

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

Belt-drive downblast ventilators are designed for roof mounted exhaust of commercial and industrial buildings.

Agency Listings

- All ventilators are UL Standard 705 listed when sold complete with motor and variable pitch drive
- All motor and drive packages comply with the minimum efficiency levels of EPA of '92. Affected motors bear the (EP) seal
- Ventilators are CSA listed according to Standard C22.2 No. 113-M1984 (Fans & Ventilators)

Features and Specifications

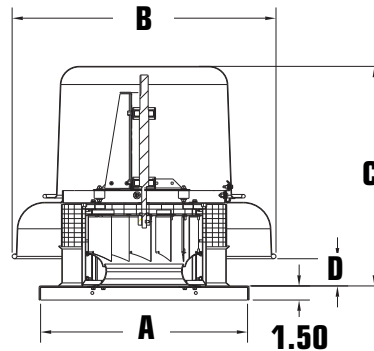
- Downblast discharge design exhausts foul air from industrial and commercial buildings
- Roof mount units only
- Models 5BDD13 – 5BDD49 available with hazardous location configuration
- Durable spun aluminum construction with steel support braces
- Backward inclined aluminum fan wheel
- Externally cooled motor compartment
- Inlet temperatures up to 170°F
- Built-in bird screen to protect discharge and ensure safe, obstruction-free operation



- Motor and wheel are easily detachable without removing ventilator from curb
- Uni-Mount motor structure
- Junction box mounted in motor compartment
- Windband rolled bead for added strength
- Welded curb cap corners eliminate water entry into ducts or building.
- Permanently lubricated ball bearings
- Regreaseable, pillow-block bearings factory installed on models 5BDD30 – 5BDD49
- Ball bearing motors and variable pitch drives are packed separately when ordered with ventilators
- 13" diameter and larger are available in explosion-proof construction with hazardous location motors (only available in 1/2 HP motors and larger)

Accessories (available separately)

- For more information, see Power Roof Ventilator Accessories
- Backdraft dampers.
- NEMA 1, NEMA 3R and NEMA 4 disconnect switches.
- Fixed mounting curbs available.



Fantech, Inc. and Systemair Mfg. Inc. certify that the Belt-Drive Downblast Centrifugal Roof Ventilators 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.

Model No.	Wheel Diameter (In.)	Wheel Bore Size (In.)	Pully Bore Size (In.)	Dimensions (In.)				Gauge Thickness (In.)				Max Ship Wt. (lbs.)	Optional Accessories			
				A	B	C	D	Baffle	Venturi	Dome	Recommended Roof Opening (In.)		Roof Mount Backdraft Damper Model No.	8" Ht. Model No.	12" Ht. Model No.	
5BDD10	10-1/2	1/2	7/8	19	25-3/4	22-7/8	3	0.05	0.05	0.1	70	14-1/2 x 14-1/2	5ACC12RD	5ACC17FS	5ACC17FT	
5BDD12	12-1/4	1/2	7/8	22	28	23-3/8	3	0.063	0.08	0.	84	17-1/2 x 17-1/2	5ACC15RD	5ACC20FS	5ACC20FT	
5BDD13	13-1/2	5/8	7/8	22	29-3/4	24-5/8	3-1/4	0.063	0.08	0.1	97	17-1/2 x 17-1/2	5ACC15RD	5ACC20FS	5ACC20FT	
5BDD15	15	5/8	7/8	26	31-11/16	27-3/8	3-3/4	0.063	0.08	0.08	119	21-1/2 x 21-1/2	5ACC19RD	5ACC24FS	5ACC24FT	
5BDD16	16-1/2	5/8	7/8	26	33-11/16	27-3/4	4-3/16	0.063	0.08	0.1	129	21-1/2 x 21-1/2	5ACC19RD	5ACC24FS	5ACC24FT	
5BDD18	18-1/4	5/8	7/8	30	36	29-5/8	4-3/4	0.063	0.08	0.08	141	25-1/2 x 25-1/2	5ACC23RD	5ACC28FS	5ACC28FT	
5BDD20	20	7/8	7/8	30	38-1/4	30-1/4	5-1/4	0.063	0.08	0.08	156	25-1/2 x 25-1/2	5ACC23RD	5ACC28FS	5ACC28FT	
5BDD24	24-1/2	7/8	7/8	34	44-1/4	33	6-11/16	0.063	0.08	0.08	177	29-1/2 x 29-1/2	5ACC27RD	5ACC32FS	5ACC32FT	
5BDD30	30	1	1	42	51-7/16	37-1/2	8-13/32	0.1	0.08	0.1	506	37-1/2 x 37-1/2	5ACC35RD	5ACC40FS	5ACC40FT	
5BDD36	36-1/2	1-3/16	1-3/16	46	60	41-5/8	10-1/2	0.1	0.09	0.1	524	43-1/2 x 43-1/2	5ACC39RD	5ACC44FS	5ACC44FT	
5BDD49	49	1-7/16	1-7/16	57	76-1/2	51-1/2	12-1/2	0.125	0.125	0.08	868	52-1/2 x 52-1/2	5ACC50RD	5ACC55FS	5ACC55FT	

MOTOR SELECTION GUIDE

Dia. (In.)	HP	Open Dripproof		Hazardous Location	
		Single Phase	Three Phase	Single Phase	Three Phase
10	1/6	AB	—	—	—
10-15	1/4	BB	—	—	—
12-24	1/3	CB	—	—	—
13-30	1/2	DB	DX	DL	DM
15-36	3/4	EB	EX	EL	EM
15-49	1	FB	FX	FL	FM

Dia. (In.)	HP	Open Dripproof		Hazardous Location	
		Single Phase	Three Phase	Single Phase	Three Phase
18-49	1-1/2	GB	GX	GL	GM
18-49	2	—	HX	—	HM
30-49	3	—	JX	—	JM
30-49	5	—	KX	—	KM
49	7-1/2	—	LX	—	LM

B = 115/230/60/1 Open Dripproof
 X = 208-220/440/60/3 Open Dripproof
 L = 115/230/60/1 Hazardous Location
 M = 230/460/60/3 Hazardous Location
 For fan with motor and drive package, add the two-digit motor HP, phase and enclosure code. Example: 5BDD10AB

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5BDD10

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/6	AB	1452	3992	955		898		838		773		694																			
				9.8	0.11	9.5	0.12	9.0	0.12	8.5	0.12	8.0	0.13																		
		1506	4189	991		935		878		817		745		654																	
				10.2	0.12	10.2	0.13	9.9	0.13	9.4	0.14	8.9	0.14	8.4	0.14																
		1589	3645	1046		992		939		880		816		741		642		455													
				11.2	0.15	11.1	0.15	10.9	0.16	10.3	0.16	9.7	0.17	9.5	0.17	9.1	0.16	9.0	0.15												
1/4	BB	1674	4602	1102		1052		1001		948		890		824		744															
				12.2	0.17	11.8	0.18	11.6	0.18	11.3	0.19	10.8	0.19	10.6	0.19	10.1	0.19														
		1736	4772	1142		1094		1045		995		941		880		808		721													
				12.8	0.19	12.9	0.20	12.5	0.20	12.4	0.21	12.0	0.21	11.5	0.22	10.9	0.22	10.7	0.22												
		1819	5000	1197		1151		1104		1055		1004		950		884		811		723		575									
				14.2	0.22	14.3	0.23	14.2	0.23	13.9	0.24	13.4	0.24	13.4	0.25	12.7	0.25	12.3	0.25	12.1	0.25	12.0	0.23								

