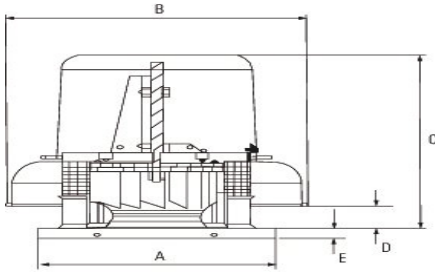


5BDD Series

Belt Drive Downblast Roof Ventilator



Dimensional Diagram:



Model	A	B	C	D	E
5BDD10	19	25 3/4	22 7/8	3	1 1/2
5BDD 12	22	28	23 3/8	3	1 1/2
5BDD 13	22	29 3/4	24 5/8	3 1/4	1 1/2
5BDD 15	26	31 2/3	27 3/8	3 3/4	1 1/2
5BDD 16	26	33 2/3	27 3/4	4 1/5	1 1/2
5BDD 18	30	36	29 5/8	4 3/4	1 1/2
5BDD 20	30	38 1/4	30 1/4	5 1/4	1 1/2
5BDD 24	34	44 1/4	33	6 2/3	1 1/2
5BDD 30	42	51 4/9	37 1/2	8 2/5	1 1/2
5BDD 36	46	60	41 1/3	10 1/2	1 1/2

Dimensions are in inches

FULLY ASSEMBLED UNITS

Performance Data:

AMCA Certified Data

Model	Rated Power HP	Voltage V	RPM min ⁻¹	cfm							Shipping Weight (lbs)	Item #
				0.0" Ps	0.25" Ps	0.375" Ps	0.5" Ps	0.625" Ps	0.75" Ps	1.00" Ps		
				Sones BHP#								
5BDD 10BB-A	1/4	120/230	1819	1197 14.2 0.22	1104 14.3 0.23	1055 13.9 0.24	1004 13.4 0.24	950 13.4 0.25	884 12.7 0.25	723 12.1 0.25	110	
5BDD 12CB-A	1/3	120/230	1566	1611 13.1 0.29	1481 12.7 0.31	1414 12.7 0.32	1339 12.3 0.32	1260 11.7 0.33	1169 11.0 0.33	966 10.3 0.33	124	
5BDD 13DB-A	1/2	120/230	1528	2106 18.5 0.41	1969 16.8 0.44	1901 15.9 0.45	1820 14.9 0.46	1735 14.7 0.47	1645 14.2 0.47	1446 13.3 0.48	137	
5BDD 15DB-A	1/2	120/230	1301	2587 15.4 0.44	2402 15.2 0.47	2308 15.0 0.48	2190 14.0 0.49	2072 14.2 0.50	1939 14.0 0.50	1633 13.0 0.49	143	
5BDD 16EB-A	3/4	120/208-230	1261	3235 17.9 0.63	3036 16.8 0.67	2936 16.3 0.68	2817 16.3 0.70	2698 15.4 0.71	2579 15.2 0.72	2269 14.5 0.72	154	
5BDD 18FB A	1	120/208-230	1169	4324 17.5 0.86	4075 16.7 0.91	3951 16.5 0.93	3815 15.9 0.96	3667 15.5 0.97	3520 15.4 0.99	3179 14.5 1.00	201	
5BDD 20GB-A	1 1/2	120/208-230	1154	5506 23.0 1.27	5222 22.0 1.35	5080 21.0 1.38	4938 20.0 1.41	4787 19.7 1.44	4636 19.5 1.46	4308 18.5 1.50	233	
5BDD 24GB-A	1 1/2	120/208-230	832	7121 19.8 1.35	6659 19.6 1.43	6426 19.0 1.46	6148 18.8 1.49	5868 18.7 1.51	5554 18.4 1.52	4823 17.8 1.51	254	
5BDD 24HX-A ^(*)	2	208-230/460	916	7839 22.0 1.80	7421 22.0 1.89	7209 22.0 1.93	6984 22.0 1.97	6730 21.0 2.00	6476 21.0 2.02	5889 21.0 2.03	310	

Performance is certified is for installation type A: free inlet, free outlet.

Speed (RPM) shown is nominal. Performance is based on actual speed of test.

Performance ratings include the effects of bird screen. # Power rating (BHP) does not include transmission losses. (*)-3 phase motor

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301.

Values shown are for Installation Type A: free inlet hemispherical sone levels.

Certifications:



Systemair Mfg. Inc. certifies that the 5BDD series shown herein is 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.

