Propeller Fan "BE" Series ENCLOSED BELT DRIVEN WALL EXHAUST FAN





ENCLOSED BELT DRIVEN WALL EXHAUST FAN

FEATURES:

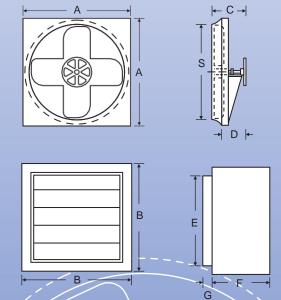
- The frame features a venturi orifice
- sturdy welded construction appropriate for industrial, Commercial and Agricultural applications
- Fan panels are heavy gauge steel with die formed edges
- All welded structural steel provides durable support for fan motors, bearings, shafts and drives. This support structure features an unique design which properly spaces the blade from the structure, eliminating vibration and reducing excess noise
- Shafts rotate in permanently lubricated heavy duty ball bearing pillow blocks. Bearings are selected for a minimum average life of 200,000 hours at maximum catalogue operating speeds
- The propeller blades are made of heavy gauge steel and are statically balanced

- Belt drive engineered to 50% overload
- Motor mounting plates are adjustable to obtain proper belt tension
- Motors are heavy duty ball bearing type carefully matched to the load
- Cabinet constructed of heavy duty 18 Ga enamel finish satin coat or galvanized steel
- Shutter blades are made of heavy gauge extruded aluminum, then stripped with neoprene gasket to ensure an airtight seal
- Rear guard made of finger proof expanded metal. Also includes a center access door for easy serviceability

DIMENSIONS:

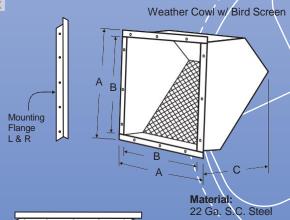
MODEL	Α"	B"	C"	D"	E"	F"	G"	S"
BE24	30	30 5/8	13 1/2	11 1/2	26 3/4	27	3	25
BE30	36	36 5/8	14	12 1/2	32 3/4	27	3	31
BE36	42	42 5/8	16	13	38 3/4	27	3	37
BE42	49 1/4	49 5/8	16 1/2	14	45 3/4	30	3	43
BE48	55	55 5/8	19	16	51 3/4	30	3	49
BE54	60	60 1/2	21	18	56 3/4	32	3	55
BE60	68	68 1/2	22	19	64 3/4	33	3	61
BE66	74	74 1/8	23	20	70 3/4	40	3	67
BE72	79	79 5/8	24	21	75 3/4	40	3	73

^{*}Consult factory representative for information on special applications and larger sizes. Order by Catalogue Number and state voltage required.



OPTIONAL ACCESSORIES:

- Two speed motor
- Special anti-corrosive coatings
- Pulleys
- · Static free belts
- Wall mounting flanges
- Wall cabinet
- Weather cowl with bird screen
- Gravity Shutter
- Back guard



MODEL	A	В	C
BE24	30	27	18
BE30	36	33	21
BE36	42	39	24
BE42	49	46	27 5/8
BE48	55	52	30 5/8
BE54	60	57	33
BE60	68	65	36 5/8
BE66	74	71	40
BF72	79	76	43

Weather Cowl Dimension

MODEL

Top & Bottom Mounting Flange

(Supplied Loose)

