

MRS Series

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



Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
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 (RoHS)



Model			Voltage	Frequency	Current	Input	Speed	Max. Air Flow		Max. Static Pressure		Noise Level	Capacitor
Low-Speed Alarm			VAC	Hz	A	W	r/min	m³/min	CFM	Pa	inH ₂ O	dB (A)	μF
Electronic Alarm Type (Alarm specifications: ②)	Contact Alarm Type (Alarm specifications: ⑤)	Standard Type											
MRS25-BM	MRS25-BB	MRS25-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	
MRS25-DM	MRS25-DB	MRS25-D	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	
MRS25-TM	MRS25-TB	MRS25-T	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	

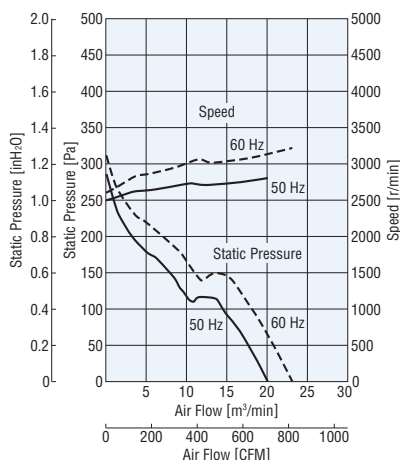
● How to read specifications → Page E-19 ● Alarm specifications ②, ⑤ → Page E-21 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

The following items are included in each product.

Fan, Capacitor*, Capacitor Cap*, Operating Manual
*Single-phase fans only

Air Flow – Static Pressure Characteristics

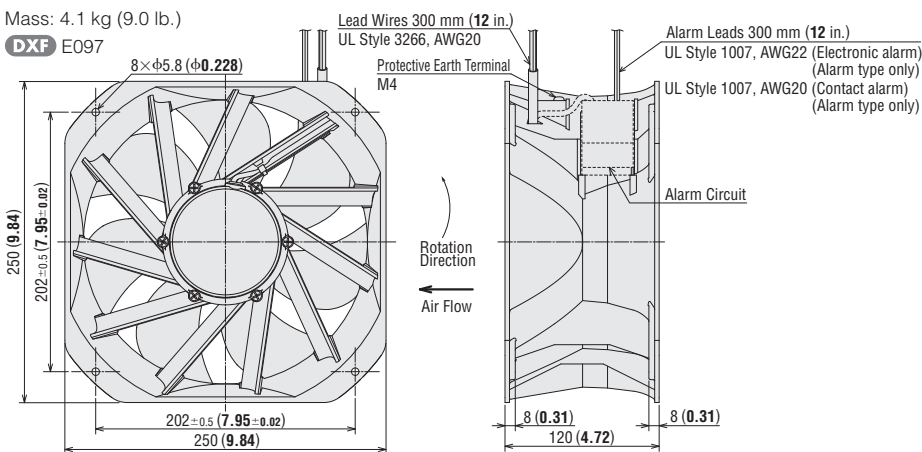
● How to read air flow – static pressure characteristics
→ Page E-20



Dimensions Unit = mm (in.)

Mass: 4.1 kg (9.0 lb.)

DXF E097



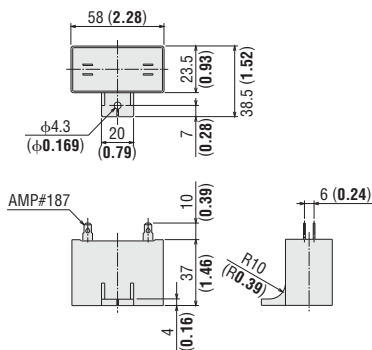
Capacitor (Included)

◇ For **MRS25-B** and **MRS25-D**

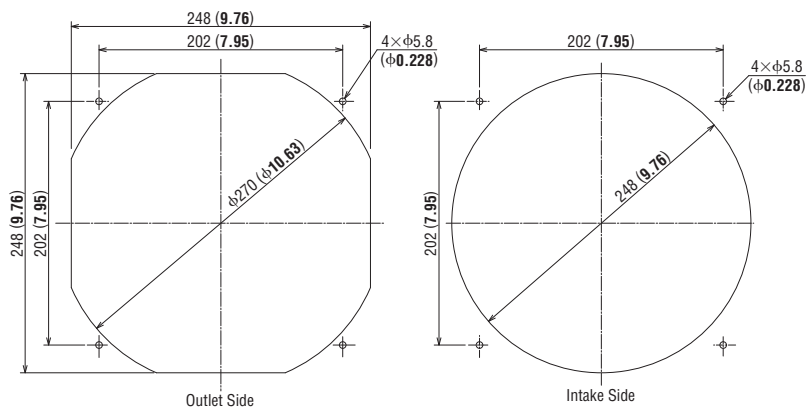
CH160CFAUL Mass: 75 g (2.6 oz.)

CH45BFAUL Mass: 73 g (2.6 oz.)

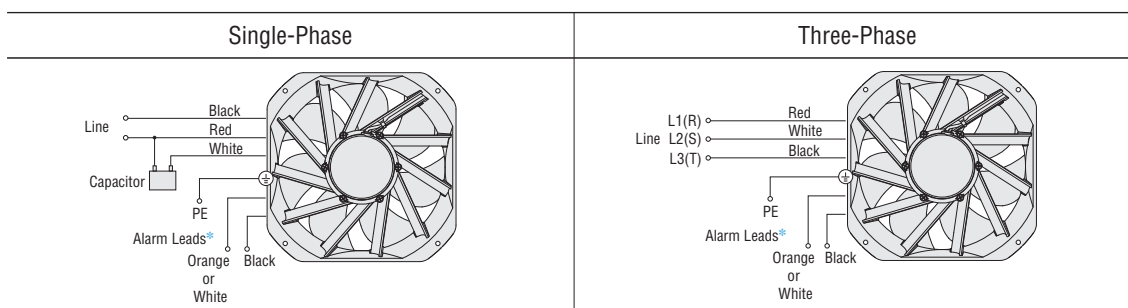
(A capacitor and capacitor cap are included with single-phase fans.)



Panel Cut-Out Unit = mm (in.)



Connection Diagrams



* Alarm type only

● How to connect a capacitor → Page E-158

Accessories

The following product is RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG25D	Conformed component	E-145

Thermostats

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



RoHS

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

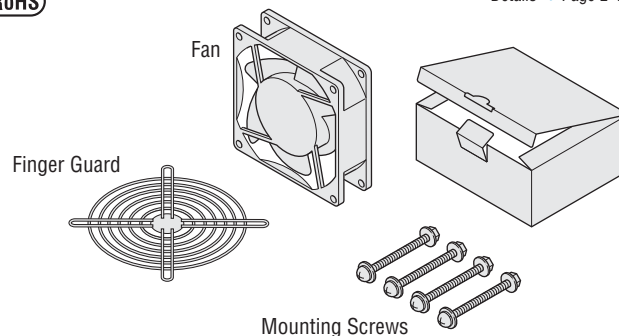
● Page → E-133

Fan Kit

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

Details → Page E-138

RoHS



Product Line

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

MRS Series

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



Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
 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 (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	VAC	Hz	A	W	r/min	m ³ /min	CFM	Pa	inH ₂ O	dB (A)	μF
MRS20-BM	MRS20-BUL	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	
MRS20-DM	MRS20-DUL	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	
		Single-Phase 230	60	0.4	95	3400	15.5	547	265	1.06	61	
MRS20-TM	MRS20-TUL	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	

● How to read specifications → Page E-19 ● Alarm specifications ② → Page E-21 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

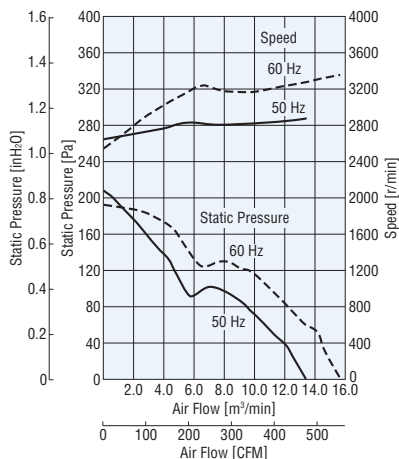
The following items are included in each product.