5BDD12

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/4	BB	1345	4312	1383		1309		1232		1148		1053		943		818															
				11.7	0.19	11.0	0.19	10.5	0.20	9.8	0.21	9.5	0.21	9.0	0.21	8.4	0.21														
		1394	4472	1434		1362		1289		1209		1120		1018		904		760													
				12.4	0.21	11.8	0.21	11.1	0.22	10.9	0.23	10.2	0.23	9.6	0.23	9.3	0.24	8.9	0.23												
		1423	4563	1464		1392		1321		1242		1158		1058		950		813													
				12.5	0.22	12.3	0.23	11.7	0.24	11.4	0.24	10.9	0.25	10.3	0.25	10.0	0.25	9.2	0.25												
1/3	CB	1480	4746	1522		1455		1386		1313		1233		1144		1043		932		785											
				13.4	0.25	12.7	0.25	12.5	0.26	12.0	0.27	11.2	0.28	10.9	0.28	10.4	0.28	10.0	0.28	9.8	0.28										
		1535	4922	1579		1514		1448		1378		1303		1220		1127		1025		910											
				14.3	0.27	13.5	0.28	13.2	0.29	12.6	0.30	12.0	0.31	11.8	0.31	11.2	0.31	11.0	0.31	10.7	0.31										
		1566	5022	1611		1546		1481		1414		1339		1260		1169		1074		966		805									
				13.1	0.29	13.1	0.30	12.7	0.31	12.7	0.32	12.3	0.32	11.7	0.33	11.0	0.33	10.8	0.33	10.3	0.33	10.2	0.32								

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD13

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/4	BB	1124	3974	1549		1459		1360		1242		1111		965																	
				12.9	0.16	11.8	0.17	10.9	0.18	9.5	0.19	8.6	0.19	8.2	0.19																
		1166	4121	1607		1521		1427		1316		1192		1059		787															
				13.7	0.18	12.6	0.19	11.6	0.20	10.1	0.21	9.3	0.21	8.7	0.21	8.3	0.19														
		1213	4287	1672		1586		1500		1393		1279		1154		1009															
				14.0	0.21	13.4	0.22	12.3	0.23	11.1	0.23	10.0	0.24	9.3	0.24	9.3	0.24														
1/3	CB	1256	4438	1731		1651		1566		1469		1359		1241		1114		653													
				14.4	0.23	13.7	0.24	13.0	0.25	12.0	0.26	10.8	0.26	9.9	0.27	9.8	0.26	9.1	0.21												
		1295	4576	1785		1707		1626		1534		1429		1316		1198		1047													
				15.2	0.25	14.6	0.26	13.8	0.27	12.7	0.28	11.5	0.29	10.6	0.29	10.5	0.29	10.1	0.29												
		1335	4718	1840		1762		1684		1595		1498		1390		1277		1145		638											
				15.7	0.28	15.2	0.29	14.6	0.30	13.8	0.31	12.5	0.31	11.3	0.32	10.8	0.32	10.7	0.32	9.9	0.24										
1/2	DB	1397	4937	1925		1854		1779		1698		1607		1507		1401		1290		1156											
				16.6	0.32	15.9	0.33	15.6	0.34	14.9	0.35	13.7	0.36	12.8	0.36	12.1	0.37	11.6	0.37	11.3	0.36										
	1440	5091	1985		1915		1843		1766		1680		1584		1483		1377		1263												
			17.0	0.35	16.1	0.36	15.7	0.37	15.2	0.38	14.1	0.39	13.2	0.40	12.8	0.40	12.2	0.40	11.9	0.40											
	1528	5400	2106		2038		1969		1901		1820		1735		1645		1548		1446		1131										
			18.5	0.41	17.4	0.43	16.8	0.44	15.9	0.45	14.9	0.46	14.7	0.47	14.2	0.47	13.6	0.48	13.3	0.48	12.5	0.46									

5BDD15

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/4	BB	944	3707	1877		1754		1611		1439		1241		500																	
				10.6	0.17	10.7	0.18	10.4	0.19	9.9	0.19	9.2	0.19	8.0	0.12																
		979	3844	1946		1828		1694		1531		1351		1112																	
				11.2	0.19	10.9	0.20	10.9	0.21	10.1	0.21	9.9	0.21	9.3	0.21																
1033	4057	2054		1937		1816		1668		1503		1306		518																	
		11.8	0.22	11.5	0.23	11.2	0.24	10.9	0.25	10.7	0.25	9.9	0.25	8.6	0.15																
1/3	CB	1068	4194	2123		2015		1898		1758		1603		1428		1200															
				12.3	0.24	12.0	0.25	11.8	0.27	11.5	0.27	10.9	0.28	10.6	0.28	10.0	0.27														
		1093	4291	2173		2068		1954		1820		1670		1506		1299															
				12.4	0.26	12.1	0.27	12.0	0.28	11.7	0.29	11.4	0.30	10.8	0.30	10.4	0.29														
		1136	4461	2259		2153		2047		1919		1782		1628		1446		1183													
				13.1	0.29	12.9	0.30	12.5	0.32	12.3	0.33	12.1	0.33	11.4	0.33	11.1	0.33	10.5	0.32												

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD15 cont.

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/2	DB	1185	4652	2356	2259	2157	2041	1909	1768	1612	1419																				
	DX			13.8	0.33	13.6	0.34	13.3	0.36	13.2	0.37	12.4	0.37	12.2	0.38	11.9	0.38	11.3	0.37												
	DL	1222	4798	2430	2336	2237	2128	2002	1867	1723	1552	1335																			
	DM			14.5	0.36	14.3	0.38	13.6	0.39	13.5	0.40	13.3	0.41	13.0	0.41	12.3	0.41	12.0	0.41	11.4	0.40										
3/4	EB	1353	5314	2690	2605	2518	2425	2321	2205	2083	1956	1813	885																		
	EX			16.2	0.49	16.2	0.51	16.1	0.52	15.6	0.54	15.3	0.55	15.1	0.55	14.9	0.56	14.3	0.56	14.1	0.56	11.6	0.39								
	EL	1403	5510	2789	2708	2624	2536	2438	2330	2214	2094	1966	1646																		
	EM			17.1	0.54	16.7	0.56	16.5	0.58	16.5	0.60	16.3	0.61	16.2	0.62	15.4	0.62	15.2	0.63	15.0	0.63	13.7	0.61								
1	FB	1542	6056	3066	2992	2916	2838	2755	2664	2565	2459	2352	2118	1822																	
	FX			18.7	0.72	18.6	0.74	18.3	0.76	18.1	0.78	18.0	0.80	17.9	0.81	17.1	0.82	17.0	0.82	16.7	0.83	15.9	0.83	15.2	0.81						
	FL	1590	6243	3161	3089	3016	2941	2862	2776	2682	2582	2478	2260	1997	937																
	FM			19.0	0.79	19.0	0.81	18.9	0.83	18.8	0.85	18.5	0.87	18.5	0.88	18.2	0.89	18.0	0.901	7.4	0.91	17.0	0.91	16.2	0.90	14.4	0.60				
		1639	6436	3259	3185	3112	3039	2965	2885	2791	2698	2604	2392	2153	1830																
				20	0.87	20	0.89	20	0.91	19.2	0.93	19.1	0.95	18.9	0.96	18.8	0.96	18.6	0.98	18.4	0.99	17.5	1.00	16.7	0.99	16.3	0.97				

5BDD16

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/3	CB	865	3736	2219	2076	1920	1733	1499	1146																						
				10.1	0.20	9.5	0.22	9.0	0.23	8.3	0.23	7.6	0.23	7.2	0.22																
		897	3875	2301	2164	2015	1842	1626	1365																						
1/2	DB	1004	4335	2468	2338	2201	2044	1865	1648	1351																					
				11.8	0.28	11.3	0.29	10.8	0.31	9.9	0.32	9.5	0.32	8.9	0.32	8.5	0.31														
		1041	4496	2576	2453	2325	2183	2019	1822	1599																					
		1100	4756	2671	2553	2430	2296	2144	1964	1760	1501																				
				12.9	0.35	12.6	0.37	12.1	0.38	11.6	0.39	11.0	0.40	10.4	0.41	10.0	0.40	9.5	0.39												
				2825	2711	2597	2467	2330	2177	1999	1790	1491																			
				14.1	0.42	13.6	0.43	13.4	0.45	12.8	0.46	12.2	0.47	11.7	0.48	11.2	0.48	11.0	0.48	10.2	0.46										

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD16 cont.

