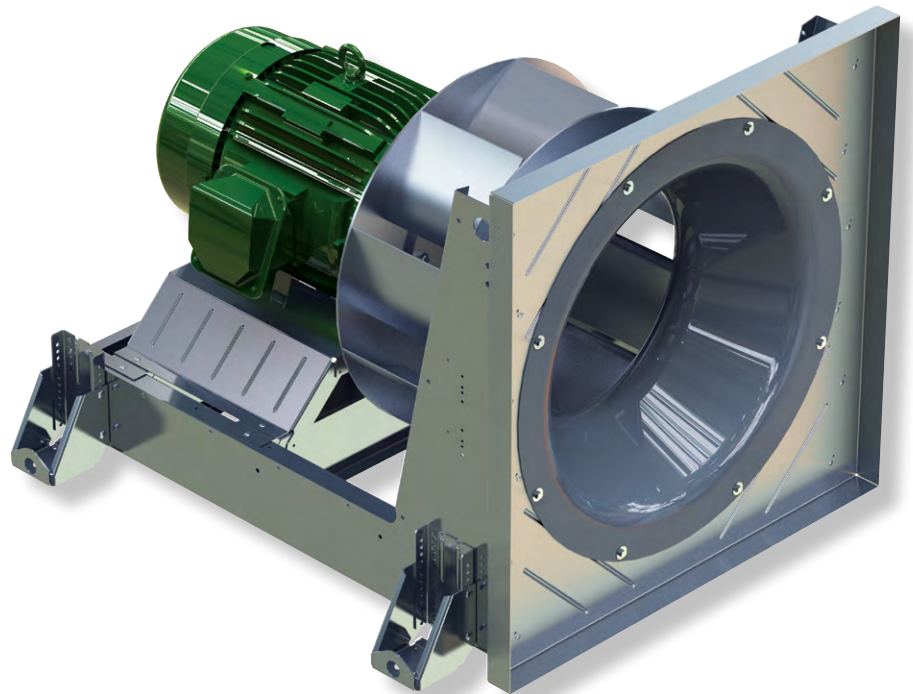


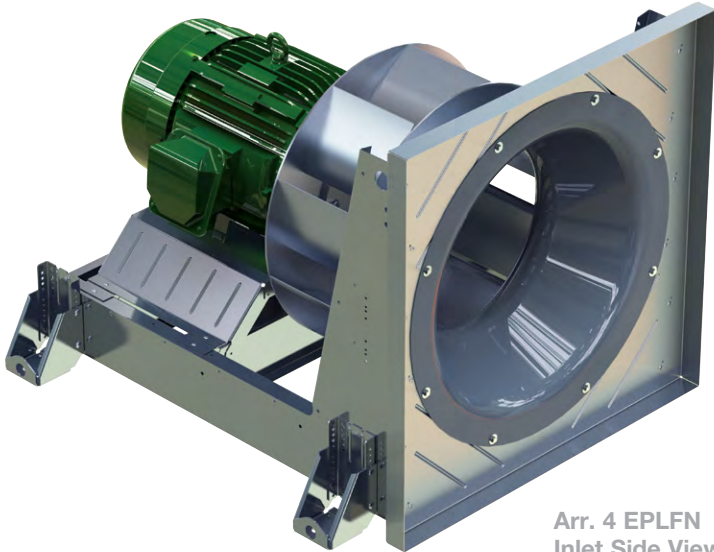


INDUSTRIAL PROCESS AND
COMMERCIAL VENTILATION SYSTEMS

COMMERCIAL DUTY PLENUM FANS

EPLFN | EPLQN





Arr. 4 EPLFN
Inlet Side View



Twin City Fan & Blower certifies that the Model EPLFN and Model EPLQN Plenum 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 AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Refer to Catalog 475 for sound power levels.



For complete product performance, drawings and available accessories, download our Fan Selector program at tcf.com.

Overview

EPLFN | EPLQN

Plenum fans are unboxed fans designed to operate inside of field-fabricated or factory-built air handling units.

The fan wheel pressurizes the entire surrounding air plenum in which the fan is installed, allowing air ducts from any direction to be directly connected to the air handling unit enclosure. This design generally saves space by eliminating the fan housing, transitions, and diffusers within the air handling unit.

Plenum fans have found a ready acceptance in the air conditioning industry. In addition, the construction versatility, adaptability in the direction of the discharges, suitability for internal isolation and application of sound panels, and generally lower cost makes it a very popular fan arrangement.

Benefits of a Plenum Fan

Saves Space – There are no housings, transitions, or diffusers within the air handling unit.

Efficiency – Plenum fans can be as efficient or more efficient than scroll type fans at specific operating points towards the bottom of the fan curve.

Lower cost – Plenum fans are less expensive than scroll type fans.

Models EPLFN & EPLQN (Arrangement 4)

Twin City Fan & Blower's models EPLFN and EPLQN commercial duty plenum fans incorporate the same performance and quality characteristics of the E-Series plenum fans, but in a lighter weight, more economical design. The innovative fan structure and adjustable frame assembly are both patent pending designs. The EPLFN and EPLQN offer a competitive cost advantage over full-framed plenum fan designs in light to medium duty applications with static pressures of 12" w.g. or less.

The compact direct drive EPLFN and EPLQN offers reduced maintenance by eliminating shafts, bearings and V-belt drives. The EPLFN and EPLQN are a great choice for applications requiring clean airstreams as there is no belt residue in the airstream. The arrangement 4 configuration offers space savings with a reduced fan footprint. Different performance points can be achieved either through wheel width reduction or varying motor speeds. Models EPLFN and EPLQN are AMCA certified for Sound and Air.

Overview

EPLFN | EPLQN

EPLFN

The model EPLFN features a highly efficient and cost effective, 9-bladed airfoil wheel design. The high efficiency of the EPLFN will often allow the use of smaller fans without increasing power requirements.

EPLQN

The Better Sound Quality model EPLQN features a 12-bladed airfoil wheel design that flattens the sound spectrum and reduces the dominance of pure tones.

Sizes

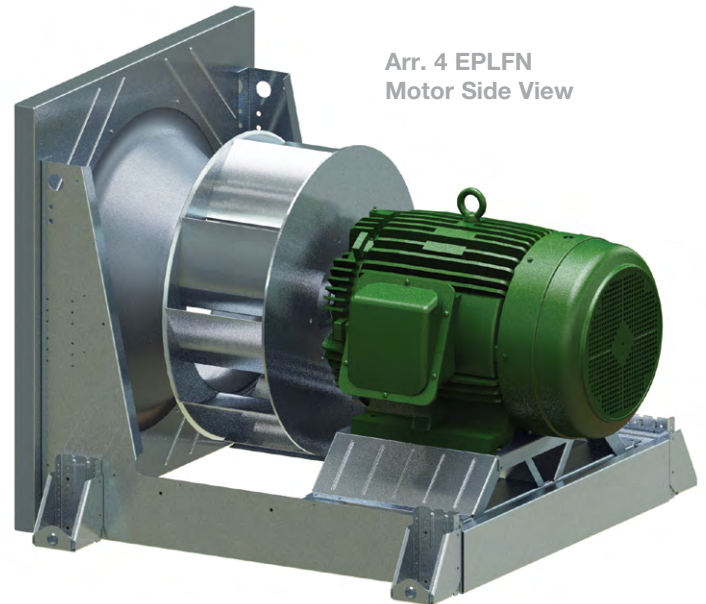
12.25" to 49" wheel diameters

Performance

Airflow to 68,800 CFM
Static pressure to 12" w.g.

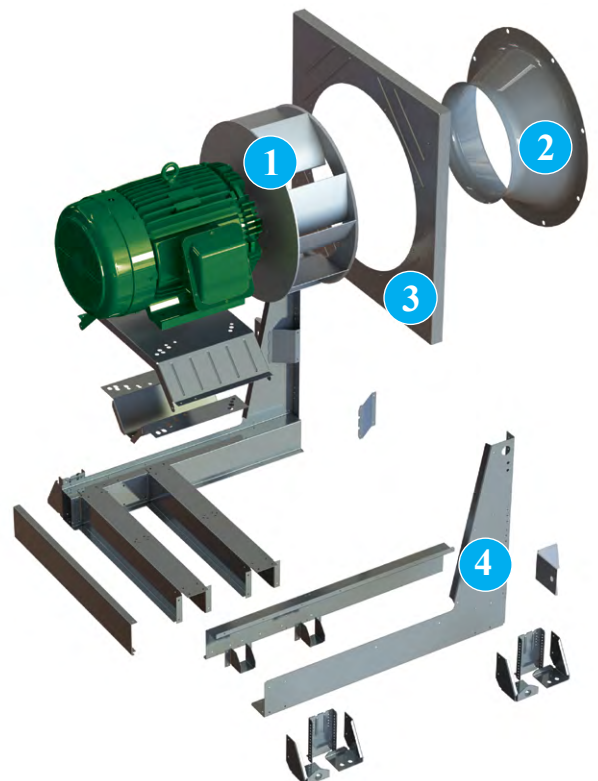
Classes

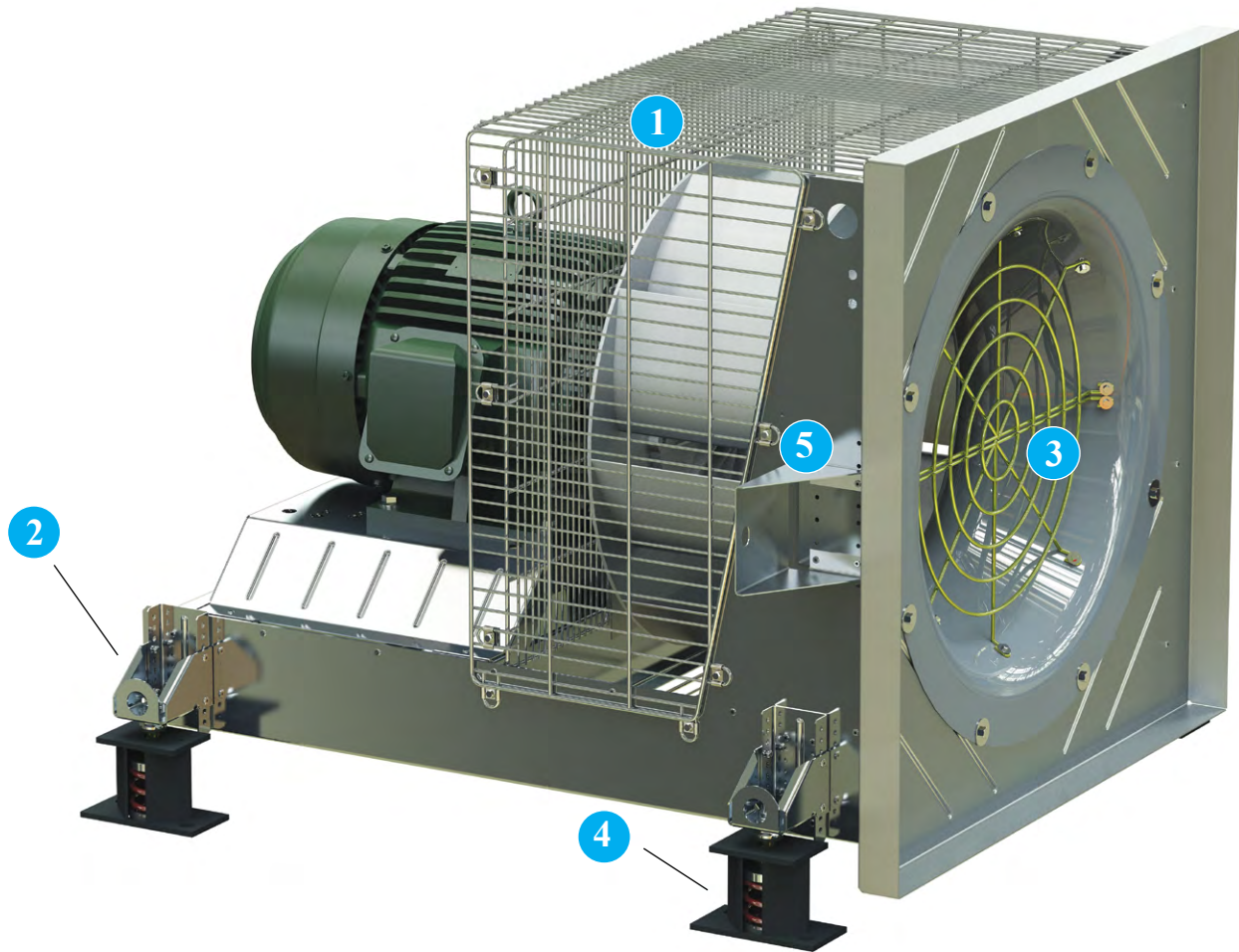
Class I available in sizes 122MK2 – 365MK2
Class II available in sizes 122MK2 – 490
Class III available in sizes 165MK2 – 365MK2



CONSTRUCTION FEATURES

- 1 **Wheels** High efficiency, non-overloading airfoil wheels are provided on all EPLFN and EPLQN fan sizes. Aluminum wheels are standard on all sizes. All wheels balanced to level G6.3.
- 2 **Inlet Cones** Heavy-gauge, spun steel inlet cones are closely matched to the wheel intake rim to ensure efficient and quiet operation.
- 3 **Inlet Plate** Fan inlet cones shall mount to heavy-gauge steel inlet plate. A steel lip suitable for attachment of a boot connector shall surround the unit.
- 4 **Frame** Models EPLFN and EPLQN feature heavy-gauge galvanized or finish painted steel mounting rails and motor mount for strength and rigidity in direct drive applications.





