

# ENERVEX®

## TDF 160-900 POWER VENTER

3912521 05.18

Product Information

### Use

The TDF Power Venter is a true in-line power venter. It is specifically designed for applications where reliable and efficient operation, low noise level, low energy consumption, variable speed and compact design are of utmost importance.

Typical applications are: mechanical venting of gas-fired or oil-fired boilers and water heaters. For indoor or outdoor installation.

### Description

The TDF Power Venter is an efficient, high-temperature ventilator with backward-inclined impeller. It can be installed horizontally or vertically in a chimney system.

The fan housing is made of stainless steel and equipped with an energy-efficient, totally enclosed, variable speed motor, which is mounted outside the air stream.

The complete drive unit (motor, impeller and mounting plates) can be removed from the fan without the need for removing the housing from the stack system.

The TDF is for use with condensing and non-condensing appliances operating where flue gas temperatures do not exceed 1400°F (760°C).

The TDF model is a component in the CASI, Chimney Automation System.

### Material

The housing is made of 316L stainless steel and has flanged connection. The impeller is of the backward inclined type made of 316L stainless steel.

### Motor

The motor is an air cooled, maintenance-free variable speed permanent magnet motor with pre-lubricated and sealed ball bearings. 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.

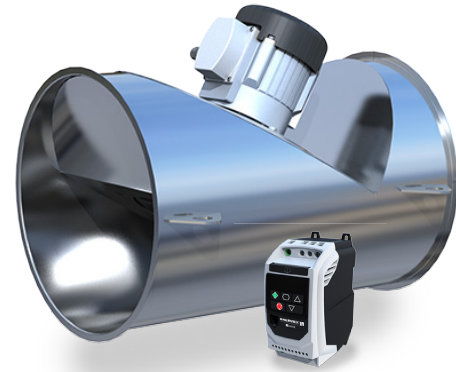
The included EDrive motor control is factory programmed by ENERVEX for optimal operation of the ventilator.

### Standard Equipment

- EDrive Motor Control
- V-Bands (where used)



Specifications are subject to change without notice.



### Optional Equipment

- EBC 30/31 Modulating Pressure Controller
- EBC 35 Modulating Pressure Controller
- EBC 24 Modulating Pressure Controller
- BDC 8 Modulating Pressure Controller

### Listings

UL Listing under Category MCQX and ZACT under File No. E467733 and reference to the following standards:

- UL 378 Standard for Draft Equipment Edition 4 - Revision Date 2013/09/17
- UL 705 Standard for Power Ventilators Edition 6 - Revision Date 2013/12/17
- CSA C22.2 No. 113-12 Fans and Ventilators Edition 9 - Revision Date 2012/10/01
- CSA3-B255-M81 Standard for Mechanical Flue Gas Exhauster

### Warranty

- 2-Year Factory Warranty
- 10-Year Warranty Against Corrosion Perforation

Complete warranty conditions are available from ENERVEX Inc.

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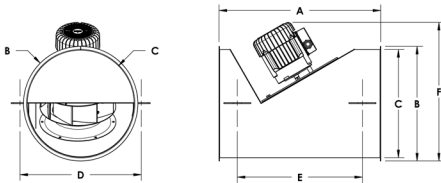
## Specifications

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

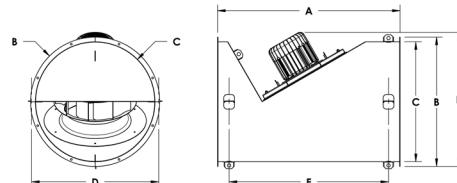
Model	TDF 160	TDF 200	TDF 250	TDF 560	TDF 620	TDF 685	TDF 900
Fan Type	Centrifugal Impeller (B-Wheel)						
Motor Type	ECM, Permanent Magnet						
Voltage EDrive VAC	1x120			3x230 / 3x460		3x230 / 3x460	
Max. Amperage -EDrive A	2.3	2.3	2.3	18.0 / 9.5	36.0 / 18.0	48.0 / 24.0	46.0
Motor Output	HP	0.5	0.5	5	10	15	30
	kW	0.38	0.38	3.75	7.46	11.19	22.37
RPM (see note below)	2000	2000	2000	1740	1740	1740	1400
Weight lbs / kg	38 / 17	45 / 20	61 / 28	240 / 109	288 / 131	331 / 150	331 / 150
Duct Connection	1/2" flange	1/2" flange	1/2" flange	1 1/2" flange w 16-holes			
Dimensions	A in / mm	18.0 / 457	21.0 / 533	24.0 / 610	48.0 / 1219	55.1 / 1401	62.3 / 1582
	B in / mm	13.0 / 330	15.0 / 381	17.0 / 432	35.0 / 889	39.0 / 991	45.0 / 1143
	C in / mm	12.0 / 305	14.0 / 356	16.0 / 406	32.0 / 813	36.0 / 914	42.0 / 1067
	D in / mm	13.8 / 349	15.8 / 400	18.0 / 457	34.3 / 870	38.4 / 975	44.4 / 1128
	E in / mm	13.3 / 337	16.3 / 413	19.3 / 489	38.5 / 978	48.1 / 1223	55.3 / 1404
	F in / mm	16.8 / 425	18.0 / 456	19.3 / 489	43.4 / 1103	40.5 / 1027	54.5 / 1383
Temp Rating °F / °C	1400 / 760						

<sup>1</sup> NOTE: Adapter transitions available - Please contact factory

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.

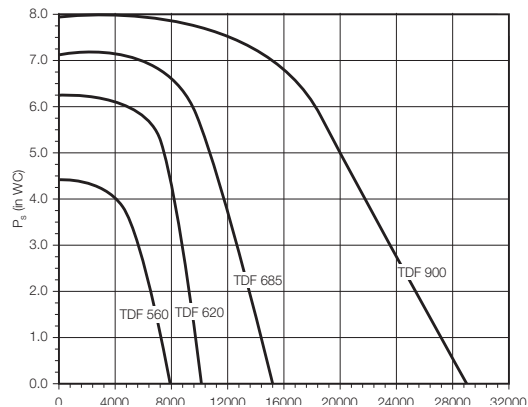
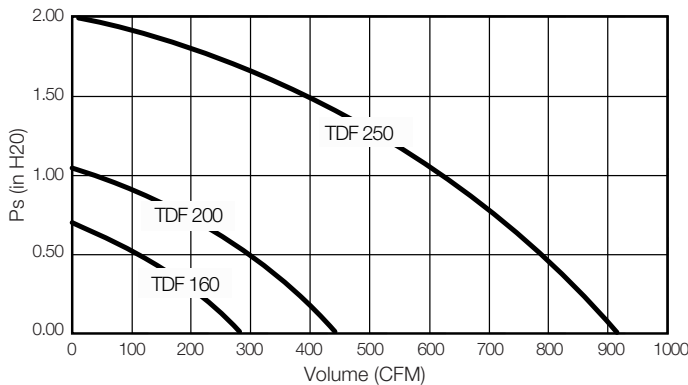


160-250



560-900

## Capacity



Specifications are subject to change without notice.

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