



The Industrial Choice.

**Model SCDD
Direct Drive**



**Model SCBD
Belt Driven**

SQUARE INLINE FANS

Direct Drive & Belt Driven

Model SCDD / SCBD

Square Inline Centrifugal Fans

General Information

Aerovent's SCDD direct drive and type SCBD 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.

Capabilities

SCBD inline fans are available in 29 sizes, 080 through 402. SCDD inline fans are available in 10 sizes, 080 through 165.

Performance capabilities include a broad capacity range from 250 to 27,500 CFM and static pressure capabilities to 3.5 inches w.g.

Variable Speed Control

Variable speed control is available on SCDD models. The speed control option allows the fan to start on high speed for better start-up characteristics and allows adjustment of airflow for system balancing. The controller can be factory installed or shipped loose for field mounting. Motor must be ODP 115V.



Aerovent certifies that the SCDD and SCBD models 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.



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



Model SCBD



Model SCDD

Construction Features

- Housing assembly features heavy-gauge galvanized steel construction.
- 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.
- Backward inclined non-overloading, all-aluminum wheel and hub statically and dynamically balanced to assure long life and quiet operation.
- Galvanized steel mounting brackets for easy mounting in horizontal or vertical position.
- Heavy-duty cast iron adjustable pulleys to permit speed variation (Model SCBD).
- 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 SCBD).
- Mounted disconnect switch provided as standard for servicing the unit without the danger of an accidental start.

Removable Side Panels

Shown below are Models SCDD and SCBD with the side panels removed. This special feature provides 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.



Accessories

Belt Guard

A formed galvanized steel guard is available to cover the drive assembly on Model SCBD.

Motor Cover

A formed galvanized steel cover is available on Model SCBD to completely cover the motor and drives. Motor cover serves as OSHA belt guard.

Vibration Isolators

Spring or neoprene type vibration isolators are available for ceiling suspended or floor mounted units.

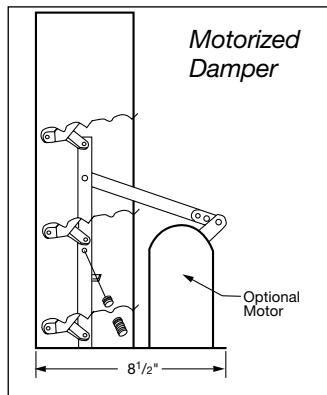
Extended Lubrication Lines

Exterior mounting zerk fittings are available with lines to the fan shaft bearings for relubrication from outside the unit.

Backdraft Dampers

Backdraft dampers, with automatic or motorized operation, feature felt-edged damper blades for quiet operation. Damper frames are constructed of 20-gauge galvanized steel and blades are constructed of 26-gauge aluminum.

Motorized dampers are recommended for low CFM applications to assure unrestricted airflow. Motorized dampers are available with 115, 208, 230, 460 or 575 volt service; 460 and 575 volt service requires a step-down transformer. See dimensional data for sizing.



Filter Box

A filter box containing 2 inch 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. For filter box pressure drops contact factory. See page 21 for dimensional data. One inch filters are available on either type.

Insulated Housing

A one-inch thick layer of fiberglass insulation on the interior of the fan housing is available to provide protection against condensation and to aid in noise reduction. Neoprene coated or foil face insulation is available.

Inlet/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.

Side Discharge

Side discharge kits provide 1-way, 2-way or 3-way discharges. See page 4 for available configurations.

Special Coatings

Square inline centrifugal fans often require special coatings for protective and decorative purposes. Available coatings include anticondensate, air-dried enamel, air-dried epoxy, and Heresite (air-dried phenolic). Contact your Aerovent representative for more information on available coatings and colors.

Weatherproofing

Sealed motor cover and gasketed panels with rain lip. Suitable for outdoor use.

