

# Roxburgh KMFA Series EMI Filters

## Three-phase Drive Rated EMI Filters - High Performance

The Roxburgh KMFA Series filters are economically priced and specifically designed as a line filter for 230/460 VAC, 3-phase devices. The two-stage design provides good performance for both common mode and differential mode interference and are

rated from 6A to 100A at up to 500V. KMFA high performance three-phase industrial mains filters are designed for all drives applications including servos and AC or DC drives. The filters are designed to be mounted in a cabinet.

### Features

- 230/460 VAC, 0-60 Hz, three-phase
  - 6A - 100A models
  - Rugged metal case
  - Screw terminals
  - Threaded GND lug
  - Lightweight side mounting
  - Panel mount
- \*Filter performance curves are available at [www.AutomationDirect.com](http://www.AutomationDirect.com)

### Applications

- Drives applications
- Electrically noisy applications requiring high filter performance
- Ideally suited for products that must conform to part 15, FCC regulations
- Industrial applications include motor drives and inverters, machine tools, UPS, industrial controls, digital electronics, process controls and mechanical handling equipment, etc.

### Standards and Certifications



KMFA EMI Filters		
Part Number	Price	Description
<b>KMF306A</b>	\$77.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 6A
<b>KMF310A</b>	\$78.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 10A
<b>KMF318A</b>	\$103.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 18A
<b>KMF325A</b>	\$115.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 25A
<b>KMF336A</b>	\$134.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 36A
<b>KMF350A</b>	\$183.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 50A
<b>KMF370A</b>	\$213.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 70A
<b>KMF3100A</b>	\$219.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 100A



General Specifications	
<b>Voltage Rating</b>	230/460 VAC, 0-60 Hz
<b>Voltage Max.</b>	528V
<b>Voltage Withstand</b>	2900VDC/ 60 secs.
<b>Phase</b>	3
<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 >3.5M Ohms
<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 Approvals**</b>	CE (EN 60939-1), cURus: File# E191581 (Standard: UL 1283 & C22.2 No.8)

Temperature Derating Chart above 40°C*										
	Part Number	Ambient °C								
		40	45	50	55	60	65	70	75	80
Continuous Ampacity at Ambient °C	<b>KMF306A</b>	6.00	5.60	5.19	4.76	4.31	3.82	3.28	2.65	1.86
	<b>KMF310A</b>	10.00	9.34	8.65	7.94	7.18	6.36	5.46	4.42	3.10
	<b>KMF318A</b>	18.00	16.81	15.57	14.29	12.92	11.45	9.83	7.96	5.58
	<b>KMF325A</b>	25.00	23.34	21.63	19.84	17.95	15.91	13.66	11.05	7.75
	<b>KMF336A</b>	26.00	24.28	22.50	20.63	18.66	16.55	14.20	11.50	8.06
	<b>KMF350A</b>	50.00	46.69	43.26	39.68	35.89	31.82	27.31	22.11	15.50
	<b>KMF370A</b>	70.00	65.36	60.56	55.55	50.25	44.55	38.24	30.95	21.70
	<b>KMF3100A</b>	100.00	93.37	86.52	79.36	71.79	63.64	54.63	44.22	31.00

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

\* 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.

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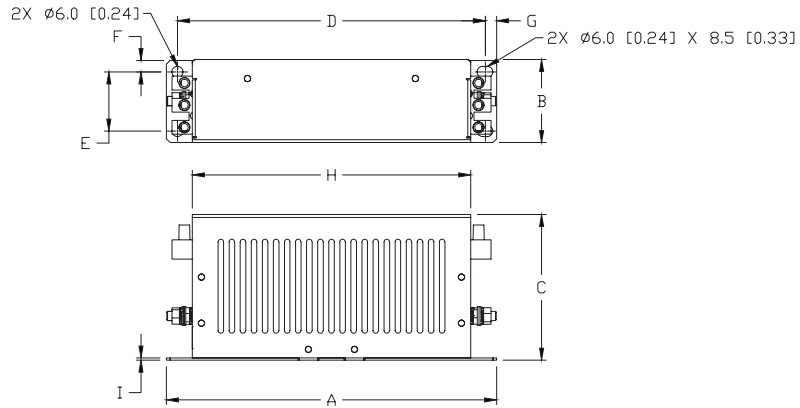
Specifications											
	Parameter	KMF306A	KMF310A	KMF318A	KMF325A	KMF336A	KMF350A	KMF370A	KMF3100A		
	Max Power, kW (max/ph)	5 (1.4)	8.3 (2.4)	14.9 (4.3)	20.8 (6)	29.9 (8.6)	41.5 (12)	58.1 (16.8)	83 (24)		
	Current Rating (A)	6	10	18	25	36	50	70	100		
	SCCR Rating (kA)	5					10	5	10		
	Ingress Protection	IP20									
GND Terminal	Terminal Style	M5x15 Stud (SS)				M6x20 Stud (SS)	M8x23 Stud (SS)				
	Torque, lb-in (N-m)	17.7 (2)				35.4 (4)	53.1 (6)				
	Ring Terminal Size	M5 (#10)				M6 (1/4)	M8 (5/16)				
Wire Terminal	Terminal Style	Screw									
	Torque, lb-in (N-m)	7 (0.8)			17.7 (2)			44.2 (5)			
	Max Wire Gauge (AWG)	10			8			2			
	Operational Leakage Current (mA)	7.2	6.8	7.2	13.5	17.6	22.8	21.4	30.6		
	Total Resistance (Line to Load) (mΩ/ph)	33	14	11.4	4.2	4.12	2.1	1.3	0.96		
	Residual Voltage (V@5s)	204V@5s	116V@5s	204V@5s	204V@5s	463V@5s	463V@5s	544V@5s	544V@5s		
	Heat Dissipation (W/ph)	1.2	1.4	3.7	2.6	5.34	5.25	6.4	9.6		
	Weight lbs (kg)	1.5 (0.7)	1.7 (0.8)	2.7 (1.25)	3.59 (1.63)	4.2 (1.9)	7.3 (3.3)	8.6 (3.9)	9 (4.1)		

