	92.30	771	99.49				
57500	1276	555	39.91	581	45.97	606	52.08	631	63.30	654	64.69	680	71.41	704	72.85	727	85.21	748	92.30	771	99.49				
60000	1331	565	42.06	591	48.27	615	54.62	640	61.02	663	67.56	686	74.28	710	81.30	733	88.43	755	95.69	777	103.06	797	110.53		
62500	1386	576	44.30	601	50.88	625	57.24	649	63.85	672	70.55	694	77.39	716	84.42	739	91.73	761	99.16	783	106.70	803	114.35	824	122.10
65000	1442	587	46.68	612	63.20	635	68.81	658	68.78	680	73.88	702	80.86	724	87.79	745	95.12	767	102.72	788	110.44	808	118.26	828	126.18
67500	1497	598	49.19	622	55.82	645	67.70	668	69.73	689	76.87	711	84.05	732	91.34	753	98.75	773	106.37	794	114.26	815	122.26	835	130.38
70000																									

73 TCFI

Performance Data

Wheel Diameter = 73 inches

Outlet Area = 55.15 Square Feet

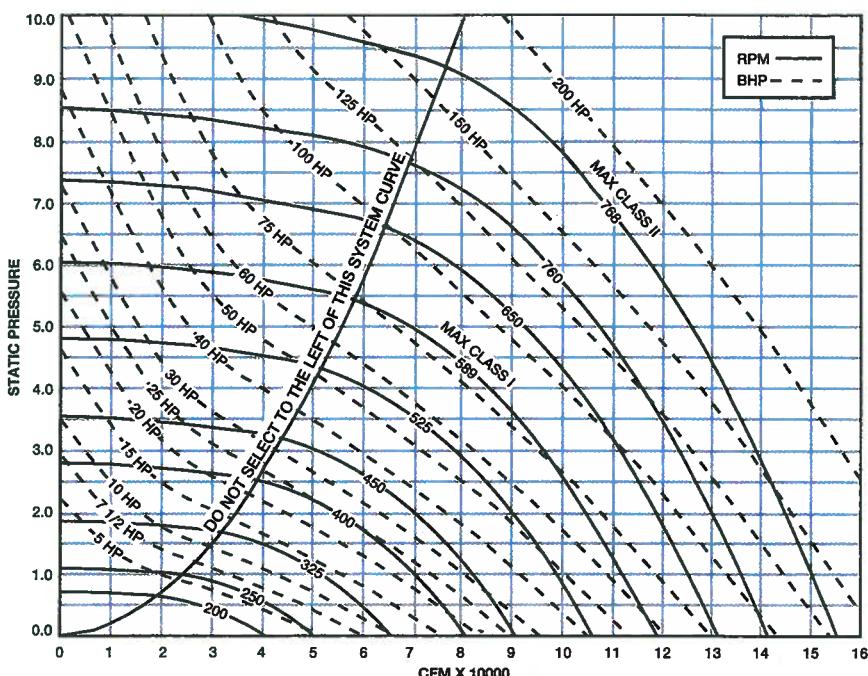
Tip Speed, FPM = 19.11 X RPM

Maximum BHP = (RPM/137)³

Pressure Class Limits

Class	Max. RPM
I	589
II	768

Maximum Motor Frame Sizes
Arr. 1 = 445T, Arr. 9 = 326T



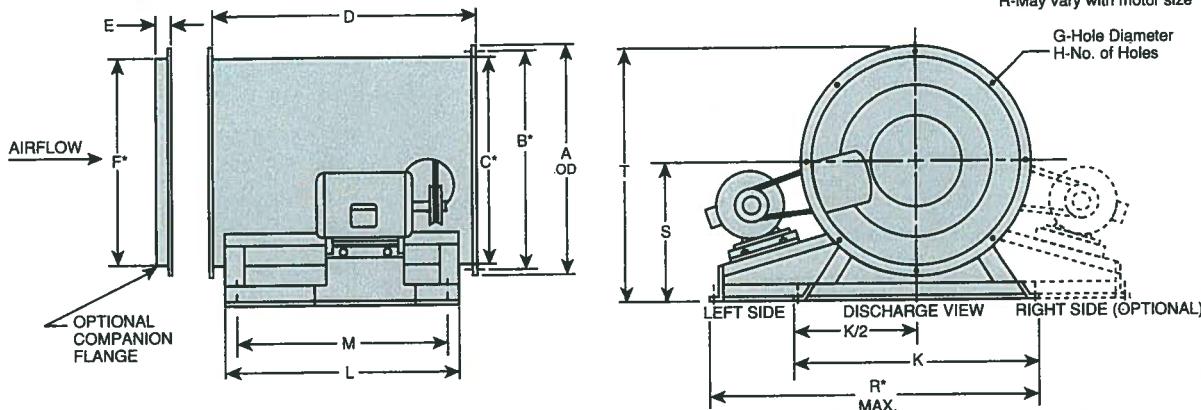
CFM	OV	STATIC PRESSURE IN INCHES W.G.																			
		1/8"	1/4"	3/8"	1"	1 1/8"	1 1/4"	1 3/8"	2"	2 1/8"	2 1/4"	2 3/8"	2 1/2"	3"	3 1/2"	4"	4 1/2"	5"			
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
25000	453	160	1.56	184	2.83	225	4.25														
28000	508	171	1.86	203	3.22	231	4.73	256	6.37												
31000	562	183	2.21	212	3.86	239	6.27	264	8.98	288	8.83										
34000	617	195	2.62	222	4.14	247	5.88	271	7.87	294	9.59	316	11.62	337	13.73						
37000	671	208	3.10	232	4.69	257	6.50	279	8.43	300	10.42	321	12.82	342	14.74	261	17.02				
40000	725	221	3.84	244	5.33	266	7.20	288	9.23	308	11.34	328	13.51	347	15.80	366	18.18	384	20.83		
43000	780	234	4.28	255	6.03	276	7.97	297	10.06	317	12.32	335	14.80	353	16.94	372	19.40	389	21.96	406	
46000	834	248	4.99	268	6.82	287	8.83	307	11.02	326	13.34	343	15.78	361	18.20	378	20.71	395	23.33	412	
49000	888	261	5.79	280	7.69	298	9.79	317	12.04	335	14.44	353	16.96	369	19.54	386	22.15	401	24.82	417	
52000	943	275	6.68	293	8.66	310	10.84	327	13.14	345	15.84	362	18.24	378	20.93	394	23.87	409	26.45	424	
55000	997	289	7.67	306	9.71	322	11.98	338	14.38	356	16.92	371	19.60	387	22.38	402	25.25	417	28.16	432	
58000	1052	303	8.76	319	10.88	335	13.23	350	15.72	365	18.30	381	21.08	396	23.84	411	26.90	426	29.93	440	
61000	1106	317	9.94	332	12.18	347	14.59	362	17.15	376	19.83	391	22.65	406	25.60	421	28.64	435	31.77	448	
64000	1160	331	11.24	346	13.59	360	16.06	374	18.71	388	21.48	402	24.33	416	27.37	430	30.49	444	33.71	457	
