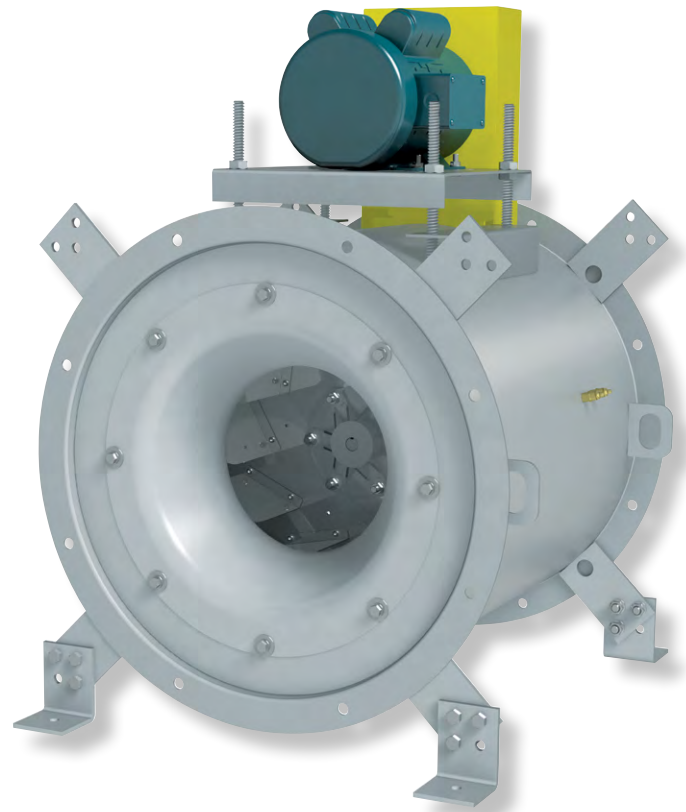




INDUSTRIAL PROCESS AND
COMMERCIAL VENTILATION SYSTEMS

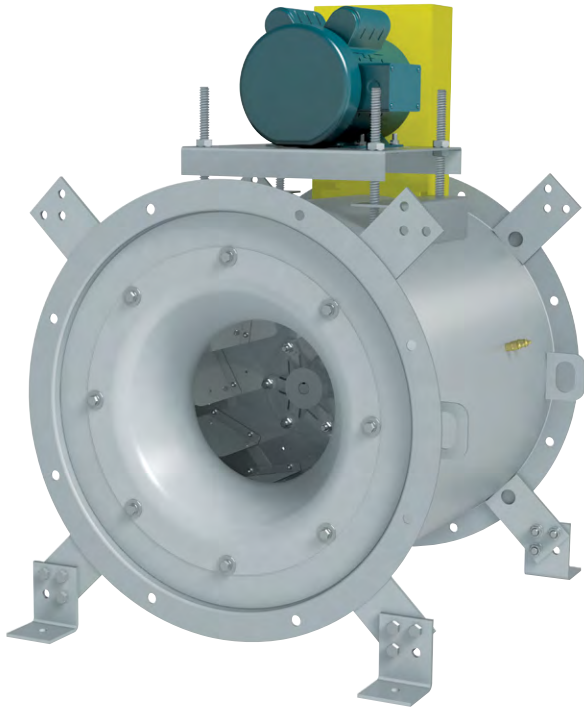
TUBULAR CENTRIFUGAL INLINE FANS

TCLB | TCLBR (Restaurant)





Models TCLB | TCLBR



TCLB
Tubular Centrifugal Inline

Twin City Fan & Blower Models TCLB and TCLBR Tubular Centrifugal Inline Fans are specifically designed for cost effective, reliable air movement in commercial and light industrial ducted medium pressure applications. The backward inclined fan wheel provides higher efficiencies and lower sound levels than axial type fans. TCLB and TCLBR fans can be horizontally, vertically or roof mounted.

Level I Construction

- Pressure capabilities to 2.5" w.g.
- Most economical

Level II Construction

- Pressure capabilities to 4" w.g.
- Larger diameter shaft and bearings
- Larger horsepower and motor frame size capabilities

Tubular Centrifugal Inline Models

TCLB – Model TCLB features the performance characteristics of a centrifugal fan with the space saving advantages of an axial type fan. It is extremely versatile in that it can be mounted both vertically and horizontally, allowing for numerous applications with multiple mounting configurations. Model TCLB is available UL/cUL 705 listed.

TCLBR – Model TCLBR is similar to the TCLB but is specifically designed for exhausting grease-laden air from kitchens, restaurants and cooking and dishwasher hoods. Model TCLBR is UL/cUL 762 listed for the exhaust of grease-laden air.



Model TCLB is available with the UL/cUL 705 listing for electrical, File No. E158680.

Model TCLBR is UL/cUL 762 listed for the exhaust of grease-laden air as standard, File No. MH-25478.

Sizes

10.5" to 49" wheel diameters

Performance

Airflow from 250 to 41,700 CFM
Static pressure to 4" w.g.



Twin City Fan & Blower, a Twin City Fan Company, certifies that the TCLB and TCLBR Tubular Centrifugal Inline 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 AMCA Certified Ratings Program.



Fan Efficiency Grade (FEG) certification applies to Models TCLB and TCLBR, Sizes 105A2, 122A2, 135A1, 135A2, 150A1, 150A2, 165A1, 165A2, 182A1, 182A2, 200A1, 200A2, 222A1, 222A2, 245A1, 245A2, 270A1, 270A2, 300A1, 300A2, 330A1, 330A2, 365A1, 365A2, 402A1, 402A2, 445A1, 445A2, 490A1 and 490A2.

Housing

All fans are constructed of heavy-gauge steel and continuously welded for strength and rigidity. All fans are provided with punched inlet and outlet flanges as standard. Housings are enamel coated as standard.

Wheel

Wheels are the non-overloading centrifugal backward inclined type and are designed for maximum efficiency and quiet operation. All wheels contain a matching inlet venturi for optimum unit performance. Sizes 90 through 270 are constructed of aluminum and sizes 300 through 490 are constructed of steel.

Belt Tube

A belt tube encloses the belts and drive components, protecting them from the airstream on Models TCLB and TCLBR.

Inlet and Outlet Flanges

Inlet and outlet flanges with prepunched mounting holes are standard on all sizes to provide a bolted connection to ductwork.

Extended Lube Lines

Lube lines with grease fittings are extended to the outside of the fan housing on all models. Nylon lines are standard on Model TCLB. Model TCLBR features copper lube lines.

Drain (TCLBR)

A two inch drain allows drainage of grease to the lowest point of the fan. Drain is located 180° from the motor on vertical fans and at the lowest point of the housing on horizontal fans. A grease box with drain connection is an available option.

Clean Out Doors (TCLBR)

Two cleanout doors are located 180° apart, providing access to the wheel for cleaning.

Bearings

Bearings are selected to exceed the L-10 life of 80,000 hours at the maximum operating speed. Heavy-duty re-greaseable pillowblock ball type bearings are specifically designed for air handling applications.

Mechanical Run Test & Final Vibration Check

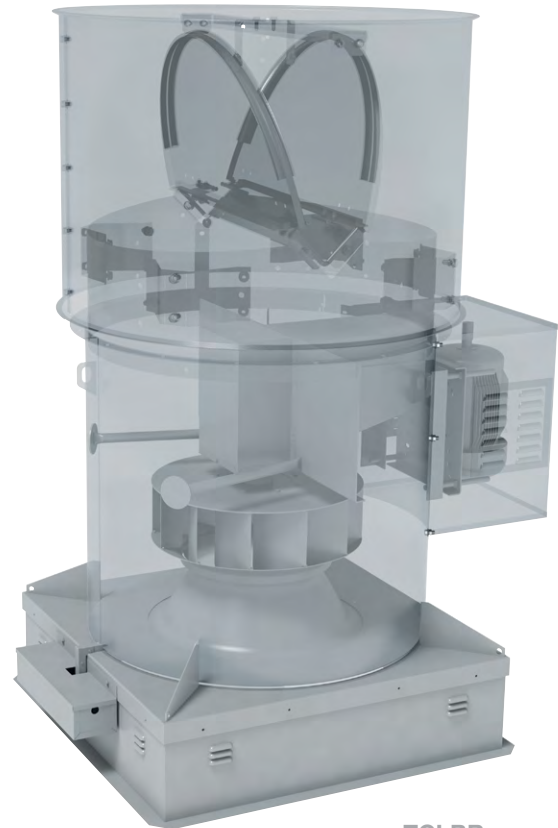
All fans are assembled for a mechanical run test and final balance prior to shipment. Vibration readings are taken on both fan bearings in the axial, horizontal, and vertical directions at the specified speed. Fans are balanced to 0.15 in./sec. peak or less.

Adjustable Motor Base

A heavy-duty adjustable motor base provides easy and positive adjustment of belt tension.

Shaft

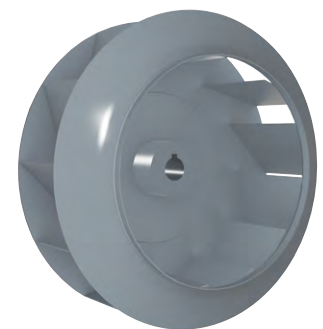
Shaft diameters sized to have a first critical speed of at least 125% of the fan's maximum operating speed.



TCLBR
Restaurant Exhaust



Wheel Size 90 - 270



Wheel Size 300 - 490





Bolted Access Door



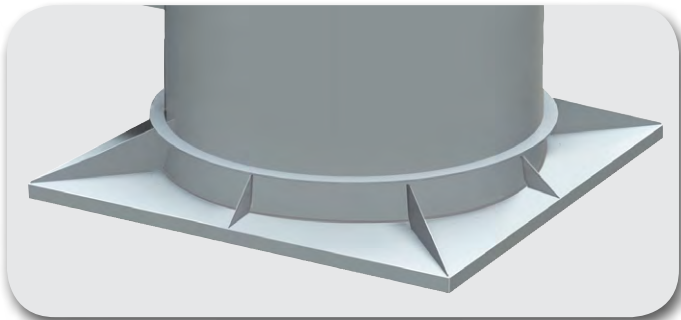
Belt Guard



Discharge Cap



Motor Cover



Curb Cap



Companion Flanges



Inlet and Outlet Guard

Access Door

Bolted or hinged access doors allow for inspection and maintenance of internal fan components.

Belt Guard

Totally enclosed belt guard protects personnel from rotating components by enclosing the motor sheaves and V-belt drive assembly.

Discharge Cap

Discharge caps are provided as a standard accessory on vertical roof mounted configurations. Discharge caps feature butterfly type dampers that seal out weather when the fan is shut off. Butterfly dampers on Models TCLB and TCLBR open with airflow.