BEA SERIES

"A" TYPE PROPELLER

PERFORMANCE DATA

MODEL Motor HP	Max. Input Power	Blade	FAN	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1 "	Sones @ 1/8"
Max.	Watts	Туре	RPM				CUBIC FEET	PER MINUT	E			S.P.
BEA-2	4											
0.33 HP	474	SD	625	3702	2740	1985	1113					8.6
0.5 HP	740	SD	725	4294	3720	2650	2110	1325				10.4
0.75 HP	905	SD	775	4590	4060	3050	2500	1800	1100			11.5
1 HP	1678	SD	950	5626	5200	4590	3780	3300	2760	2200		16.7
1.5 HP	2586	SD	1100	6515	6150	5770	5100	4350	3800	3585		21.7
2 HP	3357	HD	1200	7107	6775	6450	5985	5200	4595	4260	3500	25.4
2111	3301	110	1200	7 107	0773	0400	3303	3200	4000	4200	3300	20.4
BEA-3	0											
0.5 HP	553	SD	500	6173	4930	3005	1403					9.1
0.75 HP	956	SD	600	7407	6500	5050	3420					14.6
1 HP	1519	SD	700	8642	7950	6923	5080	4100	2680	1762		20.6
2 HP	2268	SD	800	9877	9270	8560	7510	6253	5312	4215		21.6
3 HP	3225	SD	900	11111	10596	10000	9215	7965	6725	5961		22.7
3 HP	3225	HD	900								4051	22.7
3 HP	4106	HD	975	12037	11593	11065	10412	9575	8091	7215	5518	23.6
BEA-3	C											
DEA-3	0											
1 HP	700	SD	450	9513	8322	5651	2762	1325				9.8
1.5 HP	1460	SD	575	12156	11210	9790	7451	4863				15.0
2.0 HP	1875	SD	625	13213	12360	11512	8803	6600	4215	3061		17.4
3.0 HP	3240	HD	750	15856	15183	14415	13525	11250	9183	7418		23.1
5.0 HP	4312	HD	825	17441	16781	16132	15405	14003	11968	10265	6711	272
BEA-4	2							///		\		
1.0 HP	825	SD	375	12467	9810	6218						13.4
1.5 HP	1042	SD	425	14129	12113	8865	5723					17.5
2 HP	1426	SD	450	14960	13005	10052	7120	4795				20.1
2 HP	1843	SD	490	16290	14689							25.4
3 HP	2375	SD	490			12080	8213	6585	4620	2431		25.4

575

650

HD

XHD

- All selections are based on CARBON STEEL construction. Test data is accumulated based on AMCA 210-85, figure 12, 2 fig clearance and ANSI S12.12 - 1992 panel tests, inlet only.

16001

19103

13510

17269

11215

14608

8342

12117

7100

10205

7461

36.5

47.0

- Performance certified is for installation type A - Free inlet, Free outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test.

17790

20431

- Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudless values in fan sones at a distance of 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for:

Installation Type A: free outlet hemispherical sone levels.

NOTE:

5 HP

7.5 HP

3815

5539

For selections at other CFM and Static Pressure conditions, contact factory sales representative.