67000	1215	345	12.66	359	15.13	373	17.65	386	20.39	400	23.24	413	26.19	426	29.25	440	32.47	453	35.75	467	
70000	1269	359	14.20	373	16.78	388	19.36	399	22.20	412	25.11	425	28.16	437	31.28	450	34.66	463	37.94	476	
73000	1324	374	15.87	388	18.57	399	21.25	412	24.12	424	27.14	436	30.26	449	33.47	460	36.77	473	40.24	488	
76000	1378	388	17.67	400	20.49	412	23.27	425	26.19	437	29.30	442	32.49	460	35.80	472	39.17	484	42.67	496	
79000	1432	402	19.61	414	22.56	426	25.43	437	28.38	449	31.60	461	34.88	478	38.26	483	41.73	494	45.26	506	
82000	1487	417	21.70	428	24.75	440	27.74	451	30.77	462	34.04	473	37.41	484	40.86	495	44.43	506	48.05	516	
85000	1541	431	23.93	442	27.09	453	30.21	464	33.33	475	36.62	486	40.10	496	43.63	507	47.27	517	51.00	527	
88000	1596	446	26.32	456	29.59	467	32.83	477	36.05	488	39.36	498	42.94	509	46.87	519	50.27	529	54.09	559	
91000	1650	460	28.88	470	32.24	481	35.62	491	38.93	501	42.30	511	45.93	521	49.67	531	53.45	541	57.34	561	
94000	1704	475	31.60	485	35.07	494	38.57	504	41.99	514	45.45	524	49.09	534	52.92	543	56.81	553	60.75	582	
97000	1759	489	34.49	499	38.07	508	41.70	518	45.22	527	48.78	537	52.42	546	56.35	556	60.34	565	64.37	574	
100000	1813	505	48.54	524	55.62	547	63.35	569	70.95	591	76.78	614	86.98	636	95.33	657	103.83	677	112.38	696	
103000	1868	516	85.2	533	94.3	550	103.8	569	113.5	588	123.4	703	133.7	720	144.1	737	154.8	753	165.5	771	
106000	1922	528	89.7	545	98.9	661	108.4	679	118.3	698	128.4	713	138.8	730	149.4	748	160.3	762	171.2	781	
109000	1976	540	94.3	557	103.7	673	113.3	689	123.2	706	133.8	723	144.2	739	154.9	755	165.9	771	180.4	790	
112000	2031	552	99.1	569	108.7	685	118.5	700	128.5	716	139.0	733	149.7	749	160.6	765	171.8				
115000	2085	565	104.2	580	113.9	696	123.9	711	134.1	727	144.5	743	155.5	759	166.6						
118000	2140	577	108.4	592	119.3	708	129.5	723	139.8	736	150.4	753	161.4								
121000	2194	590	114.0	705	124.9	720	135.3	735	145.8	749	166.6	763	167.6								
124000	2248	703	120.6	717	130.8	732	141.3	746	152.0	761	183.0										
127000	2303	715	126.5	730	136.9	744	147.5	758	158.5												

Performance shown is for Model TCFI with outlet duct and inlet duct.
BHP does not include drive losses.

DIMENSIONAL DATA

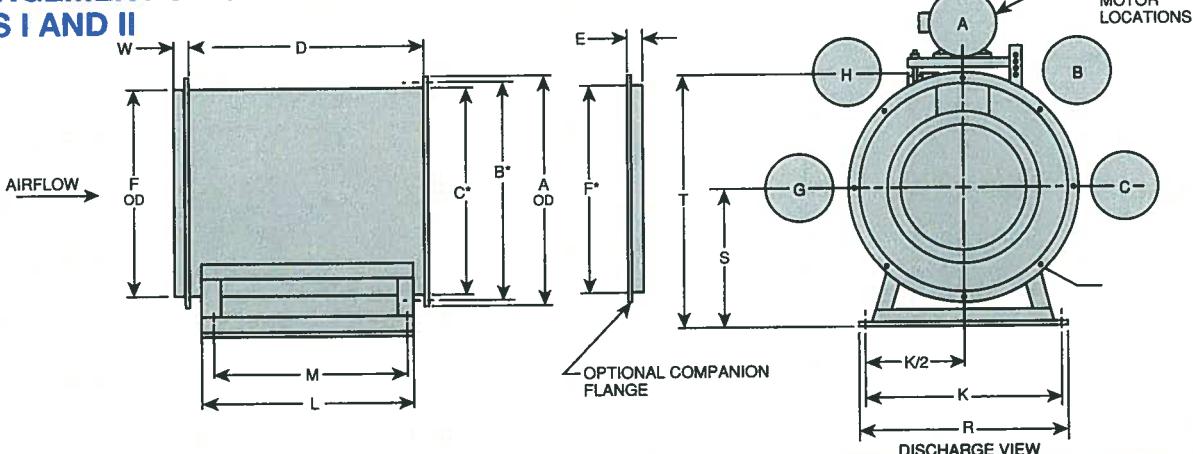
ARRANGEMENT 1 HORIZONTAL BASE CLASS I AND II

*Notes: B-Indicates bolt hole circle diameter
C-measured inside tube diameter
F-measured inside flange diameter
R-May vary with motor size