Motor Cover

A weatherproof motor cover is available to protect the motor and drive components. Motor covers also serve as an OSHA guard to protect personnel from rotating parts and can easily be removed for inspection.

Spark Resistant Construction Type B

Type B Spark Resistant Construction is available by adding an aluminum bearing cover to all sizes and an aluminum wheel on sizes 300 and larger.

Curb Cap

Attached to the fan's flange for curb mounting. Standard accessory on vertical roof mounted configuration.

Magnetic Latches

Magnetic latches are available to hold discharge cap butterfly dampers closed when not in operation.

Companion Flanges

Inlet and outlet companion flanges are available for ease of duct connection. Companion flanges are rolled angle rings punched to match the standard inlet or outlet flange.

Inlet and Outlet Guard

Inlet and outlet guards are available for added safety on non-ducted applications. Guards are removable for routine inspection and cleaning of the impeller.

Shaft Seal

To limit the air entering the bearing housing and avoid contact of airstream contaminants with the bearings and V-belt drive. Consists of a Teflon wear pad/plate and a rubber checkseal at the wheel end of the bearing housing. Please note that a shaft seal does not make the bearing housing gas tight.

Vibration Isolators

Rubber-in-shear and spring type isolators are available for floor and ceiling mounted installations.

Aluminum Construction

Aluminum construction is available when added protection is needed for moist and light corrosive applications.

Disconnect Switch

A NEMA 1, 3R, 4 or 7/9 safety disconnect switch is available for positive electrical shutoff of the fan and the protection of service personnel.

Inspection Section

Provides a section of duct length that can be removed for complete access to the fan. Each section includes a bolted inspection door.

Wheel Removal Door

Bolted door allows for complete removal of wheel for cleaning, repair or replacement. Located opposite motor.

Inlet Vanes

Nested inlet vanes provide efficient air volume control resulting in substantial energy savings. Available on Model TCLB, sizes 165 and larger.

Mounting Rails

Mounting rails are recommended when motor is in the 3 o'clock or 9 o'clock position.

Special Coatings

Twin City Fan & Blower has an in-house, specialty coating facility offering a wide range of protective coating solutions for fans that are exposed to corrosive atmospheres. Fans are coated with air-dried enamel as standard.

Copper Lube Lines

Copper lube lines are available in place of nylon lube lines on Model TCLB. Lube lines with grease fittings are extended to the outside of the fan housing. Copper lube lines are standard construction on Model TCLBR.

UL/cUL Listing

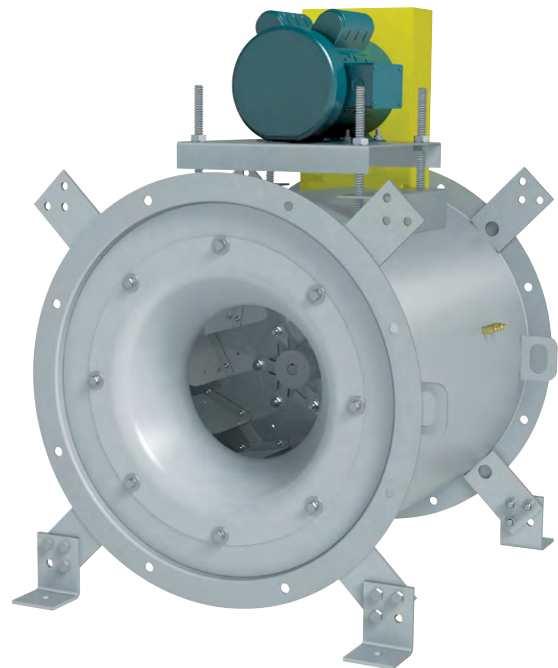
Model TCLB is available with the UL/cUL 705 listing for electrical when supplied with specific motors. Model TCLBR is provided standard with the UL/cUL 762 listing for the exhaust of grease-laden air.



Spring Isolator



Rubber Isolator



TCLB
Tubular Centrifugal Inline



NEMA 3R & NEMA 4 Switch

Horizontal Construction

Horizontal construction is available on sizes 90 through 490.

Horizontal Base Mounted (HBM) — Support legs are provided at each end of the fan for floor mounting.

Horizontal Ceiling Hung (HCH) — For duct mounted fans, four suspension clips are welded to the fan casing to allow ceiling suspension using rod hangers.

Vertical Construction

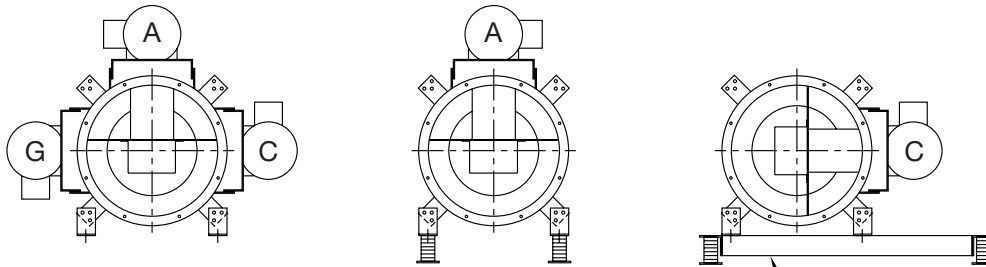
Vertical construction is available on sizes 90 through 490.

Floor or Ceiling Mounted (VU/VD) — Four vertical brackets are welded to either end of the fan housing. Bracket location is determined by airflow direction and support details (see drawing below).

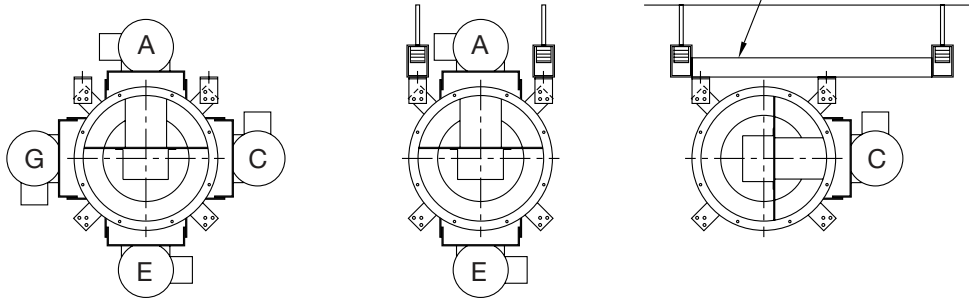
Roof Mounted (VRM) — A curb cap provides a weathertight seal for roof curb mounted fans. A discharge cap and weather cover are also available for the upblast style roof ventilator.

Discharge Arrangements

Horizontal Base Mounted - HBM

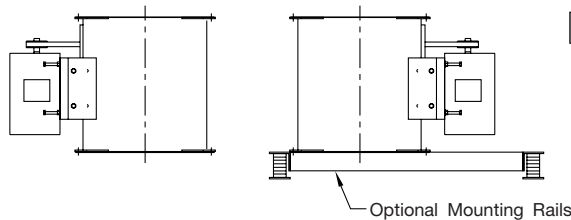


Horizontal Ceiling Hung - HCH

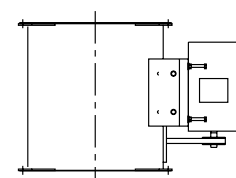


NOTE: Horizontal motor positions shown from outlet end.

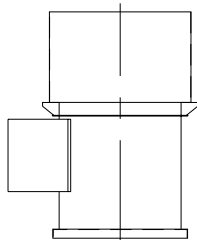
Vertical Up - VU



Vertical Down - VD



Vertical Roof Mount - VRM



Available Discharges by Model

TCLB	TCLBR
HBM	HBM
HCH	HCH
VU	VU
VD	N/A
VRM	VRM

TCLBR Restaurant Fans

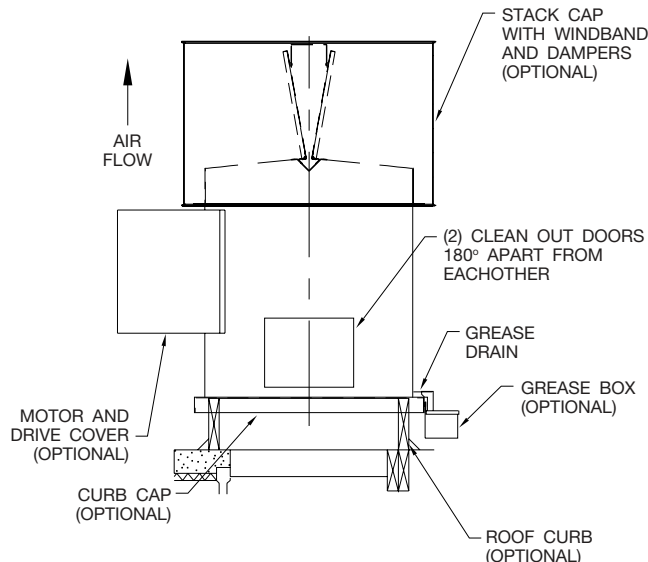
Twin City Fan & Blower offers a specially modified version of the TCLB fan designated as "TCLBR" (Tubular Centrifugal Inline Restaurant Exhaust) for exhausting grease-laden air from kitchens, restaurants, cooking and dishwasher hoods. TCLBR is available in sizes 90 through 490.

Model TCLBR is CULUS 762 listed for exhaust of grease-laden air. TCLBR is licensed to bear the AMCA certified ratings seal for sound and air performance.

The TCLBR fan is available in all configurations with the exception of vertical down (VD).