19116

21609

^{*}SD - Standard Duty, HD - Heavy Duty, XHD - Extra Heavy Duty

BEA SERIES

"A" TYPE PROPELLER

PERFORMANCE DATA

MODEL Motor HP	Max. Input Power	Blade	FAN	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	Sones @ 1/8"
Max.	Watts	Туре	RPM				CUBIC FEET	PER MINUT	E			S.P.
BEA-4	8											
2 HP	1181	SD	350	18741	16419	11600	6038	3229				16.4
3 HP	1765	SD	400	21419	19465	16605	10338	6781				22.0
3 HP	2518	HD	450	24096	22453	20398						29.3
5 HP	2908	HD	450				16481	10115		4980		29.3
5 HP	3444	XHD	500	26773	25243	23708	21198	16993		9342		36.8
7.5 HP	6066	XHD	575	30789	29507	28200	26619	24145		15351	11085	47.7
BEA-5	4											
2 HP	1283	SD	300	21185	17891	10779	6009					15.4
3 HP	2042	SD	350	24716	22310	20495	10845	7385				20.8
5 HP	3044	SD	400	28247	26120	22650	17800	12182		6446		27.3
5 HP	3250	SD	445	31778	29850							34.2
7.5 HP	4190	SD	445			27468	21750	14500		9600		34.2
7.5 HP	5950	HD	500	35309	33550	31800	28400	26500		15748		42.7
10 HP	7911	XHD	550	38840	37350	35840	33681	32387		20642	15924	51.5
BEA-6	0											
5 HP	2982	SD	350	32529	29200	25635	20250	15885	10780			25.9
7.5 HP	3672	SD	375	34853	32100	28350	21504	19797	14897	10625		29.8
7.5 HP	4043	HD	425	39500	35650							38.9
10 HP	5350	HD	425			32700	25500	16050	12625	10750		38.9
10 HP	4800	HD	450	41824	38250	35500						43.3
10 HP	6354	XHD	450				32305	28653	24196	19828	14645	43.3
BEA-6	6							1//		\		
5 HP	2630	SD	275	42872	37941	29902	16526					22.7
5 HP	3420	SD	300	46770	42128	36635	21810	14914				27.7
7.5 HP	4341	SD	325	50667	46260	41735	29958	20683	14299			33.3
7.5 HP	5428	HD	350	54565	50439	46491	40938	26385	20221	14557		38.5
10 HP	6667	HD	375	58462	54674	51148	46551	34505	25533	20124		44.9
15 HP	8118	XHD	400	62360	58871	55523	51491	46314	32372	25746	16039	52.5
15 HP	11530	XHD	450	70155	67241	63838	60926	57163	52428	39300	27188	65.7

^{*}SD - Standard Duty, HD - Heavy Duty, XHD - Extra Heavy Duty

NOTE:

For selections at other CFM and Static Pressure conditions, contact factory sales representative.

⁻ All selections are based on CARBON STEEL construction. Test data is accumulated based on AMCA 210-85, figure 12,2% in clearance and ANSI S12.12 - 1992 panel tests, inlet only.

⁻ Performance 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 do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at a distance of 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for:

Installation Type A: free outlet hemispherical sone levels.

BES SERIES

"S" TYPE PROPELLER

PERFORMANCE DATA

MODEL Motor HP	Blade	FAN	0 "	1/8"	1/4"	3/8"	1/2"	5/8"	3 / 4 "	1 "	Sones @ 1/8"
Max.	Туре	RPM			(CUBIC FEET	PER MINUTI				S.P.
3ES-24		700	4150	2272	1700		I		I		100
1/4 HP	SD SD	700 750	4153 4449	3273 3673	1768 2161	1331					10.0
1/3 HP	SD	800	4746	4062	2720	1722	1092				12.3
1 /2 HP	SD	900	5339	4774	3820	2480	1790				15.2
3/4 HP	SD	950	5636	5114	4303	2990	2202	1596	1137		17.4
1 HP	SD	1100	6526	6100	5502	4655	3497	2748	2173		20.5
1.5	HD	1250	7415	7041	6596	5972	5175	4131	3333		25.3
3ES-30		1200		1011		00.2	0.10	1.0.			
0.5 HP	SD	550	6314	4844	2775	1627					9.9
0.75 HP	SD	600	6888	5580	3744	2350	1389				11.4
1 HP	SD	650	7462	6301	4543	3064	2100	1262			13.1
1.5 HP	HD	750	8610	7692	6432	4869	3530	2686	1909		18.4
1.5 HP	HD	900	10332	9569	8636						23.6
2 HP	XHD	900				7585	6137	4809	4055	2685	23.6
3 HP	XHD	950	10906	10181	9346	8350	6969	5956	4770	3416	27.1
3ES-36											
3/4 HP	SD	500	9638	7864	4354	2606	1348				12.2
1.5 HP	SD	600	11566	10131	8173	4974	3622	2366	1402		16.3
1.5 HP	SD	700	13494	12306	10954						22.1
2 HP	HD	700				8895	5936	4707	3490		22.1
2 HP	HD	800	15421	14407	13245	11852					27.0
3 HP	XHD	800					9994	7177	6075	3811	27.0
3 HP	XHD	850	16385	15431	14359	13218	11601	9758	7062	5160	29.8
BES-42	2						//				
1 HP	SD	400	11776	9156	4687	2642	1367	_/			10.4
1.5 HP	SD	500	14721	12777	9956	6138	4110				16.4
3 HP	HD	600	17665	16008	14415	11593	8107	6107	4698		21.6
5 HP	XHD	700	20609	19189	17841	16169	13745	10341	8401	5620	29.5
5 HP	XHD	800	23553	22310	21068	19993	18312	16185	13686	9374	36.5
		000	20000	22310	21000	10000	10012	10103	13000) 1014	
BES-48									11/2		
1.5 HP	SD	350	15934	11879	5637	2912	1130				10.8
3 HP	HD	450	20487	17728	13877	8217	5638	3687	2271		18.1
3 HP	HD	550	25039	22814	20241	16920					25.9
5 HP	XHD	550					12075	8700	6840	3907	25.9
5 HP	XHD	650	29592	27721	25777	23335	20526	17742	12437	8742	37.3
7.5	XHD	700	31868	30131	28343	26393	23759	21172			53.5

