

AC Input/Large Size, Large Air Flow MRS Series

<Additional Information>
 ● Technical reference → Page H-1
 ● Regulations & Standards → Page I-2



● 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.).



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

Features

Product Line

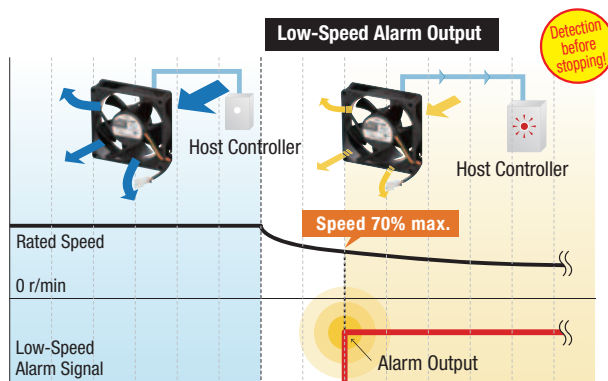
A product line of 5 fan sizes are available, with frame sizes from □140 mm (□5.51 in.) to □250 mm (□9.84 in.).

		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	–	●	●	●	●
Low-Speed Alarm	Single-Phase 220/230, 230 VAC	–	●	●	●	●
	Without alarm (Standard Type)	●	●	●	●	●
	Electronic Alarm Type	●	●	●	●	●
	Contact Alarm Type	–	●	–	–	●

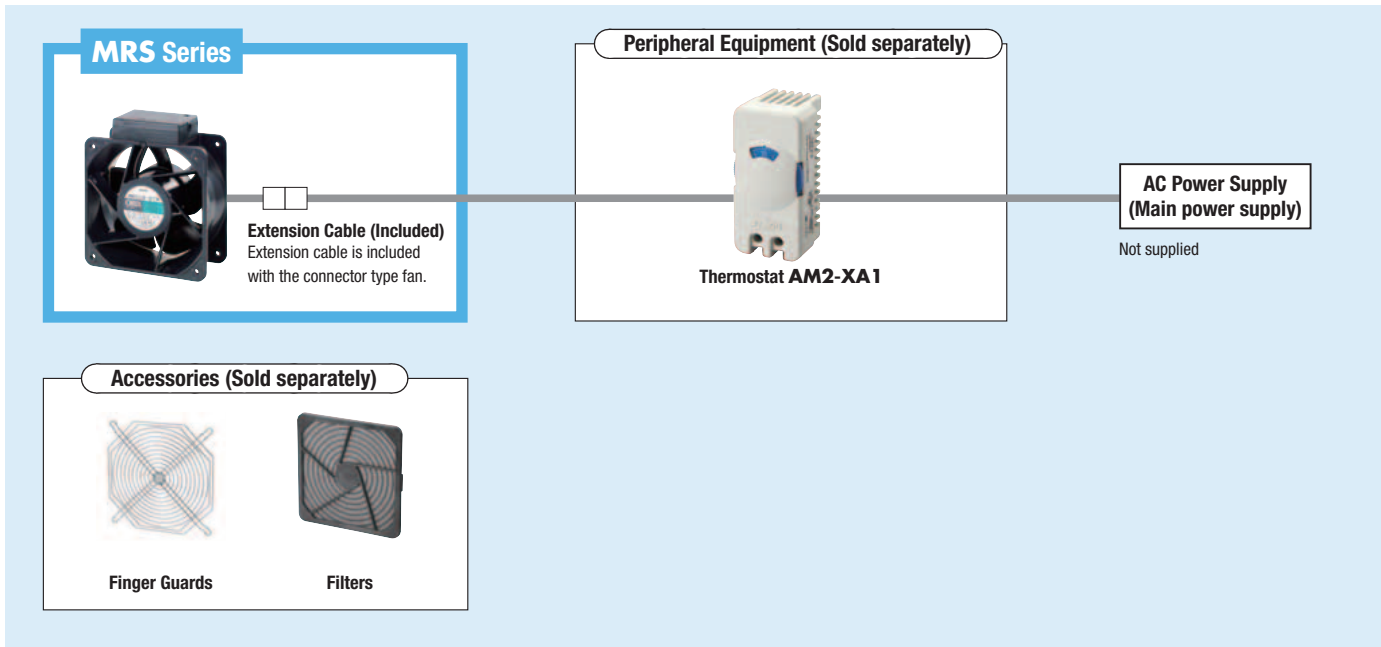
Fans with Low-Speed Alarms

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



● Example of System Configuration

Fan	Sold Separately	
	Thermostat	Finger Guard
MRS18-BMH	AM2-XA1	FG18D
\$292.00	\$35.00	\$18.00

● The system configuration shown above is an example. Other combinations are also available.

Product Number

● Fan Only

MRS 18 - B M H

① ② ③ ④ ⑤

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

● Fan Kit

T- MRS18-BMH G

① ② ③

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

MRS Series

140 mm – 47 mm Thick
 5.51 in. – 1.85 in. Thick



With Alarm

Operating Voltage Range: ±10%
Overheat Protection: Built-in Thermal Protector
Color
Frame: Dark Gray Blades: Black
Materials
Frame: Die Cast Aluminum
Blades: Polycarbonate (Flammability grade V-0)

80 mm
 3.15 in.)

92 mm
 3.62 in.)

119 mm
 4.69 in.)

140 mm
 5.51 in.)

160 mm
 6.30 in.)

180 mm
 7.09 in.)

200 mm
 7.87 in.)

250 mm
 9.84 in.)



Specifications

Product Name		Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level
Standard Type	Low-Speed Alarm, Electronic Alarm Type (Alarm specifications: ①)						m ³ /min	CFM	Pa	inH ₂ O	
MRS14-TUL	MRS14-TTM	Three-Phase 220	60	0.09	19	2900	5.0	177	107	0.43	51
		Three-Phase 230	60	0.09	20	2950	5.0	177	109	0.437	51

● Alarm specifications ① → Page G-14 ● Details of regulations and standards → Page I-2

Product Line

● Fan Only

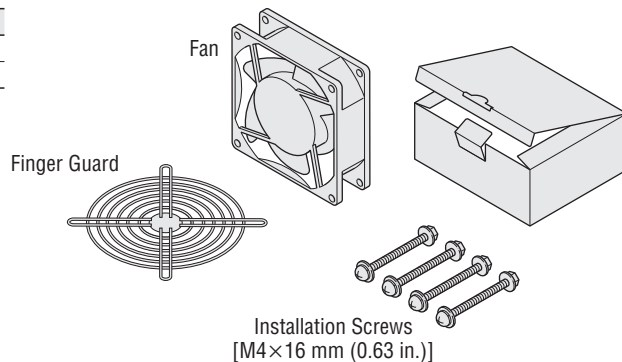
Product Name	List Price
MRS14-TUL	\$89.00
MRS14-TTM	\$152.00

The following items are included with each product.
Fan, Operating Manual

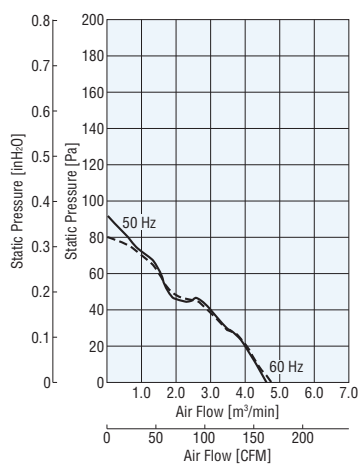
● Fan Kit

Product Name	List Price
T-MRS14-TUL-G	\$96.00
T-MRS14-TTM-G	\$159.00

The following items are included in each kit.



