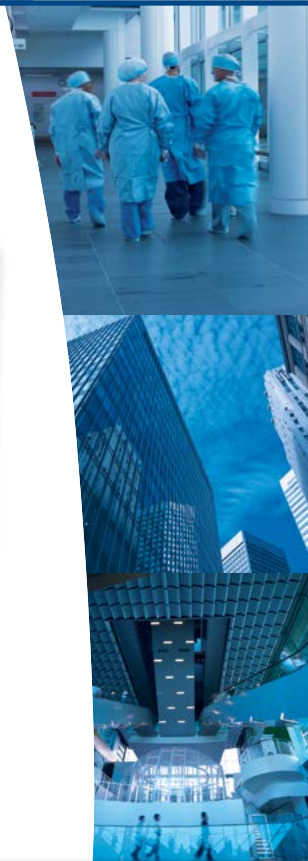


TURNING AIR INTO SOLUTIONS.

Fan & Blower

Twin City



SQUARE INLINE CENTRIFUGAL FANS

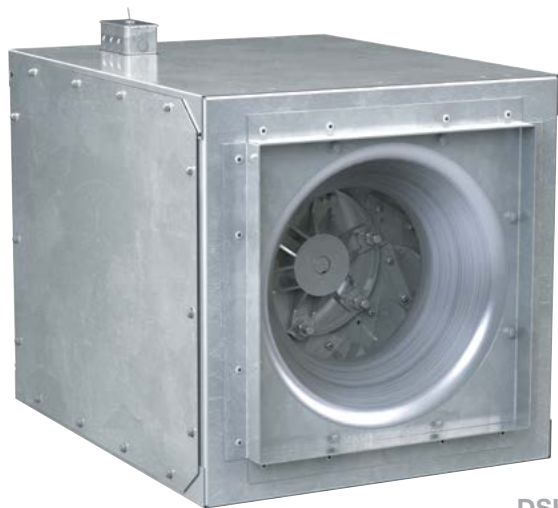
DSI | BSI

**CATALOG 4205
March 2016**

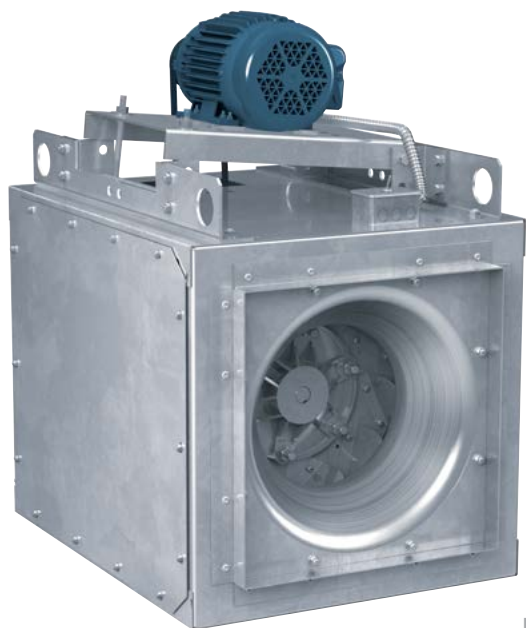
SQUARE INLINE CENTRIFUGAL FANS

Models

DSI | BSI



DSI
Direct Drive



BSI
Belt Driven

Twin City Fan's DSI direct drive and type BSI belt driven square inline fans are specifically designed for duct applications handling relatively clean air, including supply, exhaust and return air systems. These fans offer high efficiency and quiet operation in a compact design that can be mounted in any position (horizontal, vertical or angular). Duct collars are provided for easy mounting without the need for square to round duct transitions. The units can be easily serviced through the side access panels without removing duct connections.

Square inline centrifugal units feature high efficient, non-overloading, backward inclined centrifugal wheels precisely matched to a spun venturi. All wheels are statically and dynamically balanced. Units are manufactured under strict quality assurance standards to insure cataloged performance and years of maintenance-free operation. Square inline fans are not intended for outdoor applications.

Variable Speed Control

Variable speed control is available on direct drive DSI models. The speed control option allows adjustment of airflow for system balancing.

Model DSI

Sizes

Available in 10 sizes from 080 through 165

Performance

Airflow to 5,800 CFM

Static pressure to 2" w.g.

Model BSI

Sizes

Available in 29 sizes from 080 through 402

Performance

Airflow to 27,400 CFM

Static pressure to 3.5" w.g.



All DSI and BSI models are UL/cUL 705 listed, for electrical, File No. E158680.



Twin City Fan & Blower certifies that the Models DSI and BSI 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.



Fan Efficiency Grade (FEG) certification applies to Model DSI Sizes 135A, 135AE, 150A, 150AE, 150AN, 150ANE, 165A, 165AE, 165AN and 165ANE and Model BSI, Sizes 080A, 090A, 100A, 120A, 120AHP, 135A, 135AHP, 150A, 150AHP, 165A, 165AHP, 180A, 180AHP, 210A, 210AHP, 225A, 225AHP, 245A, 245AHP, 270A, 270AHP, 300A, 300AHP, 330A, 330AHP, 365A, 365AHP, 402A, 402AHP.



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

Construction

DSI | BSI

Housings - Housing assembly features heavy-gauge galvanized steel construction

Removable Side Panels - Removable side panels provide easy access for service and maintenance without the need to remove duct connections. Complete removal of the power assembly is also possible through side access panels. Side panels can provide a 90-degree side discharge. Requires optional side discharge accessory.

Duct Collars - Duct collars provide ready attachment to ductwork and eliminate the need for square to round duct transitions.

Belt Tube/Bearing Cover - Constructed of heavy gauge galvanized steel, the belt tube and bearing cover enclose the belts, fan sheave and bearings within the airstream (Model BSI).

Drive Frame - Motor and drive frame are constructed of heavy gauge galvanized steel. The pivoting motor base makes for simple belt tensioning (Model BSI).

Wheel - Backward inclined non-overloading, all-aluminum wheel and hub statically and dynamically balanced to assure long life and quiet operation.

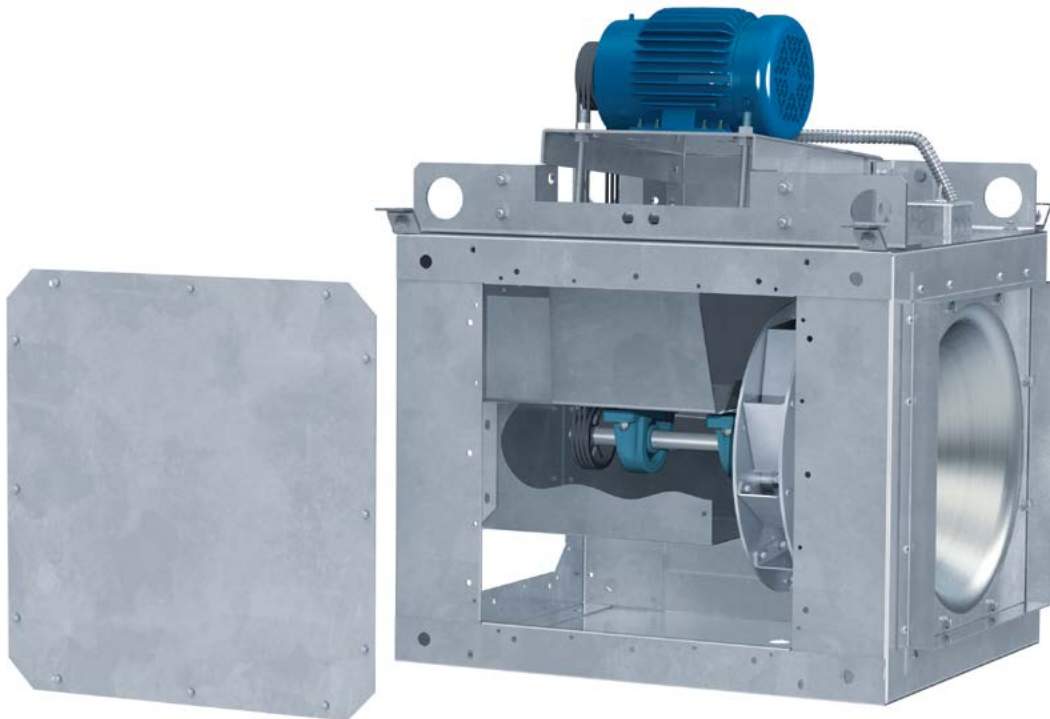
Mounting Brackets - Galvanized steel mounting brackets for easy mounting in horizontal or vertical position.

Pulleys - Heavy-duty cast iron adjustable pulleys to permit speed variation (Model BSI).

Shaft - Precision ground and polished with a first critical speed of at least 125% of the fan's maximum operating speed (Model BSI).

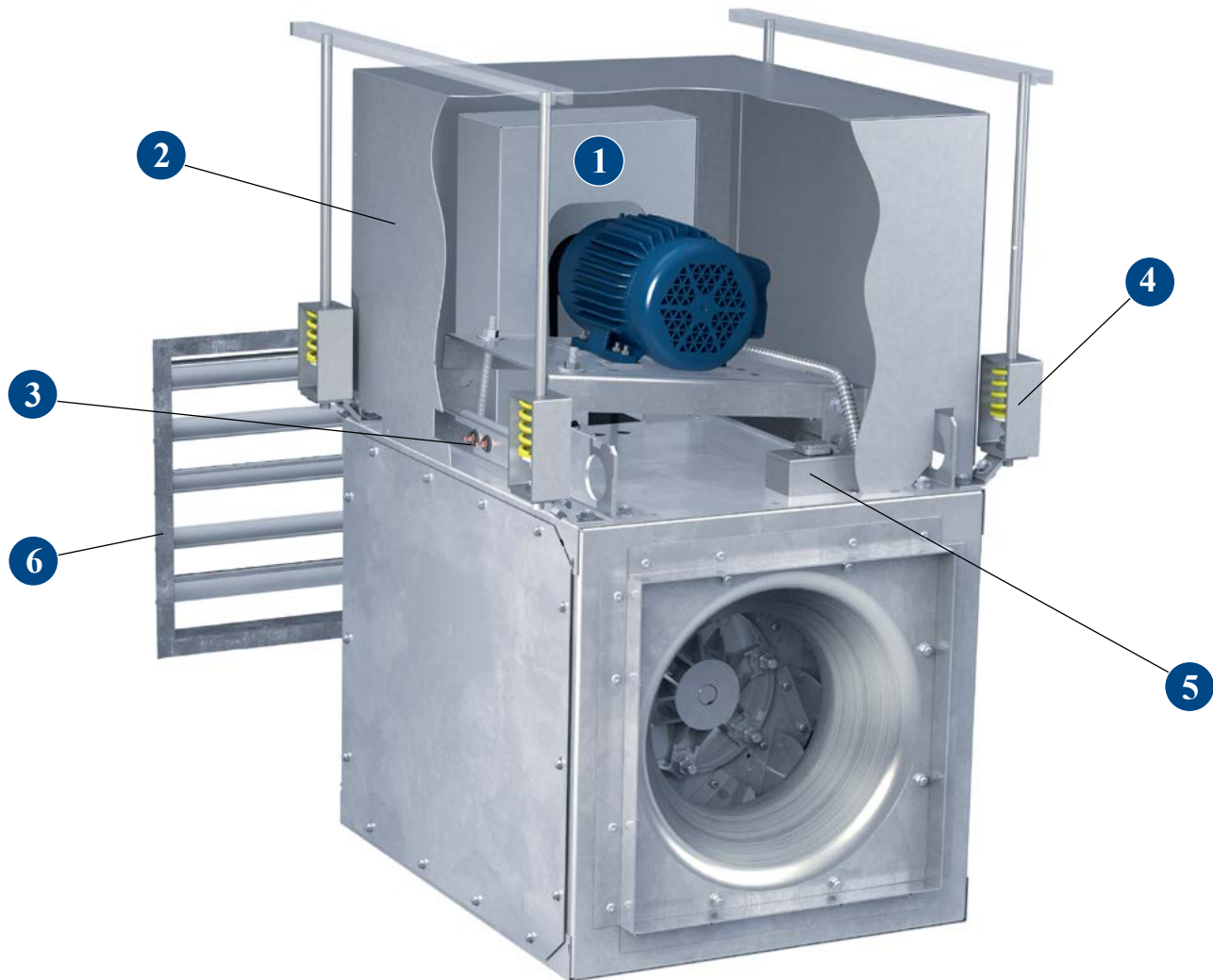
Bearings - All models are furnished with prelubricated cast iron pillow block bearings with zerk fittings, designed for an average life (L-50) of 500,000 hours or more at maximum cataloged operating speeds (Model BSI).

Disconnect Switch - Mounted and prewired NEMA-1 disconnect switch provided as standard for servicing the unit without the danger of an accidental start.