Fan, Capacitor*, Capacitor Cap*, Operating Manual

*Single-phase fans only

Air Flow – Static Pressure Characteristics

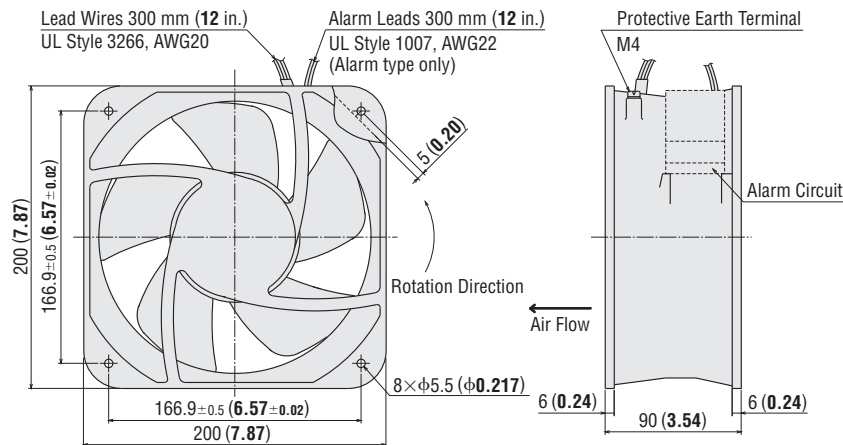
● How to read air flow – static pressure characteristics → Page E-20



Dimensions Unit = mm (in.)

Mass: 2.5 kg (5.5 lb.)

DXF E001

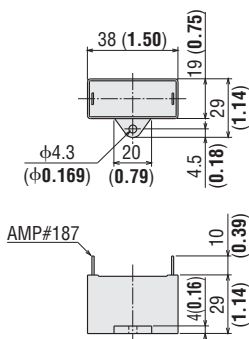


Capacitor (Included)

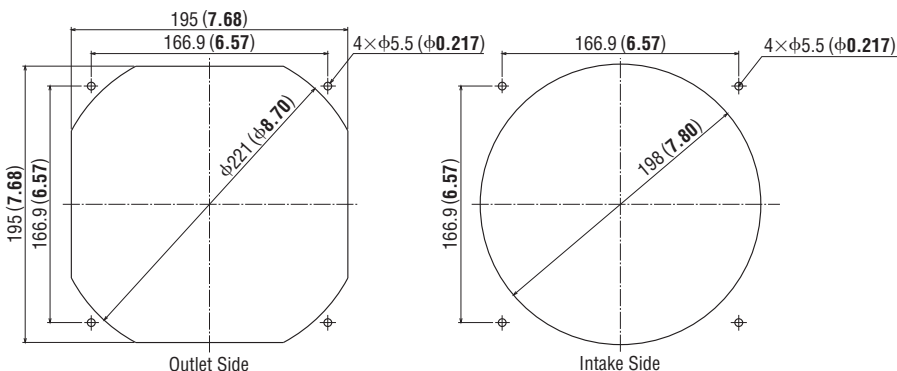
(A capacitor and capacitor cap are included with single-phase fans.)

◇ For **MRS20-B** and **MRS20-D**

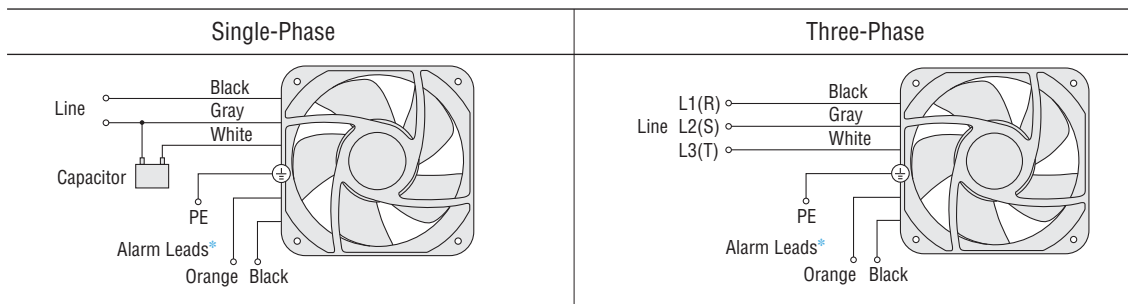
CH60UL Mass: 32 g (1.1 oz.)



Panel Cut-Out Unit = mm (in.)



Connection Diagrams



* Alarm type only

● How to connect a capacitor → Page E-158

Accessories

The following product is RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG20D	Conformed component	E-145

Thermostats

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



RoHS

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

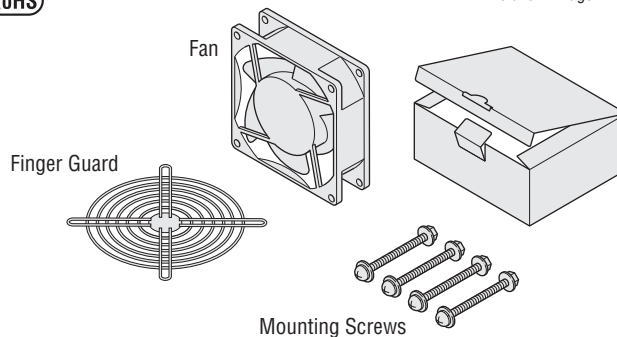
● Page → E-133

Fan Kit

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

Details → Page E-138

RoHS



Product Line

Fan Kit Model	
T-MRS20-BM-G	T-MRS20-BUL-G
T-MRS20-DM-G	T-MRS20-DUL-G
T-MRS20-TM-G	T-MRS20-TUL-G

MRS Series

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



Connector Type

Terminal Box Type

Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
 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 (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	m ³ /min	CFM	Pa	inH ₂ 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	
			Three-Phase 230	60	0.4	76	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.

● How to read specifications → Page E-19 ● Alarm specifications ② → Page E-21 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

The following items are included in each product.

● **MRS18-□H**

Fan, Cable with Connector, Operating Manual

● **MRS18-□TM**

Fan, Capacitor*, Capacitor Cap*, Operating Manual

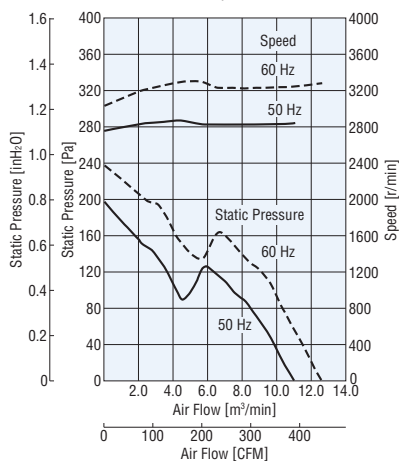
* Single-phase fans only

● **MRS18-□UL**

Fan, Operating Manual

Air Flow – Static Pressure Characteristics

● How to read air flow – static pressure characteristics → Page E-20



Dimensions Unit = mm (in.)

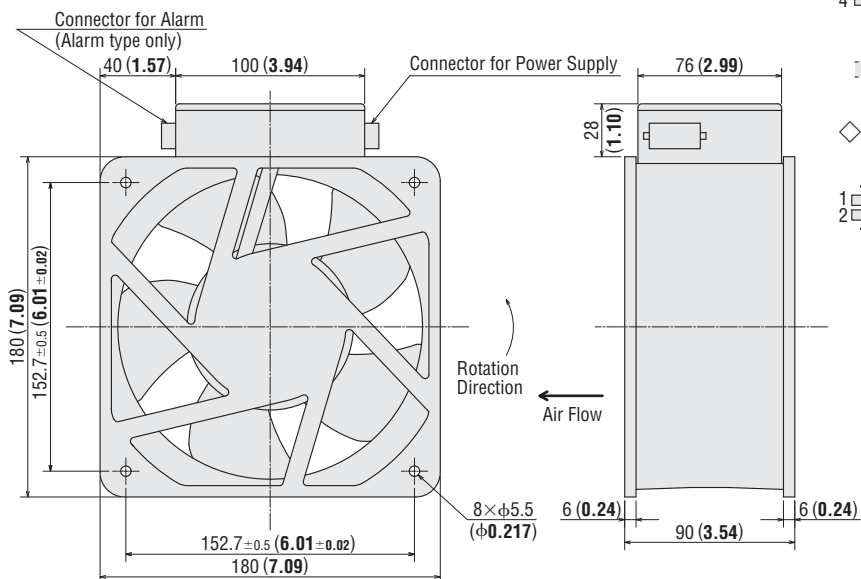
Connector Type

Fan

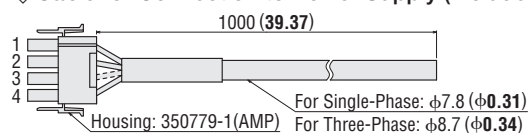
Mass: 2.5 kg (5.5 lb.)