1 Protective Enclosure Grill style protective enclosure completely encloses all sides and the back of the fan wheel to protect personnel from moving fan parts. The panels are individually removable to provide access to the wheel for service or inspection. Enclosures are available with or without a panel to enclose the bottom of the fan. Protective enclosures are plated wire.

2 Height Saving Brackets Mounting brackets that allow fan to be mounted closer to the floor grade and lower the overall fan height.

3 Inlet Screen Heavy-gauge screen mounted to fan inlet for easy removal.

4 Vibration Isolators Spring type vibration isolation mounts are available to reduce the transmission of fan vibration in 1" or 2" deflection.

5 Thrust Restraints Steel brackets located near the fan inlet panel to mount thrust restraint isolators (supplied by others).

Other Accessories Include:

- Special Width Wheel
- Special Diameter Wheel
- Stainless Steel Nameplate
- Pressure Transducer/Transmitter
- RIS Isolators
- Seismic Isolators

Piezometer Ring (Airflow Measuring System)

A piezometer ring is available on plenum fans, as well as other Twin City Fan housed fans, as part of an airflow measuring system, based on the principle of a flow nozzle. The inlet cone of the fan is used as the flow nozzle. The flow can be calculated by measuring the pressure drop through the inlet cone. No tubes or sensors are inserted in the high velocity airstream which could obstruct airflow.

The system, consists of a piezometer ring mounted at the throat and a static pressure tap mounted on the face of the inlet cone. A differential pressure transducer and digital display can also be provided.

The pressure drop is measured from the tap located on the face of the inlet cone to the piezometer ring in the throat. The inlet tap is connected to the high-pressure side of the transducer and the piezometer ring is connected to the low-pressure side. See diagram on the left.

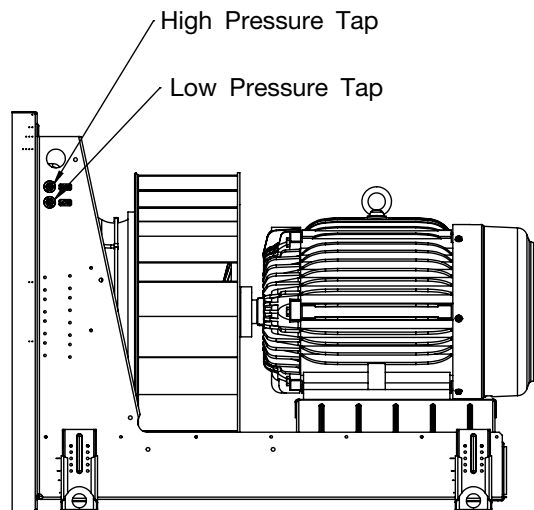
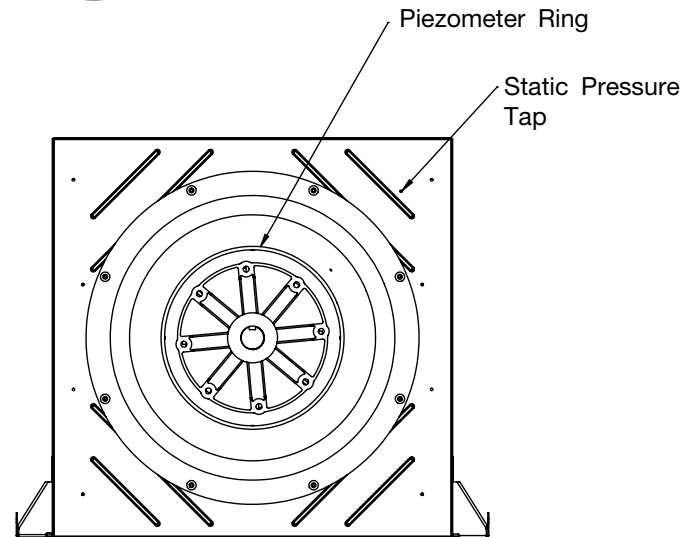
Based on Twin City Fan laboratory tests, the system was determined to be accurate within +/-5%.

Refer to Twin City Fan Engineering Supplement ES-105.

NOTE: Twin City Fan does not recommend placement of flow measuring probes inside the fan inlet cone in the path of airflow. These devices create disturbances and unpredictable performance losses. Twin City Fan will not be responsible for loss of performance due to such devices.



Piezometer Ring Mounted at Throat of Inlet Cone



Location and Placement of Fans in Air Handlers

1. Center the fan inlets in both the horizontal and vertical planes.
2. For inlet clearance, see Figure 1. The flow should converge at an angle not greater than 45° when approaching the opening for the fan inlet. A minimum of one fan wheel diameter clearance is recommended.
3. In the fan outlet plenum, a minimum wall clearance of one-half fan wheel diameter to the periphery of the fan wheel is recommended.
4. Figure 1 shows that the minimum clearance between the back of the fan wheel and the nearest component downstream (Dim. E) should be one wheel diameter. Small clearances do not allow the flow to equalize behind the fan wheel and the pressure drop of the downstream component is increased.
5. When the flow enters the inlet plenum perpendicular to the fan/motor shaft, large system effect losses can occur. See Figure 2 for a recommended flow baffle or a vortex breaker that may help preserve rated fan performance.
6. When two or more fans are installed in a plenum, divide the plenum into imaginary cells of equal area. Center the fan inlets on each cell. See Figure 3.

Installation Recommendations

1. Install the fan so the flexible connector on the inlet remains uncollapsed during operation.
2. Install thrust restraints (snubbers) to maintain the axial position of the fan when it is generating pressure.
3. Peripheral equipment, such as electrical components, inverters, control panels, etc., should be positioned away from the high velocity air entering or leaving the fan.
4. Adjust springs on the isolation base so that spring deflection is approximately equal for all isolators.
5. Follow safety, installation, start-up, and maintenance instructions supplied with each fan.

Figure 3. Location of Counter-Rotating Fans

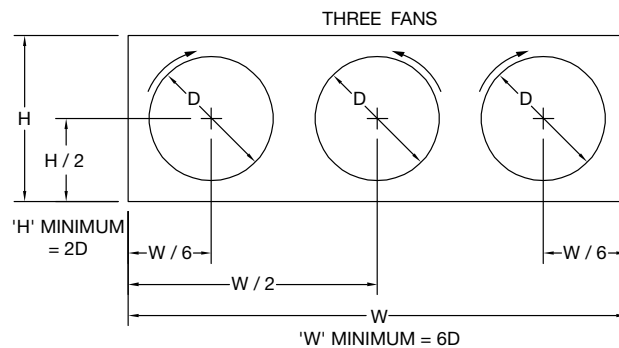
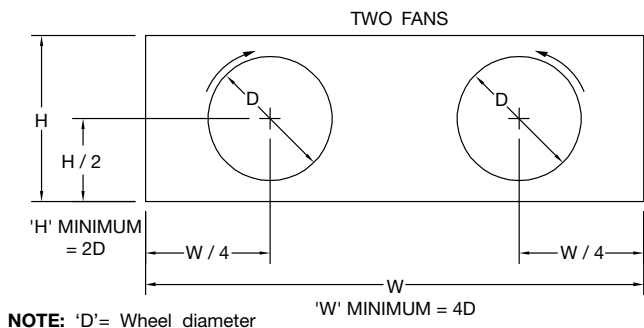


Figure 1. Recommended Location of Fan in Plenum

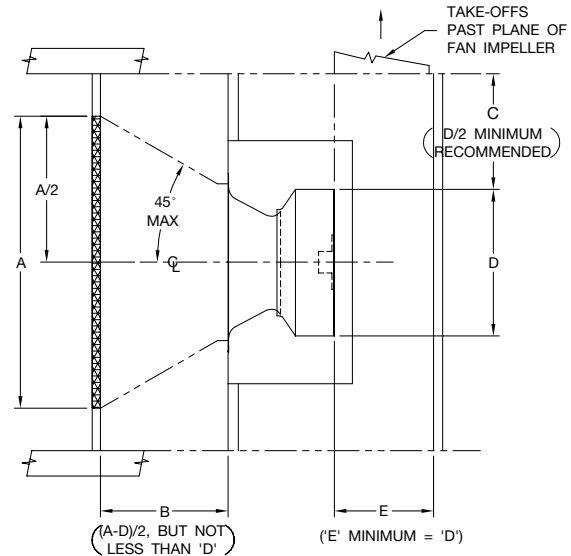
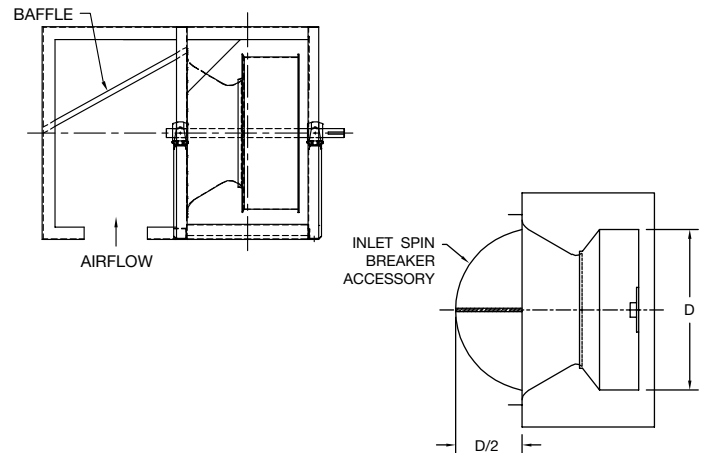
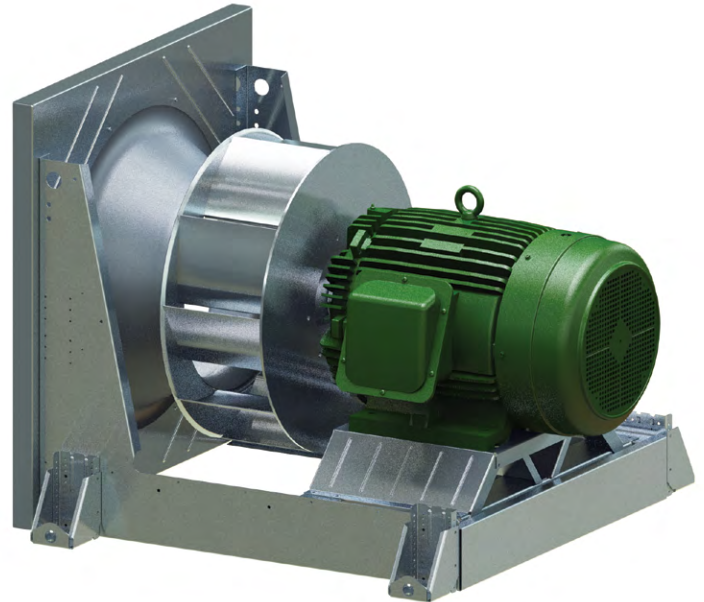


Figure 2. Flow Baffle and Vortex Spin Breaker Location



To achieve the air velocity in the discharge duct and overcome the loss associated with the air entering the ductwork, additional resistance must be added to the external static pressure (ESP) requirements of the fan. Different types of duct entrances and locations will require varying correction factors. Therefore, prior to selecting a fan, make the following correction, depending upon the type of duct and its location.