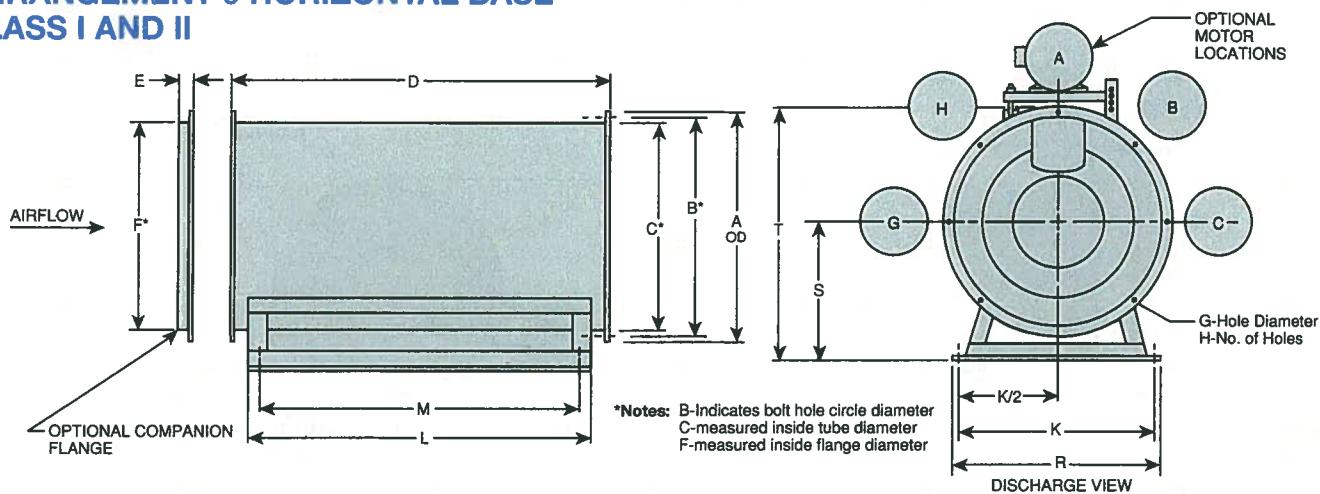
Size	A	B	C	D	E	F	G	H	K	L	M	R	S	T	Bearing Dia.		Max. Frame	Min. Frame	Wgt.
															Class I				
18	28%	27 $\frac{1}{8}$	25 $\frac{1}{8}$	32 $\frac{1}{8}$	1 $\frac{1}{2}$	25 $\frac{1}{8}$	$\frac{7}{8}$	8	23 $\frac{1}{2}$	31 $\frac{1}{16}$	30 $\frac{1}{16}$	50 $\frac{1}{16}$	16	30 $\frac{1}{8}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	254	48	277
20	30 $\frac{1}{16}$	29 $\frac{1}{8}$	27 $\frac{1}{8}$	35 $\frac{1}{8}$	1 $\frac{1}{2}$	27 $\frac{1}{16}$	$\frac{7}{8}$	8	25 $\frac{1}{2}$	35	33 $\frac{1}{4}$	52 $\frac{1}{4}$	18	33 $\frac{1}{8}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	256	48	315
22	33 $\frac{1}{8}$	32 $\frac{1}{8}$	30 $\frac{1}{8}$	39 $\frac{1}{16}$	1 $\frac{1}{2}$	30 $\frac{1}{8}$	$\frac{7}{8}$	8	28 $\frac{1}{4}$	39	37 $\frac{1}{2}$	55 $\frac{1}{8}$	20	36 $\frac{1}{16}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	258	56	394
24	37	35 $\frac{1}{4}$	33 $\frac{1}{4}$	43 $\frac{1}{8}$	1 $\frac{1}{2}$	34	$\frac{7}{8}$	8	31 $\frac{1}{4}$	42 $\frac{15}{16}$	41 $\frac{1}{16}$	64 $\frac{7}{16}$	21	39 $\frac{1}{2}$	1 $\frac{1}{16}$	1 $\frac{11}{16}$	284	56	486
27	40 $\frac{1}{16}$	39 $\frac{1}{8}$	37 $\frac{1}{16}$	47 $\frac{1}{2}$	1 $\frac{1}{2}$	37 $\frac{1}{16}$	$\frac{7}{8}$	8	34 $\frac{1}{2}$	47 $\frac{1}{16}$	45 $\frac{1}{16}$	67 $\frac{1}{16}$	23	43 $\frac{1}{8}$	1 $\frac{1}{16}$	1 $\frac{11}{16}$	284	145	545
30	45 $\frac{1}{16}$	44 $\frac{1}{8}$	41 $\frac{1}{8}$	52 $\frac{1}{16}$	2	41 $\frac{1}{8}$	$\frac{7}{8}$	16	38 $\frac{1}{2}$	48	48 $\frac{1}{2}$	72 $\frac{1}{2}$	25	47 $\frac{1}{8}$	1 $\frac{1}{16}$	1 $\frac{11}{16}$	286	182	845
33	49 $\frac{1}{8}$	48 $\frac{1}{8}$	45 $\frac{1}{8}$	58 $\frac{1}{8}$	2	45 $\frac{1}{8}$	$\frac{7}{8}$	16	42 $\frac{1}{2}$	52 $\frac{1}{2}$	51	78 $\frac{1}{2}$	27	51 $\frac{1}{2}$	1 $\frac{1}{16}$	2 $\frac{1}{16}$	326	182	1030
36	54 $\frac{1}{16}$	52 $\frac{1}{8}$	50 $\frac{1}{8}$	64 $\frac{1}{4}$	2 $\frac{1}{2}$	50 $\frac{1}{8}$	$\frac{21}{64}$	16	47 $\frac{1}{2}$	58 $\frac{1}{8}$	56 $\frac{1}{8}$	87 $\frac{1}{16}$	29	56 $\frac{1}{4}$	1 $\frac{1}{16}$	2 $\frac{1}{16}$	365	182	1300
40	60 $\frac{1}{8}$	58 $\frac{1}{8}$	55 $\frac{1}{8}$	70 $\frac{1}{8}$	2 $\frac{1}{2}$	55 $\frac{1}{8}$	$\frac{21}{64}$	16	52	64 $\frac{1}{2}$	62 $\frac{1}{8}$	93 $\frac{1}{2}$	33	63 $\frac{1}{2}$	2 $\frac{1}{16}$	2 $\frac{1}{16}$	365	184	1630
44	66 $\frac{1}{16}$	64 $\frac{1}{8}$	61 $\frac{1}{8}$	78 $\frac{1}{16}$	2 $\frac{1}{2}$	61 $\frac{1}{8}$	$\frac{21}{64}$	24	57 $\frac{1}{2}$	71 $\frac{1}{2}$	69	99	36	69 $\frac{1}{8}$	2 $\frac{1}{16}$	2 $\frac{11}{16}$	365	184	1960
49	72 $\frac{1}{16}$	70 $\frac{1}{4}$	67 $\frac{1}{8}$	86 $\frac{1}{8}$	2 $\frac{1}{2}$	67 $\frac{1}{16}$	$\frac{21}{64}$	24	64	78 $\frac{1}{4}$	76 $\frac{1}{4}$	108 $\frac{1}{2}$	39	75 $\frac{1}{2}$	2 $\frac{1}{16}$	2 $\frac{19}{16}$	404	213	2410
54	81 $\frac{1}{16}$	78	74 $\frac{1}{8}$	95 $\frac{1}{16}$	3	75 $\frac{1}{16}$	$\frac{21}{64}$	24	70 $\frac{1}{2}$	86 $\frac{1}{8}$	84 $\frac{1}{2}$	116 $\frac{1}{2}$	43	83 $\frac{1}{2}$	2 $\frac{1}{16}$	3 $\frac{1}{16}$	404	215	3110
60	88 $\frac{1}{16}$	85 $\frac{1}{16}$	82 $\frac{1}{8}$	105 $\frac{1}{8}$	3	82 $\frac{1}{16}$	$\frac{21}{64}$	24	78 $\frac{1}{4}$	96	93 $\frac{1}{2}$	124 $\frac{1}{16}$	47	91 $\frac{1}{16}$	3 $\frac{1}{16}$	3 $\frac{19}{16}$	405	254	3830
66	97 $\frac{1}{4}$	94 $\frac{1}{8}$	90 $\frac{1}{16}$	116 $\frac{1}{16}$	3	91 $\frac{1}{16}$	$\frac{21}{64}$	24	97 $\frac{1}{4}$	107 $\frac{1}{2}$	105	132	51	99 $\frac{1}{8}$	3 $\frac{1}{16}$	3 $\frac{19}{16}$	444	266	4890
73	106 $\frac{1}{16}$	103 $\frac{1}{8}$	100 $\frac{1}{8}$	128 $\frac{1}{8}$	3	100 $\frac{1}{8}$	$\frac{21}{64}$	24	104 $\frac{1}{2}$	120	117 $\frac{1}{2}$	143 $\frac{1}{2}$	56	109 $\frac{1}{16}$	3 $\frac{1}{16}$	3 $\frac{19}{16}$	445	284	5830