Alarm Type/ **DXF** E126

Standard Type/ **DXF** E127

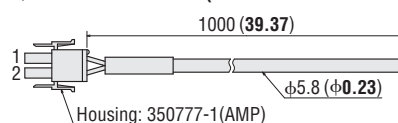


Cable for Connection to Power Supply (Included)



Only for three-phase

Cable for Alarm (Included with alarm type)

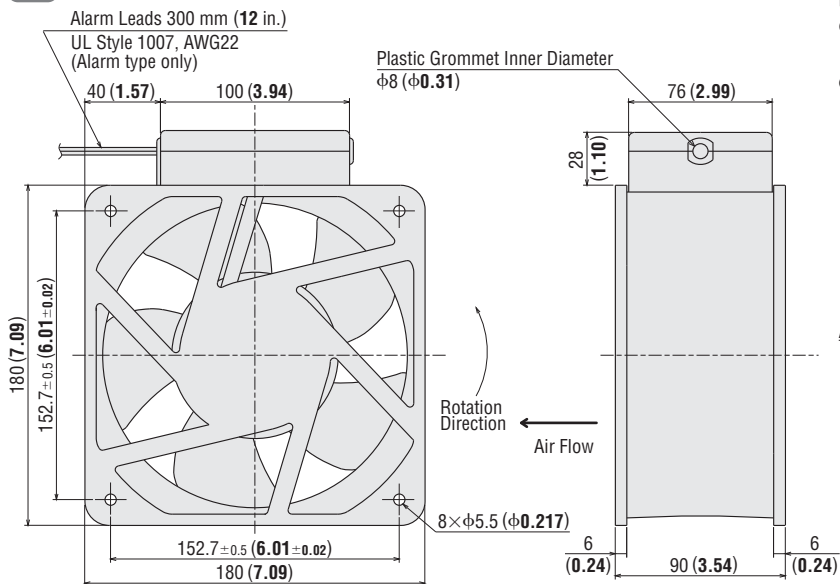


Terminal Box Type

Fan

Mass: 2.5 kg (5.5 lb.)

DXF E002

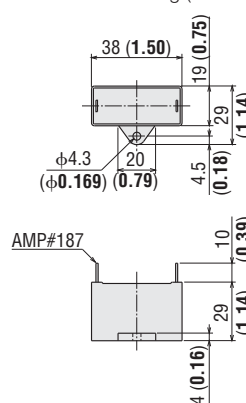


Capacitor (Included)

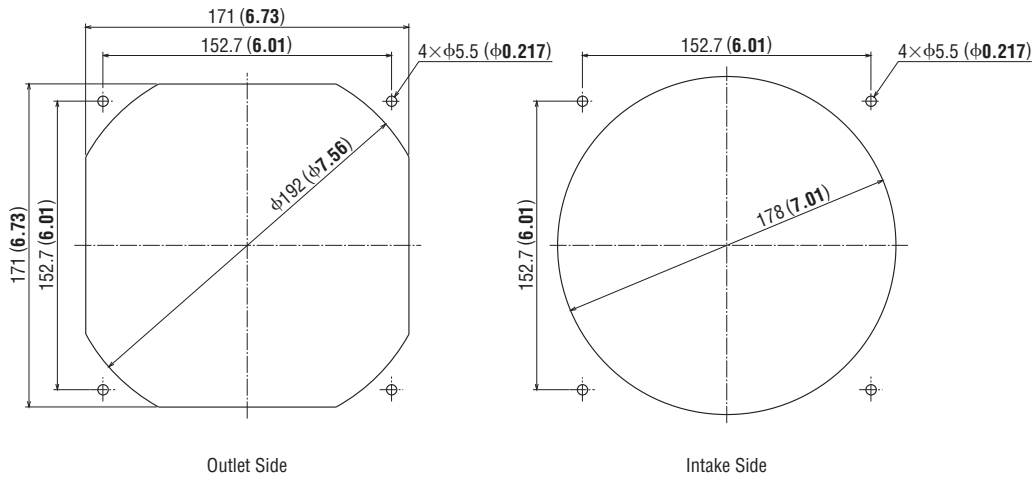
Capacitor and capacitor cap are included with single-phase alarm type fans. Single-phase standard type fans contain a built-in capacitor.

• For MRS18-BTM and MRS18-DTM

CH60UL Mass: 32 g (1.1 oz.)



■ **Panel Cut-Out** Unit = mm (in.)



■ **Connection Diagrams**

● **Connector Type**

MRS18-BMH MRS18-DMH		MRS18-BH MRS18-DH	
MRS18-TMH		MRS18-TH	

● **Terminal Box Type**

MRS18-BTM MRS18-DTM		MRS18-BUL MRS18-DUL		Terminal Box
MRS18-TTM		MRS18-TUL		

● How to connect a capacitor → Page E-158

Accessories

The following products are RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG18D	Conformed component	E-145
Filter	FL18	—	E-147

Thermostats

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



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

● Page → E-133

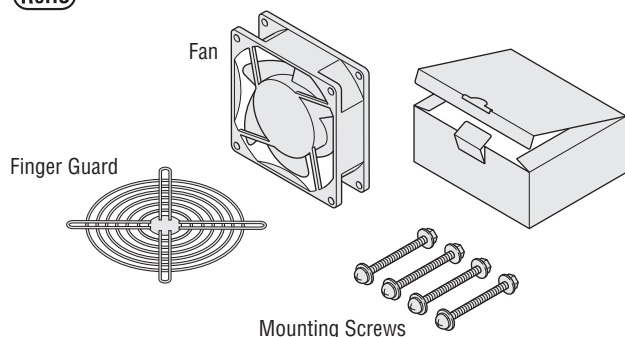
Fan Kit

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

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



Details → Page E-138



◇ Product Line

● Connector Type

Fan Kit Model
T-MRS18-BMHG
T-MRS18-DMHG
T-MRS18-TMHG
T-MRS18-BHG
T-MRS18-DHG
T-MRS18-THG

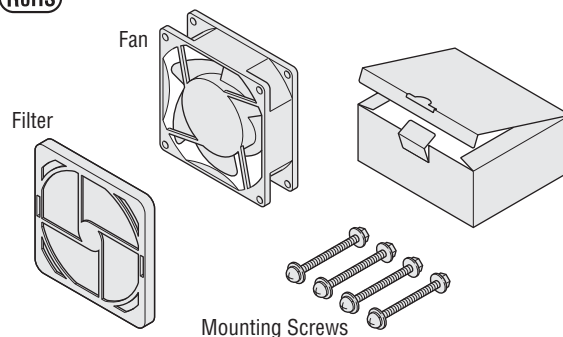
● Terminal Box Type

Fan Kit Model
T-MRS18-BTM-G
T-MRS18-DTM-G
T-MRS18-TTM-G
T-MRS18-BUL-G
T-MRS18-DUL-G
T-MRS18-TUL-G

● Package Contents (Fan, Filter, Mounting screws)



Details → Page E-138



◇ Product Line

● Connector Type

Fan Kit Model
T-MRS18-BMHF
T-MRS18-DMHF
T-MRS18-TMHF
T-MRS18-BHF
T-MRS18-DHF
T-MRS18-THF

● Terminal Box Type

Fan Kit Model
T-MRS18-BTM-F
T-MRS18-DTM-F
T-MRS18-TTM-F
T-MRS18-BUL-F
T-MRS18-DUL-F
T-MRS18-TUL-F

MRS Series

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



Ambient Temperature: -10~+60°C (+14~+140°F)
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 inH₂O			
Electronic Alarm Type (Alarm specifications: ②)	Contact Alarm Type (Alarm specifications: ④)							VAC	Hz	A	W		
MRS16-BTM	MRS16-BTA	MRS16-BUL	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	
MRS16-DTM	MRS16-DTA	MRS16-DUL	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	
MRS16-TTM	MRS16-TTA	MRS16-TUL	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	

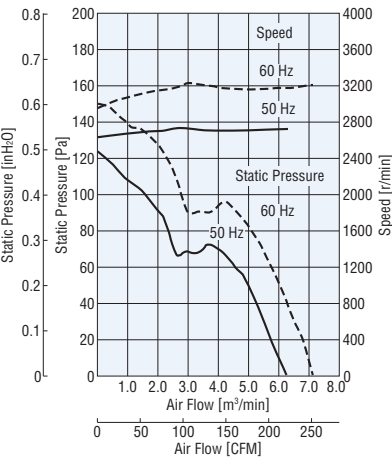
● How to read specifications → Page E-19 ● Alarm specifications ②, ④ → Page E-21 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