Standard Product Features

- Belt tube
- Two cleanout doors located 180° apart (90° from motor)
- Cooling fins on wheel
- Housing sealed with Hi-Temp caulk
- 2" drain located 180° from motor at inlet funnel on vertical fans and at lowest point on horizontal fans



ENGINEERING DATA

FAN SIZE	HOUSING GAUGE	SHAFT DIAMETER		MAXIMUM RPM		MAXIMUM MOTOR FRAME SIZE		APPROXIMATE BARE FAN WEIGHTS (LBS.)	
		LEVEL 1	LEVEL 2	LEVEL 1	LEVEL 2	LEVEL 1	LEVEL 2	LEVEL 1	LEVEL 2
90	12	0.750	1.000	2728	3637	56	145T	133	157
105	12	0.750	1.000	2728	3637	143T	184T	146	159
122	12	0.750	1.000	2375	3167	145T	184T	161	231
135	12	0.750	1.000	2156	2874	145T	215T	181	261
150	12	0.750	1.000	1940	2587	184T	215T	195	270
165	12	0.750	1.188	1764	2352	184T	215T	272	287
182	12	1.000	1.188	1589	2118	184T	215T	324	380
200	12	1.000	1.438	1449	1932	184T	215T	358	419
222	10	1.000	1.438	1303	1737	215T	256T	440	525
245	10	1.000	1.438	1183	1577	215T	256T	507	592
270	10	1.188	1.438	1048	1397	215T	284T	566	733
300	10	1.188	1.688	943	1257	215T	284T	774	907
330	10	1.438	1.938	857	1143	215T	286T	902	1046
365	10	1.438	2.188	746	995	256T	286T	1039	1159
402	10	1.688	2.438	677	903	256T	286T	1191	1412
445	10	1.938	2.438	613	817	284T	324T	1508	1668
490	10	2.188	2.438	557	742	284T	326T	1692	2072

90A1, 90A2

Wheel Dia.: 10.50"
Outlet Dia.: 16.13"

Max. BHP = 0.022 (RPM ÷ 1000)³
Tip Speed FPM = 2.75 x RPM

Outlet Area: 1.42 ft²

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
250	176	850	0.01	1024	0.02	1320	0.05	1792	0.10	2176	0.16										
		2.8		4.1		6.4		10.0		12.5											
330	233	1011	0.02	1157	0.03	1415	0.06	1844	0.12	2206	0.19	2526	0.27	2811	0.35	3070	0.44				
		4.3		5.2		7.0		10.6		13.5		15.8		17.4		19.4					
410	289	1183	0.04	1313	0.05	1537	0.08	1927	0.15	2264	0.22	2564	0.31	2840	0.40	3095	0.50	3332	0.60	3554	0.71
		5.9		6.6		8.0		11.3		14.3		16.7		18.4		21		22		23	
490	346	1364	0.05	1479	0.07	1680	0.10	2034	0.18	2346	0.26	2630	0.35	2890	0.45	3133	0.55	3362	0.66	3580	0.78
		7.1		8.1		9.1		12.2		14.9		17.1		19.4		21		23		25	
570	402	1549	0.08	1652	0.10	1837	0.13	2158	0.22	2448	0.31	2714	0.41	2962	0.51	3193	0.62	3412	0.73	3620	0.85
		8.7		9.9		10.8		13.4		15.5		17.8		20		22		24		26	
650	458	1739	0.11	1831	0.13	2001	0.17	2297	0.26	2566	0.36	2816	0.47	3050	0.58	3271	0.70	3480	0.82		
		10.3		11.0		12.8		14.4		16.8		18.5		21		23		25			
730	515	1931	0.15	2014	0.17	2170	0.22	2448	0.32	2696	0.42	2931	0.54	3152	0.65	3363	0.78	3563	0.92		
		12.0		12.8		14.4		15.8		17.9		19.5		22		23		26			
810	571	2124	0.19	2200	0.22	2344	0.27	2606	0.38	2838	0.50	3058	0.62	3268	0.74	3467	0.87				
		13.6		14.3		16.3		17.7		19.4		22		23		25					
890	628	2320	0.25	2389	0.28	2523	0.34	2769	0.46	2990	0.58	3195	0.71	3393	0.84	3584	0.98				
		15.5		16.2		17.9		19.9		20		23		24		26					
970	684	2516	0.32	2580	0.35	2704	0.41	2936	0.54	3148	0.67	3342	0.81	3528	0.95						
		17.3		18.2		19.6		22		23		24		26							
1050	740	2713	0.40	2773	0.43	2889	0.50	3107	0.64	3309	0.78	3496	0.92								
		19.6		19.8		21		24		26		26									
1130	797	2911	0.49	2967	0.52	3075	0.60	3281	0.75	3474	0.90										
		21		23		24		26		28											
1210	853	3109	0.59	3162	0.63	3264	0.71	3459	0.88												
		24		24		26		29													
1290	910	3308	0.71	3357	0.75	3454	0.84														
		26		27		27															

MAXIMUM RPM: Level 1 — 2728 Level 2 — 3637 MAXIMUM MOTOR FRAME SIZE: Level 1 = 56 Level 2 = 145T

105A1, 105A2

Wheel Dia.: 10.50"
Outlet Dia.: 16.13"

Max. BHP = 0.034 (RPM ÷ 1000)³
Tip Speed FPM = 2.75 x RPM

Outlet Area: 1.42 ft²
Fan Efficiency Grade: FEG 60*

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
400	282	869	0.02	1031	0.04	1295	0.07	1745	0.14												
		3.6		4.6		6.5		9.8													
520	366	1038	0.04	1170	0.05	1407	0.09	1799	0.17	2146	0.27	2466	0.38								
		5.5		6.3		7.6		10.8		13.4		15.3									
640	451	1221	0.06	1330	0.08	1543	0.12	1894	0.22	2205	0.32	2493	0.44	2761	0.57	3020	0.70				
		7.1		8.5		9.1		11.5		14.2		16.3		18.0		20					
760	535	1411	0.09	1504	0.11	1686	0.16	2017	0.27	2298	0.38	2561	0.51	2808	0.65	3043	0.79	3268	0.95	3487	1.10
		8.8		10.0		11.0		13.0		14.9		17.0		19.0		21		23		25	
880	620	1606	0.13	1687	0.16	1846	0.21	2153	0.33	2414	0.46	2656	0.59	2884	0.74	3103	0.89	3313	1.05	3515	1.22
		10.9		11.8		13.4		14.8		16.1		17.9		19.7		22		24		26	
1000	704	1804	0.19	1876	0.21	2017	0.27	2292	0.40	2548	0.54	2771	0.69	2983	0.84	3187	1.00	3384	1.17	3574	1.35
		13.1		14.1		15.7		16.6		18.0		19.0		20		23		25		27	
1120	789	2003	0.25	2068	0.28	2195	0.35	2442	0.49	2686	0.64	2903	0.80	3100	0.96	3291	1.13	3475	1.31		
		15.1		16.0		17.8		19.1		19.5		21		22		23		26			
1240	873	2205	0.33	2263	0.37	2379	0.44	2604	0.59	2826	0.75	3040	0.93	3232	1.10	3410	1.28	3583	1.47		
		17.6		18.3		19.7		22		21		23		24		26		26			
1360	958	2407	0.43	2461	0.47	2567	0.55	2774	0.71	2976	0.88	3178	1.07	3369	1.26	3542	1.45				
		19.9		20		21		24		24		25		26		28					
1480	1042	2610	0.55	2660	0.59	2758	0.68	2949	0.85	3136	1.03	3322	1.23	3506	1.43						
		22		23		24		26		28		27		29							
1600	1127	2814	0.69	2860	0.73	2951	0.82	3129	1.01	3303	1.20	3474	1.40								
		25		25		26		29		31		31									
1720	1211	3019	0.85	3061	0.90	3146	0.99	3313	1.19	3476	1.39	3636	1.61								
		27		27		29		31		34		35									
1840	1296	3224	1.03	3263	1.08	3343	1.19	3499	1.39												
		30		31		31		34													
1960	1380	3429	1.24	3466	1.29	3541	1.40														
		33		33		35															

MAXIMUM RPM: Level 1 — 2728 Level 2 — 3637 MAXIMUM MOTOR FRAME SIZE: Level 1 = 143T Level 2 = 184T

* FEG applies to Size 105A2 only.

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

122A1, 122A2

Wheel Dia.: 12.25"
Outlet Dia.: 18.25"

Max. BHP = 0.073 (RPM ÷ 1000)³
Tip Speed FPM = 3.21 x RPM

Outlet Area: 1.82 ft²
Fan Efficiency Grade: FEG63*

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
650	357	798 0.04	911 0.05	1123 0.10	1496 0.20																
		4.4	4.8	6.3	9.7																
820	451	951 0.06	1045 0.08	1220 0.13	1545 0.25	1836 0.38															
		6.1	6.7	7.8	10.3	13.6															
990	544	1111 0.09	1191 0.12	1342 0.18	1625 0.30	1886 0.45	2129 0.61	2359 0.78													
		7.7	8.7	9.4	11.6	14.7	16.7	19.0													
1160	637	1274 0.14	1346 0.17	1477 0.23	1726 0.37	1963 0.52	2185 0.70	2395 0.88	2597 1.08	2790 1.29											
		9.7	10.4	11.7	13.3	15.0	17.6	19.9	22	23											
1330	731	1441 0.20	1504 0.24	1623 0.31	1845 0.45	2057 0.62	2261 0.80	2456 1.00	2642 1.20	2822 1.42	2997 1.65										
		11.5	12.6	14.0	14.6	16.9	18.2	20	22	24	25										
1500	824	1609 0.28	1666 0.32	1775 0.40	1975 0.56	2167 0.73	2354 0.92	2535 1.13	2709 1.35	2877 1.58	3039 1.81										
		14.1	14.7	16.3	17.6	18.4	20	21	23	25	27										
1670	918	1779 0.37	1831 0.42	1930 0.51	2114 0.68	2290 0.87	2460 1.07	2628 1.28	2791 1.51	2948 1.75	3101 2.00										
		16.1	16.9	18.8	20	20	22	23	24	25	27										
1840	1011	1950 0.49	1997 0.54	2089 0.63	2259 0.83	2422 1.03	2579 1.24	2733 1.46	2885 1.70	3033 1.95											
		18.8	19.0	21	23	23	23	24	25	27											
2010	1104	2121 0.63	2165 0.68	2250 0.79	2410 1.00	2560 1.21	2707 1.44	2849 1.67	2990 1.91	3129 2.17											
		21	22	23	25	26	24	25	26	28											
2180	1198	2293 0.79	2334 0.85	2413 0.96	2563 1.19	2704 1.42	2841 1.66	2975 1.91	3106 2.16												
		23	24	25	27	28	27	28	28												
2350	1291	2466 0.98	2504 1.04	2578 1.16	2719 1.41	2852 1.66	2980 1.91	3106 2.17													
		26	26	27	30	30	30	29													
2520	1385	2639 1.19	2674 1.26	2744 1.39	2877 1.66	3003 1.93	3124 2.20														
		28	28	30	31	32	33														
2690	1478	2812 1.44	2846 1.51	2911 1.66	3037 1.94	3157 2.23															
		30	31	31	34	35															
2860	1571	2986 1.73	3017 1.80	3079 1.95																	
		32	32	34																	

MAXIMUM RPM: Level 1 — 2375 Level 2 — 3167 MAXIMUM MOTOR FRAME SIZE: Level 1 = 145T Level 2 = 184T
* FEG applies to Size 122A2 only.

