

AC Input/Long-Life MRE Series

For details on this product please refer to our website.

www.orientalmotor.com/catalog



For detailed information about regulations and standards, please see the Oriental Motor website.



View Expanded Product Information, Specifications, CAD, Accessories & more online. Visit www.orientalmotor.com/catalog or use the QR code and select "MRE Series".

These are long life AC power supply input axial flow fans with an expected life of 100,000 hours. The product lineup has 3 available frame sizes: □160 mm (□6.30 in.), □180 mm (□7.09 in.) and □200 mm (□7.87 in.).

Features

Long-Life

A long-life axial flow fan has an expected service life of 100,000 hours (Approx. 11 years).

In addition to the reduction of the temperature rise in the bearings, grease deterioration is suppressed. Furthermore, vibration resistance and shock resistance have been improved by using larger bearings. Measures have been taken for longer service life of circuit/coupling and reduction of failure rate. The products are designed to avoid not only initial failure but also random failure and abrasion failure, so that continuous operation of 100,000 hours or more (retention rate of 90% or more) is achieved.

Expected Service Life

The expected service life indicates that at least 90% of the fans will satisfy the following criteria when the acceleration test is performed at an ambient temperature of 60°C (140°F).

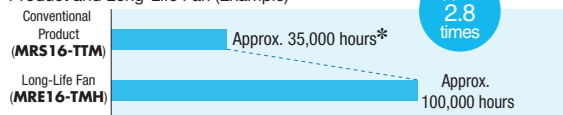
Criteria

- Speed (at rated voltage): 70% or more of rated value
- Input current (at rated voltage): 130% or less of rated value

◇ Lower Maintenance Costs and Overall Costs

A long-life axial flow fan has an expected service life of 100,000 hours. Compared to conventional products, they require fewer replacements, resulting in reduction of the overall costs.

▼ Service Life Comparison between Conventional Product and Long-Life Fan (Example)

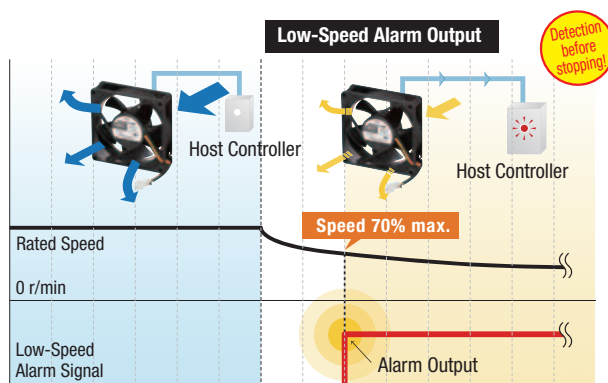


*Estimated life is 35,000 hours when the ambient temperature is 60°C (140°F). The estimated life is an estimated value calculated using the formula for the life of the bearing grease. The estimated life varies depending on the product.