Side Discharge Option

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
	D	Left and Right
2-Way	E	Left and Rear
	F	Right and Rear
3-Way	G	Left, Right and Rear

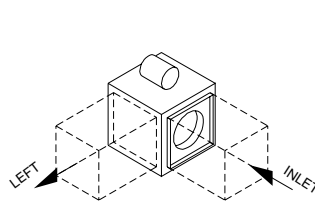


FIG. B

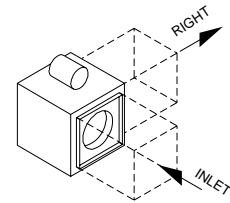


FIG. C

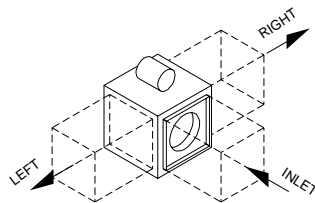


FIG. D

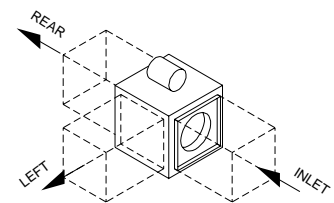


FIG. E

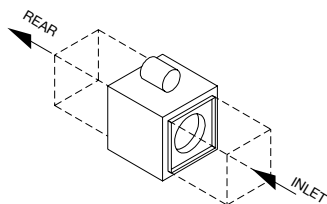


Fig. A

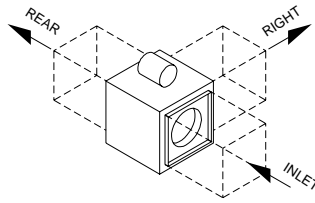


FIG. F

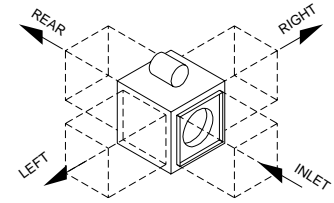


FIG. G

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.

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 SCBD	Model SCDD	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 – Direct Drive

SCDD – 60 Hz

MODEL SCDD	MOTOR HP	RPM	MAX. BHP	STATIC PRESSURE (INCHES W.G.)													
				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													
080A	1/8	860	0.01	323 4.2	247 3.4												
	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							
090A	1/8	860	0.02	495 5.9	390 4.4												
	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							
100A	1/8	860	0.04	787 7.8	666 6.0	520 6.2											
	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					
120A	1/8	860	0.07	1047 5.8	951 5.3	830 5.1	586 4.3										
	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				
135AN	1/8	860	0.08	1041 6.9	941 6.2	819 5.5	670 5.2										
	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		
135A	1/4	860	0.13	1437 7.1	1331 6.7	1208 5.9	1041 6.1										
	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			
150AN	1/4	860	0.13	1385 8.2	1277 7.9	1150 6.3	1005 6.9	810 5.9									
	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		
150A	1/4	860	0.20	1913 8.5	1798 8.5	1668 7.1	1513 7.5	1286 6.7									
	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 1/2	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		
165AN	1/4	860	0.23	2094 7.7	1953 7.6	1805 6.9	1647 7.2	1472 7.3	1248 7.2								
	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	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		
165A	1/2	860	0.33	2898 10.1	2683 9.9	2499 8.9	2323 9.2	2069 9.4	1773 8.2								
	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					
	3	1750*	2.80	5898 30	5786 30	5678 30	5574 30	5473 29	5375 28	5281 27	5109 26	4945 26	4769 27	4552 28	4589 27		

* Designates motors that cannot be used with speed controller.

NOTES:

- Performance certified is for Installation Type A: Free inlet, free outlet.
- The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301.
- Performance ratings do not include the effects of appurtenances (accessories).
- Values shown are for Installation Type A: Free inlet, free outlet fan some values.

