

MRS Series

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



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



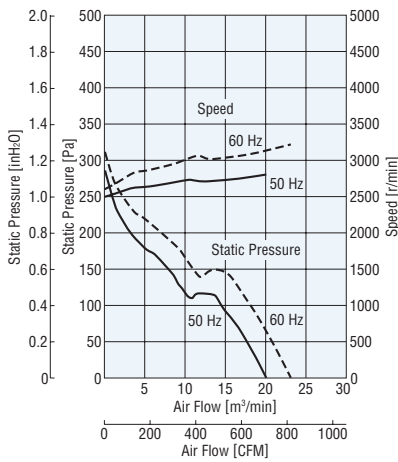
Specifications **RoHS**

Model			Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Low-Speed Alarm								VAC	Hz	A	W		
Electronic Alarm Type (Alarm specifications: ②)	Contact Alarm Type (Alarm specifications: ⑤)	Standard Type					r/min						
<b>MRS25-BM</b>	<b>MRS25-BB</b>	<b>MRS25-B</b>	Single-Phase 100	50	0.8	80	2800	21	742	290	1.16	58	16
			Single-Phase 100	60	1.1	110	3220	24	848	320	1.28	62	
			Single-Phase 110	60	1.1	120	3280	24	848	340	1.36	62	
			Single-Phase 115	60	1.1	125	3300	24	848	360	1.45	62	
<b>MRS25-DM</b>	<b>MRS25-DB</b>	<b>MRS25-D</b>	Single-Phase 200	50	0.4	85	2790	21	742	290	1.16	58	4.5
			Single-Phase 200	60	0.7	120	3220	24	848	320	1.28	62	
			Single-Phase 220	50	0.4	95	2820	21	742	310	1.24	58	
			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	
<b>MRS25-TM</b>	<b>MRS25-TB</b>	<b>MRS25-T</b>	Three-Phase 200	50	0.4	70	2830	21	742	310	1.24	58	-
			Three-Phase 200	60	0.4	100	3270	24	848	360	1.45	62	
			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	

Alarm specifications ②, ⑤ → Page F-21 Details of safety standards → Page H-2

The following items are included in each product.  
Fan, Capacitor\*, Capacitor Cap\*, Operating Manual  
\*Single-phase fans only

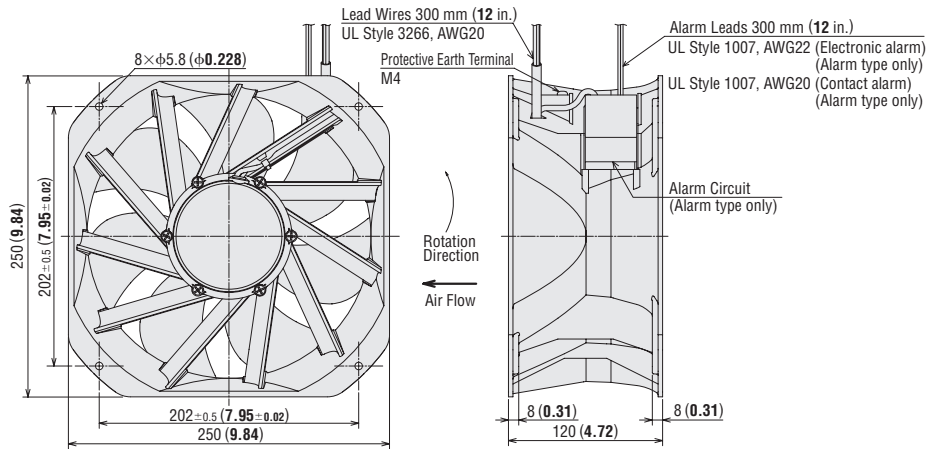
Air Flow – Static Pressure Characteristics



Dimensions Unit = mm (in.)

Mass: 4.1 kg (9.0 lb.)

DXF E097



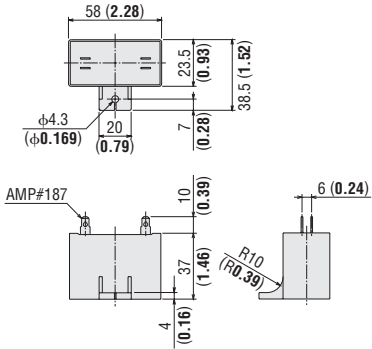
## Capacitor (Included)

◇ For **MRS25-B** and **MRS25-D**

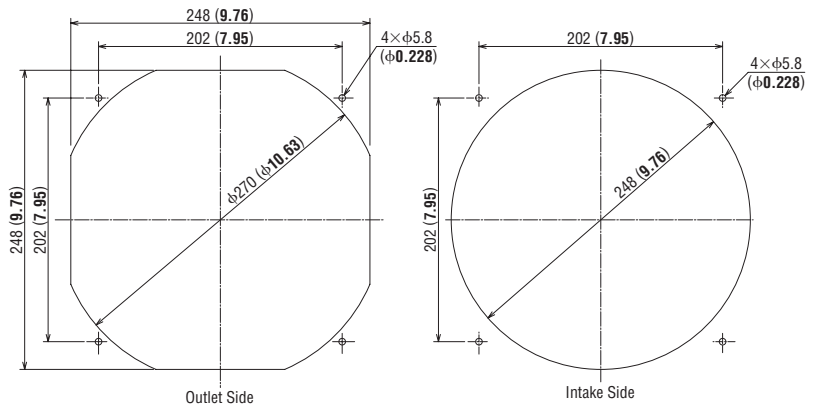
CH160CFAUL Mass: 75 g (2.6 oz.)

CH45BFAUL Mass: 73 g (2.6 oz.)

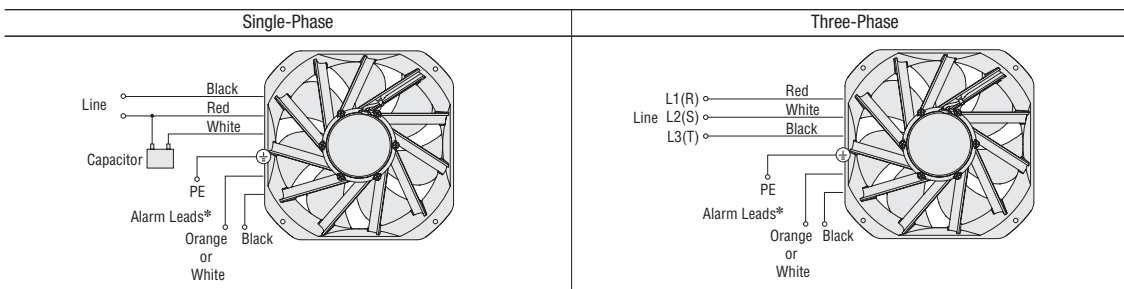
(A capacitor and capacitor cap are included with single-phase fans.)



## Panel Cut-Out Unit = mm (in.)



## Connection Diagrams



\* Alarm type only

● How to connect a capacitor → Page F-129

## Accessories

Product	Model	Page
Finger Guard	<b>FG25D</b>	F-118

## Thermostats

A thermostat makes it possible for fans to operate only when cooling is necessary, thereby conserving energy.



**RoHS**

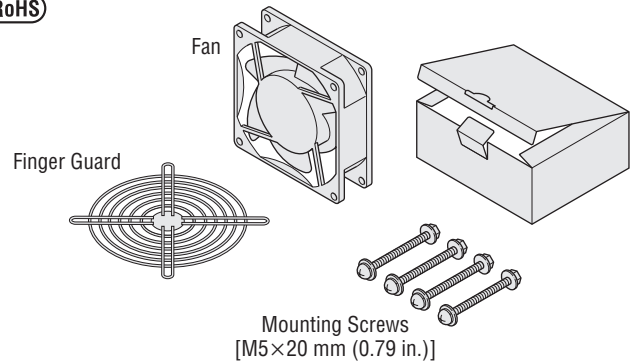
Thermostats **AM1-WA1/AM1-XA1**

● Page → F-113

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



## Product Line

Fan Kit Model	
<b>T-MRS25-BM-G</b>	<b>T-MRS25-TB-G</b>
<b>T-MRS25-DM-G</b>	<b>T-MRS25-B-G</b>
<b>T-MRS25-TM-G</b>	<b>T-MRS25-D-G</b>
<b>T-MRS25-BB-G</b>	<b>T-MRS25-T-G</b>
<b>T-MRS25-DB-G</b>	—

● See page F-32 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

MRS Series

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



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



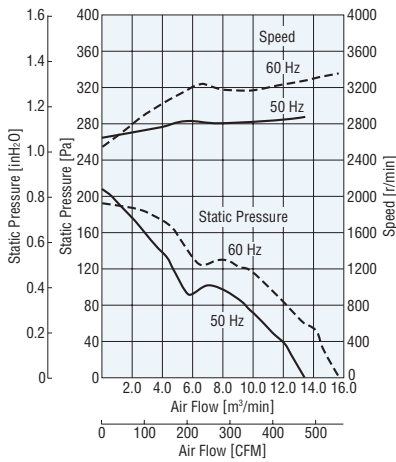
Specifications (RoHS)

Model		Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Low-Speed Alarm, Electronic Alarm Type (Alarm specifications: ②)	Standard Type						m³/min	CFM	Pa	inH <sub>2</sub> O		
		VAC	Hz	A	W	r/min	m³/min	CFM	Pa	inH <sub>2</sub> O	dB (A)	μF
<b>MRS20-BM</b>	<b>MRS20-BUL</b>	Single-Phase 100	50	0.8	75	2850	13.2	466	221	0.886	56	6.0
		Single-Phase 100	60	1.0	95	3350	15.5	547	186	0.746	60	
		Single-Phase 110	60	1.0	95	3400	15.5	547	255	1.02	61	
		Single-Phase 115	60	1.0	95	3400	15.5	547	265	1.06	61	
<b>MRS20-DM</b>	<b>MRS20-DUL</b>	Single-Phase 200	50	0.4	75	2850	13.2	466	221	0.886	56	6.0
		Single-Phase 200	60	0.5	95	3350	15.5	547	186	0.746	60	
		Single-Phase 230	60	0.5	95	3400	15.5	547	265	1.06	61	
<b>MRS20-TM</b>	<b>MRS20-TUL</b>	Three-Phase 200	50	0.4	75	2850	13.2	466	221	0.886	56	-
		Three-Phase 200	60	0.4	95	3350	15.5	547	265	1.06	60	
		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	

● Alarm specifications ② → Page F-21 ● Details of safety standards → Page H-2

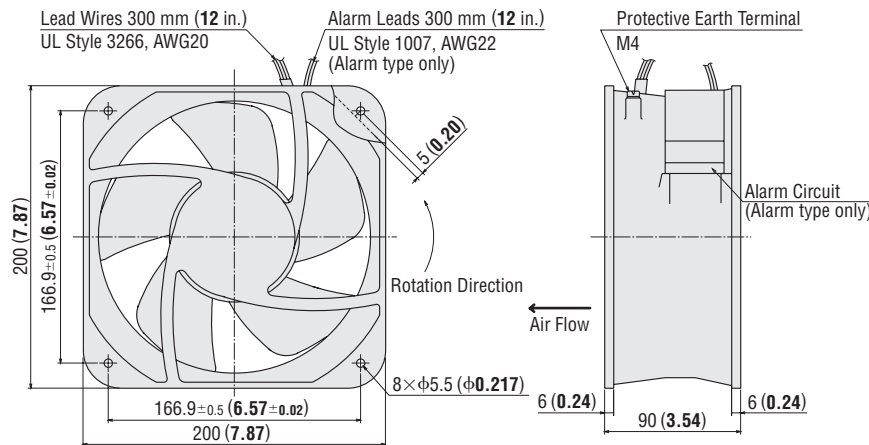
The following items are included in each product.  
 Fan, Capacitor\*, Capacitor Cap\*, Operating Manual  
 \*Single-phase fans only

Air Flow – Static Pressure Characteristics



Dimensions Unit = mm (in.)

