

Dual-Stage Performance EMI Filter AMI-27 Series



- Rated current from 1 to 36 A
- Dual-stage filter
- High differential mode performance
- Optional medical version (Type B)
- Optional safety version (Type A)

Approvals:



Technical Specifications

Maximum continuous operating voltage: 250VAC, 50/60Hz

Operating frequency: DC to 400Hz

Rated currents: 1 to 36A @ 40°C max.

High potential test voltage: L → PE 3000VDC for 2 sec (standard types)

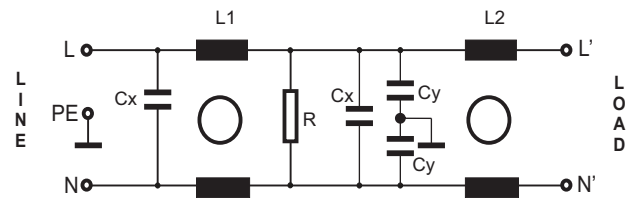
L → PE 3500VDC for 2 sec (B types)

L → N 1100VDC for 2 sec

Temperature range (operation and storage): -25°C to +100°C (25/100/21)

Design corresponding to: UL 1283.

CIRCUIT DIAGRAM:



Features and Benefits

- AMI-27 dual-stage filters are designed for easy and fast chassis mounting.
- The AMI-27 filters are also available as B versions with no Y-capacitors for medical applications as well as A versions with low capacitance for safety critical applications with requirements for low leakage currents.
- All filters provide a general purpose conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- The AMI-27 filter can be use to cover broad range of uses and they offer a good size/amperage ratio.
- AMI-27 filters are also available as single stage filters (AMI-22 series).
- Various terminal options allow you to select the desired connection style.

Typical Applications

- Consumer electronics
- Computing & accessories
- Residential appliances
- Medical accessories
- Electronic data processing equipment
- Office automation equipment
- Industrial applications
- Machinery
- Various noisy application requires good attenuation performance filter

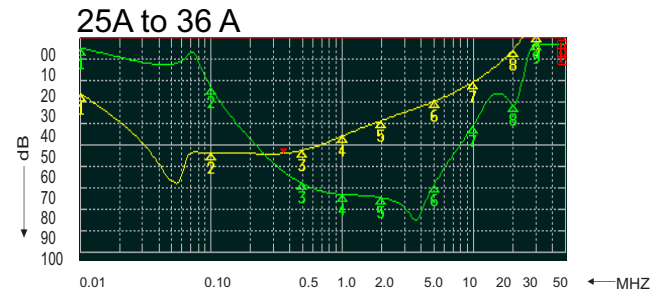
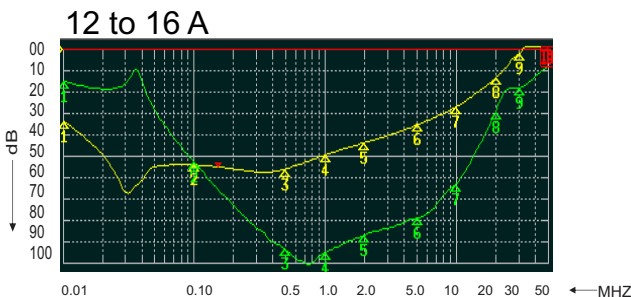
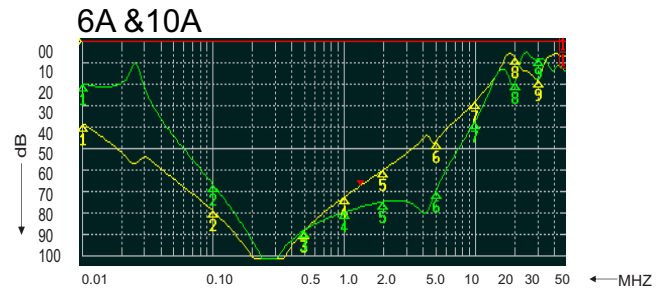
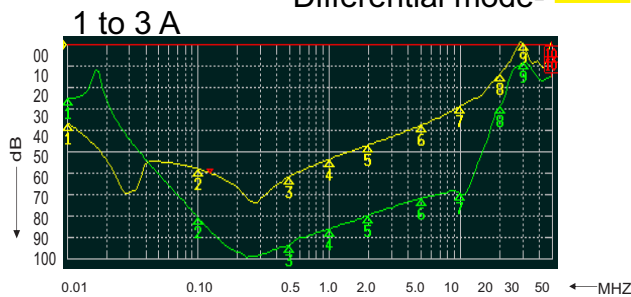
General EMI Filter with High Attenuation Performance