Performance Data – Belt Driven

SCBD 080A

Max. Motor Frame Size = 145T

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		2.50		3.00		
		CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	
1/4	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																	
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												
1/3	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										
	921		893		837		783		727		667		597		509											
2500	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	0.41	16.0								
	1062		1037		988		940		892		843		793		737		673		597							
2860	0.48	23	0.49	23	0.50	21	0.51	19.6	0.52	18.6	0.53	19.1	0.53	20	0.53	21	0.52	19.1	0.51	17.5						
3/4	3060	1139		1116		1070		1025		980		935		889		842		789		730		576				
	0.59	26	0.59	26	0.61	25	0.62	23	0.63	21	0.64	21	0.65	21	0.65	22	0.65	23	0.64	21	0.61	19.4				
	1217		1195		1152		1109		1067		1025		982		939		894		845		729		559			
3260	0.71	29	0.72	29	0.73	29	0.74	25	0.76	24	0.77	23	0.77	23	0.78	24	0.79	25	0.79	25	0.77	22	0.72	22		
1	3425	1281		1260		1218		1177		1137		1097		1057		1016		975		932		833		708		
	0.82	33	0.83	33	0.84	32	0.86	29	0.87	26	0.88	25	0.89	24	0.90	25	0.91	26	0.91	27	0.91	26	0.87	23		
	1344		1324		1285		1246		1207		1169		1131		1092		1053		1013		926		823			
3590	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		

NOTES:

1. Performance certified is for Installation Type A: Free inlet, free 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. (1.5m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type A: Free inlet, free outlet fan sone values.

Performance Data – Belt Driven

SCBD 090A

Max. Motor Frame Size = 145T

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	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	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										
1/2	2230	1201		1168		1099		1022		935		835		703											
		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									
3/4	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						
	2735	1487		1460		1406		1348		1286		1220		1149		1069		979		866		646			
1	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	
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	

SCBD 100A

Max. Motor Frame Size = 145T

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	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	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	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									
3/4	1980	1697		1654		1610		1563		1463		1353		1229		1077		825							
		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						
1	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			
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	

NOTES:

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

Performance Data – Belt Driven

SCBD 120A

Max. Motor Frame Size = 145T

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	700	716		489																						
	900	0.04	3.5	0.04	3.0																					
		990			880		710																			
	1100	0.08	6.2	0.09	6.0	0.09	5.7																			
		1252			1166		1074		944		748															
1/3	1355	0.15	9.2	0.16	7.9	0.16	8.0	0.16	8.5	0.15	6.8															
	1420	0.24	11.6	0.25	10.9	0.25	10.0	0.25	10.1	0.26	10.8	0.26	10.3													
	1578			1509		1439		1367		1282		1172														
1/2	1630	0.27	12.5	0.28	11.9	0.29	10.9	0.30	10.7	0.30	11.3	0.30	11.6													
	1792			1732		1670		1607		1543		1471		1275												
	1923	0.39	14.9	0.40	14.9	0.41	13.9	0.42	13.1	0.43	12.8	0.43	13.4	0.43	13.6											
3/4	2072			2166		2117		2067		2016		1965		1858		1726		1556								
	2215	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	0.52	13.9									
	2326			2280		2233		2186		2137		2089		1990		1877		1731		1557		1285				
1	2437	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	0.65	16.6	0.64	14.6							
	2540	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	0.79	18.7	0.79	18.3	0.77	15.3					
	2622			2582		2540		2498		2456		2413		2326		2238		2140		2022		1879		1718		
1 1/2	2807	0.80	22	0.82	22	0.83	22	0.85	22	0.86	20	0.87	19.4	0.90	18.9	0.91	19.5	0.91	20	0.9	19.3	0.86	16.3			
	2870	0.92	24	0.93	24	0.95	24	0.97	23	0.98	22	0.99	22	1.02	20	1.04	21	1.05	22	1.04	22	1.03	19.4			
	2945	1.13	26	1.15	26	1.17	26	1.18	26	1.20	25	1.22	25	1.24	23	1.27	22	1.29	23	1.29	24	1.29	24	1.28	22	
1 1/2	2807			2769		2730		2691		2652		2612		2531		2450		2365		2271		2159		2026		
	2945	1.38	30	1.40	30	1.42	30	1.43	30	1.45	29	1.47	28	1.50	26	1.53	25	1.55	25	1.57	25	1.58	27	1.57	27	

