

# ENERVEX® BEF 200-800 BOX VENTILATOR

020.1210.0619 06.19

Product Information

## Use

The BEF is designed to provide movement of air in exhaust and air supply systems. Suitable uses include comfort ventilation, make-up air for laundry and mechanical rooms, and exhaust and air supply in kitchens/bathrooms/laundries in multi-story, multi-family buildings.

## Description

The BEF is a highly efficient box ventilator with an electronically commutated permanent magnet motor, that uses a backward curved centrifugal impeller to provide high capacity at a high static pressure. The ventilator cannot be used for transport of large particles.

The fan is designed to exhaust lint-laden air from single or multiple Type I and Type II residential and commercial clothes dryers. It can be installed indoors as well as outdoors.

The design meets Type B, Spark Resistant Construction, and is completely insulated against fire, noise, condensation and heat with 2" fiberglass insulation. A service door is provided to allow easy access to the impeller.

The unique design allows the fan to be oriented in multiple positions, standing on a flat surface or suspended from a ceiling. It can be installed indoors as well as outdoors. The box ventilator can operate with exhaust temperatures within 10°F (-12°C) and 400°F (200°C), and at ambient temperatures within -20°F (-30°C) and 120°F (50°C).

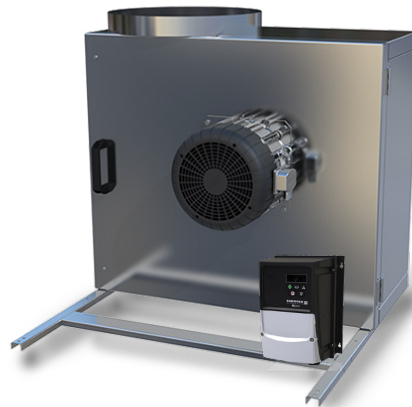
## Material

The ventilator housing is galvanized steel while the impeller is welded aluminum.\* The aluminum impeller is statically and dynamically balanced with permanently attached balancing weights.

\* Stainless steel housing and impeller optional

## Motor

The motor is a TEFC air cooled, maintenance-free variable speed permanent magnet motor with pre-lubricated and sealed ball bearings and a Class H temperature rating. The motor with controller is rated at 92% efficiency and able to operate as low as 50 RPM. It has integrated protection against overloading, blocking over and under voltage and over-heating. The motor shaft is internally isolated to eliminate the need for external shaft grounding. It is rated for outdoor installation.



The included EDrive motor control (NEMA4X) is factory programmed by ENERVEX for optimal operation of the ventilator.

## Standard Equipment

- Support legs with vibration dampers
- 4" x 4" Junction box with cover and conduit
- EDrive Motor Controller w/mounting bracket

## Optional Accessories

- MEC 24 Modulating Exhaust Control
- EBC 24 Modulating Pressure Controller
- EBC 30/31 Modulating Pressure Controller

## Listings

The BEF 200 - 800 Box Ventilator is UL Listed in the U.S. and certified for Canada under Underwriters Laboratories Inc. file no. E479840:

- UL 705 Standard for Power Ventilators, Edition 6 - Revision Date 2013/12/17. With special consideration for venting lint-laden air from single or multiple dryers
- CSA C22.2 NO. 113-12 Fans and Ventilators Edition 9 - Revision Date 2012/10/01

Complies with and meets Type B, Spark Resistant Construction per AMCA standard 99-0401 classifications of Spark Resistant Construction.

## Warranty

2-Year Factory Warranty. Complete warranty conditions are available from ENERVEX Inc.



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VENTING DESIGN SOLUTIONS

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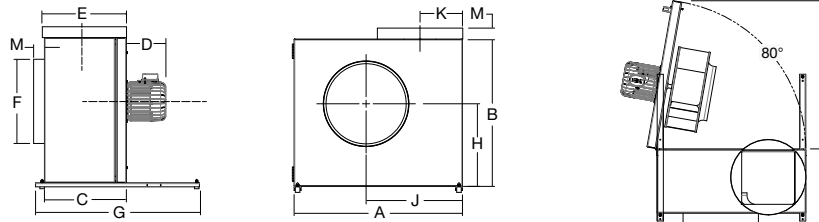
## Specifications

NOTE: All published voltages relate to power supplied to the EDrive and NOT the motor.

