

# General EMI Filter with High Attenuation Performance

## Dual-Stage High Performance EMI Filter AMI-28 Series



- Rated current from 1 to 16 A
- Dual-stage filter with good low frequency attenuation
- High differential mode and common mode attenuation 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 16A @ 40°C max.

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

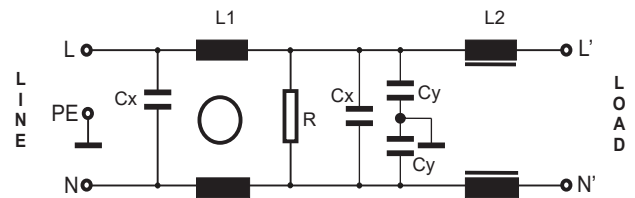
L → PE 3500VDC for 2 sec (B types)

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-28 dual-stage filters are designed for easy and fast chassis mounting.
- The AMI-28 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-28 filter are designed for good low frequency attenuation.
- 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
- Power supplies
- Various noisy application requires good attenuation performance filter

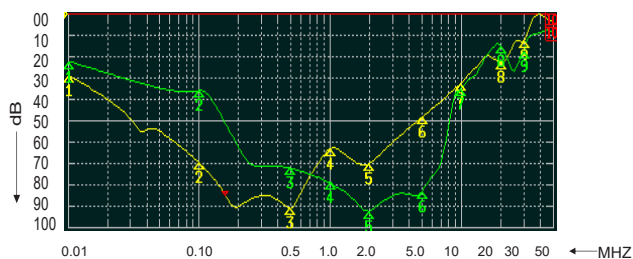
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**FILTER SELECTION TABLE**

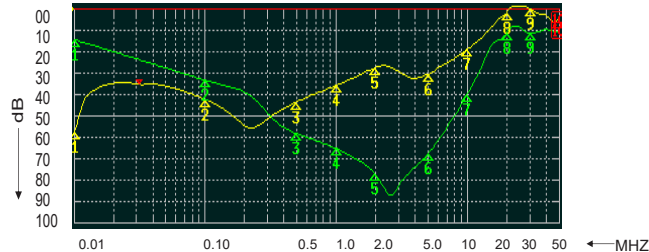
|                                  | Rated current<br>@40°C (25°C)<br>A | Leakage current<br>@ 250VAC/50Hz<br>(@ 120VAC/60Hz)<br>mA | Inductance<br>$\Sigma L$<br>mH | Capacitance<br>$\Sigma C_x$<br>uF | Capacitance<br>$\Sigma C_y$<br>nF | Resistance<br>$\Sigma R$<br>K $\Omega$ | Connetion type                                                                      |                                                                                     |                                                                                     |
|----------------------------------|------------------------------------|-----------------------------------------------------------|--------------------------------|-----------------------------------|-----------------------------------|----------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |  |  |  |
| AMI-28-1-X                       | 1 (1.2)                            | 0.73 (0.43)                                               | 22.4                           | 0.66                              | 9.4                               | 1000                                   | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28-3-X                       | 3 (3.5)                            | 0.73 (0.43)                                               | 9.96                           | 0.94                              | 9.4                               | 470                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28-6-X                       | 6 (6.9)                            | 0.73 (0.43)                                               | 7.91                           | 2                                 | 9.4                               | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28-10-X                      | 10 (11.5)                          | 0.73 (0.43)                                               | 4.56                           | 2                                 | 9.4                               | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28-12-X                      | 12 (13.8)                          | 0.73 (0.43)                                               | 3.30                           | 2                                 | 9.4                               | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28-16-X                      | 16 (18.4)                          | 0.73 (0.43)                                               | 2.84                           | 2                                 | 9.4                               | 220                                    | 1                                                                                   | 3                                                                                   | 6                                                                                   |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
| AMI-28A-1-X                      | 1 (1.2)                            | 0.073 (0.04)                                              | 22.4                           | 0.66                              | 0.94                              | 1000                                   | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28A-3-X                      | 3 (3.5)                            | 0.073 (0.04)                                              | 9.96                           | 0.94                              | 0.94                              | 470                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28A-6-X                      | 6 (6.9)                            | 0.073 (0.04)                                              | 7.91                           | 2                                 | 0.94                              | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28A-10-X                     | 10 (11.5)                          | 0.073 (0.04)                                              | 4.56                           | 2                                 | 0.94                              | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28A-12-X                     | 12 (13.8)                          | 0.073 (0.04)                                              | 3.30                           | 2                                 | 0.94                              | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28A-16-X                     | 16 (18.4)                          | 0.073 (0.04)                                              | 2.84                           | 2                                 | 0.94                              | 220                                    | 1                                                                                   | 3                                                                                   | 6                                                                                   |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
| AMI-28B-1-X                      | 1 (1.2)                            | 0.002 (0.001)                                             | 22.4                           | 0.66                              |                                   | 1000                                   | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28B-3-X                      | 3 (3.5)                            | 0.002 (0.001)                                             | 9.96                           | 0.94                              |                                   | 470                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28B-6-X                      | 6 (6.9)                            | 0.002 (0.001)                                             | 7.91                           | 2                                 |                                   | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28B-10-X                     | 10 (11.5)                          | 0.002 (0.001)                                             | 4.56                           | 2                                 |                                   | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28B-12-X                     | 12 (13.8)                          | 0.002 (0.001)                                             | 3.30                           | 2                                 |                                   | 220                                    | 1                                                                                   | 3                                                                                   |                                                                                     |
| AMI-28B-16-X                     | 16 (18.4)                          | 0.002 (0.001)                                             | 2.84                           | 2                                 |                                   | 220                                    | 1                                                                                   | 3                                                                                   | 6                                                                                   |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
| Where X denotes connection style |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |
|                                  |                                    |                                                           |                                |                                   |                                   |                                        |                                                                                     |                                                                                     |                                                                                     |