SCBD 120AHP

Max. Motor Frame Size = 145T

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	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone
1/2	1240	586																							
	1450	0.15	7.6																						
1/3	1525	921		720																					
	1600	0.26	10.7	0.24	9.6																				
1/2	1720	1020		855																					
	1840	0.30	11.3	0.30	10.9																				
	1970	1112		963		754																			
3/4	2105	0.34	11.8	0.35	12.2	0.32	10.8																		
	2210	1249		1125		978																			
	2315	0.42	13.1	0.43	13.6	0.43	13.1																		
1	2485	1378		1275		1146		1004																	
	2655	0.51	14.4	0.52	14.4	0.53	15.3	0.52	14.2																
	2807	1513		1424		1318		1193		1055															
1 1/2	2945	0.62	16.9	0.63	16.0	0.64	16.4	0.64	16.6	0.63	15.2														
	3070	1650		1571		1482		1375		1257		1126													
	3200	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 1/2	3345	1755		1681		1601		1509		1401		1287		1153											
	3490	0.86	21	0.88	20	0.90	19.0	0.91	19.2	0.91	20	0.91	19.8	0.88	17.8										
	3635	1858		1788		1715		1634		1539		1433		1323		1187									
1 1/2	3780	0.98	24	1.00	21	1.02	20	1.04	20	1.05	21	1.05	21	1.04	21	1.01	18.9								
	3925	2024		1960		1894		1824		1747		1658		1560		1459		1348		1184					
1 1/2	4070	1.21	27	1.23	25	1.25	24	1.27	23	1.28	23	1.29	23	1.30	24	1.29	24	1.28	22	1.19	21				
	4215	2187		2128		2067		2005		1938		1866		1784		1692		1598		1501		1384		1206	
1 1/2	4360	1.46	30	1.49	29	1.51	27	1.53	26	1.55	25	1.56	25	1.58	26	1.58	26	1.58	26	1.57	25	1.53	23	1.4	23
	4505																								

NOTES:

1. Performance certified is for Installation Type A: Free inlet, free 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. (1.5m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type A: Free inlet, free outlet fan sone values.

Performance Data – Belt Driven

SCBD 135A

Max. Motor Frame Size = 145T

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	900	1386	8.0	1268	7.1	1120	7.7	894	6.1																
	1075	1696	11.0	1599	9.8	1500	9.4	1380	10.0	1217	9.8														
1/3	1130	1792	11.8	1700	10.8	1607	10.1	1503	10.3	1365	11.7	1192													
	1190	1897	12.6	1810	12.0	1721	10.9	1629	10.9	1515	11.7	1367	1192												
1/2	1280	2053	13.9	1973	13.4	1890	12.4	1807	12.0	1716	12.2	1602	1292												
	1370	2208	15.4	2133	15.4	2057	14.4	1980	13.3	1901	13.2	1811	1568												
3/4	1465	2370	17.0	2301	17.0	2231	16.0	2158	15.0	2086	14.8	2010	1818	1559											
	1565	2541	19.0	2477	19.0	2411	18.3	2344	17.2	2277	16.5	2208	2054	1843	1572										
1	1640	2669	20	2608	20	2545	20	2482	19.1	2417	18.1	2353	2215	2038	1813										
	1720	2805	22	2747	22	2687	22	2627	21	2566	20	2504	2378	2229	2034	1801									
1 1/2	1845	3017	25	2963	25	2908	25	2852	24	2795	23	2738	2623	2500	2350	2163	1946								
	1970	3228	27	3178	27	3127	27	3075	26	3022	26	2969	2862	2752	2632	2484	2305	2105							

SCBD 135AHP

Max. Motor Frame Size = 145T

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	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	1050	1116	8.5	899	8.1																				
	1200	1321	11.4	1161	9.3	937	9.5																		
1/3	1275	1421	12.6	1276	10.1	1081	10.8	789	9.7																
	1350	1520	14.0	1387	11.5	1219	11.7	1007	11.0																
1/2	1450	1651	15.5	1529	13.2	1390	12.4	1206	11.6	966	11.6														
	1550	1780	17.2	1668	15.0	1546	13.6	1392	13.9	1212	13.9														
3/4	1655	1915	19.0	1812	17.4	1701	15.2	1573	14.2	1412	14.2	1237													
	1765	2055	21	1959	19.7	1858	17.6	1747	16.2	1613	17.1	1457	1283												
1	1855	2169	22	2079	21	1983	19.1	1882	18.0	1767	17.6	1625	1475	1286											
	1945	2282	24	2197	23	2107	21	2013	19.4	1910	18.6	1788	1646	1501	1294										
1 1/2	2085	2458	26	2379	26	2297	24	2211	22	2121	21	2021	1903	1771	1637	1470									
	2225	2633	29	2560	29	2484	27	2405	26	2323	24	2236	2139	2027	1903	1779	1639	1423							

NOTES:

1. Performance certified is for Installation Type A: Free inlet, free 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. (1.5m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type A: Free inlet, free outlet fan sone values.