Mass: 2.5 kg (5.5 lb.)  
 DXF E001

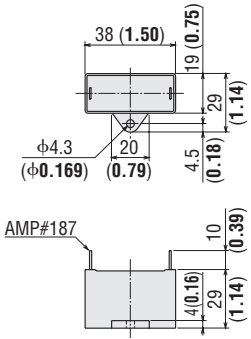


## Capacitor (Included)

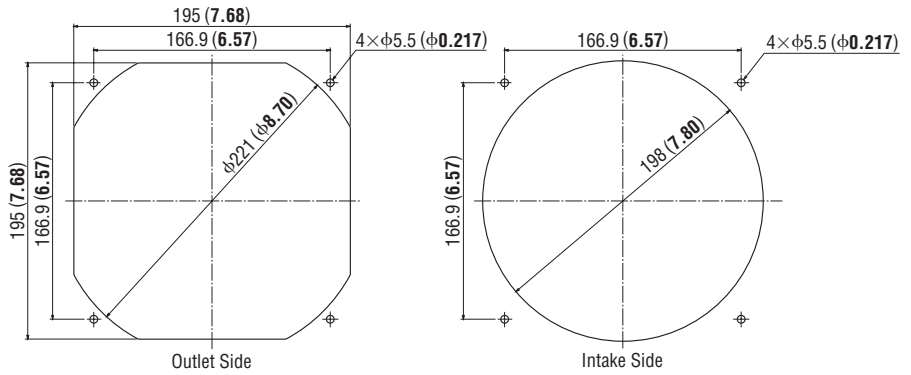
(A capacitor and capacitor cap are included with single-phase fans.)

◇ For **MRS20-B** and **MRS20-D**

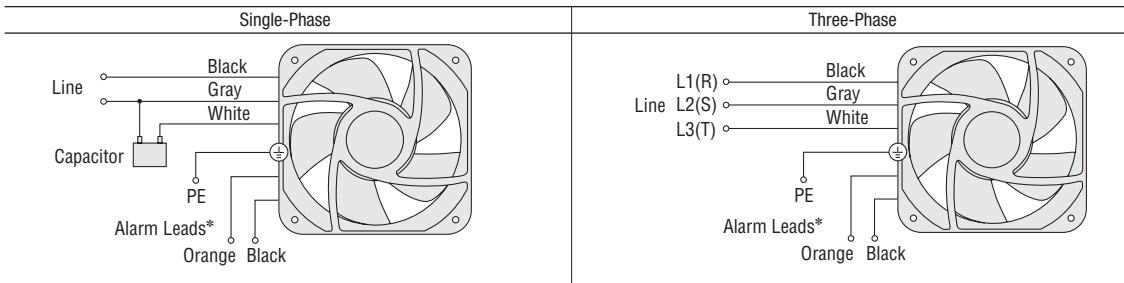
CH60UL Mass: 32 g (1.1 oz.)



## Panel Cut-Out Unit = mm (in.)



## Connection Diagrams



\* Alarm type only

● How to connect a capacitor → Page F-129

## Accessories

Product	Model	Page
Finger Guard	<b>FG20D</b>	F-118

## Thermostats

A thermostat makes it possible for fans to operate only when cooling is necessary, thereby conserving energy.



**RoHS**

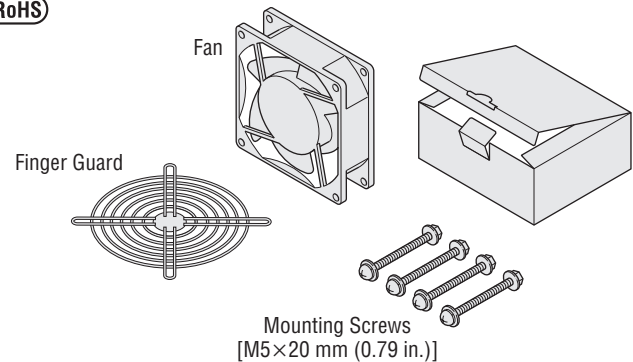
Thermostats **AM1-WA1/AM1-XA1**

● Page → F-113

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



## Product Line

Fan Kit Model	
<b>T-MRS20-BM-G</b>	<b>T-MRS20-BUL-G</b>
<b>T-MRS20-DM-G</b>	<b>T-MRS20-DUL-G</b>
<b>T-MRS20-TM-G</b>	<b>T-MRS20-TUL-G</b>

● See page F-34 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

MRS Series

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



Terminal Box Type

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



Specifications (RoHS)

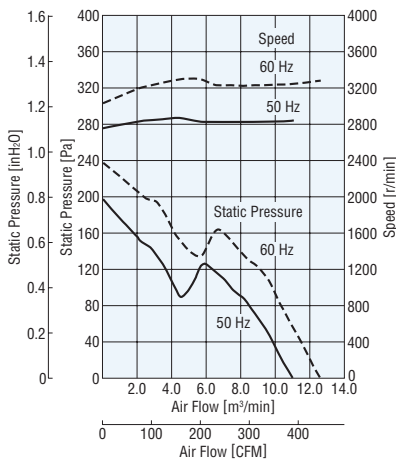
Model			Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor		
Type	Connector Type	Terminal Box Type	VAC	Hz	A	W	r/min	m³/min	CFM	Pa	inH <sub>2</sub> O	dB (A)	µF		
Low-Speed Alarm, Electronic Alarm Type (Alarm specifications: ②)	MRS18-BMH	MRS18-BTM	Single-Phase 100	50	0.8	54.5	2850	11.0	388	196	0.786	56	6.0		
			Single-Phase 100	60	1.0	76	3300	12.8	452	245	0.982	60			
			Single-Phase 110	60	1.0	81	3350	12.8	452	245	0.982	61			
			Single-Phase 115	60	1.0	84	3350	12.8	452	245	0.982	61			
	MRS18-DMH	MRS18-DTM	Single-Phase 200	50	0.4	54.5	2850	11.0	388	196	0.786	56		6.0	
			Single-Phase 200	60	0.5	70	3300	12.8	452	245	0.982	60			
			Single-Phase 230	60	0.5	77	3350	12.8	452	245	0.982	61			
	MRS18-TMH	MRS18-TTM	Three-Phase 200	50	0.4	52	2850	11.0	388	196	0.786	56		-	
			Three-Phase 200	60	0.4	70	3300	12.8	452	245	0.982	60			
			Three-Phase 220	60	0.4	74	3350	12.8	452	245	0.982	61			
	Standard Type	MRS18-BH	MRS18-BUL	Single-Phase 100	50	0.8	54.5	2850	11.0	388	196	0.786		56	6.0
				Single-Phase 100	60	1.0	76	3300	12.8	452	245	0.982		60	
Single-Phase 110				60	1.0	81	3350	12.8	452	245	0.982	61			
Single-Phase 115				60	1.0	84	3350	12.8	452	245	0.982	61			
MRS18-DH		MRS18-DUL	Single-Phase 200	50	0.4	54.5	2850	11.0	388	196	0.786	56	6.0		
			Single-Phase 200	60	0.5	70	3300	12.8	452	245	0.982	60			
			Single-Phase 230	60	0.5	77	3350	12.8	452	245	0.982	61			
MRS18-TH		MRS18-TUL	Three-Phase 200	50	0.4	52	2850	11.0	388	196	0.786	56	-		
			Three-Phase 200	60	0.4	70	3300	12.8	452	245	0.982	60			
			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		

- Only terminal box type is VDE certified.
- Alarm specifications ② → Page F-21 ● Details of safety standards → Page H-2

The following items are included in each product.

- MRS18-□H  
Fan, Cable with Connector, Operating Manual
- MRS18-□TM  
Fan, Capacitor\*, Capacitor Cap\*, Operating Manual  
\* Single-phase fans only
- MRS18-□UL  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics



Long-Life Axial Flow Fans  
MRE Series **NEW**

The MRE Series is available as a long life version of the MRS Series products. These AC input long-life axial flow fans have 100,000 hour life expectancy. For more details on the MRE Series, please visit [www.orientalmotor.com](http://www.orientalmotor.com)