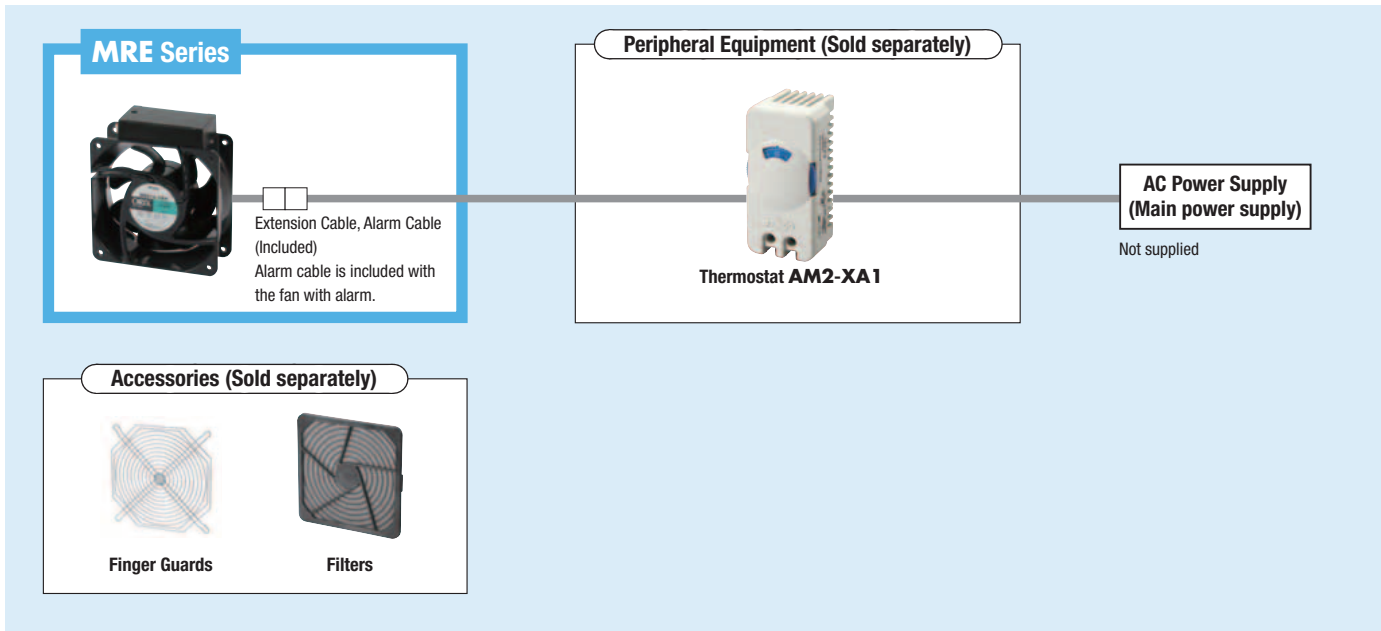
Fans with Low-Speed Alarms

An alarm is output when the fan speed drops due to the service life of the fan or the ingress of foreign objects.

This makes it possible to order and replace the fan with a new one before it stops. If multiple cooling fans are being used, it is possible to only replace the cooling fan with decreased cooling capacity thus minimizing the effect on the equipment.



System Configuration



Product Number

Fan Only

MRE 16 - B B H

① ② ③ ④ ⑤

MRE 16 - T H 2

① ② ③ ⑤ ⑥

Fan Kit

T - MRE16-BBH - G

① ② ③

①	Series	MRE: MRE Series
②	Frame Size	16: 160 mm (6.30 in.), 18: 180 mm (7.09 in.), 20: 200 mm (7.87 in.)
③	Power Supply Voltage	T: Three-phase 220/230 VAC B: Single-phase 110/115 VAC E: Single-phase 220/230/240 VAC
④	Additional Function	Blank: No additional functions A: Low-Speed Alarm, Contact Alarm Type (Normal Operation: Contact OFF) B: Low-Speed Alarm, Contact Alarm Type (Normal Operation: Contact ON) M: Low-Speed Alarm, Electronic Alarm Type
⑤	Connection Type	H: With Extension Cable
⑥	Reference Number	

①	Fan Kit Order Code
②	Fan Product Name
③	-G: With finger guard and installation screws

Overview, Product Series

Axial Flow Fans

AC Input Low-Power Consumption **EMU**

AC Input Compact Size **MU**

AC Input Large Size, Large Air Flow **MRS**

AC Input Long-Life **MRE**

DC Input **MDS**
MD

DC Input Alarm **MDA**

DC Input Variable Flow **MDV**

DC Input Long-Life **MDE**

DC Input Splash Proof **MDP**

Centrifugal Blowers

AC Input **MB**
DC Input **MBD**

Cross Flow Fans

AC Input **MF**
DC Input **MFD**

Enclosure Fan Modules

Thermostat

Accessories

Installation

Product line

No Additional Function

Size	Power Supply Voltage VAC	Fan Only		Fan Kit	
		Product Name	List Price	Product Name	List Price
□160 mm - 62 mm Thick (□6.30 in. - 2.44 in. Thick)	Three-Phase 220/230	MRE16-TH2	\$159.00	T-MRE16-TH2-G	\$166.00
	Single-Phase 110/115	MRE16-BH	\$159.00	T-MRE16-BH-G	\$166.00
	Single-Phase 220/230/240	MRE16-EH	\$159.00	T-MRE16-EH-G	\$166.00
□180 mm - 90 mm Thick (□7.09 in. - 3.54 in. Thick)	Three-Phase 220/230	MRE18-TH	\$242.00	T-MRE18-TH-G	\$254.00
	Single-Phase 110/115	MRE18-BH	\$242.00	T-MRE18-BH-G	\$254.00
	Single-Phase 220/230/240	MRE18-EH	\$242.00	T-MRE18-EH-G	\$254.00
□200 mm - 90 mm Thick (□7.87 in. - 3.54 in. Thick)	Three-Phase 220/230	MRE20-TH	\$299.00	T-MRE20-TH-G	\$314.00

