

General EMI Filter with High Attenuation Performance

Dual-Stage EMI Filter with Excellent Attenuation Performance AMI-29 Series



- Rated current from 1 to 30 A
- Dual-stage filter
- Very high differential and common mode attenuation
- 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 30A @ 40°C max.

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

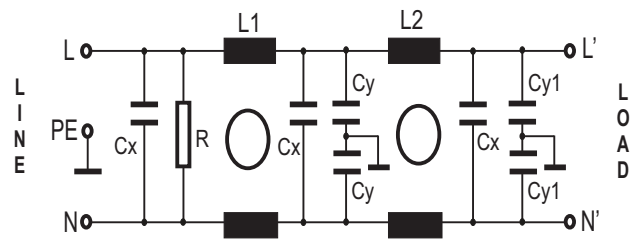
L → PE 3500VDC for 2 sec (B types)

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-29 dual-stage filters are designed for easy and fast chassis mounting.
- The AMI-29 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 a requirement for low leakage currents.
- All filters provide an exceptional conducted attenuation performance, based on chokes with high permeable core material and excellent thermal behavior.
- AMI-29 two-stage filters are designed for noisy applications requiring excellent filter performance.
- The higher inductivity versus amperage offers increased attenuation performance with the same form factor compared to AMI-26 and AMI-28 filter series.
- AMI-29 filters are also available as single stage filters (AMI-23 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
- Power supplies
- Various noisy applications requiring high filter performance

General EMI Filter with High Attenuation Performance



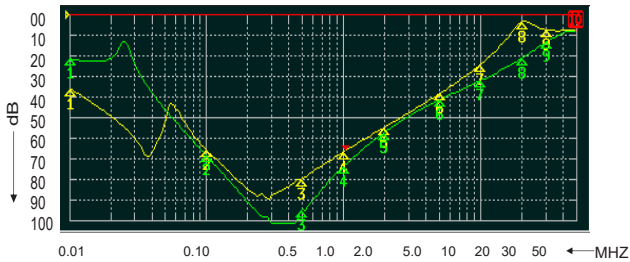
FILTER SELECTION TABLE

	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	$K\Omega$			
AMI-29-1-X	1 (1.1)	0.5 (0.29)	40	0.66	6.4	680	1	3	
AMI-29-3-X	3 (3.4)	0.5 (0.29)	28	0.99	6.4	470	1	3	
AMI-29-4-X	4 (4.5)	0.5 (0.29)	28	0.99	6.4	470	1	3	
AMI-29-6-X	6 (6.7)	0.67 (0.39)	16	1.41	8.6	330	1	3	
AMI-29-8-X	8 (8.9)	0.67 (0.39)	16	1.41	8.6	330	1	3	
AMI-29-10-X	10 (11.2)	0.67 (0.39)	16	1.41	8.6	330	1	3	
AMI-29-12-X	12 (13.4)	1.73 (1.0)	8	3.0	22	220	1	3	
AMI-29-16-X	16 (17.9)	1.73 (1.0)	8	3.0	22	220	1	3	
AMI-29-20-X	20 (22.4)	1.73 (1.0)	5.4	3.0	22	220	1		6
AMI-29-30-X	30 (33.5)	1.73 (1.0)	3.0	3.0	22	220			6
AMI-29A-1-X	1 (1.1)	0.08 (0.04)	40	0.66	1.88	680	1	3	
AMI-29A-3-X	3 (3.4)	0.08 (0.04)	28	0.99	1.88	470	1	3	
AMI-29A-4-X	4 (4.5)	0.08 (0.04)	28	0.99	1.88	470	1	3	
AMI-29A-6-X	6 (6.7)	0.08 (0.04)	16	1.41	1.88	330	1	3	
AMI-29A-8-X	8 (8.9)	0.08 (0.04)	16	1.41	1.88	330	1	3	
AMI-29A-10-X	10 (11.2)	0.08 (0.04)	16	1.41	1.88	330	1	3	
AMI-29A-12-X	12 (13.4)	0.08 (0.04)	8	3.0	1.88	220	1	3	
AMI-29A-16-X	16 (17.9)	0.08 (0.04)	8	3.0	1.88	220	1	3	
AMI-29A-20-X	20 (22.4)	0.08 (0.04)	5.4	3.0	1.88	220	1		6
AMI-29A-30-X	30 (33.5)	0.08 (0.04)	3.0	3.0	1.88	220			6
AMI-29B-1-X	1 (1.1)	0.002 (0.001)	40	0.66		680	1	3	
AMI-29B-3-X	3 (3.4)	0.002 (0.001)	28	0.99		470	1	3	
AMI-29B-4-X	4 (4.5)	0.002 (0.001)	28	0.99		470	1	3	
AMI-29B-6-X	6 (6.7)	0.002 (0.001)	16	1.41		330	1	3	
AMI-29B-8-X	8 (8.9)	0.002 (0.001)	16	1.41		330	1	3	
AMI-29B-10-X	10 (11.2)	0.002 (0.001)	16	1.41		330	1	3	
AMI-29B-12-X	12 (13.4)	0.002 (0.001)	8	3.0		220	1	3	
AMI-29B-16-X	16 (17.9)	0.002 (0.001)	8	3.0		220	1	3	
AMI-29B-20-X	20 (22.4)	0.002 (0.001)	5.4	3.0		220	1		6
AMI-29B-30-X	30 (33.5)	0.002 (0.001)	3.0	3.0		220			6