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

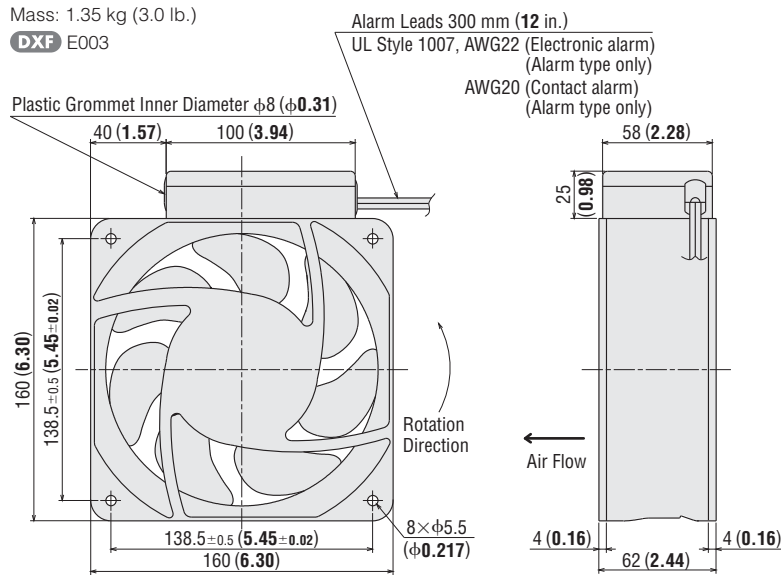
● How to read air flow – static pressure characteristics → Page E-20



Dimensions Unit = mm (in.)

Mass: 1.35 kg (3.0 lb.)

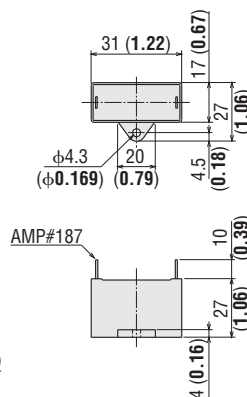
DXF E003



Capacitor (Included)

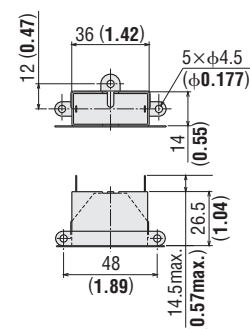
For MRS16-□TM

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

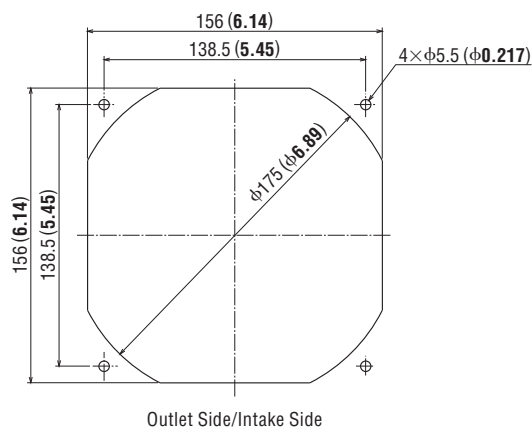


For MRS16-□TA

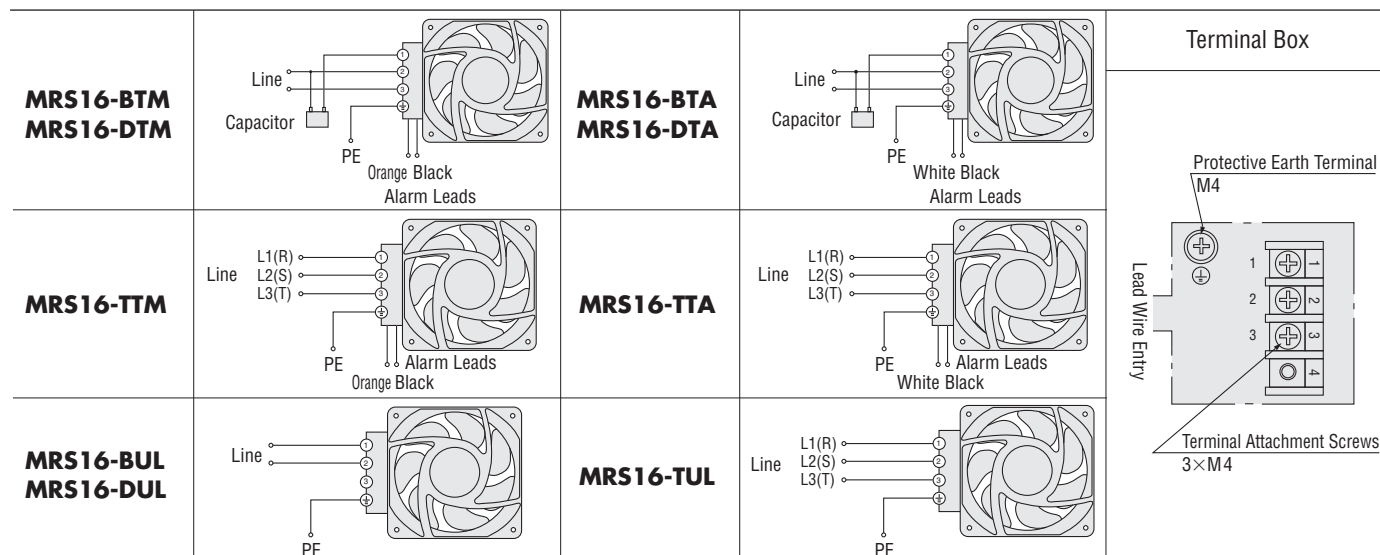
CH30 Mass: 30 g (1.1 oz.)
(A capacitor is included with single-phase alarm type fans.
A capacitor cap is sold separately.
Details → Page E-152)



Panel Cut-Out Unit = mm (in.)



Connection Diagrams



● How to connect a capacitor → Page E-158

Accessories

The following products are RoHS-Compliant.
Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG16D	Conformed component	E-145
Filter	FL16	—	E-147

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 → E-133

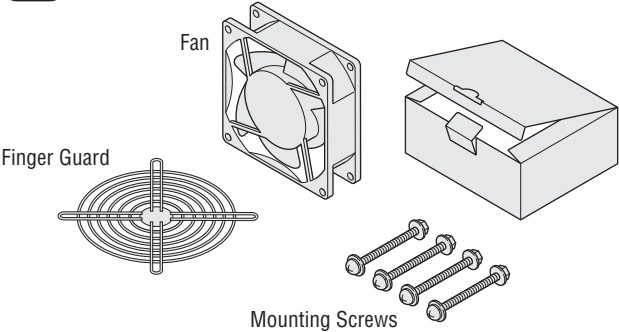
Fan Kit

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

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

RoHS

Details → Page E-138



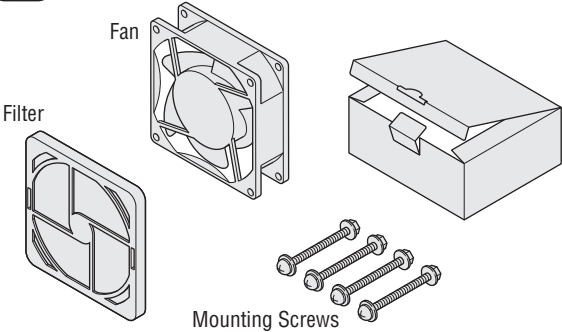
◇ Product Line

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

● Package Contents (Fan, Filter, Mounting screws)

RoHS

Details → Page E-138



◇ Product Line

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

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

MRS Series

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



Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
 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 (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	VAC	Hz	A	W	r/min	m ³ /min	CFM	Pa	inH ₂ O	dB (A)
MRS14-TTM	MRS14-TUL	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

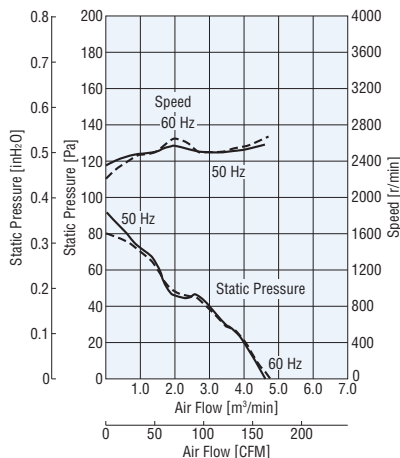
● How to read specifications → Page E-19 ● Alarm specifications ③ → Page E-21 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

The following items are included in each product.

