

High-efficiency, square Centrifugal Blower MBS Series

While evolving the performance of centrifugal blowers towards higher efficiency and lower vibration, user friendliness has also been achieved, with easy installation, easy connection, and so on.

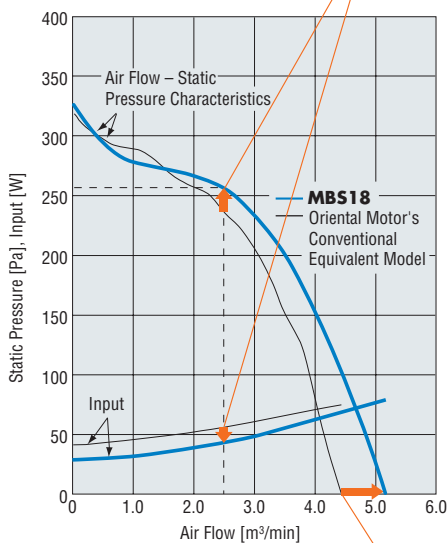
Features

● High-Efficiency, Low-Noise Design

High efficiency and low noise have been achieved thanks to new motor developments and impeller improvement.

● High-Efficiency Design

Input has been reduced 23% from 56 W to 43 W, while static pressure has been increased 6% from 240 Pa to 255 Pa.



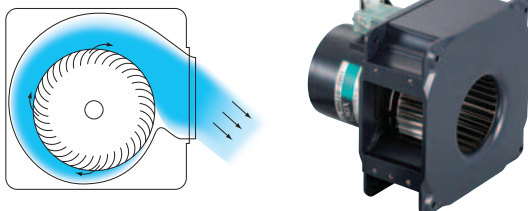
● Low-Noise Design

Max. air flow has been increased 16% from 4.4 m³/min to 5.1 m³/min, while noise remains the same as Oriental Motor's conventional equivalent model at 67 dB.

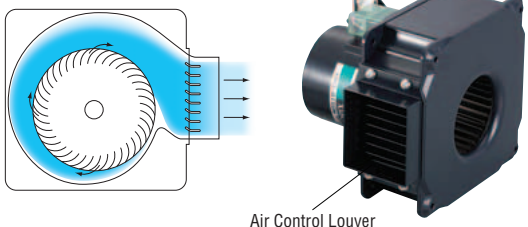
● Air Control Louver

Please use the included air control louver for air-blow cooling. Without an air control louver, air flows along the exhaust outlet and is expelled at an angle. We recommend installing the air control louver on the centrifugal blower and using it to correct the flow of air so that the centrifugal blower's directionality for air-blow cooling, etc. can be utilized.

● Without Air Control Louver



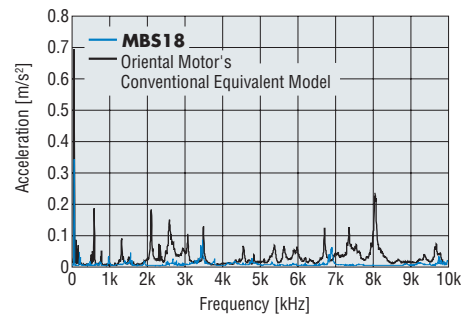
● With Air Control Louver



● The product comes with air control louver, installation screws and power supply cable are included.

● Low-Vibration Design

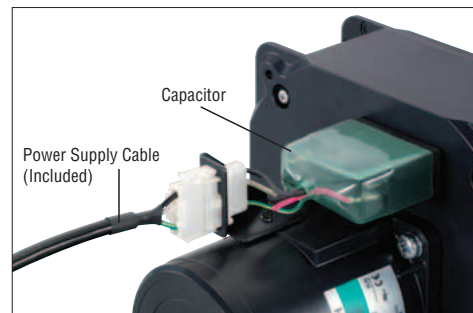
Lower vibration compared to Oriental Motor's conventional equivalent model has been achieved thanks to the magnetic design of the motors and optimally designed impellers.



