# ORIENTAL MOTOR GENERAL CATALOG



## **Centrifugal Blowers**

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MB Series	··C-72
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### **Types of Centrifugal Blowers**

Impeller Diameter	Model						Page		
	Single-Phase		Single-Phase		Three-Phase		DC	40	DO
in.dia.	100V	115V	200V	230V	200V	230V	24V	AC	DC
6.30	MB1665-B		MB16	65-D	MB1	665-T		C-72	
4.72	MB1255-B		MB1255-D				MBD12-24	C-74	C-84
3.94	MB1040-B		MB1040-D				MBD10-24	C-76	C-85
3.15	MB840-B		MB840-D				MBD8-24	C-78	C-86
2.36	MB630-B MB630-D					C-80			
1.97	MB52	20-B	MB52	20-D				C-82	

#### ■ Product Number Code

Voltage
B: Single-Phase 100V/115V
D: Single-Phase 200V/220V/230V
T: Three-Phase 200V/220V/230V
24: DC 24V

Thickness of impeller
65: 2.56 in. (65 mm)
55: 2.17 in. (55 mm)
40: 1.57 in. (40 mm)
30: 1.18 in. (30 mm)
20: .79 in. (20 mm)

Impeller Diameter
5: 1.97 in. dia. (\$\phi\$ 50 mm)
6: 2.36 in. dia. (\$\phi\$ 60 mm)
8: 3.15 in. dia. (\$\phi\$ 80 mm)
10: 3.94 in. dia. (\$\phi\$ 100 mm)

Series

MB : AC Centrifugal Blowers MBD : DC Centrifugal Blowers

#### General Specifications

**12**: 4.72 in. dia. (φ 120 mm) **16**: 6.30 in. dia. (φ 160 mm)

Item	Specifications					
Insulation Resistance	$100 \text{M}\Omega$ or more when 500V DC is applied between the windings and the frame under normal ambient temperature and humidity.					
	(MBD Series: $10M\Omega$ or more, 250V DC)					
Dielectric Strength	Sufficient to withstand 1.5kV at 50Hz applied between the windings and the frame for 1 minute under normal ambient temperature and					
	humidity. (MBD Series: 500V at 50Hz, 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. (MBD Series: 27°F (15°C) or less)					
Operating Valtage Dange	AC Centrifugal Blowers: ±10%					
Operating Voltage Range	DC Centrifugal Blowers: ±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.]					
	MB1665, MB1255, MB1040, MB840 types have built-in thermal protectors (Automatic return type)					
Overheat Protection	Operating temperature. Open: 248°F±9°F (120°C±5°C) Close: 170.6°F±27°F (77°C±15°C)					
	MB630, MB520 types have impedance protection					
	MBD Series has an overheat protection function installed.					
Ambient Temperature	$14^{\circ}F \sim 122^{\circ}F (-10^{\circ}C \sim +50^{\circ}C)$ [MB520, MB630, MBD Series: $14^{\circ}F \sim 140^{\circ}F (-10^{\circ}C \sim +60^{\circ}C)$ ]					
Ambient Humidity	0~85% (noncondensing)					
Color	Dark gray					

#### ■ Safety Standards and CE Marking

Model	Standards	Certification Body	Standards File No.	CE Marking	
MB series	UL507 CAN/CSA-C22.2 No.113	UL	E58377		
	EN60950	VDE	6755ÜG	Low Voltage Directives	
		DEMKO	124017A/DK 98-00981		

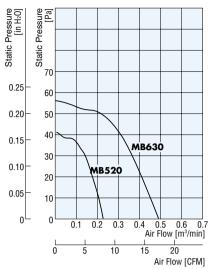
<sup>•</sup> For installation conditions for EN/IEC standards, see Page D-2.

The file No. depends on the type of products. See details on page D-10.

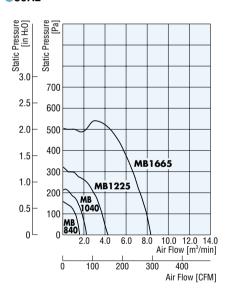
## **Comparisons of Characteristics**

#### ■ AC Centrifugal Blowers

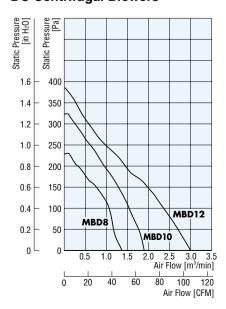
#### ●50Hz



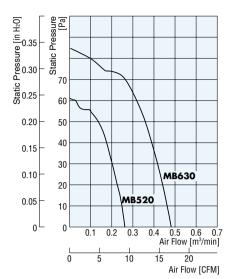
#### ●50Hz



#### ■ DC Centrifugal Blowers



#### ●60Hz



#### ●60Hz

