

# AC Input/Large Size, Large Air Flow MRS Series



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



The **MRS** Series fans are large airflow, high static pressure and high-efficient AC input axial flow fans, available in frame sizes ranging from □140 mm (□5.51 in.) to □250 mm (□9.84 in.).

A three-phase 220/230 VAC fan can be used in combination with an inverter.



See Full Product Details Online  
[www.orientalmotor.com](http://www.orientalmotor.com)

- Manual
- Specifications
- Dimensions
- CAD
- Characteristics
- Connection and Operation

## Features

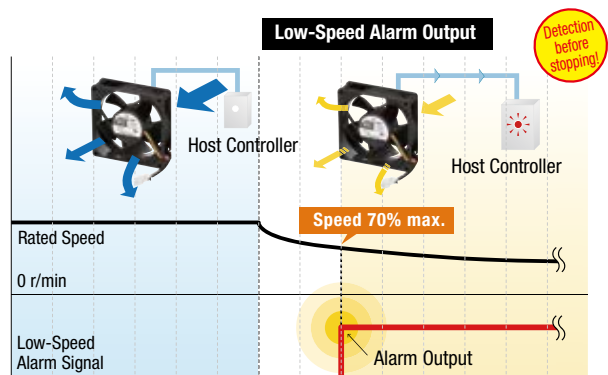
### Product Line

A product line of 5 fan sizes are available, with frame sizes from □140 mm (□5.51 in.) to □250 mm (□9.84 in.).

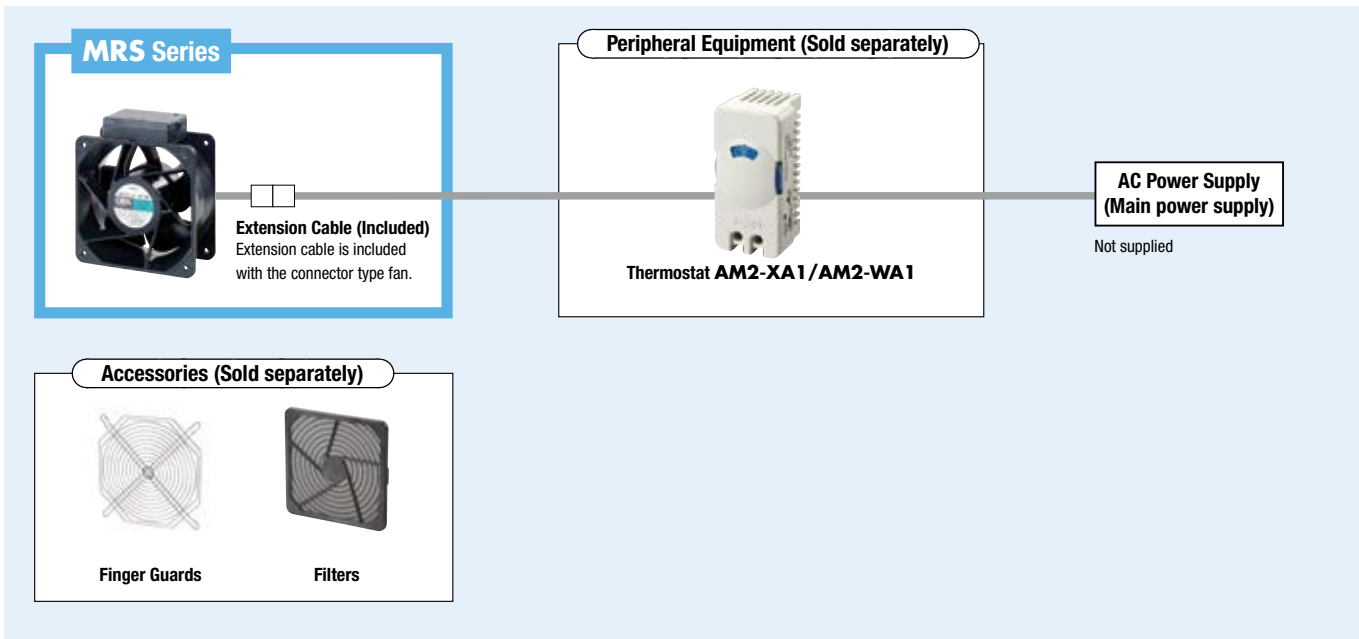
		MRS14	MRS16	MRS18	MRS20	MRS25
Frame Size		□140 mm – 47 mm Thick (□5.51 in. – 1.85 in. Thick)	□160 mm – 62 mm Thick (□6.30 in. – 2.44 in. Thick)	□180 mm – 90 mm Thick (□7.09 in. – 3.54 in. Thick)	□200 mm – 90 mm Thick (□7.87 in. – 3.54 in. Thick)	□250 mm – 120 mm Thick (□9.84 in. – 4.72 in. Thick)
						