ARRANGEMENT 3 HORIZONTAL BASE CLASS I AND II



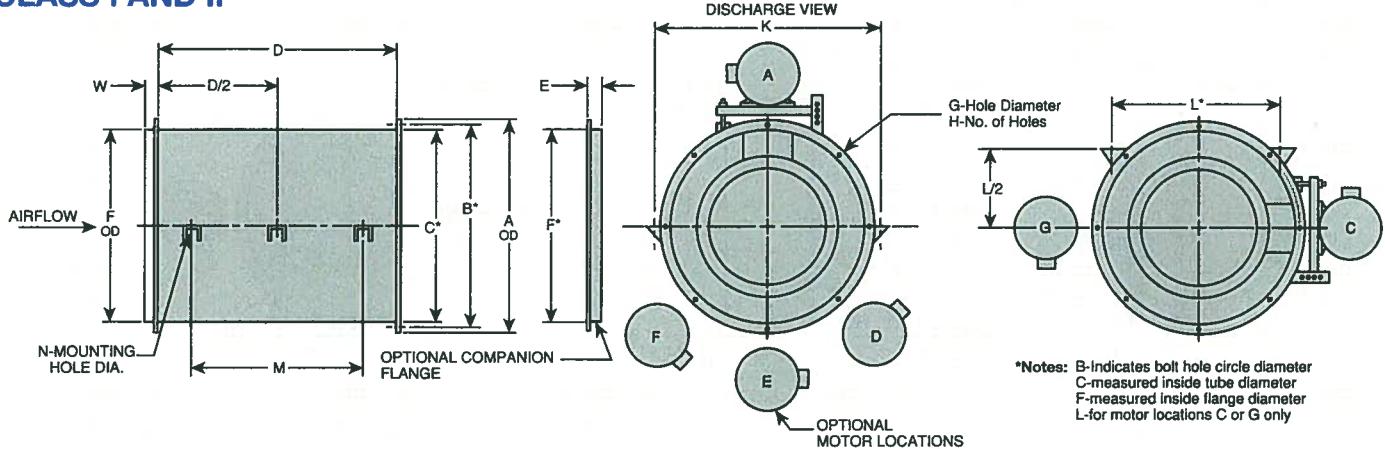
Size	A	B	C	D	E	F	G	H	K	L	M	N	P	Q	R	S	T	W	Bearing Dia.		Max. Frame	Min. Frame	Wgt.
																			Class I	Class II			
18	28%	27 $\frac{1}{8}$	25 $\frac{1}{8}$	23	1 $\frac{1}{2}$	25 $\frac{1}{8}$	$\frac{7}{8}$	8	23 $\frac{1}{2}$	22 $\frac{13}{16}$	21 $\frac{1}{16}$	$\frac{1}{16}$	4	6 $\frac{1}{4}$	24 $\frac{1}{2}$	16	30 $\frac{1}{8}$	2 $\frac{1}{8}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	254	221	
20	30 $\frac{1}{16}$	29 $\frac{1}{8}$	27 $\frac{1}{8}$	25 $\frac{1}{8}$	1 $\frac{1}{2}$	27 $\frac{1}{16}$	$\frac{7}{8}$	8	25 $\frac{1}{2}$	24 $\frac{1}{2}$	23 $\frac{1}{2}$	$\frac{1}{16}$	4	7 $\frac{1}{2}$	27	18	33 $\frac{1}{8}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	256	253	
22	33 $\frac{1}{8}$	32 $\frac{1}{8}$	30 $\frac{1}{8}$	27 $\frac{1}{16}$	1 $\frac{1}{2}$	30 $\frac{1}{8}$	$\frac{7}{8}$	8	28 $\frac{1}{4}$	27 $\frac{1}{2}$	25 $\frac{1}{4}$	$\frac{1}{16}$	4	8 $\frac{1}{8}$	30	20	36 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	256	315	
24	37	35 $\frac{1}{4}$	33 $\frac{1}{4}$	30 $\frac{1}{8}$	1 $\frac{1}{2}$	34	$\frac{7}{8}$	8	31 $\frac{1}{4}$	30 $\frac{1}{8}$	28 $\frac{1}{8}$	$\frac{1}{16}$	4	9	33	21	39 $\frac{1}{2}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	284	372	
27	40 $\frac{1}{16}$	39 $\frac{1}{8}$	37 $\frac{1}{16}$	33 $\frac{1}{4}$	1 $\frac{1}{2}$	37 $\frac{1}{16}$	$\frac{7}{8}$	8	34 $\frac{1}{2}$	32 $\frac{15}{16}$	31 $\frac{1}{16}$	$\frac{1}{16}$	4	9 $\frac{1}{16}$	38 $\frac{1}{2}$	23	43 $\frac{1}{8}$	2 $\frac{1}{2}$	1 $\frac{1}{16}$	2 $\frac{1}{16}$	284	433	
30	45 $\frac{1}{16}$	44 $\frac{1}{8}$	41 $\frac{1}{16}$	36 $\frac{1}{8}$	2	41 $\frac{1}{8}$	$\frac{7}{8}$	16	38 $\frac{1}{2}$	31 $\frac{13}{16}$	30 $\frac{1}{16}$	$\frac{1}{16}$	6	11 $\frac{1}{4}$	40 $\frac{1}{2}$	25	47 $\frac{1}{16}$	2 $\frac{1}{2}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	286	670	
33	49 $\frac{1}{8}$	48 $\frac{1}{8}$	45 $\frac{1}{8}$	40 $\frac{1}{16}$	2	45 $\frac{1}{8}$	$\frac{7}{8}$	16	42 $\frac{1}{2}$	35	33 $\frac{1}{4}$	$\frac{1}{16}$	6	12 $\frac{1}{2}$	44 $\frac{1}{2}$	27	51 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{16}$	2 $\frac{1}{16}$	326	795	