● This data shows the width of a centrifugal blower casing measured at max. air flow.

● Easy Connection

The labor needed to connect it has been reduced thanks to the connector. The capacitor is already installed and connected to the centrifugal blower, so you just have to insert the power supply cable and connect it to a power source. When replacing the centrifugal blower, all you have to do is disconnect the connector, making maintenance easy.

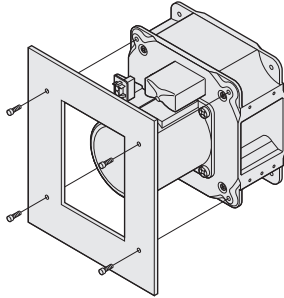


● Easy Installation and Flexible Installation

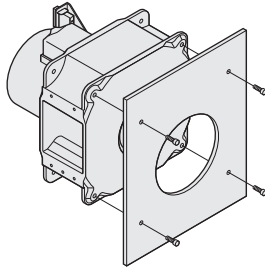
The centrifugal blower's casing is directly installed, making installation easy.

There are also no limits on installation direction, allowing you to install according to the application.

◇ Motor Side Installation

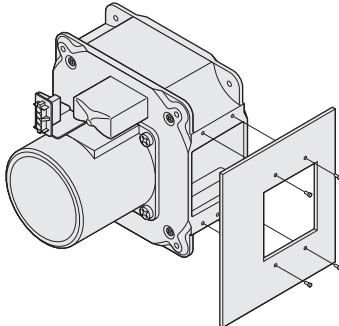


◇ Intake Side Installation

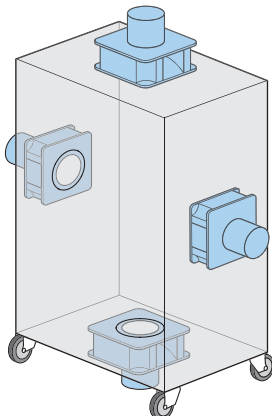


◇ Outlet Side Installation

The outlet can be installed facing any direction.

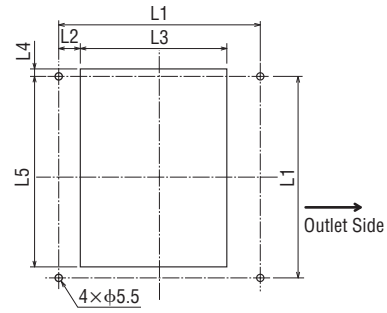


◇ Flexible Installation



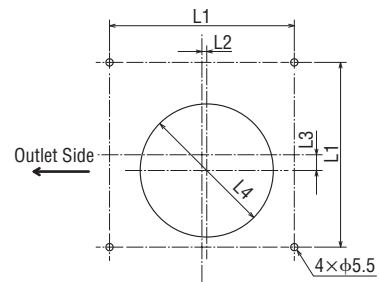
■ Panel Cut-Out (Unit = mm)

● Motor Side Installation



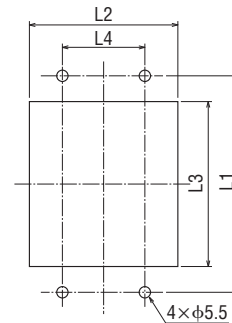
Product Name	L1	L2	L3	L4	L5
MBS18	152.7	16.5	111	5.5	150
MBS20	166.9	24.5	111	8.5	160

● Suction Side Installation



Product Name	L1	L2	L3	L4
MBS18	152.7	4	13	107
MBS20	166.9	3.5	12.5	122

● Exhaust Side Installation



Product Name	L1	L2	L3	L4
MBS18	105	72	80	40
MBS20	120	72	92	40

● Please use installation screws that are board thickness +8 mm max. in length.