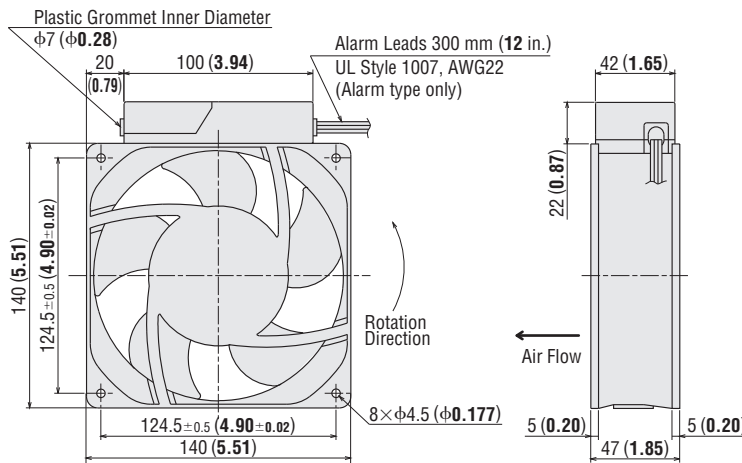
Air Flow – Static Pressure Characteristics



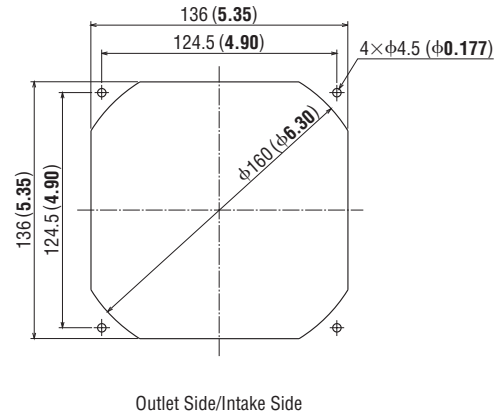
Dimensions Unit = mm (in.)

Mass: 0.9 kg (2.0 lb.)

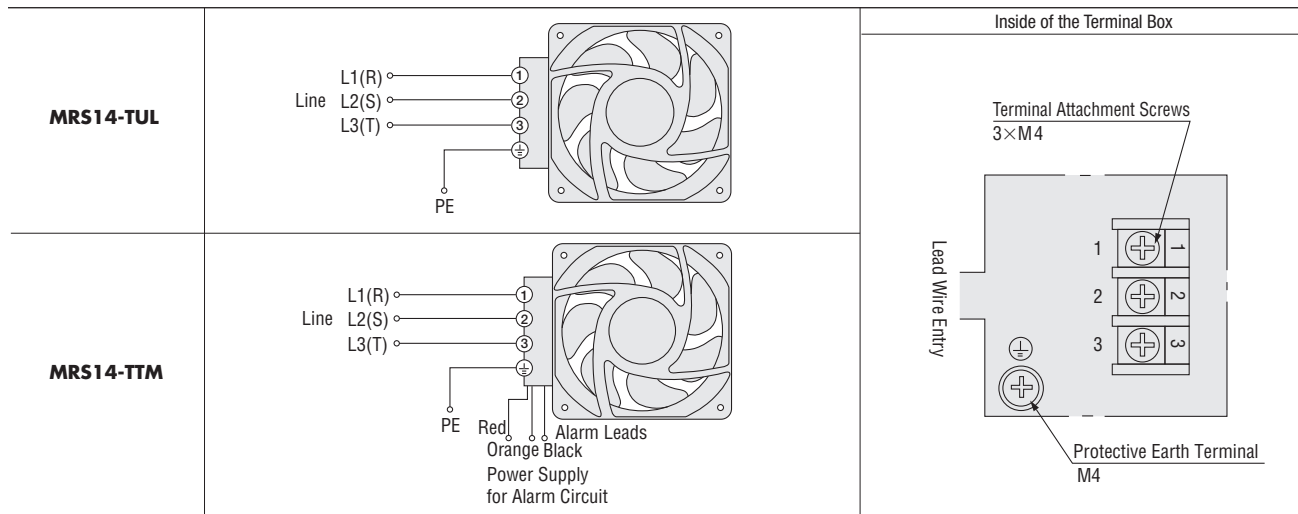
2D CAD E004 3D CAD



Panel Cut-Out Unit = mm (in.)



Connection Diagrams



Accessories

Product	Product Name	Page
Finger Guard	FG14D	G-108
Filter	FL14	G-111

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

MRS Series

160 mm – 62 mm Thick
(6.30 in. – 2.44 in. Thick)



With Alarm

Operating Voltage Range: ±10%
Overheat Protection: Built-in Thermal Protector

Color

Frame: Dark Gray Blades: Black

Materials

Frame: Die Cast Aluminum
Blades: Polycarbonate (Flammability grade V-0)



80 mm
(3.15 in.)

92 mm
(3.62 in.)

119 mm
(4.69 in.)

140 mm
(5.51 in.)

160 mm
(6.30 in.)

180 mm
(7.09 in.)

200 mm
(7.87 in.)

250 mm
(9.84 in.)

Specifications

Product Name			Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Standard Type	Low-Speed Alarm							m ³ /min	CFM	Pa	inH ₂ O		
	Electronic Alarm Type (Alarm specifications: ②)	Contact Alarm Type (Alarm specifications: ③)	VAC	Hz	A	W	r/min						
MRS16-TUL	MRS16-TTM	MRS16-TTA	Three-Phase 220	60	0.18	41	3300	7.3	258	157	0.63	53	-
			Three-Phase 230	60	0.18	43	3300	7.3	258	157	0.63	53	
MRS16-BUL	MRS16-BTM	MRS16-BTA	Single-Phase 110	60	0.48	48	3300	7.3	258	157	0.63	53	3.0
			Single-Phase 115	60	0.49	51	3300	7.3	258	157	0.63	53	
MRS16-DUL	MRS16-DTM	MRS16-DTA	Single-Phase 230	60	0.25	51	3300	7.3	258	157	0.63	53	3.0

● Alarm specifications ②, ③ → Page G-14 ● Details of regulations and standards → Page I-2

Product Line

● Fan Only

Product Name	List Price
MRS16-TUL	\$104.00
MRS16-BUL	\$104.00
MRS16-DUL	\$104.00
MRS16-TTM	\$200.00
MRS16-BTM	\$195.00
MRS16-DTM	\$200.00
MRS16-TTA	\$184.00
MRS16-BTA	\$184.00
MRS16-DTA	\$184.00

The following items are included with each product.

