

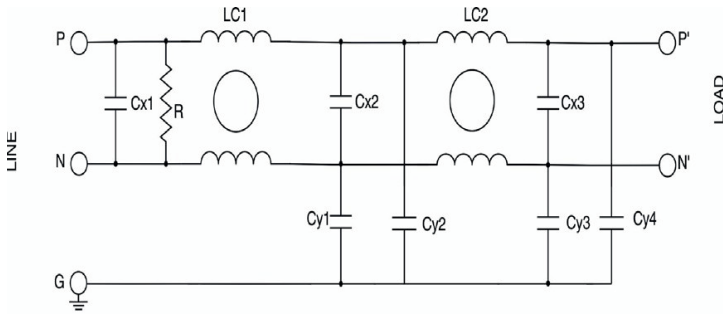
Features

- High EMI attenuation
- Rated up to 30A
- Two stage filters designed for noisy application requiring excellent filter performance
- Designed for easy and fast chassis mounting

Applications

- UPS/Inverters
- Industrial applications
- Medical equipment
- Electrical equipment application Stepper Motor Drives

Typical Circuit Diagram






Approvals & Compliances






Technical Specifications

Maximum continuous operating voltage:	250 VAC, 50/60Hz, 250 VDC
Operating Frequency:	DC to 400Hz
Rated Currents:	1A to 30A @40°C
High Potential test voltage:	P to N 1075VDC for 2 Sec P to G 2250VDC for 2 Sec P to G 1500VAC 2 Sec (M Types)
Overload Capability:	4x rated current at switch on 1.5x rated current for 1 minute, once per hour
Design corresponding to:	UL 60939-3 and IEC 60939-1&2
Temperature range:	-25°C to +100°C
Climatic category:	25/100/21
Flammability corresponding to:	UL 94 V-0 or better
Protection category:	IP 20




Selection Table

STANDARD VERSION							
Available Part Numbers	Current Rating @ 40°C (A)	Leakage current @ 250 VAC/50 Hz (mA)	Power loss @ 250°C 50Hz (W)	Termination			Weight Approx. (g)
				 6.3 X 0.8			
AMI-1090-1-1	1	0.25	2	-1	-	-	100
AMI-1090-1-3	1	0.25	2	-	-3	-	100
AMI-1090-3-1	3	0.25	4	-1	-	-	200
AMI-1090-3-3	3	0.25	4	-	-3	-	200
AMI-1090-4-1	4	0.25	6.5	-1	-	-	250
AMI-1090-4-3	4	0.25	6.5	-	-3	-	250
AMI-1090-6-1	6	0.35	7.5	-1	-	-	250
AMI-1090-6-3	6	0.35	7.5	-	-3	-	250
AMI-1090-6-6	6	0.35	7.5	-	-	-6	250
AMI-1090-8-1	8	0.35	8	-1	-	-	350
AMI-1090-8-3	8	0.35	8	-	-3	-	350
AMI-1090-10-1	10	0.35	8.5	-1	-	-	500
AMI-1090-10-3	10	0.35	8.5	-	-3	-	500
AMI-1090-10-6	10	0.35	8.5	-	-	-6	500
AMI-1090-12-1	12	0.85	12.5	-1	-	-	500
AMI-1090-12-3	12	0.85	12.5	-	-3	-	500
AMI-1090-12-6	12	0.85	12.5	-	-	-6	500
AMI-1090-16-1	16	0.85	11	-1	-	-	550
AMI-1090-16-3	16	0.85	11	-	-3	-	550
AMI-1090-20-1	20	0.85	8.5	-1	-	-	600
AMI-1090-20-6	20	0.85	8.5	-	-	-6	600
AMI-1090-30-6	30	0.85	10.5	-	-	-6	600




Selection Table

SAFETY VERSION							
Available Part Numbers	Current Rating @ 40°C (A)	Leakage current @ 250 VAC/50 Hz (mA)	Power loss @ 250°C 50Hz (W)	Termination			Weight Approx. (g)
							