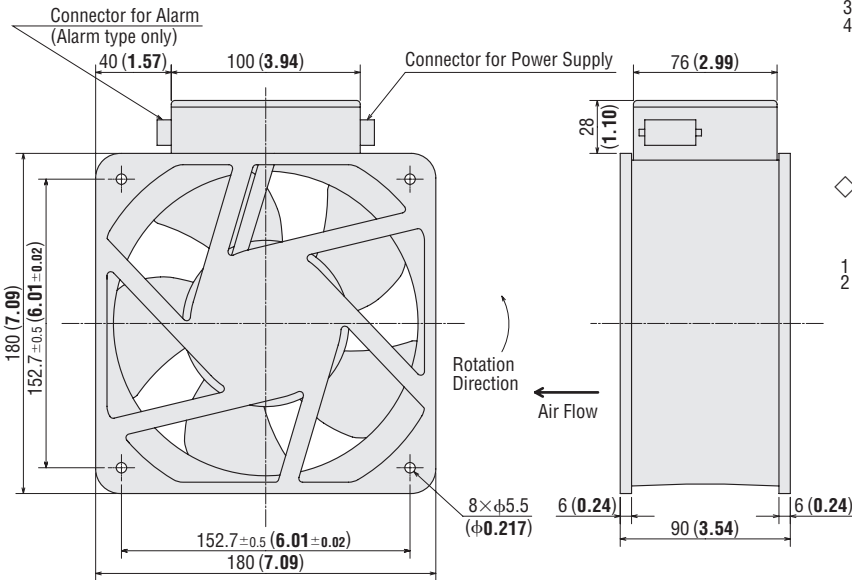


## Dimensions Unit = mm (in.)

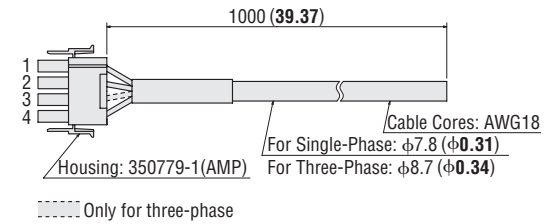
### Connector Type

#### Fan

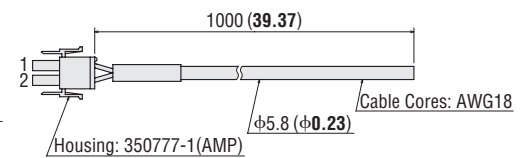
Mass: 2.5 kg (5.5 lb.)  
 Alarm Type/ **DXF** E126  
 Standard Type/ **DXF** E127



#### Cable for Connection to Power Supply (Included)



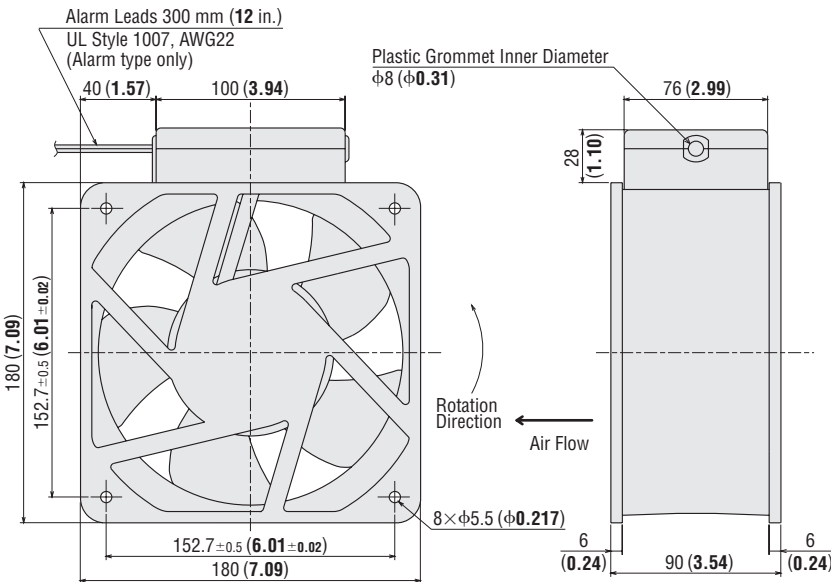
#### Cable for Alarm (Included with alarm type)



### Terminal Box Type

#### Fan

Mass: 2.5 kg (5.5 lb.)  
**DXF** E002

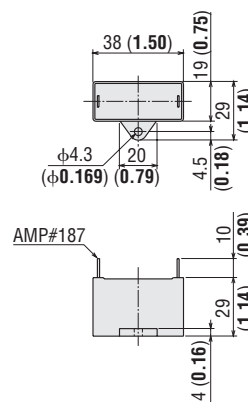


#### Capacitor (Included)

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

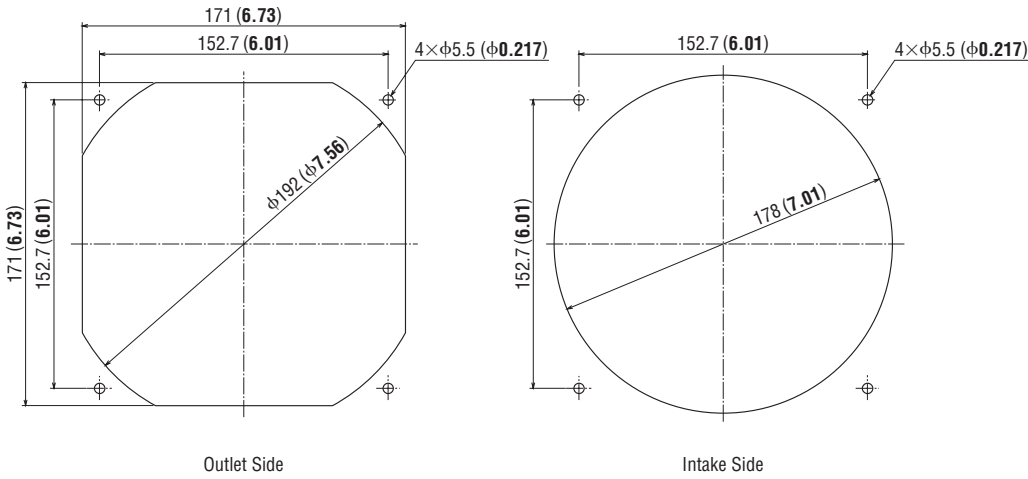
CH60UL Mass: 32 g (1.1 oz.)



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

AC Input

**Panel Cut-Out** Unit = mm (in.)



**Connection Diagrams**

● Connector Type

<p><b>MRS18-BMH</b> <b>MRS18-DMH</b></p>		<p><b>MRS18-BH</b> <b>MRS18-DH</b></p>	
<p><b>MRS18-TMH</b></p>		<p><b>MRS18-TH</b></p>	

● Terminal Box Type

<p><b>MRS18-BTM</b> <b>MRS18-DTM</b></p>		<p><b>MRS18-BUL</b> <b>MRS18-DUL</b></p>		<p>Inside of the Terminal Box</p>
<p><b>MRS18-TTM</b></p>		<p><b>MRS18-TUL</b></p>		

● How to connect a capacitor → Page F-129



## Accessories

Product	Model	Page
Finger Guard	<b>FG18D</b>	F-118
Filter	<b>FL18</b>	F-120

## Thermostats

A thermostat makes it possible for fans to operate only when cooling is necessary, thereby conserving energy.



**RoHS**

Thermostats **AM1-WA1/AM1-XA1**

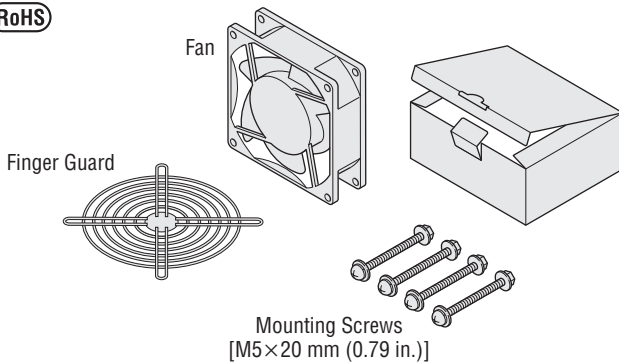
● Page → F-113

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

### ● Package Contents (Fan, Finger guard, Mounting screws)

**RoHS**



### ◇ Product Line (Fan, Finger guard, Mounting screws)

#### ● Connector Type

Fan Kit Model
<b>T-MRS18-BMHG</b>
<b>T-MRS18-DMHG</b>
<b>T-MRS18-TMHG</b>
<b>T-MRS18-BHG</b>
<b>T-MRS18-DHG</b>
<b>T-MRS18-THG</b>

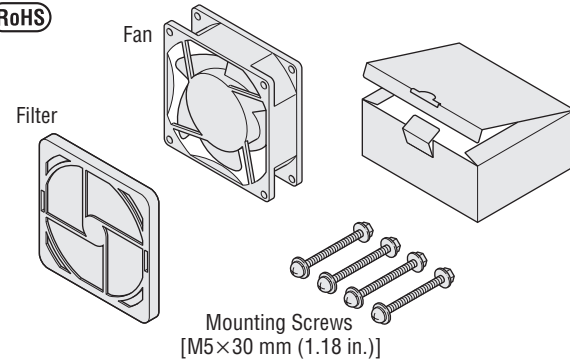
#### ● Terminal Box Type

Fan Kit Model
<b>T-MRS18-BTM-G</b>
<b>T-MRS18-DTM-G</b>
<b>T-MRS18-TTM-G</b>
<b>T-MRS18-BUL-G</b>
<b>T-MRS18-DUL-G</b>
<b>T-MRS18-TUL-G</b>

● See page F-36 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

### ● Package Contents (Fan, Filter, Mounting screws)

**RoHS**



### ◇ Product Line (Fan, Filter, Mounting screws)

#### ● Connector Type

Fan Kit Model
<b>T-MRS18-BMHF</b>
<b>T-MRS18-DMHF</b>
<b>T-MRS18-TMHF</b>
<b>T-MRS18-BHF</b>
<b>T-MRS18-DHF</b>
<b>T-MRS18-THF</b>

#### ● Terminal Box Type

Fan Kit Model
<b>T-MRS18-BTM-F</b>
<b>T-MRS18-DTM-F</b>
<b>T-MRS18-TTM-F</b>
<b>T-MRS18-BUL-F</b>
<b>T-MRS18-DUL-F</b>
<b>T-MRS18-TUL-F</b>

● See page F-36 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.



