

Roxburgh KMFV Series EMI Filters

Three-phase Drive Rated EMI Filters up to 600V - High Performance

The KMFV high performance, two-stage, three-phase industrial filters are designed for industrial drives applications in harsh environments such as the petrochemical industry. The Roxburgh KMFV Series filters are specifically designed as a line filter for

3-phase, 575VAC devices. They provide good performance for both common mode and differential mode interference and are rated up to 600V. The filters are designed to be mounted in a cabinet.

Features

- 0-600 VAC, 0-60 Hz, 3-phase
- 6A- 36A models
- Metal case
- Screw terminals
- Separate GND lug
- Panel mount, horizontal or vertical

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
- Industrial AC drives
- Digital electronics

Standards and Certifications



KMFV EMI Filters		
Part Number	Price	Description
KMF306V	\$109.00	EMI Input Filter for 3-phase AC drives, 575VAC, 6A
KMF310V	\$128.00	EMI Input Filter for 3-phase AC drives, 575VAC, 10A
KMF318V	\$138.00	EMI Input Filter for 3-phase AC drives, 575VAC, 18A
KMF325V	\$165.00	EMI Input Filter for 3-phase AC drives, 575VAC, 25A
KMF336V	\$212.00	EMI Input Filter for 3-phase AC drives, 575VAC, 36A

Filter General Specifications	
Voltage Rating	600VAC
Voltage Max.	630V
Voltage Withstand	3100VDC/ 60 secs.
Phase	3
UL/IEC Pollution Class	Degree II
Humidity	93% RH (non-condensing)
Overload Current	135% 2Hrs, 150% 60s
Insulation Resistance	500V DC, >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 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.

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Specifications						
	Parameter	<u>KMF306V</u>	<u>KMF310V</u>	<u>KMF318V</u>	<u>KMF325V</u>	<u>KMF336V</u>
	Max Power kW (max/ph)	6.2 (1.4)	10.4 (2.4)	18.7 (4.3)	26 (6)	37 (8.6)
	Current Rating (A)	6	10	18	25	36
	SCCR Rating (kA)	5				
	Ingress Protection	IP20				
GND Terminal	Terminal Style	M5x15 Stud (SS)				M6x20 Stud (SS)
	Torque, lb·in (N·m)	17.7 (2)				35.4 (4)
	Ring Terminal Size	M5 (#10)				M6 (1/4)
Wire Terminal	Terminal Style	Screw				
	Torque, lb·in (N·m)	7 (0.8)		17.7 (2)		
	Max Wire Gauge (AWG)	10		8		
	Operational Leakage Current (mA)	6		19.8		26.4
	Total Resistance, Line to Load (mΩ/ph)	33	14	11.4	4.2	4.12
	Residual Voltage (V@5s)	48V@5s		306V@5s	305V@5s	299V@5s
	Heat Dissipation (W/ph)	1.2	1.4	3.7	2.6	5.34
	Weight lbs. (kg)	1.1 (0.5)	1.5 (0.7)	3.5 (1.6)	4.2 (1.9)	4.8 (2.2)

Temperature Derating Chart above 40°C*										
	Part Number	Ambient °C								
		40	45	50	55	60	65	70	75	80
Continuous Ampacity at Ambient °C	<u>KMF306V</u>	6.00	5.60	5.19	4.76	4.31	3.82	3.28	2.65	1.86
	<u>KMF310V</u>	10.00	9.34	8.65	7.94	7.18	6.36	5.46	4.42	3.10
	<u>KMF318V</u>	18.00	16.81	15.57	14.29	12.92	11.45	9.83	7.96	5.58
	<u>KMF325V</u>	25.00	23.34	21.63	19.84	17.95	15.91	13.66	11.05	7.75
	<u>KMF336V</u>	36.00	24.28	22.50	20.63	18.66	16.55	14.20	11.50	8.06

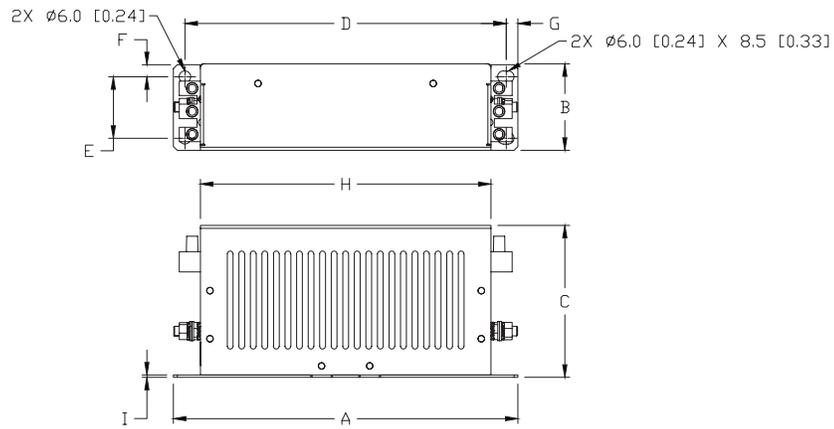
*NOTE: Using these filters above 40°C would comprise a non-UL application of device.

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Dimensions

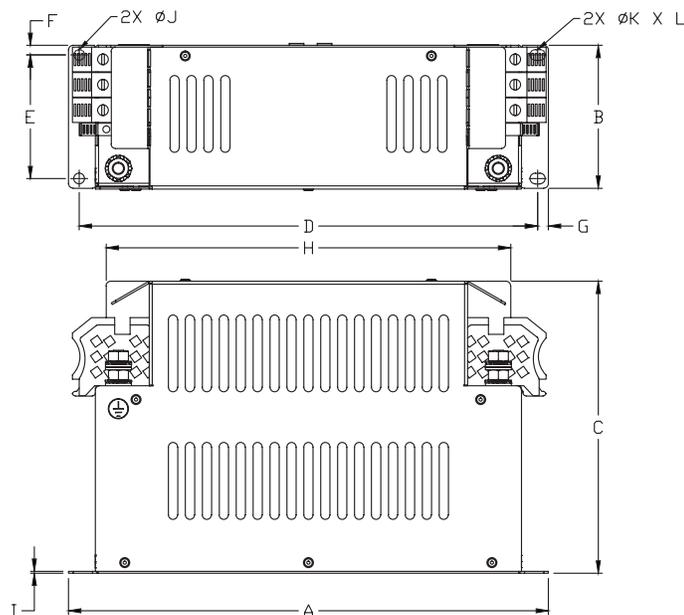
mm [inches]

KMF306V
KMF310V
KMF318V
KMF325V



PART NUMBER	A	B	C	D	E	F	G	H	I
KMF306V	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]
KMF310V	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]
KMF318V	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]
KMF325V	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]

KMF336V



PART NUMBER	A	B	C	D	E	F	G	H	I	ØJ	ØK	L
KMF336V	272.0 [10.70]	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]