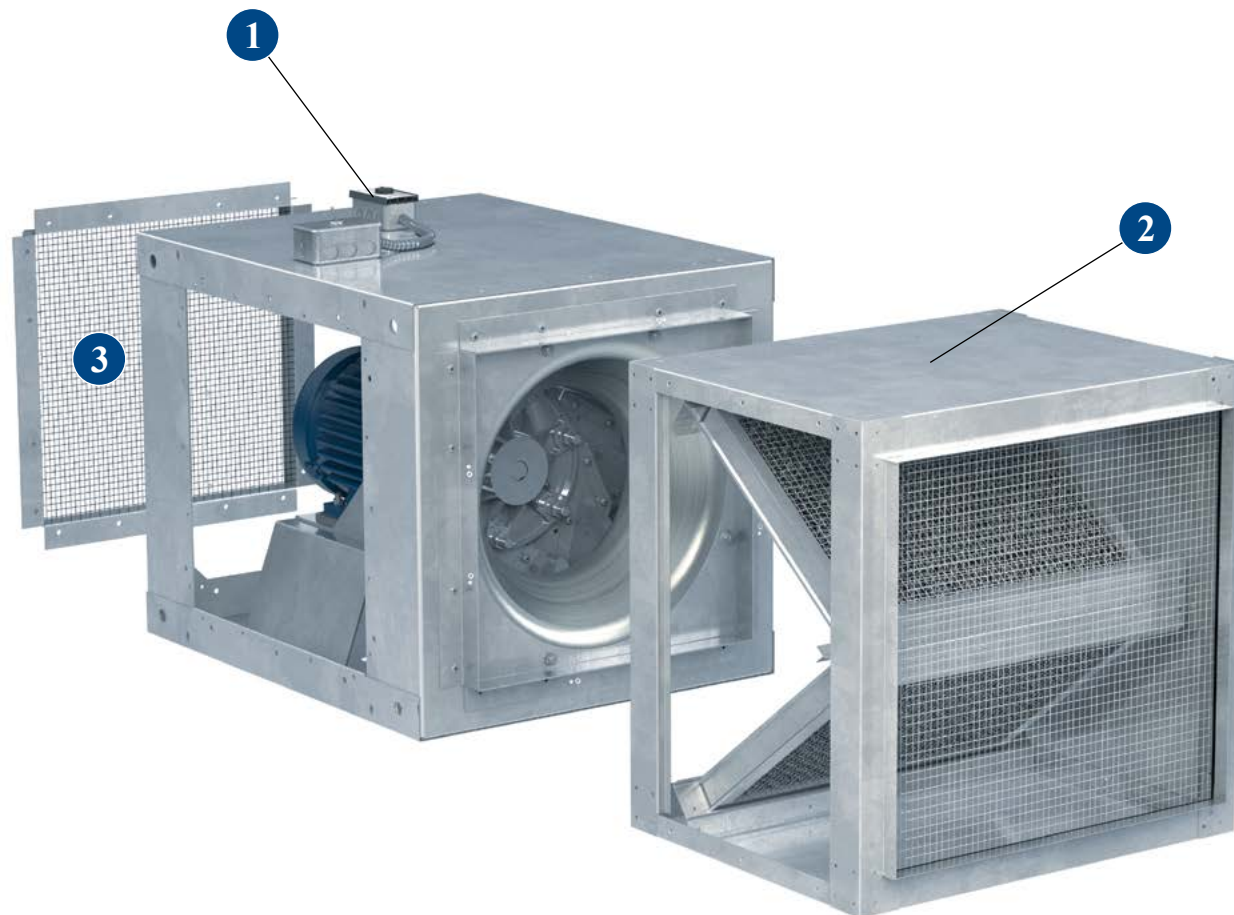


Fan & Blower
Twin City

OPTIONS/ACCESSORIES



- 1 Belt Guard** is a formed galvanized steel guard available to cover the drive assembly on Model BSI. Belt guard is offered in lieu of motor cover.
 - 2 Motor Cover** is a formed galvanized steel cover available on Model BSI to completely cover the motor and drives. Motor cover serves as OSHA belt guard.
 - 3 Extended Lube Lines** Exterior mounting zerk fittings are available with lines to the fan shaft bearings (Model BSI) for relubrication from outside the unit.
 - 4 Vibration Isolators** Spring or neoprene type vibration isolators are available for ceiling suspended or floor mounted installations.
 - 5 NEMA 3R** rain proof safety disconnect switch is available for positive electrical shutoff of the fan and the protection of service personnel.
 - 6 Backdraft Dampers**, with automatic or motorized operation, feature felt-edged damper blades for quiet operation. Damper frames are constructed of galvanized steel and blades are constructed of 26-gauge aluminum. All dampers ship loose for field mounting in ductwork.
- Motorized dampers are recommended for low CFM applications to assure unrestricted airflow. Motorized dampers are available with 115, 208, 230, 460, 575 or 24 volt service. End switches are available. See dimensional data for sizing.



1 Variable Speed Control Variable speed control is an optional accessory on all DSI models, to allow the adjustment of airflow for system balancing. Variable speed controllers are solid-state (Tri-ac) design and are designed to start the motor on high speed for better startup characteristics. Variable speed controls can be shipped separately, factory installed, or field installed on the unit at a later date. Motor must be ODP 115V, PSC or shaded pole type.

2 Filter Box A filter box containing two inch aluminum wire mesh, removable and washable filters is available for attachment to the fan inlet side. The filter box is constructed of galvanized steel, with duct collars for easy mounting and removable side panels for easy filter cleaning or replacement. Disposable paper filters are also available. One inch filters are available on either type. For filter box pressure drops contact factory. See page 24 for dimensional data.

3 Outlet Guard Inlet and outlet guards are available for all models. Guards mount inside the unit and do not interfere with the attachment of ductwork.

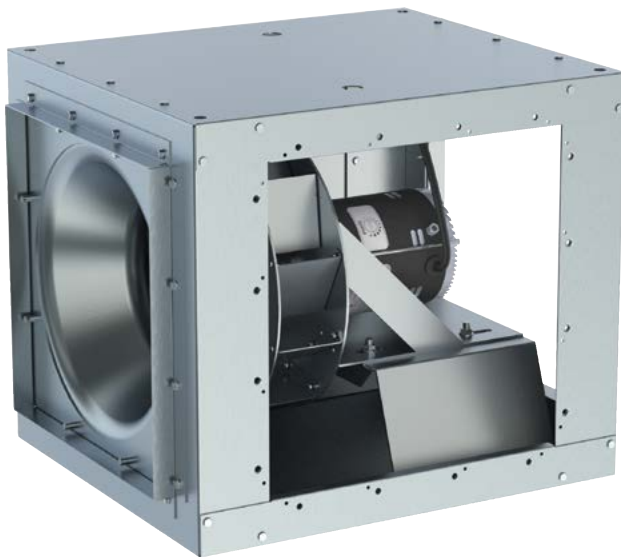
Other Accessories Include:

- Special Coatings
- Insulated Housings
- Aluminum Construction
- Stainless Steel Hardware
- NEMA 4 & 7/9 Disconnect Switches

SQUARE INLINE CENTRIFUGAL FANS

EC Motors

Model DSI



DSI Direct Drive
With EC Motor

Overview

Twin City Fan offers its own line of custom engineered Electronically Commutated (EC) motors. Electronic commutation is the latest motor technology to be used in direct drive fans. Also known in the industry as Brush Free or Brushless DC, the EC motors utilize an electronic circuitboard to control the functionality of the motor. The motor operates off of single phase AC power, which is converted to DC power within the motor's circuitry. The result is a highly efficient motor, even at part load, with an expanded speed control range and a variety of speed control options from which to choose. EC motors are available in ODP, TENV and TEFC enclosures.

Benefits

- Efficiencies up to 85%
- Constant efficiency as the motor speed is varied
- Up to 66% energy savings over traditional PSC motors
- Performance range comparable to a belt drive fan with reduced maintenance benefits of a direct drive fan
- 80% usable turndown range as compared with 40% maximum on PSC motors
- Soft start gives fans smooth, quiet start
- Lower operating temperatures result in longer life and reduces energy consumption
- Heavy-duty ball bearings are permanently lubricated
- Elimination of VFD results in lower initial cost

Speed Control Options

- Motor Mounted Dial – A potentiometer is mounted to the motor housing offering full speed control range. Speed adjustment is made with a small flat head screwdriver making system balance simple and easy. Also eliminates the need to mount or wire a speed controller.
- 0-10V DC Lead – A 36" long control lead is prewired to the motor which accepts a 0-10V DC signal and can be wired into building control systems.
- Remote Mounted Dial – A wall mounted dial allows the fan to be controlled from within the building by sending the motor a 0-10V DC signal. This option includes a 115V to 24V AC transformer mounted in a NEMA 1 electrical enclosure.



Motor Mounted
Speed Control Dial



Remote Mounted
Speed Control Dial



0-10V DC Lead
For Building Control
Systems



ECTEFC Motors
Available in 1 & 2 HP

Fan & Blower
Twin City

SIDE DISCHARGE OPTIONS

Side discharge kits (including panels, mounting collars, and necessary hardware) are available to provide 1-way, 2-way, or 3-way discharges. This option provides exceptional adaptability for any installation, as well as avoiding the system effect of disrupted airflow when the ductwork has to take a 90-degree turn.

Configurations

OPTION	FIGURE	CONFIGURATION
Standard	A	Rear
1-Way	B	Left
	C	Right
2-Way	D	Left and Right
	E	Left and Rear
	F	Right and Rear
3-Way	G	Left, Right and Rear

NOTE: Performance will change depending on the position of the discharge. See correction factor table below. Percentages based on (inline) cataloged performance, but are not AMCA certified. Always check BHP when selecting motor HP and fan size.

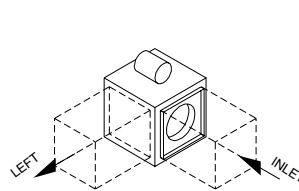


FIG. B

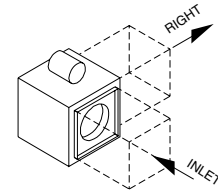


FIG. C

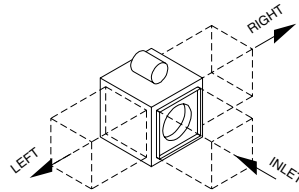


FIG. D

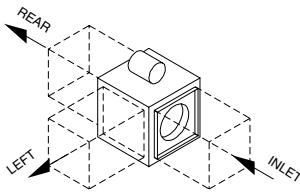


FIG. E

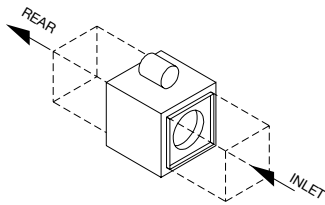


Fig. A

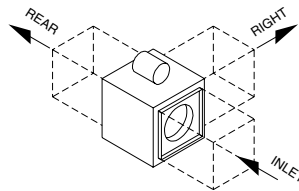


FIG. F

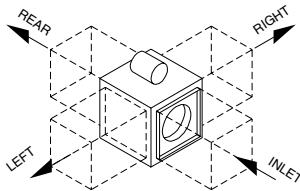


FIG. G

Performance Correction Factors

DISCHARGE	0.50" SP		1.00" SP		1.50" SP		2.00" SP		AVG.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1-Way	110.7%	113.0%	114.0%	110.8%	115.8%	108.5%	120.0%	102.3%	115.1%	108.7%
2-Way	114.7%	106.5%	118.1%	109.7%	120.3%	112.4%	126.8%	114.0%	120.0%	110.7%
3-Way	113.2%	105.9%	117.4%	109.7%	121.6%	113.0%	127.1%	114.0%	119.8%	110.7%

NOTE: The performance correction factors shown above are not licensed to bear the AMCA Certified Ratings Seal.

Duct Openings

MODEL BSI	MODEL DSI	LEFT AND RIGHT DISCHARGE			REAR DISCHARGE/INLET		
		DUCT COLLAR		DUCT SIZE REQUIRED	DUCT COLLAR		DUCT SIZE REQUIRED
		WIDTH	HEIGHT		WIDTH	HEIGHT	
080	080	11.88	11.88	12 x 12	11.88	11.88	12 x 12
090	090	11.88	11.88	12 x 12	11.88	11.88	12 x 12
100	100	13.88	13.88	14 x 14	13.88	13.88	14 x 14
120	120	15.88	15.88	16 x 16	15.88	15.88	16 x 16
135	135	17.88	17.88	18 x 18	17.88	17.88	18 x 18
150	150	19.88	19.88	20 x 20	19.88	19.88	20 x 20
165	165	22.88	22.88	23 x 23	22.88	22.88	23 x 23
180	—	23.88	23.88	24 x 24	23.88	23.88	24 x 24
210	—	27.88	27.88	28 x 28	27.88	27.88	28 x 28
225	—	25.88	28.88	26 x 29	29.88	29.88	30 x 30
245	—	27.88	31.88	28 x 32	32.88	32.88	33 x 33
270	—	29.88	33.88	30 x 34	35.88	35.88	36 x 36
300	—	29.88	37.88	30 x 38	39.88	39.88	40 x 40
330	—	31.88	39.88	32 x 40	43.88	43.88	44 x 44
365	—	32.88	41.88	33 x 42	45.88	45.88	46 x 46
402	—	34.88	46.88	35 x 47	51.88	51.88	52 x 52

NOTE: Damper size should be 1/8" less than duct size required, or same size as duct collar.

