

# 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:

### 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	
<b>Voltage Rating</b>	115/230 VAC, 0-60 Hz
<b>Voltage Max.</b>	250V
<b>Voltage Withstand</b>	2100VDC/60 sec
<b>Phase</b>	1
<b>UL/IEC Pollution Class</b>	Degree II
<b>Humidity</b>	93% RH (non-condensing)
<b>Overload Current</b>	135% 2Hrs, 150% 60s
<b>Insulation Resistance</b>	500VDC >3.5 MΩ
<b>Climate Class (IEC 60068-1)</b>	-25/85/21
<b>Temperature Rise</b>	45°C
<b>Temperature Rating</b>	-13 to 185°F; -25 to 85°C
<b>Flammability (UL94)</b>	V-2
<b>Case Material</b>	Aluminum
<b>Altitude*</b>	1000m (3000m with derating)
<b>Mounting Clearance</b>	≥50mm gap
<b>Agency Approval**</b>	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 lbs (kg)	0.7 (0.3)		1.6 (0.7)	2.2 (1.0)	2.6 (1.2)

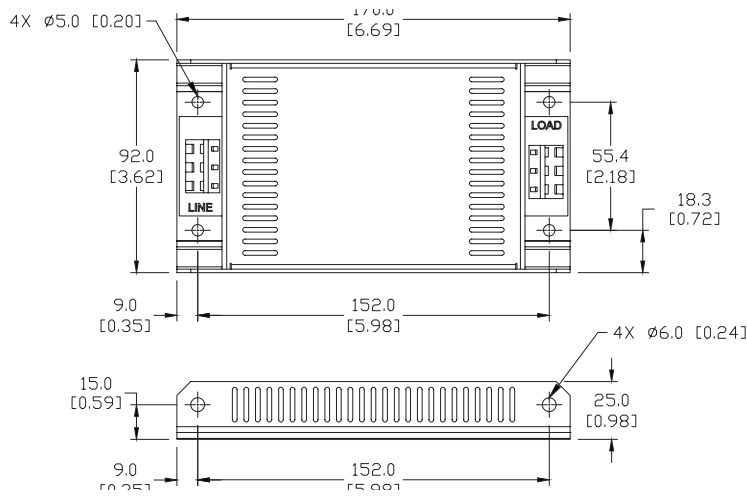
Temperature Derating Chart above 40°C*										
	Part Number	Ambient °C								
		40	45	50	55	60	65	70	75	80
Continuous Ampacity at Ambient °C	MIF03	3.00	2.80	2.60	2.38	2.15	1.91	1.64	1.33	0.93
	MIF06	6.00	5.60	5.19	4.76	4.31	3.82	3.28	2.65	1.86
	MIF10	10.00	9.34	8.65	7.94	7.18	6.36	5.46	4.42	3.10
	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.

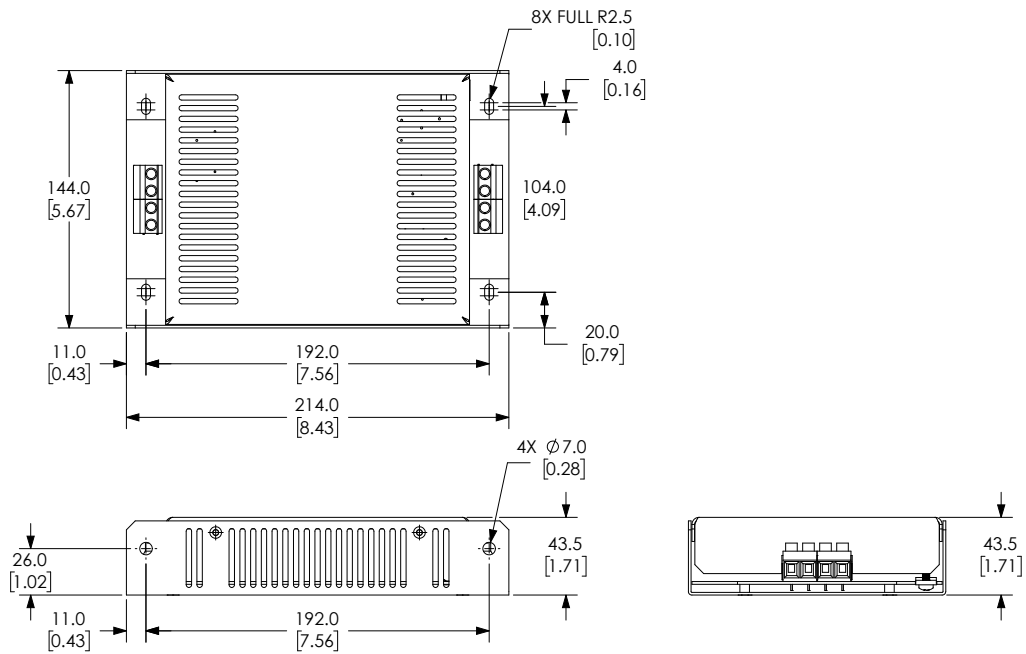
# Roxburgh MIF Series EMI Filters

Dimensions mm [inches]

**MIF03**  
**MIF06**



**MIF10**  
**MIF16**



**MIF23**

