



# Cross Flow Fans

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# Cross Flow Fans

Cross flow fans employ a specifically designed blade to create parallel air movement that reaches even distant objects in a wide, uniform pattern. These fans provide right-angle airflow and rectangular shape, allowing for installation in corners and space savings in applications such as circuit board cooling and air curtains.

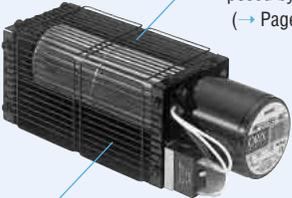


## Safety Standards and CE Marking

Model	Standards	Certification Body	Standards File No.	CE Marking
MF Series	UL507	UL	E58377	Low Voltage Directives
	CSA C22.2 No.113			
	EN60950	VDE	5854	

- [Details of Safety Standard](#) → Page G-2
- [List of Safety Standard Approved Products](#) → Page G-24

## System Configuration

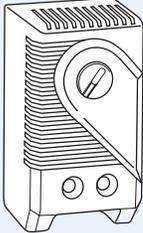


**Finger Guards (Accessories)**  
Protect Against the hazards posed by rotating fan blades.  
(→ Page E-102)

**Finger Guard**

\*The photo shows two optional finger guards, **FG915D**.

**Thermostats**  
Thermostats make it possible for fans to operate only when cooling is necessary, thereby conserving energy.  
(→ Page E-97)



## Product Number Code

# MF 9 30 B - B C

**C:** Built-in capacitor

### Voltage

**B:** Single-phase 100/110/115 VAC

**D:** Single-phase 200/220/230 VAC

**24:** 24 VDC

**24A:** 24 VDC Low-speed alarm type

**48:** 48 VDC

**48S:** 48 VDC Pulse sensor type

### Letter Designation

**No letter:** Motor is on left when viewing the mounting holes

**B:** Motor is on right when viewing the mounting holes

### Length of Impeller

**30:** 11.81 in. (300 mm)

**15:** 5.91 in. (150 mm)

### Frame Size

**9:** 3.54 in. sq. (90 mm sq.)

### Series

**MF:** AC Cross Flow Fans

**MFD:** DC Cross Flow Fans

## Types of Cross Flow Fans

Length of Impeller	Voltage				Page	
	Single-Phase 100/110/115 VAC	Single-Phase 200/220/230 VAC	24 VDC	48 VDC	AC	DC
11.81 in. (300 mm)	<b>MF930(B)-BC</b>	<b>MF930(B)-DC</b>	<b>MFD930(B)-24, 24A</b>	<b>MFD930(B)-48, 48S</b>	E-88	E-92
5.91 in. (150 mm)	<b>MF915(B)-BC</b>	<b>MF915(B)-DC</b>	<b>MFD915(B)-24, 24A</b>	<b>MFD915(B)-48, 48S</b>	E-90	E-94

## General Specifications

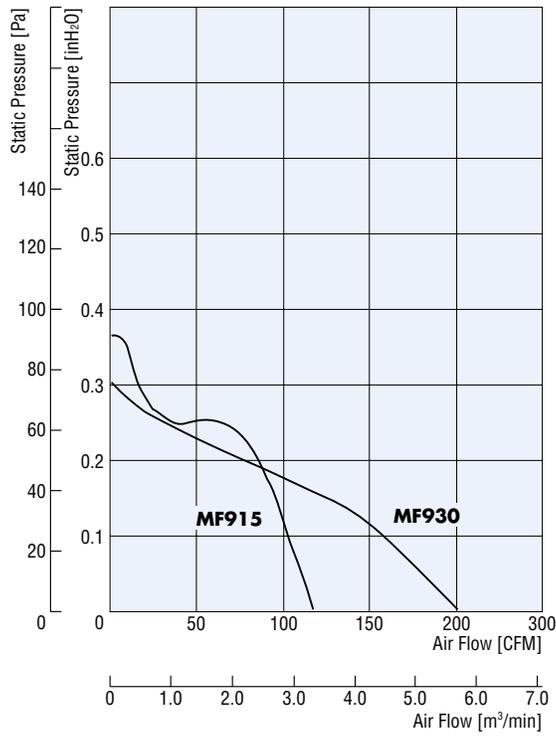
Item	Specifications
Insulation Resistance	100 MΩ or more when 500 VDC is applied between the windings and the frame under normal ambient temperature and humidity. ( <b>MFD</b> Series: 10 MΩ or more, 250 VDC) <b>MFD915-48, 24A, 48S, MFD930-48, 24A, 48S:</b> 10MΩ or more, 500 VDC)
Dielectric Strength	Sufficient to withstand 1.5 kV at 50 Hz applied between the windings and the frame for 1 minute under normal ambient temperature and humidity. ( <b>MFD</b> Series: 500 V · 50 Hz, 1 minute)
Temperature Rise	81°F (45°C) or less measured by the thermometer method after the temperature of the coil has stabilized under normal operation at the rated voltage and frequency. ( <b>MFD</b> Series: 27°F (15°C) or less)
Operating Voltage Range	AC Cross Flow Fans: ±10% of the rated voltage. DC Cross Flow Fans: ±10% of the rated voltage.
Insulation Class	Class E (248°F [120°C]) [Recognized as Class A (221°F [105°C]) by UL and CSA standards.]
Overheat Protection	<b>MF</b> Series has built-in thermal protector (automatic reset) Operating temperature open: 248°F±9°F (120°C±5°C), close: 170.6°F±27°F (77°C±15°C) <b>MFD</b> Series has an overheat protection function installed.
Ambient Temperature	14°F~140°F (-10°C~+60°C)
Ambient Humidity	0~85% (noncondensing)
Color	Black

