

Belt Drive Propeller Fans

Medium Duty Belt-Drive Exhaust Fans

Medium duty exhaust fans are designed for use in industrial exhaust ventilating systems in factories, warehouses, foundries, laundries and cooling towers.

Agency Listing

- All ventilators are UL Standard 705 listed

Ventilator Construction

- Available with a variety of motors up to 10 horsepower
- Efficient in duct installations with up to 1/2" static pressure
- Horizontal or vertical mounting
- Self-aligning, pre-lubricated, regreaseable ball-bearing pillow blocks
- Heavy-duty, statically balanced, fabricated steel propellers are safety locked to shaft

- Predrilled motor base accommodates standard NEMA motor frames of horsepower ratings specified

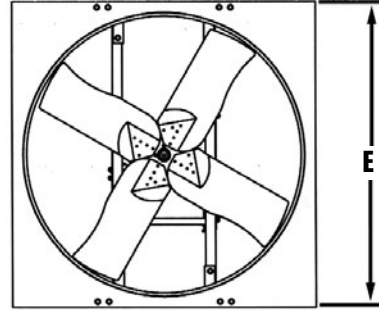
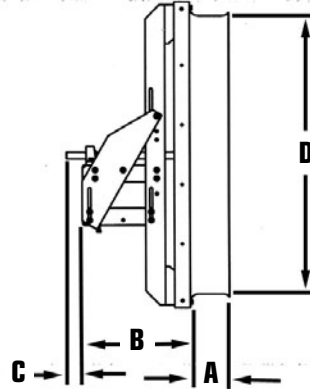
Accessories (available separately)

- For more information, see Wall Fan Accessories

- Intake guard.

WARNING: OSHA-compliant guards are required when fan is installed within 8.2 ft. (2.5M) of floor, working level or within reach of personnel. Review OSHA codes.

- Wall collar.
- Weatherhood.
- Dampers.
- Disconnect Switches.



Fentech, Inc. and Systemair Mfg. Inc. certify that the Medium Duty Belt-Drive Exhaust Fans 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.	Prop Dia. (In.)	Dimensions (In.)					Shaft Dia. (In.)	Max Ship Wt. (Lbs.)	Optional Accessories			
		A	B	C	D	E			Intake Guard Model No.	Wall Collar Model No.	Wall Mount Damper Model No.	Weatherhood Model No.
1MDE24	24	5	17	2-3/4	24-7/8	28	1	174	1ACC24SG	1ACC24WC	1ACC24WD	1ACC24WH
1MDE30	30	5-3/4	17	2-3/4	30-7/8	34	1	197	1ACC30SG	1ACC30WC	1ACC30WD	1ACC30WH
1MDE36	36	6-1/2	17	3	36-7/8	40	1-3/16	251	1ACC36SG	1ACC36WC	1ACC36WD	1ACC36WH
1MDE42	42	7	19-3/4	2-7/8	42-7/8	46	1-3/16	326	1ACC42SG	1ACC42WC	1ACC42WD	1ACC42WH
1MDE48	48	7	19-3/4	2-7/8	48-7/8	54	1-3/16	370	1ACC48SG	1ACC48HC	1ACC48WD	1ACC48WH
1MDE54	54	7	23-3/4	3-5/8	55	60	1-7/16	433	1ACC54SG	1ACC54HC	1ACC54WD	1ACC54WH
1MDE60	60	7	23-3/4	3-5/8	61	66	1-7/16	524	1ACC60SG	1ACC60HC	1ACC60WD	1ACC60WH

MOTOR SELECTION GUIDE

Dia. (In.)	HP	Open Dripproof		Totally Enclosed	
		Single Phase	Three Phase	Single Phase	Three Phase
24	1/3	CB	—	C2	CY
24-36	1/2	DB	—	D2	DY
24-42	3/4	EB	—	E2	EY
24-48	1	FB	FX	F2	FY
24-54	1-1/2	GB	GX	G2	GY

Dia. (In.)	HP	Open Dripproof		Totally Enclosed	
		Single Phase	Three Phase	Single Phase	Three Phase
30-60	2	HB	HX	H2	HY
36-60	3	—	JX	J2	JY
42-60	5	—	KX	—	KY
54-60	7-1/2	—	LX	—	LY
60	10	—	MX	—	MY