ADDITIONAL DUCT ENTRANCE LOSS TO BE ADDED TO FAN ESP	
DISCHARGE TYPE	CORRECTION FACTOR
• Radial and ducted with bellmouth	1.1 x Duct Velocity Pressure
• Radial and ducted without bellmouth	1.4 x Duct Velocity Pressure
• Radial without duct or bellmouth	1.8 x Duct Velocity Pressure
• Flow parallel to shaft and ducted with bellmouth	1.6 x Duct Velocity Pressure
• Flow parallel to shaft and ducted without bellmouth	1.9 x Duct Velocity Pressure
• Flow parallel to shaft without duct or bellmouth	2.4 x Duct Velocity Pressure

Example: A system requires 30,000 CFM at 5" SP at standard air density with one 4 ft diameter duct with bellmouth placed in a radial discharge. Determine RPM and brake horsepower:

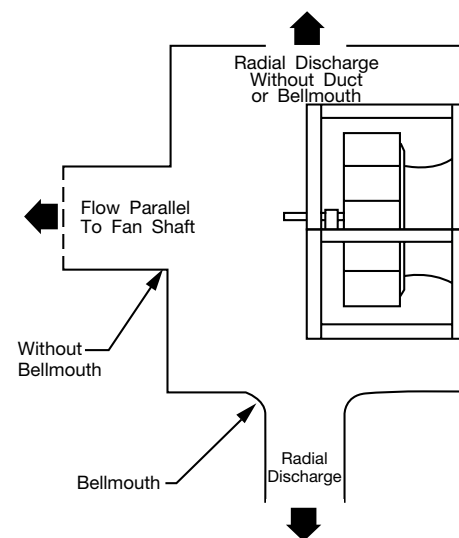
$$\text{Duct area} = (4^2 \times \rho) \div 4 = 12.57 \text{ ft}^2$$

$$\text{Duct velocity} = 30,000 \div 12.57 = 2387 \text{ FPM}$$

$$\text{Duct velocity pressure} = (2387 \div 4005)^2 = 0.355 \text{ @ std. cond.}$$

$$\begin{aligned} \text{Entrance loss correction factor} &= 1.1 \times \text{duct velocity pressure} \\ &= 1.1 \times 0.355 = 0.39 \end{aligned}$$

Thus, select the fan for = 5" + 0.39" = 5.39" S.P.



Maximum RPM, Wheel Weights, & WR²

EPLFN

SIZE	WHEEL DIA. (IN.)	CLASS I			CLASS II			CLASS III		
		MAX RPM (70°F)	WT. (LB.)	WR ² (LB-FT ²)	MAX RPM (70°F)	WT. (LB.)	WR ² (LB-FT ²)	MAX RPM (70°F)	WT. (LB.)	WR ² (LB-FT ²)
122MK2	12.25	3388	11	1.4	4000	11	1.4	---	---	---
150MK2	15.00	3006	15	3.0	3909	15	3.0	---	---	---
165MK2	16.50	2668	17	4.4	3468	17	4.4	4000	20	5.1
182MK2	18.25	2302	17	6.1	2930	18	6.1	3767	21	6.2
200MK2	20.00	2101	21	6.4	2674	21	7.4	3438	24	9.3
222MK2	22.25	1888	30	12	2403	30	12	3090	34	15
245MK2	24.50	1715	35	21	2183	35	21	2806	38	22
270MK2	27.00	1556	40	29	1981	40	29	2546	47	32
300MK2	30.00	1401	49	46	1783	54	51	2291	58	52
330MK2	33.00	1273	62	70	1620	67	76	2083	72	77
365MK2	36.50	1151	73	103	1465	79	112	1884	84	114
402	40.25	---	---	---	1329	93	165	---	---	---
445	44.50	---	---	---	1202	135	253	---	---	---
490	49.00	---	---	---	1091	164	391	---	---	---

EPLQN

SIZE	WHEEL DIA. (IN.)	CLASS I			CLASS II			CLASS III		
		MAX RPM (70°F)	WT. (LB.)	WR ² (LB-FT ²)	MAX RPM (70°F)	WT. (LB.)	WR ² (LB-FT ²)	MAX RPM (70°F)	WT. (LB.)	WR ² (LB-FT ²)
122MK2	12.25	3388	12	1.6	4000	12	1.6	---	---	---
150MK2	15.00	3006	17	3.5	3909	17	3.5	---	---	---
165MK2	16.50	2668	20	5.3	3468	20	5.3	4000	22	5.6
182MK2	18.25	2302	20	7.2	2930	20	7.2	3767	23	7.4
200MK2	20.00	2101	24	10	2674	24	8.4	3438	27	10
222MK2	22.25	1888	34	14	2403	34	14	3090	38	17
245MK2	24.50	1715	39	24	2183	39	24	2806	43	24
270MK2	27.00	1556	46	35	1981	46	35	2546	53	38
300MK2	30.00	1401	57	55	1783	61	59	2291	65	59
330MK2	33.00	1273	72	81	1620	77	87	2083	82	88
365MK2	36.50	1151	85	120	1465	91	129	1884	96	130
402	40.25	---	---	---	1329	107	190	---	---	---
445	44.50	---	---	---	1202	150	294	---	---	---
490	49.00	---	---	---	1091	183	451	---	---	---

Bare Fan Weights

SIZE	WHEEL DIA. (IN.)	WEIGHT (LB.)					
		EPLFN			EPLQN		
		CLASS I	CLASS II	CLASS III	CLASS I	CLASS II	CLASS III
122MK2	12.25	41	41	---	42	42	---
150MK2	15.00	51	51	---	52	52	---
165MK2	16.50	62	62	66	64	64	67
182MK2	18.25	78	78	83	79	79	85
200MK2	20.00	101	101	106	103	103	108
222MK2	22.25	123	123	131	126	126	134
245MK2	24.50	151	151	158	155	155	163
270MK2	27.00	179	179	187	185	185	193
300MK2	30.00	250	250	257	258	258	265
330MK2	33.00	302	302	312	313	313	323
365MK2	36.50	369	369	371	383	383	385
402	40.25	---	789	---	---	803	---
445	44.50	---	1035	---	---	1050	---
490	49.00	---	1225	---	---	1244	---



122MK2 EPLFN (9-Blade)

Wheel Diameter: 12.25"

Fan Efficiency Grade = FEG75

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	1612	0.24	2067	0.48																		
1100	1684	0.27	2100	0.52																		
1200	1760	0.30	<u>2149</u>	<u>0.56</u>	2526	0.87																
1400	1927	0.38	2270	0.66	<u>2596</u>	<u>0.99</u>	2919	1.35														
1600	2100	0.47	2415	0.79	<u>2706</u>	<u>1.13</u>	<u>2990</u>	<u>1.50</u>	3272	1.92												
1800	2274	0.57	2573	0.93	2840	1.30	3096	1.69			3598	2.57	3855	3.08								
2000	2450	0.68	2742	1.08	2988	1.49	3224	1.90	<u>3454</u>	<u>2.35</u>	<u>3681</u>	<u>2.82</u>	3906	3.32								
2200	2629	0.82	2915	1.26	3147	1.69	3368	2.15	3580	2.61	<u>3789</u>	<u>3.10</u>	<u>3996</u>	<u>3.61</u>								
2400	2812	0.97	3089	1.45	3316	1.93	3520	2.41	3721	2.91	3915	3.41										
2800	3186	1.35	3439	1.90	3662	2.46	3853	3.01														
3200	3571	1.84	3799	2.45																		
3600	3962	2.45																				

MAXIMUM RPM: Class I = 3388 Class II = 4000 Outlet Area = 1.186 ft² Max. BHP = 0.057 x (RPM / 1000)³

122MK2 EPLQN (12-Blade)

Wheel Diameter: 12.25"

Fan Efficiency Grade = FEG71

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	1663	0.26	<u>2088</u>	<u>0.51</u>	2467	0.80																
1100	1737	0.29	<u>2144</u>	<u>0.56</u>	2494	0.85																
1200	1814	0.33	<u>2205</u>	<u>0.61</u>	<u>2544</u>	<u>0.92</u>	2856	1.26														
1400	1980	0.42	<u>2342</u>	<u>0.73</u>	<u>2658</u>	<u>1.07</u>	<u>2945</u>	<u>1.44</u>	3212	1.81	<u>3489</u>	<u>2.25</u>										
1600	2158	0.53	2490	0.87	2788	1.24	<u>3059</u>	<u>1.64</u>	<u>3312</u>	<u>2.05</u>	3547	2.47	3781	2.93								
1800	2345	0.65	2648	1.03	2930	1.42	<u>3187</u>	<u>1.85</u>	<u>3426</u>	<u>2.30</u>	<u>3655</u>	<u>2.77</u>	<u>3868</u>	<u>3.24</u>								
2000	2538	0.79	2817	1.21	3080	1.64	3326	2.09	<u>3554</u>	<u>2.57</u>	<u>3771</u>	<u>3.07</u>	<u>3979</u>	<u>3.58</u>								
2200	2737	0.97	2994	1.41	3240	1.88	3473	2.36	3693	2.86	<u>3900</u>	<u>3.39</u>										
2400	2940	1.17	3179	1.65	3407	2.15	3628	2.66	3839	3.19												
2800	3354	1.66	3562	2.20	3764	2.78	3959	3.37														
3200			3960	2.90																		
3600																						

MAXIMUM RPM: Class I = 3388 Class II = 4000 Outlet Area = 1.186 ft² Max. BHP = 0.057 x (RPM / 1000)³

150MK2 EPLFN (9-Blade)

Wheel Diameter: 15.00"

Fan Efficiency Grade = FEG75

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	<u>1221</u>	<u>0.28</u>																				
1400	<u>1281</u>	<u>0.33</u>	1683	0.70																		
1600	1355	0.39	1705	0.76																		
1800	1438	0.45	<u>1755</u>	<u>0.84</u>	2063	1.31																
2200	1621	0.61	1892	1.06	<u>2148</u>	<u>1.55</u>	2399	2.10	2661	2.74												
2600	1810	0.80	2057	1.32	2281	1.86	<u>2498</u>	<u>2.44</u>	<u>2710</u>	<u>3.07</u>	2924	3.76										
3000	2001	1.03	2240	1.62	2441	2.23	2633	2.85	<u>2821</u>	<u>3.52</u>	<u>3007</u>	<u>4.23</u>	3190	4.97	3376	5.78	3569	6.66				
3400	2197	1.30	2429	1.98	2616	2.65	2792	3.35	2962	4.06	<u>3127</u>	<u>4.79</u>	<u>3293</u>	<u>5.58</u>	<u>3455</u>	<u>6.39</u>	3617	7.25	3780	8.15		
3800	2398	1.63	2618	2.39	2802	3.14	2964	3.90	3121	4.68	3273	5.47	<u>3422</u>	<u>6.28</u>	<u>3570</u>	<u>7.13</u>	<u>3717</u>	<u>8.02</u>	<u>3863</u>	<u>8.93</u>		
4200	2603	2.03	2810	2.85	2991	3.69	3148	4.52	3292	5.36	3434	6.22	3573	7.09	3708	7.98	<u>3842</u>	<u>8.89</u>				
4600	2812	2.50	3004	3.38	3181	4.30	3336	5.22	3474	6.12	3606	7.04	3735	7.98	3863	8.94						
5000	<u>3023</u>	<u>3.05</u>	<u>3203</u>	<u>3.98</u>	<u>3372</u>	<u>4.98</u>	<u>3525</u>	<u>5.98</u>	<u>3662</u>	<u>6.97</u>	<u>3788</u>	<u>7.96</u>	<u>3908</u>	<u>8.95</u>								

MAXIMUM RPM: Class I = 3006 Class II = 3909 Outlet Area = 1.646 ft² Max. BHP = 0.157 x (RPM / 1000)³

150MK2 EPLQN (12-Blade)

Wheel Diameter: 15.00"

Fan Efficiency Grade = FEG71

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	<u>1249</u>	<u>0.31</u>																				
1400	1320	0.36	1676	0.72																		
1600	1398	0.42	<u>1736</u>	<u>0.82</u>	2026	1.25																
1800	1482	0.50	<u>1801</u>	<u>0.92</u>	<u>2077</u>	<u>1.38</u>	2332	1.89														
2200	1665	0.68	1952	1.16	<u>2205</u>	<u>1.69</u>	<u>2436</u>	<u>2.25</u>	<u>2647</u>	<u>2.83</u>	2856	3.46										
2600	1864	0.91	2119	1.46	2354	2.04	2567	2.66	2766	3.32	2954	4.00	3131	4.68	3307	5.42	3490	6.23				
3000	2074	1.19	2301	1.81	2516	2.45	2717	3.13	<u>2903</u>	<u>3.85</u>	<u>3080</u>	<u>4.60</u>	<u>3250</u>	<u>5.38</u>	<u>3411</u>	<u>6.16</u>	<u>3564</u>	<u>6.94</u>	3716	7.76		
3400	2291	1.55	2496	2.24	2691	2.95	2878	3.68	3056	4.45	<u>3222</u>	<u>5.25</u>	<u>3381</u>	<u>6.09</u>	<u>3535</u>	<u>6.95</u>	<u>3685</u>	<u>7.83</u>	<u>3827</u>	<u>8.71</u>		
3800	2514	1.97	2699	2.73	2878	3.52	3051	4.32	3218	5.14	3377	6.00	3529	6.89	<u>3674</u>	<u>7.80</u>	<u>3815</u>	<u>8.74</u>				
4200	2740	2.48	2910	3.31	3075	4.17	3234	5.05	3390	5.94	3540	6.84	3686	7.78	<u>3826</u>	<u>8.76</u>						
4600	2970	3.09	3126	3.98	3278	4.91	3427	5.86	3571	6.83	3713	7.81	3851	8.80								
5000			3346	4.76	3487	5.75	3626	6.77	3761	7.81	3894	8.87										

MAXIMUM RPM: Class I = 3006 Class II = 3909 Outlet Area = 1.646 ft² Max. BHP = 0.157 x (RPM / 1000)³

Performance certified is for installation Type A; Free inlet, Free outlet.
 Power rating (BHP) does not include transmission losses.
 Performance ratings do not include the effects of appurtenances (accessories).
 Underlined figures indicate Maximum Static Efficiency.

