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

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

c UL us CE RoHS

KMFA EMI Filters		
Part Number	***Price***	***Description***
KMF306A	$101.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 6A
KMF310A	$99.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 10A
KMF318A	$124.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 18A
KMF325A	$135.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 25A
KMF336A	$163.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 36A
KMF350A	$242.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 50A
KMF370A	$246.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 70A
KMF3100A	$262.00	EMI Input Filter for 3-phase AC drives, 230/460 VAC, 100A

General Specifications	
Voltage Rating	230/460 VAC, 0-60 Hz
Voltage Max.	528V
Voltage Withstand	2900VDC/ 60 secs.
Phase	3
UL/IEC Pollution Class	Degree II
Humidity	93% RH (non-condensing)
Overload Current	135% 2Hrs, 150% 60s
Insulation Resistance	500VDC >3.5M Ohms
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 Approvals**	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.*

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

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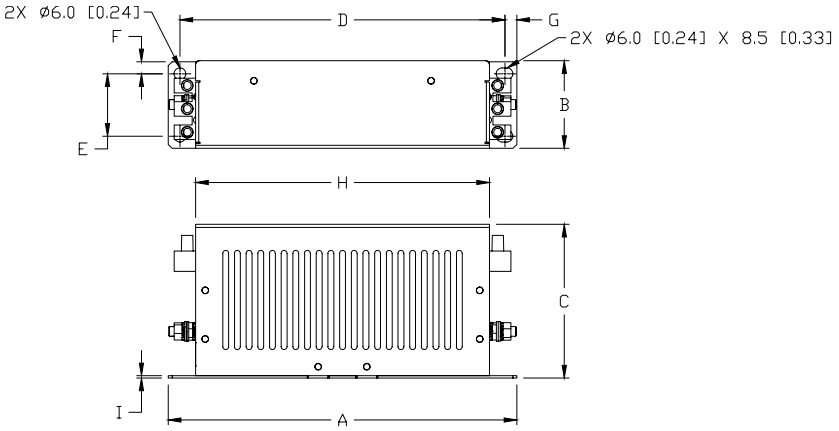
Specifications									
	Parameter	**KMF306A**	**KMF310A**	**KMF318A**	**KMF325A**	**KMF336A**	**KMF350A**	**KMF370A**	**KMF3100A**
	Max Power, kW [max/ph]	5 [1.4]	8.3 [2.4]	14.9 [4.3]	20.8 [6]	29.9 [8.6]	41.5 [12]	58.1 [16.8]	83 [24]
	Current Rating (A)	6	10	18	25	36	50	70	100
	SCCR Rating (kA)	5					10	5	10
	Ingress Protection	IP20							
GND Terminal	**Terminal Style**	M5x15 Stud (SS)				M6x20 Stud (SS)	M8x23 Stud (SS)		
GND Terminal	**Torque, lb·in (N·m)**	17.7 (2)				35.4 (4)	53.1 (6)		
GND Terminal	**Ring Terminal Size**	M5 (#10)				M6 (1/4)	M8 (5/16)		
Wire Terminal	**Terminal Style**	Screw							
Wire Terminal	**Torque, lb·in [N·m]**	7 [0.8]		17.7 [2]			44.2 [5]		
Wire Terminal	**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 (lb [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

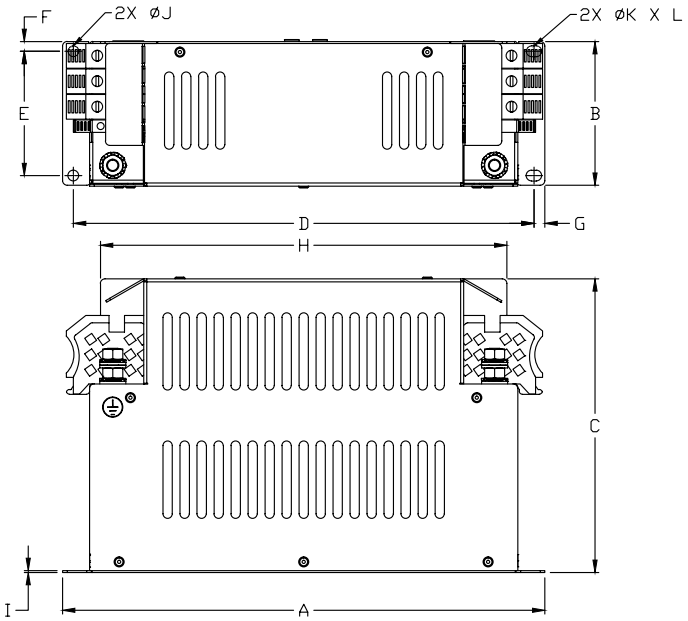
mm [inches]

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]