HP	Motor Options	RPM	TS (FPM)	0.0" SP	0.125" SP	0.250" SP	0.375" SP	0.500" SP	0.625" SP	0.750" SP	0.875" SP	1.00" SP	1.25" SP	1.50" SP	1.75" SP				
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
3/4	EB	1147	4956	2943	2836	2726	2610	2483	2341	2176	1994	1788							
				15.1	0.47	14.4	0.49	14.3	0.51	13.8	0.52	13.0	0.53	12.8	0.54	12.3	0.54	11.8	0.53
	EK	1171	5057	3004	2900	2792	2679	2557	2421	2265	2090	1899							
				15.8	0.50	15.1	0.52	15.0	0.54	14.3	0.55	13.9	0.56	13.1	0.57	12.8	0.58	12.3	0.58
	EM	1261	5447	3235	3136	3036	2936	2817	2698	2579	2425	2269	1877						
				17.9	0.63	16.9	0.65	16.8	0.67	16.3	0.68	16.3	0.70	15.4	0.71	15.2	0.72	14.5	0.72
1	FB	1294	5584	3321	3226	3129	3030	2925	2812	2689	2551	2398	2054						
				17.9	0.68	17.4	0.70	17.1	0.72	16.8	0.73	16.3	0.75	16.1	0.76	15.5	0.77	15.2	0.78
	FK	1333	5757	3421	3329	3235	3139	3038	2931	2815	2688	2545	2226	1193					
				18.3	0.74	18.1	0.76	17.5	0.78	17.4	0.80	17.2	0.82	16.5	0.83	16.2	0.84	15.8	0.85
	FL	1388	5996	3561	3471	3380	3290	3193	3085	2976	2868	2737	2448	2102					
				19.4	0.83	18.6	0.86	18.4	0.88	18.3	0.90	17.7	0.92	17.4	0.93	16.9	0.95	16.6	0.95
FM	1388	5996	3561	3471	3380	3290	3193	3085	2976	2868	2737	2448	2102						
			19.4	0.83	18.6	0.86	18.4	0.88	18.3	0.90	17.7	0.92	17.4	0.93	16.9	0.95	16.6	0.95	

5BDD18

HP	Motor Options	RPM	TS (FPM)	0.0" SP	0.125" SP	0.250" SP	0.375" SP	0.500" SP	0.625" SP	0.750" SP	0.875" SP	1.00" SP	1.25" SP	1.50" SP	1.75" SP		
				CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/3	CB	730	3489	2700	2505	2284	2026										
				8.4	0.21	8.1	0.22	7.6	0.24	7.0	0.24						
		757	3618	2800	2612	2403	2161	1865									
				9.5	0.23	8.8	0.25	8.4	0.26	8.0	0.27	7.5	0.27				
		811	3875	2999	2821	2631	2418	2168	1821								
				10.3	0.29	9.4	0.30	9.2	0.32	8.7	0.33	8.4	0.33	8.4	0.33		
1/2	DB	855	4083	3162	2997	2821	2622	2401	2139								
				10.5	0.34	10.2	0.35	9.9	0.37	9.4	0.38	8.9	0.39	8.6	0.39		
	DL	886	4235	3277	3117	2949	2762	2553	2318								
				10.7	0.37	10.6	0.39	10.4	0.41	10.0	0.42	9.8	0.43	9.2	0.44		
	DM	928	4434	3432	3276	3120	2939	2754	2533	2264							
				13.4	0.43	11.3	0.45	11.0	0.47	10.8	0.48	10.4	0.49	9.9	0.50	9.5	0.50
3/4	EB	992	4738	3669	3527	3380	3222	3049	2862	2656	2407						
				13.0	0.52	12.5	0.55	12.4	0.57	12.1	0.59	11.6	0.60	11.4	0.61	10.9	0.61
	EL	1021	4877	3776	3638	3496	3345	3180	3001	2807	2586						
				13.2	0.57	13.1	0.59	13.1	0.62	12.7	0.64	12.2	0.65	12.0	0.66	11.4	0.67
	EM	1062	5074	3928	3791	3655	3514	3352	3190	3004	2811	2549					
				14.7	0.64	13.9	0.67	13.7	0.69	13.4	0.71	13.3	0.73	12.7	0.74	12.6	0.75

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD18 cont.

HP	Motor Options	RPM	TS (FPM)	0.0" SP	0.125" SP	0.250" SP	0.375" SP	0.500" SP	0.625" SP	0.750" SP	0.875" SP	1.00" SP	1.25" SP	1.50" SP	1.75" SP								
				CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM					
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#				
1	FB	1100	5256	4068	3941	3810	3673	3526	3368	3199	3018	2815											
	FX			15.4	0.71	15.2	0.74	14.6	0.76	14.4	0.79	14.1	0.80	13.9	0.82	13.3	0.83	13.0	0.83				
	FL	1134	5418	4194	4070	3944	3813	3672	3521	3361	3191	3005											
	FM			16.2	0.78	15.9	0.81	15.9	0.83	15.2	0.86	15.0	0.88	14.7	0.89	14.5	0.90	13.9	0.91	13.3	0.91		
1-1/2	GB	1197	5719	4427	4310	4191	4068	3938	3800	3653	3498	3334	2950										
	GK			17.9	0.92	17.7	0.95	17.1	0.97	17.0	1.00	16.7	1.02	16.5	1.04	16.2	1.05	15.5	1.06	15.3	1.07	13.9	1.07
	GL	1234	5897	4564	4450	4335	4216	4092	3961	3820	3673	3518	3171										
	GM			18.9	1.01	18.8	1.04	18.5	1.06	18.4	1.09	17.8	1.11	17.4	1.13	17.2	1.15	16.8	1.16	16.3	1.17	15.3	1.18
2	HX	1360	6497	5030	4927	4823	4717	4608	4494	4374	4248	4116	3836	3520									
	HM			22	1.35	22	1.38	22	1.41	21	1.44	21	1.47	21	1.49	20	1.52	20	1.53	19.4	1.55	19.0	1.57
	1473	7038	5134	5032	4931	4827	4721	4610	4494	4372	4244	3974	3675	3304									
			23	1.44	23	1.47	22	1.50	22	1.53	22	1.56	21	1.58	21	1.61	20	1.63	20	1.64	19.4	1.67	18.4
1473	7038	5448	5349	5251	5152	5054	4956	4848	4731	4614	4381	4103	3825										
		26	1.72	25	1.75	24	1.78	24	1.82	24	1.88	24	1.90	22	1.93	22	1.95	22	1.98	21	2.00	20	2.00

5BDD20

HP	Motor Options	RPM	TS (FPM)	0.0" SP	0.125" SP	0.250" SP	0.375" SP	0.500" SP	0.625" SP	0.750" SP	0.875" SP	1.00" SP	1.25" SP	1.50" SP	1.75" SP			
				CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†
1/3	CB	634	3319	3025	2767	2500	2160	638										
				9.1	0.21	8.7	0.23	8.0	0.24	7.6	0.25	6.6	0.13					
		657	3442	3135	2886	2631	2320	1902										
				10.1	0.23	9.3	0.26	8.7	0.27	8.1	0.28	7.7	0.27					
699	3660	3335	3101	2858	2588	2241												
		12.5	0.28	10.0	0.31	9.3	0.32	8.8	0.33	8.3	0.33							
1/2	DB	764	4002	3645	3431	3216	2990	2715	2388									
				11.5	0.37	11.0	0.39	10.5	0.41	9.7	0.43	9.3	0.44	9.1	0.43			
	DX	787	4119	3755	3547	3338	3122	2869	2562	1129								
				11.7	0.40	11.3	0.43	11.0	0.45	10.2	0.47	9.9	0.48	9.4	0.48	8.8	0.30	
DL	800	4189	3817	3612	3406	3188	2942	2653	2220									
			14.7	0.42	11.3	0.45	11.2	0.47	10.6	0.49	10.0	0.50	9.8	0.50	9.4	0.48		