165MK2 EPLFN (9-Blade)

Wheel Diameter: 16.50"

Fan Efficiency Grade = FEG75

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1120	<u>0.35</u>																				
1700	1166	<u>0.40</u>	1530	0.84																		
1900	1222	0.46	1544	0.90																		
2100	1282	0.52	1579	<u>0.99</u>	1873	1.55																
2500	1416	0.67	1674	1.18	<u>1920</u>	<u>1.76</u>	2165	2.43														
2900	1558	0.84	1792	1.43	<u>2008</u>	<u>2.04</u>	2219	2.73	2429	3.48												
3300	1700	1.05	1922	1.70	2118	2.38	<u>2307</u>	<u>3.10</u>	<u>2493</u>	<u>3.88</u>	2676	4.71	2863	5.62								
3700	1845	1.29	2061	2.02	2241	2.77	2414	3.54	<u>2582</u>	<u>4.35</u>	2748	5.21	2912	6.12	3076	7.09	3245	8.14				
4500	2143	1.89	2345	2.79	2513	3.68	2661	4.57	2807	5.50	2947	6.44	<u>3085</u>	<u>7.41</u>	<u>3223</u>	<u>8.44</u>	<u>3359</u>	<u>9.50</u>	<u>3493</u>	<u>10.60</u>		
5300	2452	2.70	2634	3.73	2797	4.79	2938	5.84	3066	6.89	3190	7.96	3314	9.06	3433	10.16	3551	11.29	<u>3668</u>	<u>12.46</u>		
6100	2769	3.76	2930	4.90	3083	6.11	3223	7.34	3347	8.54	3461	9.75	<u>3570</u>	<u>10.96</u>	<u>3678</u>	<u>12.21</u>	<u>3785</u>	<u>13.47</u>	<u>3890</u>	<u>14.74</u>		
6900			3235	6.35	3376	7.69	3509	9.08	3631	10.45	3744	11.83	3848	13.19	3946	14.54						

MAXIMUM RPM: Class I = 2668 Class II = 3468 Class III = 4000 Outlet Area = 2.036 ft² Max. BHP = 0.252 x (RPM / 1000)³

165MK2 EPLQN (12-Blade)

Wheel Diameter: 16.50"

Fan Efficiency Grade = FEG71

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1148	<u>0.38</u>	1496	0.79																		
1700	1202	0.44	<u>1525</u>	<u>0.87</u>																		
1900	1260	0.50	<u>1570</u>	<u>0.97</u>	1838	1.49																
2100	1322	0.57	<u>1618</u>	<u>1.07</u>	<u>1872</u>	<u>1.62</u>	2115	2.23														
2500	1456	0.74	1727	1.30	<u>1963</u>	<u>1.92</u>	<u>2177</u>	<u>2.56</u>	2378	3.25												
2900	1601	0.95	1847	1.57	2069	2.24	<u>2270</u>	<u>2.96</u>	<u>2458</u>	<u>3.72</u>	2633	4.48	2807	5.31								
3300	1754	1.20	1978	1.89	2185	2.61	<u>2375</u>	<u>3.39</u>	<u>2552</u>	<u>4.21</u>	2721	5.07	2879	5.93	3031	6.81	3184	7.76	3344	8.81		
3700	1913	1.50	2117	2.26	2310	3.05	2491	3.88	<u>2659</u>	<u>4.76</u>	<u>2818</u>	<u>5.68</u>	<u>2971</u>	<u>6.63</u>	<u>3117</u>	<u>7.59</u>	<u>3255</u>	<u>8.55</u>	3391	9.55		
4500	2244	2.28	2416	3.17	2581	4.11	2741	5.07	2895	6.05	3041	7.07	3180	8.13	<u>3313</u>	<u>9.22</u>	<u>3443</u>	<u>10.35</u>	<u>3569</u>	<u>11.50</u>		
5300	2585	3.32	2733	4.35	2878	5.43	3018	6.54	3155	7.66	3288	8.79	3417	9.95	3542	11.15	3662	12.38	3779	13.65		
6100			3063	5.86	3190	7.07	3315	8.31	3438	9.59	3557	10.87	3675	12.16	3790	13.46	3903	14.80				
6900			3400	7.73	3514	9.07	<u>3627</u>	<u>10.46</u>	<u>3737</u>	<u>11.86</u>	3846	13.30	3953	14.76								

MAXIMUM RPM: Class I = 2668 Class II = 3468 Class III = 4000 Outlet Area = 2.036 ft² Max. BHP = 0.254 x (RPM / 1000)³

182MK2 EPLFN (9-Blade)

Wheel Diameter: 18.25"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	1086	<u>0.57</u>																				
2800	1136	0.64	1426	<u>1.27</u>																		
3100	1190	0.73	1467	<u>1.40</u>																		
3400	1246	0.82	<u>1515</u>	<u>1.54</u>	1743	2.32																
4000	1368	1.05	1614	1.85	<u>1829</u>	<u>2.71</u>	<u>2021</u>	<u>3.63</u>														
4600	1495	1.30	1723	2.20	1925	3.15	2109	4.16	<u>2276</u>	<u>5.20</u>												
5200	1627	1.61	1840	2.60	2030	3.65	2205	4.74	<u>2367</u>	<u>5.88</u>	2516	7.05	2664	8.29								
5800	1763	1.97	1964	3.07	2141	4.19	2307	5.38	2463	6.61	<u>2610</u>	<u>7.89</u>	<u>2745</u>	<u>9.17</u>	2877	10.50						
7000	2044	2.86	2222	4.17	2384	5.51	2532	6.87	2673	8.27	2807	9.71	2937	11.20	<u>3061</u>	<u>12.72</u>	<u>3180</u>	<u>14.27</u>	<u>3292</u>	<u>15.82</u>		
8200	2334	4.04	2492	5.56	2640	7.11	2777	8.68	2905	10.25	3028	11.86	3147	13.52	3262	15.21	3374	16.94	3483	18.70		
9400	2631	5.56	2772	7.28	2906	9.03	<u>3034</u>	<u>10.82</u>	<u>3154</u>	<u>12.62</u>	<u>3268</u>	<u>14.42</u>	<u>3377</u>	<u>16.23</u>	<u>3483</u>	<u>18.08</u>	<u>3587</u>	<u>19.98</u>	<u>3689</u>	<u>21.92</u>		
10600			<u>3059</u>	<u>9.38</u>	<u>3181</u>	<u>11.33</u>	<u>3299</u>	<u>13.33</u>	<u>3411</u>	<u>15.33</u>	<u>3519</u>	<u>17.36</u>	<u>3622</u>	<u>19.39</u>	<u>3721</u>	<u>21.42</u>						

MAXIMUM RPM: Class I = 2302 Class II = 2930 Class III = 3767 Outlet Area = 2.59 ft² Max. BHP = 0.444 x (RPM / 1000)³

182MK2 EPLQN (12-Blade)

Wheel Diameter: 18.25"

Fan Efficiency Grade = FEG75

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	1093	0.59	1380	1.19																		
2800	1151	0.67	1420	<u>1.31</u>																		
3100	1212	0.77	<u>1468</u>	<u>1.45</u>	1694	2.21																
3400	1277	0.87	<u>1520</u>	<u>1.59</u>	<u>1735</u>	<u>2.39</u>																
4000	1412	1.11	1635	1.93	<u>1833</u>	<u>2.81</u>	<u>2014</u>	<u>3.74</u>	2187	4.75												
4600	1552	1.4	1760	2.31	1944	3.28	2113	4.30	<u>2272</u>	<u>5.38</u>	2423	6.5	2574	7.68								
5200	1697	1.74	1893	2.75	2064	3.82	2223	4.93	<u>2372</u>	<u>6.08</u>	<u>2515</u>	<u>7.29</u>	<u>2651</u>	<u>8.54</u>	2783	9.82	2917	11.17				
5800	1846	2.15	2030	3.26	2192	4.42	2342	5.63	2483	6.87	<u>2617</u>	<u>8.15</u>	<u>2747</u>	<u>9.48</u>	<u>2871</u>	<u>10.85</u>	<u>2991</u>	<u>12.25</u>	3110	13.71		
7000	2155	3.18	2314	4.5	2462	5.85	2598	7.25	2725	8.68	2847	10.14	2964	11.64	<u>3077</u>	<u>13.18</u>	<u>3187</u>	<u>14.75</u>	<u>3295</u>	<u>16.36</u>	<u>3500</u>	<u>19.65</u>
8200	2472	4.56	2610	6.06	2744	7.63	2870	9.22	2988	10.84	3100	12.5	3207	14.18	3311	15.9	3412	17.64	3511	19.43	<u>3701</u>	<u>23.06</u>
9400			2917	8.04	3036	9.79	3152	11.59	3263	13.42	3368	15.27	3468	17.15	3564	19.04	3658	20.98	3749	22.93		
10600			<u>3231</u>	<u>10.47</u>	<u>3338</u>	<u>12.42</u>	<u>3443</u>	<u>14.42</u>	<u>3546</u>	<u>16.45</u>	<u>3645</u>	<u>18.51</u>	<u>3740</u>	<u>20.58</u>								

MAXIMUM RPM: Class I = 2302 Class II = 2930 Class III = 3767 Outlet Area = 2.59 ft² Max. BHP = 0.458 x (RPM / 1000)³

Performance certified is for installation Type A; Free inlet, Free outlet.
 Power rating (BHP) does not include transmission losses.