MRS Series

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



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



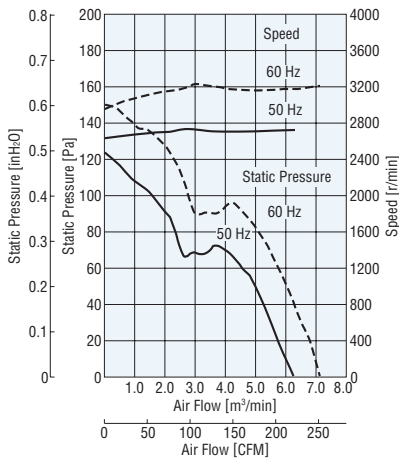
Specifications (RoHS)

Model			Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Low-Speed Alarm		Standard Type						m³/min	CFM	Pa	inH <sub>2</sub> O		
Electronic Alarm Type (Alarm specifications: ②)	Contact Alarm Type (Alarm specifications: ③)		VAC	Hz	A	W	r/min						
<b>MRS16-BTM</b>	<b>MRS16-BTA</b>	<b>MRS16-BUL</b>	Single-Phase 100	50	0.47	39	2800	6.2	219	127	0.509	49	3.0
			Single-Phase 100	60	0.46	41	3250	7.3	258	157	0.63	52	
			Single-Phase 110	60	0.48	48	3300	7.3	258	157	0.63	53	
			Single-Phase 115	60	0.49	51	3300	7.3	258	157	0.63	53	
<b>MRS16-DTM</b>	<b>MRS16-DTA</b>	<b>MRS16-DUL</b>	Single-Phase 200	50	0.24	39	2800	6.2	219	127	0.509	49	3.0
			Single-Phase 200	60	0.24	41	3250	7.3	258	157	0.63	52	
			Single-Phase 230	60	0.25	51	3300	7.3	258	157	0.63	53	
<b>MRS16-TTM</b>	<b>MRS16-TTA</b>	<b>MRS16-TUL</b>	Three-Phase 200	50	0.19	33	2800	6.2	219	127	0.509	49	-
			Three-Phase 200	60	0.17	37	3250	7.3	258	157	0.63	52	
			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	

● Alarm specifications ②, ③ → Page F-21 ● Details of safety standards → Page H-2

- The following items are included in each product.
- **MRS16-□TM**  
 Fan, Capacitor\*, Capacitor Cap\*, Operating Manual  
 \*Single-phase fans only
  - **MRS16-□TA**  
 Fan, Capacitor\*, Operating Manual  
 \*Single-phase fans only
  - **MRS16-□UL**  
 Fan, Operating Manual

Air Flow – Static Pressure Characteristics



Long-Life Axial Flow Fans  
**MRE Series** NEW

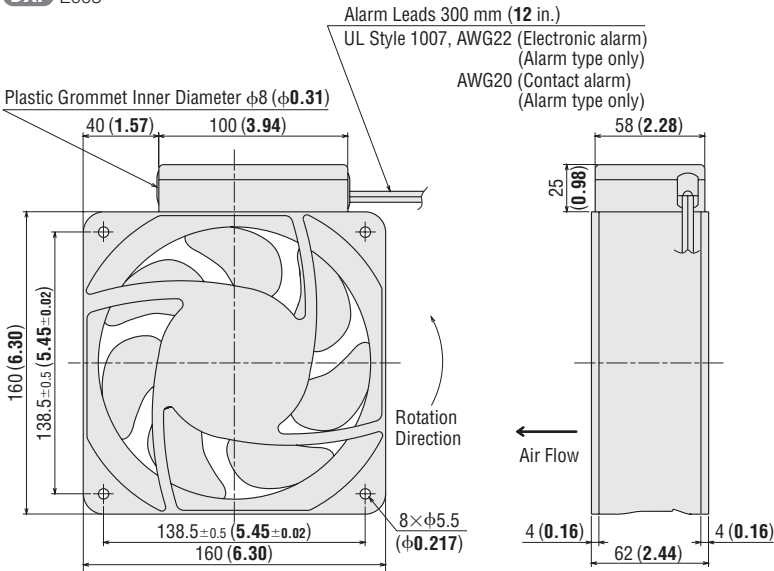
The **MRE** Series is available as a long life version of the **MRS** Series products.  
 These AC input long-life axial flow fans have 100,000 hour life expectancy.  
 For more details on the **MRE** Series, please visit [www.orientalmotor.com](http://www.orientalmotor.com)



## Dimensions Unit = mm (in.)

Mass: 1.35 kg (3.0 lb.)

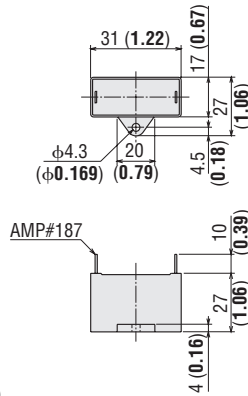
**DXF** E003



## Capacitor (Included)

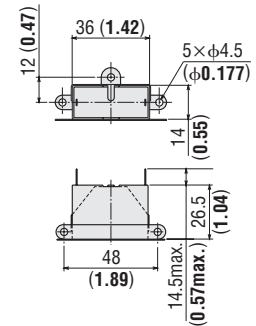
### ◇ For MRS16-□TM

CH30UL Mass: 23 g (0.81 oz.)  
(A capacitor and capacitor cap are included with single-phase alarm type fans.)

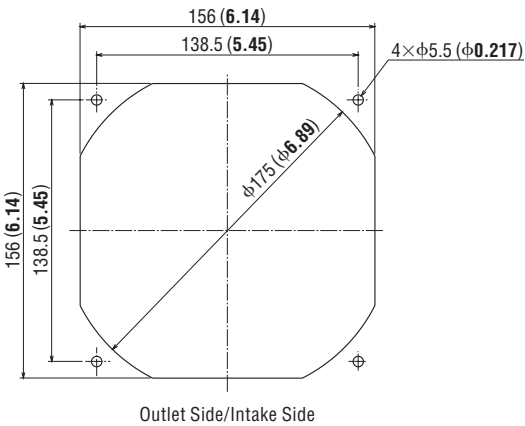


### ◇ For MRS16-□TA

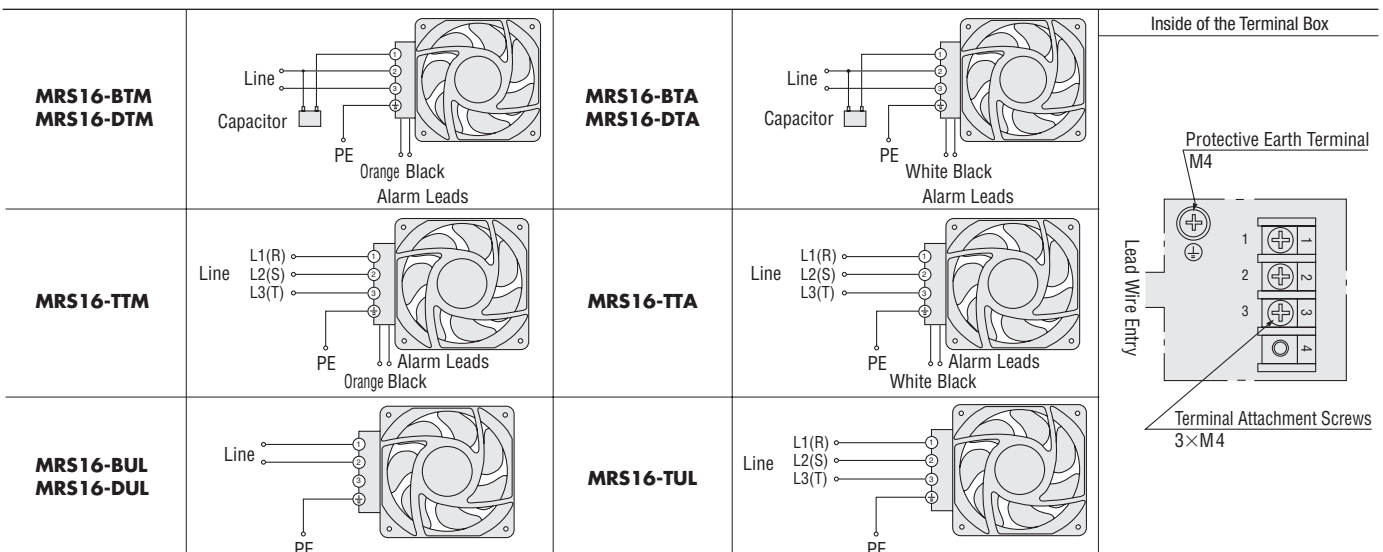
CH30 Mass: 30 g (1.1 oz.)  
(A capacitor is included with single-phase alarm type fans.)



## Panel Cut-Out Unit = mm (in.)



## Connection Diagrams



● How to connect a capacitor → Page F-129

## Accessories

Product	Model	Page
Finger Guard	<b>FG16D</b>	F-118
Filter	<b>FL16</b>	F-120

## Thermostats

A thermostat makes it possible for fans to operate only when cooling is necessary, thereby conserving energy.



**RoHS**

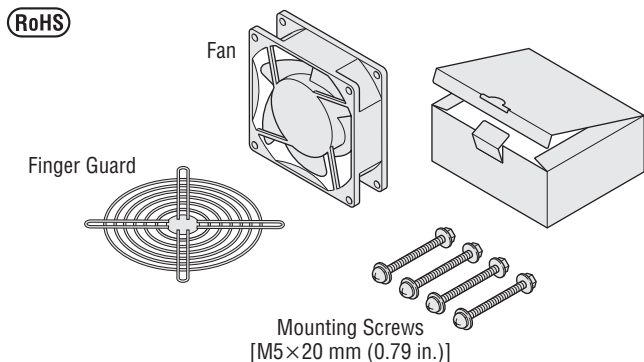
Thermostats **AM1-WA1/AM1-XA1**

● Page → F-113

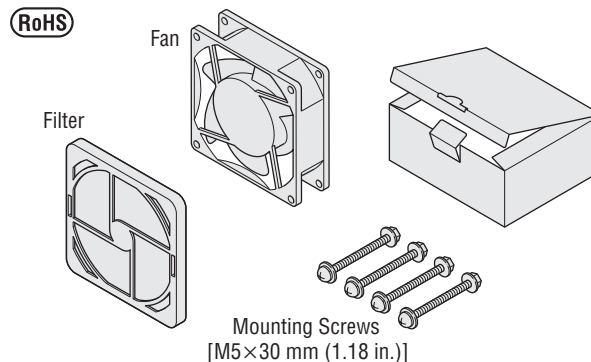
## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

### ● Package Contents (Fan, Finger guard, Mounting screws)



### ● Package Contents (Fan, Filter, Mounting screws)



### ◇ Product Line (Fan, Finger guard, Mounting screws)

Fan Kit Model
<b>T-MRS16-BTM-G</b>
<b>T-MRS16-DTM-G</b>
<b>T-MRS16-TTM-G</b>
<b>T-MRS16-BTA-G</b>
<b>T-MRS16-DTA-G</b>
<b>T-MRS16-TTA-G</b>
<b>T-MRS16-BUL-G</b>
<b>T-MRS16-DUL-G</b>
<b>T-MRS16-TUL-G</b>

● See page F-40 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

### ◇ Product Line (Fan, Filter, Mounting screws)

Fan Kit Model
<b>T-MRS16-BTM-F</b>
<b>T-MRS16-DTM-F</b>
<b>T-MRS16-TTM-F</b>
<b>T-MRS16-BTA-F</b>
<b>T-MRS16-DTA-F</b>
<b>T-MRS16-TTA-F</b>
<b>T-MRS16-BUL-F</b>
<b>T-MRS16-DUL-F</b>
<b>T-MRS16-TUL-F</b>

● See page F-40 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

250 mm (9.84 in.)  
200 mm (7.87 in.)  
180 mm (7.09 in.)  
160 mm (6.30 in.)