36	54 $\frac{1}{16}$	52 $\frac{1}{8}$	50 $\frac{1}{8}$	44 $\frac{1}{8}$	2	50 $\frac{1}{8}$	$\frac{21}{64}$	18	47 $\frac{1}{2}$	38 $\frac{1}{2}$	36 $\frac{1}{2}$	$\frac{1}{16}$	6	13 $\frac{1}{2}$	49 $\frac{1}{2}$	29	56 $\frac{1}{2}$	3	2 $\frac{1}{16}$	2 $\frac{1}{16}$	326	1030	
40	60 $\frac{1}{8}$	58 $\frac{1}{8}$	55 $\frac{1}{8}$	48 $\frac{1}{16}$	2 $\frac{1}{2}$	55 $\frac{1}{8}$	$\frac{21}{64}$	16	52	42 $\frac{1}{2}$	40 $\frac{1}{2}$	$\frac{1}{16}$	6	14 $\frac{1}{2}$	54 $\frac{1}{2}$	33	63 $\frac{1}{2}$	3	2 $\frac{1}{16}$	2 $\frac{1}{16}$	326	1280	
44	66 $\frac{1}{8}$	64 $\frac{1}{8}$	61 $\frac{1}{16}$	53 $\frac{1}{2}$	2 $\frac{1}{2}$	61 $\frac{1}{16}$	$\frac{21}{64}$	24	57 $\frac{1}{2}$	48 $\frac{1}{2}$	44 $\frac{1}{2}$	$\frac{1}{16}$	6	16 $\frac{1}{2}$	60	36	69 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{16}$	2 $\frac{1}{16}$	326	1540	
49	72 $\frac{1}{16}$	70 $\frac{1}{4}$	67 $\frac{1}{8}$	58 $\frac{1}{16}$	2 $\frac{1}{2}$	67 $\frac{1}{16}$	$\frac{21}{64}$	24	64	51 $\frac{1}{16}$	48 $\frac{1}{16}$	$\frac{1}{16}$	6	18	66 $\frac{1}{2}$	39	75 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{16}$	2 $\frac{1}{16}$	326	1890	
54	81 $\frac{1}{16}$	78	74 $\frac{1}{8}$	84 $\frac{1}{16}$	3	75 $\frac{1}{16}$	$\frac{21}{64}$	24	70 $\frac{1}{2}$	56 $\frac{1}{2}$	53 $\frac{1}{2}$	$\frac{1}{16}$	6	19 $\frac{1}{8}$	73 $\frac{1}{2}$	43	83 $\frac{1}{2}$	4	2 $\frac{1}{16}$	3 $\frac{1}{2}$	326	2480	
60	88 $\frac{1}{16}$	85 $\frac{1}{16}$	82 $\frac{1}{8}$	71 $\frac{1}{16}$	3	82 $\frac{1}{16}$	$\frac{21}{64}$	24	78 $\frac{1}{4}$	61 $\frac{1}{2}$	59 $\frac{1}{2}$	$\frac{1}{16}$	6	22 $\frac{1}{2}$	81	47	91 $\frac{1}{2}$	5	2 $\frac{1}{16}$	3 $\frac{1}{16}$	326	3050	
66	97 $\frac{1}{4}$	94 $\frac{1}{8}$	90 $\frac{1}{16}$	78 $\frac{1}{8}$	3	91 $\frac{1}{16}$	$\frac{21}{64}$	24	97 $\frac{1}{4}$	70 $\frac{1}{2}$	67 $\frac{1}{2}$	$\frac{1}{16}$	6	24 $\frac{1}{2}$	89 $\frac{1}{2}$	51	99 $\frac{1}{2}$	5	3 $\frac{1}{8}$	3 $\frac{1}{8}$	326	3800	
73	106 $\frac{1}{16}$	103 $\frac{1}{8}$	100 $\frac{1}{8}$	86 $\frac{1}{8}$	3	100 $\frac{1}{8}$	$\frac{21}{64}$	24	104 $\frac{1}{2}$	78 $\frac{1}{2}$	76 $\frac{1}{2}$ </td												