135A1, 135A2

Wheel Dia.: 13.50"
Outlet Dia.: 21.25"

Max. BHP = 0.13 (RPM ÷ 1000)³
Tip Speed FPM = 3.53 x RPM

Outlet Area: 2.46 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
800	325	685 0.04	791 0.07	989 0.12																	
		4.8	6.0	8.0																	
1015	412	815 0.07	903 0.10	1066 0.16	1370 0.31																
		6.4	7.7	9.3	13.4																
1230	499	953 0.11	1027 0.14	1167 0.21	1429 0.37	1675 0.57															
		7.9	9.5	11.0	14.4	17.6															
1445	587	1096 0.16	1159 0.20	1282 0.28	1512 0.45	1730 0.66	1939 0.89														
		10.1	11.1	13.1	16.7	17.9	20														
1660	674	1241 0.23	1296 0.27	1405 0.36	1611 0.55	1806 0.77	1995 1.01	2178 1.27	2355 1.55												
		12.3	13.2	15.7	18.0	19.2	20	23	24												
1875	761	1388 0.32	1437 0.36	1534 0.46	1722 0.67	1898 0.90	2069 1.15	2237 1.42	2399 1.71	2558 2.02											
		14.4	15.5	17.6	19.5	21	22	23	24	27											
2090	849	1537 0.43	1581 0.48	1668 0.59	1840 0.81	2001 1.06	2158 1.32	2311 1.60	2462 1.90	2609 2.22	2753 2.55										
		17.4	17.7	18.9	21	22	23	24	25	27	30										
2305	936	1687 0.56	1726 0.62	1806 0.74	1962 0.98	2113 1.24	2257 1.52	2399 1.82	2538 2.13	2675 2.45	2809 2.79										
		19.2	19.9	21	24	23	24	25	27	29	31										
2520	1023	1837 0.72	1873 0.78	1946 0.91	2090 1.17	2231 1.45	2366 1.75	2496 2.06	2625 2.38	2753 2.72											
		21	22	23	25	26	25	27	29	31											
2735	1110	1987 0.91	2021 0.98	2088 1.11	2221 1.40	2353 1.69	2480 2.00	2603 2.33	2723 2.67	2841 3.02											
		23	24	25	27	28	28	28	31	32											
2950	1198	2138 1.13	2170 1.20	2232 1.35	2355 1.65	2478 1.97	2598 2.29	2715 2.63	2828 2.99												
		26	26	27	29	30	32	32	32												
3165	1285	2290 1.38	2319 1.46	2377 1.62	2492 1.94	2607 2.27	2720 2.62	2831 2.97													
		28	28	29	31	34	35	35													
3380	1372	2442 1.67	2469 1.75	2523 1.92	2631 2.26	2739 2.62	2846 2.98														
		31	31	32	35	37	38														
3595	1460	2594 2.00	2619 2.09	2670 2.26	2772 2.63	2873 3.00															
		33	33	35	37	40															

MAXIMUM RPM: Level 1 — 2156 Level 2 — 2874 MAXIMUM MOTOR FRAME SIZE: Level 1 = 145T Level 2 = 215T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

150A1, 150A2

Wheel Dia.: 15.00"
Outlet Dia.: 22.19"

Max. BHP = 0.21 (RPM ÷ 1000)³
Tip Speed FPM = 3.93 x RPM

Outlet Area: 2.68 ft²
Fan Efficiency Grade: FEG56

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
1000	372	651	0.06	750	0.09	931	0.16	1250	0.34												
		5.2		5.8		7.9		12.5													
1250	466	767	0.09	849	0.13	1003	0.21	1283	0.40	1533	0.64										
		6.7		7.6		9.1		13.4		17.2											
1500	559	889	0.14	959	0.18	1093	0.27	1337	0.48	1567	0.73	1776	1.00								
		8.5		9.5		10.5		14.2		17.8		20									
1750	652	1016	0.21	1076	0.25	1194	0.36	1413	0.58	1616	0.84	1812	1.13	1995	1.44	2166	1.79				
		10.3		11.6		13.0		16.1		18.3		21		23		24					
2000	745	1144	0.29	1197	0.35	1302	0.46	1500	0.70	1685	0.97	1861	1.27	2033	1.60	2197	1.96	2352	2.34	2499	2.73
		12.6		13.6		15.6		17.4		19.7		21		24		25		26		28	
2250	838	1275	0.40	1322	0.46	1416	0.59	1596	0.85	1766	1.14	1927	1.45	2084	1.79	2238	2.16	2387	2.55	2529	2.96
		15.0		15.9		17.8		19.1		21		23		24		25		28		30	
2500	931	1406	0.53	1449	0.60	1534	0.74	1699	1.02	1856	1.33	2006	1.66	2150	2.01	2291	2.39	2431	2.79	2567	3.21
		17.7		18.7		19.8		22		22		24		25		26		28		30	
2750	1024	1539	0.70	1578	0.77	1655	0.92	1807	1.23	1953	1.56	2093	1.90	2228	2.27	2359	2.66	2487	3.07		
		19.8		20		22		24		24		25		27		28		29			
3000	1117	1672	0.89	1707	0.97	1778	1.13	1918	1.46	2055	1.81	2186	2.18	2313	2.57	2437	2.97	2557	3.39		
		22		23		24		26		27		26		28		30		31			
3250	1210	1805	1.12	1838	1.20	1904	1.37	2034	1.73	2161	2.10	2285	2.50	2404	2.90	2521	3.32				
		24		25		26		28		29		29		31							
3500	1304	1939	1.38	1970	1.47	2031	1.65	2152	2.04	2271	2.43	2388	2.85	2501	3.27						
		26		27		28		30		32		32		31							
3750	1397	2074	1.69	2102	1.78	2159	1.98	2272	2.38	2384	2.80	2494	3.23								
		29		29		29		32		34		35									
4000	1490	2208	2.03	2235	2.13	2289	2.34	2395	2.77	2500	3.21										
		31		31		32		34		36											
4250	1583	2343	2.42	2368	2.53	2419	2.75	2519	3.20												
		32		34		34		37													

MAXIMUM RPM: Level 1 — 1940 Level 2 — 2587 MAXIMUM MOTOR FRAME SIZE: Level 1 = 184T Level 2 = 215T

165A1, 165A2

Wheel Dia.: 16.50"
Outlet Dia.: 24.25"

Max. BHP = 0.34 (RPM ÷ 1000)³
Tip Speed FPM = 4.32 x RPM

Outlet Area: 3.21 ft²
Fan Efficiency Grade: FEG56

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
1200	374	588	0.07	679	0.10	844	0.19	1135	0.41												
		5.3		5.9		8.2		12.7													
1515	472	698	0.11	773	0.16	913	0.25	1167	0.49	1394	0.77										
		7.1		7.9		9.5		13.5		17.8											
1830	571	814	0.17	877	0.22	998	0.33	1219	0.59	1426	0.88	1616	1.22								
		8.8		10.0		11.0		15.0		18.7		22									
2145	669	934	0.26	988	0.32	1094	0.44	1291	0.71	1474	1.02	1651	1.38	1817	1.76	1971	2.18				
		10.8		12.1		13.6		16.5		19.9		22		24		26					
2460	767	1056	0.37	1103	0.44	1197	0.57	1375	0.87	1541	1.20	1699	1.57	1854	1.97	2002	2.40	2142	2.86	2275	3.34
		13.3		14.2		16.1		18.1		21		23		26		27		29		30	
2775	865	1179	0.51	1222	0.58	1305	0.74	1467	1.06	1619	1.42	1764	1.80	1904	2.21	2042	2.65	2176	3.13	2304	3.62
		15.9		16.7		18.9		21		22		25		26		28		30		32	
3090	964	1304	0.69	1342	0.77	1418	0.94	1565	1.29	1706	1.67	1840	2.07	1969	2.50	2095	2.95	2220	3.44	2342	3.96
		18.6		19.0		21		24		24		26		28		29		30		32	
3405	1062	1430	0.90	1464	0.99	1533	1.17	1668	1.55	1798	1.96	1924	2.39	2045	2.84	2162	3.31	2276	3.80		
		21		22		24		26		26		27		29		31		32			
3720	1160	1556	1.16	1588	1.25	1651	1.45	1775	1.86	1896	2.29	2013	2.75	2127	3.22	2237	3.71	2345	4.23		
		24		25		26		29		29		29		31		33		33			
4035	1258	1682	1.45	1712	1.56	1770	1.77	1885	2.21	1998	2.67	2108	3.16	2215	3.65	2319	4.17				
		26		27		28		31		32		32		32		33					
4350	1356	1809	1.80	1837	1.92	1891	2.15	1998	2.62	2103	3.11	2207	3.62	2308	4.14						
		29		30		31		33		35		36		35							
4665	1455	1937	2.21	1962	2.33	2012	2.57	2112	3.07	2211	3.59	2309	4.13								
		32		32		33		35		37		38									
4980	1553	2064	2.67	2088	2.80	2135	3.05	2229	3.59	2322	4.14										
		34		35		35		37		39											
5295	1651	2192	3.19	2214	3.33	2259	3.60	2347	4.16												
		37		37		37		39													

MAXIMUM RPM: Level 1 — 1764 Level 2 — 2352 MAXIMUM MOTOR FRAME SIZE: Level 1 = 184T Level 2 = 215T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

182A1, 182A2

Wheel Dia.: 18.25"
Outlet Dia.: 30.38"

Max. BHP = 0.56 (RPM ÷ 1000)³
Tip Speed FPM = 4.78 x RPM

Outlet Area: 5.03 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1400	278	491	0.07	575	0.11	727	0.20														
		4.6		5.7		8.3															
1800	358	592	0.11	653	0.16	783	0.26	1012	0.53												
		6.5		7.6		9.2		13.8													
2200	437	697	0.17	749	0.23	853	0.35	1055	0.63	1239	0.97	1411	1.35								
		8.5		9.7		10.7		14.8		19.0		21									
2600	517	805	0.26	851	0.33	936	0.46	1116	0.77	1280	1.12	1436	1.52	1584	1.95	1726	2.43				
		10.6		11.9		13.3		16.5		19.4		22		24		25					
3000	596	915	0.38	956	0.45	1031	0.60	1186	0.93	1337	1.31	1477	1.72	1613	2.17	1744	2.66	1870	3.18	1992	3.74
		12.9		13.8		16.1		18.6		21		22		25		26		28		31	
3400	676	1027	0.53	1063	0.61	1132	0.78	1264	1.13	1404	1.54	1534	1.97	1657	2.43	1778	2.94	1896	3.48	2009	4.04
		15.6		17.0		18.8		21		22		24		25		27		28		32	
3800	755	1139	0.72	1172	0.81	1235	0.99	1352	1.37	1476	1.80	1600	2.27	1715	2.75	1825	3.26	1934	3.81	2041	4.40
		18.6		19.8		21		24		23		25		27		28		30		33	
4200	835	1252	0.95	1282	1.05	1341	1.25	1448	1.66	1555	2.10	1670	2.60	1780	3.12	1884	3.66	1985	4.22	2084	4.81
		21		23		24		26		26		26		28		30		32		34	
4600	914	1366	1.22	1394	1.33	1447	1.55	1548	2.00	1643	2.46	1745	2.97	1850	3.53	1950	4.10	2045	4.69		
		24		25		26		28		30		28		29		32		34			
5000	994	1480	1.55	1506	1.67	1556	1.91	1650	2.40	1738	2.88	1828	3.41	1923	3.98	2020	4.59	2112	5.21		
		27		27		29		32		32		32		33		34		37			
5400	1073	1595	1.93	1618	2.05	1665	2.32	1754	2.84	1837	3.37	1918	3.91	2003	4.49	2092	5.12				
		30		30		31		34		36		36		36		36					
5800	1153	1709	2.36	1732	2.51	1775	2.78	1859	3.35	1938	3.91	2014	4.48	2090	5.08						
		32		33		34		37		39		40		41							
6200	1232	1824	2.87	1845	3.02	1886	3.32	1965	3.92	2041	4.53	2112	5.12								
		35		36		37		39		42		45									
6600	1312	1939	3.44	1959	3.60	1997	3.91	2072	4.55												
		39		39		40		43													