Insertion Loss: Common mode - —  
Differential mode- —

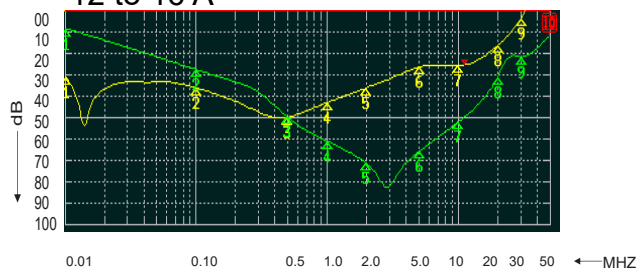
1 to 3 A



6A & 10A



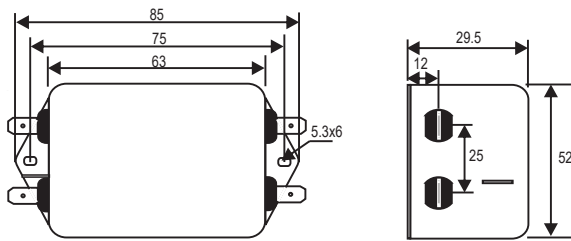
12 to 16 A



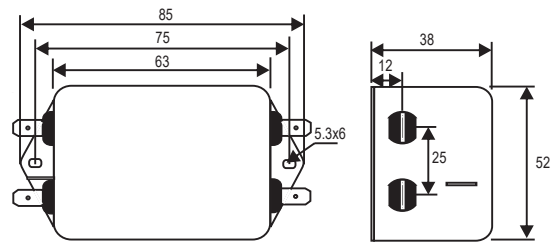
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## MECHANICAL DIMENSION (mm):