ARRANGEMENT 9 HORIZONTAL BASE CLASS I AND II



Size	A	B	C	D	E	F	G	H	K	L	M	R	S	T	Bearing Dia.		Max. Frame	Wgt.
															Class I	Class II		
18	28%	27½	25½	32½	1½	25%	7/16	8	23½	31½	30½	24%	16	30½	1⅓	1⅓	254	257
20	30½	29½	27½	35½	1½	27½	7/16	8	25½	35	33½	27	18	33½	1⅓	1⅓	256	292
22	33½	32½	30	39½	1½	30%	7/16	8	28½	39	37½	30	20	36½	1⅓	1⅓	256	385
24	37	35½	33½	43½	1½	34	7/16	8	31½	42½	41½	33	21	39½	1½	1½	284	432
27	40%	39½	37½	47½	1½	37½	7/16	8	34½	47½	45½	38½	23	43½	1⅓	1⅓	284	505
30	45%	44½	41%	52½	2	41%	7/16	16	38½	48	48½	40½	25	47½	1⅓	1⅓	286	783
33	49%	48½	46%	58½	2	46%	7/16	18	42½	52½	51	44½	27	51½	1½	2½	326	936
36	54%	52½	50%	64½	2	50%	7/16	18	47½	58½	56½	49½	29	56½	1½	2½	326	1205
40	60%	58½	55½	70½	2½	55%	7/16	18	52	64½	62½	54½	33	63½	2½	2½	326	1510
44	66%	64½	61½	78½	2½	61%	7/16	24	57½	71½	69	60	36	68½	2½	2½	326	1820
49	72%	70½	67½	86½	2½	67½	7/16	24	64	78½	76½	66½	39	75½	2½	2½	326	2230
54	81½	78	74½	95½	3	75½	7/16	24	70½	86½	84½	73½	43	83½	2½	3½	326	2880
60	88½	85½	82%	105%	3	82½	7/16	24	78½	96	93½	81	47	91½	2½	3½	326	3550
66	97½	94½	90½	116½	3	91½	7/16	24	97½	107½	105	89½	51	99½	3½	3½	326	4380
73	106%	103%	100%	128½	3	100%	7/16	24	104½	120	117½	76½	56	109½	3½	3½	326	5490

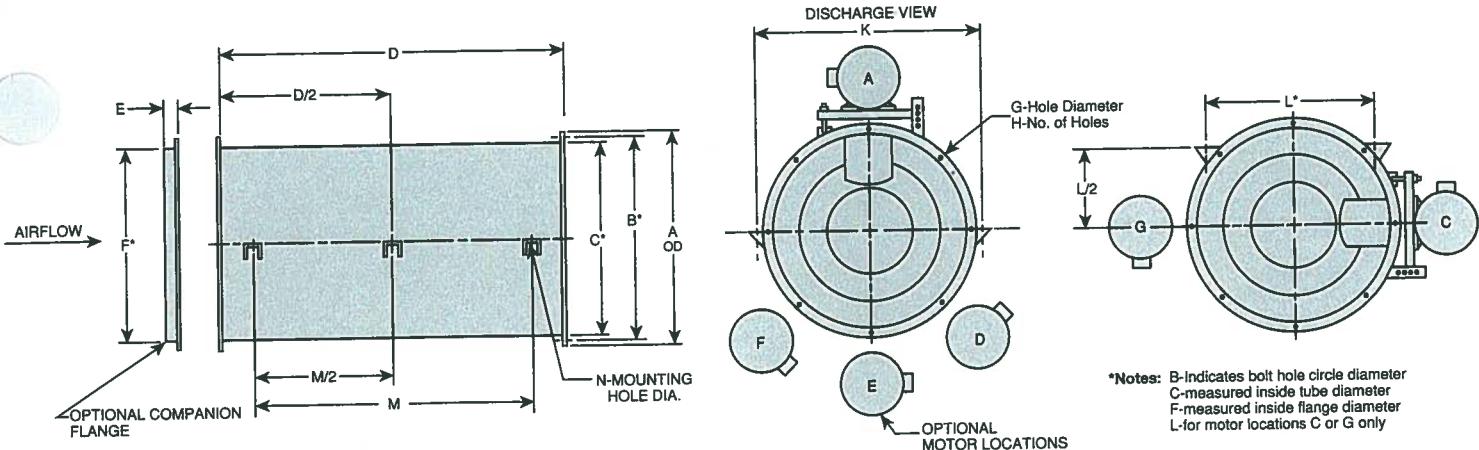
ARRANGEMENT 3 HORIZONTAL CEILING HUNG CLASS I AND II