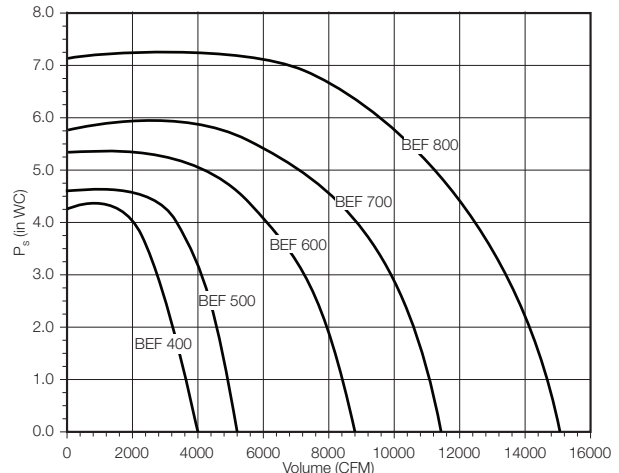
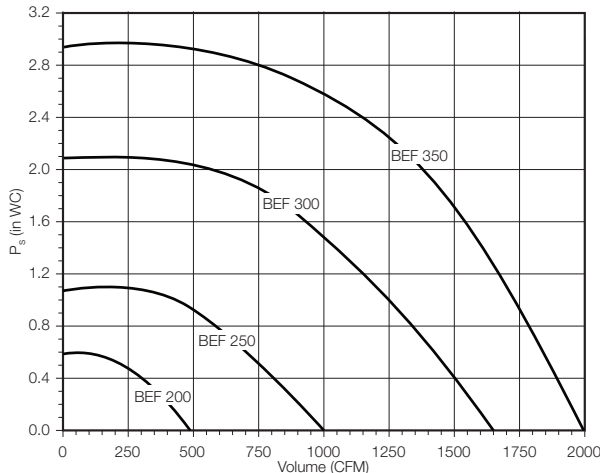
Model		BEF 200	BEF 250	BEF 300	BEF 350	BEF 400	BEF 500	BEF 600	BEF 700	BEF 800
Fan Type		Centrifugal Impeller (B-Wheel)								
Motor Type		ECM, Permanent Magnet								
Voltage *)	VAC	1x120 / 1x200-240 / 3x208-240 / 3x400-480			3x208-240 / 3x400-480			3x400-480		
Max. Amperage - EDrive A		2.3 / 2.3 / 2.3 / 2.2	2.3 / 2.3 / 2.3 / 2.2	4.3 / 4.3 / 4.3 / 2.2	5.8 / 7.0 / 7.0 / 4.1	10.5 / 5.8	20.9 / 11.5	24.0 / 14.0	18.0	30.0
Motor Output	HP	0.5 / 0.5 / 1	0.5 / 0.5 / 1	1	2 / 1.5 / 2 / 2	3	5	7.5	10	20
	kW	0.38	0.38	0.76	1.5	2.2	2.6	5.7	7.5	15.3
RPM (see note below)		1740	1740	2000	2300	2300	1740	1740	1740	1740
Weight	lbs / kg	98 / 44	110 / 50	126 / 57	150 / 68	167 / 76	227 / 103	310 / 141	320 / 145	390 / 145
Duct Connection	in / mm	8.0 / 203	12.0 / 305	14.0 / 356	16.0 / 406	16.0 / 406	18.0 / 456	20.0 / 508	22.0 / 558	22.0 / 558
Dimensions	A in / mm	20.1 / 510	24.6 / 625	27.2 / 690	30.3 / 770	30.3 / 770	36.3 / 921	38.5 / 978	41.0 / 1041	43.3 / 1041
	B in / mm	17.5 / 445	21.0 / 537	23.6 / 600	25.8 / 655	25.8 / 655	31.6 / 803	34.0 / 864	36.5 / 927	39.0 / 927
	C in / mm	9.2 / 234	11.5 / 293	12.2 / 309	13.1 / 333	13.1 / 333	16.6 / 422	18.6 / 473	20.5 / 521	21.6 / 521
	D in / mm	7.8 / 198	7.8 / 198	7.8 / 198	7.6 / 193	7.6 / 193	8.6 / 218	9.2 / 234	10.9 / 277	10.9 / 277
	E in / mm	7.9 / 201	11.9 / 302	13.9 / 353	15.9 / 404	15.9 / 404	17.9 / 454	19.9 / 505	21.9 / 555	23.9 / 555
	F in / mm	7.9 / 201	11.9 / 302	13.9 / 353	15.9 / 404	15.9 / 404	17.9 / 454	19.9 / 505	21.9 / 555	23.9 / 555
	G in / mm	18.5 / 470	24.4 / 620	32.3 / 820	32.3 / 820	32.3 / 820	35.8 / 909	38.8 / 986	41.8 / 1061	48.3 / 1061
	H in / mm	9.8 / 248	11.5 / 292	13.3 / 338	11.0 / 279	11.0 / 279	17.8 / 452	18.7 / 475	20.1 / 510	19.5 / 510
	J in / mm	11.5 / 292	14.3 / 362	16.3 / 414	17.8 / 452	17.8 / 452	20.8 / 528	22.0 / 559	24.6 / 625	21.7 / 625
	K in / mm	5.8 / 147	6.8 / 173	7.3 / 185	8.0 / 203	8.0 / 203	9.1 / 231	10.3 / 262	11.0 / 279	11.0 / 279
	M in / mm	2.0 / 50	2.0 / 50	2.0 / 50	2.0 / 50	2.0 / 50	2.0 / 50	2.0 / 50	2.0 / 50	2.0 / 50

NOTE: Our ECM motor is a synchronous motor that is UL-listed to operate at speeds up to 4000RPM. The shown RPM and motor output data is the standard setup based on the standard control selection. RPM can be increased to provide higher performance, but a different EDrive model may be required. Please contact ENERVEX for assistance.

\*) Select when ordering



## Capacity



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