Fan, Operating Manual

Air Flow – Static Pressure Characteristics

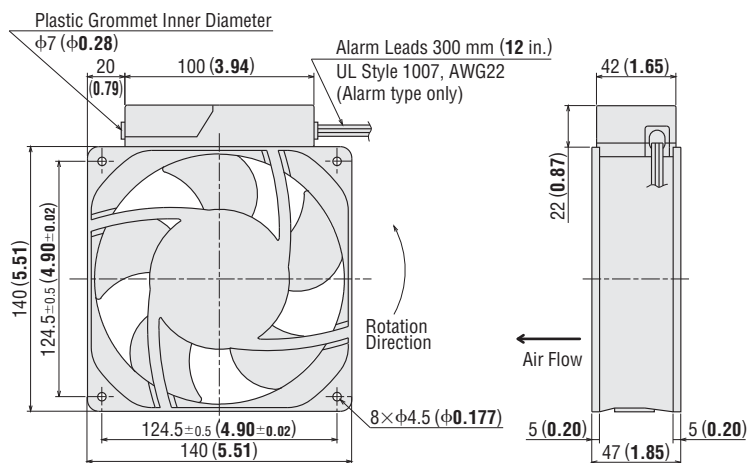
● How to read air flow – static pressure characteristics → Page E-20

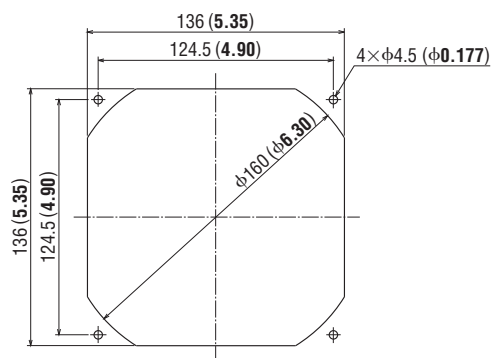


Dimensions Unit = mm (in.)

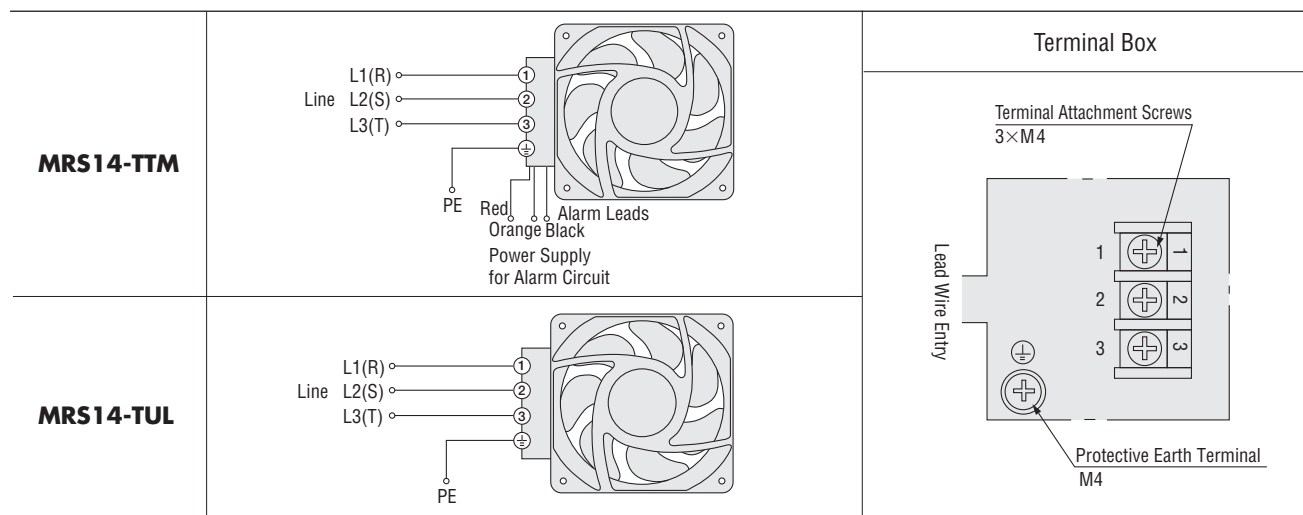
Mass: 0.9 kg (2.0 lb.)

DXF E004



Panel Cut-Out Unit = mm (in.)

Outlet Side/Intake Side

Connection Diagrams**Accessories**

The following products are RoHS-Compliant.

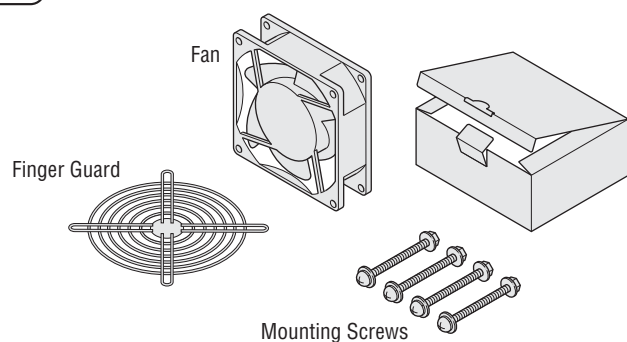
Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG14D	Conformed component	E-145
Filter	FL14	—	E-147

Fan Kit

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

Details → Page E-138

RoHS**Product Line**

Fan Kit Model

T-MRS14-TTM-G**T-MRS14-TUL-G**

VARIOFLOW**MRS Series Variable Flow Type**□ **180 mm – 90 mm Thick**(□ **7.09 in. – 3.54 in. Thick**)Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)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 m ³ /min CFM	Max. Static Pressure Pa inH ₂ O	Noise Level dB (A)	Resistance of Potentiometer kΩ
MRS18V2-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
	Single-Phase 100	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
MRS18V2-D	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
	Single-Phase 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
	Single-Phase 230	60	0.7	100	3350 1100	12.8 4.0 452 141	255 23.5 1.02 0.0942	61 44	0 200

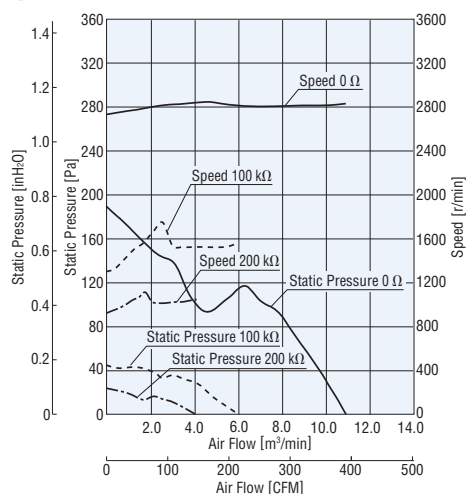
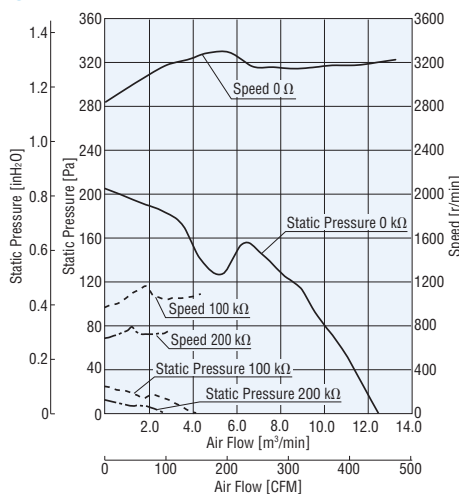
● How to read specifications → Page E-19 ● Details of safety standards → Page G-2

— The following items are included in each product. —

Fan, External Speed Potentiometer, Operating Manual

Air Flow – Static Pressure Characteristics

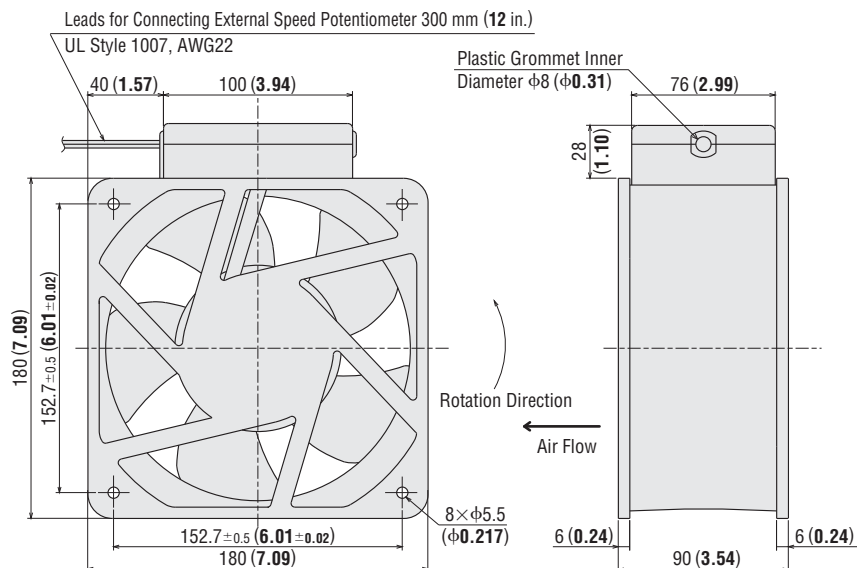
● How to read air flow – static pressure characteristics → Page E-20

50 Hz**60 Hz**

Dimensions Unit = mm (in.)