Size	A	B	C	D	E	F	G	H	K	L	M	N	W	Bearing Dia.		Max. Frame	Wgt.
														Class I	Class II		
18	28%	27½	25½	23	1½	25%	7/16	8	28½	22½	16½	7/16	2½	1⅓	1⅓	254	198
20	30½	29½	27½	25½	1½	27½	7/16	8	30½	24	18½	7/16	2½	1⅓	1⅓	256	225
22	33½	32½	30	27½	1½	30%	7/16	8	33½	26½	21½	7/16	2½	1⅓	1⅓	256	279
24	37	35½	33½	30½	1½	34	7/16	8	36½	29½	23½	1½	2½	1⅓	1⅓	284	330
27	40%	39½	37½	33½	1½	37½	7/16	8	40%	31½	28	1½	2½	1⅓	1⅓	284	383
30	45%	44½	41%	36½	2	41%	7/16	16	44½	34½	28½	1½	2½	1⅓	1⅓	286	590
33	49½	48½	45%	40½	2	45%	7/16	16	48½	37½	31½	1½	2½	1⅓	2⅓	326	705
36	54½	52½	50%	44½	2	50%	7/16	16	53½	40½	35½	1½	3	1½	2⅓	326	905
40	60%	58½	55½	48½	2½	55%	7/16	18	58½	44½	39½	1½	3	1½	2½	326	1130
44	66%	64½	61%	53½	2½	61%	7/16	24	64%	48½	44	1½	3½	1½	2½	326	1350
49	72½	70½	67½	58½	2½	67½	7/16	24	70½	53½	49½	1½	3½	2½	2½	326	1870
54	81½	78	74½	84½	3	75½	7/16	24	79	58½	53½	1½	4	2½	2½	326	2180
60	88½	85½	82%	71½	3	82½	7/16	24	86%	64½	61	1½	5	2½	3½	326	2710
66	97½	94½	90%	78½	3	91½	7/16	24	97½	89½	88%	1½	5	2½	3½	326	3370
73	106%	103%	100%	86%	3	100%	7/16	24	104½	76½	76½	1½	5	3½	3½	326	4220

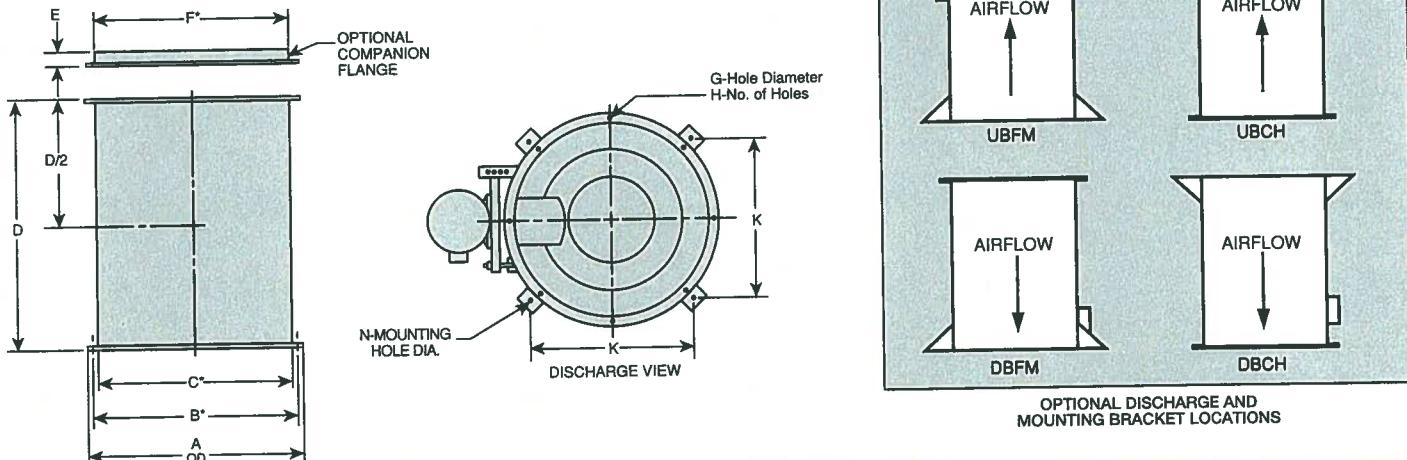
Due to IAP Inc.'s policy of continuous product improvement, dimensions are subject to change. For complete dimensional information refer to the applicable IAP submittal drawing.

ARRANGEMENT 9 HORIZONTAL CEILING HUNG CLASS I AND II



Size	A	B	C	D	E	F	G	H	K	L	M	N	Bearing Dia.		Max. Frame	Wgt.
													Class I	Class II		
18	28%	27 1/4	25%	32 1/4	1 1/4	25%	7/16	8	28%	22 1/4	25%	7/16	1 1/4	1 1/4	254	232
20	30 1/4	29 1/4	27 1/4	35 1/4	1 1/4	27 1/4	7/16	8	30%	24	28 1/4	7/16	1 1/4	1 1/4	256	264
22	33%	32%	30%	39%	1 1/4	30%	7/16	8	33 1/4	26%	32 1/4	7/16	1 1/4	1 1/4	256	329
24	37	35%	33%	43%	1 1/4	34	7/16	8	36 1/4	29%	36	7/16	1 1/4	1 1/4	284	380
27	40%	39%	37%	47 1/4	1 1/4	37 1/4	7/16	8	40%	31 1/4	40%	7/16	1 1/4	1 1/4	284	455
30	45%	44%	41%	52 1/4	2	41%	7/16	16	44 1/4	34%	44 1/4	13/16	1 1/4	1 1/4	286	705
33	49%	48 1/4	45%	58 1/4	2	45%	7/16	16	48 1/4	37%	49%	13/16	1 1/4	2 1/4	326	845
36	54%	52%	50%	64%	2	50%	21/32	16	53 1/4	40%	55%	13/16	1 1/4	2 1/4	326	1085
40	60%	58%	55%	70 1/4	2 1/4	55%	21/32	16	58 1/4	44%	61%	13/16	2 1/4	2 1/4	326	1360
44	66%	64 1/4	61%	78 1/4	2 1/4	61%	21/32	24	64%	48 1/4	68 1/4	13/16	2 1/4	2 1/4	326	1640
49	72 1/4	70%	67%	86 1/4	2 1/4	67 1/4	21/32	24	70%	53 1/4	76%	13/16	2 1/4	2 1/4	326	2010
54	81 1/4	78	74%	95 1/4	3	75 1/4	21/32	24	79	58 1/4	84 1/4	1 1/8	2 1/4	3 1/4	326	2600
60	88 1/4	85 1/4	82%	105%	3	82 1/4	21/32	24	86%	64 1/4	95%	1 1/8	2 1/4	3 1/4	326	3210
66	97 1/4	94%	90%	116 1/4	3	91 1/4	21/32	24	97 1/4	69%	105 1/4	1 1/8	3 1/4	3 1/4	326	3950
73	106%	103 1/4	100%	128 1/4	3	100%	21/32	24	104%	76%	118	1 1/8	3 1/4	3 1/4	326	4950