PERFORMANCE DATA

DSI – 60 Hz

EC MOTOR		PSC MOTOR		RPM	MAX. BHP	STATIC PRESSURE (INCHES W.G.)												FAN EFF. GRADE
SIZE	MTR HP	SIZE	MTR HP			0	0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	
						CFM SONE												
080AE	1/4	080A	1/8	860	0.01	323 4.2	247 3.4										N/A	
			1/8	1160	0.03	436 7.4	382 6.3	321 6.1	232 5.5									
			1/8	1650	0.10	620 10.4	583 10.4	545 8.7	505 8.0	459 8.6	403 8.3	335 7.3						
		---	---	1750	0.12	658 10.9	623 10.9	587 9.5	550 8.8	510 9.0	461 9.1	405 8.0						
090AE	1/4	090A	1/8	860	0.02	495 5.9	390 4.4										N/A	
			1/8	1160	0.05	668 9.8	592 8.2	510 7.9	401 6.4									
			1/8	1650	0.14	950 13.0	897 13.0	843 11.2	789 10.3	729 11.1	660 10.7	578 8.5						
		---	---	1750	0.17	1008 13.7	958 13.7	907 12.3	856 11.3	803 11.4	742 11.8	673 10.9						
100AE	1/2	100A	1/8	860	0.04	787 7.8	666 6.0	520 6.2									N/A	
			1/8	1160	0.11	1061 13.3	973 12.1	882 10.0	780 10.9	651 9.0								
			1/3	1750	0.36	1601 17.8	1543 17.8	1484 17.6	1424 15.9	1365 14.7	1303 14.8	1236 15.6	1083 14.9	877 11.7				
120AE	3/4	120A	1/8	860	0.07	1047 5.8	951 5.3	830 5.1	586 4.3								N/A	
			1/4	1160	0.18	1413 9.3	1344 9.3	1268 8.1	1183 7.7	1079 8.3	923 6.9							
			3/4	1750	0.63	2132 17.9	2087 17.9	2041 17.9	1993 17.7	1942 16.5	1889 15.5	1834 14.8	1709 15.6	1551 16.1	1288 14.2			
135ANE	3/4	135AN	1/8	860	0.08	1041 6.9	941 6.2	819 5.5	670 5.2								N/A	
			1/4	1160	0.20	1404 11.4	1332 11.4	1254 9.6	1165 8.4	1070 9.1	962 9.1	823 7.9						
			3/4	1750	0.69	2118 17.8	2071 17.8	2024 17.8	1974 17.8	1922 16.9	1867 15.7	1808 15.4	1685 15.9	1554 16.6	1401 14.8	1203 14.6		899 14.6
Outlet Area: 3.22 ft²																		
135AE	1, 2	135A	1/4	860	0.13	1437 7.1	1331 6.7	1208 5.9	1041 6.1								FEG56	
			1/2	1160	0.31	1938 11.2	1862 11.2	1780 10.7	1691 9.4	1591 9.4	1471 10.0	1306 8.9						
			1*	1750	1.07	2924 22	2875 22	2824 22	2771 22	2717 21	2660 20	2601 19.0	2476 18.3	2334 19.4	2161 19.6	1918 17.5		
Outlet Area: 3.90 ft²																		
150ANE	1, 2	150AN	1/4	860	0.13	1385 8.2	1277 7.9	1150 6.3	1005 6.9	810 5.9							FEG53	
			1/2	1160	0.32	1868 13.7	1790 13.7	1707 12.1	1615 10.5	1513 10.1	1407 11.0	1288 11.0	940 9.5					
			1*	1750	1.11	2818 21	2767 21	2715 21	2662 21	2606 20	2549 19.6	2488 18.6	2359 18.0	2221 19.2	2077 19.7	1913 18.5		1713 17.2
Outlet Area: 3.90 ft²																		
150AE	1	150A	1/4	860	0.20	1913 8.5	1798 8.5	1668 7.1	1513 7.5	1286 6.7							FEG56	
			1/2	1160	0.50	2580 13.5	2497 13.5	2409 13.3	2315 11.9	2213 11.3	2099 11.4	1965 12.1	1514 10.0					
	1	1 1/2*	1200	0.55	2669 20	2589 20	2504 20	2414 20	2317 19.3	2212 18.2	2091 17.5	1742 17.2						
			1750	1.72	3892 26	3838 26	3783 26	3726 26	3667 26	3607 25	3545 24	3414 22	3273 22	3116 22	2931 23	2699 22		
Outlet Area: 4.83 ft²																		
165ANE	1**	165AN	1/4	860	0.23	2094 7.7	1953 7.6	1805 6.9	1647 7.2	1472 7.3	1248 7.2						FEG60	
			1/2	1160	0.56	2825 12.4	2721 12.4	2615 12.0	2506 11.4	2394 11.0	2277 11.2	2155 12.0	1877 11.2	1457 11.3				
	2		2*	1750	1.93	4261 22	4193 22	4124 22	4054 22	3984 21	3912 21	3840 21	3694 20	3543 20	3386 21	3223 22		3048 23
Outlet Area: 4.83 ft²																		
165AE	1	165A	1/2	860	0.33	2898 10.1	2683 9.9	2499 8.9	2323 9.2	2069 9.4	1773 8.2						FEG60	
			1	1160	0.81	3909 16.5	3744 16.5	3592 15.6	3452 14.7	3327 14.2	3199 14.8	3044 15.7	2640 13.7	2152 13.5				
	2	3*	1500	1.76	5055 24	4925 24	4802 24	4684 23	4571 22	4465 21	4368 21	4174 21	3941 22	3637 22	3310 19.2	2935 19.8		
			1750	2.8	5898 30	5786 30	5678 30	5574 30	5473 29	5375 28	5281 27	5109 26	4945 26	4769 27	4552 28	4289 27		

* Designates motors that cannot be used with speed controller.
EC Motor is an Electronically Commutated Motor.
PSC Motor is a Permanent Split Capacitor Motor.

** Performance available with 1 HP 1160 RPM ECODP motors or 1 HP 1750 RPM ECTEFC motors. 1160 RPM maximum.

NOTES:

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

BSI 080A

Outlet Area = 1.17 ft²

Fan Efficiency Grade: FEG50

HP	RPM	STATIC PRESSURE (INCHES W.G.)															
		0.125		0.25		0.50		0.75		1.00		1.25		1.50		1.75	
		CFM	BHP	CFM	Sone	CFM	BHP	CFM	Sone	CFM	BHP	CFM	Sone	CFM	BHP	CFM	Sone
1/4	850	241															
		0.01	3.1														
	1050	333		261													
		0.03	4.6	0.03	4.7												
	1250	419		363													
		0.04	6.6	0.04	5.9												
	1450	502		455		349											
		0.06	9.0	0.07	7.3	0.07	7.5										
	1650	584		542		457		344									
		0.09	11.0	0.10	9.1	0.10	9.2	0.10	7.8								
1/3	1850	664		627		552		470		352							
		0.13	11.8	0.14	11.0	0.14	9.9	0.14	10.7	0.13	9.1						
	2050	744		710		643		574		493		376					
		0.18	13.9	0.18	12.8	0.19	11.2	0.19	12.2	0.19	11.7	0.18	10.6				
	2250	823		792		730		669		604		525		416			
		0.24	15.6	0.24	15.1	0.25	13.0	0.26	13.0	0.26	14.2	0.26	13.2	0.24	12.3		
	2375	872		843		784		726		667		599		516		390	
		0.28	16.8	0.28	16.8	0.29	14.3	0.30	13.8	0.30	14.8	0.30	15.2	0.30	13.0	0.27	13.3
	2500	921		893		837		783		727		667		597		509	
		0.32	18.3	0.33	18.3	0.34	16.0	0.35	15.1	0.35	15.6	0.35	16.5	0.35	15.8	0.34	14.3
1/2	2660	984		957		904		853		801		748		689		620	534
		0.39	20	0.39	20	0.40	18.4	0.41	16.7	0.42	16.4	0.43	18.1	0.43	18.3	0.42	16.8
	2860	1062		1037		988		940		892		843		793		737	673
		0.48	23	0.49	23	0.50	21	0.51	19.6	0.52	18.6	0.53	19.1	0.53	20	0.52	19.1
3/4	3060	1139		1116		1070		1025		980		935		889		842	789
		0.59	26	0.59	26	0.61	25	0.62	23	0.63	21	0.64	21	0.65	21	0.65	23
	3260	1217		1195		1152		1109		1067		1025		982		939	894
		0.71	29	0.72	29	0.73	29	0.74	25	0.76	24	0.77	23	0.77	23	0.78	24
1	3425	1281		1260		1218		1177		1137		1097		1057		1016	975
		0.82	33	0.83	33	0.84	32	0.86	29	0.87	26	0.88	25	0.89	24	0.90	25
	3590	1344		1324		1285		1246		1207		1169		1131		1092	1053
		0.94	35	0.95	35	0.97	35	0.98	33	1.00	30	1.01	28	1.02	27	1.03	27
																1.04	27
																1.05	29
																1.05	29
																1.03	26

MAXIMUM MOTOR FRAME SIZE: 145T

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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation Type B: free inlet hemispherical sone levels.

PERFORMANCE DATA

BSI 090A

Outlet Area = 1.62 ft²

Fan Efficiency Grade: FEG60

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.75	3.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM		
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone		
1/4	1450	752	697	562											
		0.09 9.0	0.09 8.2	0.10 8.8											
	1650	869	822	715	576										
		0.13 11.1	0.13 10.6	0.14 10.1	0.14 10.9										
	1850	984	944	854	748	608									
1/3	2015	1079	1042	962	872	764	616								
		0.23 14.8	0.23 14.8	0.25 13.5	0.26 13.1	0.26 14.4	0.25 12.7								
	2120	1139	1104	1029	946	851	734	505							
		0.27 15.8	0.27 15.8	0.28 14.4	0.30 13.9	0.30 14.8	0.30 14.8	0.27 13.2							
	2230	1201	1168	1099	1022	935	835	703							
1/2		0.31 16.8	0.31 16.8	0.33 15.9	0.34 14.7	0.35 15.5	0.35 16.2	0.35 14.1							
	2390	1292	1262	1197	1128	1052	967	868	736						
		0.38 17.9	0.38 17.9	0.40 17.6	0.41 16.3	0.43 16.3	0.43 17.3	0.44 17.3	0.42 14.4						
	2550	1382	1354	1295	1231	1163	1088	1004	908	781					
		0.46 19.8	0.47 19.8	0.48 19.6	0.49 18.7	0.51 17.9	0.52 18.4	0.53 19.4	0.53 18.6	0.51 16.0					
3/4	2735	1487	1460	1406	1348	1286	1220	1149	1069	979	866	646			
		0.56 22	0.57 22	0.59 22	0.60 21	0.62 20	0.63 20	0.65 21	0.65 22	0.65 21	0.64 18.4	0.58 17.3			
	2920	1591	1566	1515	1462	1406	1347	1283	1215	1140	1056	956			
		0.69 25	0.69 25	0.71 25	0.73 24	0.74 23	0.76 22	0.78 22	0.79 24	0.79 24	0.79 23	0.78 21			
	3060	1669	1646	1598	1547	1495	1440	1381	1319	1251	1178	1097	863		
1		0.79 26	0.80 26	0.81 26	0.83 26	0.85 25	0.87 24	0.88 24	0.90 24	0.91 25	0.91 26	0.91 25	0.87 21		
	3205	1750	1728	1682	1635	1585	1534	1480	1422	1361	1296	1224	1055		
		0.90 28	0.91 28	0.93 28	0.95 28	0.97 27	0.99 26	1.01 26	1.02 26	1.04 27	1.05 28	1.05 28	1.04 24		

MAXIMUM MOTOR FRAME SIZE: 145T

BSI 100A

Outlet Area = 2.20 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM		
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone		
1/4	1025	816	716	592											
		0.07 6.8	0.07 6.2	0.07 6.9											
	1275	1053	981	899	806										
		0.13 9.9	0.13 9.1	0.14 8.7	0.14 9.5										
	1465	1229	1169	1103	1030	859									
1/3		0.19 12.3	0.20 12.1	0.20 11.2	0.21 10.8	0.22 12.1									
	1565	1321	1265	1205	1140	992	790								
		0.23 13.7	0.24 13.7	0.25 12.8	0.25 12.2	0.26 13.1	0.26 12.7								
	1645	1394	1341	1285	1225	1090	924								
		0.27 15.0	0.28 14.5	0.28 13.9	0.29 13.2	0.30 13.9	0.31 14.3								
1/2	1725	1467	1417	1364	1308	1184	1038	833							
		0.31 16.0	0.32 16.0	0.33 15.4	0.33 14.5	0.35 14.4	0.35 15.6	0.34 14.4							
	1850	1580	1534	1485	1434	1324	1199	1049	818						
		0.38 17.9	0.39 17.9	0.40 17.1	0.41 16.3	0.42 15.5	0.43 16.7	0.44 17.5	0.41 16.1						
	1980	1697	1654	1610	1563	1463	1353	1229	1077	825					
3/4		0.47 19.2	0.47 19.2	0.48 19.0	0.49 18.3	0.51 17.2	0.53 17.3	0.53 18.8	0.53 18.1	0.5 16.8					
	2120	1823	1783	1742	1699	1609	1510	1403	1281	1133	894				
		0.57 21	0.58 21	0.59 20	0.60 20	0.62 19.2	0.64 18.6	0.65 19.5	0.66 20	0.65 19.1	0.61 17.9				
	2255	1944	1906	1868	1829	1746	1656	1560	1455	1336	1192	970			
		0.68 22	0.69 22	0.70 22	0.71 22	0.74 21	0.76 19.9	0.77 19.9	0.79 21	0.79 21	0.78 19.9	0.74 18.1			
1	2370	2046	2011	1975	1938	1860	1777	1689	1593	1489	1371	1226	999		
		0.79 24	0.80 24	0.81 24	0.83 24	0.85 23	0.87 22	0.89 22	0.91 22	0.92 23	0.92 22	0.91 20	0.85 19.3		
	2480	2145	2111	2077	2041	1968	1891	1808	1720	1626	1522	1405	1259		
		0.91 25	0.92 25	0.93 25	0.94 25	0.96 24	0.99 23	1.01 23	1.03 23	1.04 24	1.05 25	1.05 24	1.03 21		

MAXIMUM MOTOR FRAME SIZE: 145T

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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

BSI 120A

Outlet Area = 2.67 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
1/4	700	716		489											
		0.04	3.5	0.04	3.0										
	900	990		880		710									
		0.08	6.2	0.09	6.0	0.09	5.7								
1/3	1100	1252		1166		1074		944		748					
		0.15	9.2	0.16	7.9	0.16	8.0	0.16	8.5	0.15	6.8				
	1290	1495		1423		1349		1271		1169		1041			
		0.24	11.6	0.25	10.9	0.25	10.0	0.26	10.1	0.26	10.3				
1/2	1355	1578		1509		1439		1367		1282		1172			
		0.27	12.5	0.28	11.9	0.29	10.9	0.30	10.7	0.30	11.3	0.30	11.6		
	1420	1660		1595		1528		1461		1387		1293		1040	
		0.31	13.6	0.32	13.0	0.33	11.8	0.34	11.6	0.35	11.7	0.35	12.4	0.34	10.5
3/4	1525	1792		1732		1670		1607		1543		1471		1275	
		0.39	14.9	0.40	14.9	0.41	13.9	0.42	13.1	0.43	12.8	0.43	13.6	0.43	13.6
	1630	1923		1867		1810		1751		1693		1631		1476	
		0.47	16.7	0.48	16.7	0.49	15.8	0.50	14.5	0.51	14.3	0.52	14.3	0.53	15.2
1	1750	2072		2020		1968		1913		1859		1804		1681	
		0.58	18.6	0.59	18.6	0.61	17.7	0.62	16.8	0.63	15.8	0.64	15.6	0.65	16.4
	1865	2215		2166		2117		2067		2016		1965		1858	
		0.70	21	0.71	21	0.73	20	0.74	19.4	0.75	18.3	0.76	17.6	0.78	17.6
1 1/2	1955	2326		2280		2233		2186		2137		2089		1990	
		0.80	22	0.82	22	0.83	22	0.85	22	0.86	20	0.87	19.4	0.90	18.9
	2045	2437		2393		2349		2304		2258		2211		2118	
		0.92	24	0.93	24	0.95	24	0.97	23	0.98	22	0.99	22	1.02	20
1 1/2	2195	2622		2582		2540		2498		2456		2413		2326	
		1.13	26	1.15	26	1.17	26	1.18	26	1.20	25	1.22	25	1.24	23
	2345	2807		2769		2730		2691		2652		2612		2531	
		1.38	30	1.40	30	1.42	30	1.43	30	1.45	29	1.47	28	1.50	26

