



ORIENTAL MOTOR U.S.A. Corp.  
570 Alaska Avenue  
Torrance, CA 90503  
1-800-468-3982

Item # MBD12-24, 4.72 in. (120 mm) MBD Series Centrifugal Fan / Blower (24 VDC)



Centrifugal fans / blowers maximize static pressure to provide concentrated airflow in one defined direction. These blowers can be used in a fixed position or mounted on moving parts, and are optimal for local cooling and airflow through ducts.



Specifications

|                        |                          |
|------------------------|--------------------------|
| Lead Time <sup>1</sup> |                          |
| Fan Type               | Centrifugal Fan / Blower |
| Impeller Diameter      | 4.72 in.                 |
| Power Supply           | 24 VDC                   |
| Current (A)            | 1.50                     |
| Function               | Standard type            |
| Speed (r/min)          | 1900                     |
| Max. Air Flow          | 106 CFM                  |
| Max. Static Pressure   | 1.49 inH <sub>2</sub> O  |

**Noise Level** 58 dB (A)

**Fan Kit** Fan Only

**RoHS Compliant** Yes

**California Proposition 65**

**⚠ CA WARNING**  
 Cancer risk from exposure to Nickel. See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 Risk of reproductive harm from exposure to Di-n-hexyl phthalate (DnHP). See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 Risk of cancer and reproductive harm from exposure to Di(2-ethylhexyl phthalate (DEHP). See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 See "?" or copy/paste [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov) in your browser.

**Insulation Resistance** 10 MΩ or more when 500 VDC is applied between the windings and the frame under normal ambient temperature and humidity.

**Dielectric Strength** Sufficient to withstand 500 V at 50Hz applied between the windings and the frame for 1 minute under normal ambient temperature and humidity.

**Temperature Rise** 27°F (15°C) or less measured by the thermometer method after the temperature of the motor case has stabilized after continuous operation under normal ambient temperature and humidity.

**Insulation Class** Class E (248°F [120°C])

**Overheat Protection** Built-in Overheat Protection Circuit

**Ambient Temperature Range** 14°F ~ 140°F (-10°C ~ 60°C)

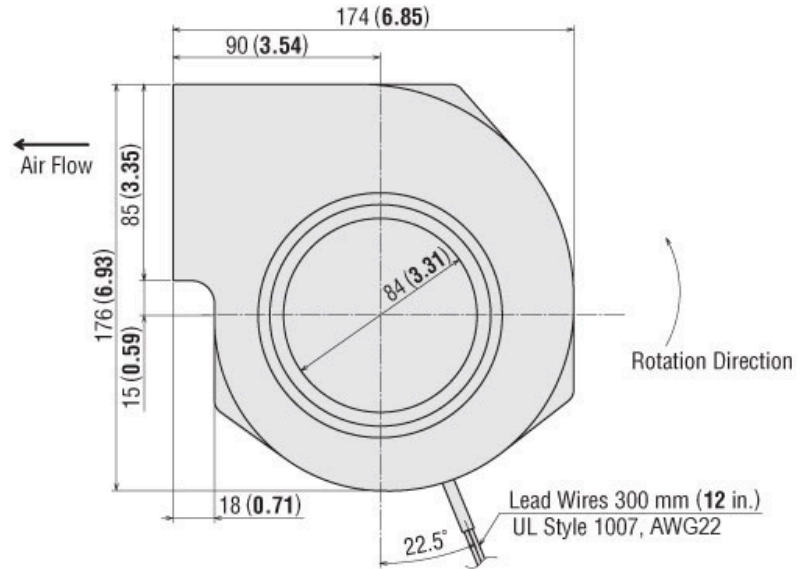
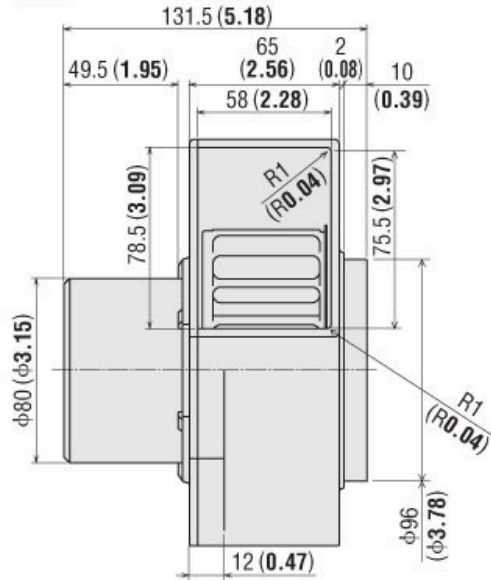
**Ambient Humidity** 85% or less (noncondensing)

## Dimensions

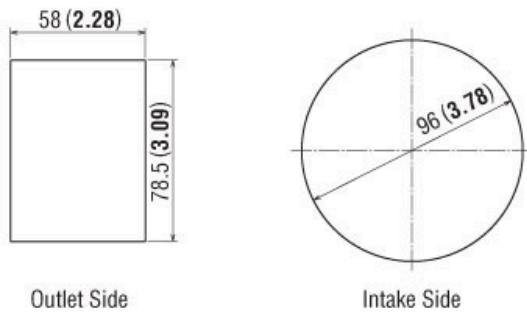
### ■ Dimensions Unit = mm (in.)

Mass: 1.5 kg (3.3 lb.)

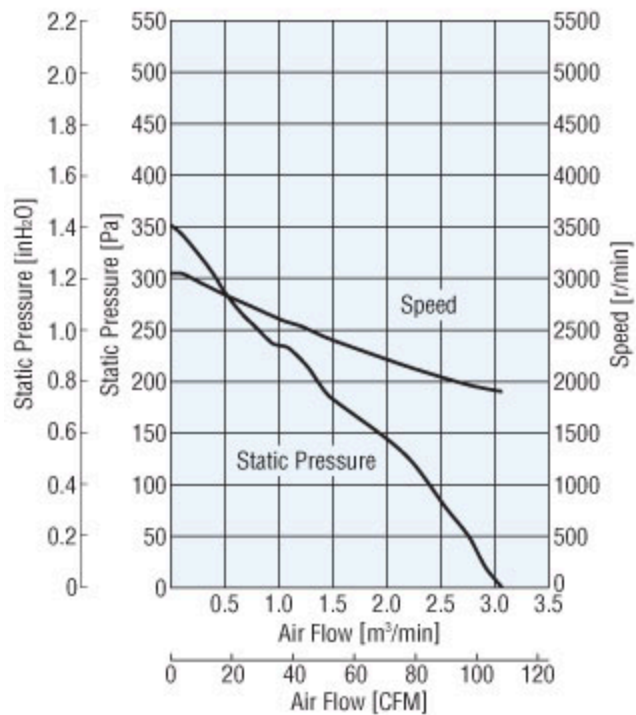
**DXF** E031



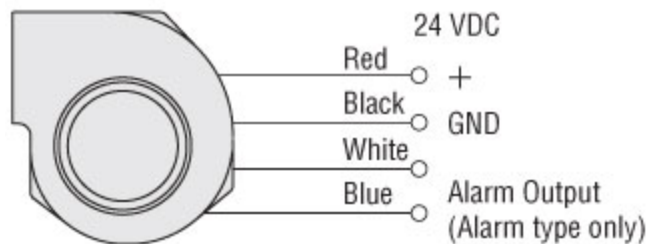
### ■ Panel Cut-Out Unit = mm (in.)



## Air Flow – Static Pressure Characteristics



## Connection Diagram



## ■ System Configuration

An example of a system configuration with the **MB Series**.