# Roxburgh KMFA Series EMI Filters

## Dimensions

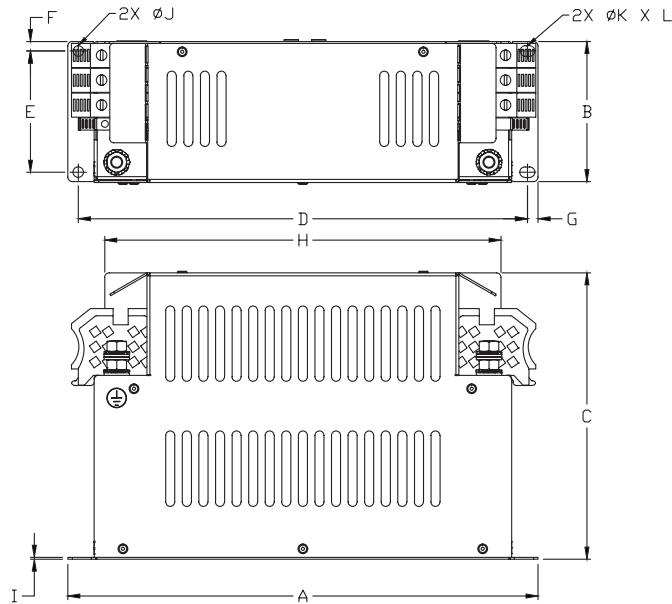
mm [inches]

**KMF306A**  
**KMF310A**  
**KMF318A**  
**KMF325A**



PART NUMBER	A	B	C	D	E	F	G	H	I
KMF306A	179.0 [7.04]	45.0 [1.77]	79.0 [3.11]	167.0 [6.57]	32.0 [1.26]	6.3 [0.25]	6.3 [0.25]	151.0 [5.94]	1.2 [0.05]
KMF310A	179.0 [7.04]	45.0 [1.77]	79.0 [3.11]	167.0 [6.57]	32.0 [1.26]	6.3 [0.25]	6.3 [0.25]	151.0 [5.94]	1.2 [0.05]
KMF318A	229.0 [9.01]	55.2 [2.17]	115.5 [4.55]	217.0 [8.54]	42.0 [1.65]	5.6 [0.22]	6.0 [0.24]	201.0 [7.91]	1.2 [0.05]
KMF325A	229.0 [9.01]	55.2 [2.17]	115.5 [4.55]	217.0 [8.54]	42.0 [1.65]	5.6 [0.22]	6.0 [0.24]	201.0 [7.91]	1.2 [0.05]

**KMF336A**  
**KMF350A**  
**KMF370A**  
**KMF3100A**



PART NUMBER	A	B	C	D	E	F	G	H	I	ØJ	ØK	L
KMF336A	269.0 [10.59]	73.2 [2.88]	162.2 [6.38]	258.0 [10.15]	60.0 [2.36]	5.9 [0.23]	7.0 [0.28]	226.0 [8.89]	1.2 [0.05]	6.5 [0.26]	6.5 [0.26]	9.5 [0.37]
KMF350A	312.0 [12.28]	93.5 [3.68]	190.0 [7.48]	298.0 [11.73]	79.0 [3.11]	7.8 [0.31]	7.0 [0.28]	263.0 [10.35]	1.2 [0.05]	7.0 [0.28]	7.0 [0.28]	10.0 [0.39]
KMF370A	312.0 [12.28]	93.5 [3.68]	190.0 [7.48]	298.0 [11.73]	79.0 [3.11]	7.8 [0.31]	7.0 [0.28]	263.0 [10.35]	1.2 [0.05]	7.0 [0.28]	7.0 [0.28]	10.0 [0.39]
KMF3100A	312.0 [12.28]	93.5 [3.68]	190.0 [7.48]	298.0 [11.73]	79.0 [3.11]	7.8 [0.31]	7.0 [0.28]	263.0 [10.35]	1.2 [0.05]	7.0 [0.28]	7.0 [0.28]	10.0 [0.39]