- **MRS16-□UL**
Fan, Operating Manual
- **MRS16-□TM**
Fan, Capacitor*, Capacitor Cap*, Operating Manual
*Single-Phase fans only
- **MRS16-□TA**
Fan, Capacitor*, Operating Manual
*Single-Phase fans only

● Fan Kit

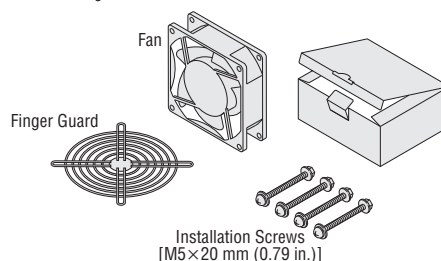
◇ With Finger Guard

Product Name	List Price
T-MRS16-TUL-G	\$115.00
T-MRS16-BUL-G	\$115.00
T-MRS16-DUL-G	\$115.00
T-MRS16-TTM-G	\$211.00
T-MRS16-BTM-G	\$206.00
T-MRS16-DTM-G	\$211.00
T-MRS16-TTA-G	\$195.00
T-MRS16-BTA-G	\$195.00
T-MRS16-DTA-G	\$195.00

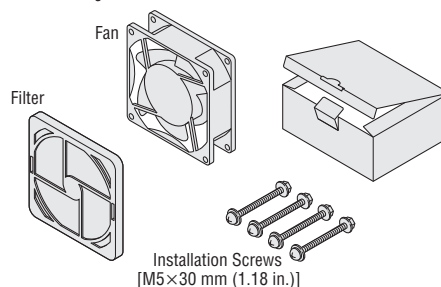
◇ With Filter

Product Name	List Price
T-MRS16-TUL-F	\$122.00
T-MRS16-BUL-F	\$122.00
T-MRS16-DUL-F	\$122.00
T-MRS16-TTM-F	\$218.00
T-MRS16-BTM-F	\$213.00
T-MRS16-DTM-F	\$218.00
T-MRS16-TTA-F	\$202.00
T-MRS16-BTA-F	\$202.00
T-MRS16-DTA-F	\$202.00

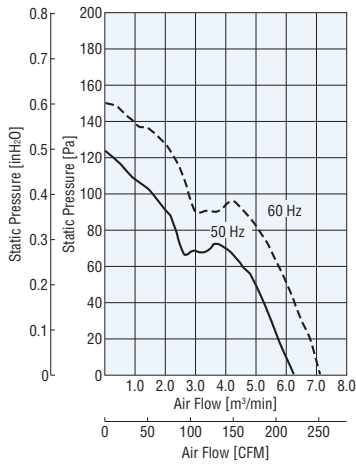
The following items are included in each kit.



The following items are included in each kit.



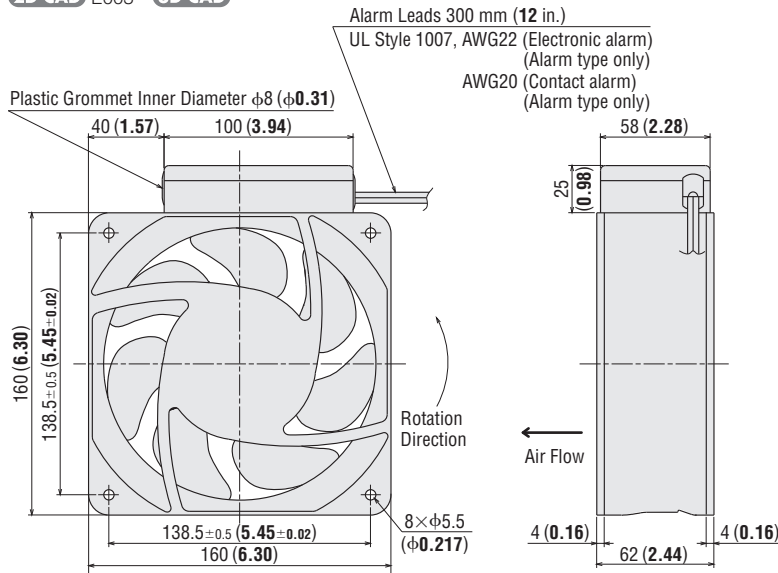
Air Flow – Static Pressure Characteristics



Dimensions Unit = mm (in.)

Mass: 1.35 kg (3.0 lb.)

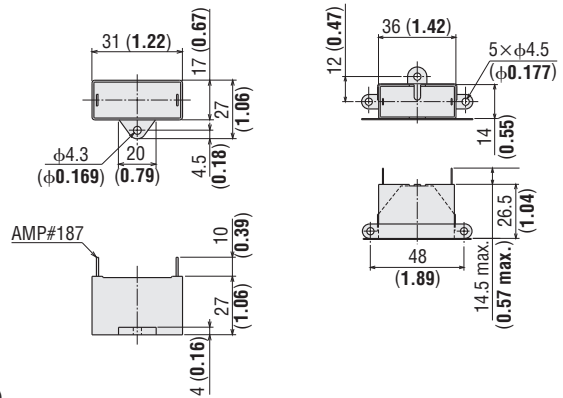
2D CAD E003 3D CAD



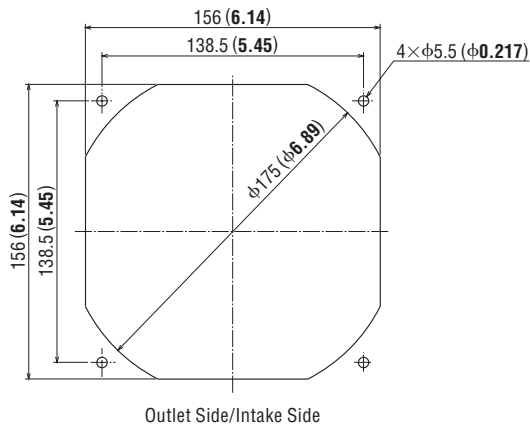
Capacitor (Included)

◇ For **MRS16-□TM**
 CH30UL Mass: 23 g (0.81 oz.)
 (A capacitor and capacitor cap are included with single-phase alarm type fans.)

◇ For **MRS16-□TA**
 CH30 Mass: 30 g (1.1 oz.)
 (A capacitor is included with single-phase alarm type fans.)



Panel Cut-Out Unit = mm (in.)