MAXIMUM RPM: Level 1 — 1589 Level 2 — 2118 MAXIMUM MOTOR FRAME SIZE: Level 1 = 184T Level 2 = 215T

200A1, 200A2

Wheel Dia.: 20.00"
Outlet Dia.: 33.47"

Max. BHP = 0.88 (RPM ÷ 1000)³
Tip Speed FPM = 5.24 x RPM

Outlet Area: 6.11 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2100	344	528	0.12	586	0.18	707	0.31	920	0.62												
		6.3		7.5		9.5		13.4													
2550	417	617	0.19	666	0.26	766	0.40	953	0.73	1125	1.13	1286	1.59								
		8.3		9.5		10.7		14.4		19.4		22									
3000	491	709	0.29	752	0.36	833	0.51	1003	0.88	1157	1.29	1303	1.77	1441	2.29						
		10.2		11.7		13.2		16.2		20		23		25							
3450	565	803	0.41	842	0.49	913	0.66	1062	1.05	1202	1.49	1334	1.98	1462	2.52	1584	3.10	1702	3.72		
		12.5		13.5		15.5		17.9		22		24		26		28		30			
3900	638	898	0.56	933	0.66	998	0.85	1125	1.26	1257	1.74	1378	2.24	1495	2.79	1609	3.39	1719	4.03	1826	4.71
		14.7		15.7		18.1		20		23		25		27		29		32		33	
4350	712	994	0.76	1025	0.86	1085	1.07	1197	1.51	1317	2.01	1432	2.56	1540	3.13	1645	3.74	1748	4.39	1848	5.08
		17.6		18.3		21		24		24		26		28		30		32		34	
4800	786	1090	0.99	1119	1.11	1174	1.34	1276	1.81	1381	2.33	1491	2.91	1593	3.51	1691	4.14	1786	4.81	1880	5.51
		21		22		23		27		26		28		30		31		33		34	
5250	859	1187	1.27	1214	1.40	1265	1.65	1360	2.16	1452	2.70	1552	3.30	1652	3.96	1744	4.61	1834	5.30	1921	6.01
		24		24		26		29		30		29		31		33		35		35	
5700	933	1285	1.60	1309	1.74	1357	2.02	1446	2.57	1531	3.14	1619	3.75	1712	4.43	1803	5.14	1888	5.85		
		26		27		28		31		33		33		32		34		35			
6150	1007	1382	1.99	1405	2.14	1449	2.43	1534	3.03	1613	3.63	1692	4.26	1776	4.96	1863	5.70				
		29		30		30		34		36		36		35		36					
6600	1080	1480	2.43	1501	2.59	1543	2.91	1623	3.55	1698	4.19	1771	4.85	1846	5.55	1926	6.32				
		32		32		34		36		39		39		39		38					
7050	1154	1578	2.94	1598	3.11	1637	3.45	1713	4.14	1785	4.83	1853	5.51	1922	6.23						
		34		35		36		39		41		42		44							
7500	1227	1676	3.52	1695	3.70	1732	4.06	1804	4.79	1873	5.52										
		37		38		39		41		44											
7950	1301	1775	4.17	1793	4.36	1828	4.74	1896	5.51												
		41		41		42		44													

MAXIMUM RPM: Level 1 — 1449 Level 2 — 1932 MAXIMUM MOTOR FRAME SIZE: Level 1 = 184T Level 2 = 215T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

222A1, 222A2

Wheel Dia.: 22.25"
Outlet Dia.: 36.50"

Max. BHP = 1.50 (RPM ÷ 1000)³
Tip Speed FPM = 5.83 x RPM

Outlet Area: 7.27 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
2600	358	465	0.14	518	0.21	626	0.36	822	0.74												
		4.6		5.3		6.9		10.5													
3200	440	550	0.23	593	0.30	681	0.48	848	0.88	1007	1.37										
		6.0		6.9		7.8		11.3		14.8											
3800	523	638	0.35	675	0.44	747	0.62	895	1.07	1032	1.57	1166	2.15								
		7.5		8.4		9.9		12.6		15.4		18.0									
4400	605	728	0.50	760	0.60	822	0.81	951	1.29	1075	1.83	1192	2.42	1308	3.08	1423	3.79				
		9.5		10.1		12.0		13.4		16.4		19.0		21		23					
5000	688	819	0.70	847	0.82	903	1.06	1013	1.56	1128	2.15	1234	2.76	1338	3.44	1440	4.17	1541	4.95	1642	5.77
		11.6		12.3		14.0		15.6		17.8		20		22		23		26		28	
5600	771	911	0.96	936	1.08	986	1.35	1084	1.89	1186	2.51	1287	3.18	1381	3.88	1473	4.61	1565	5.42	1656	6.27
		13.9		14.6		15.7		18.3		18.7		22		23		24		26		29	
6200	853	1003	1.27	1026	1.41	1072	1.70	1160	2.29	1249	2.92	1343	3.64	1433	4.39	1518	5.16	1601	5.96	1685	6.83
		16.0		16.8		18.4		21		22		23		25		26		27		30	
6800	936	1096	1.64	1117	1.80	1159	2.11	1240	2.75	1320	3.42	1403	4.15	1489	4.96	1571	5.78	1648	6.61	1724	7.48
		18.9		19.6		21		23		25		25		26		28		29		31	
7400	1018	1189	2.08	1209	2.25	1247	2.59	1322	3.29	1396	4.00	1470	4.75	1548	5.58	1626	6.45	1701	7.35		
		22		22		23		26		28		28		27		30		31			
8000	1101	1283	2.61	1301	2.79	1336	3.15	1406	3.90	1475	4.66	1542	5.44	1612	6.28	1685	7.20				
		24		25		26		29		31		32		31		32					
8600	1183	1377	3.21	1393	3.40	1426	3.79	1492	4.59	1556	5.41	1619	6.23	1682	7.09						
		28		28		29		32		34		35		36							
9200	1266	1470	3.90	1486	4.11	1517	4.52	1578	5.37	1639	6.24	1698	7.12								
		30		32		32		34		37		38									
9800	1349	1564	4.68	1579	4.90	1608	5.34	1666	6.25	1723	7.17										
		34		34		36		37		40											
10400	1431	1658	5.57	1672	5.80	1699	6.26														
		37		37		39															

MAXIMUM RPM: Level 1 — 1303 Level 2 — 1737 MAXIMUM MOTOR FRAME SIZE: Level 1 = 215T Level 2 = 256T

245A1, 245A2

Wheel Dia.: 24.50"
Outlet Dia.: 40.00"

Max. BHP = 2.43 (RPM ÷ 1000)³
Tip Speed FPM = 6.41 x RPM

Outlet Area: 8.73 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
3200	367	427	0.18	474	0.26	571	0.45	748	0.91												
		4.7		5.6		7.2		11													
3900	447	502	0.28	541	0.37	620	0.58	771	1.07	915	1.66										
		6.1		7.2		8.1		11.7		15.3											
4600	527	579	0.42	612	0.53	678	0.75	813	1.29	937	1.90	1059	2.61								
		7.7		8.5		10.0		12.8		16.1		19.2									
5300	607	657	0.60	687	0.72	744	0.98	861	1.55	974	2.20	1081	2.92	1187	3.72	1292	4.58				
		9.6		10.1		12.0		13.9		17.2		19.8		22		24					
6000	688	737	0.83	763	0.97	814	1.25	915	1.86	1020	2.57	1117	3.31	1212	4.12	1306	5.02	1399	5.97	1491	6.94
		11.5		12.2		13.7		15.9		18.2		21		23		25		27		29	
6700	768	817	1.12	840	1.27	886	1.58	976	2.24	1070	2.98	1162	3.79	1249	4.63	1333	5.52	1418	6.50	1502	7.54
		13.7		14.4		15.9		18.6		19.6		22		25		26		28		29	
7400	848	898	1.47	919	1.64	961	1.99	1042	2.69	1125	3.46	1211	4.32	1293	5.21	1371	6.13	1448	7.11	1525	8.16
		16.1		16.8		17.8		21		22		23		26		27		29		31	
8100	928	979	1.90	998	2.08	1037	2.45	1112	3.22	1186	4.02	1263	4.91	1342	5.87	1416	6.84	1488	7.86	1558	8.90
		18.9		19.1		20		23		25		25		27		28		30		32	
8800	1008	1060	2.39	1078	2.59	1113	2.99	1183	3.82	1251	4.67	1320	5.58	1393	6.58	1465	7.63	1533	8.69		
		21		22		23		26		27		28		28		30		32			
9500	1089	1142	2.98	1158	3.19	1191	3.62	1256	4.51	1319	5.41	1382	6.35	1448	7.38	1515	8.47				
		24		25		26		28		31		32		31		31					
10200	1169	1224	3.66	1239	3.88	1270	4.35	1330	5.29	1390	6.26	1448	7.24	1507	8.28	1569	9.40				
		27		27		28		30		33		35		35		35					
10900	1249	1305	4.42	1320	4.67	1349	5.16	1406	6.17	1462	7.20	1517	8.24	1571	9.30						
		30		30		32		34		36		39		39							
11600	1329	1388	5.30	1401	5.55	1428	6.08	1482	7.15	1535	8.24										
		33		33		35		38		39											
12300	1409	1470	6.28	1482	6.55	1508	7.11	1559	8.24												
		36		38		38		41													