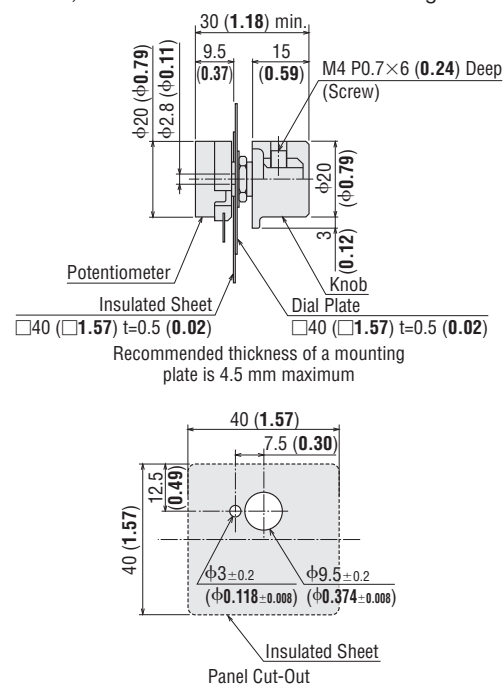
Mass: 2.5 kg (5.5 lb.)

DXF E002

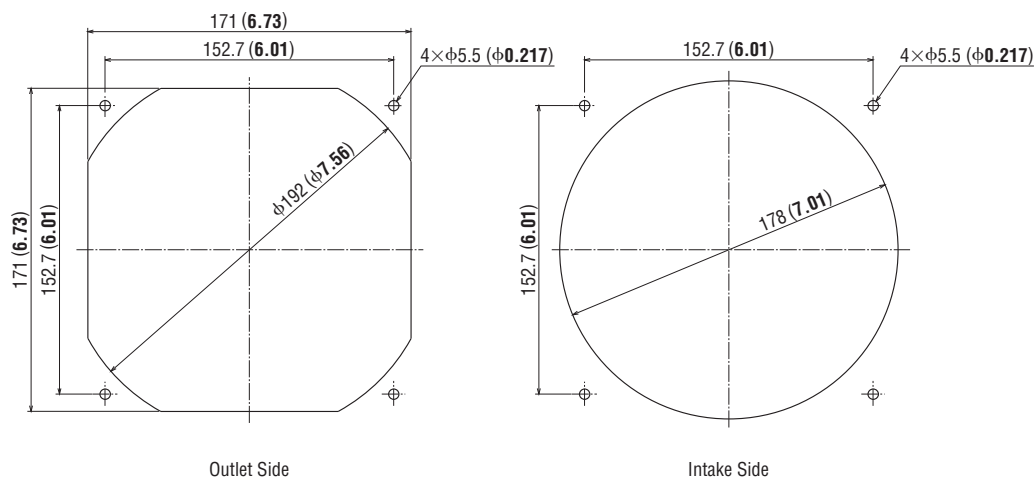


External Speed Potentiometer (Included)

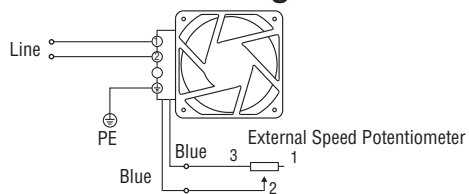
200 kΩ, 1/4 W with a linear resistance vs. angle curve



Panel Cut-Out Unit = mm (in.)



Connection Diagram



Leads for connecting external speed potentiometer

Accessories

The following products are RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG18D	Conformed component	E-145
Filter	FL18	—	E-147

MU Series

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



Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
 Operating Voltage Range: $\pm 10\%$
 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 m ³ /min CFM	Max. Static Pressure Pa inH ₂ 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	50	0.10	13.5	2800	2.7 95.3	81 0.325	43
			60	0.11 0.10	16.0 13.5	2800 3250	2.7 95.3 3.0 106	81 0.325 81 0.325	43 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	50	0.09	11.5	2500	2.2 77.7	52 0.209	38
			60	0.09 0.09	14.0 11.5	2500 2800	2.3 81.2 2.5 88.3	59 0.237 52 0.209	39 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	50	0.06	7.5	2100	1.85 65.3	34 0.137	33
			60	0.06 0.06	9.5 7.5	2100 2200	1.9 67.1 1.9 67.1	34 0.137 29 0.118	34 33

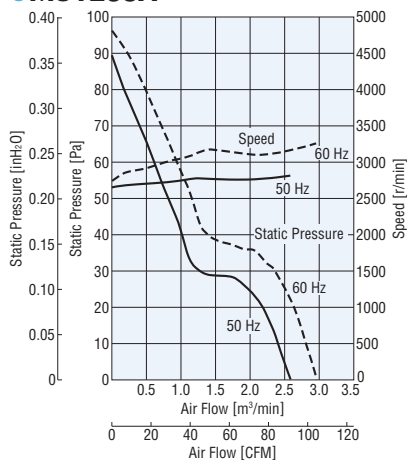
● How to read specifications → Page E-19 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

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

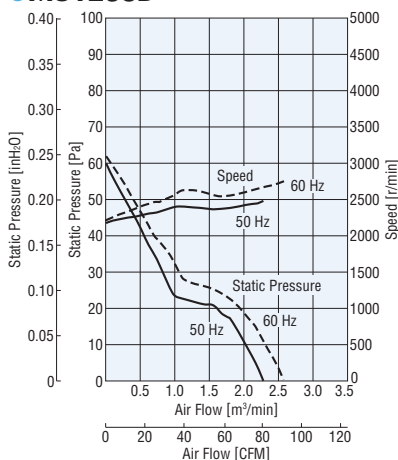
Air Flow – Static Pressure Characteristics

● How to read air flow – static pressure characteristics → Page E-20

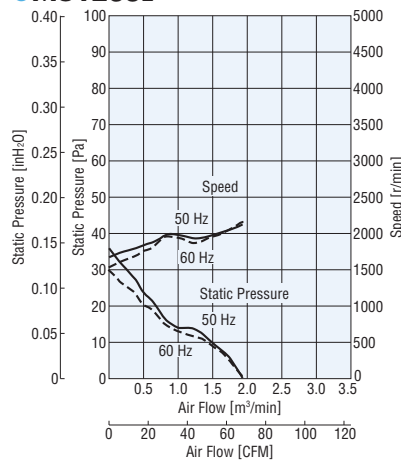
● MU1238A



● MU1238B



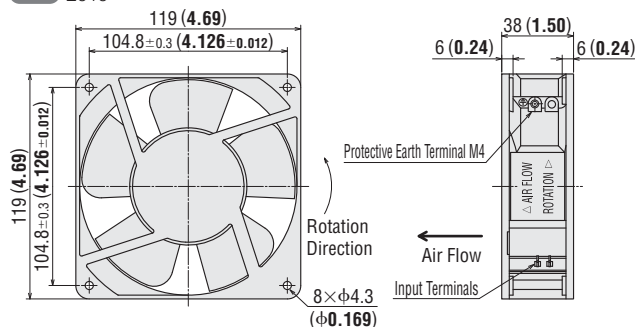
● MU1238L



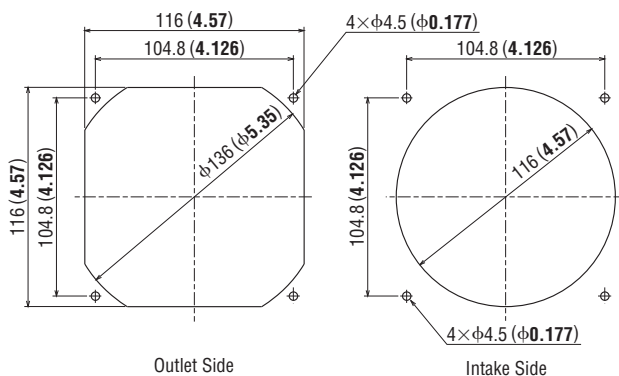
Dimensions Unit = mm (in.)