Power Supply Voltage	Three-Phase 220/230 VAC	●	●	●	●	●
	Single-Phase 110/115 VAC	–	●	●	●	●
	Single-Phase 220/230, 230 VAC	–	●	●	●	●
Low-Speed Alarm	Without alarm (Standard Type)	●	●	●	●	●
	Electronic Alarm Type	●	●	●	●	●
	Contact Alarm Type	–	●	–	–	●
Combination with inverter		–	●	●	●	●

### 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 effects on the equipment.



## System Configuration



## Product Number

### Fan Only

**MRS 18 - B M H**

- ①      ②      ③      ④      ⑤

### Fan Kit

**T- MRS18-BMH G**

- ①      ②      ③

①	Series	<b>MRS: MRS Series</b>
②	Frame Size	<b>14:</b> 140 mm (5.51 in.) <b>16:</b> 160 mm (6.30 in.) <b>18:</b> 180 mm (7.09 in.) <b>20:</b> 200 mm (7.87 in.) <b>25:</b> 250 mm (9.84 in.)
③	Power Supply Voltage	<b>T:</b> Three-Phase 220/230 VAC <b>B:</b> Single-Phase 110/115 VAC <b>D:</b> Single-Phase 220/230, 230 VAC
④	Additional Functions	<b>M:</b> Low-Speed Alarm, Electronic Alarm Type <b>B:</b> Low-Speed Alarm, Contact Alarm Type <b>TM:</b> Low-Speed Alarm, Electronic Alarm Type <b>TA:</b> Low-Speed Alarm, Contact Alarm Type <b>UL:</b> Standard Type
⑤	Connection Type	Blank: Connection with lead wire type or terminal box type <b>H:</b> Connector Type

①	Fan Kit Order Code
②	Fan Product Name
③	<b>G, -G:</b> With finger guard and installation screws <b>F, -F:</b> With filter and installation screws