200MK2 EPLFN (9-Blade)

Wheel Diameter: 20.00"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	991	0.68																				
3400	1042	0.79	1305	1.54																		
3800	1096	0.90	<u>1348</u>	<u>1.72</u>																		
4200	1155	1.03	<u>1396</u>	<u>1.91</u>	1601	2.86																
4600	1216	1.17	1446	2.11	<u>1645</u>	<u>3.12</u>																
5400	1344	1.51	1554	2.56	1741	3.69	1910	4.88	2065	6.12												
6200	1477	1.91	1672	3.09	1846	4.34	2006	5.65	<u>2155</u>	<u>7.02</u>	<u>2291</u>	<u>8.40</u>										
7000	1614	2.38	1798	3.72	1959	5.07	2110	6.50	2252	7.99	<u>2385</u>	<u>9.51</u>	2509	11.07	2629	12.67						
7800	1756	2.95	1927	4.42	2080	5.91	2221	7.45	2355	9.04	2483	10.70	<u>2605</u>	<u>12.39</u>	<u>2720</u>	<u>14.11</u>	<u>2829</u>	<u>15.85</u>	<u>2936</u>	<u>17.64</u>		
9400	2047	4.38	2197	6.12	2335	7.90	2463	9.70	2583	11.52	2698	13.39	2810	15.32	2918	17.30	3022	19.30	<u>3123</u>	<u>21.35</u>		
11000	2346	6.28	2478	8.29	2603	10.36	2721	12.45	2832	14.55	2937	16.66	3038	18.80	3137	20.99	3233	23.23	<u>3327</u>	<u>25.51</u>		
12600			<u>2767</u>	<u>11.01</u>	<u>2880</u>	<u>13.34</u>	<u>2988</u>	<u>15.71</u>	<u>3091</u>	<u>18.10</u>	<u>3190</u>	<u>20.51</u>	<u>3285</u>	<u>22.93</u>	<u>3376</u>	<u>25.36</u>						

MAXIMUM RPM: Class I = 2101 Class II = 2674 Class III = 3438 Outlet Area = 3.11 ft² Max. BHP = 0.701 x (RPM / 1000)³

200MK2 EPLQN (12-Blade)

Wheel Diameter: 20.00"

Fan Efficiency Grade = FEG75

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	997	0.71	1259	1.43																		
3400	1056	0.82	<u>1300</u>	<u>1.59</u>																		
3800	1119	0.95	<u>1350</u>	<u>1.78</u>	1553	2.70																
4200	1185	1.09	<u>1403</u>	<u>1.97</u>	<u>1597</u>	<u>2.95</u>	1777	4.00														
4600	1253	1.24	1462	2.20	<u>1646</u>	<u>3.22</u>	<u>1815</u>	<u>4.33</u>														
5400	1394	1.61	1586	2.69	1756	3.84	<u>1912</u>	<u>5.05</u>	<u>2059</u>	<u>6.32</u>	2198	7.65										
6200	1540	2.06	1720	3.27	1876	4.54	2022	5.87	<u>2159</u>	<u>7.25</u>	<u>2290</u>	<u>8.70</u>	2414	10.19	2535	11.72						
7000	1691	2.60	1858	3.95	2006	5.34	2142	6.80	2271	8.30	<u>2393</u>	<u>9.85</u>	<u>2511</u>	<u>11.45</u>	<u>2624</u>	<u>13.09</u>	<u>2733</u>	<u>14.78</u>	<u>2841</u>	<u>16.53</u>		
7800	1847	3.25	2001	4.73	2142	6.26	2270	7.84	2391	9.46	2507	11.13	<u>2617</u>	<u>12.83</u>	<u>2725</u>	<u>14.59</u>	<u>2830</u>	<u>16.40</u>	<u>2931</u>	<u>18.24</u>	3125	22.04
9400	2165	4.91	2297	6.65	2423	8.45	2541	10.29	2651	12.17	2755	14.08	2855	16.03	2953	18.03	3047	20.05	<u>3139</u>	<u>22.11</u>	<u>3317</u>	<u>26.35</u>
11000			<u>2605</u>	<u>9.14</u>	<u>2716</u>	<u>11.20</u>	<u>2824</u>	<u>13.31</u>	<u>2926</u>	<u>15.45</u>	<u>3023</u>	<u>17.62</u>	<u>3116</u>	<u>19.84</u>	<u>3205</u>	<u>22.08</u>	<u>3291</u>	<u>24.33</u>	<u>3376</u>	<u>26.65</u>		
12600			<u>2922</u>	<u>12.29</u>	<u>3021</u>	<u>14.62</u>	<u>3118</u>	<u>16.99</u>	<u>3212</u>	<u>19.40</u>	<u>3303</u>	<u>21.85</u>	<u>3390</u>	<u>24.32</u>								

MAXIMUM RPM: Class I = 2101 Class II = 2674 Class III = 3438 Outlet Area = 3.11 ft² Max. BHP = 0.724 x (RPM / 1000)³

222MK2 EPLFN (9-Blade)

Wheel Diameter: 22.25"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3500	856	0.76																				
4000	900	0.88																				
4500	947	1.01	1172	1.93																		
5000	998	1.16	1215	2.16	<u>1399</u>	<u>3.22</u>																
6000	1106	1.48	1305	2.66	1477	3.88	1630	5.13														
7000	1221	1.88	1403	3.22	1565	4.61	1712	6.05	1843	7.47												
8000	1340	2.36	1510	3.85	1661	5.42	1800	7.02	1929	8.66	<u>2046</u>	<u>10.27</u>	2160	11.96								
9000	1464	2.93	1622	4.58	1763	6.30	1895	8.08	2018	9.89	2134	11.73	<u>2241</u>	<u>13.54</u>	<u>2343</u>	<u>15.39</u>	<u>2444</u>	<u>17.31</u>				
10000	1590	3.61	1738	5.41	1872	7.29	1995	9.23	2112	11.20	2223	13.20	2329	15.24	2429	17.28	<u>2524</u>	<u>19.32</u>	<u>2615</u>	<u>21.37</u>		
12000	1849	5.30	1980	7.43	2100	9.62	2212	11.87	2317	14.17	2418	16.51	2515	18.87	2609	21.27	2700	23.69	2788	26.14		
14000	2114	7.54	2231	10.00	2339	12.50	2441	15.05	2538	17.65	2631	20.32	2720	23.02	2807	25.77	2891	28.52	<u>2973</u>	<u>31.30</u>		
16000			<u>2488</u>	<u>13.19</u>	<u>2587</u>	<u>16.03</u>	<u>2681</u>	<u>18.90</u>	<u>2770</u>	<u>21.80</u>	<u>2857</u>	<u>24.78</u>	<u>2940</u>	<u>27.79</u>	<u>3020</u>	<u>30.84</u>						

MAXIMUM RPM: Class I = 1888 Class II = 2403 Class III = 3090 Outlet Area = 3.84 ft² Max. BHP = 1.207 x (RPM / 1000)³

222MK2 EPLQN (12-Blade)

Wheel Diameter: 22.25"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3500	848	0.78																				
4000	901	0.92	1122	1.79																		
4500	956	1.06	<u>1158</u>	<u>2.00</u>	1354	3.07																
5000	1015	1.23	<u>1204</u>	<u>2.24</u>	1381	3.35																
6000	1139	1.62	1312	2.80	<u>1463</u>	<u>4.02</u>	<u>1610</u>	<u>5.35</u>	1757	6.78												
7000	1270	2.11	1427	3.43	1568	4.83	<u>1696</u>	<u>6.26</u>	<u>1822</u>	<u>7.78</u>	1948	9.40	2074	11.11								
8000	1406	2.72	1549	4.18	1680	5.73	1802	7.34	1914	8.97	<u>2023</u>	<u>10.66</u>	<u>2134</u>	<u>12.46</u>	2244	14.34	2354	16.28				
9000	1545	3.44	1677	5.06	1799	6.76	1913	8.53	2020	10.33	<u>2121</u>	<u>12.16</u>	<u>2218</u>	<u>14.03</u>	<u>2316</u>	<u>15.99</u>	<u>2415</u>	<u>18.04</u>	2512	20.14	2709	24.59
10000	1686	4.29	1810	6.10	1922	7.92	2030	9.85	2131	11.81	2229	13.83	2320	15.84	2409	17.91	2496	20.01	2584	22.20	<u>2761</u>	<u>26.81</u>
12000	1972	6.43	2084	8.64	2183	10.78	2277	12.97	2369	15.25	2456	17.57	2541	19.94	2623	22.34	2702	24.75	2778	27.18	<u>2925</u>	<u>32.12</u>
14000			<u>2364</u>	<u>11.87</u>	<u>2455</u>	<u>14.40</u>	<u>2540</u>	<u>16.92</u>	<u>2622</u>	<u>19.47</u>	<u>2701</u>	<u>22.07</u>	<u>2778</u>	<u>24.73</u>	<u>2853</u>	<u>27.44</u>	<u>2927</u>	<u>30.21</u>	<u>2998</u>	<u>32.98</u>		
16000			<u>2649</u>	<u>15.90</u>	<u>2733</u>	<u>18.83</u>	<u>2812</u>	<u>21.73</u>	<u>2887</u>	<u>24.62</u>	<u>2959</u>	<u>27.51</u>	<u>3029</u>	<u>30.44</u>								

245MK2 EPLFN (9-Blade)

Wheel Diameter: 24.50"

Fan Efficiency Grade = FEG85

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4400	790	0.93	1021	1.92																		
5000	831	1.07	1047	2.13																		
5600	877	1.23	<u>1079</u>	<u>2.36</u>	1258	3.63																
6200	926	1.41	<u>1115</u>	<u>2.60</u>	1286	3.96	1442	5.40														
7400	1031	1.83	1200	3.18	<u>1354</u>	<u>4.67</u>	1497	6.27	1632	7.96	1759	9.73										
8600	1140	2.35	1295	3.87	1435	5.49	<u>1567</u>	<u>7.23</u>	1691	9.06	1810	10.99	1924	13.00	2034	15.08						
9800	1250	2.95	1399	4.68	1526	6.44	1648	8.33	<u>1763</u>	<u>10.30</u>	<u>1874</u>	<u>12.37</u>	1981	14.52	2084	16.74	2184	19.03	2281	21.39		
11000	1364	3.67	1506	5.61	1626	7.55	1738	9.58	1845	11.69	<u>1949</u>	<u>13.89</u>	<u>2049</u>	<u>16.18</u>	<u>2146</u>	<u>18.54</u>	<u>2240</u>	<u>20.97</u>	<u>2332</u>	<u>23.48</u>		
12200	1481	4.53	1615	6.66	1731	8.81	1835	10.99	1935	13.24	2032	15.58	<u>2126</u>	<u>18.00</u>	<u>2218</u>	<u>20.51</u>	<u>2307</u>	<u>23.08</u>	<u>2394</u>	<u>25.73</u>		
14600	1720	6.71	1838	9.19	1947	11.77	2045	14.36	2134	16.93	2219	19.55	2302	22.25	2384	25.03	2464	27.87	2543	30.80		
17000	1966	9.63	2069	12.41	2168	15.36	<u>2261</u>	<u>18.38</u>	<u>2347</u>	<u>21.40</u>	<u>2426</u>	<u>24.38</u>	2501	27.39	2574	30.45	2646	33.58	2717	36.78		
19400			<u>2307</u>	<u>16.50</u>	<u>2396</u>	<u>19.76</u>	<u>2482</u>	<u>23.15</u>	<u>2564</u>	<u>26.61</u>	<u>2641</u>	<u>30.05</u>	<u>2713</u>	<u>33.47</u>	<u>2781</u>	<u>36.87</u>						

MAXIMUM RPM: Class I = 1715 Class II = 2183 Class III = 2806 Outlet Area = 4.66 ft² Max. BHP = 1.88 x (RPM / 1000)³

245MK2 EPLQN (12-Blade)

Wheel Diameter: 24.50"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4400	779	0.96																				
5000	824	1.11	<u>1026</u>	<u>2.19</u>																		
5600	875	1.29	<u>1061</u>	<u>2.44</u>	1234	3.73																
6200	929	1.49	<u>1100</u>	<u>2.71</u>	<u>1261</u>	<u>4.07</u>																
7400	1043	1.98	1192	3.33	<u>1334</u>	<u>4.84</u>	1469	6.46	1598	8.16												
8600	1157	2.53	1299	4.11	1423	5.73	<u>1545</u>	<u>7.51</u>	<u>1662</u>	<u>9.37</u>	<u>1774</u>	<u>11.31</u>	1886	13.35								
9800	1275	3.20	1412	5.03	1524	6.79	1633	8.69	1740	10.71	1844	12.81	1944	14.97	2042	17.21	2140	19.53				
11000	1395	3.99	1525	6.05	1634	8.05	1732	10.06	1829	12.20	<u>1924</u>	<u>14.43</u>	<u>2018</u>	<u>16.78</u>	<u>2110</u>	<u>19.19</u>	<u>2198</u>	<u>21.62</u>	<u>2285</u>	<u>24.13</u>	<u>2462</u>	<u>29.43</u>
12200	1519	4.95	1640	7.20	1748	9.48	1840	11.66	1928	13.91	2015	16.26	2102	18.75	<u>2187</u>	<u>21.30</u>	<u>2271</u>	<u>23.93</u>	<u>2353</u>	<u>26.61</u>	<u>2510</u>	<u>32.05</u>
14600	1770	7.35	1877	9.98	1976	12.72	2066	15.44	2147	18.08	2222	20.70	2295	23.38	2368	26.17	2441	29.06	2514	32.06	<u>2656</u>	<u>38.22</u>
17000	2026	10.54	2121	13.55	<u>2211</u>	<u>16.67</u>	<u>2295</u>	<u>19.85</u>	<u>2374</u>	<u>23.04</u>	<u>2447</u>	<u>26.16</u>	2515	29.24	2579	32.28	2642	35.38	2704	38.54		
19400			<u>2371</u>	<u>18.05</u>	<u>2452</u>	<u>21.52</u>	<u>2530</u>	<u>25.11</u>	<u>2604</u>	<u>28.74</u>	<u>2675</u>	<u>32.41</u>	<u>2742</u>	<u>36.03</u>	<u>2804</u>	<u>39.54</u>						