5BDD Series

Belt Drive Downblast Roof Ventilator



SHELL PROGRAM

To complete our range of Downblast Roof fans, and allow for maximum quick turn availability, Systemair offers the complete range as 3 easily assembled components. The fans come with a Shell featuring a fully welded curbcap, heavy duty motor supports and machine balanced and mounted blower wheel. Factory pressed bearings complete the shaft and motor mount assembly. Choosing the right motor is as easy as finding your desired airflow and matching that performance with the corresponding motor size and drive pack.

Model	Rated Power HP	Voltage V	RPM min ⁻¹	0.0" Ps	0.125" Ps	0.25" Ps	0.375" Ps	0.50" Ps	0.625" Ps	0.75" Ps	0.875" Ps	1.00" Ps	1.25" Ps	-	-		
				cfm												-	-
				Sones BHP												-	-
5BDD 12	1/4	120/230	1423	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	-	-	-	-		
5BDD 13	1/4	120/230	1213	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	-	-	-	-			
5BDD 15	1/3	120/230	1335	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	-	-			
5BDD 15	1/4	120/208-230	1033	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	-	-	-	-			
5BDD 15	1/3	120/208-230	1136	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	-	-	-			
5BDD 15	1/2	120/208-230 208-230/460	1301	2587	2494	2402	2308	2190	2072	1939	1804	1633	-	-			
				15.4 0.44	15.4 0.45	15.2 0.47	15.0 0.48	14.0 0.49	14.2 0.50	14.0 0.50	13.2 0.50	13.0 0.49	-	-			
5BDD 16	1/3	120/230	962	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	-	-	-	-			
5BDD 16	1/2	120/208-230 208-230/460	1100	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	-	-			
5BDD 16	3/4	120/208-230 208-230/460	1261	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	14.5 0.72	13.2 0.70	-			
5BDD 18	1/3	120/230	811	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	-	-	-	-	-			
5BDD 18	1/2	120/208-230 208-230/460	928	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	-	-	-	-			
5BDD 18	3/4	120/208-230 208-230/460	1062	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	12.0 0.75	-	-	-			
5BDD 20	1/3	120/230	699	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	-	-	-	-	-	-			
5BDD 20	1/2	120/208-230 208-230/460	800	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	-	-	-	-			
5BDD 20	3/4	120/208-230 208-230/460	916	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 0.75	12.6 0.75	12.0 0.75	11.9 0.75	11.7 0.69	-	-			
5BDD 20	1	120/208-230 208-230/460	1008	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	-			

Performance is certified is for installation type A: free inlet, free outlet.
 Speed (RPM) shown is nominal. Performance is based on actual speed of test.
 Performance ratings include the effects of bird screen.
 The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301.
 Values shown are for Installation Type A: free inlet hemispherical sone levels.

Certifications:



Systemair Mfg. Inc. certifies that the 5BDD series shown herein is 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.

