

DC Input/Long-Life MDE Series

<Additional Information>

- Technical reference → Page H-1
- Regulations & Standards → Page I-2

UL[®] US [D] CE [cUL[®] US CE (Only for MDE1451)]

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



The **MDE** Series long-life axial flow fans utilize a brushless motor and have an expected life of 100,000 hours. A stall alarm comes standard.

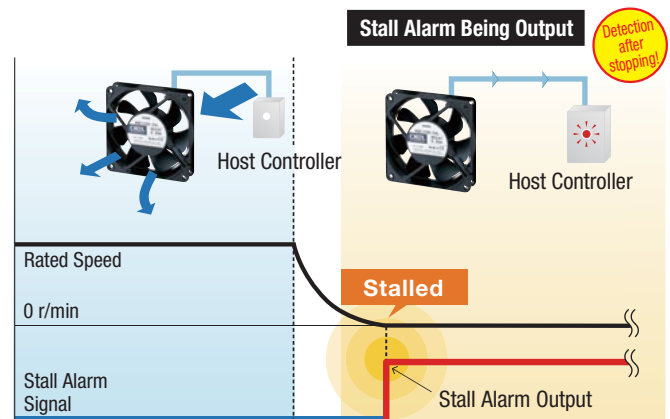
Features

Long-Life

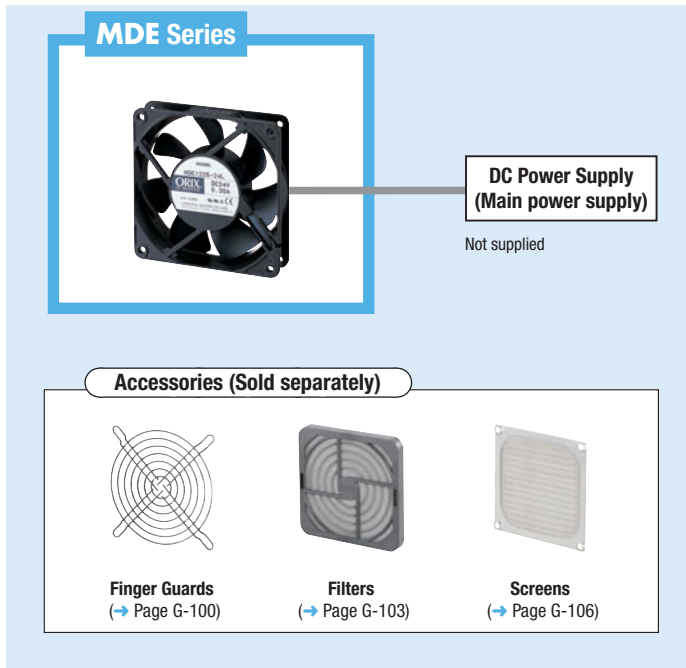
By using long life fans with an expected life of 100,000 hours (approximately 11 years), the maintenance interval can be extended, and the number of times the cooling fans are replaced can also be reduced. In addition to reducing running costs, this also reduces scrapped parts, which can contribute to both financial and environmental gains.

Fans with Stall Alarm

Outputs an alarm when the cooling fan stops.
Quickly detects defective stops to allow the cooling fan to be replaced.



System Configuration



● Example of System Configuration

Fan	Sold Separately
MDE1225-24L €52.00	Finger Guard FG12D €5.00

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

Product Number

● Fan Only

MDE 14 51 - 24 L 2

① ② ③ ④ ⑤ ⑥

①	Series	MDE: MDE Series
②	Frame Size	12: 119 mm, 14: 140 mm
③	Frame Thickness	25: 25 mm, 51: 51 mm
④	Power Supply Voltage	12: 12 VDC, 24: 24 VDC, 48: 48 VDC
⑤	Additional Function	L: Stall Alarm, Electronic Alarm Type
⑥	Reference Number	

● Fan Kit

T - MDE1451-24L2 G

① ② ③

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

Product Line

Size	Power Supply Voltage VDC	Fan Only		Fan Kit	
		Product Name	List Price	Product Name	List Price
□119 mm - 25.4 mm Thick	12	MDE1225-12L	€52.00	T-MDE1225-12L-G	€56.00
	24	MDE1225-24L	€52.00	T-MDE1225-24L-G	€56.00
□140 mm - 51 mm Thick	24	MDE1451-24L2	€64.00	T-MDE1451-24L2G	€69.00
	48	MDE1451-48L2	€64.00	T-MDE1451-48L2G	€69.00