AC Input

140 mm (5.51 in.)  
119 mm (4.69 in.)  
92 mm (3.62 in.)  
80 mm (3.15 in.)

Introduction
MRS
AC Input Variable Flow MRS
MU
MDS/MD
DC Input Long-Life MDE
Centrifugal Blowers
AC Input MB
DC Input MBD
Cross Flow Fans
AC Input MF
DC Input MFD
Cooling Module FM
Thermostats
Accessories
Installation

MRS Series

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



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



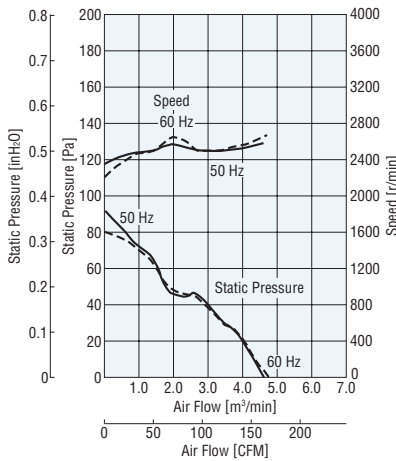
Specifications (RoHS)

Model		Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level
Low-Speed Alarm, Electronic Alarm Type (Alarm specifications: ③)	Standard Type						m <sup>3</sup> /min	CFM	Pa	inH <sub>2</sub> O	
<b>MRS14-TTM</b>	<b>MRS14-TUL</b>	Three-Phase 200	50	0.08	14	2600	4.5	159	92	0.369	48
		Three-Phase 200	60	0.09	17	2650	4.6	162	81	0.325	49
		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 ③ → Page F-21 ● Details of safety standards → Page H-2

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

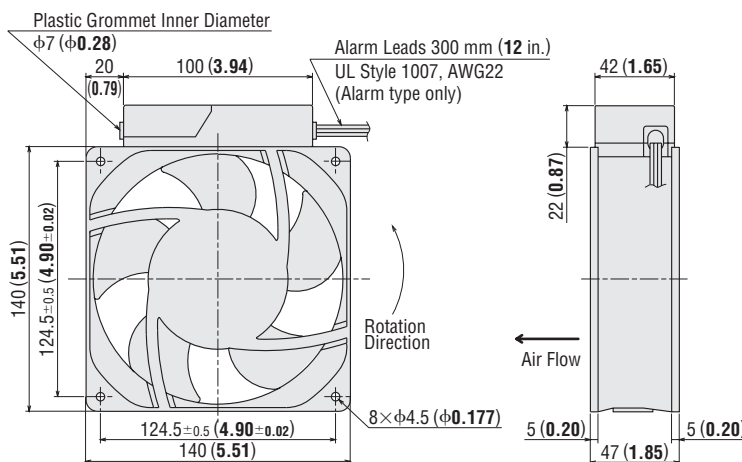
Air Flow – Static Pressure Characteristics



Dimensions Unit = mm (in.)

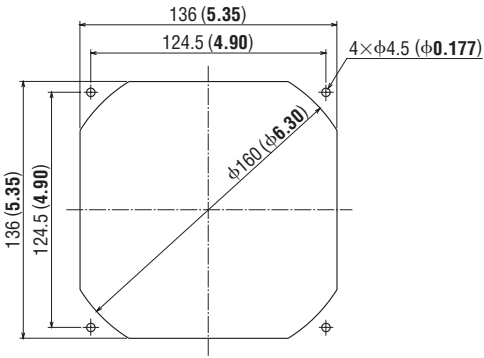
Mass: 0.9 kg (2.0 lb.)

DXF E004



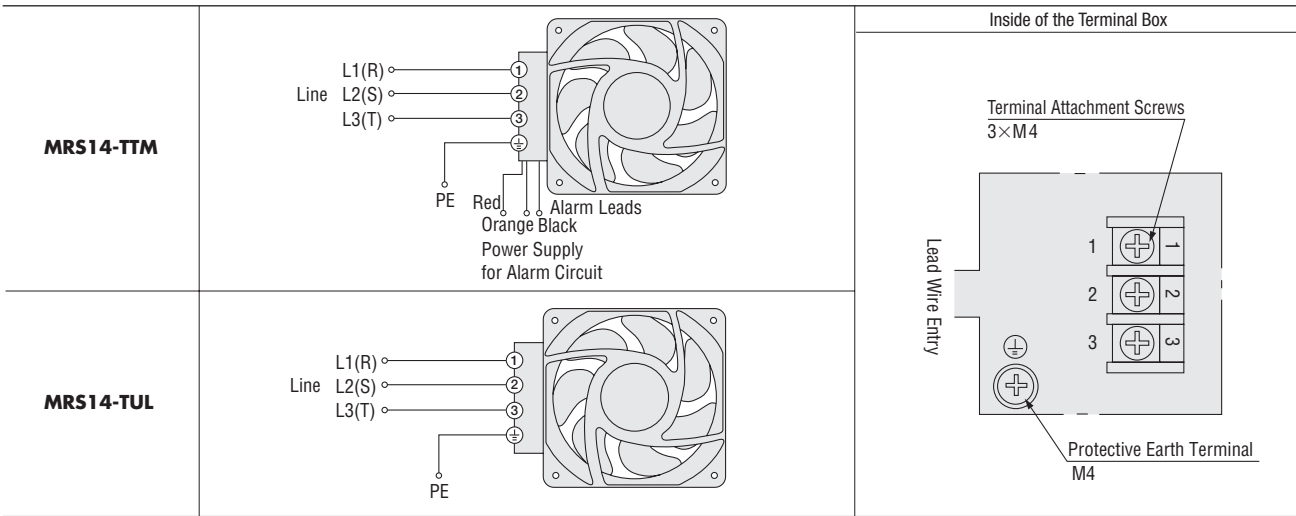
AC Input  
 1250 mm (9.84 in.)  
 1200 mm (9.87 in.)  
 1180 mm (9.09 in.)  
 1160 mm (9.30 in.)  
 1140 mm (9.51 in.)  
 1119 mm (9.69 in.)  
 1102 mm (9.82 in.)  
 1080 mm (9.15 in.)

## Panel Cut-Out Unit = mm (in.)



Outlet Side/Intake Side

## Connection Diagrams



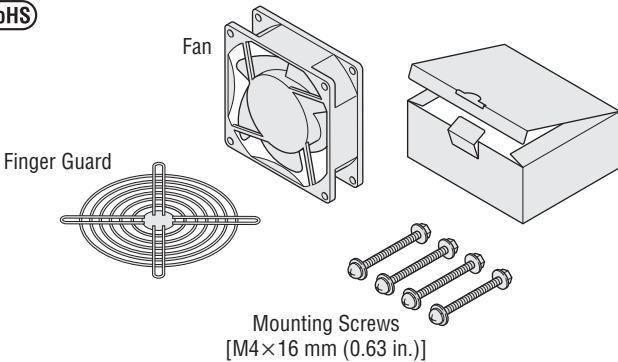
## Accessories

Product	Model	Page
Finger Guard	<b>FG14D</b>	F-118
Filter	<b>FL14</b>	F-120

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

RoHS



## Product Line

Fan Kit Model
<b>T-MRS14-TTM-G</b>
<b>T-MRS14-TUL-G</b>

● See page F-44 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

## VARIOFLOW

### MRS Series Variable Flow Type

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



Operating Voltage Range:  $\pm 10\%$   
 Materials  
 Frame: Die Cast Aluminum  
 Blades: Polycarbonate (Flammability grade V-0)  
 Overheat Protection: Built-in Thermal Protector  
 Bearings: Ball Bearings

## Specifications



Model	Voltage VAC	Frequency Hz	Current A	Input W	Speed r/min	Max. Air Flow		Max. Static Pressure		Noise Level dB (A)	Resistance of Potentiometer k $\Omega$
						m <sup>3</sup> /min	CFM	Pa	inH <sub>2</sub> O		
<b>MRS18V2-B</b>	Single-Phase 100	50	1.2	74	2800 1000	11.0 3.9	388 138	186 19.6	0.746 0.0786	56 46	0 200
		60	1.4	100	3200 750	12.0 2.8	424 98.8	196 11.8	0.786 0.0472	60 40	0 200
	Single-Phase 115	60	1.4	100	3350 1100	12.8 4.0	452 141	255 23.5	1.02 0.0942	61 44	0 200
<b>MRS18V2-D</b>	Single-Phase 200	50	0.6	74	2800 1000	11.0 3.9	388 138	186 19.6	0.746 0.0786	56 46	0 200
		60	0.7	100	3200 750	12.0 2.8	424 98.8	196 11.8	0.786 0.0472	60 40	0 200
	Single-Phase 230	50	0.6	84	2850 1350	11.0 5.0	388 177	196 36.3	0.786 0.146	56 49	0 200
		60	0.7	100	3350 1100	12.8 4.0	452 141	255 23.5	1.02 0.0942	61 44	0 200

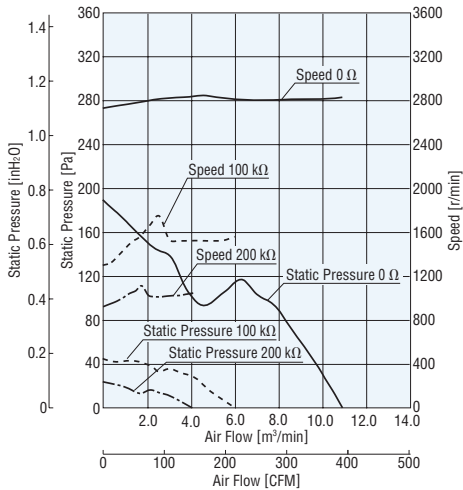
● Details of safety standards → Page H-2

— The following items are included in each product.