Performance Data – Belt Driven

SCBD 150A

Max. Motor Frame Size = 184T

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	8.2	1552	7.3	1378	7.9	1115	6.6																
	920	1918	10.2	1793	9.1	1660	8.7	1481	7.7	1235															
1/3	970	2035	10.9	1917	9.9	1795	9.3	1646	8.8	1444															
	1020	2152	11.7	2040	11.1	1925	10.1	1798	9.8	1626	1410														
1/2	1095	2326	13.2	2222	12.6	2116	11.5	2006	10.7	1874	1701														
	1170	2498	14.6	2402	14.2	2303	13.0	2203	12.9	2094	1959	1593													
3/4	1250	2682	16.2	2592	15.8	2500	14.8	2407	13.6	2311	2204	1913													
	1335	2876	18.0	2792	18.0	2707	17.1	2620	15.3	2532	2440	2209	1898												
1	1400	3024	18.8	2944	18.8	2863	18.5	2780	17.5	2697	2613	2416	2147	1771											
	1465	3171	20	3096	20	3019	19.0	2940	18.1	2860	2781	2697	2599	2377	2090										
1 1/2	1570	3409	23	3339	23	3267	22	3195	20	3120	3046	2894	2715	2483	2206										
	1680	3657	25	3592	25	3525	25	3458	24	3389	3320	3181	3032	2851	2625	2365									
2	1760	3837	27	3775	27	3712	27	3648	27	3583	3517	3385	3248	3094	2903	2676	2412								
	1845	4028	29	3969	29	3909	29	3848	29	3787	3724	3598	3471	3334	3174	2979	2758								

SCBD 150AHP

Max. Motor Frame Size = 184T

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	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone
1/3	950	1078	8.3																						
	1140	1505	10.4	1261	10.8																				
1/2	1230	1682	11.9	1481	12.0	1226	11.5																		
	1320	1853	13.6	1684	12.8	1465	11.9	1175																	
3/4	1415	2029	15.9	1881	15.8	1698	14.8	1482																	
	1510	2201	17.8	2067	16.1	1914	15.5	1723	15.6	1512															
1	1585	2335	19.6	2210	17.9	2073	16.9	1906	17.6	1714	1484														
	1660	2468	21	2350	19.0	2224	18.1	2078	19.0	1902	1715	1444													
1 1/2	1780	2679	24	2570	22	2457	20	2333	20	2189	2023	1848	1615												
	1900	2887	27	2787	25	2682	23	2573	22	2453	2313	2155	1992	1794											
2	1995	3050	29	2956	27	2858	26	2756	25	2648	2527	2387	2235	2079	1889										
	2090	3213	31	3123	29	3031	28	2935	27	2835	2728	2607	2469	2324	2175	1995	1721								

NOTES:

1. Performance certified is for Installation Type A: Free inlet, free 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. (1.5m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type A: Free inlet, free outlet fan sone values.