Overview

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

## Product Line

### Standard Type

Size	Power Supply Voltage VAC	Fan Only		Fan Kit		With Filter	
		Product Name	List Price	Product Name	List Price	Product Name	List Price
□140 mm – 47 mm Thick (□5.51 in. – 1.85 in. Thick)	Three-Phase 220/230	<b>MRS14-TUL</b>	\$89.00	<b>T-MRS14-TUL-G</b>	\$96.00	–	–
□160 mm – 62 mm Thick (□6.30 in. – 2.44 in. Thick)	Three-Phase 220/230	<b>MRS16-TUL</b>	\$104.00	<b>T-MRS16-TUL-G</b>	\$115.00	<b>T-MRS16-TUL-F</b>	\$122.00
	Single-Phase 110/115	<b>MRS16-BUL</b>	\$104.00	<b>T-MRS16-BUL-G</b>	\$115.00	<b>T-MRS16-BUL-F</b>	\$122.00
	Single-Phase 230	<b>MRS16-DUL</b>	\$104.00	<b>T-MRS16-DUL-G</b>	\$115.00	<b>T-MRS16-DUL-F</b>	\$122.00
□180 mm – 90 mm Thick (□7.09 in. – 3.54 in. Thick)	Three-Phase 220/230	<b>MRS18-TH</b>	\$207.00	<b>T-MRS18-THG</b>	\$225.00	<b>T-MRS18-THF</b>	\$236.00
		<b>MRS18-TUL</b>	\$179.00	<b>T-MRS18-TUL-G</b>	\$197.00	<b>T-MRS18-TUL-F</b>	\$208.00
	Single-Phase 110/115	<b>MRS18-BH</b>	\$197.00	<b>T-MRS18-BHG</b>	\$215.00	<b>T-MRS18-BHF</b>	\$226.00
		<b>MRS18-BUL</b>	\$169.00	<b>T-MRS18-BUL-G</b>	\$187.00	<b>T-MRS18-BUL-F</b>	\$198.00
	Single-Phase 230	<b>MRS18-DH</b>	\$207.00	<b>T-MRS18-DHG</b>	\$225.00	<b>T-MRS18-DHF</b>	\$236.00
		<b>MRS18-DUL</b>	\$179.00	<b>T-MRS18-DUL-G</b>	\$197.00	<b>T-MRS18-DUL-F</b>	\$208.00
□200 mm – 90 mm Thick (□7.87 in. – 3.54 in. Thick)	Three-Phase 220/230	<b>MRS20-TUL</b>	\$285.00	<b>T-MRS20-TUL-G</b>	\$307.00	–	–
	Single-Phase 110/115	<b>MRS20-BUL</b>	\$266.00	<b>T-MRS20-BUL-G</b>	\$288.00	–	–
	Single-Phase 230	<b>MRS20-DUL</b>	\$285.00	<b>T-MRS20-DUL-G</b>	\$307.00	–	–
□250 mm – 120 mm Thick (□9.84 in. – 4.72 in. Thick)	Three-Phase 220/230	<b>MRS25-T</b>	\$310.00	<b>T-MRS25-T-G</b>	\$336.00	–	–
	Single-Phase 110/115	<b>MRS25-B</b>	\$310.00	<b>T-MRS25-B-G</b>	\$336.00	–	–
	Single-Phase 220/230	<b>MRS25-D</b>	\$310.00	<b>T-MRS25-D-G</b>	\$336.00	–	–