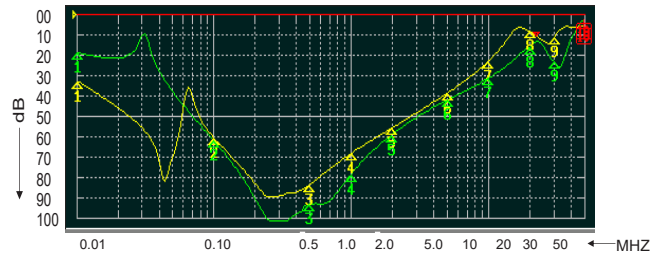
Where X denotes connection style

Insertion Loss: Common mode - —
Differential mode - —

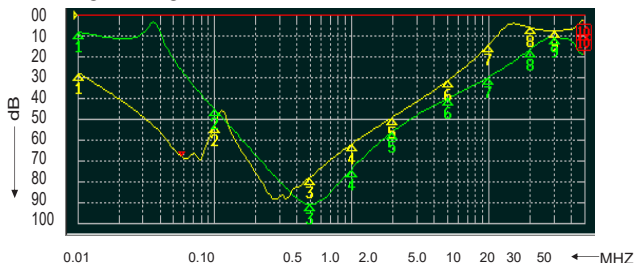
1 to 6 A



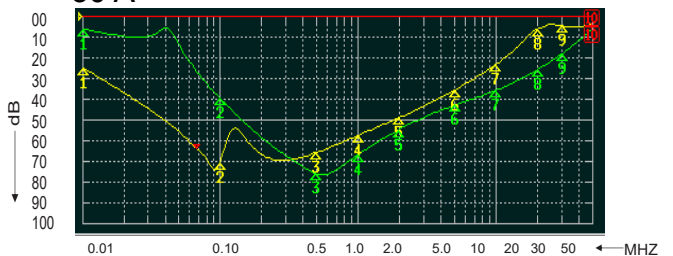
8 to 12 A



16 to 20 A



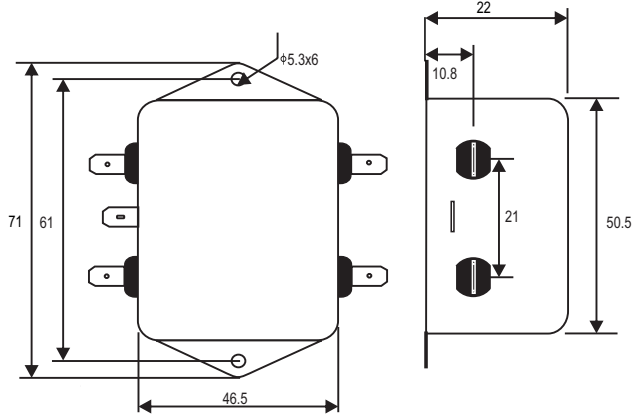
30 A



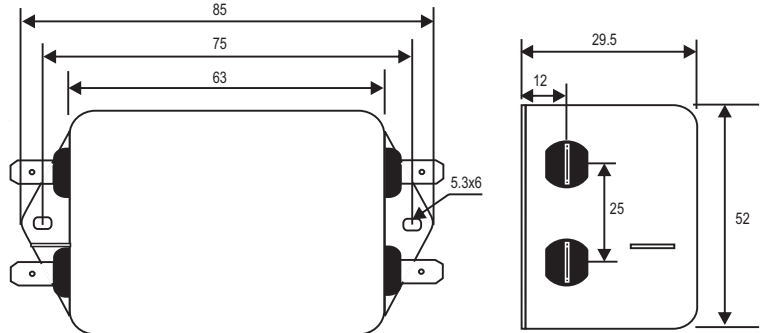
General EMI Filter with High Attenuation Performance