Overview,
Product
Series

Axial
Flow
Fans

AC Input
Energy Saving
EMU

AC Input
Energy Saving,
Variable Flow
EMR

AC Input
Compact Size
MU

AC Input
Long-Life
MRE

DC Input
MDS
MD

DC Input
Alarm
MDA

DC Input
Long-Life
MDE

Centrifugal
Blowers

AC Input
MB
DC Input
MBD

Cross Flow Fans

AC Input
MF
DC Input
MFD

Accessories

Installation

Long-Life MDE Series

119 mm – 25 mm Thick



With Stall Alarm

Operating Voltage Range: ±15% (Applies to each voltage)

Overheat Protection: Built-in Overheat Protection Circuit

Color

Frame: Dark Gray Blades: Black

Materials

Frame: Die Cast Aluminum

Blades: Polycarbonate (Flammability grade V-0)

42 mm

52 mm

62 mm

80 mm

92 mm

119 (120) mm

140 mm

φ172 mm

Specifications



Speed Type	Function	Product Name	Voltage VDC	Current A	Speed r/min	Max. Air Flow m ³ /min	Max. Static Pressure Pa	Noise Level dB (A)
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm Specification: ⑦)	MDE1225-12L	12	0.58	3000	2.7	70	46
		MDE1225-24L	24	0.30	3000	2.7	70	46

● Sensor specifications ⑦ → Page G-14

● Regulations & Standards → Page I-2

Product Line

Fan Only

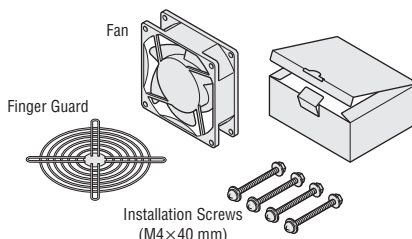
Product Name	List Price
MDE1225-12L	€52.00
MDE1225-24L	€52.00

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

Fan Kit

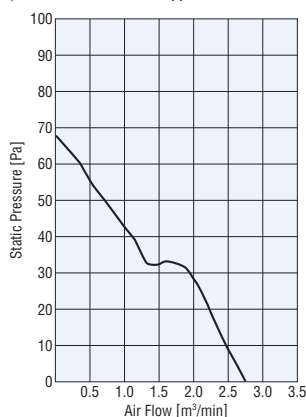
Product Name	List Price
T-MDE1225-12L-G	€56.00
T-MDE1225-24L-G	€56.00

The following items are included with each kit.



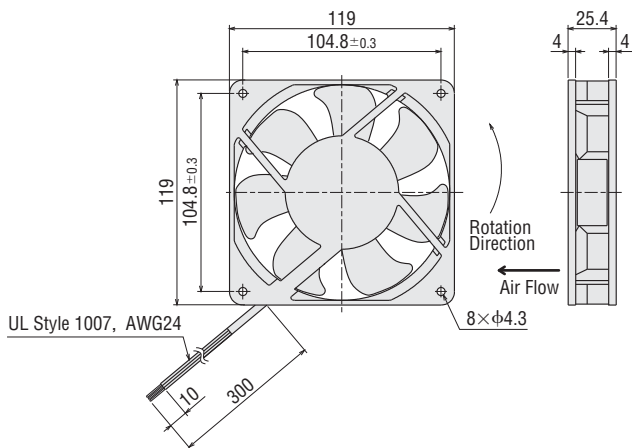
Air Flow – Static Pressure Characteristics

(The characteristics are applicable for the fan only.)

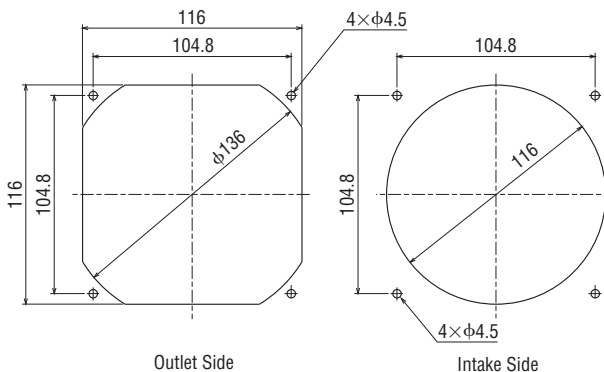


Dimensions Unit: mm

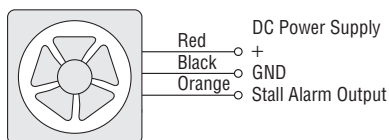
Mass: 0.3 kg



Panel Cut-Out Unit: mm



Connection Diagram



Accessories

Product	Product Name	List Price	Page
Finger Guard	FG12D	€5.00	G-100
Stainless Steel Finger Guard	FG12S	€6.00	G-102
Filter	FL12	€8.00	G-104
Metallic Filter	FLW12	€14.00	G-105
Screen	FS12S	€7.00	G-106

