

General EMI Filter with High Attenuation Performance AMI-23 Series



- Rated current from 1 to 30 A
- Single 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)

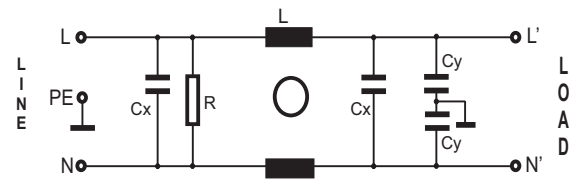
L → PE 3500VDC for 2 sec (B types)

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-23 Single stage filters are designed for easy and fast chassis mounting.
- The AMI-23 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 an exceptional conducted attenuation performance, based on chokes with high permeable core material and excellent thermal behavior.
- AMI-23 Single 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-21 and AMI-22 filter series.
- Various terminal options allow you to select the desired connection style.

Typical Applications

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Building automation
- Industrial applications
- Machinery
- Medical equipment
- Electronic data processing equipment
- Office automation and datacom equipment
- Various noisy applications requiring high filter performance

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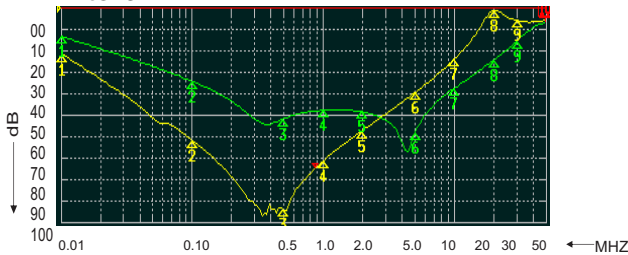
FILTER SELECTION TABLE

	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-23-1-X	1 (1.1)	0.34 (0.20)	20	0.44	4.4	1000	1	3	
AMI-23-3-X	3 (3.4)	0.52 (0.30)	14	0.66	6.6	1000	1	3	
AMI-23-4-X	4 (4.5)	0.52 (0.30)	14	0.66	6.6	1000	1	3	
AMI-23-6-X	6 (6.7)	0.73 (0.43)	8	0.94	9.4	680	1	3	
AMI-23-8-X	8 (8.9)	0.73 (0.43)	8	0.94	9.4	680	1	3	
AMI-23-10-X	10 (11.2)	0.73 (0.43)	8	0.94	9.4	680	1	3	
AMI-23-12-X	12 (13.4)	1.57 (0.90)	4	2.00	20	330	1	3	
AMI-23-16-X	16 (17.9)	1.57 (0.90)	4	2.00	20	330	1	3	
AMI-23-20-X	20 (22.4)	1.57 (0.90)	4	2.00	20	330	1	3	6
AMI-23-30-X	30 (33.5)	1.57 (0.90)	2	2.00	20	330			6
AMI-23A-1-X	1 (1.1)	0.074 (0.04)	20	0.44	0.94	1000	1	3	
AMI-23A-3-X	3 (3.4)	0.074 (0.04)	14	0.66	0.94	1000	1	3	
AMI-23A-4-X	4 (4.5)	0.074 (0.04)	14	0.66	0.94	1000	1	3	
AMI-23A-6-X	6 (6.7)	0.074 (0.04)	8	0.94	0.94	680	1	3	
AMI-23A-8-X	8 (8.9)	0.074 (0.04)	8	0.94	0.94	680	1	3	
AMI-23A-10-X	10 (11.2)	0.074 (0.04)	8	0.94	0.94	680	1	3	
AMI-23A-12-X	12 (13.4)	0.074 (0.04)	4	2.00	0.94	330	1	3	
AMI-23A-16-X	16 (17.9)	0.074 (0.04)	4	2.00	0.94	330	1	3	
AMI-23A-20-X	20 (22.4)	0.074 (0.04)	4	2.00	0.94	330	1	3	6
AMI-23A-30-X	30 (33.5)	0.074 (0.04)	2	2.00	0.94	330			6
AMI-23B-1-X	1 (1.1)	0.02 (0.01)	20	0.44	0.94	1000	1	3	
AMI-23B-3-X	3 (3.4)	0.02 (0.01)	14	0.66	0.94	1000	1	3	
AMI-23B-4-X	4 (4.5)	0.02 (0.01)	14	0.66	0.94	1000	1	3	
AMI-23B-6-X	6 (6.7)	0.02 (0.01)	8	0.94	0.94	680	1	3	
AMI-23B-8-X	8 (8.9)	0.02 (0.01)	8	0.94	0.94	680	1	3	
AMI-23B-10-X	10 (11.2)	0.02 (0.01)	8.45	0.94	0.94	680	1	3	
AMI-23B-12-X	12 (13.4)	0.02 (0.01)	4	2.00	0.94	330	1	3	
AMI-23B-16-X	16 (17.9)	0.02 (0.01)	4	2.00	0.94	330	1	3	
AMI-23B-20-X	20 (22.4)	0.02 (0.01)	4	2.00	0.94	330	1	3	6
AMI-23B-30-X	30 (33.5)	0.02 (0.01)	2	2.00	0.94	330			6