AMI-1090A-1-1	1	0.1	2	-1	-	-	100
AMI-1090A-1-3	1	0.1	2	-	-3	-	100
AMI-1090A-3-1	3	0.1	4	-1	-	-	200
AMI-1090A-3-3	3	0.1	4	-	-3	-	200
AMI-1090A-4-1	4	0.1	6.5	-1	-	-	250
AMI-1090A-4-3	4	0.1	6.5	-	-3	-	250
AMI-1090A-6-1	6	0.1	7.5	-1	-	-	250
AMI-1090A-6-3	6	0.1	7.5	-	-3	-	250
AMI-1090A-6-6	6	0.1	7.5	-	-	-6	250
AMI-1090A-8-1	8	0.1	8	-1	-	-	350
AMI-1090A-8-3	8	0.1	8	-	-3	-	350
AMI-1090A-10-1	10	0.1	8.5	-1	-	-	500
AMI-1090A-10-3	10	0.1	8.5	-	-3	-	500
AMI-1090A-10-6	10	0.1	8.5	-	-	-6	500
AMI-1090A-12-1	12	0.1	12.5	-1	-	-	500
AMI-1090A-12-3	12	0.1	12.5	-	-3	-	500
AMI-1090A-12-6	12	0.1	12.5	-	-	-6	500
AMI-1090A-16-1	16	0.1	11	-1	-	-	550
AMI-1090A-16-3	16	0.1	11	-	-3	-	550
AMI-1090A-20-1	20	0.1	8.5	-1	-	-	600
AMI-1090A-20-6	20	0.1	8.5	-	-	-6	600
AMI-1090A-30-6	30	1.57	10.5	-	-	-6	600

Selection Table

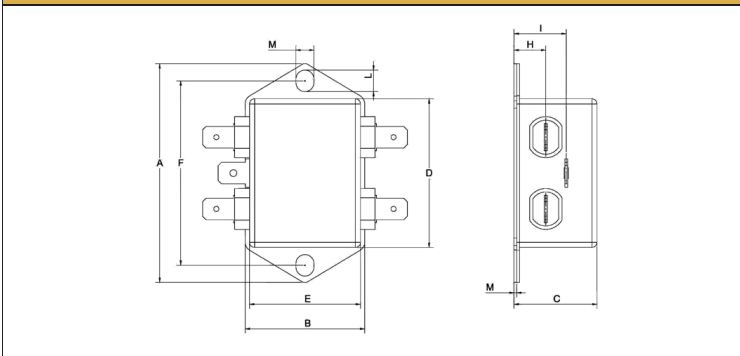
MEDICAL VERSION							
Available Part Numbers	Current Rating @ 40°C (A)	Leakage current @ 250 VAC/50 Hz (mA)	Power loss @ 250°C 50Hz (W)	Termination			Weight Approx. (g)
							
				6.3 X 0.8			
AMI-1090B-1-1	1	0	2	-1	-	-	100
AMI-1090B-1-3	1	0	2	-	-3	-	100
AMI-1090B-3-1	3	0	4	-1	-	-	200
AMI-1090B-3-3	3	0	4	-	-3	-	200
AMI-1090B-4-1	4	0	6.5	-1	-	-	250
AMI-1090B-4-3	4	0	6.5	-	-3	-	250
AMI-1090B-6-1	6	0	7.5	-1	-	-	250
AMI-1090B-6-3	6	0	7.5	-	-3	-	250
AMI-1090B-6-6	6	0	7.5	-	-	-6	250
AMI-1090B-8-1	8	0	8	-1	-	-	350
AMI-1090B-8-3	8	0	8	-	-3	-	350
AMI-1090B-10-1	10	0	8.5	-1	-	-	500
AMI-1090B-10-3	10	0	8.5	-	-3	-	500
AMI-1090B-10-6	10	0	8.5	-	-	-6	500
AMI-1090B-12-1	12	0	12.5	-1	-	-	500
AMI-1090B-12-3	12	0	12.5	-	-3	-	500
AMI-1090B-12-6	12	0	12.5	-	-	-6	500
AMI-1090B-16-1	16	0	11	-1	-	-	550
AMI-1090B-16-3	16	0	11	-	-3	-	550
AMI-1090B-20-1	20	0	8.5	-1	-	-	600
AMI-1090B-20-6	20	0	8.5	-	-	-6	600
AMI-1090B-30-6	30	0	10.5	-	-	-6	600