FILTER SELECTION TABLE

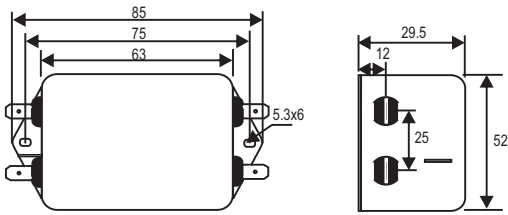
| | Rated current @40°C (25°C) | Leakage current @ 250VAC/50Hz (@ 120VAC/60Hz) | Inductance ΣL | Capacitance ΣCx | Capacitance ΣCy | Resistance ΣR | Connetion type | | |
|----------------------------------|-------------------------------|---|--------------------------|----------------------------|----------------------------|--------------------------|----------------|---|---|
| | A | mA | mH | μF | nF | K_{Ω} | | | |
| AMI-27-1-X | 1 (1.2) | 0.73 (0.43) | 44 | 0.66 | 9.4 | 1000 | 1 | 3 | |
| AMI-27-3-X | 3 (3.5) | 0.73 (0.43) | 19.6 | 0.94 | 9.4 | 470 | 1 | 3 | |
| AMI-27-6-X | 6 (6.9) | 0.73 (0.43) | 15.6 | 2 | 9.4 | 220 | 1 | 3 | |
| AMI-27-10-X | 10 (11.5) | 0.73 (0.43) | 9 | 2 | 9.4 | 220 | 1 | 3 | |
| AMI-27-12-X | 12 (13.8) | 0.73 (0.43) | 6.5 | 2 | 9.4 | 220 | 1 | 3 | |
| AMI-27-16-X | 16 (18.4) | 0.73 (0.43) | 5.6 | 2 | 9.4 | 220 | 1 | 3 | 6 |
| AMI-27-25-X | 25 (28.8) | 0.73 (0.43) | 4 | 4.4 | 9.4 | 220 | | | 6 |
| AMI-27-36-X | 36 (41.4) | 0.73 (0.43) | 2.46 | 4.4 | 9.4 | 220 | | | 6 |
| | | | | | | | | | |
| AMI-27A-1-X | 1 (1.2) | 0.073 (0.04) | 44 | 0.66 | 0.94 | 1000 | 1 | 3 | |
| AMI-27A-3-X | 3 (3.5) | 0.073 (0.04) | 19.6 | 0.94 | 0.94 | 470 | 1 | 3 | |
| AMI-27A-6-X | 6 (6.9) | 0.073 (0.04) | 15.6 | 2 | 0.94 | 220 | 1 | 3 | |
| AMI-27A-10-X | 10 (11.5) | 0.073 (0.04) | 9 | 2 | 0.94 | 220 | 1 | 3 | |
| AMI-27A-12-X | 12 (13.8) | 0.073 (0.04) | 6.5 | 2 | 0.94 | 220 | 1 | 3 | |
| AMI-27A-16-X | 16 (18.4) | 0.073 (0.04) | 5.6 | 2 | 0.94 | 220 | 1 | 3 | 6 |
| AMI-27A-25-X | 25 (28.8) | 0.073 (0.04) | 4 | 4.4 | 0.94 | 220 | | | 6 |
| AMI-27A-36-X | 36 (41.4) | 0.073 (0.04) | 2.46 | 4.4 | 0.94 | 220 | | | 6 |
| | | | | | | | | | |
| AMI-27B-1-X | 1 (1.2) | 0.02 (0.01) | 44 | 0.66 | 0.94 | 1000 | 1 | 3 | |
| AMI-27B-3-X | 3 (3.5) | 0.02 (0.01) | 19.6 | 0.94 | 0.94 | 470 | 1 | 3 | |
| AMI-27B-6-X | 6 (6.9) | 0.02 (0.01) | 15.6 | 2 | 0.94 | 220 | 1 | 3 | |
| AMI-27B-10-X | 10 (11.5) | 0.02 (0.01) | 9 | 2 | 0.94 | 220 | 1 | 3 | |
| AMI-27B-12-X | 12 (13.8) | 0.02 (0.01) | 6.5 | 2 | 0.94 | 220 | 1 | 3 | |
| AMI-27B-16-X | 16 (18.4) | 0.02 (0.01) | 5.6 | 2 | 0.94 | 220 | 1 | 3 | 6 |
| AMI-27B-25-X | 25 (28.8) | 0.02 (0.01) | 4 | 4.4 | 0.94 | 220 | | | 6 |
| AMI-27B-36-X | 36 (41.4) | 0.02 (0.01) | 2.46 | 4.4 | 0.94 | 220 | | | 6 |
| | | | | | | | | | |
| Where X denotes connection style | | | | | | | | | |

Insertion Loss: Common mode - —
Differential mode- —

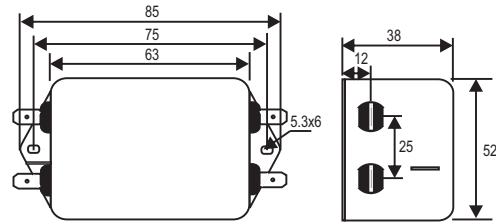


MECHANICAL DIMENSION (mm):

