



OPERATING MANUAL

Cooling Module FM Series

IP4X Rated Filter Panel

Introduction

■ Before using the product

Only qualified personnel should work with the product. The product described in this manual has been designed and manufactured for use in general industrial machinery, and must not be used for any other purpose. Oriental Motor Co., Ltd. is not responsible for any damage caused through failure to observe this warning.

■ Hazardous substances

RoHS (Directive 2002/95/EC 27Jan.2003) compliant

Preparation

■ Checking the product

Upon opening the package, verify that the items listed below are included. Report any missing or damaged items to the branch or sales office from which you purchased the product.

FMZ1□A-M, FMZ1□A-A

- Filter panel..... 1 pc.
- Mounting screw set..... 1 set (Nut, M4 screw, 2 pcs. each)
- Operating manual..... 1 copy (this manual)

FMZ1□A-B, FMZ1□A-C

- Filter panel..... 1 pc.
- Mounting screw set..... 1 set (Nut, M4 screw, 4 pcs. each)
- Operating manual..... 1 copy (this manual)

FMZ1□A-L

- Filter panel..... 1 pc.
- Mounting screw set..... 1 set (Nut, M4 screw, 8 pcs. each,)
- Operating manual..... 1 copy (this manual)

■ Checking the model name

Check the model number against the number indicated on the product.

Installation

■ Location for installation

The filter panel is designed and manufactured for installation in equipment. Install it in a well-ventilated location that provides easy access for inspection. The location must also satisfy the following conditions:

- Inside an enclosure that is installed indoors (provide vent holes)
- Operating ambient temperature
-10 to +60 °C (+14 to +140 °F) (non-freezing)
- Operating ambient humidity 85% or less (non-condensing)
- Area that is free of explosive atmosphere or toxic gas (such as sulfuric gas) or liquid
- Area not exposed to direct sun
- Area free of excessive amount of dust, iron particles or the like
- Area not subject to splashing water (rains, water droplets), oil (oil droplets) or other liquids
- Area not subject to continuous vibration or excessive shocks
- Area free of excessive electromagnetic noise (from welders, power machinery, etc.)
- Area free of radioactive materials, magnetic fields or vacuum

■ Installation dimensions

Figure A

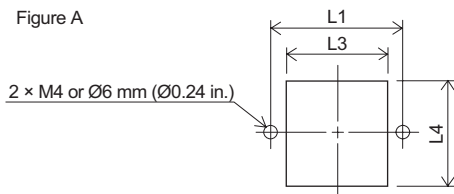
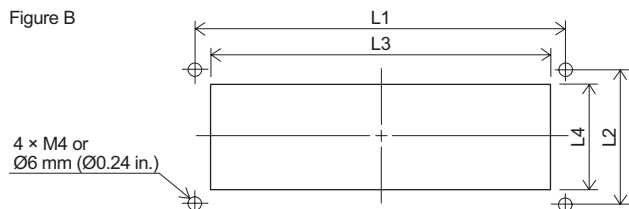


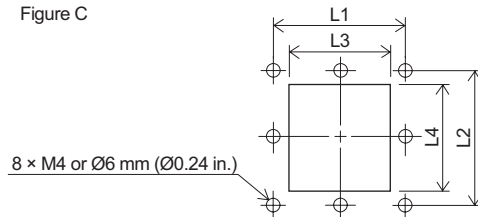
Figure B



Thank you for purchasing an Oriental Motor product. This Operating Manual describes product handling procedures and safety precautions.

- Please read it thoroughly to ensure safe operation.
- Always keep the manual where it is readily available.

Figure C



Model	Dimension drawing	Dimensions [mm (in.)]			
		L1	L2	L3	L4
FMZ1□A-M	A	145 (5.71)	—	135 (5.31)	135 (5.31)
FMZ1□A-A		170 (6.69)	—	160 (6.30)	160 (6.30)
FMZ1□A-B	B	295 (11.61)	170 (6.69)	285 (11.22)	160 (6.30)
FMZ1□A-C		420 (16.54)	170 (6.69)	410 (16.14)	160 (6.30)
FMZ1□A-L	C	263 (10.35)	263 (10.35)	250 (9.84)	250 (9.84)

Option

■ Replacement filter media

• IP4X rated filter media

Set of 5 sheets

Model	Applicable product
FMXAA-M	FM series – External dimensions: 155×155 mm (6.10×6.10 in.)
FMXAA-A	FM series – External dimensions: 180×180 mm (7.09×7.09 in.)
FMXAA-B	FM series – External dimensions: 305×180 mm (12.01×7.09 in.)
FMXAA-C	FM series – External dimensions: 430×180 mm (16.93×7.09 in.)
FMXAA-L	FM series – External dimensions: 284×284 mm (11.18×11.18 in.)

1 sheet

Model	Applicable product
FMXAA-L-1	FM series – External dimensions: 284×284 mm (11.18×11.18 in.)

Cooling of the filter media reduces the cooling capacity. Clean or replace the filter media regularly.

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