BES SERIES

"S" TYPE PROPELLER

PERFORMANCE DATA

Blade	FAN	0 "	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1 "	Sones @ 1/8"
Туре	RPM			(CUBIC FEET	PER MINUTE	Ē			S.P.
		1								'
	400	26354	22884	17426	11623	8791	6430	4271		18.3
									4026	23.0
								7 00 1	1020	27.7
								15306		32.8
										42.6
ALID	000	33331	37300	34373	32032	20090	20240	13403		42.0
1										
	200	00040	22220	40775	0000	E400	2042		l	45.0
	-							4707		15.8
	-							4/8/		21.9
								45007		28.4
HD	450	43204						15367		36.6
LID	475	45000								
HD	475	45668	42681	39046	34189	26099	21864	04000	45440	40.6
HD XHD	475 500	45668 48071	42681 45234	39046 41862	34189 37515	31706	25076	21322	15419	45.0
XHD								21322	15419	
XHD	500	48071	45234	41862	37515	31706	25076	21322	15419	45.0
XHD SD	500 275	48071 35191	45234 28523	41862 17053	37515 10886	31706 6540	25076 3755	21322	15419	45.0
XHD SD SD	275 325	48071 35191 41589	28523 36351	41862 17053 28046	37515 10886 18866	31706 6540 13764	25076 3755 9606			45.0 16.6 22.9
SD SD HD	275 325 375	35191 41589 47987	28523 36351 43656	41862 17053 28046 37781	37515 10886 18866 27528	31706 6540 13764 21737	25076 3755 9606 17215	13330	7567	45.0 16.6 22.9 30.8
SD SD HD HD	275 325 375 400	35191 41589 47987 51186	28523 36351 43656 47234	17053 28046 37781 42347	37515 10886 18866 27528 34848	31706 6540 13764 21737 25975	25076 3755 9606 17215 21009	13330 17168		16.6 22.9 30.8 35.2
SD SD HD HD HD	275 325 375 400 425	35191 41589 47987 51186 54385	28523 36351 43656 47234 50714	17053 28046 37781 42347 46214	37515 10886 18866 27528 34848 40159	31706 6540 13764 21737 25975 30397	25076 3755 9606 17215 21009 25291	13330 17168 21037	7567 10554	16.6 22.9 30.8 35.2 40.3
SD SD HD HD	275 325 375 400	35191 41589 47987 51186	28523 36351 43656 47234	17053 28046 37781 42347	37515 10886 18866 27528 34848	31706 6540 13764 21737 25975	25076 3755 9606 17215 21009	13330 17168	7567	16.6 22.9 30.8 35.2
SD SD HD HD HD XHD	275 325 375 400 425	35191 41589 47987 51186 54385	28523 36351 43656 47234 50714	17053 28046 37781 42347 46214	37515 10886 18866 27528 34848 40159	31706 6540 13764 21737 25975 30397	25076 3755 9606 17215 21009 25291	13330 17168 21037	7567 10554	16.6 22.9 30.8 35.2 40.3
SD SD HD HD HD XHD	275 325 375 400 425 450	35191 41589 47987 51186 54385 57585	28523 36351 43656 47234 50714 54117	17053 28046 37781 42347 46214 49976	37515 10886 18866 27528 34848 40159 44554	31706 6540 13764 21737 25975 30397 36873	25076 3755 9606 17215 21009 25291	13330 17168 21037	7567 10554	16.6 22.9 30.8 35.2 40.3 45.3