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**

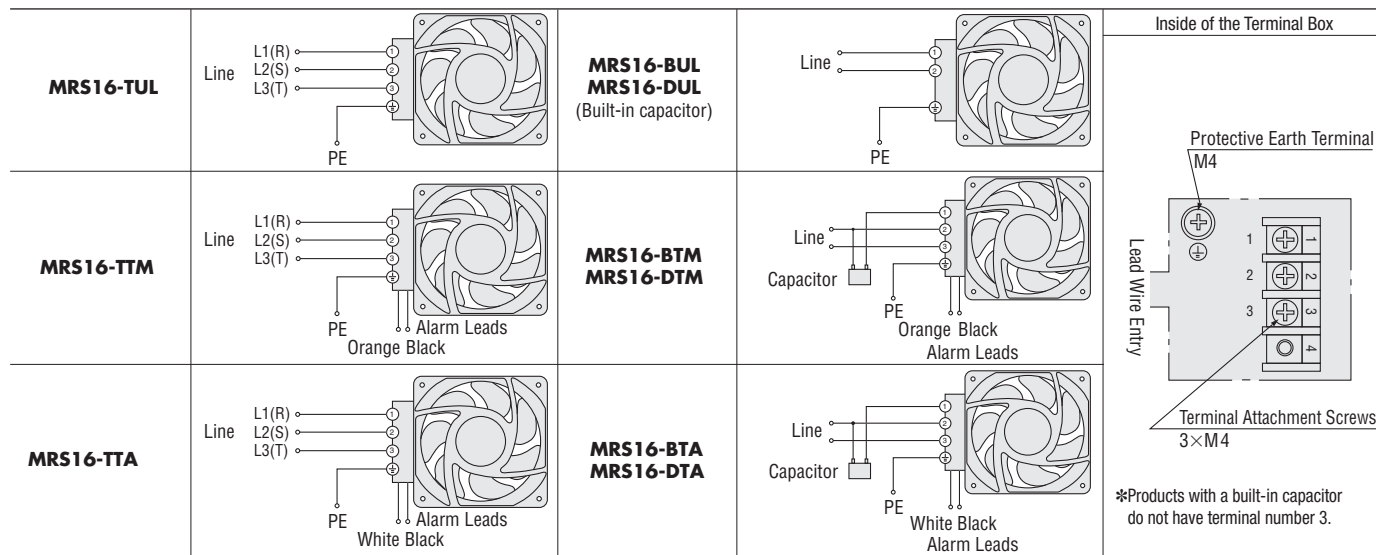
Enclosure Fan Modules

Thermostat

Accessories

Installation

Connection Diagrams



● How to connect a capacitor → Page G-117

Accessories

Product	Product Name	Page
Finger Guard	FG16D	G-108
Filter	FL16	G-111

Thermostat

The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment's "environmental" performance relative to energy savings, noise reduction, etc.



Thermostat **AM2-XA1**
Number of Connectable Fans: 5
● Page → G-104

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

MRS Series

180 mm – 90 mm Thick
(7.09 in. – 3.54 in. Thick)



Terminal Box Type

With Alarm

Operating Voltage Range: $\pm 10\%$

Overheat Protection: Built-in Thermal Protector

Color

Frame: Dark Gray Blades: Black

Materials

Frame: Die Cast Aluminum

Blades: Polycarbonate (Flammability grade V-0)

 80 mm
(3.15 in.)

 92 mm
(3.62 in.)

 119 mm
(4.69 in.)

 140 mm
(5.51 in.)

 160 mm
(6.30 in.)

 180 mm
(7.09 in.)

 200 mm
(7.87 in.)

 250 mm
(9.84 in.)


Specifications

Product Name			Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Type	Connector Type	Terminal Box Type	VAC	Hz	A	W	r/min	m ³ /min	CFM	Pa	inH ₂ O	dB (A)	μ F
Standard Type	MRS18-TH	MRS18-TUL	Three-Phase 220	60	0.4	74	3350	12.8	452	245	0.982	61	–
			Three-Phase 230	60	0.4	76	3350	12.8	452	245	0.982	61	–
	MRS18-BH	MRS18-BUL	Single-Phase 110	60	1.0	81	3350	12.8	452	245	0.982	61	6.0
			Single-Phase 115	60	1.0	84	3350	12.8	452	245	0.982	61	6.0
	MRS18-DH	MRS18-DUL	Single-Phase 230	60	0.5	77	3350	12.8	452	245	0.982	61	6.0
			–	–	–	–	–	–	–	–	–	–	–
Low-Speed Alarm, Electronic Alarm Type (Alarm specifications: ②)	MRS18-TMH	MRS18-TTM	Three-Phase 220	60	0.4	74	3350	12.8	452	245	0.982	61	–
			Three-Phase 230	60	0.4	76	3350	12.8	452	245	0.982	61	–
	MRS18-BMH	MRS18-BTM	Single-Phase 110	60	1.0	81	3350	12.8	452	245	0.982	61	6.0
			Single-Phase 115	60	1.0	84	3350	12.8	452	245	0.982	61	6.0
	MRS18-DMH	MRS18-DTM	Single-Phase 230	60	0.5	77	3350	12.8	452	245	0.982	61	6.0
			–	–	–	–	–	–	–	–	–	–	–

● Only terminal box type is VDE certified.

● Alarm specifications ② → Page G-14 ● Details of regulations and standards → Page I-2

Product Line

● Fan Only

◇ Connector Type

Product Name	List Price
MRS18-TH	\$207.00
MRS18-BH	\$197.00
MRS18-DH	\$207.00
MRS18-TMH	\$306.00
MRS18-BMH	\$292.00
MRS18-DMH	\$306.00

The following items are included with each product.

Fan, Cable with Connector (Cable for Power Supply, Cable for Alarm*), Operating Manual
* Only for Fan with Alarm

◇ Terminal Box Type

Product Name	List Price
MRS18-TUL	\$179.00
MRS18-BUL	\$169.00
MRS18-DUL	\$179.00
MRS18-TTM	\$295.00
MRS18-BTM	\$281.00
MRS18-DTM	\$295.00

The following items are included with each product.

- **MRS18-□UL**
Fan, Operating Manual
- **MRS18-□TM**
Fan, Capacitor*, Capacitor Cap*, Operating Manual
* Single-Phase fans only

● Fan Kit

◇ With Finger Guard

● Connector Type

Product Name	List Price
T-MRS18-THG	\$225.00
T-MRS18-BHG	\$215.00
T-MRS18-DHG	\$225.00
T-MRS18-TMHG	\$324.00
T-MRS18-BMHG	\$310.00
T-MRS18-DMHG	\$324.00

◇ With Filter

● Connector Type

Product Name	List Price
T-MRS18-THF	\$236.00
T-MRS18-BHF	\$226.00
T-MRS18-DHF	\$236.00
T-MRS18-TMHF	\$335.00
T-MRS18-BMHF	\$321.00
T-MRS18-DMHF	\$335.00

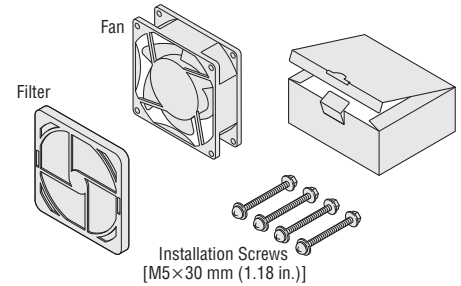
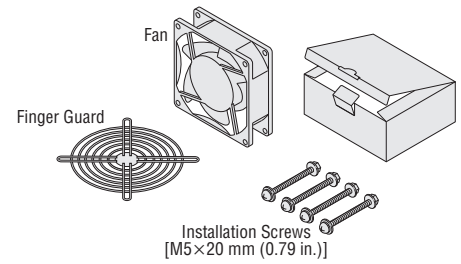
● Terminal Box Type

Product Name	List Price
T-MRS18-TUL-G	\$197.00
T-MRS18-BUL-G	\$187.00
T-MRS18-DUL-G	\$197.00
T-MRS18-TTM-G	\$313.00
T-MRS18-BTM-G	\$299.00
T-MRS18-DTM-G	\$313.00

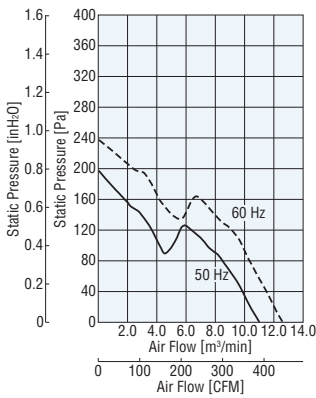
● Terminal Box Type

Product Name	List Price
T-MRS18-TUL-F	\$208.00
T-MRS18-BUL-F	\$198.00
T-MRS18-DUL-F	\$208.00
T-MRS18-TTM-F	\$324.00
T-MRS18-BTM-F	\$310.00
T-MRS18-DTM-F	\$324.00

The following items are included in each kit.