Introduction

AC Input
MU

AC Input
MRS

Axial Flow Fans
DC Input
MDS-MD

DC Input
Low-Speed Alarm
MDA

DC Input
Long-Life
MDE

AC Input
High-Efficiency
MBS

Centrifugal Blowers
AC Input
MB

DC Input
MBD

Cross Flow Fans
AC Input
MF

DC Input
MFD

Accessories

Installation

High-efficiency, square AC Centrifugal Blower MBS Series

180 mm



Operating Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$
 Operating Voltage Range: $\pm 10\%$
 (Applies to each voltage)
 Materials
 Motor Case: Die cast aluminum
 Casing: Die cast aluminum
 Impeller: Aluminum
 Overheat Protection: Built-in thermal protector
 Bearings: Ball bearings

Specifications RoHS



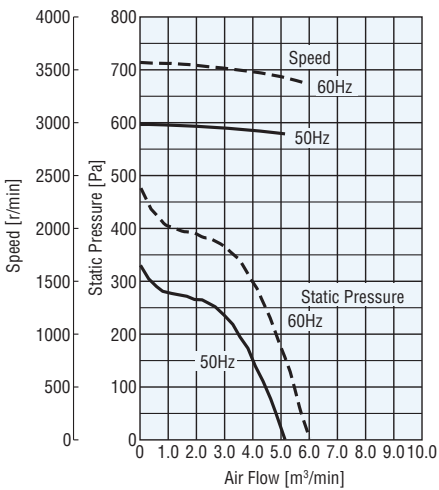
Product Name	Voltage VAC	Frequency Hz	Current A	Input W	Speed r/min	Maximum Air Flow m^3/min	Maximum Static Pressure Pa	Noise Level dB (A)
MBS18-DWHL	Single-Phase 220	50	0.38	80	2900	5.1	320	67
	Single-Phase 220	60	0.58	128	3380	6.0	470	70
	Single-Phase 230	50	0.37	82	2900	5.1	320	67
	Single-Phase 230	60	0.56	128	3380	6.0	470	70

● Safety standards → Page H-2

The following items are included in each product.
 Centrifugal Blower, Power Supply Cable, Air Control Louver, Centrifugal blower installation screws (M5×20 mm), Air control louver installation screws (M5×10 mm), Operating Manual

Air Flow – Static Pressure Characteristics

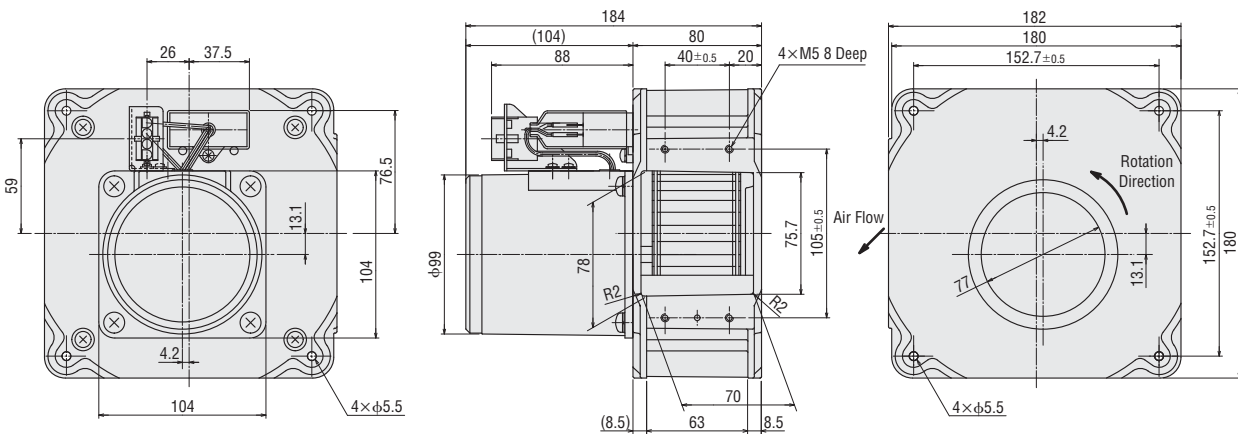
(This is a characteristic when the air control louver is not used.)