Selection Table

ENHANCED VERSION							
Available Part Numbers	Current Rating @ 40°C (A)	Leakage current @ 250 VAC/50 Hz (mA)	Power loss 50Hz (W)	Termination			Weight Approx. (g)
				 6.3 X 0.8			
AMI-1090N-1-1	1	3.4	2	-1	-	-	100
AMI-1090N-1-3	1	3.4	2	-	-3	-	100
AMI-1090N-3-1	3	15.71	4	-1	-	-	200
AMI-1090N-4-1	4	15.71	6.5	-1	-	-	250
AMI-1090N-6-1	6	15.71	7.5	-1	-	-	250
AMI-1090N-8-1	8	15.71	8	-1	-	-	350
AMI-1090N-10-1	10	5.1	8.5	-1	-	-	500
AMI-1090N-10-6	10	5.1	8.5	-	-	-6	500
AMI-1090N-12-1	12	5.1	12.5	-1	-	-	500
AMI-1090N-12-6	12	5.1	12.5	-	-	-6	500
AMI-1090N-16-1	16	5.1	11	-1	-	-	550
AMI-1090N-20-1	20	5.1	8.5	-1	-	-	600
AMI-1090N-20-6	20	5.1	8.5	-	-	-6	600
AMI-1090N-30-6	30	5.1	10.5	-	-	-6	600

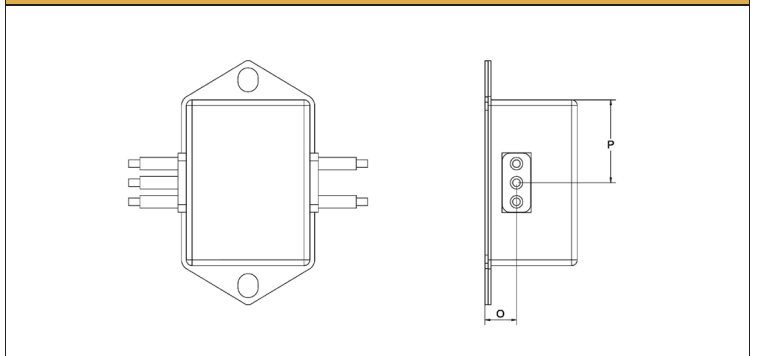
Mechanical Drawing

Connection style -1, 1A types

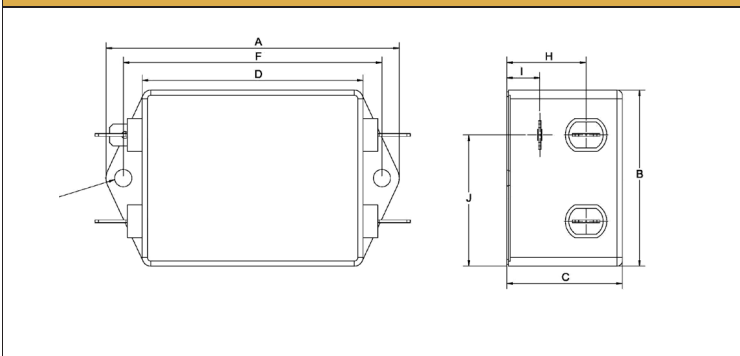


Connection style -3, 1A type

(same dimensions as style-1)