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD20 *cont.*

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
3/4	EB	854	4471	4075		3883		3691		3497		3286		3035		2746		1328													
				13.2	0.51	12.9	0.54	12.4	0.57	11.8	0.59	11.5	0.60	10.9	0.61	10.7	0.61	10.2	0.39												
	EX	879	4602	4194		4008		3821		3633		3434		3201		2929		2615													
				14.2	0.56	13.6	0.59	12.9	0.62	12.4	0.64	12.0	0.65	11.5	0.66	11.3	0.66	10.9	0.65												
EM	916	4796	4371		4192		4013		3828		3638		3429		3181		2895		2335												
			15.6	0.64	14.8	0.67	14.2	0.69	13.5	0.72	12.9	0.74	12.6	0.75	12.0	0.75	11.9	0.75	11.7	0.69											
1	FB	960	5028	4581		4410		4239		4068		3893		3705		3488		3239		2970											
				16.5	0.73	16.3	0.76	15.5	0.79	14.9	0.82	14.2	0.84	13.9	0.86	13.2	0.87	13.0	0.87	13.0	0.85										
	FX	989	5176	4719		4554		4388		4222		4054		3876		3675		3443		3193											
				17.6	0.80	17.0	0.83	16.3	0.86	15.7	0.89	15.5	0.91	14.5	0.93	14.5	0.94	13.6	0.95	13.6	0.94										
FM	1008	5278	4810		4647		4484		4322		4149		3976		3786		3560		3325		1186										
			18.7	0.85	17.7	0.88	17.1	0.91	16.4	0.94	16.0	0.96	15.4	0.98	14.6	1.00	14.5	1.00	14.4	1.00	13.3	0.57									
1-1/2	GB	1081	5660	5158		5006		4855		4703		4551		4396		4232		4050		3844		3381									
				22	1.04	20	1.08	19.6	1.11	18.8	1.15	18.8	1.17	17.7	1.20	17.6	1.22	16.7	1.23	16.7	1.24	15.9	1.22								
	GX	1113	5828	5311		5164		5016		4869		4722		4572		4416		4247		4057		3623		1597							
				22	1.14	21	1.18	21	1.21	19.8	1.25	18.9	1.27	18.8	1.30	18.4	1.32	17.6	1.34	17.3	1.35	16.7	1.34	15.9	0.84						
GM	1154	6042	5506		5364		5222		5080		4938		4787		4636		4484		4308		3913		3421								
			23	1.27	22	1.31	22	1.35	21	1.38	20	1.41	19.7	1.44	19.5	1.46	18.6	1.48	18.5	1.50	17.5	1.50	17.1	1.47							
2	HX	1224	6408	5840		5707		5573		5439		5805		5171		5034		4893		4744		4401		4004		3499					
				24	1.51	24	1.56	23	1.60	23	1.63	22	1.67	21	1.70	21	1.73	21	1.75	20	1.77	19.6	1.79	19.2	1.79	18.7	1.73				
	HM	1256	6576	5993		5863		5732		5602		5471		5340		5208		5073		4931		4611		4234		3813					
				25	1.64	25	1.68	24	1.72	23	1.76	23	1.80	22	1.83	22	1.86	22	1.88	21	1.90	20	1.94	20	1.94	19.7	1.90				
HM	1270	6650	6060		5931		5802		5673		5544		5413		5275		5138		5001		4685		4327		3888						
			26	1.69	25	1.74	24	1.78	24	1.82	23	1.85	23	1.89	22	1.92	22	1.95	22	1.97	21	2.00	20	2.01	19.7	1.97					

5BDD24

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/3	CB	453	2904	3877		3447		2889																							
				8.0	0.22	7.9	0.24	7.5	0.25																						
		470	3012	4022		3611		3092		2319																					
				8.6	0.24	8.5	0.26	8.0	0.27	7.5	0.26																				
504	3233	4313		3931		3478		2877																							
		9.6	0.30	9.5	0.32	9.0	0.34	8.5	0.34																						

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD24 cont.

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1/2	DB	523	3352	4476		4112		3685		3147																					
				10.1	0.34	10.2	0.36	9.5	0.38	9.0	0.38																				
	DX	542	3476	4639		4288		3886		3383		2653																			
				10.5	0.37	10.4	0.40	10.3	0.42	9.6	0.42	9.1	0.40																		
DM	577	3701	4938		4605		4233		3795		3253																				
			11.8	0.45	11.7	0.48	11.7	0.50	11.0	0.51	10.2	0.50																			
3/4	EB	610	3911	5221		4912		4576		4180		3710		3087																	
				13.2	0.53	13.1	0.56	13.1	0.59	12.4	0.60	11.7	0.60	11.1	0.58																
	EX	632	4056	5409		5112		4791		4421		3982		3487																	
				14.0	0.59	14.0	0.62	13.9	0.65	13.4	0.66	12.5	0.67	11.9	0.66																
EM	660	4233	5649		5358		5059		4707		4309		3844		2837																
			15.1	0.67	15.1	0.71	14.9	0.73	14.9	0.75	14.2	0.76	13.3	0.76	12.3	0.68															
1	FB	695	4457	5948		5679		5396		5082		4721		4309		3859															
				16.9	0.79	16.9	0.82	16.8	0.85	16.6	0.87	15.8	0.89	15.1	0.89	14.5	0.88														
	FX	715	4588	6119		5857		5584		5284		4944		4553		4135		3428													
				17.8	0.86	17.8	0.89	17.9	0.92	17.7	0.95	16.8	0.96	16.1	0.97	15.4	0.96	14.6	0.91												
FL	727	4663	6222		5959		5692		5389		5069		4689		4266		3705														
			18.0	0.90	18.0	0.97	18.0	0.97	17.9	1.00	17.4	1.01	17.0	1.02	16.0	1.01	15.6	0.98													
1-1/2	GB	770	4936	6590		6347		6097		5829		5533		5198		4827		4436		3864											
				18.8	1.07	18.7	1.11	18.7	1.14	18.6	1.17	18.5	1.19	17.8	1.21	16.9	1.21	16.3	1.20	16.2	1.16										
	GX	798	5118	6830		6596		6355		6101		5822		5512		5165		4796		4390											
				19.4	1.19	19.1	1.23	19.1	1.27	19.0	1.30	18.9	1.32	18.1	1.34	17.5	1.34	17.4	1.34	16.5	1.32										
GM	832	5337	7121		6892		6659		6426		6148		5868		5554		5212		4823												
			19.8	1.35	19.7	1.39	19.6	1.43	19.0	1.46	18.8	1.49	18.7	1.51	18.4	1.52	18.1	1.52	17.8	1.51											
2	HX	877	5626	7506		7293		7077		6852		6612		6353		6069		5757		5425		4663									
				21	1.58	21	1.62	21	1.66	20	1.70	20	1.74	20	1.76	19.8	1.78	19.5	1.79	19.3	1.78	19.0	1.75								
	HM	894	5732	7651		7443		7231		7011		6779		6527		6255		5955		5633		4935									
				22	1.67	22	1.72	21	1.76	21	1.80	21	1.83	21	1.86	20	1.88	20	1.89	20	1.89	19.5	1.86								
HM	916	5875	7839		7633		7421		7209		6984		6730		6476		6199		5889		5195										
			22	1.80	22	1.85	22	1.89	22	1.93	22	1.97	21	2.00	21	2.02	21	2.03	21	2.03	20	2.01									