Low-Speed Alarm Type

Size	Additional Function	Power Supply Voltage VAC	Fan Only		Fan Kit	
			Product Name	List Price	Product Name	List Price
□160 mm - 62 mm Thick (□6.30 in. - 2.44 in. Thick)	Contact Alarm Type (Normal Operation: Contact ON)	Three-Phase 220/230	MRE16-TBH	\$212.00	T-MRE16-TBH-G	\$220.00
	Electronic Alarm Type	Three-Phase 220/230	MRE16-TMH	\$257.00	T-MRE16-TMH-G	\$265.00
	Contact Alarm Type (Normal Operation: Contact OFF)	Three-Phase 220/230	MRE16-TAH	\$257.00	T-MRE16-TAH-G	\$265.00
	Contact Alarm Type (Normal Operation: Contact ON)	Single-Phase 110/115	MRE16-BBH	\$212.00	T-MRE16-BBH-G	\$220.00
	Electronic Alarm Type	Single-Phase 110/115	MRE16-BMH	\$257.00	T-MRE16-BMH-G	\$265.00
	Contact Alarm Type (Normal Operation: Contact OFF)	Single-Phase 110/115	MRE16-BAH	\$257.00	T-MRE16-BAH-G	\$265.00
	Contact Alarm Type (Normal Operation: Contact ON)	Single-Phase 220/230/240	MRE16-EBH	\$212.00	T-MRE16-EBH-G	\$220.00
	Electronic Alarm Type	Single-Phase 220/230/240	MRE16-EMH	\$257.00	T-MRE16-EMH-G	\$265.00
□180 mm - 90 mm Thick (□7.09 in. - 3.54 in. Thick)	Contact Alarm Type (Normal Operation: Contact ON)	Three-Phase 220/230	MRE18-TBH	\$295.00	T-MRE18-TBH-G	\$307.00
	Electronic Alarm Type	Three-Phase 220/230	MRE18-TMH	\$364.00	T-MRE18-TMH-G	\$376.00
	Contact Alarm Type (Normal Operation: Contact OFF)	Three-Phase 220/230	MRE18-TAH	\$364.00	T-MRE18-TAH-G	\$376.00
	Contact Alarm Type (Normal Operation: Contact ON)	Single-Phase 110/115	MRE18-BBH	\$295.00	T-MRE18-BBH-G	\$307.00
	Electronic Alarm Type	Single-Phase 110/115	MRE18-BMH	\$364.00	T-MRE18-BMH-G	\$376.00
	Contact Alarm Type (Normal Operation: Contact OFF)	Single-Phase 110/115	MRE18-BAH	\$364.00	T-MRE18-BAH-G	\$376.00
	Contact Alarm Type (Normal Operation: Contact ON)	Single-Phase 220/230/240	MRE18-EBH	\$295.00	T-MRE18-EBH-G	\$307.00
	Electronic Alarm Type	Single-Phase 220/230/240	MRE18-EMH	\$364.00	T-MRE18-EMH-G	\$376.00
□200 mm - 90 mm Thick (□7.87 in. - 3.54 in. Thick)	Contact Alarm Type (Normal Operation: Contact ON)	Three-Phase 220/230	MRE20-TBH	\$353.00	T-MRE20-TBH-G	\$368.00
	Electronic Alarm Type	Three-Phase 220/230	MRE20-TMH	\$353.00	T-MRE20-TMH-G	\$368.00



For details (specifications, characteristics, dimensions and others) on these products please refer to either to our website, contact technical support or your nearest Oriental Motor sales office.

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Overview,
Product
Series

Axial
Flow
Fans

AC Input
Low-Power
Consumption
EMU

AC Input
Compact Size
MU

AC Input
Large Size,
Large Air Flow
MRS

AC Input
Long-Life
MRE

DC Input
MDS
MD

DC Input
Alarm
MDA

DC Input
Variable Flow
MDV

DC Input
Long-Life
MDE

DC Input
Splash Proof
MDP

Centrifugal
Blowers

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MB
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Cross Flow Fans

AC Input
MF
DC Input
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Modules

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Accessories

Installation