MAXIMUM RPM: Class I = 1715 Class II = 2183 Class III = 2806 Outlet Area = 4.66 ft² Max. BHP = 2.04 x (RPM / 1000)³

270MK2 EPLFN (9-Blade)

Wheel Diameter: 27.00"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	705	1.07																				
5800	743	1.24	952	2.55																		
6600	787	1.44	978	2.83																		
7400	835	1.68	<u>1012</u>	<u>3.15</u>	1174	4.84																
8200	885	1.94	<u>1051</u>	<u>3.51</u>	<u>1202</u>	<u>5.27</u>	1346	7.22														
9000	937	2.24	1095	3.92	<u>1236</u>	<u>5.74</u>	1371	7.78	1501	9.95												
10600	1045	2.92	1189	4.84	1317	6.86	<u>1437</u>	<u>9.02</u>	1553	11.36	1665	13.85	1776	16.45								
12200	1157	3.75	1291	5.93	1409	8.18	1519	10.53	<u>1623</u>	<u>12.98</u>	<u>1725</u>	<u>15.61</u>	1824	18.37	1921	21.25	2017	24.23	2114	27.32		
13800	1273	4.75	1397	7.20	1507	9.68	1610	12.26	1707	14.92	1800	17.67	1891	20.56	1980	23.59	2067	26.73	2153	29.98		
17000	1511	7.34	1618	10.32	1718	13.36	1809	16.40	1895	19.50	1977	22.66	2057	25.93	2134	29.25	<u>2209</u>	<u>32.65</u>	<u>2284</u>	<u>36.21</u>		
20200	1757	10.89	1850	14.40	<u>2022</u>	<u>21.54</u>	<u>2101</u>	<u>25.17</u>	<u>2175</u>	<u>28.78</u>	<u>2247</u>	<u>32.47</u>	<u>2317</u>	<u>36.23</u>	<u>2385</u>	<u>40.05</u>	<u>2452</u>	<u>43.96</u>				
23400			<u>2089</u>	<u>19.59</u>	<u>2168</u>	<u>23.69</u>	<u>2243</u>	<u>27.78</u>	<u>2316</u>	<u>31.94</u>	<u>2386</u>	<u>36.14</u>	<u>2453</u>	<u>40.36</u>	<u>2517</u>	<u>44.56</u>						

MAXIMUM RPM: Class I = 1556 Class II = 1981 Class III = 2546 Outlet Area = 5.67 ft² Max. BHP = 3.04 x (RPM / 1000)³

270MK2 EPLQN (12-Blade)

Wheel Diameter: 27.00"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	698	1.11																				
5800	741	1.30	927	2.57																		
6600	790	1.53	<u>964</u>	<u>2.92</u>	1119	4.43																
7400	842	1.78	<u>1004</u>	<u>3.28</u>	<u>1148</u>	<u>4.91</u>																
8200	897	2.07	1048	3.68	<u>1186</u>	<u>5.43</u>	<u>1311</u>	<u>7.27</u>														
9000	953	2.38	1096	4.12	<u>1226</u>	<u>5.98</u>	<u>1347</u>	<u>7.95</u>	1460	10.00												
10600	1071	3.15	1200	5.13	1317	7.23	<u>1427</u>	<u>9.42</u>	<u>1532</u>	<u>11.71</u>	<u>1630</u>	<u>14.06</u>	<u>1725</u>	<u>16.48</u>	1823	19.02						
12200	1192	4.09	1310	6.31	1417	8.64	1518	11.07	1614	13.58	<u>1707</u>	<u>16.18</u>	<u>1796</u>	<u>18.86</u>	<u>1880</u>	<u>21.56</u>	<u>1963</u>	<u>24.35</u>	<u>2047</u>	<u>27.24</u>		
13800	1316	5.23	1425	7.70	1525	10.28	1618	12.95	1707	15.70	1793	18.53	<u>1876</u>	<u>21.42</u>	<u>1956</u>	<u>24.36</u>	<u>2034</u>	<u>27.39</u>	<u>2109</u>	<u>30.47</u>	<u>2256</u>	<u>36.81</u>
17000	1569	8.21	1667	11.25	1753	14.30	1835	17.44	1913	20.66	1988	23.97	2061	27.35	2132	30.78	2201	34.25	2269	37.79	<u>2401</u>	<u>45.06</u>
20200	1828	12.31	1915	15.90	<u>1994</u>	<u>19.51</u>	<u>2066</u>	<u>23.11</u>	<u>2136</u>	<u>26.81</u>	<u>2204</u>	<u>30.59</u>	<u>2269</u>	<u>34.42</u>	<u>2333</u>	<u>38.36</u>	<u>2395</u>	<u>42.33</u>	<u>2456</u>	<u>4</u>		

300MK2 EPLFN (9-Blade)

Wheel Diameter: 30.00"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	627	1.27																				
7000	662	1.49	847	3.05																		
8000	702	1.73	872	3.40	1025	5.31																
9000	746	2.01	904	3.82	1047	5.81	1179	8.03														
10000	794	2.35	940	4.26	1074	6.37	1200	8.68	1317	11.17												
11000	842	2.70	980	4.74	1106	6.99	1225	9.40	1337	11.96	1443	14.70										
13000	941	3.56	1068	5.87	1181	8.36	1287	11.01	1390	13.83	1488	16.75	1582	19.82	1672	23.02						
15000	1041	4.58	1164	7.24	1266	9.96	1363	12.85	1456	15.91	1546	19.09	1633	22.36	1718	25.77	1800	29.30	1879	32.93		
17000	1144	5.82	1262	8.82	1359	11.83	1448	14.97	1533	18.23	1616	21.67	1696	25.20	1775	28.86	1851	32.56	1926	36.40		
21000	1359	9.10	1461	12.70	1555	16.45	1636	20.16	1709	23.89	1781	27.79	1851	31.80	1919	35.93	1986	40.19	2051	44.49		
25000	1582	13.67	1668	17.79	1753	22.16	1832	26.61	1903	31.03	1968	35.45	2030	39.95	2090	44.53	2150	49.26	2208	54.03		
29000			1884	24.42	1958	29.32	2031	34.41	2100	39.56	2165	44.76	2224	49.88	2279	54.97						

MAXIMUM RPM: Class I = 1401 Class II = 1783 Class III = 2291 Outlet Area = 7.00 ft² Max. BHP = 5.17 x (RPM / 1000)³

300MK2 EPLQN (12-Blade)

Wheel Diameter: 30.00"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	621	1.33																				
7000	657	1.55	845	3.17																		
8000	699	1.81	865	3.55																		
9000	745	2.12	895	3.97	1042	6.05																
10000	794	2.46	933	4.44	1065	6.65	1196	9.02														
11000	845	2.86	974	4.94	1095	7.27	1216	9.80	1335	12.47												
13000	949	3.81	1067	6.17	1173	8.70	1275	11.46	1377	14.40	1478	17.40	1579	20.63								
15000	1056	4.96	1166	7.63	1262	10.42	1354	13.39	1443	16.55	1531	19.88	1619	23.29	1707	26.80	1795	30.51				
17000	1167	6.37	1269	9.38	1360	12.47	1443	15.66	1524	19.03	1603	22.58	1680	26.24	1757	30.02	1835	33.91	1913	37.89	2068	46.31
21000	1394	9.97	1482	13.78	1563	17.47	1638	21.24	1708	25.11	1775	29.08	1841	33.19	1906	37.44	1970	41.84	2033	46.35	2158	55.65
25000	1626	14.85	1704	19.50	1776	23.98	1844	28.36	1909	32.82	1971	37.41	2029	42.00	2086	46.72	2141	51.48	2196	56.38		
29000			1931	26.73	1996	32.06	2058	37.24	2117	42.32	2174	47.43	2229	52.65	2282	57.96						

MAXIMUM RPM: Class I = 1401 Class II = 1783 Class III = 2291 Outlet Area = 7.00 ft² Max. BHP = 5.54 x (RPM / 1000)³

330MK2 EPLFN (9-Blade)

Wheel Diameter: 33.00"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7000	564	1.49																				
8000	589	1.70	762	3.52																		
9000	617	1.92	779	3.86																		
11000	682	2.47	824	4.65	954	7.09	1073	9.77														
13000	754	3.15	881	5.57	998	8.27	1107	11.13	1211	14.24	1308	17.51										
15000	828	3.97	946	6.67	1052	9.59	1152	12.72	1247	15.99	1339	19.47	1426	23.11	1510	26.94						
17000	903	4.92	1016	7.93	1113	11.08	1205	14.45	1294	18.03	1379	21.71	1461	25.53	1541	29.57	1617	33.70	1692	38.06		
19000	979	6.04	1090	9.41	1180	12.81	1265	16.39	1347	20.18	1427	24.18	1504	28.25	1578	32.40	1651	36.75	1722	41.25		
23000	1137	8.86	1238	12.89	1324	16.94	1400	21.07	1471	25.28	1541	29.70	1609	34.29	1675	39.00	1740	43.84	1804	48.80		
27000	1302	12.66	1389	17.21	1472	21.99	1546	26.81	1611	31.57	1673	36.45	1734	41.49	1794	46.70	1852	51.99	1909	57.42		
31000	1470	17.56	1547	22.67	1622	28.03	1693	33.53	1758	39.05	1817	44.55	1872	50.05	1926	55.71	1979	61.48	2031	67.34		
35000			1709	29.38	1776	35.27	1843	41.45	1906	47.68	1964	53.87	2018	60.07	2069	66.30						

MAXIMUM RPM: Class I = 1273 Class II = 1620 Class III = 2083 Outlet Area = 8.46 ft² Max. BHP = 8.32 x (RPM / 1000)³

330MK2 EPLQN (12-Blade)

Wheel Diameter: 33.00"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7000	559	1.55																				
8000	583	1.76																				
9000	613	2.00	775	4.03																		
11000	681	2.59	816	4.84	949	7.39																
13000	756	3.33	876	5.82	988	8.61	1100	11.60														
15000	833	4.22	943	6.97	1044	9.99	1140	13.22	1238	16.68	1334	20.26										
17000	913	5.30	1017	8.36	1108	11.58	1196	15.07	1281	18.75	1366	22.58	1452	26.58	1537	30.77						
19000	995	6.57	1093	9.95	1178	13.43	1259	17.14	1337	21.05	1413	25.14	1489	29.39	1566	33.78	1642	38.25	1718	42.96		
23000	1164	9.72	1250	13.84	1328	17.92	1399	22.13	1466	26.45	1533	31.04	1597	35.72	1660	40.58	1723	45.62	1786	50.78	1913	61.39
27000	1336	13.81	1413	18.77	1484	23.54	1550	28.32	1612	33.24	1671	38.28	1728	43.43	1784	48.71	1840	54.22	1894	59.79	2001	71.38
31000	1511	19.04	1581	24.83	1646	30.44	1706	35.83	1764	41.32	1820	47.00	1872	52.65	1923	58.46	1972	64.29	2022	70.42		
35000			1751	32.13	1811	38.60	1868	44.89	1921	50.97	1973	57.16	2023	63.45	2071	69.85						

MAXIMUM RPM: Class I = 1273 Class II = 1620 Class III = 2083 Outlet Area = 8.46 ft² Max. BHP = 8.92 x (RPM / 1000)³

Performance certified is for installation Type A; Free inlet, Free outlet.
 Power rating (BHP) does not include transmission losses.
 Performance ratings do not include the effects of appurtenances (accessories).
 Underlined figures indicate Maximum Static Efficiency.