MAXIMUM MOTOR FRAME SIZE: 145T

BSI 120AHP

Outlet Area = 2.67 ft²

Fan Efficiency Grade: FEG53

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
1/4	1240	586													
		0.15	7.6												
	1450	921		720											
		0.26	10.7	0.24	9.6										
1/3	1525	1020		855											
		0.30	11.3	0.30	10.9										
	1600	1112		963		754									
		0.34	11.8	0.35	12.2	0.32	10.8								
1/2	1720	1249		1125		978									
		0.42	13.1	0.43	13.6	0.43	13.1								
	1840	1378		1275		1146		1004							
		0.51	14.4	0.52	14.4	0.53	15.3	0.52	14.2						
3/4	1970	1513		1424		1318		1193		1055					
		0.62	16.9	0.63	16.0	0.64	16.4	0.64	16.6	0.63	15.2				
	2105	1650		1571		1482		1375		1257		1126			
		0.75	19.3	0.77	18.0	0.78	17.5	0.79	18.4	0.79	18.2	0.77	17.0		
1	2210	1755		1681		1601		1509		1401		1287		1153	
		0.86	21	0.88	20	0.90	19.0	0.91	19.2	0.91	19.8	0.88	17.8		
	2315	1858		1788		1715		1634		1539		1433		1323	
		0.98	24	1.00	21	1.02	20	1.04	20	1.05	21	1.05	21	1.04	21
1 1/2	2485	2024		1960		1894		1824		1747		1658		1560	
		1.21	27	1.23	25	1.25	24	1.27	23	1.28	23	1.29	23	1.30	24
	2655	2187		2128		2067		2005		1938		1866		1784	
		1.46	30	1.49	29	1.51	27	1.53	26	1.55	25	1.56	25	1.58	26

MAXIMUM MOTOR FRAME SIZE: 145T

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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

PERFORMANCE DATA

BSI 135A

Outlet Area = 3.22 ft²

Fan Efficiency Grade: FEG53

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1/4	900	1386	1268	1120	894										
		0.14 8.0	0.15 7.1	0.15 7.7	0.15 6.1										
1/4	1075	1696	1599	1500	1380	1217									
		0.23 11.0	0.24 9.8	0.25 9.4	0.26 10.0	0.26 9.8									
1/3	1130	1792	1700	1607	1503	1365	1192								
		0.27 11.8	0.28 10.8	0.29 10.1	0.30 10.3	0.30 10.9	0.29 9.6								
1/3	1190	1897	1810	1721	1629	1515	1367								
		0.31 12.6	0.33 12.0	0.34 10.9	0.34 10.9	0.35 11.7	0.35 11.4								
1/2	1280	2053	1973	1890	1807	1716	1602	1292							
		0.39 13.9	0.40 13.4	0.41 12.4	0.42 12.0	0.43 12.2	0.43 13.0	0.42 10.8							
1/2	1370	2208	2133	2057	1980	1901	1811	1568							
		0.47 15.4	0.49 15.4	0.50 14.4	0.51 13.3	0.52 13.2	0.53 14.0	0.53 14.1							
3/4	1465	2370	2301	2231	2158	2086	2010	1818	1559						
		0.58 17.0	0.59 17.0	0.61 16.0	0.62 15.0	0.63 14.8	0.64 14.8	0.65 15.8	0.64 14.3						
3/4	1565	2541	2477	2411	2344	2277	2208	2054	1843	1572					
		0.70 19.0	0.72 19.0	0.73 18.3	0.75 17.2	0.76 16.5	0.77 16.2	0.79 17.2	0.79 17.3	0.77 14.8					
1	1640	2669	2608	2545	2482	2417	2353	2215	2038	1813					
		0.81 20	0.82 20	0.84 20	0.86 19.1	0.87 18.1	0.88 17.4	0.91 17.6	0.91 18.9	0.9 17.7					
1	1720	2805	2747	2687	2627	2566	2504	2378	2229	2034	1801				
		0.93 22	0.95 22	0.96 22	0.98 21	1.00 19.8	1.01 19.1	1.04 18.6	1.05 19.7	1.05 19.9	1.04 18.1				
1 1/2	1845	3017	2963	2908	2852	2795	2738	2623	2500	2350	2163	1946			
		1.14 25	1.16 25	1.18 25	1.20 24	1.22 23	1.23 22	1.27 21	1.29 21	1.30 22	1.29 22	1.28 21			
1 1/2	1970	3228	3178	3127	3075	3022	2969	2862	2752	2632	2484	2305	2105		
		1.39 27	1.41 27	1.43 27	1.45 27	1.47 26	1.49 25	1.52 24	1.55 23	1.58 24	1.58 25	1.58 24	1.56 23		

MAXIMUM MOTOR FRAME SIZE: 145T

BSI 135AHP

Outlet Area = 3.22 ft²

Fan Efficiency Grade: FEG53

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1/4	1050	1116	899												
		0.16 8.5	0.17 8.1												
1/4	1200	1321	1161	937											
		0.23 11.4	0.24 9.3	0.25 9.5											
1/3	1275	1421	1276	1081	789										
		0.28 12.6	0.29 10.1	0.30 10.8	0.26 9.7										
1/3	1350	1520	1387	1219	1007										
		0.33 14.0	0.34 11.5	0.35 11.7	0.35 11.0										
1/2	1450	1651	1529	1390	1206	966									
		0.40 15.5	0.42 13.2	0.43 12.4	0.44 13.0	0.41 11.6									
1/2	1550	1780	1668	1546	1392	1212									
		0.49 17.2	0.51 15.0	0.52 13.6	0.53 14.4	0.53 13.9									
3/4	1655	1915	1812	1701	1573	1412	1237								
		0.59 19.0	0.61 17.4	0.63 15.2	0.64 15.2	0.65 16.0	0.64 14.6								
3/4	1765	2055	1959	1858	1747	1613	1457	1283							
		0.71 21	0.74 19.7	0.76 17.6	0.77 16.2	0.78 17.1	0.79 17.2	0.77 15.5							
1	1855	2169	2079	1983	1882	1767	1625	1475	1286						
		0.82 22	0.85 21	0.87 19.1	0.89 18.0	0.91 17.6	0.91 18.4	0.91 18.2	0.87 16.4						
1	1945	2282	2197	2107	2013	1910	1788	1646	1501	1294					
		0.94 24	0.97 23	1.00 21	1.02 19.4	1.04 18.6	1.05 19.5	1.05 19.9	1.04 19.3	0.98 17.8					
1 1/2	2085	2458	2379	2297	2211	2121	2021	1903	1771	1637	1470				
		1.16 26	1.19 26	1.22 24	1.24 22	1.26 21	1.28 21	1.29 22	1.30 22	1.29 22	1.25 19.7				
1 1/2	2225	2633	2560	2484	2405	2323	2236	2139	2027	1903	1779	1639	1423		
		1.40 29	1.44 29	1.47 27	1.50 26	1.52 24	1.54 23	1.56 23	1.57 24	1.57 24	1.57 24	1.55 23	1.43 22		

MAXIMUM MOTOR FRAME SIZE: 145T

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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

BSI 150A

Outlet Area = 3.90 ft²

Fan Efficiency Grade: FEG53

HP	RPM	STATIC PRESSURE (INCHES W.G.)																							
		0.125		0.25		0.375		0.50		0.625		0.75		1.00		1.25		1.50		1.75		2.00		2.25	
		CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone
1/4	825	1693		1552		1378		1115																	
		0.17	8.2	0.18	7.3	0.19	7.9	0.18	6.6																
1/3	920	1918		1793		1660		1481		1235															
		0.24	10.2	0.25	9.1	0.26	8.7	0.26	9.5	0.25	7.7														
1/2	970	2035		1917		1795		1646		1444															
		0.28	10.9	0.29	9.9	0.30	9.3	0.30	10.1	0.30	9.8														
3/4	1020	2152		2040		1925		1798		1626		1410													
		0.32	11.7	0.33	11.1	0.34	10.1	0.35	10.7	0.35	10.9	0.35	9.8												
1	1095	2326		2222		2116		2006		1874		1701													
		0.39	13.2	0.41	12.6	0.42	11.5	0.43	11.4	0.44	12.3	0.44	12.4												
1 1/2	1170	2498		2402		2303		2203		2094		1959		1593											
		0.48	14.6	0.49	14.2	0.51	13.0	0.52	12.5	0.53	12.9	0.53	13.4	0.52	11.7										
2	1250	2682		2592		2500		2407		2311		2204		1913											
		0.58	16.2	0.60	15.8	0.61	14.8	0.63	14.0	0.64	13.6	0.65	14.3	0.65	14.7										
3	1335	2876		2792		2707		2620		2532		2440		2209		1898									
		0.70	18.0	0.72	18.0	0.74	17.1	0.76	15.8	0.77	15.3	0.78	15.3	0.79	16.7	0.78	15.1								
4	1400	3024		2944		2863		2780		2697		2613		2416		2147		1771							
		0.81	18.8	0.83	18.8	0.85	18.5	0.87	17.5	0.88	16.8	0.90	16.1	0.91	17.3	0.91	17.3	0.88	14.4						
5	1465	3171		3096		3019		2940		2860		2781		2607		2377		2090							
		0.93	20	0.95	20	0.97	20	0.99	19.0	1.00	18.1	1.02	17.7	1.04	17.7	1.05	18.9	1.03	17.2						
6	1570	3409		3339		3267		3195		3120		3046		2894		2715		2483		2206					
		1.14	23	1.16	23	1.18	23	1.20	22	1.22	20	1.24	19.8	1.27	19.4	1.29	21	1.29	21	1.27	18.9				
7	1680	3657		3592		3525		3458		3389		3320		3181		3032		2851		2625		2365			
		1.39	25	1.41	25	1.44	25	1.46	25	1.48	24	1.50	22	1.54	21	1.57	21	1.58	23	1.57	23	1.56	21		
8	1760	3837		3775		3712		3648		3583		3517		3385		3248		3094		2903		2676		2412	
		1.59	27	1.62	27	1.64	27	1.67	27	1.69	25	1.71	24	1.75	23	1.79	23	1.81	24	1.82	25	1.81	24	1.78	21
9	1845	4028		3969		3909		3848		3787		3724		3598		3471		3334		3174		2979		2758	
		1.83	29	1.86	29	1.89	29	1.91	29	1.94	28	1.96	27	2.00	25	2.04	25	2.08	25	2.09	26	2.09	27	2.08	26

PERFORMANCE DATA

BSI 165A

Outlet Area = 4.83 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1/3	800	2314	2167	1981	1706										
		0.24 10.3	0.26 9.0	0.27 7.9	0.26 8.4										
1/2	875	2555	2426	2274	2079	1809									
		0.32 12.1	0.33 10.8	0.35 9.5	0.35 9.4	0.35 9.7									
3/4	940	2762	2646	2513	2353	2141	1889								
		0.39 13.3	0.41 12.8	0.42 11.3	0.43 10.3	0.43 10.9	0.43 10.7								
1	1005	2968	2861	2742	2605	2442	2218								
		0.47 14.9	0.49 14.4	0.51 13.0	0.52 11.8	0.53 11.7	0.53 12.2								
1 1/2	1075	3188	3090	2983	2864	2726	2561	2127							
		0.57 16.2	0.60 16.1	0.62 15.1	0.63 13.9	0.64 13.1	0.65 13.1	0.64 13.0							
2	1150	3423	3333	3236	3130	3012	2877	2508	2066						
		0.70 18.1	0.72 18.1	0.75 17.4	0.77 15.9	0.78 15.0	0.79 14.3	0.79 15.0	0.76 13.8						
3	1205	3595	3510	3419	3321	3213	3093	2787	2395						
		0.80 19.4	0.83 19.5	0.85 18.7	0.88 17.8	0.89 16.2	0.90 15.7	0.91 15.8	0.9 15.3						
4	1260	3766	3686	3600	3508	3409	3300	3040	2672	2265					
		0.91 21	0.94 21	0.97 20	0.99 19.0	1.01 18.2	1.03 17.2	1.04 16.7	1.03 17.1	1 15.2					
5	1350	4046	3972	3893	3810	3722	3627	3410	3129	2775	2352				
		1.12 23	1.15 23	1.18 23	1.21 22	1.23 20	1.25 19.6	1.28 18.3	1.28 19.1	1.27 18.6	1.22 16.9				
6	1445	4341	4272	4200	4124	4045	3961	3774	3553	3259	2931	2531			
		1.37 25	1.40 25	1.43 25	1.46 24	1.49 24	1.52 23	1.55 21	1.57 20	1.57 21	1.55 20	1.5 18.0			
7	1520	4573	4508	4440	4369	4295	4218	4049	3854	3621	3310	3007			
		1.59 27	1.62 27	1.66 27	1.69 27	1.72 26	1.75 25	1.79 23	1.82 22	1.83 22	1.82 23	1.81 21			
8	1590	4789	4727	4663	4596	4527	4455	4299	4123	3921	3667	3360	3071		
		1.81 28	1.85 28	1.89 28	1.92 28	1.95 28	1.98 27	2.04 25	2.07 24	2.09 23	2.1 24	2.08 24	2.06 22		
9	1705	5144	5087	5027	4966	4903	4838	4699	4547	4377	4184	3946	3658		
		2.23 32	2.27 32	2.31 32	2.35 32	2.38 32	2.42 32	2.48 30	2.53 28	2.56 27	2.58 26	2.59 27	2.57 27		
10	1820	5499	5445	5390	5333	5275	5216	5090	4955	4807	4644	4461	4241		
		2.70 36	2.75 36	2.79 36	2.83 36	2.87 36	2.91 36	2.98 34	3.04 32	3.09 31	3.12 29	3.14 29	3.15 30		