Mass: 0.53 kg (1.2 lb.)

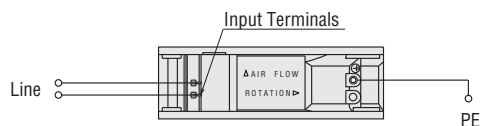
DXF E010



Panel Cut-Out Unit = mm (in.)



Connection Diagram



Accessories

The following products are RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG12D	Conformed component	E-145
Filter	FL12	—	E-147
Screen	FS12S	—	E-150
Plug Cord	PCA2B [1 m (3.3 ft.)]	Electrical Appliance and Material Safety Law-Compliant component (Japan) UL recognized component CSA certified component	E-151

Thermostats

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



RoHS

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

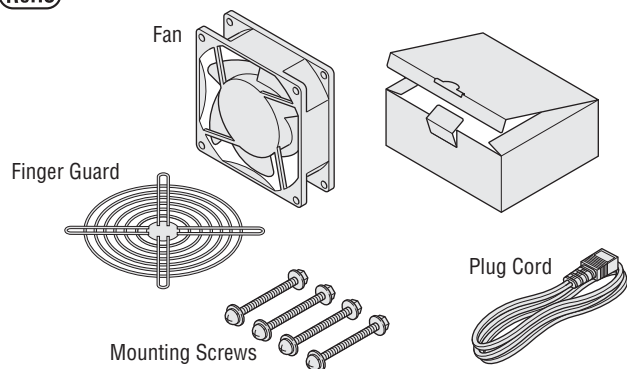
● Page → E-133

Fan Kit

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

Details → Page E-140

RoHS



Product Line

Fan Kit Model
T-MU1238A-21-GP
T-MU1238A-51-GP
T-MU1238B-21-GP
T-MU1238B-51-GP
T-MU1238L-21-GP
T-MU1238L-51-GP

MU Series

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



Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
 Operating Voltage Range: $\pm 10\%$
 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
							m ³ /min	CFM	Pa	inH ₂ O	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	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	50	0.07	10.0	2250	1.4	49.4	32	0.129	33
			60	0.07	9.5	2600	1.7	60	31	0.125	37

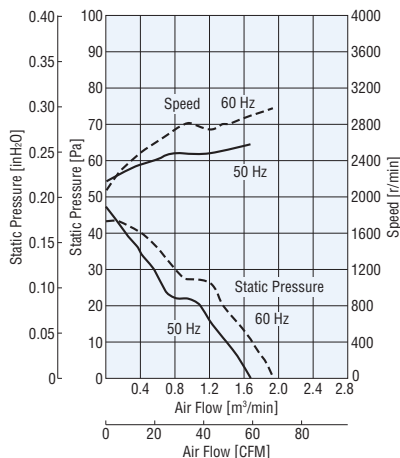
● How to read specifications → Page E-19 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

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

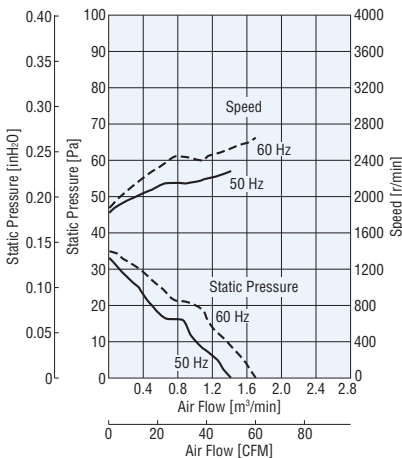
Air Flow – Static Pressure Characteristics

● How to read air flow – static pressure characteristics → Page E-20

● MU1225S



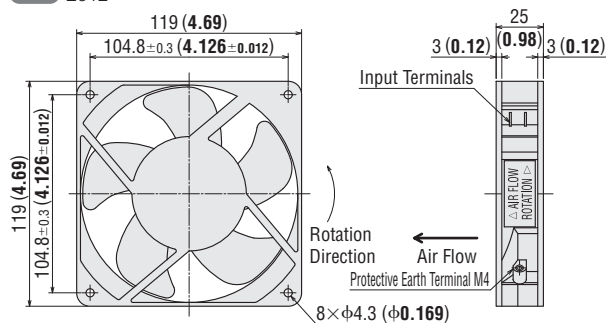
● MU1225M



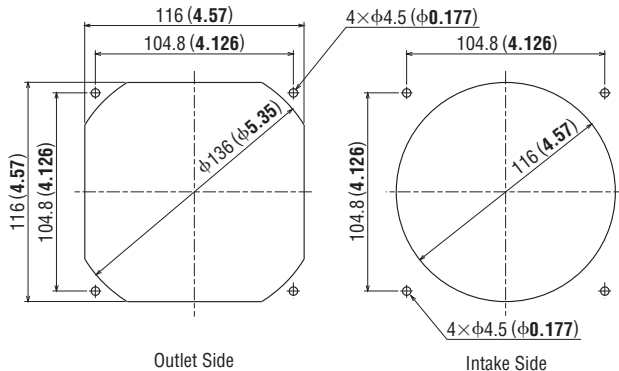
Dimensions Unit = mm (in.)

Mass: 0.31 kg (0.68 lb.)

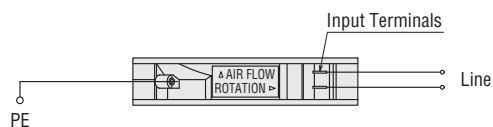
DXF E012



Panel Cut-Out Unit = mm (in.)



Connection Diagram



Accessories

The following products are RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG12D	Conformed component	E-145
Filter	FL12	—	E-147
Screen	F512S	—	E-150
Plug Cord	PCA2B [1 m (3.3 ft.)]	Electrical Appliance and Material Safety Law-Compliant component (Japan) UL recognized component CSA certified component	E-151

Thermostats

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



RoHS

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

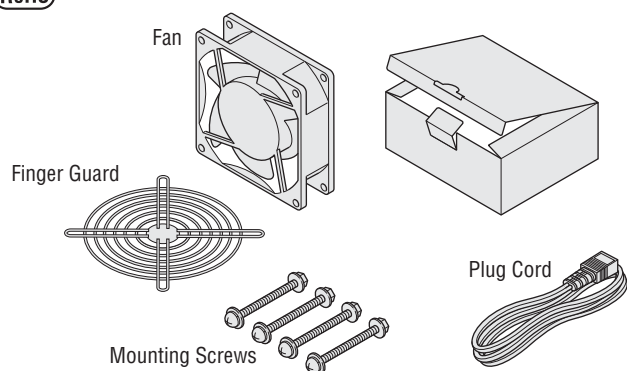
●Page → E-133

Fan Kit

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

Details → Page E-140

RoHS



Product Line

Fan Kit Model
T-MU1225S-21-GP
T-MU1225S-51-GP
T-MU1225M-21-GP
T-MU1225M-51-GP

MU Series

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



Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
Operating Voltage Range: $\pm 10\%$
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
							m³/min	CFM	Pa	inH₂O	dB (A)
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
		Single-Phase 230	50	0.07	10.5	2600	0.95	33.5	44	0.176	35
		Single-Phase 230	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
		Single-Phase 230	50	0.06	9.5	2300	0.85	30.0	34	0.137	32
		Single-Phase 230	60	0.06	8.0	2700	1.00	35.8	44	0.176	36

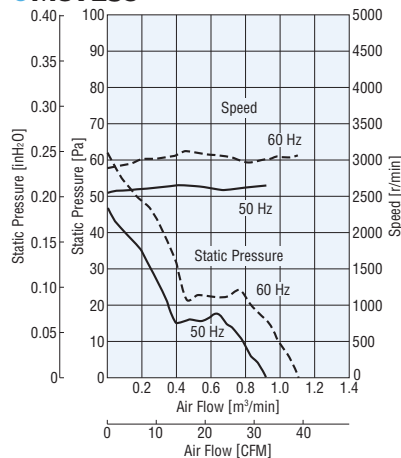
● How to read specifications → Page E-19 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

