

# DBF 110 DRYER EXHAUST FAN

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## Description

- Dryer exhaust fan
- Pressure sensing switch automatically turns on the dryer exhaust fan
- Vibration welded seam ensures leak proof housing
- Performance certified by HVI; safety certified by ETL to UL507

The DBF 110 Dryer Exhaust fan is engineered of thermoplastic resin. This model features a fully sealed plastic housing that is joined via a vibration welding process. The fan is equipped with an integral, automatic pressure switch. It can be used on dryer duct runs up to 108 feet. The fan's backward inclined blades allow lint to pass through the fan. The fan can be mounted in any angle at any point along the duct work and straight-through air flow design allows easy installation.

Fantech dryer exhaust fans have been specially designed to solve the problems caused by long duct runs on clothes dryers. According to dryer manufacturers and some local building codes, booster fans should be added in the dryer duct run when the length of the duct exceeds 24 feet with no bends, 20 feet with one bend or 15 feet with two bends.

When the dryer is on, Fantech's patented pressure sensing switch automatically turns the fan on. The warm, moist air in the dryer duct is exhausted out of the building quickly. The dryer booster fan monitors the status of the dryer and will turn itself off when the dryer stops.



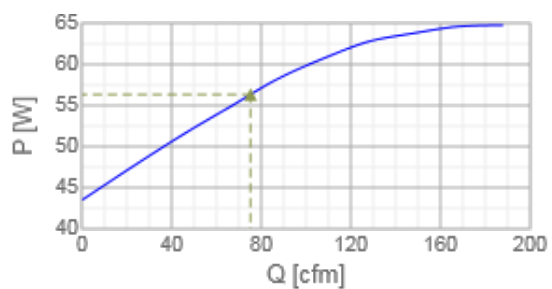
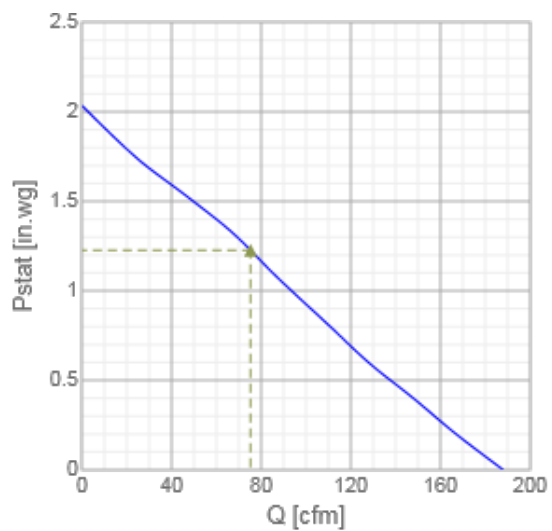
## Technical parameters

Nominal data		
Voltage	120	V
Frequency	60	Hz
Phase	1	~
Input power (P1)	64.8	W
Current	0.54	A
Max. airflow	188	cfm
Fan impeller speed	2175	r.p.m.
Weight	8.99	lbs.
Temperature data		
Max. temperature of transported air	140	°F
Protection / Classification		
Insulation class	B	
Enclosure class, motor	IP44	IP