MAXIMUM MOTOR FRAME SIZE: 145T

BSI 165AHP

Outlet Area = 4.83 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1/2	1000	1620	1053												
		0.37 9.2	0.33 8.2												
3/4	1130	2070	1776	1294											
		0.53 10.6	0.53 10.6	0.49 9.7											
1	1210	2322	2071	1764											
		0.65 11.3	0.65 12.1	0.65 10.5											
1 1/2	1290	2564	2342	2088	1758										
		0.78 12.3	0.79 12.8	0.79 12.7	0.78 11.5										
2	1350	2741	2535	2306	2039	1631									
		0.88 13.3	0.90 13.0	0.91 13.9	0.91 12.9	0.86 12.4									
3	1415	2928	2736	2529	2294	2009	1498								
		1.01 14.4	1.03 13.8	1.04 14.2	1.05 14.5	1.04 13.0	0.93 13.0								
4	1520	3222	3051	2867	2669	2446	2182	1769							
		1.24 16.7	1.27 15.2	1.29 15.2	1.30 16.1	1.30 15.7	1.29 14.5	1.21 14.6							
5	1620	3495	3341	3175	2998	2808	2597	2351	1995						
		1.48 18.9	1.52 17.0	1.54 16.2	1.56 16.8	1.57 17.2	1.57 17.2	1.56 15.7	1.49 15.7						
6	1700	3710	3567	3413	3250	3077	2890	2684	2443	2099					
		1.69 20	1.74 18.9	1.77 17.9	1.79 17.4	1.81 18.0	1.81 18.6	1.82 18.2	1.8 16.7	1.72 16.8					
7	1785	3936	3803	3660	3509	3350	3182	3000	2802	2572	2254				
		1.94 23	1.99 21	2.03 19.3	2.06 18.9	2.09 18.9	2.10 19.3	2.10 19.6	2.10 19.0	2.09 17.9	2.01 18.0				
8	1920	4289	4169	4042	3907	3766	3618	3464	3299	3121	2928	2697	2382		
		2.39 26	2.45 24	2.50 23	2.54 21	2.57 20	2.59 20	2.61 21	2.61 22	2.62 22	2.62 20	2.59 19.7	2.49 19.7		
9	2040	4600	4489	4373	4250	4122	3988	3849	3704	3551	3388	3214	3020		
		2.84 28	2.91 27	2.97 25	3.01 24	3.05 23	3.08 22	3.11 22	3.13 23	3.13 24	3.14 24	3.14 23	3.13 22		

MAXIMUM MOTOR FRAME SIZE: 145T

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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

BSI 180A

Outlet Area = 5.82 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125		0.25		0.375		0.50		0.625		0.75		1.00	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1/3	675	2544	0.23	2342	0.25	2060	0.25	1671	0.25						
	750	2864	0.32	2695	0.34	2485	0.35	2184	0.35	1830	0.34				
1/2	810	3117	0.40	2966	0.42	2788	0.43	2564	0.44	1892	0.42				
	865	3347	0.48	3209	0.50	3052	0.52	2864	0.53	2317	0.53				
3/4	925	3597	0.58	3470	0.61	3330	0.63	3168	0.65	2718	0.65				
	985	3845	0.70	3728	0.73	3601	0.75	3458	0.77	3295	0.78	2583	0.79	13.9	0.78
1	1035	4052	0.81	3942	0.84	3823	0.86	3693	0.89	3546	0.91	2914	0.91	15.0	0.91
	1085	4257	0.92	4153	0.96	4042	0.99	3922	1.01	3789	1.03	3640	1.05	16.0	1.04
1 1/2	1160	4565	1.12	4469	1.16	4367	1.19	4259	1.22	4142	1.25	4013	1.27	18.1	1.28
	1240	4892	1.37	4803	1.41	4710	1.44	4611	1.48	4507	1.51	4394	1.53	19.6	1.57
2	1300	5137	1.57	5053	1.61	4965	1.65	4873	1.69	4775	1.72	4672	1.75	21	1.79
	1365	5402	1.82	5322	1.86	5239	1.90	5153	1.94	5062	1.97	4967	2.01	23	2.06
3	1460	5789	2.22	5715	2.26	5638	2.31	5559	2.35	5476	2.39	5390	2.43	25	2.49
	1560	6195	2.70	6126	2.74	6055	2.79	5982	2.84	5906	2.88	5828	2.92	30	3.00

MAXIMUM MOTOR FRAME SIZE: 184T

BSI 180AHP

Outlet Area = 5.82 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.75		1.00		1.25		1.50		1.75		2.00		2.25	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1/2	875	1753	0.39	1785	0.41										
	970	2218	0.53	2124	0.53										
3/4	1040	2524	0.65	2492	0.66	1645	0.62	10.5							
	1105	2793	0.78	2739	0.79	2691	0.78	11.0							
1	1160	3013	0.89	2974	0.91	2422	0.91	13.0	0.88	11.9					
	1215	3227	1.02	3174	1.04	2691	1.05	14.4	1.04	12.7	0.96	12.7			
1 1/2	1300	3549	1.24	3322	1.26	3075	1.28	15.5	1.28	13.8	1.17	13.8			
	1390	3881	1.49	3676	1.53	3456	1.55	16.0	1.57	17.0	1.56	15.4	1.46	15.4	
2	1460	4133	1.71	3944	1.76	3740	1.79	17.0	1.81	17.2	1.82	18.1	1.82	17.5	1.80
	1530	4381	1.96	4206	2.01	4016	2.04	18.2	2.07	18.0	2.09	19.1	2.09	18.3	2.06
3	1640	4766	2.38	4608	2.44	4438	2.49	21	2.53	20	2.55	19.8	2.57	20	2.58
	1750	5145	2.86	5000	2.93	4847	2.99	23	3.04	22	3.08	21	3.10	21	3.12

MAXIMUM MOTOR FRAME SIZE: 184T

NOTES:

1. Performance certified is for Installation Type AB 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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

PERFORMANCE DATA

BSI 210A

Outlet Area = 7.18 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1/3	550	2810	2508	2029											
		0.22 7.5	0.23 6.2	0.23 6.4											
1/2	630	3286	3052	2745	2297										
		0.32 10.0	0.34 8.4	0.35 7.8	0.35 8.1										
3/4	675	3550	3340	3082	2711	2274									
		0.39 11.3	0.42 9.9	0.43 8.8	0.43 9.2	0.42 9.1									
1	720	3811	3621	3396	3109	2710									
		0.47 12.7	0.50 11.5	0.52 10.1	0.52 9.9	0.52 10.3									
1 1/2	770	4099	3926	3728	3490	3173	2798								
		0.58 14.3	0.60 13.4	0.63 11.6	0.64 10.8	0.64 11.4	0.63 11.3								
2	825	4415	4256	4080	3877	3635	3304								
		0.70 16.2	0.73 15.3	0.76 13.9	0.78 12.5	0.79 12.3	0.79 12.8								
3	865	4643	4494	4330	4146	3932	3667	2998							
		0.81 17.3	0.84 16.8	0.87 15.4	0.89 14.0	0.91 13.2	0.91 13.6	0.89 13.7							
4	905	4871	4730	4577	4408	4215	3992	3376							
		0.92 18.6	0.96 18.3	0.99 16.7	1.01 15.4	1.03 14.6	1.04 14.1	1.03 15.0							
5	970	5239	5110	4971	4821	4655	4468	3977	3382						
		1.13 20	1.17 20	1.20 19.6	1.23 18.0	1.26 16.8	1.27 15.9	1.28 16.7	1.26 16.3						
6	1040	5635	5516	5389	5254	5109	4949	4570	4031	3454					
		1.38 22	1.43 22	1.47 22	1.50 21	1.53 19.9	1.56 18.3	1.58 17.9	1.57 18.4	1.53 17.6					
7	1090	5917	5804	5685	5559	5424	5279	4944	4497	3967					
		1.59 24	1.63 24	1.68 24	1.71 23	1.75 22	1.78 20	1.81 19.1	1.82 20	1.80 19.6					
8	1140	6198	6091	5978	5860	5735	5601	5299	4929	4423	3922				
		1.81 26	1.86 26	1.90 25	1.95 25	1.99 24	2.02 23	2.06 21	2.08 21	2.07 22	2.04 20				
9	1225	6675	6576	6473	6366	6253	6135	5875	5573	5200	4719	4258			
		2.24 28	2.29 28	2.34 28	2.39 28	2.43 27	2.47 26	2.53 24	2.57 23	2.58 23	2.56 23	2.53 22			
10	1305	7123	7031	6935	6836	6733	6626	6395	6135	5835	5458	5003	4573		
		2.70 30	2.75 30	2.81 30	2.86 30	2.91 30	2.95 29	3.03 27	3.09 26	3.12 25	3.12 26	3.10 26	3.07 24		

MAXIMUM MOTOR FRAME SIZE: 184T

BSI 210AHP

Outlet Area = 7.18 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1/2	700	2665	2166												
		0.33 7.3	0.34 7.4												
3/4	810	3208	2816	2338											
		0.49 10.0	0.52 8.8	0.53 9.3											
1	865	3471	3118	2702	2144										
		0.59 11.3	0.63 10.0	0.64 10.6	0.63 9.5										
1 1/2	925	3755	3435	3066	2628	1894									
		0.72 12.9	0.76 11.7	0.78 11.7	0.79 11.6	0.72 10.6									
2	970	3966	3668	3325	2934	2424									
		0.82 14.0	0.87 12.6	0.90 12.2	0.91 13.0	0.89 11.5									
3	1015	4175	3895	3576	3221	2798	2102								
		0.93 14.9	0.99 13.9	1.02 13.0	1.04 13.8	1.04 12.6	0.96 12.2								
4	1090	4521	4267	3982	3668	3316	2895	2164							
		1.15 16.7	1.21 15.8	1.26 14.3	1.28 14.3	1.29 15.1	1.28 13.2	1.17 13.2							
5	1165	4864	4630	4374	4091	3785	3440	3024	2309						
		1.39 18.3	1.46 17.4	1.52 16.3	1.55 15.5	1.57 16.3	1.58 16.4	1.56 14.8	1.42 14.4						
6	1220	5115	4894	4654	4391	4109	3800	3450	2999						
		1.59 19.4	1.66 18.8	1.73 17.6	1.77 16.6	1.80 16.7	1.81 17.5	1.81 16.7	1.77 15.5						
7	1280	5387	5178	4955	4711	4449	4169	3860	3510	3037					
		1.82 21	1.91 21	1.98 19.0	2.03 17.9	2.06 17.6	2.08 18.5	2.09 18.7	2.09 17.2	2.02 16.6					
8	1370	5793	5600	5396	5178	4942	4693	4428	4137	3815	3412	2776			
		2.22 23	2.31 23	2.39 22	2.46 20	2.50 19.1	2.54 19.1	2.55 20	2.56 20	2.56 19.1	2.52 18.4	2.34 18.4			
9	1465	6220	6041	5854	5656	5445	5220	4985	4736	4466	4172	3830	3361		
		2.70 25	2.80 25	2.89 24	2.97 23	3.03 21	3.07 21	3.11 21	3.12 22	3.13 22	3.13 21	3.11 19.8	3 19.9		

MAXIMUM MOTOR FRAME SIZE: 184T

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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

BSI 225A

Outlet Area = 8.03 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125		0.25		0.375		0.50		0.625		0.75		1.00	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
		Sone		Sone		Sone		Sone		Sone		Sone		Sone	
1/3	450	3358	0.21	2784	0.22										
		5.5	5.7												
1/2	520	4017	0.32	3578	0.34	3008	0.35								
		7.5	7.0	7.5											
3/4	560	4384	0.40	3994	0.42	3518	0.43	2870	0.42						
		8.7	8.1	8.7	8.7	7.5									
1	600	4746	0.48	4395	0.51	3981	0.53	3467	0.49	2620					
		9.9	8.9	9.9	9.3	9.5	8.0								
1 1/2	640	5105	0.58	4783	0.61	4416	0.63	3982	0.63	3436					
		11.1	10.1	10.7	9.9	10.7	9.7								
2	685	5505	0.71	5211	0.74	4883	0.79	4509	0.79	3500					
		12.1	11.5	10.9	10.9	11.6	10.3								
3	720	5814	0.82	5538	0.85	5235	0.89	4896	0.92	4506					
		13.1	12.8	11.8	11.9	12.6	12.5								
4	750	6078	0.92	5816	0.96	5531	0.99	5215	1.04	4861					
		14.1	13.9	12.6	12.6	13.3	13.5								
5	810	6603	1.15	6364	1.19	6109	1.23	5831	1.29	5528					
		15.6	15.6	14.3	14.3	13.6	13.9								
6	865	7081	1.39	6861	1.44	6626	1.49	6376	1.56	6106					
		16.8	16.8	15.9	15.9	14.7	14.7								
7	910	7472	1.61	7263	1.67	7044	1.72	6812	1.79	6564					
		17.9	17.9	17.2	17.2	15.8	15.8								
8	950	7817	1.83	7619	1.89	7411	1.94	7193	2.03	6961					
		18.4	18.4	18.3	18.3	16.9	16.9								
9	1025	8464	2.29	8282	2.35	8093	2.41	7895	2.51	7689					
		19.9	19.9	19.9	19.9	19.0	19.0								
10	1085	8980	2.71	8809	2.77	8632	2.84	8448	2.95	8258					
		21	21	21	21	21	21								
11	1185	9837	3.51	9682	3.59	9522	3.66	9358	3.78	9188					
		23	23	23	23	23	23								
12	1285	10692	4.47	10550	4.55	10404	4.62	10255	4.77	10101					
		26	26	26	26	26	26								

MAXIMUM MOTOR FRAME SIZE: 215T

BSI 225AHP

Outlet Area = 8.03 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.75		1.00		1.25		1.50		1.75		2.00		2.25	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
		Sone		Sone		Sone		Sone		Sone		Sone		Sone	
3/4	725	2733	0.62	2568	0.79										
		9.1	9.7												
1	785	3288	0.91	3069	0.99	2599									
		10.8	10.9	11.1											
1 1/2	820	3625	1.04	3369	1.04	2986	0.98	2737							
		11.8	11.8	11.1											
2	860	4451	1.26	4199	1.26	3981	1.12	3728							
		12.6	12.6	12.9	12.9	12.1									
3	920	4919	1.52	4530	1.52	4199	1.30	3981							
		14.0	14.0	14.3	14.3	13.7	13.7	12.9							
4	985	5266	1.75	4933	1.75	4530	1.53	4199							
		15.0	15.0	15.0	15.0	14.8	14.8	14.5							
5	1035	5606	1.99	5306	1.99	4923	1.74	4530							
		16.0	16.0	16.0	16.0	15.6	15.6	15.4							
6	1085	6108	2.40	5838	2.40	5537	2.06	4660							
		17.9	17.9	17.5	17.5	17.5	17.5	17.6							
7	1160	6635	2.91	6387	2.91	6126	2.52	5417							
		19.9	19.9	19.5	19.5	18.8	18.8	18.6							
8	1240	7378	3.51	7156	3.51	6927	3.13	6417							
		24	24	24	24	24	24	24							
9	1355	8110	4.47	7910	4.47	7702	4.05	7268							
		27	27	27	27	26	26	26							