Air Flow – Static Pressure Characteristics



Dimensions Unit = mm (in.)

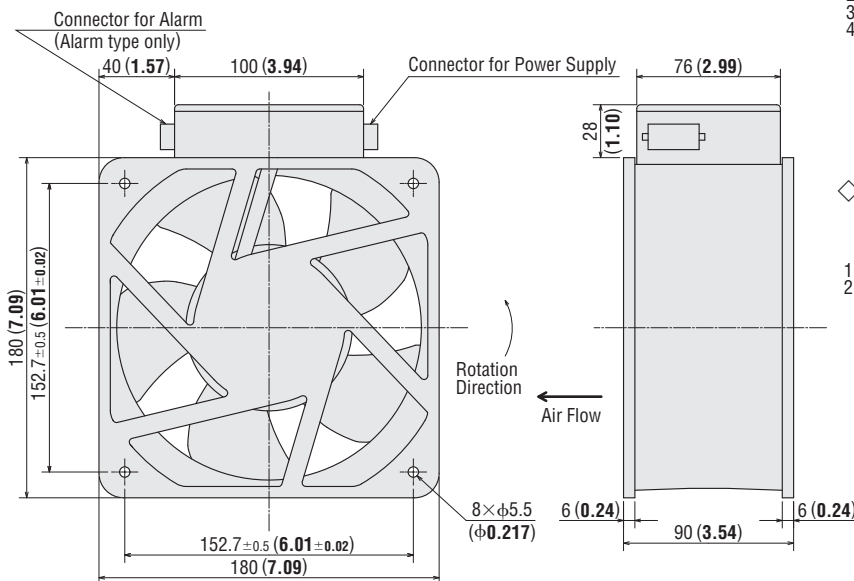
● Connector Type

◇ Fan

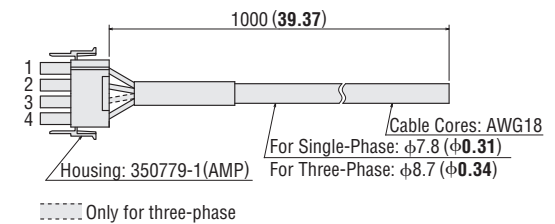
Mass: 2.5 kg (5.5 lb.)

Alarm Type **2D CAD** E126 **3D CAD**

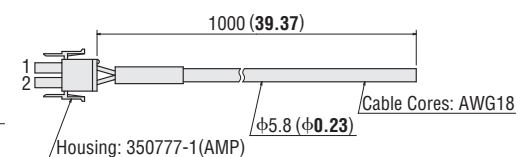
Standard Type **2D CAD** E127 **3D CAD**



◇ Cable for Connection to Power Supply (Included)



◇ Cable for Alarm (Included with alarm type)



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** **MBD**

Cross Flow Fans

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

Enclosure Fan Modules

Thermostat

Accessories

Installation

● Terminal Box Type

◇ Fan

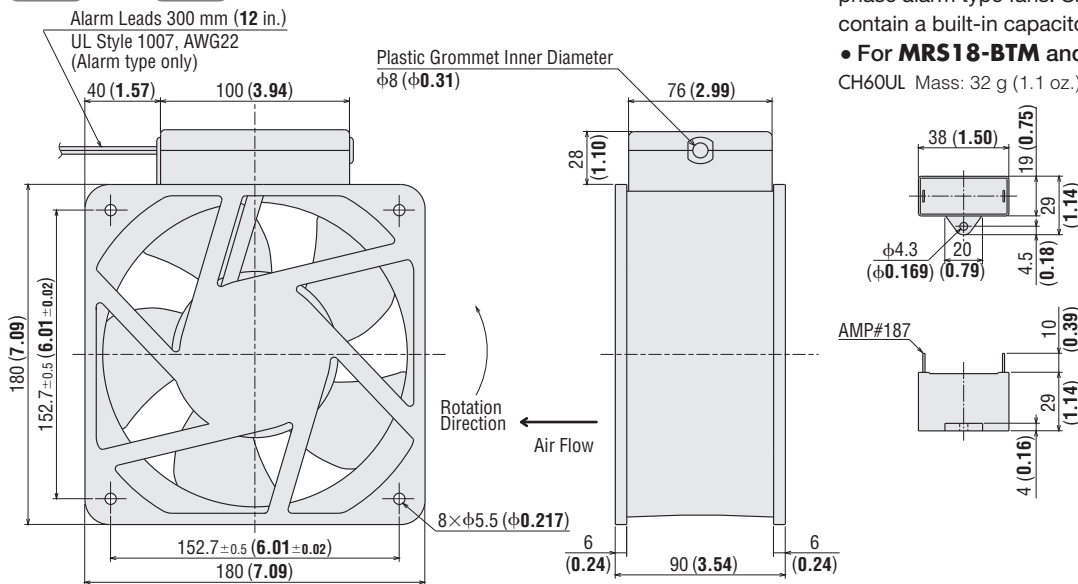
Mass: 2.5 kg (5.5 lb.)

2D CAD E002 3D CAD

Alarm Leads 300 mm (12 in.)
UL Style 1007, AWG22
(Alarm type only)

Plastic Grommet Inner Diameter
φ8 (φ0.31)

- 80 mm (3.15 in.)
- 92 mm (3.62 in.)
- 119 mm (4.69 in.)
- 140 mm (5.51 in.)
- 160 mm (6.30 in.)
- 180 mm (7.09 in.)
- 200 mm (7.87 in.)
- 250 mm (9.84 in.)

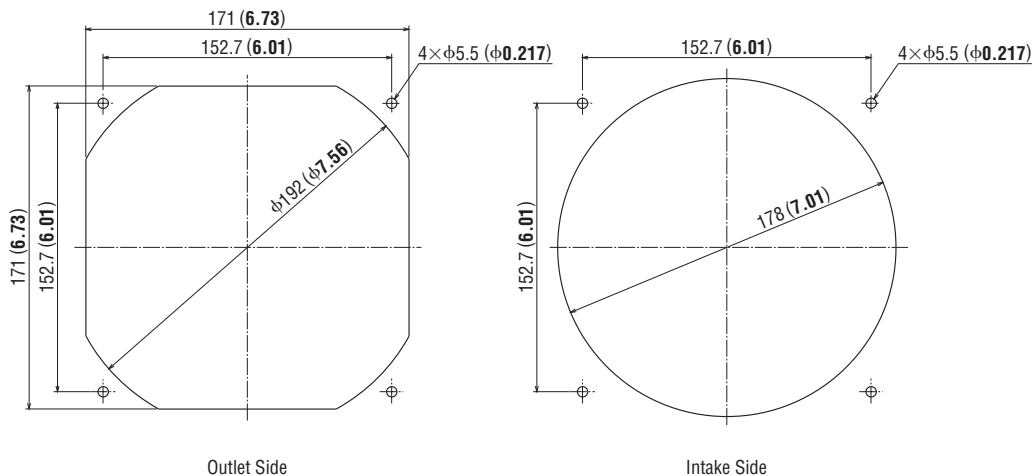


◇ Capacitor (Included)

Capacitor and capacitor cap are included with single-phase alarm type fans. Single-phase standard type fans contain a built-in capacitor.