365MK2 EPLFN (9-Blade)

Wheel Diameter: 36.50"

Fan Efficiency Grade = FEG85

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	491	<u>1.66</u>																				
9200	511	<u>1.90</u>																				
10400	534	2.16	682	4.34																		
11600	560	2.46	698	<u>4.78</u>																		
14000	615	3.12	741	<u>5.79</u>	852	<u>8.67</u>																
16400	676	3.92	791	6.92	893	<u>10.15</u>	987	13.51	1078	17.13												
18800	741	4.88	846	8.23	941	11.77	<u>1029</u>	<u>15.53</u>	<u>1111</u>	<u>19.35</u>	1191	23.40										
23600	880	7.40	967	11.40	1050	15.64	1128	20.01	1201	24.54	<u>1271</u>	<u>29.26</u>	<u>1338</u>	<u>34.05</u>	<u>1403</u>	<u>38.93</u>	<u>1466</u>	<u>43.90</u>	<u>1529</u>	<u>49.14</u>		
28400	1026	10.93	1099	15.45	1171	20.39	1240	25.45	1307	30.67	1371	36.04	1431	41.44	1490	47.06	<u>1547</u>	<u>52.76</u>	<u>1603</u>	<u>58.58</u>		
33200	1176	15.63	1239	20.71	1301	26.17	1363	32.00	1422	37.86	1480	43.85	1537	50.01	1592	56.30	1644	62.59	1695	69.03		
38000			1384	27.37	1439	33.38	<u>1493</u>	<u>39.71</u>	<u>1547</u>	<u>46.34</u>	<u>1599</u>	<u>53.02</u>	<u>1651</u>	<u>59.88</u>	<u>1702</u>	<u>66.84</u>	<u>1751</u>	<u>73.80</u>	<u>1799</u>	<u>80.90</u>		
42800			<u>1532</u>	<u>35.59</u>	<u>1581</u>	<u>42.14</u>	<u>1630</u>	<u>49.03</u>	<u>1678</u>	<u>56.19</u>	<u>1726</u>	<u>63.62</u>	<u>1773</u>	<u>71.16</u>	<u>1819</u>	<u>78.74</u>	<u>1865</u>	<u>86.48</u>				

MAXIMUM RPM: Class I = 1151 Class II = 1465 Class III = 1884 Outlet Area = 10.35 ft² Max. BHP = 14.26 x (RPM / 1000)³

365MK2 EPLQN (12-Blade)

Wheel Diameter: 36.50"

Fan Efficiency Grade = FEG80

CFM	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP		12" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	486	1.72																				
9200	506	<u>1.96</u>																				
10400	535	2.27																				
11600	566	2.61	691	<u>4.97</u>																		
14000	630	3.36	739	6.04	843	<u>9.00</u>																
16400	698	4.27	800	7.36	<u>887</u>	<u>10.52</u>	<u>977</u>	<u>14.04</u>														
18800	767	5.34	863	8.81	946	12.40	<u>1022</u>	<u>16.10</u>	<u>1099</u>	<u>20.06</u>												
23600	912	8.13	998	12.39	1073	16.77	1141	21.24	1205	25.81	<u>1264</u>	<u>30.36</u>	<u>1325</u>	<u>35.24</u>	<u>1388</u>	<u>40.37</u>						
28400	1061	11.88	1139	16.98	1208	22.15	1271	27.42	1329	32.74	1385	38.19	1438	43.67	1488	49.15	<u>1537</u>	<u>54.72</u>	<u>1587</u>	<u>60.53</u>	<u>1692</u>	<u>72.93</u>
33200	1213	16.79	1284	22.73	1348	28.73	1407	34.81	1461	40.88	1513	47.13	1562	53.39	1610	59.77	1656	66.16	1699	72.43	<u>1784</u>	<u>85.42</u>
38000	1367	23.04	1432	29.84	1492	36.72	1546	43.52	1598	50.48	1647	57.48	1693	64.49	1738	71.68	1781	78.87	1823	86.13		
42800			<u>1583</u>	<u>38.54</u>	<u>1638</u>	<u>46.20</u>	<u>1690</u>	<u>53.94</u>	<u>1738</u>	<u>61.63</u>	<u>1784</u>	<u>69.39</u>	<u>1829</u>	<u>77.31</u>	<u>1871</u>	<u>85.16</u>						

MAXIMUM RPM: Class I = 1151 Class II = 1465 Class III = 1884 Outlet Area = 10.35 ft² Max. BHP = 15.14 x (RPM / 1000)³

402 EPLFN (9-Blade)

Wheel Diameter: 40.25"

Fan Efficiency Grade = FEG85

CFM	OV	1" SP		1.5" SP		2" SP		2.5" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		8.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	794	<u>448</u>	<u>2.06</u>																				
13300	1056	494	2.77	<u>562</u>	<u>4.11</u>	<u>624</u>	<u>5.50</u>																
16600	1318	550	3.66	611	5.23	666	6.86	718	8.55	768	10.30												
19900	1580	612	4.75	666	6.54	717	8.41	764	10.32	<u>809</u>	<u>12.30</u>	<u>895</u>	<u>16.42</u>										
23200	1842	679	6.08	727	8.11	773	10.20	817	12.35	859	14.57	<u>937</u>	<u>19.12</u>	1012	23.90	1083	28.79						
26500	2104	749	7.70	792	9.95	834	12.30	874	14.66	914	17.14	987	22.13	<u>1056</u>	<u>27.35</u>	<u>1123</u>	<u>32.82</u>	<u>1186</u>	<u>38.26</u>	<u>1248</u>	<u>43.95</u>	1279	46.92
29800	2366	822	9.69	861	12.14	899	14.71	936	17.35	972	20.01	1042	25.54	1107	31.20	<u>1168</u>	<u>36.97</u>	<u>1228</u>	<u>43.01</u>	<u>1286</u>	<u>49.15</u>	1314	52.21
33100	2628	897	12.09	932	14.71	966	17.44	1000	20.30	1034	23.27	1099	29.24	1161	35.37	1220	41.69	1276	48.11				
36400	2890	973	14.92	1005	17.73	1036	20.63	1068	23.74	1099	26.91	1159	33.34	1218	39.98	1274	46.70	1328	53.62				
39700	3152	1050	18.23	1080	21.27	1109	24.38	1137	27.57	1166	30.95	1222	37.86	1277	44.95								
43000	3414			1155	25.27	1182	28.58	1209	32.01	1236	35.59	1288	42.90										
46300	3676			1232	29.92	1257	33.41	1282	37.02	1307	40.75												

MAXIMUM RPM: Class II = 1329 Outlet Area = 12.60 ft² Max. BHP = 23.25 x (RPM / 1000)³

402 EPLQN (12-Blade)

Wheel Diameter: 40.25"

Fan Efficiency Grade = FEG80

CFM	OV	1" SP		1.5" SP		2" SP		2.5" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		8.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	794	<u>443</u>	<u>2.14</u>																				
13300	1056	497	2.93	<u>556</u>	<u>4.25</u>																		
16600	1318	562	3.93	615	5.51	663	7.14	<u>710</u>	<u>8.84</u>	761	10.73												
19900	1580	632	5.18	680	7.02	724	8.90	765	10.82	<u>804</u>	<u>12.78</u>	<u>886</u>	<u>17.07</u>										
23200	1842	703	6.66	749	8.80	790	10.96	828	13.14	865	15.39	<u>932</u>	<u>19.87</u>	<u>1001</u>	<u>24.75</u>								
26500	2104	777	8.48	819	10.86	858	13.29	895	15.80	929	18.30	993	23.36	1052	28.48	1111	33.88	1173	39.66				
29800	2366	852	10.64	892	13.32	929	16.04	963	18.74	996	21.55	1057	27.20	1113	32.84	1166	38.59	<u>1218</u>	<u>44.52</u>	<u>1272</u>	<u>50.83</u>	1300	54.13
33100	2628	928	13.18	966	16.16	1001	19.15	1034	22.17	1065	25.20	1123	31.37	1177	37.64	1229	44.05	1277	50.39	<u>1323</u>	<u>56.77</u>		
36400	2890	1006	16.19	1041	19.42	1074	22.68	1106	26.02	1136	29.36	1191	35.99	1243	42.82	1292	49.72						
39700	3152	1084	19.65	1118	23.23	1149	26.75	1179	30.34	1207	33.89	1261	41.16	1311	48.50								
43000	3414	1163	23.65	1195	27.51	1225	31.36	1253	35.17	1281	39.11												
46300	3676	1242	28.17	1272	32.29	1301	36.46	1328	40.58														

MAXIMUM RPM: Class II = 1329 Outlet Area = 12.60 ft²

445 EPLFN (9-Blade)

Wheel Diameter: 44.50"

Fan Efficiency Grade = FEG85

CFM	OV	1" SP		1.5" SP		2" SP		2.5" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		8.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	780	<u>403</u>	<u>2.47</u>																				
16100	1047	445	3.35	<u>507</u>	<u>4.99</u>	564	6.69																
20200	1313	496	4.44	551	6.34	<u>601</u>	<u>8.33</u>	<u>649</u>	<u>10.42</u>	<u>694</u>	<u>12.54</u>												
24300	1580	553	5.79	602	7.98	648	10.25	691	12.62	<u>732</u>	<u>15.05</u>	<u>809</u>	<u>20.03</u>										
28400	1846	615	7.46	658	9.93	700	12.51	740	15.15	778	17.88	<u>848</u>	<u>23.41</u>	<u>916</u>	<u>29.29</u>	<u>980</u>	<u>35.26</u>						
32500	2113	680	9.50	718	12.22	756	15.11	792	18.00	828	21.04	894	27.16	<u>956</u>	<u>33.52</u>	<u>1016</u>	<u>40.16</u>	<u>1073</u>	<u>46.83</u>	<u>1129</u>	<u>53.79</u>	<u>1157</u>	<u>57.43</u>
36600	2379	747	11.99	781	14.93	815	18.07	849	21.35	881	24.58	944	31.34	1003	38.31	<u>1059</u>	<u>45.51</u>	<u>1112</u>	<u>52.77</u>	<u>1165</u>	<u>60.39</u>	<u>1190</u>	<u>64.11</u>
40700	2646	816	15.01	847	18.19	878	21.57	908	25.04	938	28.63	997	36.01	1053	43.54	1106	51.26	1157	59.22				
44800	2913	886	18.57	914	21.97	942	25.54	971	29.38	998	33.19	1053	41.20	1105	49.23	1156	57.55						
48900	3179	957	22.75	983	26.42	1009	30.24	1035	34.23	1060	38.28	1111	46.85										
53000	3446			1053	31.54	1077	35.60	1101	39.80	1124	44.05	1172	53.19										
57100	3712			1123	37.32	1146	41.69	1168	46.08	1190	50.61												

MAXIMUM RPM: Class II = 1202

Outlet Area = 15.38 ft²

Max. BHP = 38.36 x (RPM / 1000)³

445 EPLQN (12-Blade)

Wheel Diameter: 44.50"

Fan Efficiency Grade = FEG80

CFM	OV	1" SP		1.5" SP		2" SP		2.5" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		8.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	780	<u>399</u>	<u>2.57</u>																				
16100	1047	448	3.55	<u>502</u>	<u>5.16</u>																		
20200	1313	507	4.77	555	6.70	<u>598</u>	<u>8.66</u>	<u>642</u>	<u>10.79</u>														
24300	1580	571	6.31	615	8.58	<u>655</u>	<u>10.89</u>	<u>692</u>	<u>13.23</u>	<u>727</u>	<u>15.60</u>	<u>801</u>	<u>20.83</u>										
28400	1846	637	8.18	678	10.77	715	13.41	750	16.13	783	18.85	<u>844</u>	<u>24.37</u>	<u>906</u>	<u>30.31</u>								
32500	2113	705	10.45	743	13.38	778	16.34	811	19.39	842	22.48	900	28.70	953	34.96	<u>1006</u>	<u>41.54</u>	<u>1062</u>	<u>48.64</u>				
36600	2379	774	13.15	810	16.44	843	19.75	874	23.10	903	26.47	958	33.40	1010	40.48	1057	47.44	<u>1104</u>	<u>54.74</u>	<u>1152</u>	<u>62.38</u>	<u>1177</u>	<u>66.39</u>
40700	2646	844	16.34	878	19.99	909	23.63	939	27.36	967	31.08	1019	38.63	1068	46.36	1115	54.24	1158	61.98	1200	69.91		
44800	2913	915	20.08	947	24.09	977	28.12	1005	32.15	1032	36.25	1082	44.44	1129	52.86	1173	61.32						
48900	3179	987	24.44	1017	28.80	1046	33.23	1073	37.65	1098	42.00	1147	51.00	1192	60.03								
53000	3446	1059	29.41	1088	34.19	1115	38.92	1141	43.71	1166	48.54												
57100	3712	1132	35.14	1160	40.33	1185	45.35																

MAXIMUM RPM: Class II = 1202

Outlet Area = 15.38 ft²

Max. BHP = 40.80 x (RPM / 1000)³

490 EPLFN (9-Blade)

Wheel Diameter: 49.00"