MAXIMUM MOTOR FRAME SIZE: 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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

PERFORMANCE DATA

BSI 245A

Outlet Area = 9.77 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
1/2	475	4748		4292		3692									
		0.41	8.3	0.44	7.3	0.44	7.6								
3/4	505	5097		4686		4171		3523							
		0.49	9.4	0.52	8.0	0.53	8.6	0.52	7.8						
1	540	5500		5129		4684		4122		3387					
		0.59	10.3	0.63	9.4	0.65	9.1	0.65	9.4	0.61	7.7				
1 1/2	575	5900		5561		5166		4690		4122					
		0.70	11.5	0.75	10.6	0.77	9.8	0.79	10.5	0.78	9.9				
2	600	6183		5864		5498		5070		4545					
		0.79	12.3	0.84	11.4	0.87	10.5	0.89	11.1	0.86	9.6				
3	630	6522		6222		5886		5499		5040					
		0.91	13.3	0.97	12.7	1.00	11.8	1.02	11.5	1.03	12.3	1.02	11.7		
4	675	7027		6752		6452		6113		5729					
		1.12	14.4	1.17	13.9	1.22	12.9	1.25	12.2	1.27	13.0	1.27	13.3		
5	725	7585		7334		7063		6765		6434					
		1.37	15.8	1.44	15.8	1.49	14.4	1.53	13.8	1.55	13.8	1.57	14.7	1.56	14.1
6	760	7974		7736		7483		7208		6906					
		1.57	16.6	1.64	16.2	1.70	15.6	1.75	14.7	1.78	14.5	1.80	14.9	1.81	15.9
7	795	8362		8136		7898		7642		7364					
		1.79	17.1	1.87	17.1	1.93	16.9	1.98	16.3	2.02	15.5	2.05	15.6	2.08	16.8
8	850	8969		8761		8542		8310		8062					
		2.18	18.3	2.26	18.3	2.33	18.4	2.39	17.6	2.44	16.9	2.48	16.9	2.53	17.7
9	910	9630		9437		9236		9025		8803					
		2.66	19.8	2.75	19.8	2.83	19.6	2.90	19.0	2.96	18.8	3.01	18.3	3.08	18.0
10	995	10563		10389		10208		10020		9825					
		3.46	21	3.56	21	3.65	21	3.73	21	3.81	21	3.87	20	3.97	20
12	1080	11494		11334		11170		11000		10825					
		4.41	25	4.51	25	4.61	25	4.71	25	4.79	24	4.87	23	5.01	23
14	1160	12367		12220		12068		11913		11753					
		5.45	28	5.56	28	5.67	28	5.77	28	5.87	27	5.96	27	6.13	26
16	1235	13185		13047		12906		12762		12614					
		6.56	30	6.68	30	6.79	30	6.91	30	7.01	30	7.12	30	7.30	29

MAXIMUM MOTOR FRAME SIZE: 215T

BSI 245AHP

Outlet Area = 9.77 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
1	650	3332													
		0.74	9.8												
1 1/2	730	4232		3570											
		1.04	12.0	1.05	10.9										
2	780	4731		4208		3435									
		1.26	12.7	1.29	13.1	1.25	11.5								
3	835	5257		4806		4248		3404							
		1.52	13.3	1.56	14.6	1.58	14.2	1.48	12.6						
4	875	5627		5210		4739		4092							
		1.73	14.3	1.78	15.4	1.81	16.0	1.79	13.9						
5	915	5989		5602		5179		4658		3927					
		1.96	15.2	2.02	16.0	2.06	17.1	2.08	16.5	2.00	14.8				
6	980	6566		6218		5842		5432		4920					
		2.37	17.2	2.45	17.4	2.51	18.6	2.54	19.2	2.55	18.0	2.46	16.5		
7	1050	7176		6857		6523		6165		5773					
		2.87	19.8	2.96	18.9	3.04	19.7	3.10	21	3.13	21	3.13	20	3.06	18.6
8	1150	8030		7743		7450		7143		6818					
		3.70	24	3.81	22	3.91	22	3.99	23	4.06	24	4.10	25	4.12	24
9	1245	8828		8566		8300		8027		7743					
		4.62	27	4.76	26	4.87	25	4.97	25	5.06	25	5.13	26	5.19	28
10	1335	9575		9332		9086		8837		8581					
		5.63	30	5.78	30	5.92	28	6.04	28	6.14	28	6.23	28	6.31	30
12	1425	10314		10089		9860		9628		9394					
		6.77	34	6.94	34	7.10	33	7.24	32	7.36	31	7.47	31	7.57	31

MAXIMUM MOTOR FRAME SIZE: 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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

BSI 270A

Outlet Area = 11.11 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125		0.25		0.375		0.50		0.625		0.75		1.00	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
1/2	375	5140		4357											
		0.36	9.2	0.38	7.0										
3/4	420	5895		5263		4470									
		0.49	11.6	0.52	8.5	0.53	8.7								
1	450	6387		5839		5140		4277							
		0.60	12.6	0.64	10.4	0.65	10.0	0.64	8.2						
1 1/2	480	6874		6390		5762		5043							
		0.72	14.1	0.77	12.9	0.79	10.3	0.79	10.6						
2	500	7196		6744		6162		5507		4690					
		0.82	15.0	0.86	14.2	0.89	11.5	0.89	11.8	0.87	9.5				
3	525	7595		7178		6653		6050		5356					
		0.94	14.7	0.99	15.5	1.02	12.5	1.03	12.2	1.02	11.7				
4	565	8230		7855		7409		6869		6290		5614			
		1.16	16.0	1.21	16.0	1.26	14.8	1.28	13.4	1.29	13.9	1.27	12.8		
5	605	8861		8519		8130		7659		7140		6578			
		1.42	17.5	1.47	17.5	1.53	17.3	1.56	15.2	1.58	14.8	1.58	15.6		
6	635	9332		9010		8653		8232		7746		7240		6008	
		1.63	18.7	1.69	18.7	1.75	19.3	1.79	16.9	1.82	16.0	1.83	16.4	1.79	14.1
7	665	9801		9498		9166		8786		8340		7867		6798	
		1.87	20	1.93	20	1.99	20	2.04	18.9	2.08	17.3	2.10	17.3	2.08	17.0
8	710	10502		10223		9921		9589		9204		8772		7853	
		2.26	22	2.33	22	2.40	22	2.46	22	2.51	19.9	2.54	19.0	2.56	20
9	760	11278		11021		10746		10450		10122		9746		8922	
		2.76	23	2.84	23	2.91	23	2.98	23	3.04	22	3.08	21	3.14	21
10	830	12361		12128		11884		11624		11347		11042		10330	
		3.58	26	3.67	26	3.75	26	3.83	26	3.90	26	3.96	25	4.05	24
11	900	13440		13228		13007		12775		12531		12272		11678	
		4.55	30	4.64	30	4.73	30	4.82	30	4.90	30	4.98	30	5.10	27
12	965	14439		14243		14040		13829		13608		13376		12869	
		5.59	33	5.69	33	5.79	33	5.89	33	5.98	33	6.06	33	6.21	32
13	1030	15437		15254		15066		14872		14670		14460		14011	
		6.78	37	6.89	37	7.00	37	7.10	37	7.20	37	7.30	37	7.47	36

MAXIMUM MOTOR FRAME SIZE: 215T

BSI 270AHP

Outlet Area = 11.11 ft²

Fan Efficiency Grade: FEG60

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.75		1.00		1.25		1.50		1.75		2.00		2.25	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
1	530	2972													
		0.64	7.7												
1 1/2	605	4674													
		1.04	10.1												
2	650	5444		4515											
		1.29	12.2	1.28	11.1										
3	695	6139		5335		4251									
		1.56	13.6	1.58	12.5	1.50	12.5								
4	730	6631		5941		5113									
		1.80	14.0	1.83	14.4	1.81	13.4								
5	760	7032		6440		5666		4611							
		2.02	14.7	2.06	15.8	2.06	14.2	1.96	14.3						
6	815	7744		7269		6623		5891		4762					
		2.47	17.0	2.51	17.0	2.55	17.1	2.53	15.9	2.37	16.4				
7	870	8438		8020		7519		6861		6171		5040			
		2.98	19.0	3.04	18.4	3.08	19.0	3.11	18.8	3.07	17.7	2.88	18.1		
8	950	9431		9055		8663		8189		7589		6965		6216	
		3.83	23	3.91	21	3.96	21	4.01	22	4.05	22	4.02	20	3.92	21
9	1030	10411		10061		9714		9345		8905		8362		7784	
		4.81	26	4.93	25	5.01	24	5.06	23	5.11	25	5.15	25	5.15	23
10	1105	11318		10989		10666		10340		9990		9580		9082	
		5.87	29	6.02	28	6.13	27	6.20	26	6.25	26	6.31	27	6.36	27
11	1185	12275		11969		11663		11363		11057		10731		10357	
		7.15	33	7.33	33	7.48	31	7.58	30	7.65	29	7.70	29	7.76	30

MAXIMUM MOTOR FRAME SIZE: 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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

PERFORMANCE DATA

BSI 300A

Outlet Area = 13.44 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1	400	7531	6837	5958	4778										
		0.68 12.9	0.72 10.2	0.74 9.8	0.70 7.3										
1 1/2	450	8610	8054	7336	6527	5478									
		0.96 14.9	1.01 14.3	1.04 11.4	1.05 11.8	1.01 9.0									
2	480	9248	8747	8121	7397	6570									
		1.15 16.8	1.21 16.8	1.25 13.4	1.27 13.2	1.26 12.7									
3	515	9988	9535	8999	8348	7651	6839								
		1.42 17.5	1.48 17.5	1.53 15.9	1.56 14.2	1.57 14.4	1.55 13.4								
5	540	10513	10088	9602	9007	8363	7650								
		1.62 18.5	1.69 18.5	1.75 18.0	1.79 15.2	1.81 15.3	1.80 15.5								
7 1/2	565	11035	10636	10188	9651	9045	8406	6721							
		1.85 19.2	1.93 19.2	1.99 19.3	2.04 16.8	2.07 15.7	2.08 16.6	1.98 12.8							
1	605	11869	11502	11101	10642	10104	9532	8240							
		2.26 21	2.34 21	2.42 21	2.48 20	2.52 18.2	2.55 17.7	2.53 17.3							
1 1/2	645	12698	12360	11994	11592	11126	10602	9488	8112						
		2.73 23	2.82 23	2.90 23	2.97 23	3.03 20	3.07 19.6	3.09 20	3.01 17.4						
2	710	14040	13739	13418	13074	12700	12273	11316	10274	9019					
		3.62 26	3.72 26	3.81 26	3.89 26	3.97 26	4.03 24	4.11 23	4.11 24	4.03 20					
3	770	15274	14999	14711	14406	14081	13729	12903	12002	11016	9858				
		4.60 28	4.71 28	4.81 28	4.90 28	4.99 28	5.07 28	5.19 25	5.25 25	5.24 27	5.15 24				
5	825	16402	16148	15883	15606	15314	15005	14300	13484	12632	11690	10607			
		5.64 31	5.76 31	5.87 31	5.97 31	6.07 31	6.16 31	6.32 30	6.42 28	6.47 30	6.44 29	6.34 26			
7 1/2	880	17527	17291	17046	16791	16525	16247	15636	14919	14139	13330	12435	11429		
		6.83 34	6.95 34	7.07 34	7.19 34	7.30 34	7.40 34	7.59 32	7.73 32	7.82 31	7.85 33	7.81 33	7.71 30		

MAXIMUM MOTOR FRAME SIZE: 215T

BSI 300AHP

Outlet Area = 13.44 ft²

Fan Efficiency Grade: FEG60

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1	390	2715													
		0.40 5.6													
1 1/2	515	6049	4817												
		1.02 9.6	1.02 8.8												
2	550	6697	5656												
		1.24 10.5	1.26 10.3												
3	590	7396	6568	5439											
		1.52 12.1	1.55 12.5	1.54 11.2											
5	620	7905	7196	6180	4525										
		1.75 13.6	1.79 13.9	1.81 12.0	1.63 12.3										
7 1/2	650	8407	7773	6876	5807										
		2.00 15.4	2.05 14.1	2.09 14.4	2.04 13.6										
1	700	9233	8668	7984	7069	5958									
		2.47 18.2	2.54 15.7	2.59 16.7	2.60 15.1	2.51 15.2									
1 1/2	745	9968	9440	8872	8107	7228	5967								
		2.95 21	3.04 17.5	3.09 17.6	3.14 18.0	3.12 16.2	2.96 16.8								
2	810	11018	10527	10039	9480	8742	7935	6942							
		3.73 23	3.87 21	3.94 19.4	3.99 20	4.04 20	4.02 18.6	3.89 19.5							
3	880	12133	11679	11233	10774	10241	9558	8815	8022	6584					
		4.71 25	4.89 25	5.00 23	5.06 22	5.12 23	5.17 23	5.17 22	5.08 22	4.73 22					
5	945	13157	12737	12316	11901	11464	10951	10314	9620	8917	7959				
		5.77 28	5.98 28	6.13 26	6.22 25	6.28 25	6.35 26	6.40 26	6.41 24	6.34 24	6.15 25				
7 1/2	1010	14173	13782	13386	12997	12605	12188	11702	11112	10461	9818	9087	7869		
		6.97 30	7.21 30	7.40 30	7.53 27	7.61 27	7.68 27	7.75 28	7.81 28	7.83 28	7.78 26	7.66 26	7.28 27		

MAXIMUM MOTOR FRAME SIZE: 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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