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD30

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP							
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM			
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#		
1/2	DB	365	2864	5732		5049		4279																									
				11.5	0.31	9.0	0.33	8.5	0.35																								
	DX	378	2970	5936		5278		4558																									
				10.6	0.34	9.9	0.37	9.5	0.39																								
DL	412	3236	6470		5866		5234		4371																								
			10.7	0.44	10.8	0.47	10.5	0.50	10.0	0.50																							
3/4	EB	429	3370	6737		6158		5564		4831																							
				11.4	0.50	11.1	0.53	10.7	0.56	10.3	0.57																						
	EX	444	3487	6972		6412		5843		5174																							
				11.6	0.55	11.7	0.59	11.4	0.62	10.6	0.63																						
EL	471	3699	7396		6869		6326		5732		4906																						
			12.5	0.66	12.1	0.70	11.8	0.73	11.5	0.75	11.0	0.74																					
1	FB	486	3817	7632		7121		6606		6054		5354																					
				12.6	0.73	12.9	0.76	12.5	0.80	11.7	0.82	11.3	0.82																				
	FX	502	3945	7883		7388		6891		6367		5732		4686																			
				13.4	0.80	13.1	0.84	12.8	0.87	12.3	0.90	11.6	0.91	11.4	0.86																		
FL	519	4076	8150		7672		7188		6681		6084		5257																				
			13.5	0.89	13.5	0.92	13.0	0.96	12.7	1.00	12.3	1.01	11.6	0.98																			
1-1/2	GB	570	4476	8951		8515		8078		7637		7164		6607		5901																	
				15.1	1.17	15.0	1.22	15.0	1.26	14.2	1.30	13.8	1.33	13.5	1.33	12.9	1.31																
	GX	586	4602	9202		8778		8354		7925		7475		6959		6328																	
				15.8	1.28	15.7	1.32	15.5	1.36	14.9	1.40	14.2	1.44	13.8	1.45	13.6	1.43																
GL	594	4665	9227		8910		8490		8058		7619		7099		6515		4859																
			16.1	1.33	15.8	1.37	15.6	1.41	15.0	1.46	14.8	1.49	12.9	1.51	13.9	1.50	13.1	1.29															
2	HX	630	4948	9893		9499		9104		8708		8303		7866		7363		6760		4232													
				17.4	1.58	17.2	1.63	16.8	1.68	16.5	1.72	16.1	1.76	15.2	1.79	14.9	1.80	14.4	1.78	13.7	1.35												
	HM	645	5070	10128		9744		9358		8971		8578		8161		7689		7133		6398													
				17.8	1.70	17.5	1.75	17.4	1.79	16.9	1.84	16.4	1.88	16.1	1.92	15.3	1.93	15.2	1.92	14.6	1.87												
JX	700	5501	10992		10638		10283		9926		9568		9201		8812		8376		7876		4295												
			19.7	2.17	19.6	2.22	19.1	2.28	18.8	2.33	18.5	2.38	17.6	2.42	17.3	2.46	16.9	2.47	16.4	2.46	15.4	1.75											
3	JM	718	5642	11275		10929		10583		10236		9888		9533		9161		8753		8291		7037											
				20	2.35	20	2.40	19.6	2.45	19.4	2.50	19.0	2.55	18.5	2.60	17.9	2.64	17.4	2.66	17.2	2.66	16.5	2.57										
	JX	748	5875	11746		11416		11082		10749		10414		10062		9711		9357		8907		7855											
				21	2.65	21	2.71	21	2.76	20	2.82	19.9	2.87	19.7	2.92	19.2	2.97	18.3	3.00	18.1	3.01	17.8	2.96										

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD30 *cont.*

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP			
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
5	KX	841	6606	13206		12911		12616		12320		12024		11727		11428		11123		10806		10103		9254		7914			
				26	3.77	26	3.83	26	3.89	26	3.95	25	4.01	25	4.07	25	4.13	24	4.19	23	4.23	22	4.28	22	4.25	21	4.04		
	KM	872	6645	13693		13408		13124		12839		12553		12267		11979		11689		11390		10744		9987		9050			
				29	4.20	29	4.27	29	4.33	28	4.39	27	4.45	27	4.52	27	4.58	26	4.64	25	4.69	24	4.76	23	4.76	23	4.68		
			887	6966	13928		13651		13370		13089		12808		12526		12238		11941		11645		11037		10278		9352		
					30	4.42	29	4.49	30	4.55	30	4.62	29	4.68	28	4.74	28	4.81	27	4.87	27	4.93	25	5.01	24	5.02	24	4.95	

5BDD36

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP			
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
3/4	EB	293	2804	8671		7701		6396																					
				9.3	0.48	7.9	0.51	7.2	0.52																				
	EK	301	2878	8907		7970		6739																					
				9.8	0.52	8.5	0.55	7.7	0.56																				
EL	339	3239	10032		9207		8221		6803																				
			11.9	0.74	10.3	0.78	9.4	0.81	8.5	0.79																			
1	FB	350	3342	10357		9570		8642		7436																			
				12.0	0.81	10.7	0.86	9.8	0.88	9.1	0.88																		
	FX	356	3398	10535		9762		8861		7708																			
				12.1	0.86	11.1	0.90	10.2	0.93	9.3	0.93																		
FL	373	3564	11038		10288		9435		8397		6687																		
			13.6	0.98	12.0	1.03	11.0	1.07	10.3	1.07	10.0	1.00																	

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.
 # Power rating (BHP) does not include transmission losses.
 † 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD36 cont.

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1-1/2	GB	399	3811	11807		11124		10371		9472		8346																			
				14.2	1.21	13.3	1.26	12.6	1.30	11.8	1.31	10.8	1.30																		
	GX	409	3911	12103		11437		10711		9853		8807																			
				14.6	1.30	14.2	1.35	13.0	1.39	12.3	1.41	11.5	1.40																		
GL	427	4080	12636		11981		11302		10495		9541		8114																		
			16.7	1.48	14.9	1.53	14.1	1.58	13.7	1.61	12.9	1.61	12.8	1.55																	
2	HX	445	4252	13169		12559		11912		11176		10321		9278																	
				17.2	1.67	16.1	1.73	15.6	1.78	14.9	1.81	14.1	1.82	13.0	1.79																
	HM	454	4342	13435		12838		12206		11496		10675		9698																	
				18.0	1.78	16.9	1.84	16.1	1.89	15.7	1.92	14.8	1.94	13.6	1.92																
JM	470	4491	13908		13313		12718		12017		11284		10357		9030																
			19.5	1.97	18.2	2.03	17.8	2.09	16.8	2.13	16.1	2.15	15.0	2.14	14.9	2.07															
3	JX	520	4969	15388		14869		14332		13759		13125		12415		11616		10658													
				24	2.67	22	2.74	22	2.80	21	2.86	20	2.89	19.4	2.91	17.9	2.90	16.3	2.86												
	JM	531	5074	15713		15205		14682		14125		13513		12833		12073		11189													
				24	2.84	23	2.91	22	2.98	22	3.03	21	3.07	19.5	3.09	18.4	3.09	17.1	3.06												
JM	538	5141	15921		15401		14881		14352		13712		13071		12310		11486		10129												
			24	2.96	23	3.03	23	3.10	22	3.15	21	3.20	20	3.22	19.2	3.22	18.0	3.19	17.9	3.08											
5	KX	607	5799	17962		17518		17067		16601		16107		15574		14997		14371		13687		11965									
				29	4.24	28	4.32	26	4.40	26	4.47	25	4.54	25	4.58	23	4.61	23	4.63	22	4.62	19.3	4.50								
	KM	620	5922	18347		17913		17471		17017		16538		16024		15470		14870		14220		12661									
				29	4.52	28	4.60	27	4.68	27	4.76	26	4.82	25	4.88	24	4.91	23	4.93	23	4.92	20	4.84								
KM	637	6087	18850		18411		17972		17533		17094		16563		16023		15482		14861		13469										
			28	4.90	28	4.99	29	5.08	28	5.15	27	5.22	27	5.28	25	5.32	25	5.34	23	5.35	23	5.33									

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD49

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
1	FB	212	2717	14849		12993		10386																							
	FX			7.9	0.77	7.0	0.83	6.5	0.81																						
	FL	219	2808	15339		13555		11142																							
	FM			8.1	0.85	7.2	0.91	6.8	0.90																						
		228	2925	15969		14246		11996																							
				7.9	0.96	7.6	1.03	7.3	1.03																						
1-1/2	GB	247	3164	17300		15750		13874		11208																					
	GK			9.1	1.22	8.4	1.30	8.2	1.32	7.8	1.26																				
	GL	254	3255	17790		16288		14506		12081																					
	GM			9.4	1.33	8.7	1.41	8.6	1.43	8.1	1.39																				
		261	3348	18281		16812		15092		12849																					
				9.9	1.44	9.3	1.52	8.7	1.56	8.4	1.51																				
2	HX	265	3398	18561		17129		15469		13305																					
	HM			9.9	1.51	9.6	1.59	9.2	1.63	8.7	1.59																				
		276	3540	19331		17960		16408		14449																					
				10.6	1.70	10.1	1.79	9.7	1.84	9.4	1.81																				
		287	3682	20102		18766		17266		15459		12938																			
				11.3	1.92	10.8	2.01	10.3	2.07	10.2	2.05	9.6	1.97																		
3	JX	297	3810	20802		19535		18145		16484		14375																			
	JM			12.0	2.12	11.8	2.22	11.3	2.28	10.9	2.22	10.5	2.22																		
		313	4010	21923		20724		19431		17935		16102																			
				13.3	2.49	13.2	2.59	12.6	2.67	12.1	2.68	11.8	2.64																		
		329	4220	23044		21878		20671		19273		17614		15610																	
				14.0	2.89	13.8	3.00	13.5	3.08	13.5	3.12	13.0	3.09	12.6	3.01																