MAXIMUM RPM: Level 1 — 1183 Level 2 — 1577 MAXIMUM MOTOR FRAME SIZE: Level 1 = 215T Level 2 = 256T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

270A1, 270A2

Wheel Dia.: 27.00"
Outlet Dia.: 43.38"

Max. BHP = 4.25 (RPM ÷ 1000)³
Tip Speed FPM = 7.07 x RPM

Outlet Area: 10.26 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	390	404	0.26	441	0.36	519	0.59	666	1.14												
		5.6		6.6		7.5		10.4													
4750	463	467	0.39	499	0.51	562	0.75	687	1.33												
		7.2		8.1		9.1		11.3													
5500	536	531	0.56	559	0.69	613	0.97	726	1.60	828	2.30										
		8.8		9.6		11.1		12.6		15.0											
6250	609	596	0.77	621	0.93	669	1.23	767	1.91	863	2.66	952	3.47								
		10.7		11.6		13.2		14.5		16.9		18.8									
7000	682	662	1.05	684	1.21	727	1.55	813	2.28	903	3.09	985	3.95	1065	4.86	1153	5.94				
		13.0		13.3		14.8		16.8		18.6		21		22		24					
7750	755	729	1.38	748	1.56	788	1.94	865	2.72	945	3.57	1025	4.50	1097	5.44	1169	6.45	1248	7.63		
		14.8		15.5		16.5		19.6		20		23		24		25		27			
8500	828	795	1.78	814	1.98	850	2.39	920	3.23	991	4.13	1066	5.11	1137	6.13	1202	7.16	1268	8.27	1338	9.50
		17.5		17.5		19.4		23		24		25		26		27		28		29	
9250	901	862	2.25	879	2.47	912	2.91	978	3.83	1042	4.77	1109	5.79	1178	6.88	1242	7.99	1302	9.11	1362	10.30
		19.5		21		22		25		27		27		28		30		31		31	
10000	974	930	2.81	945	3.04	976	3.52	1037	4.50	1096	5.50	1157	6.57	1220	7.69	1283	8.87	1342	10.07		
		23		24		25		28		30		31		31		32		33			
10750	1048	997	3.44	1012	3.70	1040	4.20	1097	5.25	1153	6.33	1208	7.42	1265	8.59	1325	9.84	1383	11.11		
		26		27		29		32		34		35		35		35		36			
11500	1121	1065	4.18	1078	4.44	1105	4.99	1158	6.10	1211	7.25	1262	8.39	1315	9.62	1369	10.89				
		29		30		32		35		37		39		39		39					
12250	1194	1133	5.02	1145	5.29	1171	5.88	1221	7.06	1270	8.26	1318	9.47	1367	10.74						
		33		34		35		39		41		43		43							
13000	1267	1200	5.95	1212	6.25	1236	6.86	1283	8.10	1330	9.38	1376	10.67								
		37		37		39		41		44		46									
13750	1340	1268	7.00	1280	7.33	1302	7.97	1347	9.29	1391	10.62										
		41		41		42		45		48											

MAXIMUM RPM: Level 1 — 1048 Level 2 — 1397 MAXIMUM MOTOR FRAME SIZE: Level 1 = 215T Level 2 = 284T

300A1, 300A2

Wheel Dia.: 30.00"
Outlet Dia.: 48.63"

Max. BHP = 7.19 (RPM ÷ 1000)³
Tip Speed FPM = 7.85 x RPM

Outlet Area: 12.90 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4700	364	350	0.29	385	0.41	458	0.68														
		5.3		6.2		7.3															
5600	434	404	0.43	434	0.57	494	0.87	610	1.56												
		6.8		7.9		8.8		11.2													
6500	504	460	0.62	486	0.78	537	1.11	642	1.86	739	2.72										
		8.5		9.3		10.9		12.6		15.3											
7400	574	516	0.86	539	1.03	584	1.40	678	2.23	764	3.11	851	4.14								
		10.3		10.9		13.0		14.3		16.7		19.2									
8300	644	574	1.16	595	1.36	635	1.77	716	2.64	799	3.61	874	4.64	952	5.80						
		12.3		13.3		14.7		16.0		18.5		21		23							
9200	713	632	1.53	651	1.75	687	2.19	759	3.13	835	4.16	908	5.28	975	6.42	1045	7.70				
		14.1		14.8		16.5		18.9		19.8		22		24		26					
10100	783	690	1.97	707	2.21	741	2.70	807	3.71	874	4.80	944	5.99	1008	7.20	1068	8.45	1131	9.83	1200	11.41
		16.5		17.3		18.3		21		22		24		26		27		29		30	
11000	853	749	2.50	764	2.76	795	3.28	856	4.37	917	5.52	980	6.75	1043	8.05	1101	9.38	1157	10.76	1214	12.23
		18.9		19.3		21		24		26		26		28		30		30		32	
11900	923	808	3.13	822	3.40	851	3.97	907	5.13	963	6.34	1020	7.63	1079	8.99	1137	10.42	1190	11.85	1242	13.34
		21		22		23		27		29		30		31		32		33		34	
12800	993	867	3.84	880	4.14	907	4.75	960	6.00	1011	7.27	1063	8.60	1118	10.04	1173	11.53	1226	13.06		
		24		25		27		30		32		33		34		34		36			
13700	1062	926	4.66	938	4.97	963	5.62	1013	6.96	1061	8.31	1110	9.72	1159	11.18	1210	12.72				
		27		28		30		33		35		37		38		38					
14600	1132	985	5.59	997	5.94	1020	6.62	1067	8.04	1113	9.48	1158	10.94	1203	12.44	1250	14.04				
		31		31		33		36		39		41		42		42					
15500	1202	1044	6.64	1055	7.00	1077	7.73	1121	9.21	1165	10.75	1208	12.30	1250	13.86						
		34		35		36		40		43		45		47							
16400	1272	1104	7.84	1114	8.21	1135	8.98	1177	10.56	1218	12.15										
		38		38		41		43		47											

MAXIMUM RPM: Level 1 — 943 Level 2 — 1257 MAXIMUM MOTOR FRAME SIZE: Level 1 = 215T Level 2 = 284T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

330A1, 330A2

Wheel Dia.: 33.00"
Outlet Dia.: 52.00"

Max. BHP = 11.31 (RPM ÷ 1000)³
Tip Speed FPM = 8.64 x RPM

Outlet Area: 14.75 ft²
Fan Efficiency Grade: FEG60

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
5800	393	325	0.36	358	0.51	421	0.84														
		4.9		5.8		7.1															
6900	468	375	0.54	402	0.70	457	1.08	564	1.96												
		6.6		7.6		8.3		11.5													
8000	542	426	0.77	450	0.96	498	1.38	590	2.31	683	3.39										
		8.7		9.6		10.4		12.4		15.3											
9100	617	478	1.07	500	1.29	542	1.74	624	2.75	705	3.90	787	5.15								
		10.4		11.1		12.5		13.9		16.8		19.4									
10200	692	531	1.45	550	1.69	588	2.18	662	3.27	734	4.46	806	5.79	880	7.20						
		12.5		13.2		14.8		15.5		18.4		21		22							
11300	766	585	1.92	602	2.18	636	2.71	704	3.90	769	5.15	834	6.52	899	8.01	966	9.59				
		14.4		14.7		16.5		18.5		20		22		24		25					
12400	841	639	2.49	654	2.76	685	3.34	747	4.59	808	5.95	867	7.37	926	8.90	986	10.57	1046	12.28	1109	14.03
		16.5		17.0		18.4		22		22		24		26		26		28		31	
13500	915	693	3.16	707	3.45	735	4.06	792	5.40	849	6.85	904	8.36	958	9.93	1012	11.61	1067	13.43	1122	15.28
		19.2		19.4		21		24		25		25		27		29		30		32	
14600	990	747	3.94	760	4.25	786	4.91	839	6.33	892	7.87	943	9.45	993	11.08	1044	12.84	1094	14.67		
		22		22		24		27		28		29		29		31		33			
15700	1064	801	4.84	813	5.17	838	5.89	887	7.38	936	8.99	985	10.69	1032	12.41	1078	14.18	1125	16.07		
		25		25		27		30		31		33		32		33		35			
16800	1139	856	5.89	867	6.24	890	6.99	936	8.57	982	10.26	1027	12.01	1072	13.85	1116	15.72				
		28		28		30		32		34		35		36		36					
17900	1214	910	7.05	921	7.45	942	8.23	985	9.88	1028	11.64	1071	13.49	1114	15.43						
		30		31		32		34		37		39		39							
19000	1288	965	8.39	975	8.80	995	9.63	1036	11.39	1076	13.20	1117	15.15								
		34		34		34		37		40		42									
20100	1363	1020	9.89	1029	10.31	1048	11.19	1087	13.04	1125	14.94										
		37		37		39		40		43											

MAXIMUM RPM: Level 1 — 857 Level 2 — 1143 MAXIMUM MOTOR FRAME SIZE: Level 1 = 215T Level 2 = 286T

365A1, 365A2

Wheel Dia.: 36.50"
Outlet Dia.: 54.63"

Max. BHP = 18.48 (RPM ÷ 1000)³
Tip Speed FPM = 9.56 x RPM

Outlet Area: 16.27 ft²
Fan Efficiency Grade: FEG56

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
7100	436	296	0.45	326	0.63	387	1.06														
		5.0		5.7		6.6															
8400	516	339	0.66	365	0.87	417	1.34	513	2.40												
		6.6		7.4		8.1		10.0													
9700	596	384	0.93	407	1.17	451	1.69	539	2.85												
		8.6		9.7		10.4		11.4													
10000	614	395	1.01	417	1.26	460	1.78	546	2.97												
		9.0		10.2		11.0		11.7													
12300	756	476	1.73	494	2.02	530	2.64	600	3.99	670	5.49	732	7.04								
		12.6		13.4		14.6		15.0		16.5		18.5									
13600	836	523	2.27	539	2.58	572	3.26	635	4.71	699	6.29	759	7.96	816	9.72						
		14.6		15.2		16.4		17.7		18.5		21		23							
14900	916	570	2.91	585	3.26	615	3.99	672	5.52	731	7.22	789	9.01	842	10.85	894	12.79				
		16.4		17.2		18.8		21		21		23		25		26					
16200	995	617	3.67	631	4.05	658	4.82	712	6.48	765	8.25	819	10.13	872	12.13	920	14.14	967	16.21		
		18.8		18.9		21		24		25		26		28		28		30			
17500	1075	664	4.55	677	4.96	703	5.81	753	7.57	801	9.40	851	11.38	902	13.51	949	15.62	993	17.79		
		21		22		24		27		29		30		31		32		33			
18800	1155	712	5.59	724	6.02	748	6.92	794	8.76	840	10.73	886	12.81	933	15.00	979	17.25				
		24		25		27		31		33		34		33		35					
20100	1235	760	6.77	771	7.23	793	8.17	837	10.15	880	12.21	922	14.34	966	16.64						
		28		28		30		34		37		38		38							
21400	1315	807	8.09	818	8.59	839	9.60	880	11.67	921	13.85	961	16.11								
		31		33		34		38		40		42									
22700	1395	855	9.59	865	10.12	885	11.19	924	13.37	962	15.62										
		35		36		38		41		45											
24000	1475	903	11.28	912	11.81	931	12.94	968	15.24												
		40		40		41		44													