## EPS diagrams

## Performance

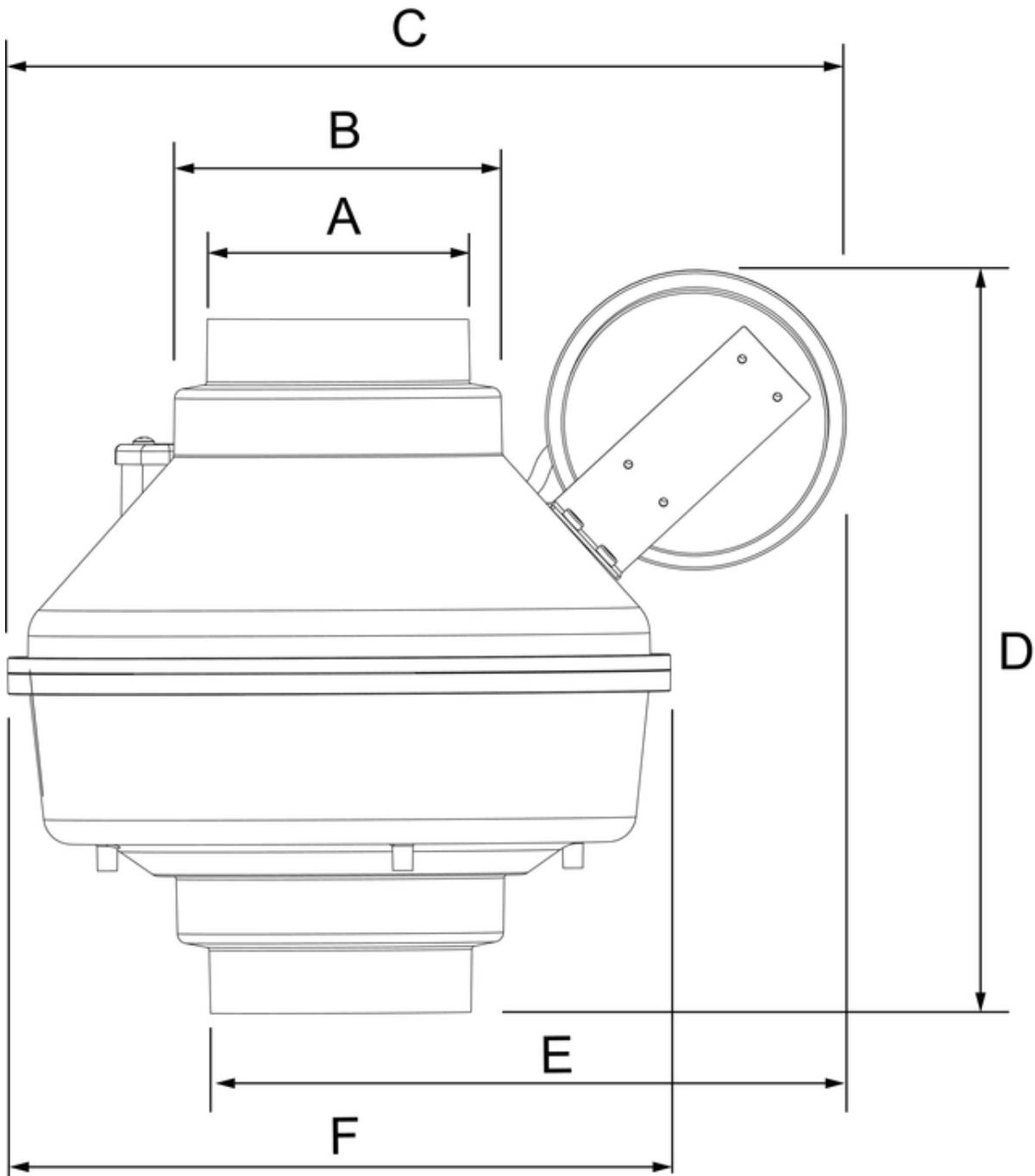
## Diagrams



**Hydraulic data**

	Working point						
	Q [cfm]	Ps [in.wg]	P [W]	n [r.p.m.]	I [A]	SFP [W/(cfm)]	U [V]
Max efficiency	75.2	1.23	56.4	2318	0.479	3.36	120

**Dimensions**

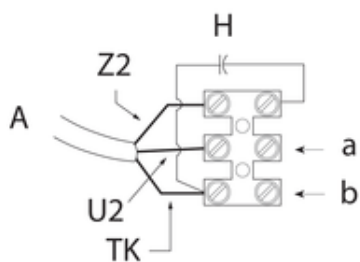


Model	A	B	C	D	E	F
DBF 110	3 31/32 (100)	4 31/32 (126)	12 3/4 (324)	11 1/4 (286)	9 3/4 (248)	10 (250)