Performance Data – Belt Driven

SCBD 245A

Max. Motor Frame Size = 215T

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	CFM	Sone
1/2	475	4748	8.3	4292	7.3	3692	6.6																				
	505	5097	9.4	4686	8.0	4171	7.8	3523	7.8																		
3/4	540	5500	10.3	5129	9.4	4684	9.1	4122	9.4	3387	9.4																
	575	5900	11.5	5561	10.6	5166	9.8	4690	10.5	4122	9.9																
1	600	6183	12.3	5864	11.4	5498	10.5	5070	11.4	3946	11.4																
	630	6522	13.3	6222	12.7	5886	11.8	5499	11.5	4517	12.3																
1 1/2	675	7027	14.4	6752	13.9	6452	12.9	6113	13.0	5275	13.3																
	725	7585	15.8	7334	15.8	7063	14.4	6765	13.8	6062	14.7																
2	760	7974	17.1	7736	17.1	7483	16.9	7208	16.3	6572	16.8																
	795	8362	18.3	8136	18.3	7898	17.6	7642	17.1	7059	17.7																
3	850	8969	19.8	8761	19.8	8542	19.8	8310	19.0	7795	19.3																
	910	9630	21.7	9437	21.7	9236	21.7	9025	21.0	8566	21.3																
5	995	10563	24.2	10389	24.2	10208	23.3	10020	22.0	9620	22.0																
	1080	11494	26.6	11334	26.6	11170	25.9	11000	25.0	10644	25.3																
7 1/2	1160	12367	30.2	12220	30.2	12068	30.2	11913	29.0	11589	29.3																
	1235	13185	33.1	13047	33.1	12906	33.1	12762	32.0	12614	31.7																

SCBD 245AHP

Max. Motor Frame Size = 215T

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	Sone	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	650	3332	9.8																								
	730	4232	12.0	3570	10.9																						
1 1/2	780	4731	12.7	4208	13.1	3435	11.5																				
	835	5257	13.3	4806	14.6	4248	14.2	3404	12.6																		
2	875	5627	14.3	5210	15.4	4739	16.0	4092	13.9																		
	915	5989	15.2	5602	16.0	5179	17.1	4658	16.5	3927	14.8																
3	980	6566	17.2	6218	17.4	5842	18.6	5432	19.2	4231	16.5																
	1050	7176	19.8	6857	19.8	6523	19.7	6165	21.0	5292	18.6																
5	1150	8030	24.2	7743	22.0	7450	23.0	7143	24.0	6472	21.0																
	1245	8828	27.1	8566	26.0	8300	27.0	8027	28.0	7443	25.0																
7 1/2	1335	9575	30.2	9332	30.2	9086	30.2	8837	29.0	8315	29.3																
	1425	10314	33.1	10089	33.1	9860	33.1	9628	32.0	9394	31.7																

NOTES:

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

Performance Data – Belt Driven

SCBD 402A

Max. Motor Frame Size = 256T

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	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone
1 1/2	290	12803	8.6	11551	7.5	9898	8.1																		
	310	13837	10.3	12708	8.9	11321	8.2	9460																	
2	325	14605	11.1	13550	10.1	12305	10.2	10677																	
	340	15368	12.4	14377	11.4	13238	11.5	11810	9946																
3	365	16630	14.5	15729	13.5	14722	13.4	13542	12064																
	390	17882	16.1	17054	15.8	16146	14.7	15127	13911	12447															
5	430	19870	19.1	19136	18.4	18347	17.9	17491	16540	15433	14130	12574													
	465	21599	22	20929	22	20220	20	19462	18644	17742	16707	15514	14190												
7 1/2	500	23319	24	22703	24	22057	23	21374	20649	19871	19021	18061	16972	15788											
	535	25032	27	24462	27	23867	27	23245	22591	21900	21163	20365	19476	18483	16212										
10	555	26009	28	25462	28	24893	28	24300	23679	23028	22340	21604	20804	19915	17876										
	585	27471	30	26955	30	26421	30	25867	25290	24689	24060	23396	22690	21928	20169	18133									

