MV Series

Multi-purpose Medical Filter for Power Line Noise Protection with Limited Leakage Current



UL Recognized CSA Certified VDE Approved

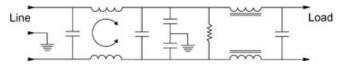
MV Series

The MV series answers the need for a medical filter to help equipment comply with increasing noise sources in medical applications while still meeting leakage current requirements of UL2601.

Less strict than previous UL medical standards, UL2601 limits leakage current for patient care equipment. Due to the increased need for higher performance filtering, UL has allowed more leakage current than in previous standards.

The MV takes advantage of this to offer improved line-toground performance in a moderately priced filter. Higher line-to-line performance is achieved through its additional differential mode rod inductors. Overall, the filter provides a good solution to emission and immunity problems, at a moderate cost, in a reasonable package size.

Electrical Schematic



Resistor location for reference only.



Specifications

Maximum leakage current, each

line-to-ground @ 120VAC 60 Hz: .07mA @ 250VAC 50 Hz: .13mA

Hipot rating (one minute):

line-to-ground 2250 VDC line-to-line 2250 VDC

Operating frequency: 50/60 Hz

Rated voltage: 120/250 VAC

| Rated current: | <u>@ 120VAC</u> | @ 250VAC |
|----------------|-----------------|----------|
| 3MV | 3A | 2.5A |
| 6MV | 6A | 5A |
| 10MV | 10A | 8A |
| 20MV | 20A | 16A |

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

| Current | Frequency-MHz | | | | | | | | |
|---------|---------------|----|----|----|----|----|----|----|--|
| Rating | .15 | .5 | 1 | 2 | 5 | 10 | 20 | 30 | |
| 3A | 14 | 19 | 20 | 30 | 46 | 40 | 34 | 31 | |
| 6A | 19 | 27 | 30 | 38 | 50 | 40 | 35 | 35 | |
| 10A | 15 | 25 | 26 | 34 | 46 | 50 | 44 | 42 | |
| 20A | 18 | 30 | 34 | 34 | 46 | 40 | 36 | 20 | |

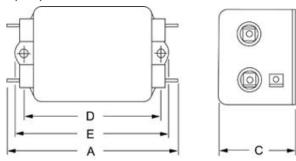
Line-to-line in 50 ohm circuit

| Current | | | Fre | equen | су-МН | lz | | | |
|---------|-----|----|-----|-------|-------|----|----|----|--|
| Rating | .15 | .5 | 1 | 2 | 5 | 10 | 20 | 30 | |
| 3A | 33 | 65 | 65 | 65 | 65 | 60 | 53 | 50 | |
| 6A | 40 | 65 | 65 | 65 | 65 | 60 | 57 | 55 | |
| 10A | 33 | 65 | 65 | 65 | 65 | 65 | 55 | 55 | |
| 20A | 25 | 65 | 65 | 65 | 65 | 60 | 57 | 45 | |

Series MV

Case Styles Metric shown in italics.

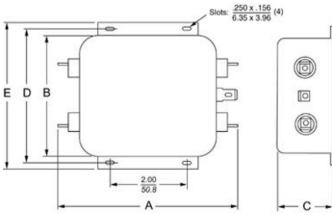
3A, 6A, 10A



Typical dimensions

Terminals: $\frac{.250}{6.35}$ (5) Holes: $\frac{.07}{1.8}$ Dia.(4) Slot: $\frac{.07 \times .16}{1.8 \times 4.1}$ Mounting holes: $\frac{.188}{4.78}$ Dia.(2)

20A



Typical dimensions

Terminals: $\frac{.250}{6.35}$ (5) Holes: $\frac{.07}{1.8}$ Dia.(4) Slot: $\frac{.07 \times .16}{1.8 \times 4.1}$

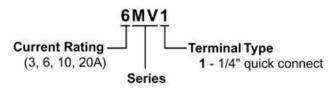
Case Dimensions

Metric shown in italics.

| Part No. | A (max) | B (max) | C (max) | D ± .015 ± .38 | E (max) |
|----------|------------|------------|------------|----------------------|------------|
| 3MV1 | 3.36 | 1.82 | 1.28 | 2.375 | 2.78 |
| | 85.3 | 46.2 | 32.5 | 60.33 | 70.6 |
| 6MV1 | 3.86 | 2.08 | 1.53 | 2.938 | 3.34 |
| | 98.0 | 52.8 | 38.9 | 74.63 | 84.8 |
| 10MV1 | 3.86 | 2.08 | 1.53 | 2.938 | 3.34 |
| | 98.0 | 52.8 | 38.9 | 74.63 | 84.8 |
| 20MV1 | 5.23 | 3.38 | 1.53 | 3.75 | 4.2 |
| | 132.8 | 85.9 | 38.9 | 95.25 | 106.7 |

Ordering Information

Consult your local Corcom sales representative for pricing.



Available Part Numbers

3MV1 6MV1 10MV1 20MV1