B = 115/230/60/1 Open Dripproof
 X = 208-220/440/60/3 Open Dripproof
 2 = 115/230/60/1 Totally Enclosed
 Y = 208-220/440/60/3 Totally Enclosed
 For fan with motor and drive package, add the two-digit motor HP, phase and enclosure code. Example: 1MDE24CB

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Model No.	HP	RPM	TS (FPM)	Max. BHP#	0.0" SP CFM	0.125" SP CFM	0.250" SP CFM	0.375" SP CFM	0.500" SP CFM	Sones@ 0.250" SP†	Total Ship Wt. (lbs.)
1MDE24	1/3	833	5234	0.38	5687	5014	4083	—	—	13.9	145
	1/2	948	5956	0.57	6473	5901	5157	4229	—	17.2	146
	3/4	1000	6283	0.68	6828	6291	5617	4796	2140	18.8	150
	1	1204	7565	1.15	8220	7783	7296	6697	6027	27	151
	1 1/2	1395	8765	1.72	9525	9149	8753	8302	7774	31	162
1MDE30	1/2	728	5718	0.57	9013	7862	6235	—	—	17.2	162
	3/4	830	6519	0.87	10276	9270	8165	6244	—	19.2	167
	1	880	6911	1.02	10895	9947	8952	7381	—	21	168
	1 1/2	1052	8262	1.72	13024	12232	11434	10567	9300	30	179
	2	1170	9189	2.30	14485	13774	13058	12326	11485	33	199
1MDE36	1/2	515	4854	0.56	11756	9556	4467	—	—	19.1	213
	3/4	589	5551	0.91	13446	11660	9212	4334	—	21	217
	1	648	6107	1.14	14793	13090	11566	9761	8281	24	218
	1 1/2	680	6409	1.40	15523	14047	12065	9738	5003	26	229
	2	823	7756	2.33	18787	17600	16216	14480	12688	32	249
	3	942	8878	3.45	21504	20476	19363	18009	16468	37	274
1MDE42	3/4	437	4805	0.93	16350	13580	8753	3351	—	18.3	266
	1	450	4948	0.99	16837	14190	10130	3918	—	18.6	267
	1 1/2	550	6047	1.72	20578	18574	15817	12318	5889	22	278
	2	605	6652	2.28	22636	20854	18583	15648	9597	24	298
	3	692	7609	3.42	25891	24366	22581	20324	17699	32	323
	5	830	9126	5.77	31054	29801	28441	26878	25028	48	315
1MDE48	1	390	4901	1.15	20315	16318	10000	—	—	18	307
	1 1/2	453	5692	1.72	23597	20319	15577	—	—	21	318
	2	492	6182	2.30	25628	22659	18887	13298	—	23	338
	3	573	7200	3.45	29847	27344	24491	20760	—	30	363
	5	670	8419	5.50	34900	32779	30510	27899	24617	38	355
1MDE54	1 1/2	458	6475	1.65	25956	22363	16773	—	—	25	368
	2	505	7139	2.23	28620	25378	21561	13245	—	29	388
	3	578	8171	3.35	32757	29934	26974	22589	14835	36	413
	5	693	9797	5.70	39274	36925	34541	32007	28635	48	405
	7 1/2	780	11027	8.06	44205	42119	40017	37865	35526	55	433
1MDE60	2	422	6629	2.36	34374	29163	22869	13568	—	27	437
	3	483	7587	3.39	39343	34977	29683	23016	—	31	462
	5	572	8984	5.70	46592	43015	38783	34290	28932	40	454
	7 1/2	655	10288	8.60	53353	50266	46836	42897	39006	54	482
	10	710	11152	10.96	57833	54995	51947	48441	44780	64	500

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 are loudness 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:

Medium Duty Belt-Drive Exhaust Fans

Medium duty belt-drive exhaust fans shall be axial belt-drive type. The propeller shall be constructed of steel. Propellers shall be statically balanced. The fan housing shall be constructed of steel with a rigid steel support structure and coated with a durable, baked-on polyester powder coat finish. Motors shall be readily accessible for maintenance. Steel shafts shall be turned, ground-polished and mounted in regreaseable, pillow block ball bearings. Bearings shall be selected for a minimum life (L50) 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 fully machined cast iron type, keyed and securely attached to the fan and motor shafts. 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 and carry a one-year warranty. Fans shall be Fantech Model Medium Duty Belt-Drive Exhaust Fans as manufactured by Systemair Mfg. Inc., Lenexa, Kansas.