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators

5BDD49 *cont.*

HP	Motor Options	RPM	TS (FPM)	0.0" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.00" SP		1.25" SP		1.50" SP		1.75" SP					
				CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
				Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#	Sones†	BHP#
5	KX	356	4563	24935		23885		22790		21589		20226		18623		16705															
				16.8	3.66	16.7	3.78	16.0	3.88	15.7	3.94	15.3	3.94	14.8	3.89	14.6	3.80														
		365	4687	25565		24541		23478		22323		21026		19522		17744															
	18.3			3.94	17.5	4.07	16.8	4.17	16.3	4.24	16.2	4.25	15.8	4.22	15.7	4.13															
	390	5003	27316		26333		25350		24280		23100		21848		20289		18571														
			28	4.81	19.7	4.95	19.0	5.06	18.3	5.15	17.8	5.19	17.4	5.18	17.6	5.11	17.1	5.02													
7-1/2	LX	413	5298	28927		28025		27101		26134		25087		23939		22653		21190		19519											
				21	5.71	21	5.85	21	5.98	19.8	6.09	19.8	6.15	19.3	6.16	18.7	6.13	18.9	6.05	18.8	5.95										
		420	5389	29417		28530		27625		26677		25658		24546		23309		21912		20326											
	22			6.01	22	6.15	21	6.28	21	6.39	20	6.46	19.7	6.48	19.6	6.46	19.2	6.39	19.0	6.29											
	447	5734	31308		30451		29593		28735		27768		26739		25709		24454		23093		19487										
			28	7.24	23	7.40	23	7.55	23	7.67	23	7.76	22	7.81	22	7.81	21	7.77	21	7.69	21	7.34									

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Power rating (BHP) does not include transmission losses.

† 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 hemispherical sone levels.

Typical Specifications

Belt-Drive Downblast Roof

Roof mount exhaust fans shall be downblast centrifugal belt-driven type. The fan wheel shall be centrifugal backward inclined, blades and wheel cone to be constructed of aluminum and shall include a wheel cone matched to the inlet cone for precise running tolerances. Wheels shall be statically and dynamically balanced. The fan housing shall be constructed of heavy gauge aluminum with a rigid steel internal support structure. Baffles and motor compartment hoods shall have a rolled bead for added strength. Motors shall be heavy-duty ball bearing type, matched to the fan load, furnished at the specified voltage, phase and enclosure. Motors and drives shall be mounted out of the airstream. Fresh air for motor cooling shall be drawn into the motor compartments from an area free of discharge contaminants. Motors shall be readily accessible for maintenance. Steel shafts shall be turned, ground polished and mounted in permanently sealed and lubricated ball bearings (30" - 49" units feature regreaseable pillow block bearings). Bearings shall be selected for a minimum (L50) life in excess of 200,000 hours at maximum cataloged operating speed. Drives shall be sized for a minimum of 150% of driven horsepower. Pulleys shall be of the fully machined cast iron type, keyed and securely attached to the wheel and motor shafts. Motor pulleys shall be adjustable for final system balancing. A junction box shall be factory installed to permit a disconnect switch to be wired to the fan motor within the motor compartment. A conduit chase shall be provided through the curb cap to the motor compartment for ease of electrical wiring. All fans shall bear the AMCA Certified Ratings Seal for sound and air performance. Each fan shall bear a permanently affixed manufacturer's nameplate containing model number, drive selections and will carry a one-year warranty. Fans shall be Fantech Model Belt-Drive Downblast Centrifugal Roof Ventilators as manufactured by Systemair Mfg. Inc., Lenexa, Kansas.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators – Octave Sound Data

The sound power ratings shown are in decibels, referred to 10–12 Watts calculated per AMCA Standard 301. Values shown are for inlet Lwi A sound power levels for installation Type A: free inlet, free outlet. Ratings do not include the effects of duct end correction. For models shown on this page, the AMCA ratings seal applies to air performance and some values. For models shown on this page, the AMCA Certified Ratings Seal applies to air performance and some values only.

Model 5BDD10; Wheel Dia. 10-1/2" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/6	1589	0	69	70	77	71	64	64	60	55	73
		0.5	67	69	76	69	62	62	56	52	71
1/4	1819	0	71	74	79	80	67	67	64	59	79
		0.5	70	74	78	79	67	64	62	57	78

Model 5BDD12; Wheel Dia. 12-1/4" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/4	1423	0	71	74	80	71	65	68	63	55	75
		0.5	70	73	77	69	62	62	58	52	72
1/3	1566	0	72	76	82	74	67	71	67	59	78
		0.5	72	75	79	72	64	66	63	56	75
		1	71	74	76	71	63	62	59	54	73

Model 5BDD13; Wheel Dia. 13-1/2" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/4	1213	0	68	76	79	70	62	75	64	54	78
		0.5	67	75	76	68	61	63	56	51	71
1/3	1335	0	69	77	80	73	63	76	70	58	79
		0.5	68	77	78	71	62	70	60	54	75
1/2	1528	0	71	77	83	76	66	73	75	63	81
		0.5	70	77	82	75	65	73	69	59	79
		1	70	77	79	73	64	68	62	57	76

Model 5BDD15; Wheel Dia. 15" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/4	1033	0	68	76	79	70	65	66	58	55	74
		0.5	68	75	78	67	62	59	55	51	72
1/3	1136	0	69	76	81	72	66	67	62	57	76
		0.5	69	75	80	70	65	63	59	53	74
1/2	1301	0	70	77	84	75	68	68	67	60	78
		0.5	70	76	83	73	67	67	66	57	78
		1	71	75	80	70	64	64	59	56	75
3/4	1489	0	73	78	86	79	71	71	71	64	81
		0.5	72	77	85	78	70	70	70	62	81
		1	72	76	84	76	69	70	65	60	79
1	1639	0	75	80	86	83	74	73	73	67	84
		0.5	74	79	86	82	73	72	72	65	83
		1	74	78	85	80	71	71	70	63	81
		1.5	75	78	83	78	70	69	67	61	80

Model 5BDD16; Wheel Dia. 16-1/2" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/3	962	0	69	75	79	71	63	65	59	52	74
		0.5	68	72	75	68	63	61	55	48	71
1/2	1101	0	71	77	82	75	66	66	63	57	77
		.5	69	75	80	73	65	65	60	53	75
3/4	1261	0	73	78	86	79	69	68	67	62	81
		0.5	71	77	84	78	68	68	66	59	80
		1	73	76	81	75	66	67	62	57	77
1	1388	0	75	79	87	80	71	70	69	64	82
		0.5	73	79	86	79	70	70	68	62	81
		1	73	78	83	77	68	69	65	60	79

Model 5BDD18; Wheel Dia. 18-1/4" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/3	811	0	70	78	74	69	63	61	55	48	71
		0.5	69	75	71	65	63	57	52	46	69
1/2	928	0	71	79	77	72	66	64	58	52	74
		0.5	70	77	76	69	66	61	56	50	72
3/4	1062	0	73	80	81	75	69	67	62	57	77
		0.5	72	79	80	73	69	65	60	54	76
1	1169	0	74	81	84	78	72	70	65	61	80
		0.5	73	80	84	76	71	68	64	58	79
		1	72	77	81	74	69	66	62	57	77
1 1/2	1338	0	77	82	89	82	76	74	70	66	84
		0.5	76	82	89	81	75	73	69	64	84
		1	75	80	87	79	73	71	67	62	82
2	1473	0	79	84	91	84	78	76	73	68	87
		0.5	78	84	90	84	78	76	72	67	86
		1	78	82	89	82	76	74	70	65	85
		1.5	76	80	87	80	74	72	69	65	83