SCBD 402AHP

Max. Motor Frame Size = 256T

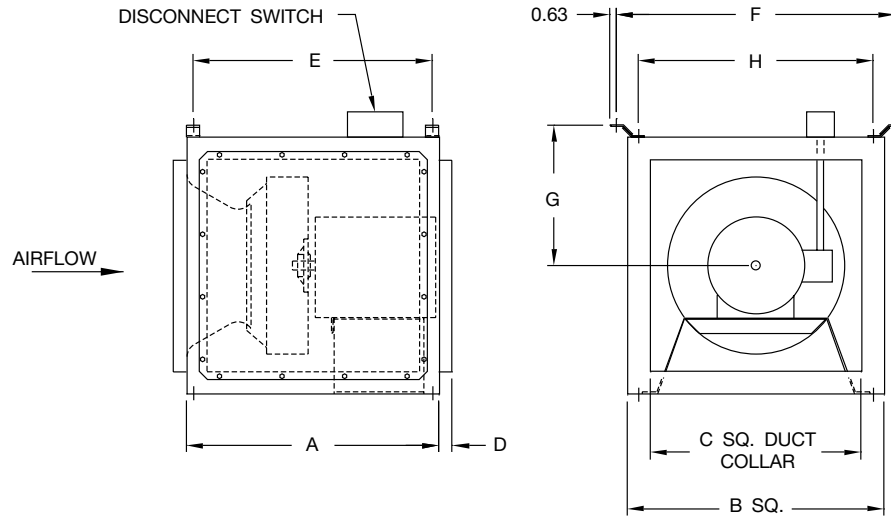
HP	RPM	STATIC PRESSURE (INCHES W.G.)																							
		0.50		0.75		1.00		1.25		1.50		1.75		2.00		2.25		2.50		2.75		3.00		3.25	
		CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone
1 1/2	300	6115	6.6																						
	355	9151	9.6																						
2	370	9886	10.2	7706	10.7																				
	390	10821	10.8	8929	12.0																				
3	420	12135	12.2	10463	13.2	8217	13.4																		
	445	13174	13.2	11713	14.1	10021	14.3																		
5	490	14984	15.7	13808	15.3	12337	16.3	10775																	
	530	16559	18.7	15516	17.1	14303	17.7	12888	11382																
7 1/2	570	18119	22	17148	19.2	16129	19.1	14901	13583	12127															
	605	19474	24	18544	22	17626	22	16575	15355	14125	12645														
10	640	20817	24	19924	24	19066	24	18152	17082	15903	14747	13278													
	670	21960	30	21097	27	20275	27	19437	18492	17412	16282	15169	13598												
15	715	23663	35	22847	31	22062	28	21294	20488	19572	18551	17490	16459	15234	12566										
	765	25541	40	24774	36	24023	34	23303	22582	21815	20953	20004	19011	18045	17034	15602									

NOTES:

1. Performance certified is for Installation Type A: Free inlet, free 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. (1.5m) in a hemispherical free field calculated per AMCA Standard 301.
5. Values shown are for Installation Type A: Free inlet, free outlet fan sone values.

Dimensional Data

Direct Drive



MODEL SCDD	A	B	C	D	E	F	G	H	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 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 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	14.00 x 14.00	106	13.88 x 13.88
120A	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	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	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	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.