Long-Life MDE Series

140 mm – 51 mm Thick



With Stall Alarm

Operating Voltage Range: $\pm 15\%$ (Applies to each voltage)

Overheat Protection: Built-in Overheat Protection Circuit

Color

Frame: Dark Gray Blades: Black

Materials

Frame: Die Cast Aluminum

Blades: Polycarbonate (Flammability grade V-0)

Specifications



Speed Type	Function	Product Name	Voltage VDC	Current A	Speed r/min	Max. Air Flow m ³ /min	Max. Static Pressure Pa	Noise Level dB (A)
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm Specification: ⑦)	MDE1451-24L2	24	0.7	3150	5.8	130	49
		MDE1451-48L2	48	0.35				

● Sensor specifications ⑦ → Page G-14

● Regulations & Standards → Page I-2

Product Line

Fan Only

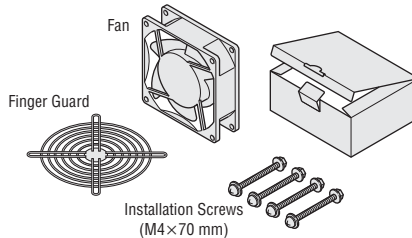
Product Name	List Price
MDE1451-24L2	€64.00
MDE1451-48L2	€64.00

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

Fan Kit

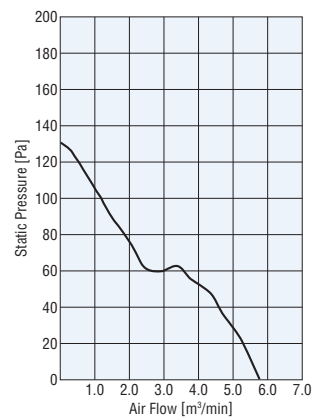
Product Name	List Price
T-MDE1451-24L2G	€69.00
T-MDE1451-48L2G	€69.00

The following items are included with each kit.



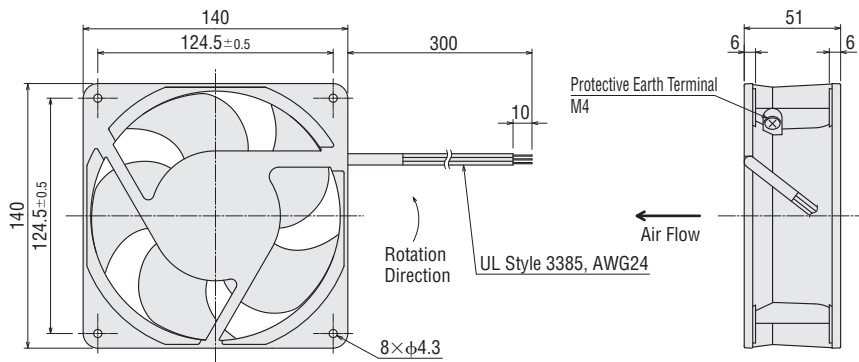
Air Flow – Static Pressure Characteristics

(The characteristics are applicable for the fan only.)

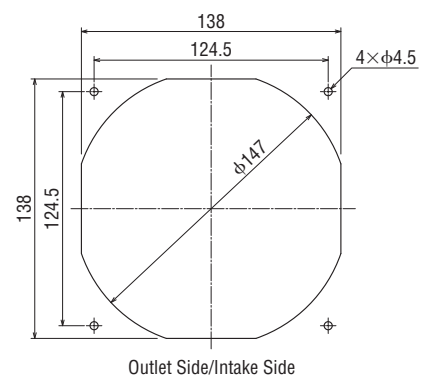


Dimensions Unit: mm

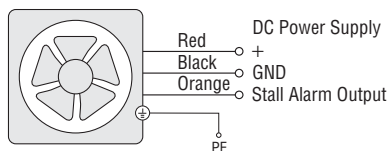
Mass: 0.65 kg



Panel Cut-Out Unit: mm



Connection Diagram



Accessories

Product	Product Name	List Price	Page
Finger Guard	FG 14D	€5.00	G-100
Stainless Steel Finger Guard	FG 14S	€6.00	G-102
Filter	FL 14	€14.00	G-104
Metallic Filter	FLW 14	€17.00	G-105

Overview, Product Series

Axial Flow Fans

AC Input Energy Saving EMU

AC Input Energy Saving, Variable Flow EMR

AC Input Compact Size MU

AC Input Long-Life MRE

DC Input MDS MD

DC Input Alarm MDA

DC Input Long-Life MDE

Centrifugal Blowers

AC Input MB
DC Input MBD

Cross Flow Fans

AC Input MF
DC Input MFD

Accessories

Installation