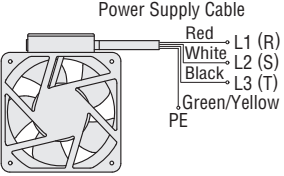
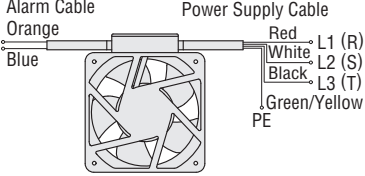
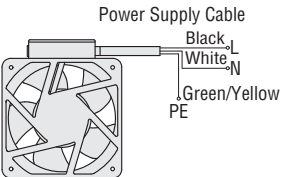
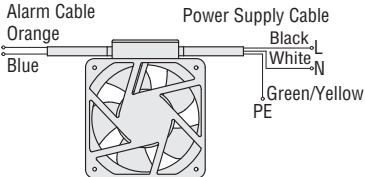
● For **MRS18-BTM** and **MRS18-DTM**
CH60UL Mass: 32 g (1.1 oz.)

■ Panel Cut-Out Unit = mm (in.)

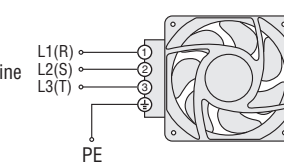
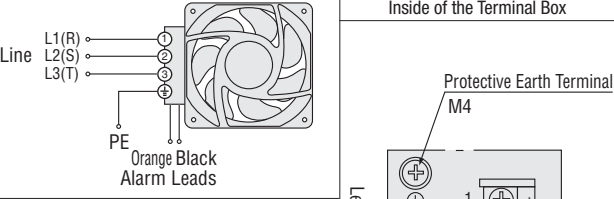
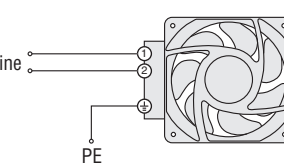
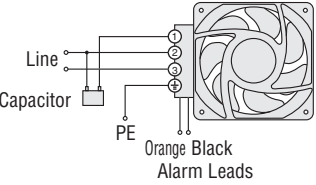


Connection Diagrams

Connector Type

<p>MRS18-TH</p>		<p>MRS18-TMH</p>	
<p>MRS18-BH MRS18-DH (Built-in capacitor)</p>		<p>MRS18-BMH MRS18-DMH (Built-in capacitor)</p>	

Terminal Box Type

<p>MRS18-TUL</p>		<p>MRS18-TTM</p>	
<p>MRS18-BUL MRS18-DUL (Built-in capacitor)</p>		<p>MRS18-BTM MRS18-DTM</p>	 <p>Terminal Attachment Screws* 3×M4</p> <p>*Products with a built-in capacitor do not have terminal number 3.</p>

How to connect a capacitor → Page G-117

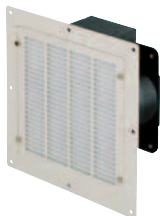
Accessories

Product	Product Name	Page
Finger Guard	FG18D	G-109
Filter	FL18	G-111

Enclosure Fan Modules → G-96

This product integrates the **MRS** Series fan with peripheral equipment such as the cover, filter media, frame and finger guard. Optimized cooling for control boxes.

Slit Metal Plate IP4X Type



→ G-101

Thermostat

The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment's "environmental" performance relative to energy savings, noise reduction, etc.



Thermostat **AM2-XA1**
Number of Connectable Fans: 2
● Page → G-104

Variable Flow Type

In the **MRS** Series, a speed control type is also available in the □180 mm (□7.09 in.) size. Suitable for applications in which adjustment of the air flow is necessary, or applications in which a temporary decrease in noise is needed. For details, check the Oriental Motor website or contact the Oriental Motor sales office.



MRS Series

200 mm – 90 mm Thick
(7.87 in. – 3.54 in. Thick)



With Alarm

Operating Voltage Range: ±10%
Overheat Protection: Built-in Thermal Protector
Color
Frame: Dark Gray Blades: Black
Materials
Frame: Die Cast Aluminum
Blades: Polycarbonate (Flammability grade V-0)

80 mm
(3.15 in.)

92 mm
(3.62 in.)

119 mm
(4.69 in.)

140 mm
(5.51 in.)

160 mm
(6.30 in.)

180 mm
(7.09 in.)

200 mm
(7.87 in.)

250 mm
(9.84 in.)



Specifications

Product Name		Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Standard Type	Low-Speed Alarm, Electronic Alarm Type (Alarm specifications: ②)						VAC	Hz	A	W		
MRS20-TUL	MRS20-TM	Three-Phase 220	60	0.4	95	3400	15.5	547	265	1.06	61	-
		Three-Phase 230	60	0.4	95	3400	15.5	547	265	1.06	61	-
MRS20-BUL	MRS20-BM	Single-Phase 110	60	1.0	95	3400	15.5	547	255	1.02	61	6.0
		Single-Phase 115	60	1.0	95	3400	15.5	547	265	1.06	61	6.0
MRS20-DUL	MRS20-DM	Single-Phase 230	60	0.5	95	3400	15.5	547	265	1.06	61	6.0

● Alarm specifications ② → Page G-14 ● Details of regulations and standards → Page I-2

Product Line

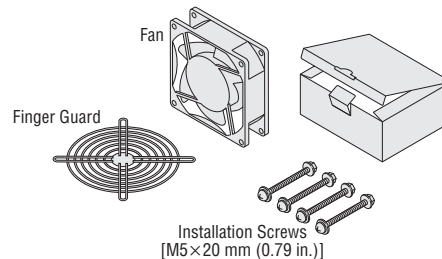
● Fan Only

Product Name	List Price
MRS20-TUL	\$285.00
MRS20-BUL	\$266.00
MRS20-DUL	\$285.00
MRS20-TM	\$366.00
MRS20-BM	\$346.00
MRS20-DM	\$366.00

● Fan Kit

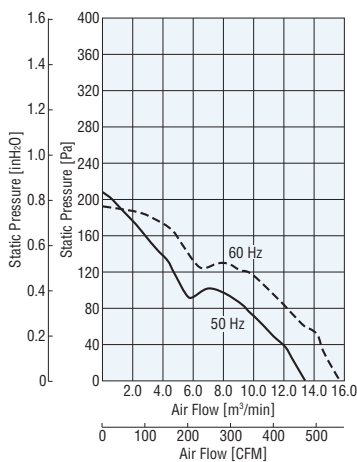
Product Name	List Price
T-MRS20-TUL-G	\$307.00
T-MRS20-BUL-G	\$288.00
T-MRS20-DUL-G	\$307.00
T-MRS20-TM-G	\$388.00
T-MRS20-BM-G	\$368.00
T-MRS20-DM-G	\$388.00

The following items are included in each kit.