MECHANICAL DIMENSION (mm):

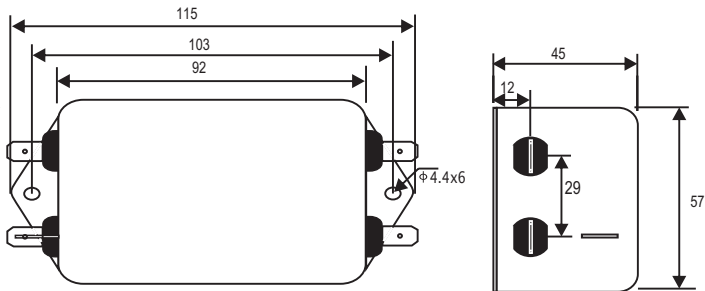
CONNECTION TYPE -1
1A



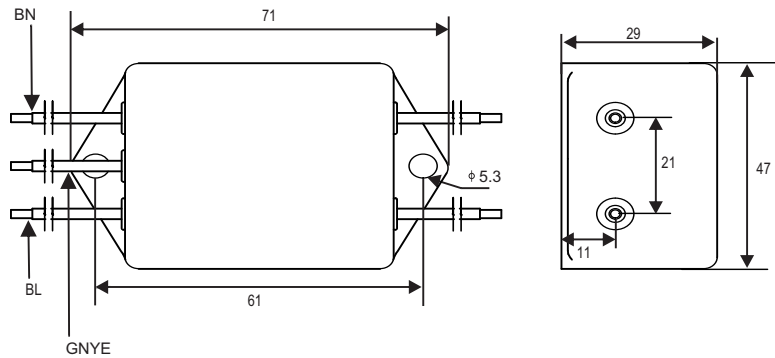
CONNECTION TYPE -1
3A TO 6A



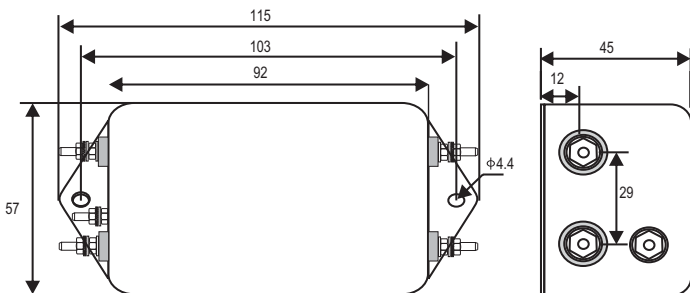
CONNECTION TYPE -1
8A TO 20A



CONNECTION TYPE -3
16A



CONNECTION TYPE -6
20A & 30A



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)