SD SD HD HD XHD SD SD	275 325 375 400 425 450	35191 41589 47987 51186 54385 57585	28523 36351 43656 47234 50714 54117	41862 17053 28046 37781 42347 46214 49976	37515 10886 18866 27528 34848 40159 44554	31706 6540 13764 21737 25975 30397 36873	25076 3755 9606 17215 21009 25291 29525	13330 17168 21037	7567 10554	16.6 22.9 30.8 35.2 40.3 45.3
SD SD HD HD XHD SD SD SD SD	275 325 375 400 425 450 225 250	35191 41589 47987 51186 54385 57585	28523 36351 43656 47234 50714 54117	41862 17053 28046 37781 42347 46214 49976 11962 18884	37515 10886 18866 27528 34848 40159 44554 6208 10159	31706 6540 13764 21737 25975 30397 36873	25076 3755 9606 17215 21009 25291 29525	13330 17168 21037 25005	7567 10554	16.6 22.9 30.8 35.2 40.3 45.3
SD SD HD HD XHD SD SD SD SD SD	275 325 375 400 425 450 225 250 275	35191 41589 47987 51186 54385 57585 34726 38584 42442	28523 36351 43656 47234 50714 54117 25457 30722 35675	41862 17053 28046 37781 42347 46214 49976 11962 18884 25742	37515 10886 18866 27528 34848 40159 44554 6208 10159 14523	31706 6540 13764 21737 25975 30397 36873 1441 5570 9609	25076 3755 9606 17215 21009 25291 29525 1139 5536	13330 17168 21037	7567 10554	45.0 16.6 22.9 30.8 35.2 40.3 45.3 13.2 16.3 20.0
SD SD HD HD XHD SD SD SD SD SD	275 325 375 400 425 450 225 250 275 300	35191 41589 47987 51186 54385 57585 34726 38584 42442 46301	28523 36351 43656 47234 50714 54117 25457 30722 35675 40456	17053 28046 37781 42347 46214 49976 11962 18884 25742 31870	37515 10886 18866 27528 34848 40159 44554 6208 10159 14523 19942	31706 6540 13764 21737 25975 30397 36873 1441 5570 9609 13431	25076 3755 9606 17215 21009 25291 29525	13330 17168 21037 25005	7567 10554	16.6 22.9 30.8 35.2 40.3 45.3 13.2 16.3 20.0 23.8
SD SD HD HD XHD SD SD SD SD SD SD	275 325 375 400 425 450 225 250 275 300 325	35191 41589 47987 51186 54385 57585 34726 38584 42442 46301 50159	28523 36351 43656 47234 50714 54117 25457 30722 35675 40456 44974	17053 28046 37781 42347 46214 49976 11962 18884 25742 31870 37503	37515 10886 18866 27528 34848 40159 44554 6208 10159 14523 19942 28961	31706 6540 13764 21737 25975 30397 36873 1441 5570 9609 13431 18425	25076 3755 9606 17215 21009 25291 29525 1139 5536 9556	13330 17168 21037 25005	7567 10554 17926	16.6 22.9 30.8 35.2 40.3 45.3 13.2 16.3 20.0 23.8 27.8
SD SD HD HD XHD SD SD SD SD SD	275 325 375 400 425 450 225 250 275 300	35191 41589 47987 51186 54385 57585 34726 38584 42442 46301	28523 36351 43656 47234 50714 54117 25457 30722 35675 40456	17053 28046 37781 42347 46214 49976 11962 18884 25742 31870	37515 10886 18866 27528 34848 40159 44554 6208 10159 14523 19942	31706 6540 13764 21737 25975 30397 36873 1441 5570 9609 13431	25076 3755 9606 17215 21009 25291 29525 1139 5536	13330 17168 21037 25005	7567 10554	16.6 22.9 30.8 35.2 40.3 45.3 13.2 16.3 20.0 23.8