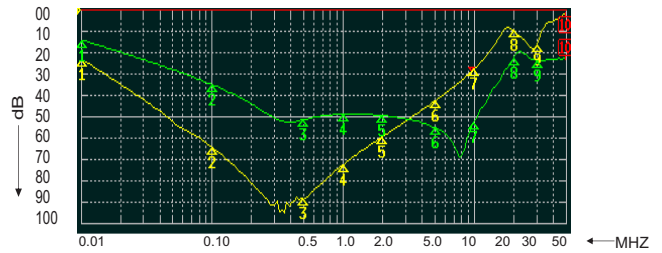
Where X denotes connection type

Insertion Loss: Common mode - —
Differential mode - —

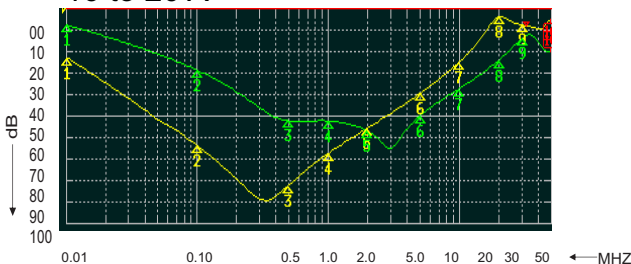
1 to 6 A



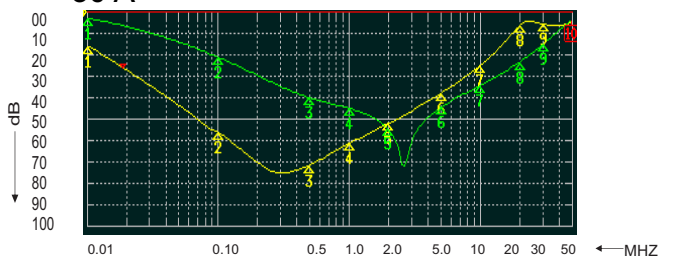
8 to 12 A



16 to 20 A



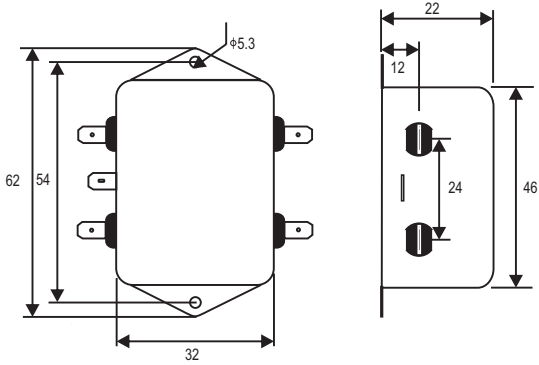
30 A



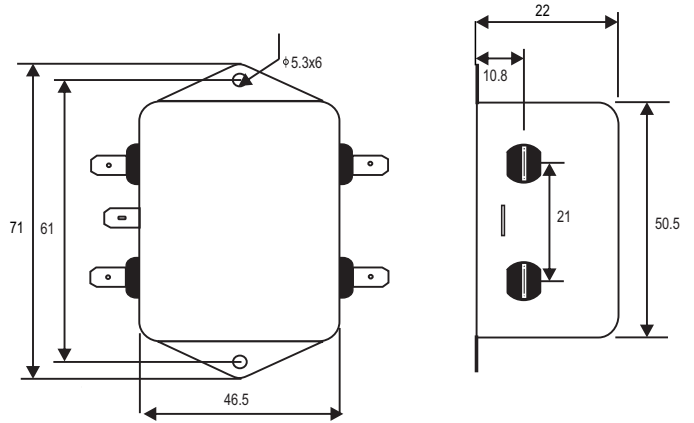
