## ENERVEX® TDF 900 POWER VENTER

020.1099.0621 12.22

#### **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.



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 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**

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



Specifications are subject to change without notice.



#### **Optional Accessories**

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

#### 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
- UL 705 Standard for Power Ventilators Edition 6
- CSA C22.2 No. 113-12 Fans and Ventilators Edition 9
- ULC/ORD-C378-75 Guide for the Investigation of Draft Equipment Edition 1

#### **Warranty**

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

Complete warranty conditions are available from ENERVEX Inc.

# **ENERVEX**° **TDF 900 POWER VENTER**

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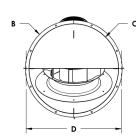
### **Product Information**

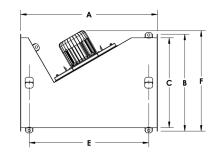
## **Specifications**

Model	TDF 900	
Fan Type	Centrifugal Impeller (BC-Wheel)	
Motor Type	ECM, Permanent Magnet	
Voltage Configuration	3 x 380-480 VAC	
EDrive Model	321.0922.4200	
EDrive Ratings:		
NEMA / IP Rating	4X / IP66	
Supply Voltage - VAC	3 x 380-480	
Power - kW	22.0	
Max Input Current - Amp	51.9	
Max Output Current - Amp	46.0	
Max Over-Current - %	175	
Min Operating Temp °F / °C	-4 / -20	
Max Operating Temp °F / °C	104 / 40	
Motor Ratings:		
Motor Efficiency Class	IE5	
Temperature Class	Н	
NEMA / IP Rating	3S / IP55	
Max Current - Amp	38	
Max Speed - RPM	1750	
Power - kW / HP	22.2 / 29.8	
Torque - Nm	145	
Motor Operating Settings:		
Fan Speed - RPM	1400	
Max Power - kW / ~ HP	Not Available	
Max Torque - Nm	Not Available	
Weight:		
TDF - lbs / kg	1104 / 502	
EDrive - lbs / kg	20.9 / 9.5	

Note: Use EDrive Ratings Data for Circuit Sizing

## **Dimensions**

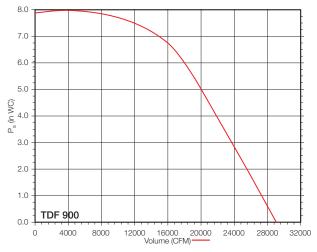




Model		TDF 900	
Duct Connection		1 ½" flange w 16-holes	
Dimensions	А	in / mm	75.0 / 1905
	В	in / mm	55.0 / 1397
	С	in / mm	52.0 / 1321
	D	in / mm	54.3 / 1379
	E	in / mm	66.2 / 1682
	F	in / mm	60.9 / 1547
Flange Bolt Ce	enter Diameter	in / mm	53.7 / 1364
Temp Rating*		°F/°C	1400 / 760

<sup>\*</sup> Maximum Intermittent Temperature Rating

## **Capacity**



Specifications are subject to change without notice.