5BDD Series

Belt Drive Downblast Roof Ventilator



SHELL PROGRAM CONTINUED

Model	Rated Power	Voltage	RPM	0.0" Ps	0.125" Ps	0.25" Ps	0.375" Ps	0.50" Ps	0.625" Ps	0.75" Ps	1.00" Ps	1.25" Ps	1.50" Ps	-	-		
				cfm												-	-
				Sones BHP												-	-
	HP	V	min-1														
5BDD 24	1/3	120/230	504	4313	3931	3478	2877	-	-	-	-	-	-	-	-	-	
		208-230/460	577	9.9 0.30	9.5 0.32	9.0 0.34	8.5 0.34	-	-	-	-	-	-	-	-	-	
	1/2	120/230	577	4938	4605	4233	3795	3253	-	-	-	-	-	-	-	-	
		208-230/460	660	11.8 0.45	11.7 0.48	11.7 0.50	11.0 0.51	10.2 0.50	-	-	-	-	-	-	-	-	
5BDD 30	3/4	120/230	660	5649	5358	5059	4707	4309	3844	2837	-	-	-	-	-		
		208-230/460	727	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	120/230	727	6222	5959	5692	5389	5069	4689	4266	-	-	-	-	-		
		208-230/460	887	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	-	-	-	-	-		
5BDD 36	1/2	120/230	412	6470	5866	5234	4371	-	-	-	-	-	-	-	-		
		208-230/460	471	10.7 0.44	10.8 0.47	10.5 0.50	10.0 0.50	-	-	-	-	-	-	-	-		
	3/4	120/230	471	7396	6869	6326	5732	4906	-	-	-	-	-	-	-		
		208-230/460	519	12.5 0.66	12.1 0.70	11.8 0.73	11.5 0.75	11.0 0.74	-	-	-	-	-	-	-		
5BDD 36	1	120/230	519	8150	7672	7188	6681	6084	5257	-	-	-	-	-			
		208-230/460	594	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	120/230	594	9227	8910	8490	8058	7619	7099	6515	-	-	-	-			
		208-230/460	653	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	-	-	-	-			
5BDD 36	2	120/230	653	10254	9875	9493	9111	8708	8305	7826	6545	-	-	-			
		208-230/460	748	17.8 1.76	17.8 1.81	17.5 1.86	16.9 1.91	16.7 1.96	16.3 1.99	15.3 2.00	15.1 1.95	-	-	-			
	3	120/230	748	11746	11416	11082	10749	10414	10062	9711	8907	7855	-	-			
		208-230/460	887	21.0 2.65	21.0 2.71	21.0 2.76	20.0 2.82	19.9 2.87	19.7 2.92	19.2 2.97	18.1 3.01	17.8 2.96	-	-			
5BDD 36	5	120/230	887	13928	13651	13370	13089	12808	12526	12238	11546	11037	10278	-			
		208-230/460	339	30.0 4.42	29.0 4.49	30.0 4.55	30.0 4.62	29.0 4.68	28.0 4.74	28.0 4.81	27.0 4.87	25.0 5.01	24.0 5.02	-			
	3/4	120/230	339	10032	9207	8221	6803	-	-	-	-	-	-	-			
		208-230/460	373	11.9 0.74	10.3 0.78	9.4 0.81	8.5 0.79	-	-	-	-	-	-	-			
5BDD 36	1	120/230	373	11038	10288	9435	8397	6687	-	-	-	-	-				
		208-230/460	427	13.6 0.98	12.0 1.03	11.0 1.07	10.3 1.07	10.0 1.00	-	-	-	-	-				
	1 1/2	120/230	427	12636	11981	11302	10495	9541	8114	-	-	-	-				
		208-230/460	470	16.7 1.48	14.9 1.53	14.1 1.58	13.7 1.61	12.9 1.61	12.8 1.55	-	-	-	-				
5BDD 36	2	120/230	470	13908	13313	12718	12017	11284	10357	9030	-	-	-				
		208-230/460	538	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	120/230	538	15921	15401	14881	14352	13712	13071	12310	14486	-	-				
		208-230/460	637	24.0 2.96	23.0 3.03	23.0 3.10	22.0 3.15	21.0 3.20	20.0 3.22	19.2 3.22	18.0 3.19	-	-				
5	120/230	637	18850	18411	17972	17533	17094	16563	16023	14861	-	-					
	208-230/460		28.0 4.90	28.0 4.99	29.0 5.08	28.0 5.15	27.0 5.22	27.0 5.28	25.0 5.32	23.0 5.35	-	-					

Performance is certified is for installation type A: free inlet, free outlet.

Speed (RPM) shown is nominal. Performance is based on actual speed of test.

Performance ratings include the effects of bird screen.

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301.

Values shown are for Installation Type A: free inlet hemispherical sone levels.

Certifications:



Systemair Mfg. Inc. certifies that the 5BDD series shown herein is 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.