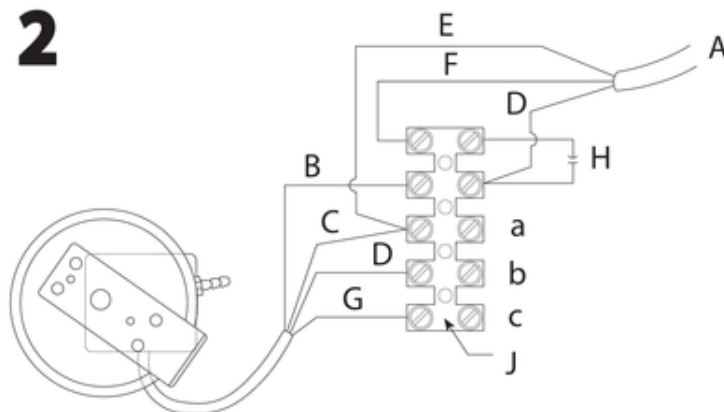
Dimensions are in inches (mm)

### Wiring

**1**



**2**




<b>Position</b>	A	B	C	D	E	F	G	H	J	TK	U2	Z2	a	b	c
<b>Description</b>	Power	Red	White	Black	Blue	Brown	Green	Capacitor	Terminal box	Black	Blue	Brown	Neutral	Line	Ground
<b>Diagram 1</b>	Fan Only														
<b>Diagram 2</b>	Fan and Pressure Switch														


## Accessories


### Accessories


- FC 4 Mounting Clamps (411295)
- DBLT4W Lint Trap (46000)

## Documentation

 401441 DBF110 OIPM EN FR ES.pdf (1,16MB)

 411347.dxf (4,28MB)

 412038 Ventilation Solutions Laundries EN.pdf (1,43MB)

 450379 DBF110 Submittal Sheet EN.pdf (179,53kB)

## Specification text

### Description

A integral centrifugal fan and positive pressure sensing switch specifically designed for residential dryer vent booster applications. The fan can be mounted in any angle at any point along the duct work and straight-through air flow design allows easy installation. By using using accessory FC mounting clamps, fan can easily be removed from duct work for service. Fan inlet and outlet are 3 7/8" diameter allowing direct installation into dryer vent duct thereby eliminating the need for transition pieces. Motor bearings are a permanently sealed, self lubricating ball type. DBF110 fan is backed by Fantech's Five Year Warranty.

### Installation Notes

1. For maximum sensitivity, switch diaphragm must be mounted vertically. Failure to orient the diaphragm vertically may result in improper operation
2. Fan must be mounted a minimum of 15 linear (not equivalent) feet from the dryer in order to prevent the impeller from loading with wet lint. If mounted within 15 feet, an accessory, secondary lint trap (DBLT4W) must be used. (see installation manual)
3. Fan should be inspected periodically, depending on amount of usage, and cleaned as necessary.

### Guide Specifications for Model DBF110 Dryer Vent Exhaust System

Inline fan shall be of the centrifugal, direct driven type

### Construction

#### Housing

- Fan housing shall be constructed of UV resistant ABS-PC blended thermoplastic
- Fan shall be supplied with an integral external electrical terminal box with pre-wired terminal strip connections
- Capacitor shall be provided and shall be located within the fan electrical terminal box

#### Motor

- Motorized impeller shall be an external rotor type, class B insulation, totally enclosed permanent split capacitor type
- Motor shall be a permanently sealed self lubricating ball bearing type
- Motor shall be equipped with automatic reset thermal overload protection
- Motor shall be acceptable for continuous duty

#### Wheel

- Fan wheel shall be of the backward inclined centrifugal type with an inlet venturi for maximum performance
- Motorized impeller shall be both statically and dynamically balanced as one integral unit to provide for vibration free performance

#### Switch

- Integral positive pressure switch shall be mounted on the fan and prewired to the terminal strip provided in fan electrical junction box
- Switch shall be set to 0.05" H2O guage static pressure
- Switch shall incorporate a delay-on-break timer cycle to maintain fan performance for intervals of 10 minutes until drying cycle is complete

### Code Approval

- Fan shall be certified by ETL to the UL507 standard for safety
- Rating shall include approval for residential dryer exhaust and air stream temperatures not to exceed 140°F (60°C)

DBF110 Series shall be manufactured under the authority of Fantech, Inc., Lenexa, KS.