BSI 330A

Outlet Area = 16.46 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1	310	7663	6517	4805											
		0.54 8.7	0.57 6.7	0.53 5.4											
1 1/2	380	9752	8983	7994	6823										
		0.96 14.0	1.02 12.2	1.05 10.7	1.03 9.9										
2	405	10479	9795	8908	7908	6582									
		1.16 15.6	1.22 14.9	1.26 11.9	1.26 12.3	1.21 9.4									
3	435	11343	10732	9970	9088	8082									
		1.42 17.6	1.49 17.6	1.55 14.0	1.57 13.7	1.56 13.3									
5	455	11916	11343	10654	9829	8932	7858								
		1.62 18.7	1.70 18.7	1.76 15.7	1.79 14.1	1.79 14.8	1.76 12.4								
7 1/2	475	12485	11946	11318	10550	9727	8787								
		1.84 19.3	1.92 19.3	1.98 17.6	2.03 15.4	2.04 15.6	2.02 15.1								
10	510	13477	12987	12438	11779	11036	10251	8162							
		2.26 21	2.35 21	2.42 21	2.49 17.5	2.52 16.8	2.53 17.2	2.40 13.2							
15	545	14463	14013	13519	12954	12290	11588	9992							
		2.74 22	2.84 22	2.93 22	3.00 21	3.05 18.5	3.08 18.3	3.05 18.0							
20	600	16005	15606	15176	14708	14175	13569	12272	10750						
		3.63 25	3.74 25	3.84 25	3.94 25	4.01 23	4.07 21	4.12 21	4.06 20						
25	650	17401	17037	16652	16240	15792	15286	14137	12898	11434					
		4.60 28	4.72 28	4.83 28	4.94 28	5.03 28	5.11 26	5.21 23	5.23 25	5.15 22					
30	700	18792	18458	18108	17737	17344	16918	15920	14826	13637	12250				
		5.72 32	5.85 32	5.98 32	6.09 32	6.20 32	6.30 30	6.45 27	6.53 27	6.52 28	6.42 25				
35	745	20040	19729	19405	19065	18707	18329	17465	16464	15420	14263	12932			
		6.88 34	7.02 34	7.15 34	7.28 34	7.40 34	7.52 34	7.71 30	7.83 29	7.88 31	7.84 31	7.73 27			
40	780	21010	20714	20407	20088	19753	19401	18623	17707	16728	15697	14538	13186		
		7.88 35	8.03 35	8.17 35	8.31 35	8.44 35	8.56 35	8.78 33	8.93 32	9.03 32	9.04 33	8.97 32	8.8 28		
45	820	22116	21837	21547	21247	20935	20610	19907	19089	18175	17235	16226	15099		
		9.14 38	9.29 38	9.44 38	9.59 38	9.73 38	9.86 38	10.11 36	10.30 35	10.43 34	10.50 35	10.49 36	10.41 34		

MAXIMUM MOTOR FRAME SIZE: 256T

BSI 330AHP

Outlet Area = 16.46 ft²

Fan Efficiency Grade: FEG60

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1 1/2	440	4716													
		1.00 8.4													
2	500	7005	4831												
		1.57 10.7	1.40 10.3												
3	525	7782	6329												
		1.82 12.4	1.78 11.2												
4	550	8512	7221												
		2.08 13.3	2.08 11.9												
5	590	9567	8485	7198											
		2.54 14.6	2.58 15.0	2.53 13.8											
6	630	10536	9686	8557	7137										
		3.07 16.4	3.12 16.9	3.14 15.3	3.01 15.6										
7 1/2	690	11923	11264	10413	9369	8178									
		3.99 19.5	4.05 18.7	4.12 19.8	4.12 17.7	4.01 17.8									
8	745	13162	12577	11928	11082	10111	9053								
		4.97 23	5.06 21	5.12 21	5.19 22	5.19 19.8	5.08 20								
9	800	14385	13842	13285	12645	11827	10922	9976	8380						
		6.07 27	6.21 24	6.29 23	6.36 24	6.43 24	6.43 22	6.34 22	5.98 23						
10	855	15596	15081	14573	14039	13413	12637	11787	10930	9770					
		7.33 29	7.51 27	7.62 26	7.70 25	7.78 27	7.85 27	7.85 25	7.78 25	7.54 25					
11	900	16576	16084	15602	15113	14583	13953	13193	12386	11574	10550	8575			
		8.46 31	8.69 31	8.84 28	8.93 27	9.01 28	9.10 29	9.16 29	9.16 27	9.08 26	8.87 27	8.12 26			
12	940	17440	16970	16504	16043	15562	15027	14386	13638	12867	12088	11130	9424		
		9.57 33	9.82 33	10.01 31	10.13 30	10.21 30	10.30 30	10.39 32	10.44 30	10.43 29	10.35 28	10.14 29	9.5 29		

MAXIMUM MOTOR FRAME SIZE: 256T

NOTES:

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

PERFORMANCE DATA

BSI 365A

Outlet Area = 17.36 ft²

Fan Efficiency Grade: FEG53

HP	RPM	STATIC PRESSURE (INCHES W.G.)																							
		0.125		0.25		0.375		0.50		0.625		0.75		0.875		1.00		1.25		1.50		1.75		2.00	
		CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone
1	240	7252		5314																					
		0.43	4.2	0.41	4.0																				
	320	10451		9423		8064																			
		0.98	8.7	1.01	7.7	1.01	8.3																		
1 1/2	345	11407		10491		9375		7885																	
		1.21	10.6	1.26	9.2	1.28	9.8	1.23	8.7																
	370	12351		11523		10562		9338																	
		1.48	12.1	1.55	11.1	1.57	11.0	1.57	11.6																
2	385	12914		12129		11237		10145		8770															
		1.67	13.2	1.73	12.3	1.77	11.6	1.77	12.4	1.71	11.0														
	405	13659		12926		12107		11150		9953															
		1.93	14.3	2.01	13.8	2.05	12.9	2.06	13.6	2.04	13.5														
3	435	14771		14101		13368		12548		11578		10406													
		2.38	15.9	2.46	15.7	2.52	14.5	2.55	14.5	2.56	15.4	2.51	14.5												
	465	15875		15258		14592		13866		13049		12081		10956											
		2.89	17.3	2.99	17.3	3.06	16.1	3.10	15.6	3.12	16.5	3.12	16.6	3.06	15.7										
5	505	17338		16779		16185		15548		14857		14087		13194		12173									
		3.68	19.9	3.79	19.9	3.88	19.4	3.95	18.0	3.98	17.9	4.00	18.1	4.00	19.0	3.94	17.9								
	550	18976		18469		17937		17374		16777		16135		15430		14633		12747							
		4.72	23	4.85	23	4.96	23	5.05	21	5.11	19.9	5.14	19.7	5.16	21	5.17	21	5.03	18.8						
7 1/2	590	20425		19957		19470		18959		18422		17854		17248		16591		15040		13163					
		5.81	25	5.95	25	6.07	25	6.18	24	6.27	23	6.32	22	6.35	22	6.37	23	6.37	23	6.11	20				
	630	21870		21435		20984		20516		20027		19515		18977		18407		17121		15565		13694			
		7.05	29	7.20	29	7.34	29	7.46	27	7.57	26	7.65	25	7.70	24	7.73	23	7.77	25	7.71	25	7.34	21		
10	660	22951		22538		22111		21669		21211		20733		20235		19712		18566		17212		15635			
		8.09	31	8.25	31	8.40	31	8.53	31	8.65	29	8.75	27	8.82	27	8.87	25	8.92	26	8.93	27	8.75	25		
	695	24210		23820		23418		23003		22575		22131		21671		21192		20163		18996		17625		16081	
		9.43	34	9.60	34	9.76	34	9.90	34	10.04	33	10.15	31	10.25	29	10.31	29	10.39	29	10.43	30	10.40	29	10.14	26

MAXIMUM MOTOR FRAME SIZE: 256T

BSI 365AHP

Outlet Area = 17.36 ft²

Fan Efficiency Grade: FEG56

HP	RPM	STATIC PRESSURE (INCHES W.G.)																											
		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00		2.25		2.50		2.75		3.00					
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM					
BHP		Sone		BHP		Sone		BHP		Sone		BHP		Sone		BHP		Sone		BHP		Sone		BHP		Sone			
1 1/2	380	8578		7022																									
		1.10	8.6	1.15	8.9																								
	420	9743		8471		6844																							
1.47		11.0	1.54	10.3	1.56	10.9																							
2	440	10320		9147		7646																							
		1.67	12.3	1.75	10.9	1.80	12.0																						
	460	10895		9791		8397		6313																					
1.90		13.7	1.99	11.2	2.04	12.5	1.82	12.5																					
3	495	11892		10869		9691		8320																					
		2.33	15.5	2.46	13.1	2.53	13.6	2.56	14.3																				
	530	12878		11913		10907		9652		8246																			
2.82		17.9	3.00	14.6	3.07	14.6	3.13	15.4	3.09	14.9																			
5	575	14135		13229		12355		11313		10134		8699																	
		3.55	21	3.78	17.4	3.88	16.0	3.96	17.0	4.01	17.0	3.87	16.2																
	625	15519		14674		13874		13026		12001		10917		9638															
4.50		23	4.79	20	4.93	18.3	5.02	18.1	5.10	19.3	5.15	18.6	5.04	17.3															
7 1/2	670	16756		15964		15204		14454		13598		12604		11599		10408													
		5.49	26	5.83	24	6.03	21	6.13	20	6.22	21	6.30	21	6.35	21	6.23	19.3												
	720	18122		17382		16660		15970		15249		14414		13477		12542		11517		9203									
6.74		30	7.13	28	7.41	25	7.55	23	7.64	23	7.75	24	7.83	25	7.87	24	7.82	22	6.71	22									
10	755	19074		18366		17671		17008		16343		15607		14763		13855		12971		11949		9636							
		7.72	32	8.15	31	8.47	28	8.65	26	8.76	25	8.86	25	8.97	27	9.04	27	9.08	26	8.99	24	7.74	24						
	790	20023		19345		18677		18034		17406		16745		15995		15159		14291		13446		12438		10227					
8.80		35	9.27	34	9.62	31	9.86	29	9.99	28	10.09	28	10.21	28	10.31	30	10.36	29	10.41	27	10.28	26	8.91	26					

MAXIMUM MOTOR FRAME SIZE: 256T

NOTES:

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

BSI 402A

Outlet Area = 21.20 ft²

Fan Efficiency Grade: FEG53

HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.125	0.25	0.375	0.50	0.625	0.75	0.875	1.00	1.125	1.25	1.50	1.75		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1 1/2	290	12803	11551	9898											
		1.20 8.6	1.25 7.5	1.25 8.1											
2	310	13837	12708	11321	9460										
		1.45 10.3	1.51 8.9	1.53 9.4	1.47 8.2										
3	325	14605	13550	12305	10677										
		1.67 11.1	1.74 10.1	1.76 10.1	1.74 10.2										
5	340	15368	14377	13238	11810	9946									
		1.90 12.4	1.98 11.4	2.01 11.1	2.01 11.5	1.90 10.1									
7 1/2	365	16630	15729	14722	13542	12064									
		2.33 14.5	2.43 13.5	2.48 12.7	2.50 13.4	2.47 13.4									
10	390	17882	17054	16146	15127	13911	12447								
		2.83 16.1	2.94 15.8	3.01 14.7	3.04 14.6	3.05 15.5	2.98 14.5								
15	430	19870	19136	18347	17491	16540	15433	14130	12574						
		3.76 19.1	3.89 19.1	3.99 17.6	4.05 16.7	4.07 17.3	4.08 17.8	4.03 17.4	3.85 15.8						
20	465	21599	20929	20220	19462	18644	17742	16707	15514	14190					
		4.73 22	4.88 22	4.99 20	5.08 19.1	5.13 18.7	5.15 19.2	5.16 20	5.12 19.8	4.96 17.8					
25	500	23319	22703	22057	21374	20649	19871	19021	18061	16972	15788				
		5.86 24	6.02 24	6.15 23	6.27 22	6.34 21	6.38 21	6.41 22	6.42 23	6.39 22	6.26 20				
30	535	25032	24462	23867	23245	22591	21900	21163	20365	19476	18483	16212			
		7.15 27	7.32 27	7.48 27	7.61 25	7.72 24	7.78 23	7.82 23	7.85 23	7.87 25	7.84 24	7.54 21			
35	555	26009	25462	24893	24300	23679	23028	22340	21604	20804	19915	17876			
		7.97 28	8.15 28	8.31 28	8.46 27	8.58 25	8.66 25	8.71 24	8.75 24	8.77 25	8.78 25	8.62 24			
40	585	27471	26955	26421	25867	25290	24689	24060	23396	22690	21928	20169	18133		
		9.31 30	9.50 30	9.68 30	9.84 30	9.98 28	10.09 27	10.17 26	10.21 26	10.25 26	10.27 27	10.25 27	9.95 24		

