

Roxburgh MIF Series EMI Filters

Single-phase Drive Rated EMI Filters - Very High Performance

The MIF series industrial multi-stage EMI filters offer very high performance for use in a variety of applications. Rated at 250V and installed on the supply (line) side of the drive; these filters are used for single-phase motor drives where long motor supply cable runs (above 50m) are necessary, and where compliance with industrial and residential noise limits is required.

The MIF series filters are compact and cost-effective, offering flexibility in mounting options while ensuring minimal panel space requirements.

All products are RoHS compliant, include UL and cUL approvals, and are CE labeled.

Features

- 0-250 VAC/VDC, 0-60 Hz, single-phase
- 3A - 23A models
- Metal case
- Insulated screw terminal blocks
- Panel mount, dual mounted - flat or side

Filter performance curves are available on item page at www.AutomationDirect.com

Applications

- Ideally suited for products that must conform to part 15, FCC regulations
- Single-phase AC and DC drives
- Machinery design

Standards and Certifications



MIF Series EMI Filters			
Part Number	Price	Description	Replacement Line & Load Side Protective Cover
MIF03		EMI Input filter, 120/240 VAC, 1-phase, Very High Performance Filter, 3A	N/A
MIF06		EMI Input filter, 120/240 VAC, 1-phase, Very High Performance Filter, 6A	
MIF10		EMI Input filter, 120/240 VAC, 1-phase, Very High Performance Filter, 10A	TER524-AS
MIF16		EMI Input filter, 120/240 VAC, 1-phase, Very High Performance Filter, 16A	
MIF23		EMI Input filter, 120/240 VAC, 1-phase, Very High Performance Filter, 23A	N/A

General Specifications	
Voltage Rating	115/230 VAC, 0-60 Hz
Voltage Max.	250V
Voltage Withstand	2100VDC/60 sec
Phase	1
UL/IEC Pollution Class	Degree II
Humidity	93% RH (non-condensing)
Overload Current	135% 2Hrs, 150% 60s
Insulation Resistance	500VDC >3.5 MΩ
Climate Class (IEC 60068-1)	-25/85/21
Temperature Rise	45°C
Temperature Rating	-13 to 185°F; -25 to 85°C
Flammability (UL94)	V-2
Case Material	Aluminum
Altitude*	1000m (3000m with derating)
Mounting Clearance	≥50mm gap
Agency Approval**	CE (EN 60939-1), cURus: File# E191581 (Standard: UL1283 & C22.2 No.8)

* Derate 1% per 100m after 1000m; Max 3000m.

**To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific component part number web page.



Roxburgh MIF Series EMI Filters

Specifications							
Parameter	MIF03	MIF06	MIF10	MIF16	MIF23		
Max. Power (kW)	0.7	1.4	2.4	3.8	5.5		
	Current Rating (A)	3	6	10	16	23	
	SCCR Rating (kA)	5					
	Ingress Protection	IP20					
GND Terminal	Terminal Style	Spring		Screw			
	Torque, (lb-in [N·m])	N/A		4.4 [0.5]			
	Wire Gauge (AWG)	12					
Wire Terminal	Terminal Style	Spring		Screw			
	Torque, (lb-in [N·m])	N/A		4.4 [0.5]			
	Max. Wire Gauge (AWG)	12					
Operational Leakage Current (mA)	2.6			45		90	
	Total Resistance, Line to Load (mΩ/ph)	55	48.6	13.5	13.7	9.5	
	Residual Voltage (V@5s)	2		1		9	
	Heat Dissipation (W/ph)	0.5	1.75	1.35	3.5	5	
	Weight (lb [kg])	0.7 [0.3]		1.6 [0.7]	2.2 [1.0]	2.6 [1.2]	