ARRANGEMENT 9 VERTICAL FLOOR MOUNT/CEILING HUNG CLASS I



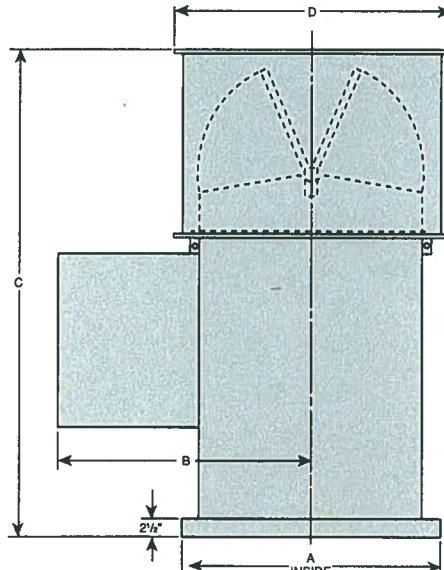
Size	A	B	C	D	E	F	G	H	K	N	Bearing Dia.	Max. Frame	Wgt.
18	28%	27 1/4	25%	32 1/4	1 1/4	25%	7/16	8	21 1/4	7/16	1 1/4	254	227
20	30 1/4	29 1/4	27 1/4	35 1/4	1 1/4	27 1/4	7/16	8	24 1/4	7/16	1 1/4	256	254
22	33%	32%	30%	39%	1 1/4	30%	7/16	8	26%	7/16	1 1/4	256	324
24	37	35%	33%	43%	1 1/4	34	7/16	8	28 1/4	7/16	1 1/4	284	380
27	40%	39%	37%	47 1/4	1 1/4	37 1/4	7/16	8	31	7/16	1 1/4	284	450
30	45%	44%	41%	52 1/4	2	41%	7/16	16	34 1/4	13/16	1 1/4	286	705
33	49%	48 1/4	45%	58 1/4	2	45%	7/16	16	37	13/16	1 1/4	326	830
36	54%	52%	50%	64%	2	50%	21/32	16	40%	13/16	1 1/4	326	1050
40	60%	58%	55%	70 1/4	2 1/4	55%	21/32	16	47 1/4	13/16	2 1/4	326	1330
44	66%	64 1/4	61%	78 1/4	2 1/4	61%	21/32	24	51%	13/16	2 1/4	326	1600
49	72 1/4	70%	67%	86 1/4	2 1/4	67 1/4	21/32	24	55%	13/16	2 1/4	326	1990
54	81 1/4	78	74%	95 1/4	3	75 1/4	21/32	24	60 1/4	13/16	2 1/4	326	2520

Due to IAP Inc.'s policy of continuous product improvement, dimensions are subject to change. For complete dimensional information refer to the applicable IAP submittal drawing.

ARRANGEMENT 9 UPBLAST CLASS I

Size	A	B		C	D	BEARING DIA.	MAX. FRAME	WGT.
		48T-215T	254T & UP					
18	30	34½	34½	58½	32	1½	254	315
20	32	33½	38	63½	38	1½	256	357
22	36	35	40	67½	38	1½	256	435
24	38	37	43½	74½	44½	1½	284	530
27	42	39	45½	79½	44½	1½	284	600
30	46	41	48	88½	32	1½	286	895
33	50	43½	52	95½	57½	1½	326	1060
36	56	46	55	108½	63½	1½	326	1350
40	62	48	57½	113½	63½	2½	326	1650
44	68	51	61	123½	69½	2½	326	1990
49	74	53½	64½	134½	75½	2½	326	2440
54	82½	57½	67½	152½	83½	2½	326	3050

Due to IAP Inc.'s policy of continuous product improvement, dimensions are subject to change. For complete dimensional information refer to the applicable IAP submittal drawing.



TYPICAL SPECIFICATIONS

Supply, exhaust, or return air fans shall be of the tubular centrifugal type with airfoil wheels.

The housing shall be constructed of continuously welded heavy gauge steel to assure no air leakage.

The housing and bearing support shall be constructed of structural steel members to prevent vibration and rigidly support the shaft and bearings.

The wheel shall be of the non-overloading airfoil centrifugal type. Wheels shall be statically and dynamically balanced. The wheel cone and fan inlet cone shall be carefully matched and shall have precise running tolerances for maximum performance and operating efficiency. Welded steel vanes shall straighten the flow of air from the fan discharge and support bearings and drives.

Turned, precision ground and polished steel shafts shall be sized so the first critical speed is at least 25% over the maximum operating speed for each pressure class.

Close tolerances shall be maintained where the shaft makes contact with the bearing. Bearings shall be heavy duty, grease lubricated, self aligning ball bearing or roller pillow block type. Extended lubrication lines shall be provided with external grease fittings. Bearings shall be selected for a minimum average of 200,000 hours life at maximum operating speed for each pressure class.

Fan performance shall be based on tests conducted in accordance with AMCA Standard 210 test code for air moving devices, and fans shall be licensed to bear the AMCA Certified Ratings Seal.

After assembly each fan shall be given a final balance test at the specified operating RPM to insure smooth vibration free operation.

Tubular centrifugal fans shall be Model TCFI as manufactured by IAP Inc. of Phillips, Wisconsin, and shall be supplied as shown on the plans and in the fan schedule.

WARRANTY

IAP Inc. warrants this equipment to be free from defects in material and workmanship for a period of one year from the purchase date.

Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid.

Motors are warranted by the motor manufacturer for a period of one year. Should motors furnished by IAP Inc. prove defective during this period, they should be returned to the nearest authorized motor service station. IAP Inc. will not be responsible for any installation or removal costs.



IAP INC.
P.O. BOX 56
PHILLIPS, WI 54555
715/339-3024

Due to IAP Inc.'s policy of continuous product improvement, dimensions are subject to change. For complete dimensional information refer to the applicable IAP submittal drawing.

TCFI-TD-10-0
June 1993