## Air Flow–Static Pressure

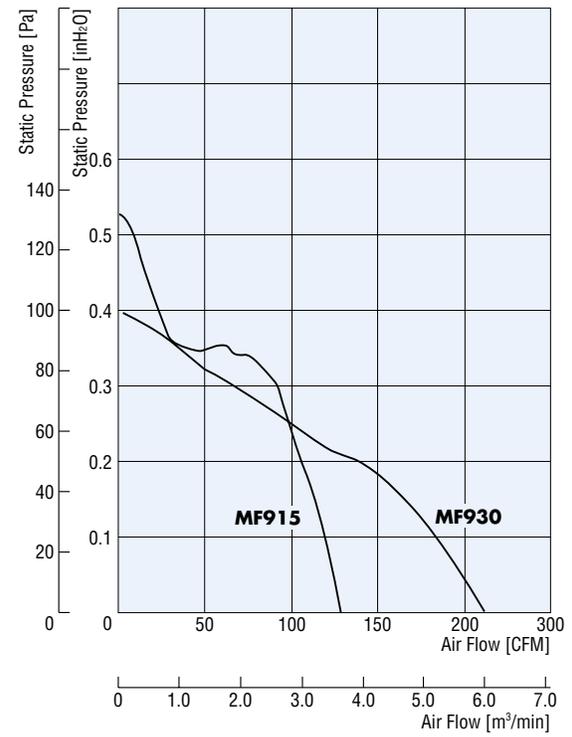
● AC Cross Flow Fans

◆ MF Series

● 50 Hz

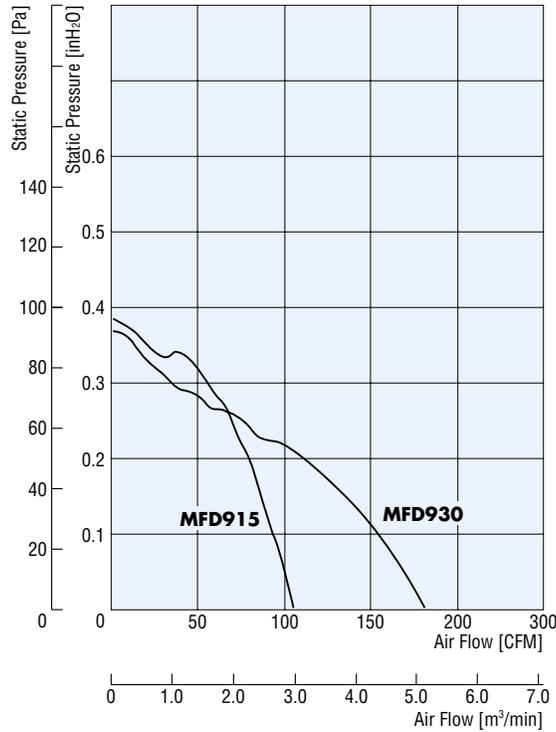


● 60 Hz



● DC Cross Flow Fans

◆ MFD Series



Introduction	Axial Flow Fans		Centrifugal Blowers		Cross Flow Fans		Thermostats	Accessories	Before Using a Fan
MRS	AC Input Variable Flow	MU	DC Input Long Life MDE	MBS	AC Input	MFB			
			MDS · MD			MFD			