MAXIMUM RPM: Level 1 — 746 Level 2 — 995 MAXIMUM MOTOR FRAME SIZE: Level 1 = 256T Level 2 = 286T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

402A1, 402A2

Wheel Dia.: 40.25"
Outlet Dia.: 60.63"

Max. BHP = 30.12 (RPM ÷ 1000)³
Tip Speed FPM = 10.54 x RPM

Outlet Area: 20.05 ft²
Fan Efficiency Grade: FEG56

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
9800	489	297	0.72	322	0.98	371	1.54														
		6.1		6.9		7.5															
11200	559	333	1.00	355	1.28	397	1.88	479	3.25												
		7.7		8.6		9.4		11.4													
12600	629	370	1.35	389	1.65	426	2.30	502	3.78	571	5.40										
		9.4		10.5		12.1		12.8		14.4											
14000	698	406	1.76	424	2.10	458	2.81	527	4.40	591	6.12										
		11.8		12.7		14.2		13.9		16.0											
15400	768	444	2.28	460	2.64	491	3.41	553	5.09	615	6.94	670	8.86								
		14.1		14.5		16.1		16.3		17.2		19.0									
16800	838	481	2.87	496	3.27	525	4.10	581	5.87	639	7.84	693	9.90	743	12.02						
		14.4		16.1		17.5		18.7		19.0		21		23							
18200	908	519	3.58	533	4.02	559	4.89	611	6.76	664	8.82	717	11.03	765	13.28	811	15.59				
		17.2		18.0		19.3		21		21		23		25		26					
19600	978	557	4.40	570	4.87	595	5.82	643	7.79	691	9.92	741	12.23	789	14.65	832	17.05	876	19.63		
		19.3		19.6		21		23		24		25		27		29		31			
21000	1048	595	5.34	607	5.84	630	6.83	676	8.95	721	11.19	767	13.59	813	16.11	856	18.68	896	21.27		
		21		21		22		26		27		28		30		32		33			
22400	1117	633	6.41	644	6.93	666	7.99	709	10.21	751	12.54	794	15.05	837	17.65	880	20.39				
		23		24		25		29		32		32		34							
23800	1187	671	7.61	682	8.18	702	9.28	743	11.63	783	14.09	823	16.68	863	19.36						
		26		26		28		32		35		36		36							
25200	1257	710	8.99	719	9.54	739	10.74	778	13.22	816	15.80	853	18.45	891	21.26						
		29		29		32		36		38		40		41							
26600	1327	748	10.49	757	11.09	776	12.35	813	14.94	849	17.63	884	20.38								
		32		34		36		38		42		45									
28000	1397	786	12.15	795	12.80	813	14.12	848	16.82	882	19.59										
		36		36		38		43		46											

MAXIMUM RPM: Level 1 — 677 Level 2 — 903 MAXIMUM MOTOR FRAME SIZE: Level 1 = 256T Level 2 = 286T

445A1, 445A2

Wheel Dia.: 44.50"
Outlet Dia.: 66.75"

Max. BHP = 49.74 (RPM ÷ 1000)³
Tip Speed FPM = 11.65 x RPM

Outlet Area: 24.30 ft²
Fan Efficiency Grade: FEG56

CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
12000	494	269	0.89	291	1.19	335	1.87														
		6.2		7.1		7.5															
13900	572	305	1.27	325	1.62	362	2.35	435	4.03												
		7.8		8.8		9.7		12.2													
15800	650	342	1.75	359	2.14	392	2.95	459	4.78	520	6.79										
		9.7		10.8		12.4		13.8		15.3											
17700	728	379	2.35	395	2.79	424	3.66	484	5.64	542	7.82	595	10.08								
		12.2		13.6		15.3		15.3		17.1		18.4									
19600	807	417	3.10	431	3.57	458	4.54	511	6.62	566	8.97	615	11.38	664	13.96						
		15.0		16.0		17.2		18.2		18.7		20		21							
21500	885	455	4.00	467	4.49	492	5.53	541	7.79	591	10.27	639	12.86	683	15.55	728	18.41				
		17.1		18.0		19.3		21		20		22		24		25					
23400	963	493	5.05	504	5.58	527	6.70	572	9.09	617	11.68	663	14.45	706	17.31	746	20.24	787	23.33		
		19.3		19.8		21		23		23		24		26		28		30			
25300	1041	531	6.28	542	6.88	563	8.07	605	10.62	646	13.32	688	16.20	731	19.33	770	22.43	806	25.53		
		22		22		23		25		26		26		29		30		33			
27200	1119	569	7.69	579	8.32	599	9.61	638	12.30	677	15.19	715	18.16	755	21.39	794	24.73				
		23		24		25		29		30		31		32		34					
29100	1197	607	9.31	617	10.01	636	11.40	672	14.21	708	17.20	744	20.36	781	23.70						
		25		27		29		31		34		35		36							
31000	1276	646	11.18	655	11.91	672	13.33	707	16.37	741	19.52	775	22.84	808	26.18						
		29		29		31		35		39		40		42							
32900	1354	684	13.24	693	14.04	709	15.54	742	18.73	774	22.02	806	25.47								
		32		33		35		39		43		45									
34800	1432	723	15.61	731	16.41	747	18.06	778	21.39	808	24.80										
		37		37		39		44		46											
36700	1510	761	18.17	769	19.04	784	20.75	814	24.30												
		41		42		44		47													

MAXIMUM RPM: Level 1 — 613 Level 2 — 817 MAXIMUM MOTOR FRAME SIZE: Level 1 = 284T Level 2 = 324T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

490A1, 490A2

Wheel Dia.: 49.00"
Outlet Dia.: 72.75"

Max. BHP = 80.56 (RPM ÷ 1000)³
Tip Speed FPM = 12.83 x RPM

Outlet Area: 28.87 ft²
Fan Efficiency Grade: FEG56

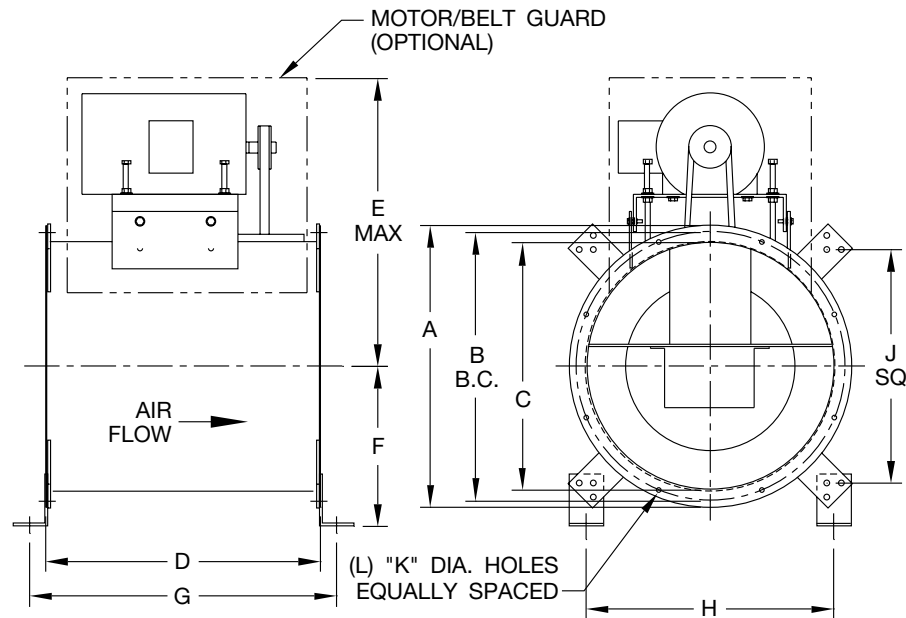
CFM	OV	STATIC PRESSURE (INCHES W.G.)																			
		0.125		0.25		0.50		1.00		1.50		2.00		2.50		3.00		3.50		4.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones		Sones	
14400	499	242	1.05	263	1.43	303	2.24														
		6.3		7.0		7.5															
16500	572	272	1.46	290	1.87	325	2.76	392	4.76												
		7.8		8.6		9.2		11.8													
18600	644	302	1.96	318	2.42	349	3.38	412	5.58	468	7.94										
		9.3		10.6		11.9		13.4		15.7											
20700	717	333	2.59	348	3.11	376	4.16	432	6.48	485	9.04										
		11.2		12.4		14.3		15.5		17.0											
22800	790	364	3.35	377	3.89	403	5.04	454	7.53	505	10.28	550	13.10								
		13.9		14.8		16.5		17.5		18.6		20									
24900	863	395	4.25	407	4.84	431	6.07	477	8.69	525	11.63	569	14.65	610	17.78						
		16.3		17.2		19.1		20		19.9		22		23							
27000	935	427	5.33	438	5.96	460	7.28	503	10.08	546	13.11	589	16.34	629	19.73	667	23.19				
		18.9		19.3		21		22		22		23		25		27					
29100	1008	458	6.55	469	7.25	489	8.63	529	11.60	569	14.80	609	18.16	649	21.80	684	25.34	720	29.15		
		21		22		23		25		25		25		27		28		30			
31200	1081	490	7.98	500	8.72	519	10.21	556	13.31	593	16.65	631	20.24	668	23.90	704	27.78	737	31.67		
		23		23		25		27		27		27		29		30		33			
33300	1154	522	9.61	531	10.38	549	11.96	584	15.25	618	18.68	653	22.39	689	26.32	724	30.37				
		25		26		27		30		30		31		31		33					
35400	1226	553	11.39	562	12.24	579	13.91	612	17.36	645	21.04	677	24.82	710	28.83						
		27		28		29		32		33		35		35							
37500	1299	585	13.45	593	14.31	609	16.07	641	19.75	672	23.57	702	27.48	733	31.65						
		30		30		31		34		37		38		40							
39600	1372	617	15.74	625	16.68	640	18.52	670	22.35	700	26.40	728	30.41								
		32		32		34		37		41		43									
41700	1445	649	18.28	656	19.22	671	21.21	699	25.16	728	29.42										
		35		35		38		41		45											

MAXIMUM RPM: Level 1 — 557 Level 2 — 742 MAXIMUM MOTOR FRAME SIZE: Level 1 = 284T Level 2 = 326T

NOTES:

1. Performance certified is for Installation Type B: Free inlet, ducted outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type B: Free inlet hemispherical sone levels.