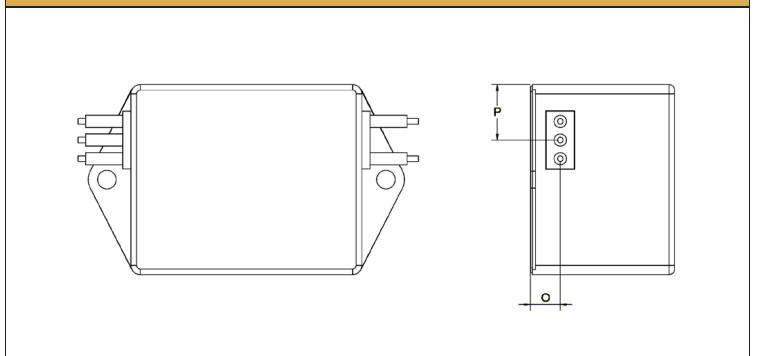


Connection style -1, 3A to 6A types

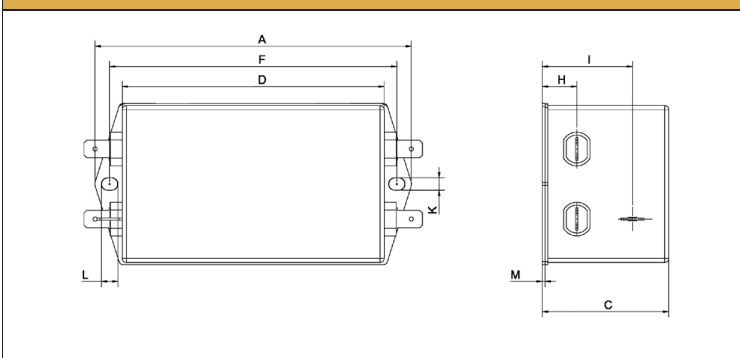


Connection style -3, 3A to 6A type

(same dimensions as style -1)

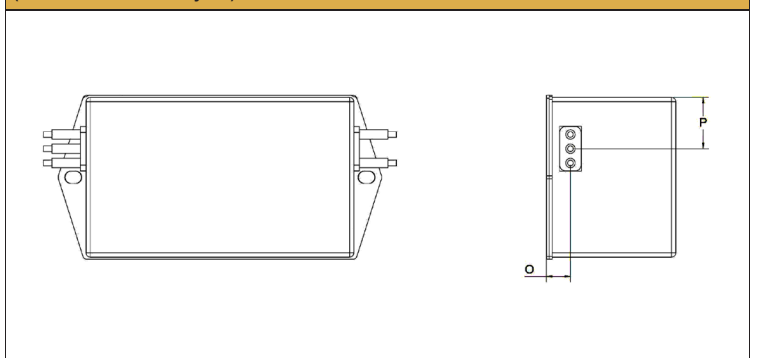


Connection style -1, 8A to 30A types

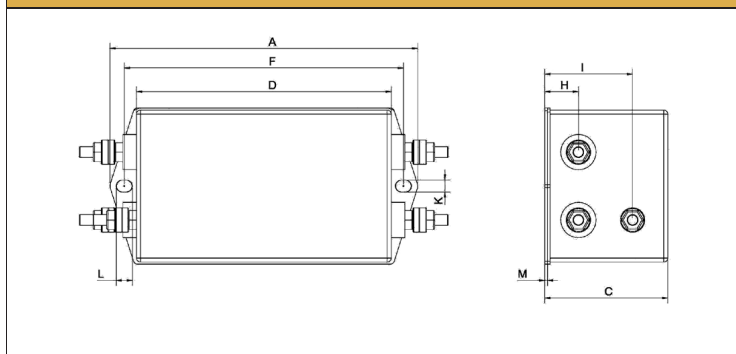


Connection style -3, 8A to 30A types

(same dimensions as style-1)



Connection style -6, 10A to 30A types



Mechanical Dimensions:

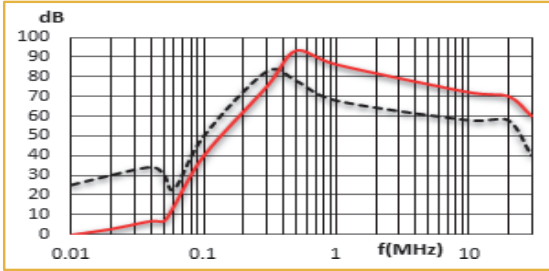
	1A	3A	4A	6A	8A	10A	12A	16A	20A	30A
A	71±1	85±1	85±1	85±1	113.5±1	113.5±1	113.5±1	113.5±1	113.5±1	113.5±1
B	46.6±1	51±1	51±1	51±1	57.5±1	57.5±1	57.5±1	57.5±1	57.5±1	57.5±1
C	22.3±1	32.3±1	32.3±1	32.3±1	45.4±1	45.4±1	45.4±1	45.4±1	45.4±1	45.4±1
D	50.5±1	64±1	64±1	64±1	94±1	94±1	94±1	94±1	94±1	94±1
E	44.5				56	56	56	56	56	56
F	61	75	75	75	103	103	103	103	103	103
K	5.3	5	5	5	4.4	4.4	4.4	4.4	4.4	4.4
L	6.3				6	6	6	6	6	6
M	0.6	0.6	0.6	0.6	1	1	1	1	1	1
N	6.3x0.8	6.3X0.8	6.3X0.8	6.3X0.8	6.3X0.8	6.3X0.8	6.3X0.8	6.3X0.8		
AWG Type Wire	AWG 20	AWG 20	AWG 20	AWG 18	AWG 18	AWG 18	AWG 16	AWG 16		
Wire Length	140	140	140	140	140	140	140	140		
N						M4	M4	M4	M4	M4
Recommended torque (Nm)						1.2-1.3	1.2-1.3	1.2-1.3	1.2-1.3	1.2-1.3
Recommended torque (Nm)						1.5-1.7	1.5-1.7	1.5-1.7	1.5-1.7	1.5-1.7

Typical Insertion Loss

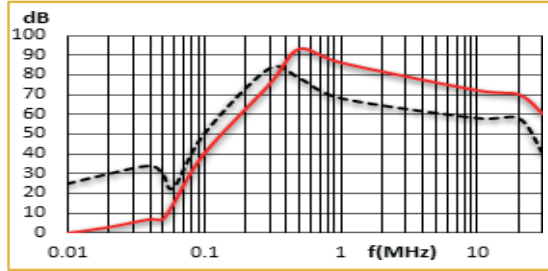
According to CISPR17 in 50 Ω system

— Common Mode / Asymmetrical (L-G)
 — Differential Mode / Symmetrical (L-L)