Fan Efficiency Grade = FEG85

CFM	OV	1" SP		1.5" SP		2" SP		2.5" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		8.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	858	<u>376</u>	<u>3.29</u>																				
20800	1116	416	4.39	<u>470</u>	<u>6.45</u>	<u>519</u>	<u>8.56</u>																
25600	1373	462	5.74	511	8.14	<u>555</u>	<u>10.60</u>	<u>597</u>	<u>13.19</u>	<u>637</u>	<u>15.84</u>												
30400	1631	513	7.39	556	10.09	597	12.91	<u>636</u>	<u>15.87</u>	<u>672</u>	<u>18.85</u>	<u>741</u>	<u>25.05</u>	<u>807</u>	<u>31.60</u>								
35200	1888	567	9.37	606	12.46	643	15.60	679	18.86	713	22.20	<u>777</u>	<u>29.14</u>	<u>837</u>	<u>36.27</u>	<u>894</u>	<u>43.54</u>	951	51.39				
40000	2146	624	11.81	659	15.20	693	18.74	726	22.35	757	25.93	818	33.60	<u>873</u>	<u>41.30</u>	<u>927</u>	<u>49.43</u>	<u>979</u>	<u>57.72</u>	<u>1029</u>	<u>66.16</u>	1054	70.57
44800	2403	683	14.78	715	18.47	745	22.25	775	26.19	805	30.27	861	38.41	915	47.02	<u>965</u>	<u>55.71</u>	<u>1013</u>	<u>64.58</u>	<u>1061</u>	<u>73.92</u>	<u>1084</u>	<u>78.55</u>
49600	2661	744	18.38	772	22.24	800	26.36	828	30.68	855	35.03	908	43.97	959	53.18	1007	62.58	1052	72.03				
54400	2918	805	22.53	831	26.71	857	31.11	882	35.62	908	40.43	957	50.04	1005	59.93	1051	69.99						
59200	3176	868	27.49	891	31.87	915	36.52	939	41.41	962	46.35	1008	56.68	1053	67.26								
64000	3433			953	37.91	974	42.69	996	47.78	1018	53.07	1061	64.00										
68800	3691			1014	44.56	1035	49.83	1055	55.11	1076	60.72												

MAXIMUM RPM: Class II = 1091

Outlet Area = 18.64 ft²

Max. BHP = 62.10 x (RPM / 1000)³

490 EPLQN (12-Blade)

Wheel Diameter: 49.00"

Fan Efficiency Grade = FEG80

CFM	OV	1" SP		1.5" SP		2" SP		2.5" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		8.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	858	<u>372</u>	<u>3.40</u>																				
20800	1116	420	4.65	467	6.70	<u>514</u>	<u>8.91</u>																
25600	1373	473	6.16	516	8.61	554	11.06	<u>591</u>	<u>13.63</u>	<u>630</u>	<u>16.42</u>												
30400	1631	530	8.06	569	10.86	605	13.76	638	16.66	669	19.59	<u>733</u>	<u>25.96</u>										
35200	1888	588	10.31	625	13.53	658	16.78	689	20.09	719	23.49	774	30.32	<u>828</u>	<u>37.50</u>	886	45.40						
40000	2146	647	12.99	682	16.63	714	20.32	743	24.00	771	27.78	823	35.38	871	43.08	919	51.23	<u>968</u>	<u>59.74</u>				
44800	2403	708	16.23	741	20.29	771	24.36	799	28.45	825	32.55	875	41.06	921	49.56	964	58.14	<u>1007</u>	<u>67.17</u>	<u>1050</u>	<u>76.47</u>	<u>1072</u>	<u>81.27</u>
49600	2661	770	20.04	800	24.43	829	28.95	856	33.48	881	37.97	929	47.28	973	56.65	1015	66.14	1054	75.57				
54400	2918	832	24.42	861	29.29	888	34.16	914	39.13	938	44.03	984	54.08	1026	64.18	1066	74.46						
59200	3176	895	29.51	923	34.87	949																	



Model EPLFN

Fans shall be Model EPLFN cost effective centrifugal plenum (plug) type, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE — Performance ratings shall conform to AMCA Standard 205 (fan efficiency grade), 211 (air performance) and 311 (sound performance). Fans shall be tested in accordance with ANSI/AMCA Standard 210 (air performance) and 300 (sound performance) in an AMCA accredited laboratory. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air, and fan efficiency grade (FEG).

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the peak efficiency to ensure quiet and stable operation. Fans shall have a non-overloading design with self-limiting horsepower characteristics and shall reach a peak in the normal selection area. All fans shall be capable of operating over the minimum pressure class limits as specified in AMCA Standard 99.

CONSTRUCTION — Fans shall be unhooded and incorporate a non-overloading type backward inclined airfoil blade wheel, heavy-gauge galvanized or finish painted steel frame and inlet plate.

FRAME AND INLET PANEL — Inlet plates shall be of heavy-gauge galvanized or finish painted steel construction. The inlet plate incorporates a removable spun inlet cone designed for smooth airflow into the accompanying inlet retaining ring of the fan wheel. A square, formed lip suitable for attachment of a boot connector shall surround the unit.

WHEEL — Wheels shall have a spun non-tapered style blade retaining ring on the inlet side to allow higher efficiencies over the performance range of the fan. All wheels on direct drive arrangement 4 fans shall have airfoil shaped, extruded aluminum blades. All wheels shall be continuously welded around all edges. EPLFN wheels shall have nine blades for high efficiencies. All wheels shall be statically and dynamically balanced on precision electronic balancers to a level of G6.3 (per ANSI 2-19) or better.

FINISH AND COATING — Fan shall be constructed of corrosion resistant galvanized or finish painted steel. Aluminum components shall be unpainted.

ACCESSORIES — When specified, accessories shall be provided by Twin City Fan & Blower to maintain one source responsibility.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each wheel shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its EPLFN fans for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.



Model EPLQN

Fans shall be Model EPLQN cost effective centrifugal plenum (plug) type, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE — Performance ratings shall conform to AMCA Standard 205 (fan efficiency grade), 211 (air performance) and 311 (sound performance). Fans shall be tested in accordance with ANSI/AMCA Standard 210 (air performance) and 300 (sound performance) in an AMCA accredited laboratory. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air, and fan efficiency grade (FEG).

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the peak efficiency to ensure quiet and stable operation. Fans shall have a non-overloading design with self-limiting horsepower characteristics and shall reach a peak in the normal selection area. All fans shall be capable of operating over the minimum pressure class limits as specified in AMCA Standard 99.

CONSTRUCTION — Fans shall be unboxed and incorporate a non-overloading type backward inclined airfoil blade wheel, heavy-gauge galvanized or finish painted steel frame and inlet plate.

FRAME AND INLET PANEL — Inlet plates shall be of heavy-gauge galvanized or finish painted steel construction. The inlet plate incorporates a removable spun inlet cone designed for smooth airflow into the accompanying inlet retaining ring of the fan wheel. A square, formed lip suitable for attachment of a boot connector shall surround the unit.

WHEEL — Wheels shall have a spun non-tapered style blade retaining ring on the inlet side to allow higher efficiencies over the performance range of the fan. All wheels on direct drive arrangement 4 fans shall have airfoil shaped, extruded aluminum blades. All wheels shall be continuously welded around all edges. EPLQN wheels shall have twelve blades for better sound quality. All wheels shall be statically and dynamically balanced on precision electronic balancers to a level of G6.3 (per ANSI 2-19) or better.

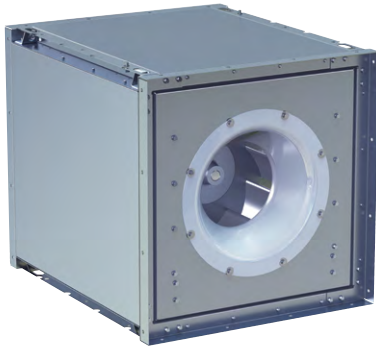
FINISH AND COATING — Fan shall be constructed of corrosion resistant galvanized or finish painted steel. Aluminum components shall be unpainted.

ACCESSORIES — When specified, accessories shall be provided by Twin City Fan & Blower to maintain one source responsibility.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each wheel shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its EPLQN fans for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

ALTERNATIVE PLENUM FANS



Model MPLQN



Model MPLFN
Fan Array

Models

MPLFN | MPLQN | MPLFN | MPLQS

Sizes

12.25" to 36.5" wheel diameters

Performance

Airflow to 44,000 CFM

Static pressure to 12" w.g.

Classes

Class I & II available in sizes 122 to 365.

Class III available in sizes 165 to 365.



See Catalog 495 for more information



Model MPLN



Model MPQS
Fan Array

Models

MPQN | MPQS

Sizes

12.25" to 36.5" wheel diameters

Performance

Airflow to 44,000 CFM

Static pressure to 12" w.g.

Classes

Class I & II available in sizes 122 to 365.

Class III available in sizes 165 to 365.



See Catalog 490 for more information

Models (E-Series)

EPF | EPFN | EPQ | EPQN

Sizes

12.4" to 73.0" wheel diameters

Performance

Airflow to 170,000 CFM

Static pressure to 10" w.g.

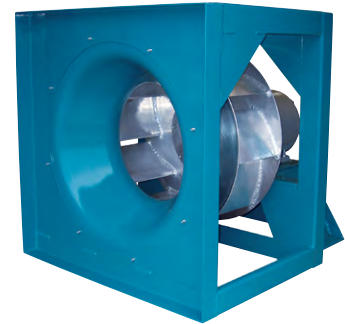
Classes

Class I, II, & III



See Catalog 470 for more information

Model EPFN



Model EPQN



AeroAcousticDiffuser™ For E-Series Plenum Fans

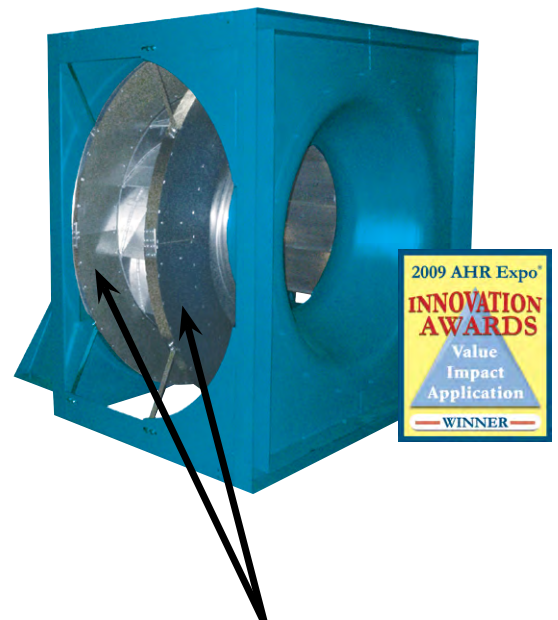
Traditional acoustic silencers attenuate sound at the expense of additional pressure drop resulting in higher power consumption and lower aerodynamic efficiencies. Twin City Fan and Blower's patented Aero Acoustic Diffuser™ (U.S. Patent 8025477) achieves discharge sound power reduction by up to 3dBA. Static pressure is boosted and aerodynamic static efficiency increases by up to 4%.

When used with Twin City Fan's E-Series plenum fans, static efficiency up to 80% is achieved on a size 365 (36.5" wheel diameter)...the best in the industry.

Higher air handling unit system pressure drops, equating to more coil rows or high efficiency filters, can be handled with the same size fan running at the same speed. In certain cases, a smaller size fan may be selected for a given application.



See Catalog 471 for more information



Aero Acoustic Diffuser™
mounted on EPQN E-Series

(U.S. Patent 8025477)

INDUSTRIAL PROCESS AND COMMERCIAL VENTILATION SYSTEMS

CENTRIFUGAL FANS | UTILITY SETS | PLENUM & PLUG FANS | INLINE CENTRIFUGAL FANS
MIXED FLOW FANS | TUBEAXIAL & VANEAXIAL FANS | PROPELLER WALL FANS | PROPELLER ROOF VENTILATORS
CENTRIFUGAL ROOF & WALL EXHAUSTERS | CEILING VENTILATORS | GRAVITY VENTILATORS | DUCT BLOWERS
RADIAL BLADED FANS | RADIAL TIP FANS | HIGH EFFICIENCY INDUSTRIAL FANS | PRESSURE BLOWERS
LABORATORY EXHAUST FANS | FILTERED SUPPLY FANS | MANCOOLERS | FIBERGLASS FANS | CUSTOM FANS



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