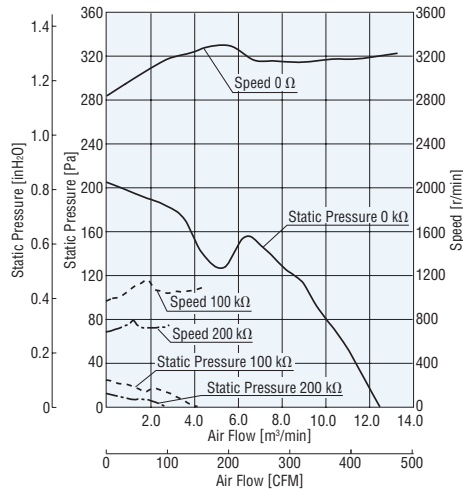
Fan, External Speed Potentiometer, Operating Manual

## Air Flow – Static Pressure Characteristics

### ● 50 Hz



### ● 60 Hz



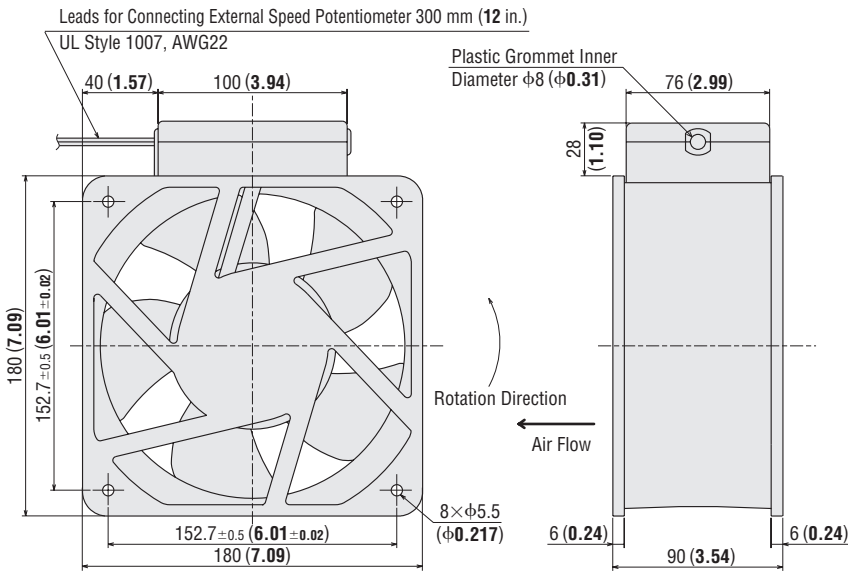
AC Input  
 250 mm (9.84 in.)  
 200 mm (7.87 in.)  
 180 mm (7.09 in.)  
 160 mm (6.30 in.)  
 140 mm (5.51 in.)  
 119 mm (4.69 in.)  
 92 mm (3.62 in.)  
 80 mm (3.15 in.)



## Dimensions Unit = mm (in.)

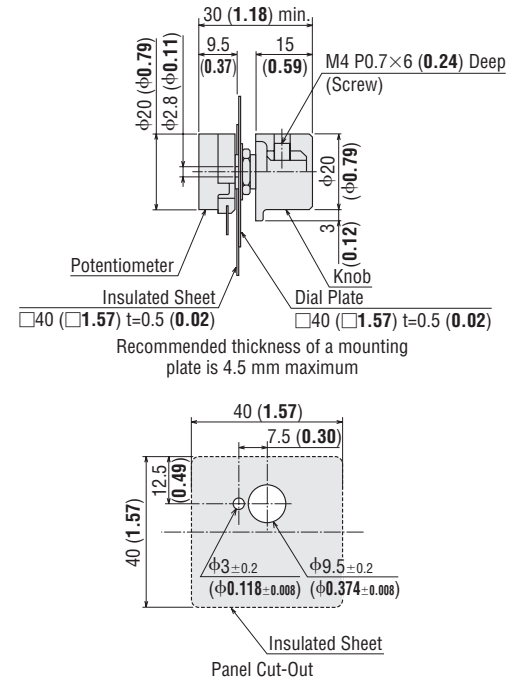
Mass: 2.5 kg (5.5 lb.)

**DXF** E002

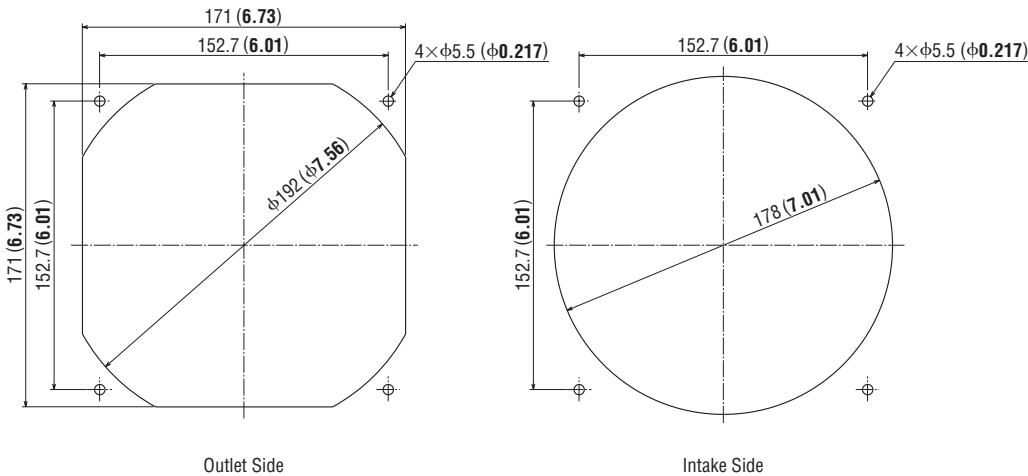


## External Speed Potentiometer (Included)

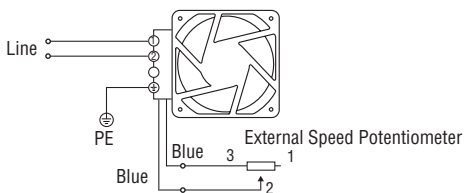
200 k $\Omega$ , 1/4 W with a linear resistance vs. angle curve



## Panel Cut-Out Unit = mm (in.)



## Connection Diagram



Leads for connecting external speed potentiometer

## Accessories

Product	Model	Page
Finger Guard	<b>FG18D</b>	F-118
Filter	<b>FL18</b>	F-120

Introduction	
MRS	AC Input
Variable Flow	DC Input
MRS	Long-Life
MU	
MDS/MD	
MDC	
MB	Centrifugal Blowers
MBD	DC Input
MF	AC Input
MFD	DC Input
FM	Cross Flow Fans
	Cooling Module
	Thermostats
	Accessories
	Installation

MU Series

119 mm – 38 mm Thick  
(4.69 in. – 1.50 in. Thick)



Operating Voltage Range: ±10%  
Materials  
Frame: Die Cast Aluminum  
Blades: Polycarbonate (Flammability grade V-0)  
Overheat Protection: Impedance Protected  
Bearings: Ball Bearings

Specifications (RoHS)



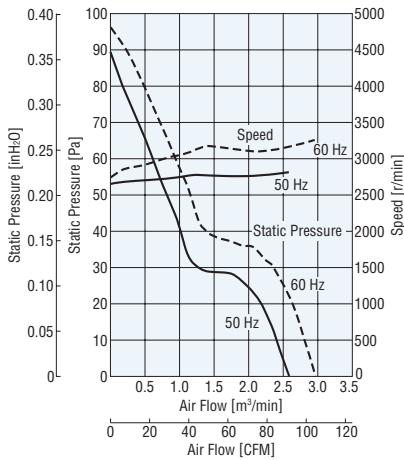
Speed Type	Model	Voltage VAC	Frequency Hz	Current A	Input W	Speed r/min	Max. Air Flow m³/min	CFM	Max. Static Pressure Pa	inH <sub>2</sub> O	Noise Level dB (A)
Standard Speed	MU1238A-21B	Single-Phase 115	50	0.20	14.0	2800	2.7	95.3	81	0.325	43
			60	0.18	13.0	3250	3.0	106	81	0.325	46
	MU1238A-51B	Single-Phase 220 Single-Phase 230 Single-Phase 230	50	0.10	13.5	2800	2.7	95.3	81	0.325	43
			50	0.11	16.0	2800	2.7	95.3	81	0.325	43
			60	0.10	13.5	3250	3.0	106	81	0.325	46
			60	0.10	13.5	3250	3.0	106	81	0.325	46
Middle Speed	MU1238B-21B	Single-Phase 115	50	0.16	12.5	2500	2.2	77.7	52	0.209	38
			60	0.15	11.5	2800	2.5	88.3	52	0.209	40
	MU1238B-51B	Single-Phase 220 Single-Phase 230 Single-Phase 230	50	0.09	11.5	2500	2.2	77.7	52	0.209	38
			50	0.09	14.0	2500	2.3	81.2	59	0.237	39
			60	0.09	11.5	2800	2.5	88.3	52	0.209	40
			60	0.09	11.5	2800	2.5	88.3	52	0.209	40
Low Speed	MU1238L-21B	Single-Phase 115	50	0.10	8.0	2100	1.9	67.1	34	0.137	33
			60	0.09	7.5	2100	1.8	63.5	27	0.11	32
	MU1238L-51B	Single-Phase 220 Single-Phase 230 Single-Phase 230	50	0.06	7.5	2100	1.85	65.3	34	0.137	33
			50	0.06	9.5	2100	1.9	67.1	34	0.137	34
			60	0.06	7.5	2200	1.9	67.1	29	0.118	33
			60	0.06	7.5	2200	1.9	67.1	29	0.118	33

Details of safety standards → Page H-2

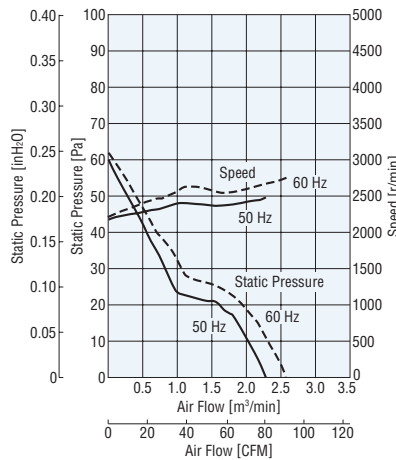
The following items are included in each product:  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics

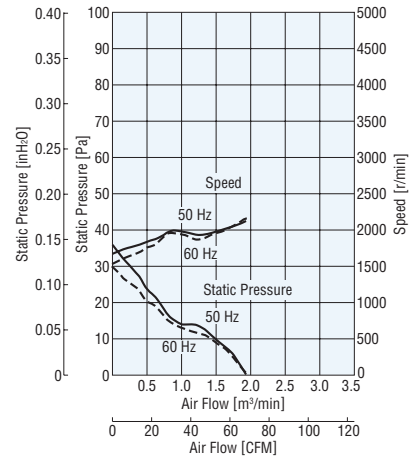
MU1238A



MU1238B



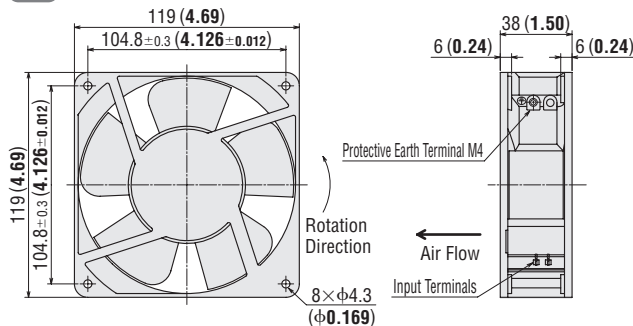
MU1238L



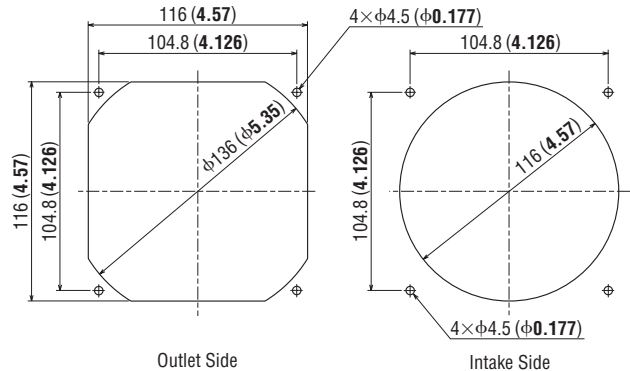
Dimensions Unit = mm (in.)