Horizontal & Vertical



FAN SIZE	A	B	C	D	E	F	G	H	J	L	K	SHAFT DIA (IN.)		MAX. MOTOR FRAME		AVERAGE SHIP WT. (LBS.)	
												LV 1	LV 2	LV 1	LV 2	LV 1	LV 2
90/105	19.63	17.88	16.13	19.50	21.00	11.50	22.25	17.88	16.68	8	0.56	0.750	1.000	56	145T	140	158
122	21.75	19.88	18.25	20.50	22.50	12.38	23.25	19.50	18.25	8	0.56	0.750	1.000	143T	184T	161	231
135	24.75	22.88	21.25	23.00	25.25	13.38	25.75	21.50	20.25	8	0.56	0.750	1.000	145T	184T	181	261
150	25.69	23.94	22.19	24.00	26.50	13.75	26.75	22.25	21.00	8	0.56	0.750	1.000	184T	215T	195	270
165	27.75	25.88	24.25	25.00	28.50	14.50	27.75	23.63	22.44	8	0.56	0.750	1.188	184T	215T	272	287
182	33.88	32.00	30.38	29.00	30.75	18.63	31.75	28.00	26.75	8	0.56	1.000	1.188	184T	215T	324	380
200	37.47	35.25	33.47	32.00	33.00	19.75	34.75	30.19	29.00	8	0.69	1.000	1.438	215T	215T	358	419
222	40.50	38.38	36.50	34.00	36.50	20.81	36.75	32.38	31.13	16	0.69	1.000	1.438	215T	215T	440	525
245	44.00	42.25	40.00	37.00	38.75	24.00	39.75	34.88	33.63	16	0.69	1.000	1.438	215T	256T	507	592
270	47.38	45.63	43.38	40.00	41.00	25.25	42.75	37.25	36.00	16	0.69	1.188	1.438	215T	256T	566	733
300	52.63	50.63	48.63	44.00	44.25	27.13	46.75	41.00	39.75	16	0.69	1.188	1.688	215T	284T	774	907
330	56.00	54.25	52.00	49.00	46.25	29.75	51.75	43.38	42.00	16	0.69	1.438	1.938	215T	284T	902	1046
365	58.63	57.25	54.63	52.50	48.00	30.75	55.25	45.13	44.00	16	0.69	1.438	2.188	256T	286T	1039	1159
402	64.63	62.81	60.63	56.00	51.50	33.00	58.38	49.63	49.63	16	0.69	1.688	2.438	256T	286T	1191	1412
445	71.75	70.00	66.75	60.00	56.25	36.50	62.75	53.63	52.44	16	0.69	1.938	2.438	284T	324T	1508	1668
490	77.75	75.25	72.75	63.50	59.63	39.50	66.25	58.13	56.88	16	0.69	2.188	2.438	284T	326T	1692	2072

D4215B

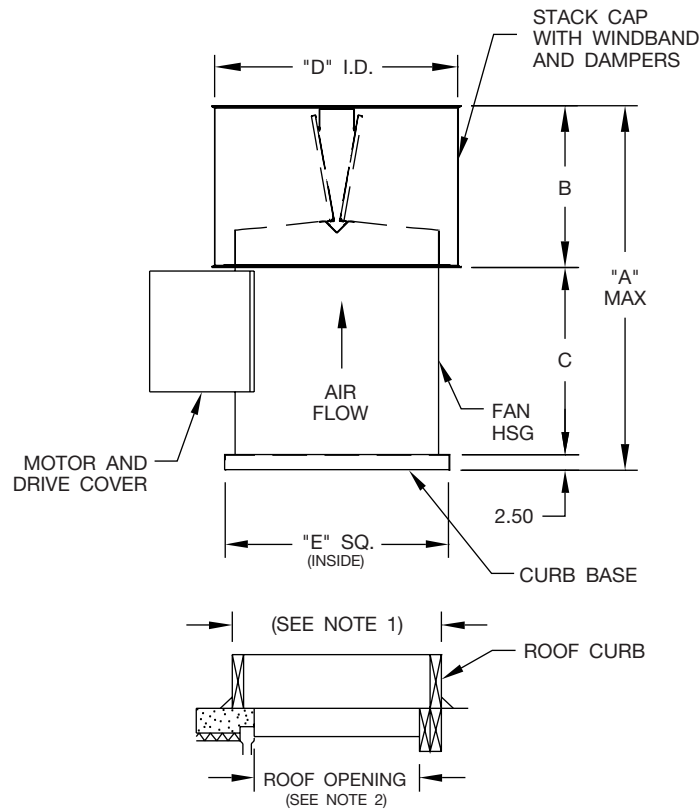
Dimensions shown are in inches unless otherwise indicated.

Dimensions are not to be used for construction.

NOTE:

1. Fan shown in horizontal shipping position, universal mounting brackets allow for other mounting configurations.

Vertical Roof Mounted



FAN SIZE	A	B	C	D	E	STD. ROOF CURB SIZE	SHAFT DIA (IN.)		MAX. MOTOR FRAME		AVERAGE SHIP WT. (LBS.)	
							LEVEL 1	LEVEL 2	LEVEL 1	LEVEL 2	LEVEL 1	LEVEL 2
90/105	39.13	17.75	18.88	22.25	20.00	18.50 x 18.50	0.750	1.000	56	145T	197	215
122	41.13	18.75	19.88	24.31	22.00	20.50 x 20.50	0.750	1.000	143T	184T	229	299
135	45.13	20.25	22.38	27.63	25.00	23.50 x 23.50	0.750	1.000	145T	184T	262	342
150	46.13	20.25	23.38	27.63	26.00	24.50 x 24.50	0.750	1.000	184T	215T	280	355
165	48.88	22.00	24.38	31.00	28.00	26.50 x 26.50	0.750	1.188	184T	215T	363	378
182	56.13	25.25	28.38	37.13	34.00	32.50 x 32.50	1.000	1.188	184T	215T	474	530
200	60.88	27.00	31.38	40.38	37.00	35.50 x 35.50	1.000	1.438	215T	215T	531	592
222	64.63	28.75	33.38	43.38	40.00	38.50 x 38.50	1.000	1.438	215T	215T	645	730
245	69.13	30.25	36.38	46.00	43.00	41.50 x 41.50	1.000	1.438	215T	256T	760	845
270	73.88	32.00	39.38	49.63	47.00	45.50 x 45.50	1.188	1.438	215T	256T	857	1024
300	80.88	35.00	43.38	55.63	52.00	50.50 x 50.50	1.188	1.688	215T	284T	1092	1225
330	87.38	36.50	48.38	59.63	55.00	53.50 x 53.50	1.438	1.938	215T	284T	1316	1460
365	92.88	38.50	51.88	62.25	58.00	56.50 x 56.50	1.438	2.188	256T	286T	1478	1598
402	99.88	42.00	55.38	68.25	64.00	62.50 x 62.50	1.688	2.438	256T	286T	1670	1891
445	108.63	46.75	59.38	73.25	70.00	68.50 x 68.50	1.938	2.438	284T	324T	2048	2208
490	115.13	49.75	62.88	79.25	76.00	74.50 x 74.50	2.188	2.438	284T	326T	2294	2674

D4215-1

Dimensions shown are in inches unless otherwise indicated.

Dimensions are not to be used for construction.

NOTES:

1. Outside dimensions of roof curb should be 1" to 1.50" less than inside curb base dimension 'E', depending on thickness of flashing material used.
2. Roof opening is 7.50" less than curb base 'E'.



Models

TCLB | TCLBR

Tubular Centrifugal Inline fans shall be belt driven model TCLB (standard inline centrifugal), model TCLBR (restaurant) as manufactured by Twin City Fan, 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).

Model TCLB shall be UL 705 listed. Model TCLBR shall be UL 762 listed for the exhaust of grease-laden air. Fans shall bear a permanently attached nameplate displaying model and serial number of the unit for future identification.

CONSTRUCTION — Housings shall be constructed of heavy gauge, continuously welded steel to prevent air leakage. Housings shall include punched inlet and outlet flanges for duct mounting. Motor and bearing supports shall be constructed of heavy gauge steel and shall be suitably braced to prevent vibration and pulsation. Extended lube lines shall be supplied as standard for lubrication of the fan bearings without fan disassembly. Model TCLBR shall include a 2" drain and two wheel cleanout doors (located 180° apart) for the inspection and maintenance of the wheel.

WHEEL — Fan wheels shall be of the non-overloading centrifugal backward inclined type and containing a matching inlet venturi for optimum unit performance. Sizes 270 and smaller shall be constructed of aluminum. Sizes 300 and larger shall be constructed of steel. Wheels shall be statically and dynamically balanced.

SHAFT — Fan shafts shall be precision ground and polished. Shafts shall have a first critical speed of at least 125% of the fan's maximum operating speed.

BEARINGS — Bearings shall be of the one-piece, self-aligning, pillow block type with relubricable zerk fittings. Bearings shall be designed for air handling service with a minimum L-10 life in excess of 80,000 hours; L-50 life in excess of 400,000 hours at the maximum cataloged operating speed.

DRIVE — Drives shall be sized for a minimum of 150% of driven horsepower. Machined, cast iron motor sheaves shall be adjustable through 20 HP for final system balancing. 25 HP and larger are fixed pitch.

MOTOR — Motors shall be of the heavy-duty ball bearing type, closely matched to the fan load and provided at the voltage, hertz, and enclosure as provided on the fan schedule. Motor adjustment shall allow precise belt tensioning for optimum belt life and one-person adjustment and servicing.

FINISH AND COATING — The entire fan assembly, excluding the shaft, shall be thoroughly degreased and deburred before application of a rust-preventative primer. After the fan is completely assembled, a finish coat of enamel paint shall be applied to the entire assembly. The fan shaft shall be coated with a petroleum-based rust protectant. Aluminum components shall be unpainted.

ACCESSORIES — When specified, accessories such as bolted and hinged access doors, belt guard, motor cover, inlet and outlet guard, companion flanges, type B spark resistant construction, aluminum construction, inspection section, inlet vanes, vibration isolators, and special coatings shall be provided by Twin City Fan to maintain one source responsibility.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at 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 on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its TCLB, TCLBR Tubular Centrifugal Fans for at least one (1) year from startup or eighteen (18) months from ship date.

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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