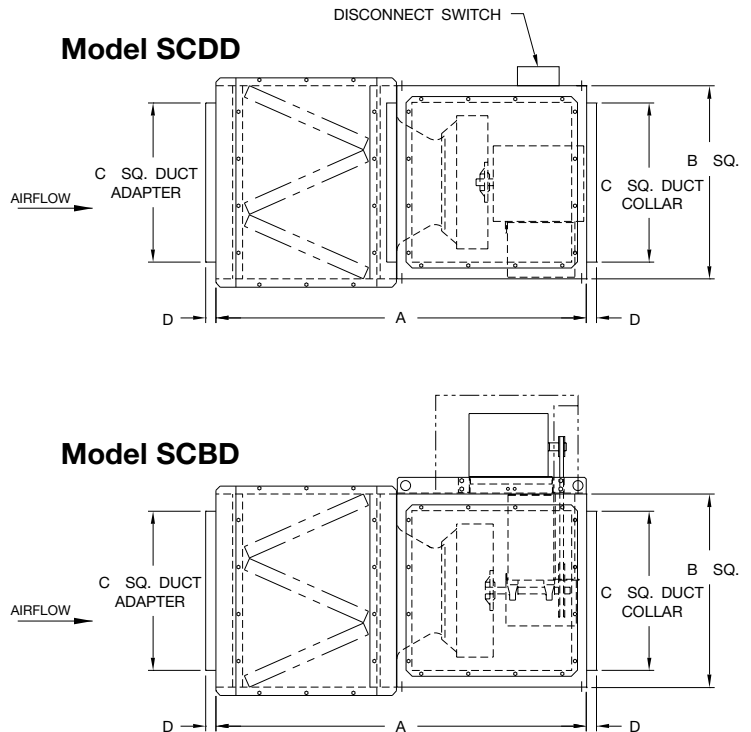
D-4210

Filter Box Assembly

SIZE	A	B	C	D
080A	47.38	15.33	11.88	1.00
090A	47.38	15.33	11.88	1.00
100A	47.25	17.81	13.88	1.00
120A/120AHP	52.88	19.38	15.88	1.00
135A/135AHP	55.00	21.56	17.88	1.00
150A/150AHP	56.00	23.82	19.88	1.00
165A/165AHP	54.00	26.50	22.88	1.00
180A/180AHP	55.00	29.00	23.88	1.50
210A/210AHP	63.00	32.34	27.88	1.50
225A/225AHP	68.00	34.00	29.88	1.50
245A/245AHP	65.50	37.50	32.88	1.50
270A/270AHP	72.00	40.13	35.88	1.50
300A/300AHP	75.50	44.13	39.88	1.50
330A/330AHP	80.50	48.81	43.88	1.50
365A/365AHP	79.50	50.13	45.88	1.50
402A/402AHP	88.00	55.25	51.88	1.50

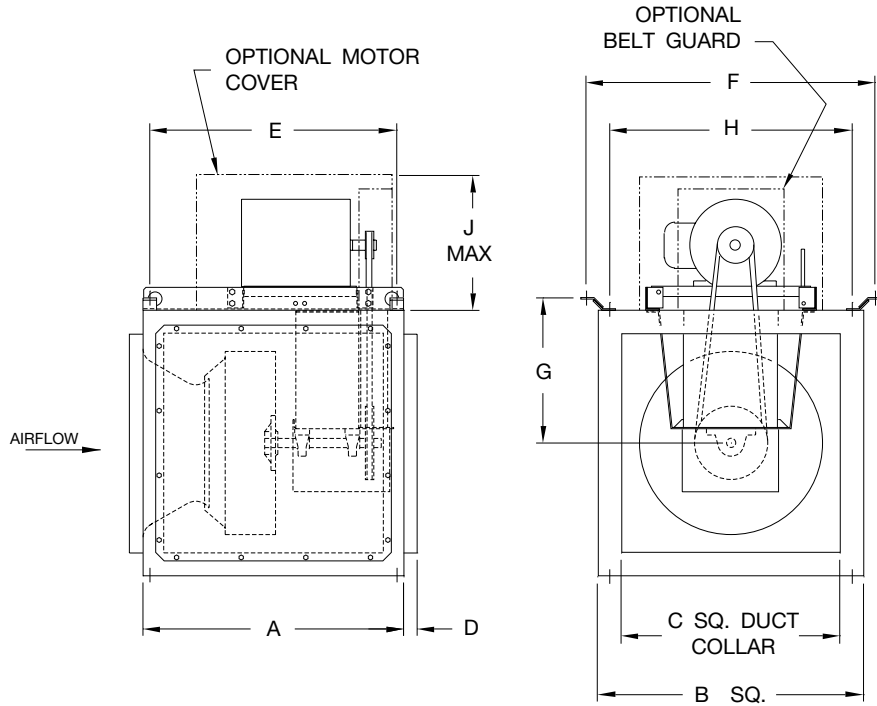
Notes:

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 3.



Dimensional Data

Belt Drive



MODEL SCBD	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	18.50	36.00 x 36.00	394	29.88 x 33.88
300A/300AHP	41.50	44.13	39.88	1.50	39.50	46.95	23.45	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	51.63	25.78	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	52.94	26.44	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	58.19	29.09	53.13	20.00	52.00 x 52.00	743	34.88 x 46.88

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-4205

Typical Specifications

Supply or exhaust fans shall be of the direct drive model SCDD or the belt driven model SCBD centrifugal square inline type, as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested in accordance with AMCA 210 and AMCA 300 test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air. Fans shall be cULus 705 listed for electrical.

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.

SHAFT (SCBD Only) — 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 (SCBD Only) — 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 (SCBD Only) — 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, firestat, inlet and outlet guards, special coatings, and filter box option shall be provided by Aerovent 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 SCDD and SCBD Square Inline Fans for at least one (1) year from startup or eighteen (18) months from ship date.



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