Mass: 0.53 kg (1.2 lb.)

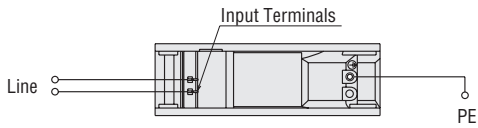
DXF E010



Panel Cut-Out Unit = mm (in.)



## Connection Diagram



## Accessories

Product	Model	Page
Finger Guard	<b>FG12D</b>	F-118
Filter	<b>FL12</b>	F-120
Screen	<b>FS12S</b>	F-123
Plug Cord	<b>PCA2B</b> [1 m (3.3 ft.)]	F-124
	<b>PCA2B2</b> [2 m (6.6 ft.)]	

## Thermostats

A thermostat makes it possible for fans to operate only when cooling is necessary, thereby conserving energy.

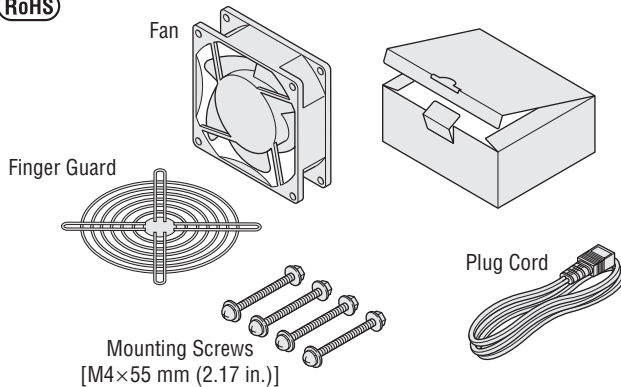


Thermostats **AM1-WA1/AM1-XA1**

● Page → F-113

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.



## Product Line

Fan Kit Model
<b>T-MU1238A-21-GP</b>
<b>T-MU1238A-51-GP</b>
<b>T-MU1238B-21-GP</b>
<b>T-MU1238B-51-GP</b>
<b>T-MU1238L-21-GP</b>
<b>T-MU1238L-51-GP</b>

● See page F-48 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

MU Series

119 mm – 25 mm Thick  
(4.69 in. – 0.98 in. Thick)



Operating Voltage Range: ±10%  
Materials  
Frame: Die Cast Aluminum  
Blades: Polycarbonate (Flammability grade V-0)  
Overheat Protection: Impedance Protected  
Bearings: Ball Bearings



Specifications (RoHS)

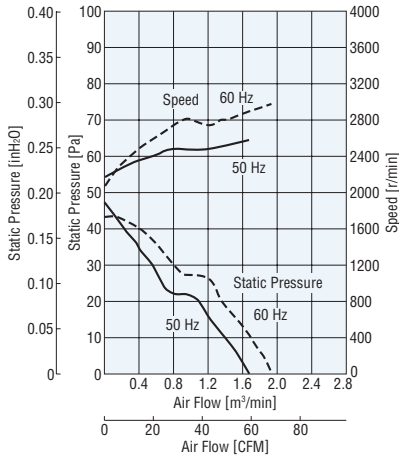
Speed Type	Model	Voltage VAC	Frequency Hz	Current A	Input W	Speed r/min	Max. Air Flow m³/min	CFM	Max. Static Pressure Pa	inH <sub>2</sub> O	Noise Level dB (A)
Standard Speed	MU1225S-21	Single-Phase 115	50	0.14	11.0	2500	1.6	56.5	49	0.196	36
			60	0.12	9.5	2950	1.9	67.1	44	0.176	40
	MU1225S-51	Single-Phase 220 Single-Phase 230 Single-Phase 230	50	0.07	10.5	2500	1.6	56.5	49	0.196	36
			60	0.08 0.07	12.0 10.0	2500 2950	1.6 1.9	56.5 67.1	49 44	0.196 0.176	36 40
Middle Speed	MU1225M-21	Single-Phase 115	50	0.13	10.5	2250	1.4	49.4	32	0.129	33
			60	0.11	9.0	2600	1.7	60	31	0.125	37
	MU1225M-51	Single-Phase 220 Single-Phase 230 Single-Phase 230	50	0.07	10.0	2250	1.4	49.4	32	0.129	33
			60	0.07	9.5	2250 2600	1.4 1.7	49.4 60	32 31	0.129 0.125	33 37

Details of safety standards → Page H-2

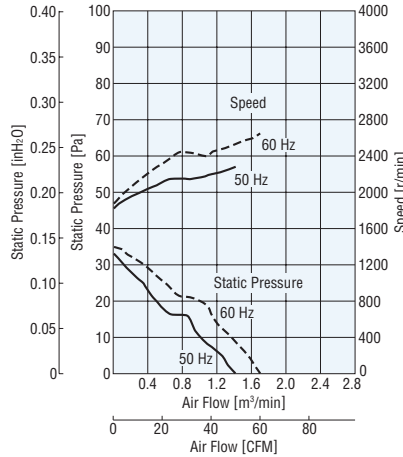
The following items are included in each product.  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics

MU1225S



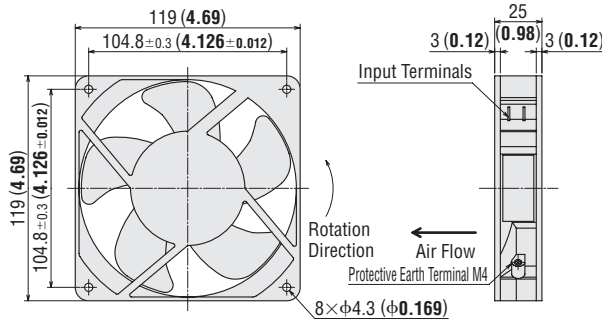
MU1225M



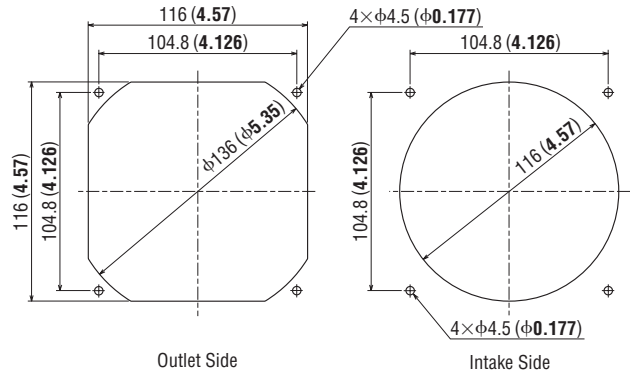
Dimensions Unit = mm (in.)

Mass: 0.31 kg (0.68 lb.)

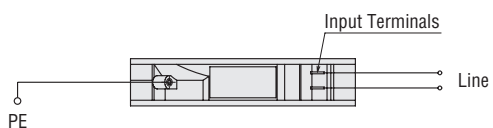
DXF E012



Panel Cut-Out Unit = mm (in.)



## Connection Diagram



## Accessories

Product	Model	Page
Finger Guard	<b>FG12D</b>	F-118
Filter	<b>FL12</b>	F-120
Screen	<b>FS12S</b>	F-123
Plug Cord	<b>PCA2B</b> [1 m (3.3 ft.)]	F-124
	<b>PCA2B2</b> [2 m (6.6 ft.)]	

## Thermostats

A thermostat makes it possible for fans to operate only when cooling is necessary, thereby conserving energy.

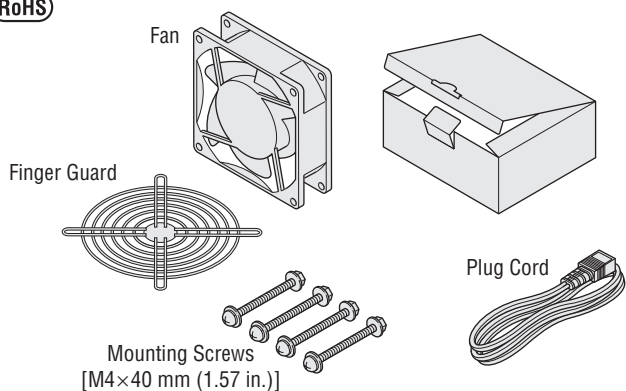


Thermostats **AM1-WA1/AM1-XA1**

● Page → F-113

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.