### Low-Speed Alarm Type

Size	Additional Function	Power Supply Voltage VAC	Fan Only		Fan Kit		With Filter	
			Product Name	List Price	Product Name	List Price	Product Name	List Price
□140 mm – 47 mm Thick (□5.51 in. – 1.85 in. Thick)	Electronic Alarm Type	Three-Phase 220/230	<b>MRS14-TTM</b>	\$152.00	<b>T-MRS14-TTM-G</b>	\$159.00	–	–
□160 mm – 62 mm Thick (□6.30 in. – 2.44 in. Thick)	Electronic Alarm Type	Three-Phase 220/230	<b>MRS16-TTM</b>	\$200.00	<b>T-MRS16-TTM-G</b>	\$211.00	<b>T-MRS16-TTM-F</b>	\$218.00
	Contact Alarm Type (Normal Operation: Contact OFF)	Three-Phase 220/230	<b>MRS16-TTA</b>	\$184.00	<b>T-MRS16-TTA-G</b>	\$195.00	<b>T-MRS16-TTA-F</b>	\$202.00
	Electronic Alarm Type	Single-Phase 110/115	<b>MRS16-BTM</b>	\$195.00	<b>T-MRS16-BTM-G</b>	\$206.00	<b>T-MRS16-BTM-F</b>	\$213.00
	Contact Alarm Type (Normal Operation: Contact OFF)	Single-Phase 110/115	<b>MRS16-BTA</b>	\$184.00	<b>T-MRS16-BTA-G</b>	\$195.00	<b>T-MRS16-BTA-F</b>	\$202.00
	Electronic Alarm Type	Single-Phase 230	<b>MRS16-DTM</b>	\$200.00	<b>T-MRS16-DTM-G</b>	\$211.00	<b>T-MRS16-DTM-F</b>	\$218.00
	Contact Alarm Type (Normal Operation: Contact OFF)	Single-Phase 230	<b>MRS16-DTA</b>	\$184.00	<b>T-MRS16-DTA-G</b>	\$195.00	<b>T-MRS16-DTA-F</b>	\$202.00
□180 mm – 90 mm Thick (□7.09 in. – 3.54 in. Thick)	Electronic Alarm Type	Three-Phase 220/230	<b>MRS18-TMH</b>	\$306.00	<b>T-MRS18-TMHG</b>	\$324.00	<b>T-MRS18-TMHF</b>	\$335.00
	Electronic Alarm Type	Three-Phase 220/230	<b>MRS18-TTM</b>	\$295.00	<b>T-MRS18-TTM-G</b>	\$313.00	<b>T-MRS18-TTM-F</b>	\$324.00
	Electronic Alarm Type	Single-Phase 110/115	<b>MRS18-BMH</b>	\$292.00	<b>T-MRS18-BMHG</b>	\$310.00	<b>T-MRS18-BMHF</b>	\$321.00
	Electronic Alarm Type	Single-Phase 110/115	<b>MRS18-BTM</b>	\$281.00	<b>T-MRS18-BTM-G</b>	\$299.00	<b>T-MRS18-BTM-F</b>	\$310.00
	Electronic Alarm Type	Single-Phase 230	<b>MRS18-DMH</b>	\$306.00	<b>T-MRS18-DMHG</b>	\$324.00	<b>T-MRS18-DMHF</b>	\$335.00
	Electronic Alarm Type	Single-Phase 230	<b>MRS18-DTM</b>	\$295.00	<b>T-MRS18-DTM-G</b>	\$313.00	<b>T-MRS18-DTM-F</b>	\$324.00
□200 mm – 90 mm Thick (□7.87 in. – 3.54 in. Thick)	Electronic Alarm Type	Three-Phase 220/230	<b>MRS20-TM</b>	\$366.00	<b>T-MRS20-TM-G</b>	\$388.00	–	–
	Electronic Alarm Type	Single-Phase 110/115	<b>MRS20-BM</b>	\$346.00	<b>T-MRS20-BM-G</b>	\$368.00	–	–
	Electronic Alarm Type	Single-Phase 230	<b>MRS20-DM</b>	\$366.00	<b>T-MRS20-DM-G</b>	\$388.00	–	–
□250 mm – 120 mm Thick (□9.84 in. – 4.72 in. Thick)	Electronic Alarm Type	Three-Phase 220/230	<b>MRS25-TM</b>	\$384.00	<b>T-MRS25-TM-G</b>	\$410.00	–	–
	Contact Alarm Type (Normal Operation: Contact ON)	Three-Phase 220/230	<b>MRS25-TB</b>	\$394.00	<b>T-MRS25-TB-G</b>	\$420.00	–	–
	Electronic Alarm Type	Single-Phase 110/115	<b>MRS25-BM</b>	\$384.00	<b>T-MRS25-BM-G</b>	\$410.00	–	–
	Contact Alarm Type (Normal Operation: Contact ON)	Single-Phase 110/115	<b>MRS25-BB</b>	\$394.00	<b>T-MRS25-BB-G</b>	\$420.00	–	–
	Electronic Alarm Type	Single-Phase 220/230	<b>MRS25-DM</b>	\$384.00	<b>T-MRS25-DM-G</b>	\$410.00	–	–
	Contact Alarm Type (Normal Operation: Contact ON)	Single-Phase 220/230	<b>MRS25-DB</b>	\$394.00	<b>T-MRS25-DB-G</b>	\$420.00	–	–

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

[www.orientalmotor.com](http://www.orientalmotor.com)



Overview

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