The following items are included with each product.
Fan, Capacitor*, Capacitor Cap*, Operating Manual
*Single-Phase fans only

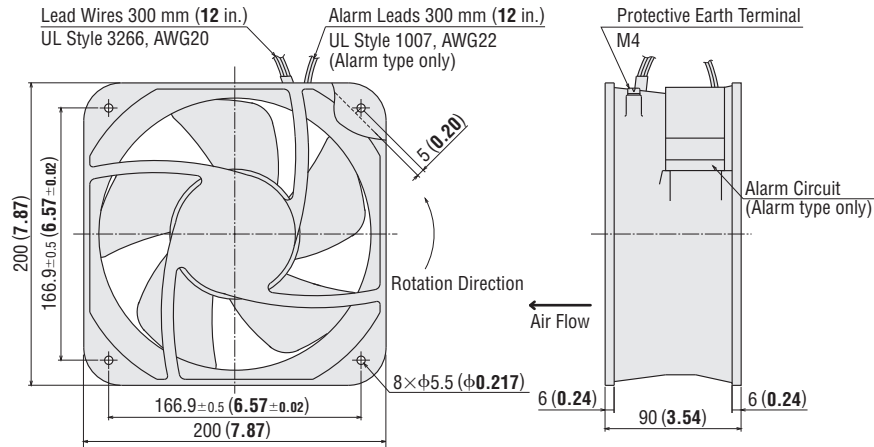
Air Flow – Static Pressure Characteristics



Dimensions Unit = mm (in.)

Mass: 2.5 kg (5.5 lb.)

2D CAD E001 3D CAD

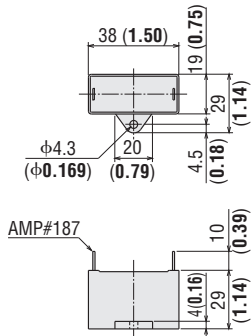


Capacitor (Included)

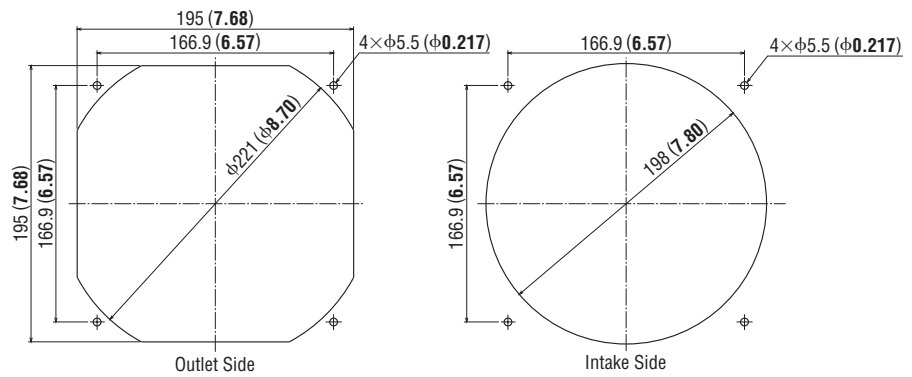
(A capacitor and capacitor cap are included with single-phase fans.)

◇ For **MRS20-B** and **MRS20-D**

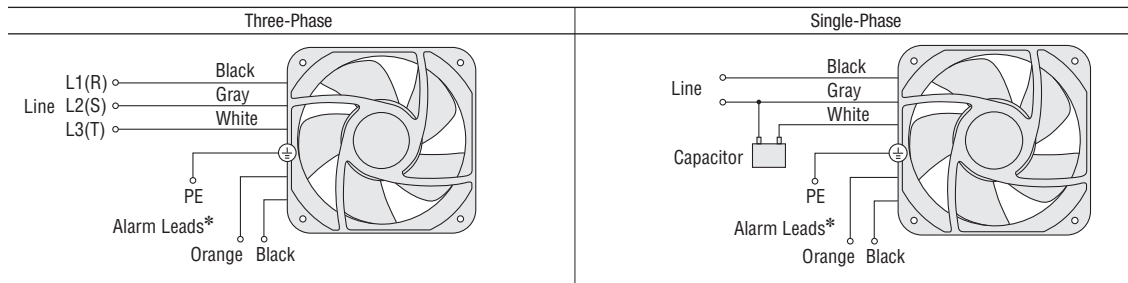
CH60UL Mass: 32 g (1.1 oz.)



Panel Cut-Out Unit = mm (in.)



Connection Diagrams



* Alarm type only

● How to connect a capacitor → Page G-117

Accessories

Product	Product Name	Page
Finger Guard	FG20D	G-109

Thermostat

The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment's "environmental" performance relative to energy savings, noise reduction, etc.



Thermostat **AM2-XA1**

Number of Connectable Fans: 2

- Connect the power-supply lead wire by relaying to AWG 18~13.
- Page → G-104

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

MRS Series

250 mm – 120 mm Thick
(9.84 in. – 4.72 in. Thick)



With Alarm

Operating Voltage Range: ±10%
Overheat Protection: Built-in Thermal Protector
Color
Frame: Dark Gray Blades: Black
Materials
Frame: Die Cast Aluminum
Blades: Polycarbonate (Flammability grade V-0)



80 mm
(3.15 in.)

92 mm
(3.62 in.)

119 mm
(4.69 in.)

140 mm
(5.51 in.)

160 mm
(6.30 in.)

180 mm
(7.09 in.)

200 mm
(7.87 in.)

250 mm
(9.84 in.)

Specifications

Product Name			Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Standard Type	Low-Speed Alarm							m³/min	CFM	Pa	inH ₂ O		
	Electronic Alarm Type (Alarm specifications: ②)	Contact Alarm Type (Alarm specifications: ④)	VAC	Hz	A	W	r/min						
MRS25-T	MRS25-TM	MRS25-TB	Three-Phase 220	50	0.4	80	2850	21	742	320	1.28	58	-
			Three-Phase 220	60	0.4	105	3320	25	883	390	1.57	62	
			Three-Phase 230	60	0.4	105	3340	25	883	410	1.65	63	
MRS25-B	MRS25-BM	MRS25-BB	Single-Phase 110	60	1.1	120	3280	24	848	340	1.36	62	16
			Single-Phase 115	60	1.1	125	3300	24	848	360	1.45	62	
MRS25-D	MRS25-DM	MRS25-DB	Single-Phase 220	50	0.4	95	2820	21	742	310	1.24	58	4.5
			Single-Phase 220	60	0.7	130	3260	24	848	360	1.45	62	
			Single-Phase 230	50	0.5	100	2830	21	742	320	1.28	58	
			Single-Phase 230	60	0.7	135	3290	24	848	360	1.45	62	