## Product Line

Fan Kit Model
<b>T-MU1225S-21-GP</b>
<b>T-MU1225S-51-GP</b>
<b>T-MU1225M-21-GP</b>
<b>T-MU1225M-51-GP</b>

● See page F-50 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

MU Series

92 mm – 25 mm Thick  
 (3.62 in. – 0.98 in. Thick)



Operating Voltage Range: ±10%  
 Materials  
 Frame: Die Cast Aluminum  
 Blades: Polycarbonate (Flammability grade V-0)  
 Overheat Protection: Impedance Protected  
 Bearings: Ball Bearings

Specifications (RoHS)



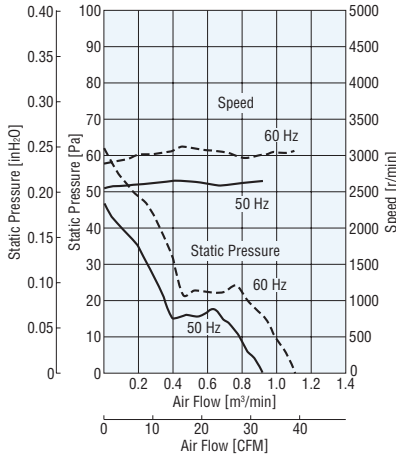
Speed Type	Model	Voltage VAC	Frequency Hz	Current A	Input W	Speed r/min	Max. Air Flow		Max. Static Pressure		Noise Level dB (A)
							m³/min	CFM	Pa	inH <sub>2</sub> O	
Standard Speed	MU925S-21	Single-Phase 115	50	0.11	9.5	2600	0.95	33.5	44	0.176	35
			60	0.10	8.0	3000	1.10	38.8	59	0.237	39
	MU925S-51	Single-Phase 220	50	0.06	8.5	2600	0.95	33.5	44	0.176	35
			50	0.07	10.5	2600	0.95	33.5	44	0.176	35
			60	0.06	8.0	3000	1.10	38.8	59	0.237	39
			60	0.06	8.0	3000	1.10	38.8	59	0.237	39
Middle Speed	MU925M-21	Single-Phase 115	50	0.11	9.0	2300	0.85	30.0	34	0.137	31
			60	0.10	8.0	2700	1.00	35.8	44	0.176	36
	MU925M-51	Single-Phase 220	50	0.06	8.5	2300	0.85	30.0	34	0.137	31
			50	0.06	9.5	2300	0.85	30.0	34	0.137	32
			60	0.06	8.0	2700	1.00	35.8	44	0.176	36
			60	0.06	8.0	2700	1.00	35.8	44	0.176	36

Details of safety standards → Page H-2

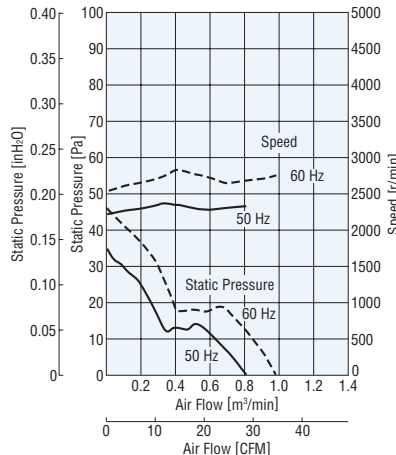
The following items are included in each product.  
 Fan, Operating Manual

Air Flow – Static Pressure Characteristics

MU925S



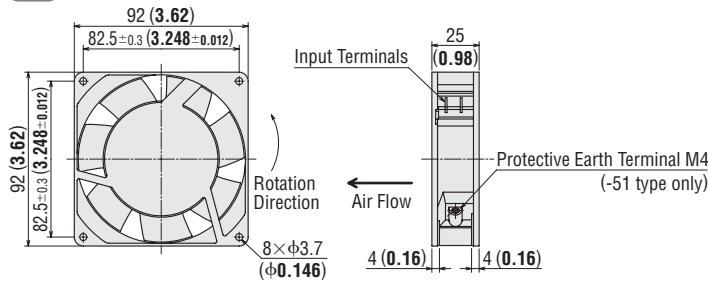
MU925M



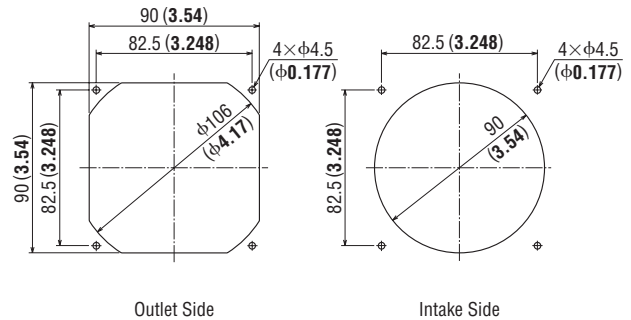
Dimensions Unit = mm (in.)

Mass: 0.27 kg (0.59 lb.)

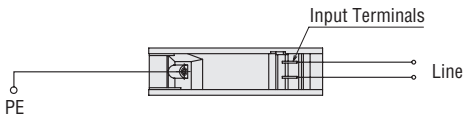
DXF E014



Panel Cut-Out Unit = mm (in.)



## Connection Diagram



## Accessories

Product	Model	Page
Finger Guard	<b>FG9D</b>	F-118
Filter	<b>FL9</b>	F-120
Screen	<b>FS9S</b>	F-123
Plug Cord	<b>PCA2B</b> [1 m (3.3 ft.)]	F-124
	<b>PCA2B2</b> [2 m (6.6 ft.)]	

## Thermostats

A thermostat makes it possible for fans to operate only when cooling is necessary, thereby conserving energy.



**(RoHS)**

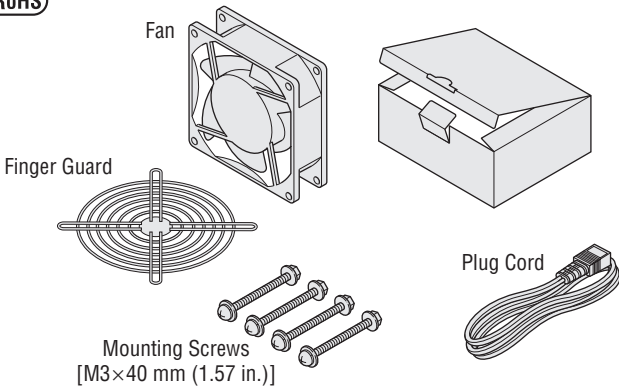
Thermostats **AM1-WA1/AM1-XA1**

● Page → F-113

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**(RoHS)**



## Product Line

Fan Kit Model
<b>T-MU925S-21-GP</b>
<b>T-MU925S-51-GP</b>
<b>T-MU925M-21-GP</b>
<b>T-MU925M-51-GP</b>

● See page F-52 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.



MU Series

80 mm – 25 mm Thick  
 (3.15 in. – 0.98 in. Thick)



Operating Voltage Range: ±10%  
 Materials  
 Frame: Die Cast Aluminum  
 Blades: Polycarbonate (Flammability grade V-0)  
 Overheat Protection: Impedance Protected  
 Bearings: Ball Bearings



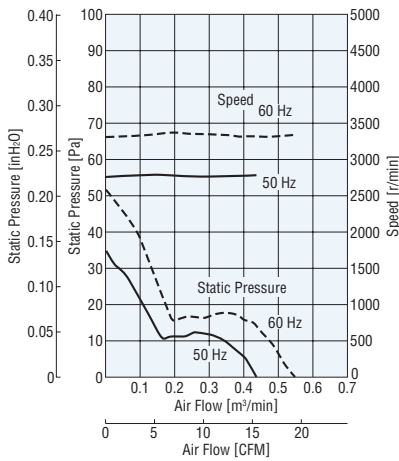
Specifications (RoHS)

Speed Type	Model	Voltage VAC	Frequency Hz	Current A	Input W	Speed r/min	Max. Air Flow		Max. Static Pressure		Noise Level dB (A)
							m <sup>3</sup> /min	CFM	Pa	inH <sub>2</sub> O	
Standard Speed	MU825S-23	Single-Phase 115	50	0.11	9.5	2750	0.45	15.9	34	0.137	28
			60	0.09	8.0	3250	0.55	19.4	49	0.196	35
	MU825S-53	Single-Phase 220	50	0.06	8.5	2750	0.45	15.9	34	0.137	28
			50	0.07	10.5	2750	0.45	15.9	34	0.137	28
			60	0.06	8.0	3250	0.55	19.4	49	0.196	35
			60	0.06	8.0	3250	0.55	19.4	49	0.196	35

Details of safety standards → Page H-2

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

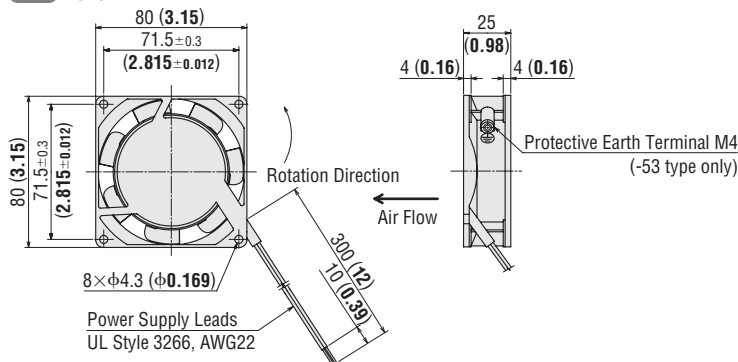
Air Flow – Static Pressure Characteristics



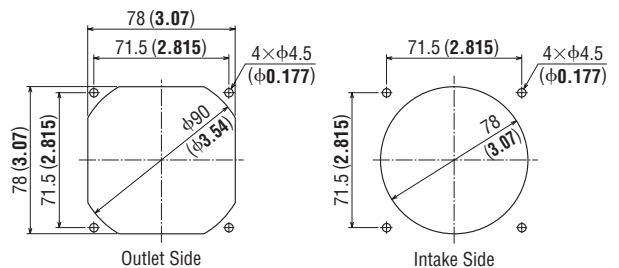
Dimensions Unit = mm (in.)

Mass: 0.25 kg (0.55 lb.)

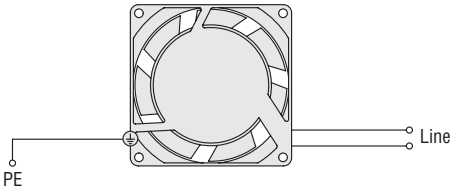
DXF E015



Panel Cut-Out Unit = mm (in.)



## Connection Diagram



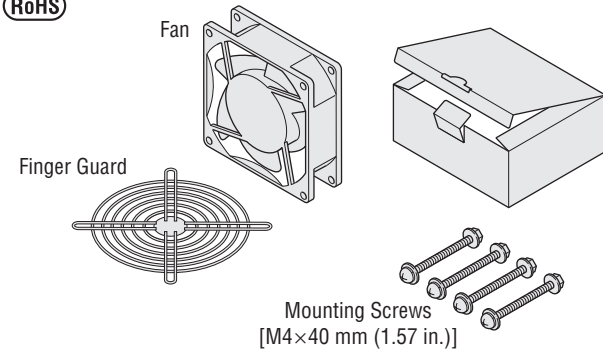
## Accessories

Product	Model	Page
Finger Guard	<b>FG8D</b>	F-118
Filter	<b>FL8</b>	F-120
Screen	<b>FS8S</b>	F-123

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



## Product Line

Fan Kit Model
<b>T-MU825S-23-G</b>
<b>T-MU825S-53-G</b>

● See page F-54 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

Introduction	
MRS	
Variable Flow MRS	AC Input
MU	DC Input
MDS/MD	DC Input
MDE	Long-Life
MB	Centrifugal Blowers
MBD	DC Input
MF	AC Input
MFD	DC Input
FM	Cross Flow Fans
	Cooling Module
	Thermostats
	Accessories
	Installation