5BDD Series

Belt Drive Downblast Roof Ventilator



Downblast Roof Ventilator Components

Shell			Roof Curb				1 ph Motor					3 ph Motor			
Model	Item #	Shipping weight, lbs	Model	Item #	Max Outer Dimension	Weight, lbs	HP	Motor	Item #	Drive Pack	Item #	Motor	Item #	Drive Pack	Item #
5BDD10	49810	90	5ACC17FS/FT/VC	47206/47207/47208	19" x 19"	24/29/38	1/4	MOT BB	49907	DP-10-BB	48992				
5BDD12	49811	100	5ACC20FS/FT/VC	47212/47213/47214	22" x 22"	28/33/38	1/4	MOT BB	49907	DP-12-BB	48993				
							1/3	MOT CB	49909	DP-12-CB	48994				
5BDD13	49812	110	5ACC20FS/FT/VC	47212/47213/47214	22" x 22"	28/33/38	1/4	MOT BB	49907	DP-13-BB	48995				
							1/3	MOT CB	49909	DP-13-CB	48996				
							1/2	MOT DB	49910	DP-13-DB	48997	MOT DX	49911	DP-13-DX	49000
5BDD15	49813	120	5ACC24FS/FT/VC	47217/47941/47219	26" x 26"	33/38/47	1/4	MOT BB	49907	DP-15-BB	49001				
							1/3	MOT CB	49909	DP-15-CB	49002				
							1/2	MOT DB	49910	DP-15-DB	49003	MOT DX	49911	DP-15-DX	49004
							3/4	MOT EB	49912	DP-15-EB/EX	49005	MOT EX	49913	DP-15-EX	49005
							1	MOT FB	49914	DP-15-FB/FX	49007	MOT FX	49915	DP-15-FX	49007
5BDD16	49814	130	5ACC24FS/FT/VC	47217/47941/47219	26" x 26"	33/38/47	1/3	MOT CB	49909	DP-16-CB	49010				
							1/2	MOT DB	49910	DP-16-DB	49011	MOT DX	49911	DP-16-DX	49012
							3/4	MOT EB	49912	DP-16-EB/EX	49013	MOT EX	49913	DP-16-EX	49013
							1	MOT FB	49914	DP-16-FB/FX	49015	MOT FX	49915	DP-16-FX	49015
5BDD18	49815	164	5ACC28FS/FT/VC	47221/47222/47223	30" x 30"	40/48/54	1/3	MOT CB	49909	DP-18-CB	49017				
							1/2	MOT DB	49910	DP-18-DB	49018	MOT DX	49911	DP-18-DX	49019
							3/4	MOT EB	49912	DP-18-EB/EX	49020	MOT EX	49913	DP-18-EX	49020
							1	MOT FB	49914	DP-18-FB/FX	49022	MOT FX	49915	DP-18-FX	49022
							1 1/2	MOT GB	49916	DP-18-GB/GX	49024	MOT GX	49917	DP-18-GX	49024
							2					MOT HX	49918	DP-18-HX	49026
5BDD20	49816	185	5ACC28FS/FT/VC	47221/47222/47223	30" x 30"	40/48/54	1/3	MOT CB	49909	DP-20-CB	49027				
							1/2	MOT DB	49910	DP-20-DB	49028	MOT DX	49911	DP-20-DX	49029
							3/4	MOT EB	49912	DP-20-EB/EX	49031	MOT EX	49913	DP-20-EX	49031
							1	MOT FB	49914	DP-20-FB/FX	49032	MOT FX	49915	DP-20-FX	49032
							1 1/2	MOT GB	49916	DP-20-GB/GX	49036	MOT GX	49917	DP-20-GX	49036
							2					MOT HX	49918	DP-20-HX	49038
5BDD24	49817	212	5ACC32FS/FT/VC	47226/47227/47228	34" x 34"	46/53/52	1/3	MOT CB	49909	DP-24-CB	49039				
							1/2	MOT DB	49910	DP-24-DB	49040	MOT DX	49911	DP-24-DX	49041
							3/4	MOT EB	49912	DP-24-EB/EX	49042	MOT EX	49913	DP-24-EX	49042
							1	MOT FB	49914	DP-24-FB/FX	49044	MOT FX	49915	DP-24-FX	49044
							1 1/2	MOT GB	49916	DP-24-GB/GX	49046	MOT GX	49917	DP-24-GX	49046
							2					MOT HX	49918	DP-24-HX	49051
5BDD30	49818	310	5ACC40FS/FT/VC	47233/47901/47234	42" x 42"	57/68/63	1/2	MOT DB	49910	DP-30-DB	49466	MOT DX	49911	DP-30-DX	49052
							3/4	MOT EB	49912	DP-30-EB/EX	49053	MOT EX	49913	DP-30-EX	49053
							1	MOT FB	49914	DP-30-FB/FX	49055	MOT FX	49915	DP-30-FX	49055
							1 1/2	MOT GB	49916	DP-30-GB/GX	49057	MOT GX	49917	DP-30-GX	49057
							2					MOT HX	49918	DP-30-HX	49060
							3					MOT JX	49919	DP-30-JX	49061
							5					MOT KX	49920	DP-30-KX	49062
5BDD36	49809	385	5ACC44FS/FT/VC	47237/47238/47665	46" x 46"	68/73/92	3/4	MOT EB	49912	DP-36-EB/EX	49063	MOT EX	49913	DP-36-EX	49063
							1	MOT FB	49914	DP-36-FB/FX	49065	MOT FX	49915	DP-36-FX	49065
							1 1/2	MOT GB	49916	DP-36-GB/GX	49067	MOT GX	49917	DP-36-GX	49067
							2					MOT HX	49918	DP-36-HX	49069
							3					MOT JX	49919	DP-36-JX	49070
							5					MOT KX	49920	DP-36-KX	49072