MAXIMUM MOTOR FRAME SIZE: 256T

BSI 402AHP

Outlet Area = 21.20 ft²

Fan Efficiency Grade: FEG56

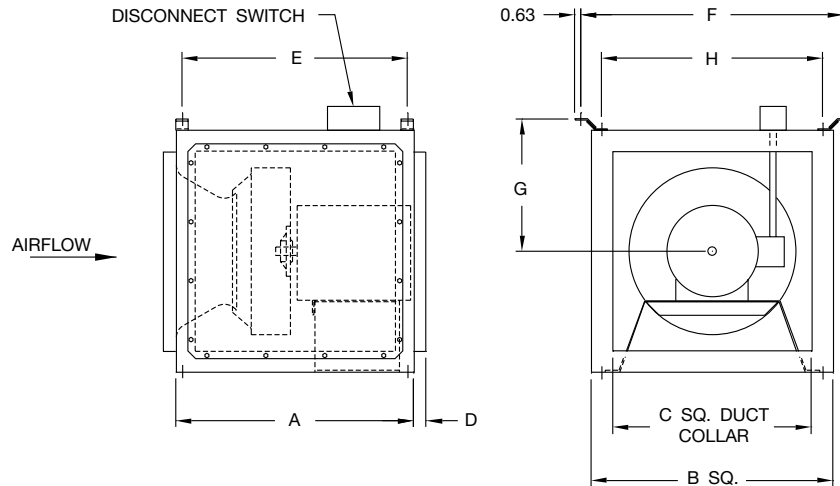
HP	RPM	STATIC PRESSURE (INCHES W.G.)													
		0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25		
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
		BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone
1 1/2	300	6115													
		0.91 6.6													
2	355	9151													
		1.55 9.6													
3	370	9886	7706												
		1.74 10.2	1.73 10.7												
5	390	10821	8929												
		2.02 10.8	2.07 12.0												
7 1/2	420	12135	10463	8217											
		2.50 12.2	2.57 13.2	2.40 13.4											
10	445	13174	11713	10021											
		2.95 13.2	3.04 14.1	3.07 14.3											
15	490	14984	13808	12337	10775										
		3.90 15.7	3.99 15.3	4.08 16.7	4.09 16.3										
20	530	16559	15516	14303	12888	11382									
		4.88 18.7	5.00 17.1	5.11 17.7	5.17 18.5	5.14 17.8									
25	570	18119	17148	16129	14901	13583	12127								
		6.00 22	6.18 19.2	6.28 19.1	6.39 20	6.45 20	6.38 19.0								
30	605	19474	18544	17626	16575	15355	14125	12645							
		7.09 24	7.33 22	7.45 21	7.57 22	7.67 22	7.72 21	7.56 20							
35	640	20817	19924	19066	18152	17082	15903	14747	13278						
		8.30 28	8.61 24	8.77 22	8.88 22	9.01 24	9.09 24	9.14 23	8.91 22						
40	670	21960	21097	20275	19437	18492	17412	16282	15169	13598					
		9.45 30	9.81 27	10.01 25	10.13 24	10.26 25	10.38 26	10.45 26	10.49 24	10.06 23					
45	715	23663	22847	22062	21294	20488	19572	18551	17490	16459	15234	12566			
		11.35 35	11.79 31	12.07 28	12.23 28	12.35 28	12.50 28	12.62 30	12.69 28	12.75 27	12.59 26	10.93 26			
50	765	25541	24774	24023	23303	22582	21815	20953	20004	19011	18045	17034	15602		
		13.74 40	14.25 36	14.63 34	14.87 32	15.01 31	15.15 31	15.31 32	15.44 34	15.53 33	15.59 32	15.59 30	15.03 30		

MAXIMUM MOTOR FRAME SIZE: 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 1.5m (5 ft.) in a hemispherical free field calculated per AMCA International Standard 301.
5. Values shown are for installation type B: free inlet hemispherical sone levels.

Model DSI, Direct Drive



MODEL DSI	EC MOTOR SIZES	A	B	C	D	E	F	G	H	DAMPER SIZE	AVG. SHIP WT. (LBS.)	SIDE DISCHARGE SIZE
080A	080AE	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00 x 12.00	93	11.88 x 11.88
090A	090AE	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00 x 12.00	96	11.88 x 11.88
100A	100AE	20.50	17.81	13.88	1.00	19.00	21.06	10.38	16.00	14.00 x 14.00	106	13.88 x 13.88
120A	120AE	21.50	19.38	15.88	1.00	20.00	22.06	11.13	17.00	16.00 x 16.00	127	15.88 x 15.88
135A/135AN	135AE/ANE	23.00	21.56	17.88	1.00	21.50	24.25	12.19	19.16	18.00 x 18.00	132	17.88 x 17.88
150A/150AN	150AE/ANE	24.00	23.82	19.88	1.00	22.50	26.38	13.29	21.31	20.00 x 20.00	157	19.88 x 19.88
165A/165AN	165AE/ANE	26.00	26.50	22.88	1.00	24.50	29.06	14.64	24.00	23.00 x 23.00	167	22.88 x 22.88

Notes:

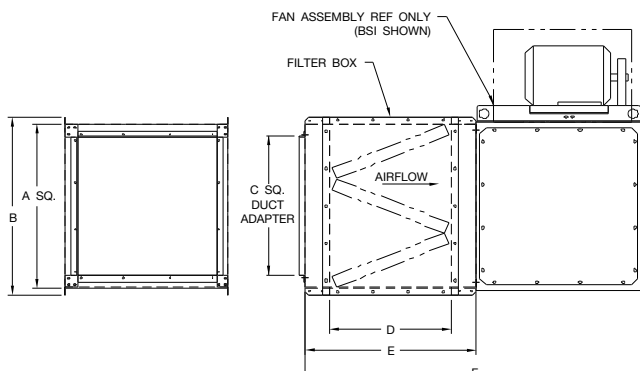
1. All figures are in inches unless noted otherwise.
2. Average ship weight is for fan and motor assembly.
3. Dimensions are not to be used for construction.

D-4210J

Filter Box Assembly

SIZE	A SQ.	B	C	D	E	F	FILTER SIZE	FILTER QTY.	AVG. SHIP WT. (LBS.)
080/090	16.00	18.50	11.88	21.44	28.38	47.38	25x16x2	1	99
100	18.06	20.56	13.88	19.88	26.75	47.25	25x16x2	1	113
120/120HP	19.62	22.12	15.88	24.50	31.38	52.88	25x16x2	2	148
135/135HP	21.75	24.25	17.88	24.00	32.00	55.00	25x20x2	2	181
150/150HP	23.94	26.44	19.88	23.75	32.00	56.00	25x20x2	2	200
165/165HP	26.62	29.12	22.88	19.56	28.00	54.00	25x20x2	3	203
180/180HP	29.12	31.62	23.88	19.25	26.50	55.00	25x20x2	3	220
210/210HP	32.44	34.94	27.88	21.00	31.00	63.00	25x16x2	4	290
225/225HP	34.25	36.75	29.88	24.00	33.00	67.00	25x16x2	6	397
245/245HP	37.75	40.25	32.88	18.88	30.00	56.50	25x20x2	2	439
							25x16x2	2	
							25x20x2	6	
270/270HP	40.25	42.75	35.88	23.00	33.00	72.00	25x20x2	8	568
300/300HP	44.25	46.75	39.88	24.00	33.00	74.50	25x20x2	12	654
330/330HP	48.94	51.44	43.88	23.50	34.00	79.50	25x16x2	12	842
365/365HP	50.25	52.75	45.88	19.75	30.50	77.38	25x20x2	12	850
402/402HP	55.50	58.00	51.88	24.75	36.00	88.00	25x20x2	12	1150
							25x16x2	6	

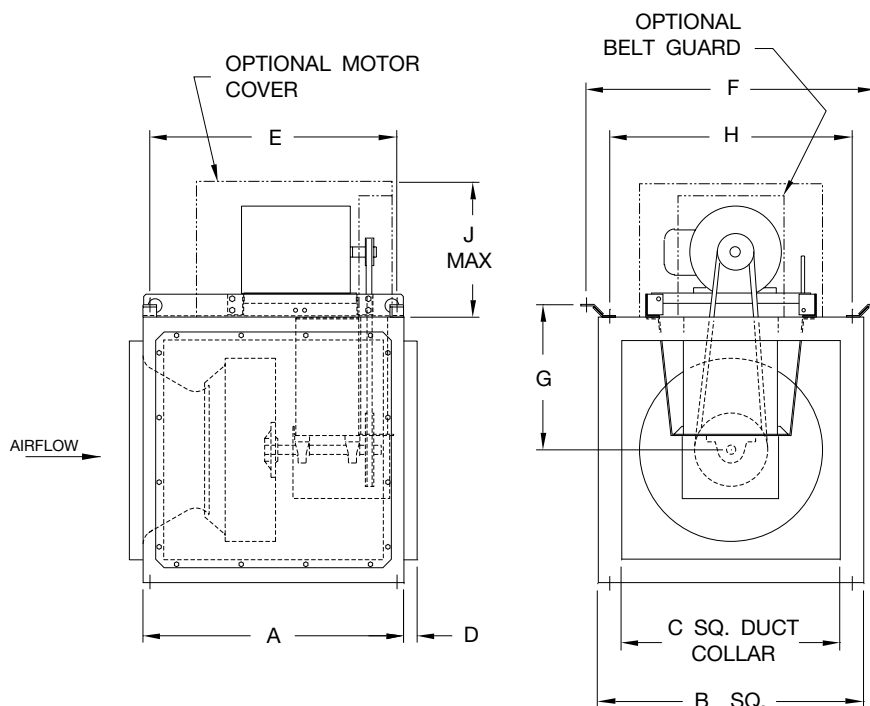
D-4205-1



Notes:

1. All figures are in inches unless noted otherwise.
2. Filter box option is shipped separately for field installation.
3. For filter box information, see page 5.

Model BSI, Belt Driven



MODEL BSI	A	B	C	D	E	F	G	H	J	DAMPER SIZE	AVG. SHIP WT. (LBS.)	SIDE DISCHARGE SIZE
080A	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00	12.00 x 12.00	93	11.88 x 11.88
090A	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00	12.00 x 12.00	96	11.88 x 11.88
100A	20.50	17.81	13.88	1.00	19.00	21.06	10.38	16.00	12.00	14.00 x 14.00	106	13.88 x 13.88
120A/120AHP	21.50	19.38	15.88	1.00	20.00	22.06	11.13	17.00	12.00	16.00 x 16.00	127	15.88 x 15.88
135A/135AHP	23.00	21.56	17.88	1.00	21.50	24.25	12.19	19.16	12.75	18.00 x 18.00	132	17.88 x 17.88
150A/150AHP	24.00	23.82	19.88	1.00	22.50	26.38	13.29	21.31	12.75	20.00 x 20.00	157	19.88 x 19.88
165A/165AHP	26.00	26.50	22.88	1.00	24.50	29.06	14.64	24.00	14.56	23.00 x 23.00	167	22.88 x 22.88
180A/180AHP	28.50	29.00	23.88	1.50	27.00	31.56	15.89	26.50	16.25	24.00 x 24.00	193	23.88 x 23.88
210A/210AHP	32.00	32.34	27.88	1.50	30.50	35.06	17.54	30.00	16.25	28.00 x 28.00	223	27.88 x 27.88
225A/225AHP	34.00	34.00	29.88	1.50	32.50	36.89	18.45	31.81	18.50	30.00 x 30.00	287	25.88 x 28.88
245A/245AHP	36.50	37.50	32.88	1.50	35.00	40.38	20.20	35.31	18.50	33.00 x 33.00	352	27.88 x 31.88
270A/270AHP	39.00	40.13	35.88	1.50	37.50	43.00	21.45	37.88	20.00	36.00 x 36.00	394	29.88 x 33.88
300A/300AHP	41.50	44.13	39.88	1.50	39.50	47.62	23.83	41.88	20.00	40.00 x 40.00	442	29.88 x 37.88
330A/330AHP	45.50	48.81	43.88	1.50	43.50	52.31	26.19	46.56	20.00	44.00 x 44.00	554	31.88 x 39.88
365A/365AHP	48.50	50.13	45.88	1.50	46.50	53.63	26.84	47.88	20.00	46.00 x 46.00	665	32.88 x 41.88
402A/402AHP	52.00	55.25	51.88	1.50	50.00	58.88	29.47	53.13	20.00	52.00 x 52.00	743	34.88 x 46.88

D-4205J

Notes:

1. All figures are in inches unless noted otherwise.
2. Average ship weight is for fan and motor assembly.
3. Dimensions are not to be used for construction.

TYPICAL SPECIFICATIONS



Model
DSI

Supply or exhaust fans shall be of the direct drive model DSI centrifugal square inline type, 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 DSI shall be UL 705 listed.

CONSTRUCTION — Unit exterior shall be constructed of heavy gauge galvanized steel. The fan housing shall be square in shape and readily attachable to building ductwork. Unit side panels shall be removable for easy access for maintenance and service. The power assembly shall be removable as a complete module through the side access panel. Fan housings shall have universal mounting brackets to accommodate horizontal or vertical installations. Fans shall bear a permanently attached nameplate displaying model and serial number of the unit for future identification.

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

MOTOR — Motors shall be of the heavy-duty ball bearing type, closely matched to the fan load. A disconnect switch shall be factory installed and wired to the fan motor as standard. All motors shall be UL recognized.

ACCESSORIES — When specified, accessories such as backdraft damper, belt guard, motor cover, insulated housing, vibration isolators, side discharge, remote lubrication lines, inlet and outlet guards, special coatings, and filter box option 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. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its DSI Square Inline Fans for at least one (1) year from startup or eighteen (18) months from ship date, whichever occurs first.



TYPICAL SPECIFICATIONS

Model

BSI



Supply or exhaust fans shall be of the belt driven model BSI centrifugal square inline type, 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 BSI shall be UL 705 listed. Fans shall bear a permanently attached nameplate displaying model and serial number of the unit for future identification.

CONSTRUCTION — Unit exterior shall be constructed of heavy gauge galvanized steel. The fan housing shall be square in shape and readily attachable to building ductwork. Unit side panels shall be removable for easy access for maintenance and service. The power assembly shall be removable as a complete module through the side access panel. Fan housings shall have universal mounting brackets to accommodate horizontal or vertical installations.

WHEEL — Fan wheels shall be of the non-overloading centrifugal backward inclined type, constructed of aluminum and containing a matching inlet venturi for optimum unit performance. 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, pillow block type with relubricable zerk fittings. Bearings shall be designed for air handling service with a minimum L-10 life in excess of 100,000 hours; L-50 500,000 hours at the maximum cataloged operating speed. Bearing mounting plate shall have self-aligning tabs for exact locating and alignment of bearings.

DRIVE — Drives shall be sized for a minimum of 150% of driven horsepower. Machined, cast iron motor sheaves shall be adjustable for final system balancing. The belt and pillow block ball bearings shall be protected from the airstream by an enclosure.

MOTOR — Motors shall be of the heavy-duty ball bearing type, closely matched to the fan load. A disconnect switch shall be factory installed and wired to the fan motor as standard. Motor shall be mounted on the outside of the unit, isolated from the airstream. All motors shall be UL recognized.

ACCESSORIES — When specified, accessories such as backdraft damper, belt guard, motor cover, insulated housing, vibration isolators, side discharge, remote lubrication lines, inlet and outlet guards, special coatings, and filter box option 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 BSI Square Inline Fans for at least one (1) year from startup or eighteen (18) months from ship date, whichever occurs first.

INDUSTRIAL & COMMERCIAL FANS

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



Fan & Blower
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