

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 | \$94.00 | EMI Input Filter for 3-phase AC drives, 575VAC, 6A |
| KMF310V | \$114.00 | EMI Input Filter for 3-phase AC drives, 575VAC, 10A |
| KMF318V | \$126.00 | EMI Input Filter for 3-phase AC drives, 575VAC, 18A |
| KMF325V | \$135.00 | EMI Input Filter for 3-phase AC drives, 575VAC, 25A |
| KMF336V | \$169.00 | 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.

Roxburgh KMFV Series EMI Filters

| Specifications | | | | | | |
|----------------|--|-----------------|---------------|---------------|-----------|-----------------|
| | Parameter | KMF306V | KMF310V | KMF318V | KMF325V | KMF336V |
| | 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 | KMF306V | 6.00 | 5.60 | 5.19 | 4.76 | 4.31 | 3.82 | 3.28 | 2.65 | 1.86 |
| | KMF310V | 10.00 | 9.34 | 8.65 | 7.94 | 7.18 | 6.36 | 5.46 | 4.42 | 3.10 |
| | KMF318V | 18.00 | 16.81 | 15.57 | 14.29 | 12.92 | 11.45 | 9.83 | 7.96 | 5.58 |
| | KMF325V | 25.00 | 23.34 | 21.63 | 19.84 | 17.95 | 15.91 | 13.66 | 11.05 | 7.75 |
| | KMF336V | 36.00 | 24.28 | 22.50 | 20.63 | 18.66 | 16.55 | 14.20 | 11.50 | 8.06 |

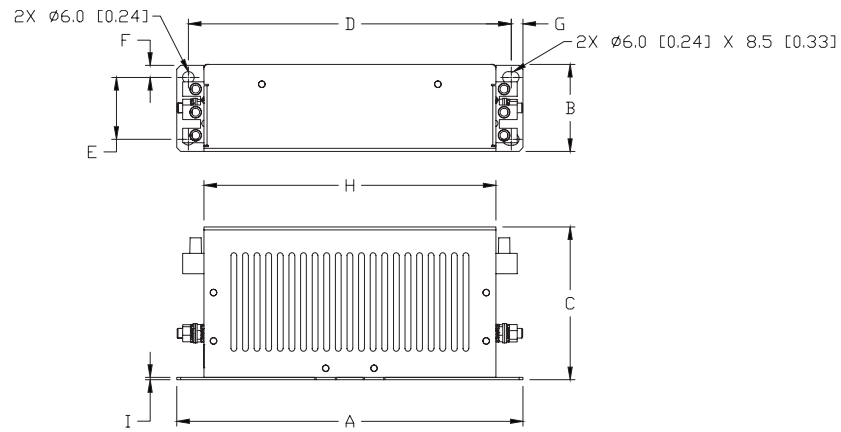
*NOTE: Using these filters above 40°C would comprise a non-UL application of device.

Roxburgh KMFV Series EMI Filters

Dimensions

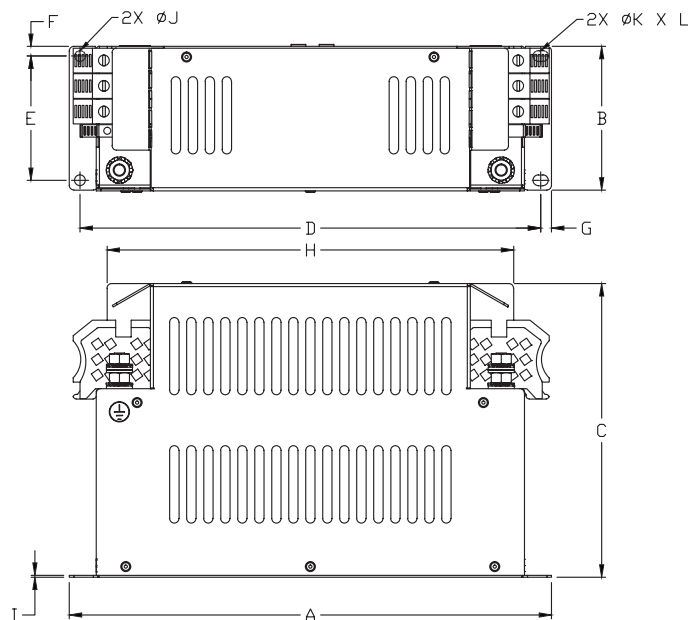
mm [inches]

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] |