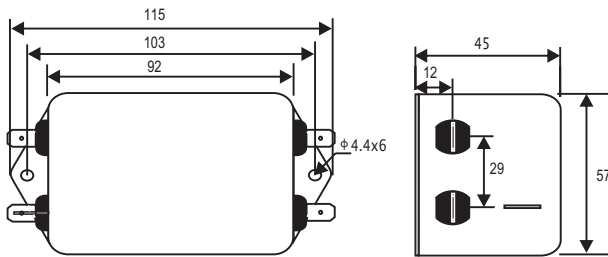
CONNECTION TYPE -1
1A



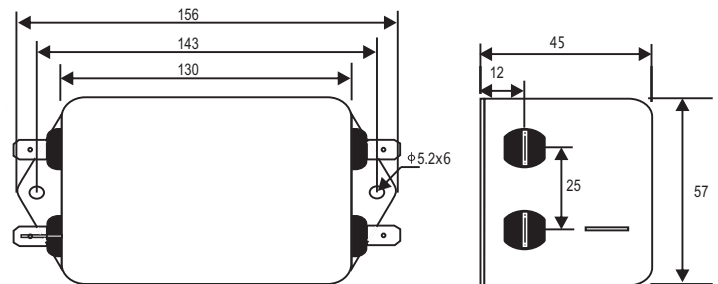
CONNECTION TYPE -1
3A



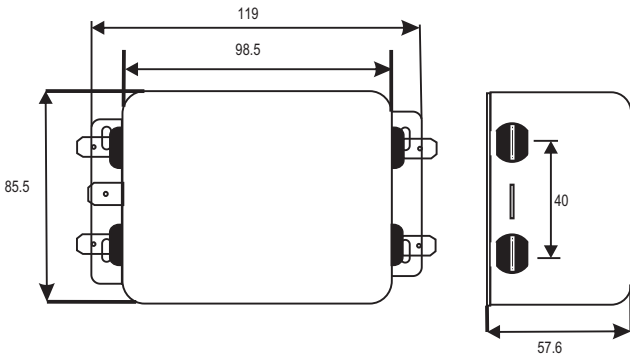
CONNECTION TYPE -1
6A



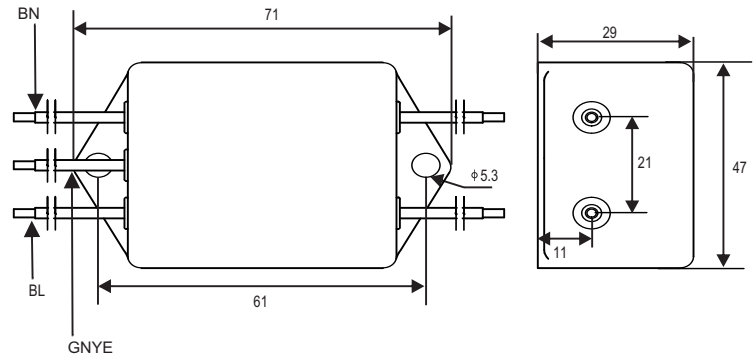
CONNECTION TYPE -1
10A & 12A



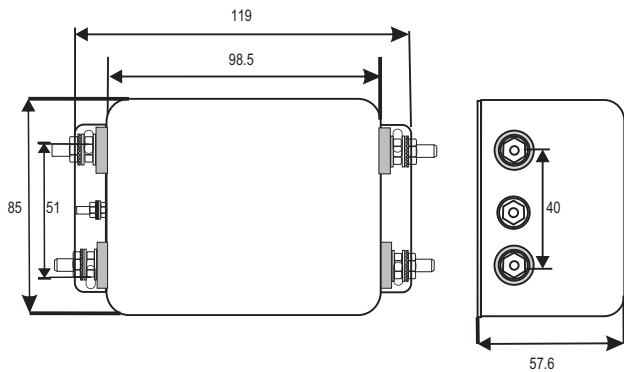
CONNECTION TYPE -1
16A



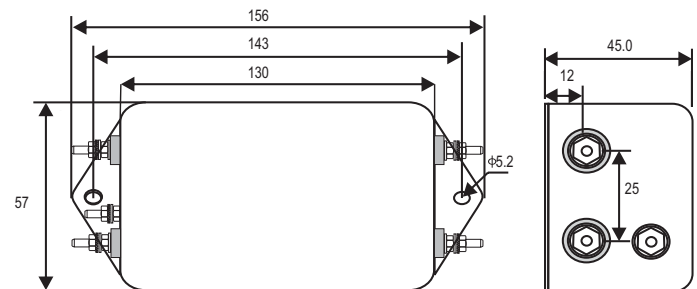
CONNECTION TYPE -3
16A



CONNECTION TYPE -6
16A



CONNECTION TYPE -6
25A & 36 A



NOTE:

All Dimension in mm

- Connection type: 1 - Spade Terminals (6.3 x 0.8)
- 3 - Wire leads (140mm on both sides)
- 6 - Threaded Bolt Terminals (M4)