● The products above are ErP Directive-compliant.
● Alarm specifications ②, ④ → Page G-14 ● Details of regulations and standards → Page I-2

Product Line

Fan Only

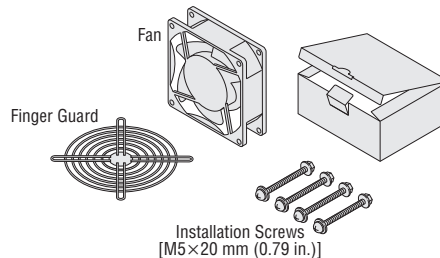
Product Name	List Price
MRS25-T	\$310.00
MRS25-B	\$310.00
MRS25-D	\$310.00
MRS25-TM	\$384.00
MRS25-BM	\$384.00
MRS25-DM	\$384.00
MRS25-TB	\$394.00
MRS25-BB	\$394.00
MRS25-DB	\$394.00

The following items are included with each product.
Fan, Capacitor*, Capacitor Cap*, Operating Manual
*Single-Phase fans only

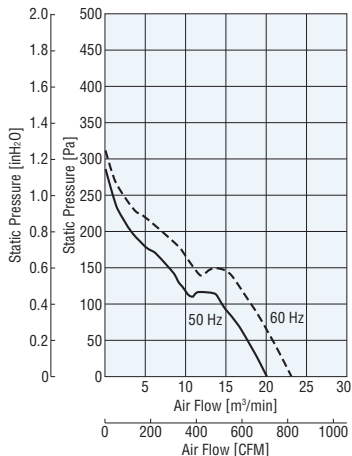
Fan Kit

Product Name	List Price
T-MRS25-T-G	\$336.00
T-MRS25-B-G	\$336.00
T-MRS25-D-G	\$336.00
T-MRS25-TM-G	\$410.00
T-MRS25-BM-G	\$410.00
T-MRS25-DM-G	\$410.00
T-MRS25-TB-G	\$420.00
T-MRS25-BB-G	\$420.00
T-MRS25-DB-G	\$420.00

The following items are included in each kit.



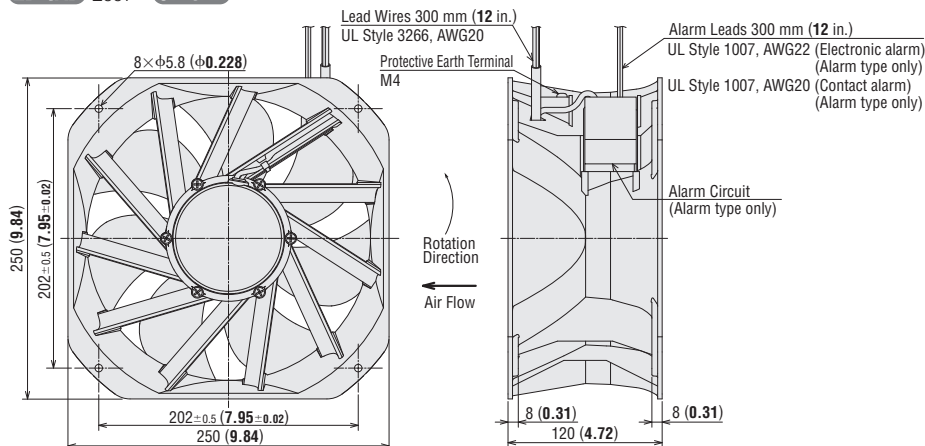
Air Flow – Static Pressure Characteristics



Dimensions Unit = mm (in.)

Mass: 4.1 kg (9.0 lb.)

2D CAD E097 3D CAD



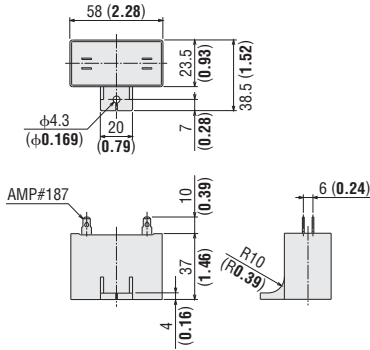
● Capacitor (Included)

◇ For **MRS25-B** and **MRS25-D**

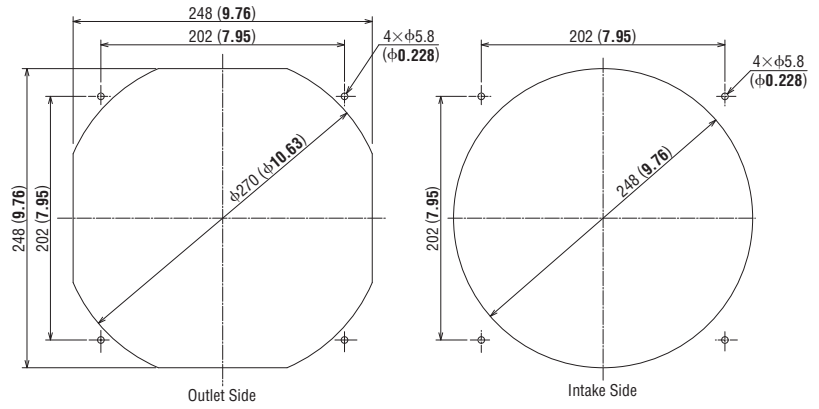
CH160CAUL Mass: 75 g (2.6 oz.)

CH45BFAUL Mass: 73 g (2.6 oz.)

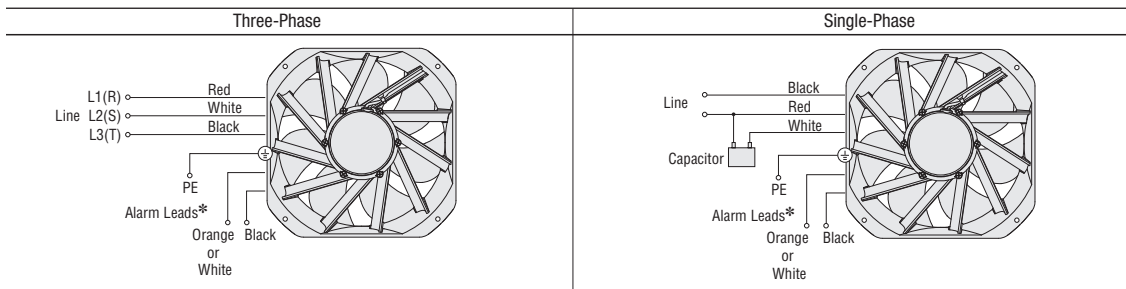
(A capacitor and capacitor cap are included with single-phase fans.)



■ Panel Cut-Out Unit = mm (in.)



■ Connection Diagrams



* Alarm type only

● How to connect a capacitor → Page G-117

■ Accessories

Product	Product Name	Page
Finger Guard	FG25D	G-109

■ Thermostat

The thermostat automatically controls the operation of the fan in accordance with temperature fluctuations inside the equipment. This helps improve the equipment's "environmental" performance relative to energy savings, noise reduction, etc.



Thermostat **AM2-XA1**

Number of Connectable Fan: 1

- Connect the power-supply lead wire by relaying to AWG 18~13.
- Page → G-104

Overview,
Product
Series

Axial
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AC Input
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Compact Size
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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