Temperature Derating Chart above 40°C*										
	Part Number	Ambient °C								
		40	45	50	55	60	65	70	75	80
Continuous Ampacity at Ambient °C	MIF03	3.00	2.80	2.60	2.38	2.15	1.91	1.64	1.33	0.93
	MIF06	6.00	5.60	5.19	4.76	4.31	3.82	3.28	2.65	1.86
	MIF10	10.00	9.34	8.65	7.94	7.18	6.36	5.46	4.42	3.10
	MIF16	16.00	14.94	13.84	12.70	11.49	10.18	8.74	7.08	4.96
	MIF23	23.00	21.48	19.90	18.25	16.51	14.64	12.56	10.17	7.13

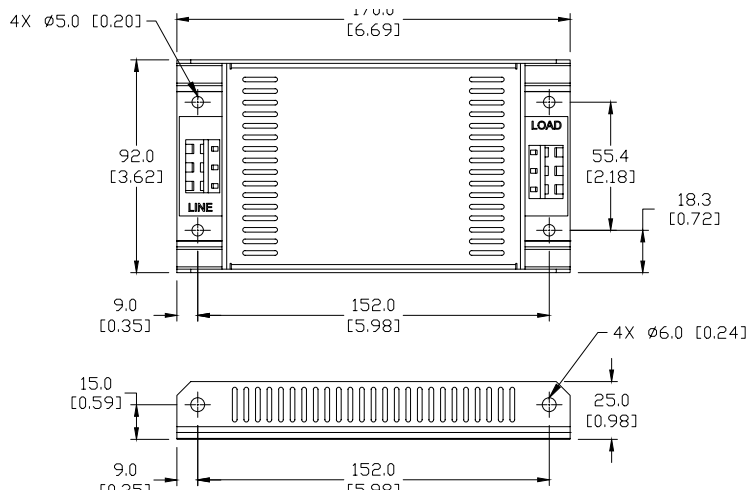
* NOTE: Using these filters above 40°C would comprise a non-UL application of device.

Roxburgh MIF Series EMI Filters

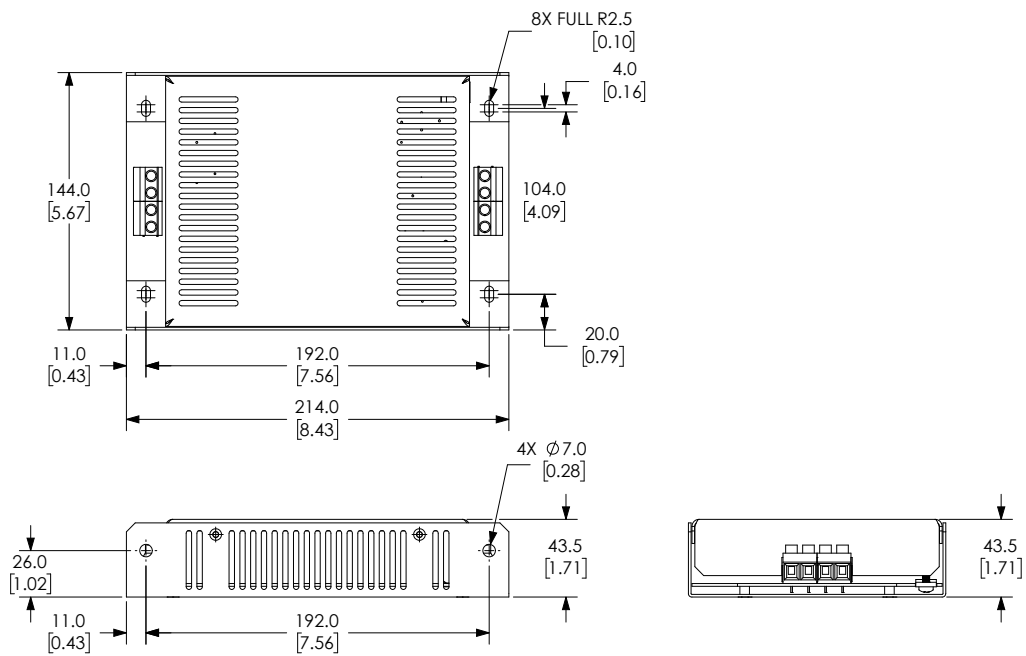
Dimensions

mm [inches]

MIF03
MIF06



MIF10
MIF16



MIF23