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

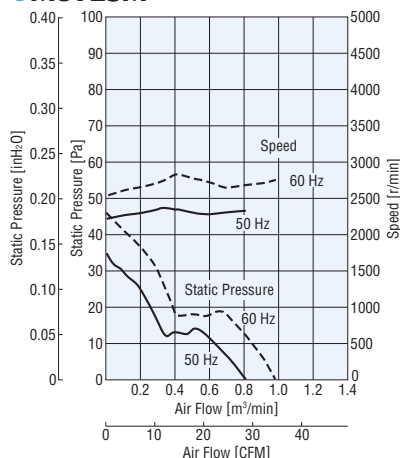
Air Flow – Static Pressure Characteristics

● How to read air flow – static pressure characteristics → Page E-20

● MU925S



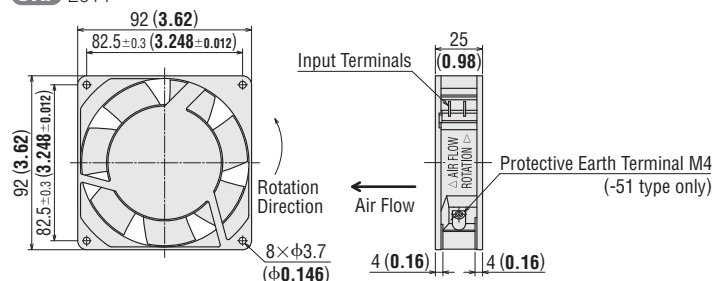
● MU925M



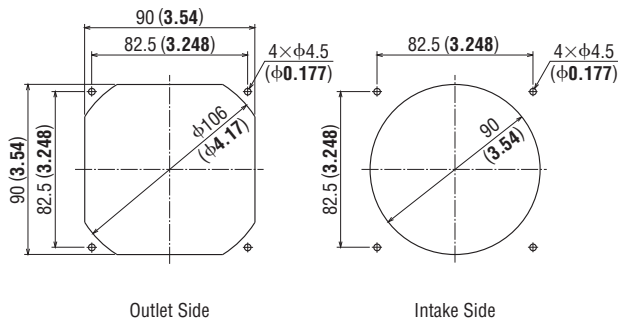
Dimensions Unit = mm (in.)

Mass: 0.27 kg (0.59 lb.)

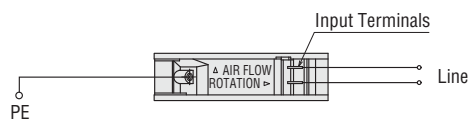
DXF E014



Panel Cut-Out Unit = mm (in.)



Connection Diagram



Accessories

The following products are RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG9D	Conformed component	E-145
Filter	FL9	—	E-147
Screen	FS9S	—	E-150
Plug Cord	PCA2B [1 m (3.3 ft.)]	Electrical Appliance and Material Safety Law-Compliant component (Japan) UL recognized component CSA certified component	E-151

Thermostats

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



RoHS

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

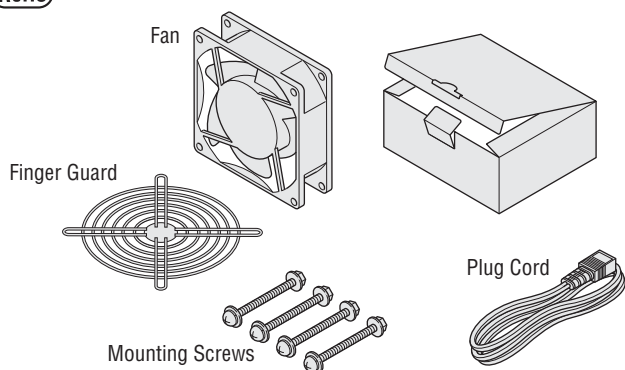
●Page → E-133

Fan Kit

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

Details → Page E-140

RoHS



Product Line

Fan Kit Model
T-MU925S-21-GP
T-MU925S-51-GP
T-MU925M-21-GP
T-MU925M-51-GP

MU Series

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



Ambient Temperature: $-10 \sim +60^{\circ}\text{C}$ ($+14 \sim +140^{\circ}\text{F}$)
Operating Voltage Range: $\pm 10\%$
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
							m ³ /min	CFM	Pa	inH ₂ O	dB (A)
Standard Speed	MU8255-23	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
	MU8255-53	Single-Phase 220	50	0.06	8.5	2750	0.45	15.9	34	0.137	28
		Single-Phase 230	50	0.07	10.5	2750	0.45	15.9	34	0.137	28
		Single-Phase 230	60	0.06	8.0	3250	0.55	19.4	49	0.196	35

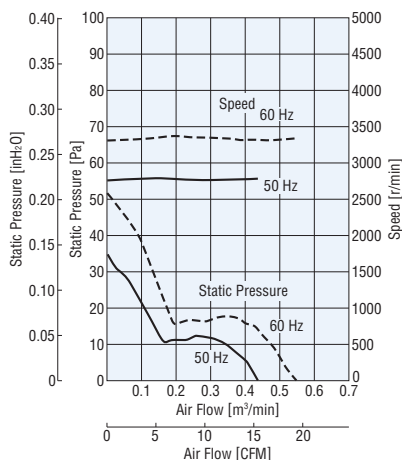
● How to read specifications → Page E-19 ● Details of safety standards → Page G-2 ● Details of RoHS Directive → Page G-38

The following items are included in each product.

Fan, Operating Manual

Air Flow – Static Pressure Characteristics

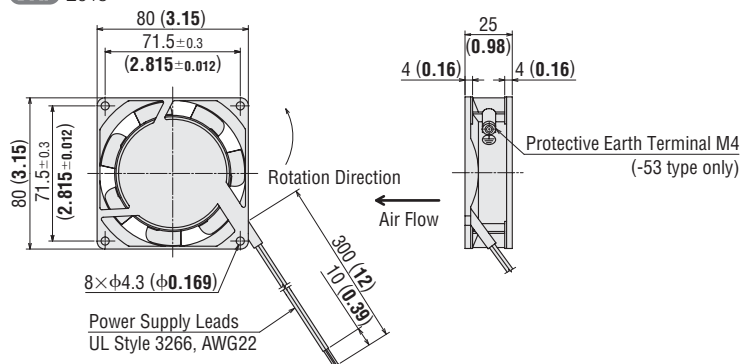
● How to read air flow – static pressure characteristics → Page E-20



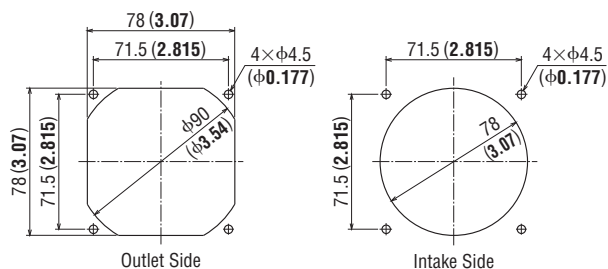
Dimensions Unit = mm (in.)

Mass: 0.25 kg (0.55 lb.)

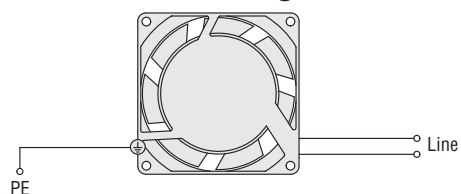
DXF E015



Panel Cut-Out Unit = mm (in.)



Connection Diagram



Accessories

The following products are RoHS-Compliant.

Details → Page E-137

Product	Model	Safety Standards	Page
Finger Guard	FG8D	Conformed component	E-145
Filter	FL8	—	E-147
Screen	FS8S	—	E-150

Thermostats

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



RoHS

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

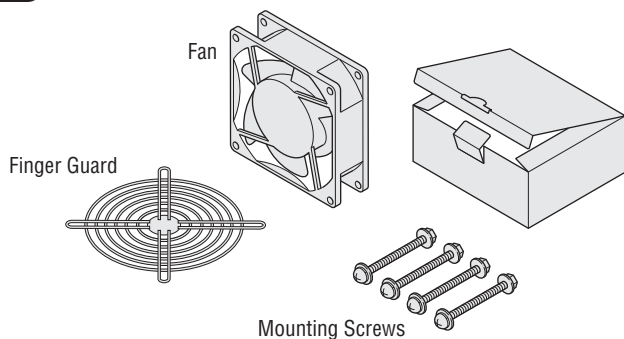
●Page → E-133

Fan Kit

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

Details → Page E-140

RoHS



Product Line

Fan Kit Model

T-MU825S-23-G

T-MU825S-53-G