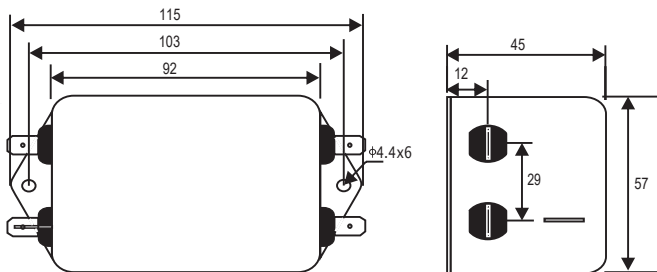
CONNECTION TYPE -1  
1A



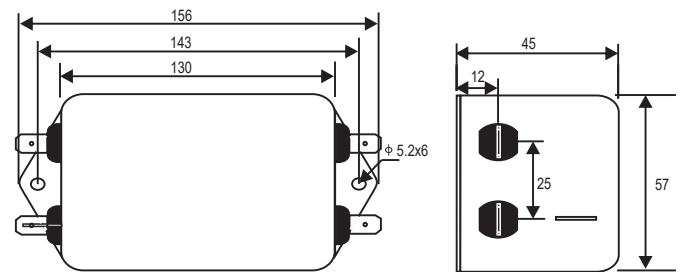
CONNECTION TYPE -1  
3A



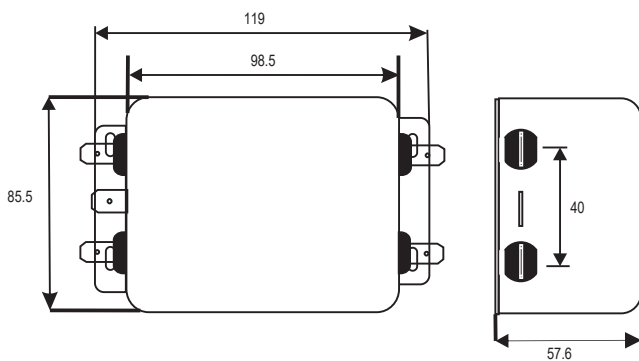
CONNECTION TYPE -1  
6A



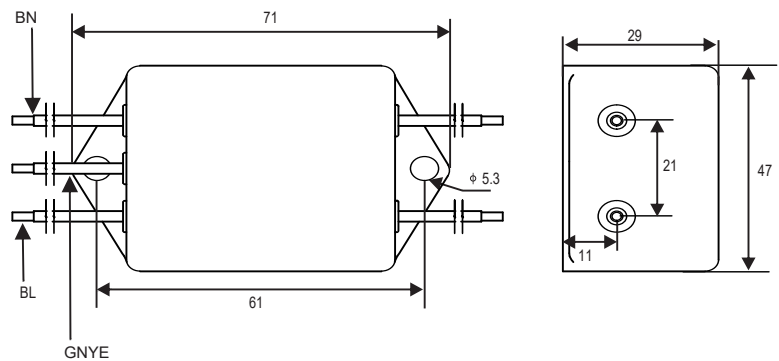
CONNECTION TYPE -1  
10A & 12A



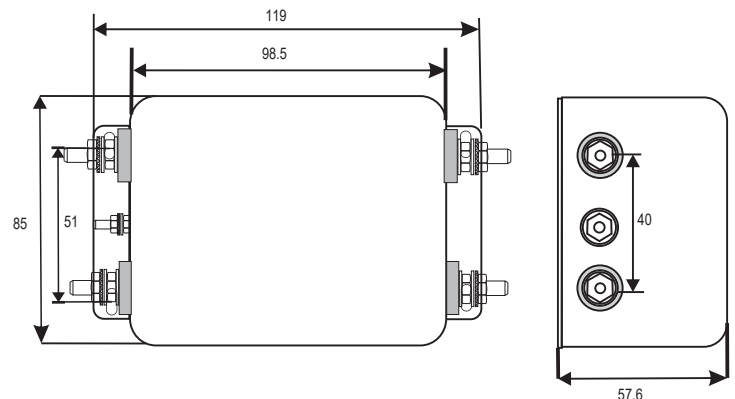
CONNECTION TYPE -1  
16A



CONNECTION TYPE -3  
16A



CONNECTION TYPE -6  
16A



### 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)