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MECHANICAL DIMENSION (mm):

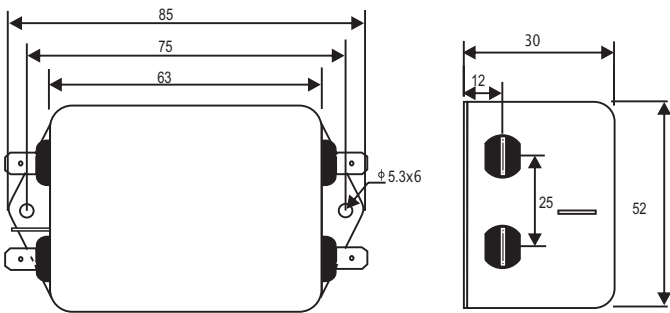
CONNECTION TYPE -1
1A



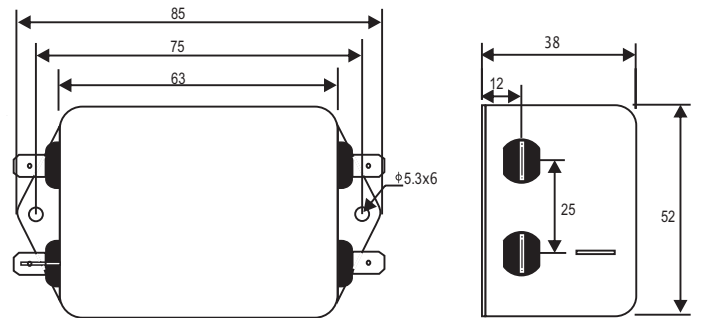
CONNECTION TYPE -1
3A TO 6A



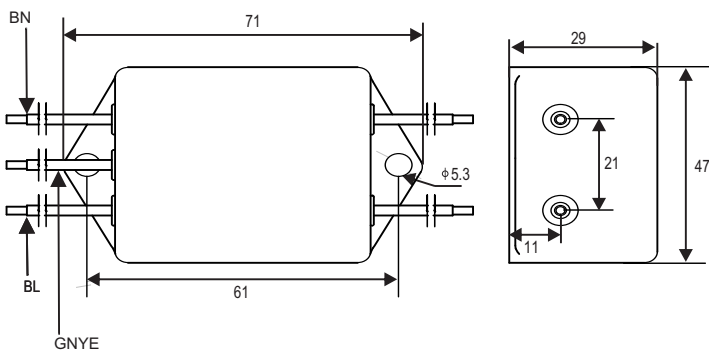
CONNECTION TYPE -1
8A TO 12A



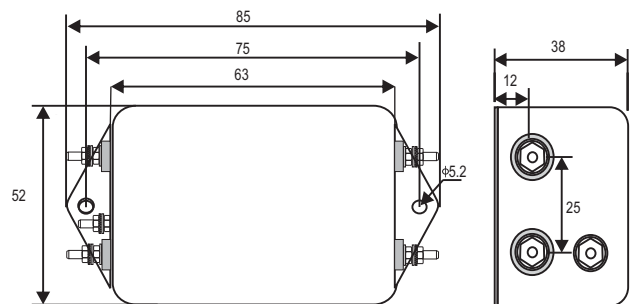
CONNECTION TYPE -1
16A & 20A



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)