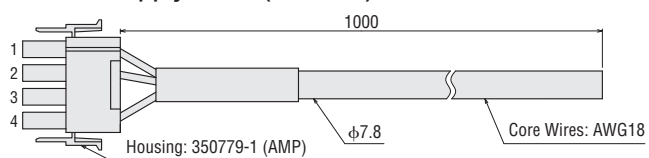
Dimensions (Unit = mm)

Centrifugal Blower

Product Name	Centrifugal Blower Product Name	Mass kg
MBS18-DWHL	MBS18-DWH	4.6

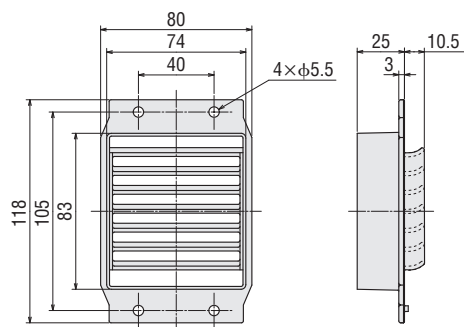


● Power Supply Cable (Included)

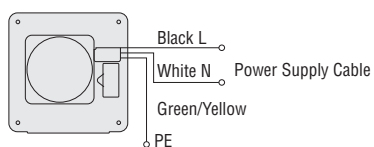


● Air Control Louver (Included)

FCL18
Mass: 0.1 kg



■ Connection Diagram



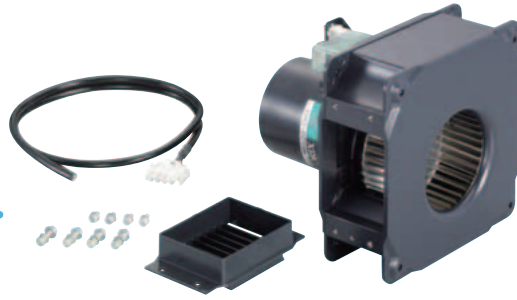
■ Accessories

Product	Product Name	Page
Finger Guard	FG18D	F-120

Introduction
AC Input MU
AC Input MRS
DC Input MDS-MD
DC Input Low-Speed Alarm MDA
DC Input Long-life MDE
AC Input High-Efficiency MBS
AC Input MB
DC Input MBD
AC Input MF
DC Input MFD
Accessories
Installation

High-efficiency, square AC Centrifugal Blower MBS Series

200 mm



Operating Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$
 Operating Voltage Range: $\pm 10\%$
 (Applies to each voltage)
 Materials
 Motor Case: Die cast aluminum
 Casing: Die cast aluminum
 Impeller: Aluminum
 Overheat Protection: Built-in thermal protector
 Bearings: Ball bearings

Specifications RoHS



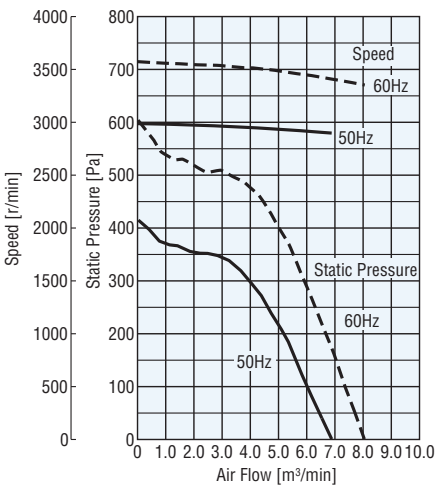
Product Name	Voltage VAC	Frequency Hz	Current A	Input W	Speed r/min	Maximum Air Flow m^3/min	Maximum Static Pressure Pa	Noise Level dB (A)
MBS20-DWHL	Single-Phase 220	50	0.62	136	2900	6.9	420	71
	Single-Phase 220	60	0.99	217	3380	8.1	600	74
	Single-Phase 230	50	0.61	140	2900	6.9	420	71
	Single-Phase 230	60	0.97	219	3380	8.1	600	74