	Туре	Type RPM SD 400 SD 450 SD 500 HD 550 XHD 600 SD 300 SD 350 SD 400	SD 400 26354 SD 450 29648 SD 500 32943 HD 550 36237 XHD 600 39531 SD 300 28843 SD 350 33650 SD 400 38457	SD 400 26354 22884 SD 450 29648 26640 SD 500 32943 30294 HD 550 36237 33877 XHD 600 39531 37368 SD 300 28843 23229 SD 350 33650 29203 SD 400 38457 34723	SD 400 26354 22884 17426 SD 450 29648 26640 22372 SD 500 32943 30294 27116 HD 550 36237 33877 31147 XHD 600 39531 37368 34973 SD 300 28843 23229 13775 SD 350 33650 29203 21543 SD 400 38457 34723 29520	SD 400 26354 22884 17426 11623 SD 450 29648 26640 22372 16097 SD 500 32943 30294 27116 22593 HD 550 36237 33877 31147 27301 XHD 600 39531 37368 34973 32052 SD 300 28843 23229 13775 8692 SD 350 33650 29203 21543 14610 SD 400 38457 34723 29520 21116	SD 400 26354 22884 17426 11623 8791 SD 450 29648 26640 22372 16097 12565 SD 500 32943 30294 27116 22593 16790 HD 550 36237 33877 31147 27301 22651 XHD 600 39531 37368 34973 32052 28395 SD 300 28843 23229 13775 8692 5180 SD 350 33650 29203 21543 14610 10474 SD 400 38457 34723 29520 21116 16322	SD 400 26354 22884 17426 11623 8791 6430 SD 450 29648 26640 22372 16097 12565 10047 SD 500 32943 30294 27116 22593 16790 13821 HD 550 36237 33877 31147 27301 22651 17931 XHD 600 39531 37368 34973 32052 28395 23249 SD 300 28843 23229 13775 8692 5180 2912 SD 350 33650 29203 21543 14610 10474 7084 SD 400 38457 34723 29520 21116 16322 12754	SD 400 26354 22884 17426 11623 8791 6430 4271 SD 450 29648 26640 22372 16097 12565 10047 7864 SD 500 32943 30294 27116 22593 16790 13821 HD 550 36237 33877 31147 27301 22651 17931 15306 XHD 600 39531 37368 34973 32052 28395 23249 19409 SD 300 28843 23229 13775 8692 5180 2912 SD 350 33650 29203 21543 14610 10474 7084 4787 SD 400 38457 34723 29520 21116 16322 12754	CUBIC FEET PER MINUTE SD 400 26354 22884 17426 11623 8791 6430 4271 SD 450 29648 26640 22372 16097 12565 10047 7864 4026 SD 500 32943 30294 27116 22593 16790 13821 HD 550 36237 33877 31147 27301 22651 17931 15306 XHD 600 39531 37368 34973 32052 28395 23249 19409 SD 300 28843 23229 13775 8692 5180 2912 SD 350 33650 29203 21543 14610 10474 7084 4787 SD 400 38457 34723 29520 21116 16322 12754

NOTE:

For selections at other CFM and Static Pressure conditions, contact factory sales representative.

^{*}SD - Standard Duty, HD - Heavy Duty, XHD - Extra Heavy Duty
- All selections are based on CARBON STEEL construction. Test data is accumulated based on AMCA 210-85, figure 12, 2% tip clearance and ANSI S12.12 - 1992 panel tests, inlet only.