Model 5BDD20; Wheel Dia. 20" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/3	699	0	71	77	72	69	63	67	57	50	72
		0.5	70	74	69	68	65	58	51	46	69
1/2	800	0	74	78	77	72	65	68	61	54	75
		0.5	71	76	74	71	66	63	56	50	72
3/4	916	0	77	80	82	75	68	69	65	59	78
		0.5	73	78	79	74	68	67	61	55	76
1	1008	0	79	81	86	78	70	70	68	62	81
		0.5	75	80	83	77	70	69	65	59	79
		1	75	78	81	75	68	67	62	57	77
1 1/2	1154	0	81	83	90	81	74	73	71	67	84
		0.5	78	82	88	80	73	72	70	64	83
		1	76	80	86	78	71	70	67	62	81
2	1270	0	81	85	92	83	76	75	73	70	86
		0.5	79	84	90	82	75	74	72	68	85
		1	78	83	89	80	74	72	70	66	84
		1.5	78	82	88	79	73	72	69	64	83

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Belt-Drive Downblast Centrifugal Roof Ventilators – Octave Sound Data

Model 5BDD24; Wheel Dia. 24-1/2" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/3	504	0	77	78	71	67	61	58	54	48	70
1/2	577	0	78	82	74	69	64	62	58	54	73
		0.5	75	79	73	68	62	60	55	52	71
3/4	660	0	80	86	78	72	67	66	63	60	76
		0.5	78	84	77	72	66	65	61	58	75
1	727	0	81	89	81	74	70	70	68	65	79
		0.5	80	88	80	74	69	69	66	62	79
1 1/2	832	0	80	88	85	79	73	72	69	67	82
		0.5	80	88	85	79	72	71	67	65	81
		1	76	85	84	77	70	69	66	63	80
2	916	0	80	88	88	83	75	73	69	69	84
		0.5	79	87	88	82	74	72	68	67	84
		1	77	85	88	81	72	70	67	65	83

Model 5BDD30; Wheel Dia. 30" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1/2	412	0	75	82	70	67	66	59	54	48	71
3/4	471	0	76	83	73	69	68	62	57	52	73
		0.5	74	83	70	65	61	58	54	50	71
1	519	0	77	84	75	70	69	65	60	54	75
		0.5	75	84	73	68	64	60	56	53	73
1 1/2	594	0	78	86	79	72	71	69	64	59	78
		0.5	76	86	76	71	69	66	60	56	76
2	653	0	79	88	82	74	73	73	67	62	80
		0.5	78	88	79	73	72	70	64	59	78
3	748	0	81	89	87	77	76	76	71	66	83
		0.5	80	89	85	76	75	75	69	64	82
		1	79	87	83	75	73	71	66	61	80
5	887	0	83	90	94	82	80	80	78	72	89
		0.5	82	90	94	82	79	80	76	70	89
		1	81	89	92	81	78	79	73	68	87
		1.5	82	88	90	80	77	77	71	67	85

Model 5BDD36; Wheel Dia. 36-1/2" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
3/4	339	0	76	76	71	71	72	62	56	52	74
1	373	0	77	79	74	72	73	65	60	56	76
1 1/2	427	0	79	83	79	75	74	70	66	62	79
		0.5	75	78	75	72	71	65	62	60	75
2	470	0	80	86	84	77	75	75	70	66	82
		0.5	76	81	80	74	75	70	68	65	79
3	538	0	82	89	89	79	77	79	75	71	86
		0.5	79	87	86	77	78	75	72	68	83
5	637	0	84	93	95	83	80	80	77	73	89
		0.5	82	93	92	80	80	78	75	70	87
		1	80	89	87	79	78	75	72	68	84

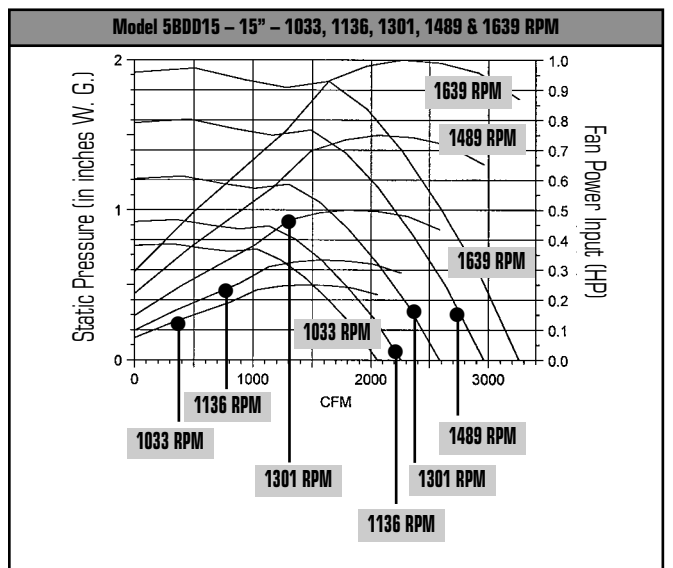
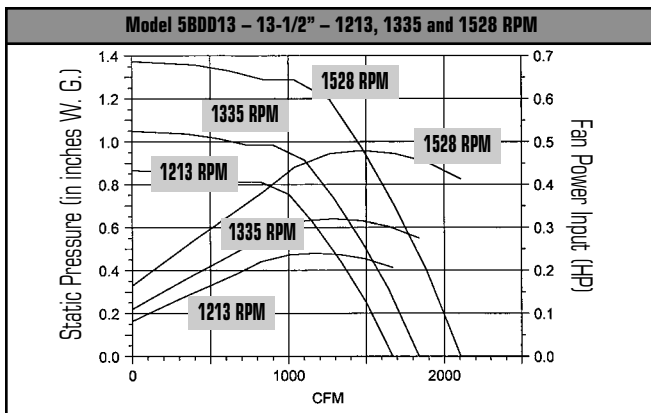
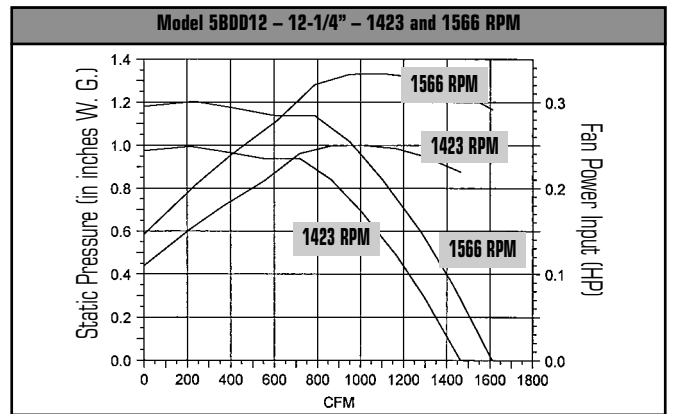
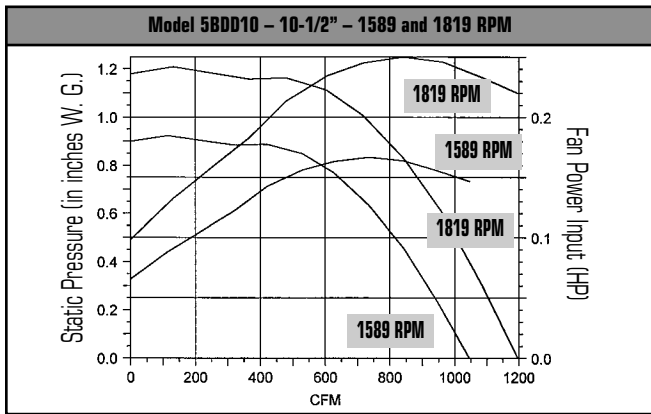
Model 5BDD49; Wheel Dia. 49" Sound Data											
HP	RPM	SP	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LwiA
1	228	0	77	73	71	64	60	56	52	50	68
1 1/2	261	0	79	77	73	66	63	58	55	52	70
2	287	0	81	80	74	68	65	61	57	54	72
		0.5	80	77	69	66	63	61	57	53	70
3	329	0	84	86	77	70	68	64	60	56	75
		0.5	82	82	73	70	67	64	62	56	74
5	390	0	87	92	82	74	72	69	65	60	80
		0.5	85	89	80	73	71	68	66	61	79
7 1/2	447	0	89	94	90	78	76	73	69	64	85
		0.5	87	92	88	77	74	71	69	64	83
		1	86	89	86	77	74	73	71	66	83

The AMCA Certified Ratings Seal applies to air performance and sound only.

Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Centrifugal Ventilators

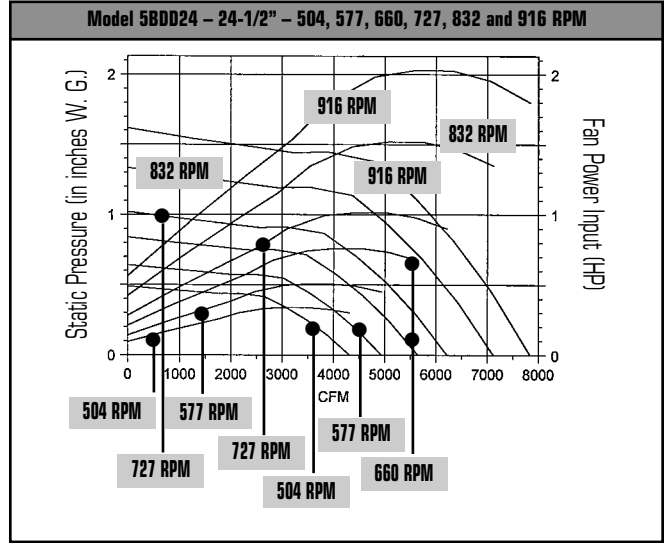
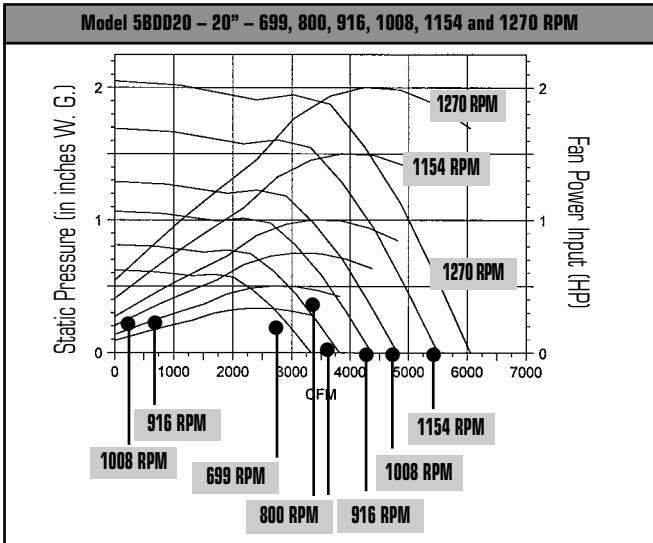
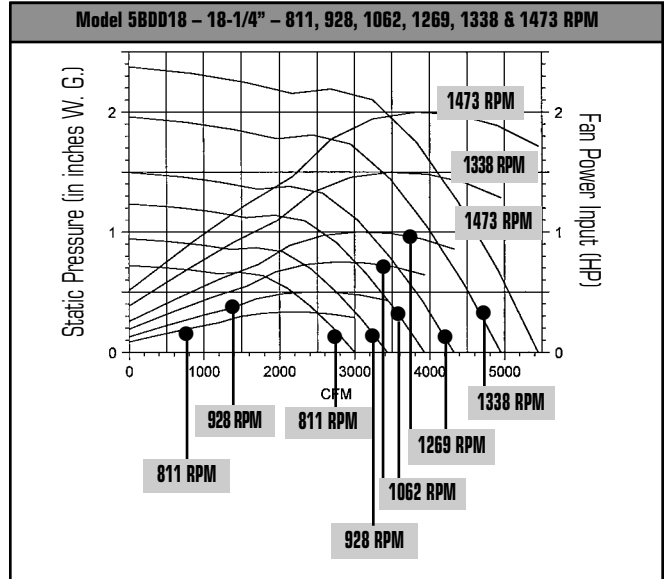
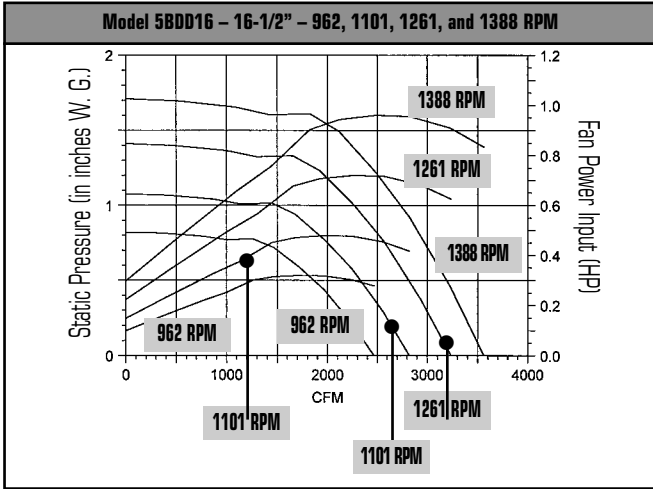
Belt-Drive Downblast Centrifugal Roof Ventilators – Performance Curves



Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Centrifugal Ventilators

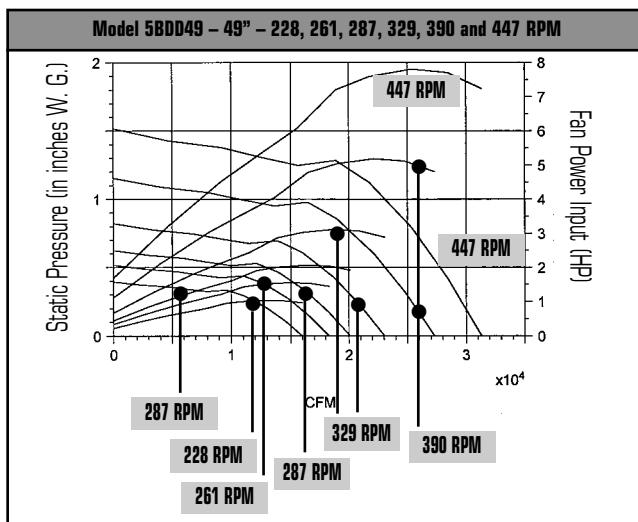
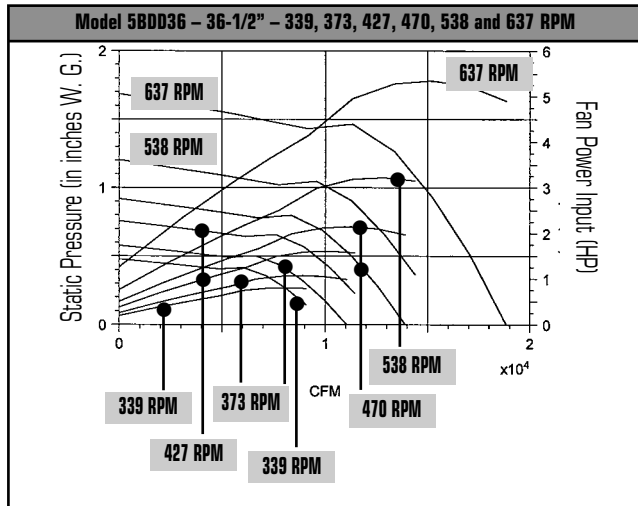
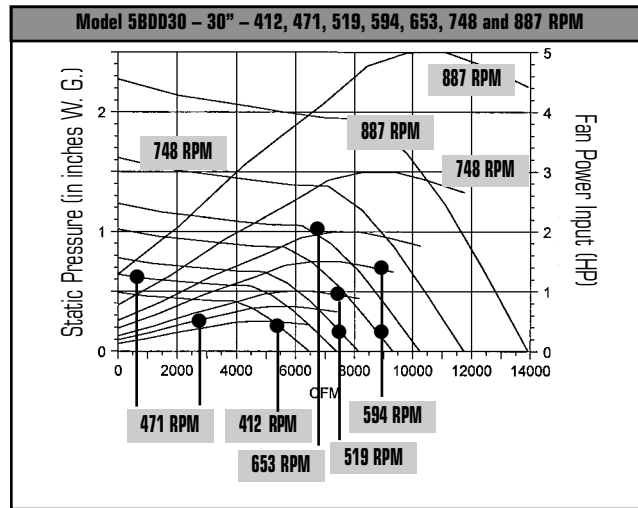
Belt-Drive Downblast Centrifugal Roof Ventilators – Performance Curves



Performance certified is for installation type A: free inlet, free outlet. Performance rating includes the effects of bird screen.

Centrifugal Ventilators

Belt-Drive Downblast Centrifugal Roof Ventilators – Performance Curves



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