● Safety standards → Page H-2

The following items are included in each product.
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Air Flow – Static Pressure Characteristics

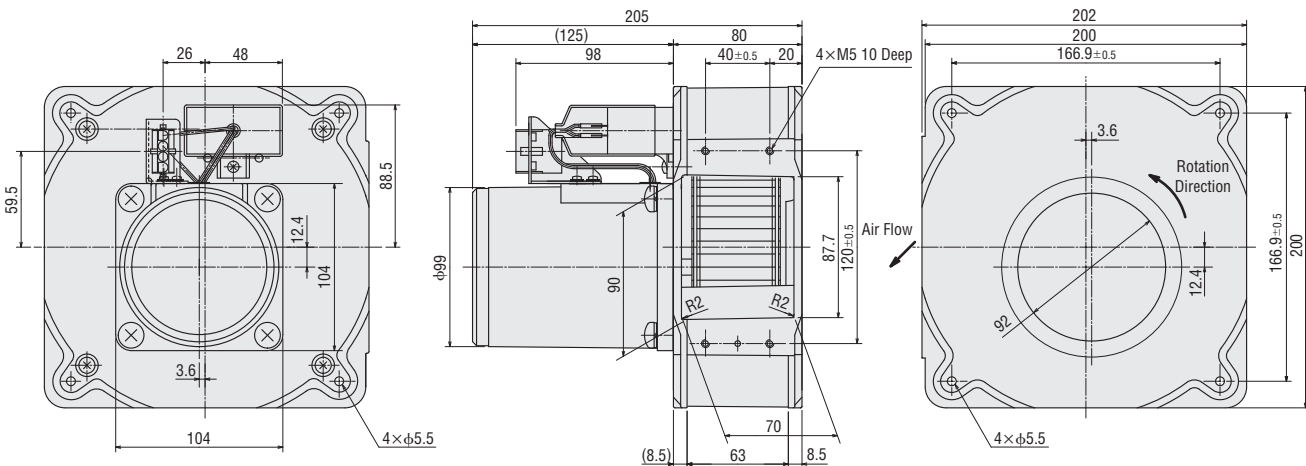
(This is a characteristic when the air control louver is not used.)



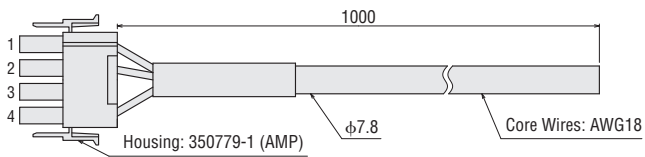
Dimensions (Unit = mm)

Centrifugal Blower

Product Name	Centrifugal Blower Product Name	Mass kg
MBS20-DWHL	MBS20-DWH	5.6

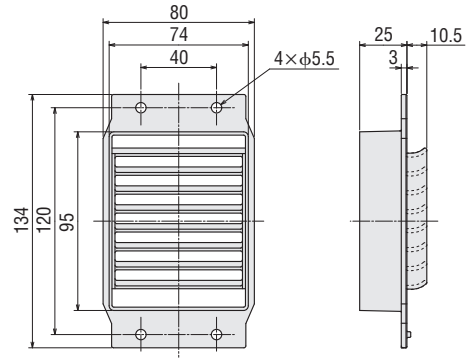


● Power Supply Cable (Included)

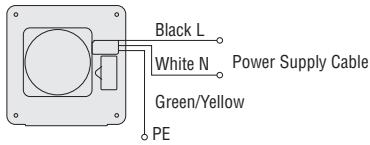


● Air Control Louver (Included)

FCL20
Mass: 0.11 kg



■ Connection Diagram



■ Accessories

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Finger Guard	FG20D	F-120

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