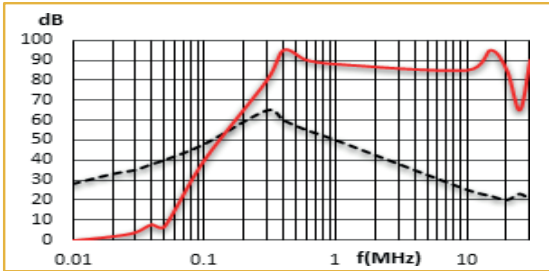
1A Standard Version



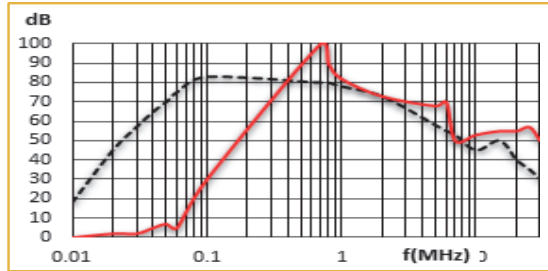
Safety Version



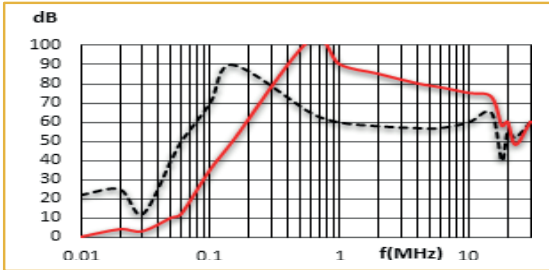
Medical Version



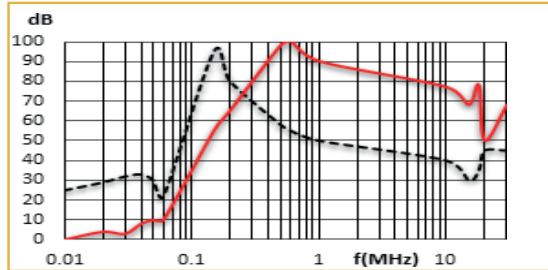
Enhanced Performance



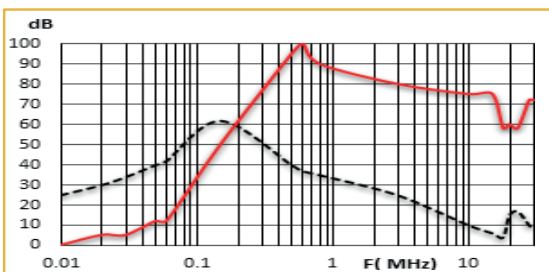
3A Standard Version



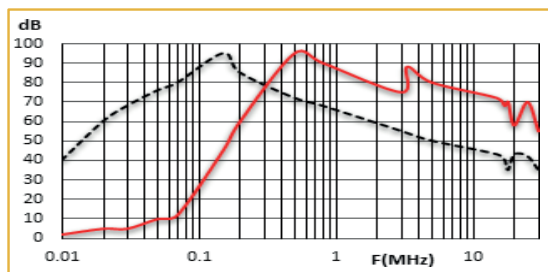
Safety Version



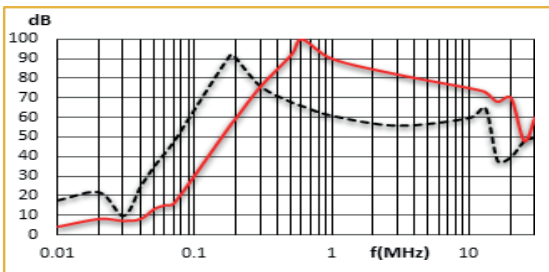
Medical Version



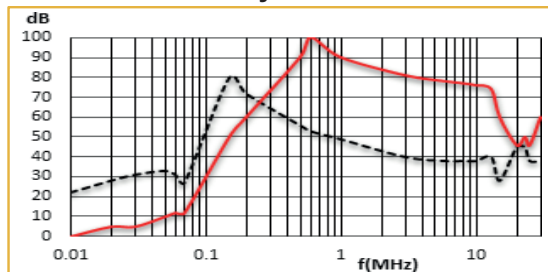
Enhanced Performance



4A Standard Version



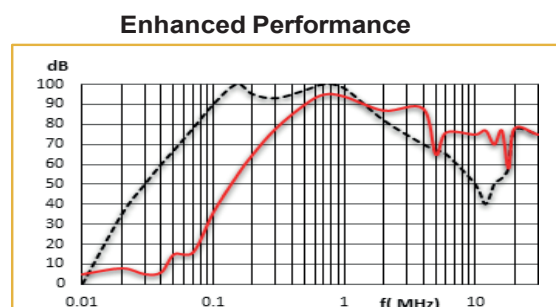
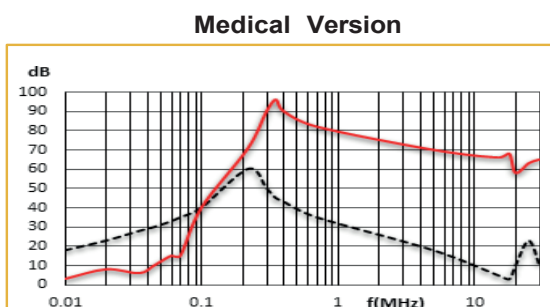
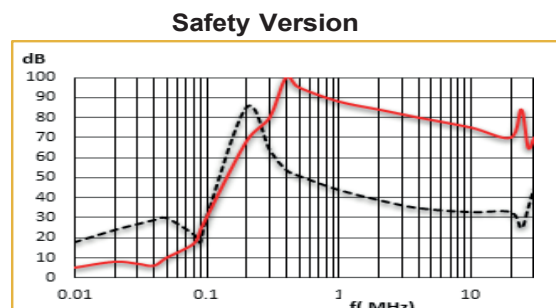
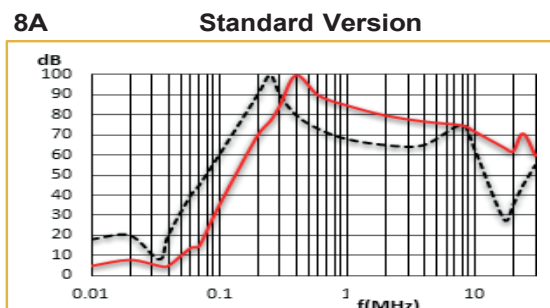
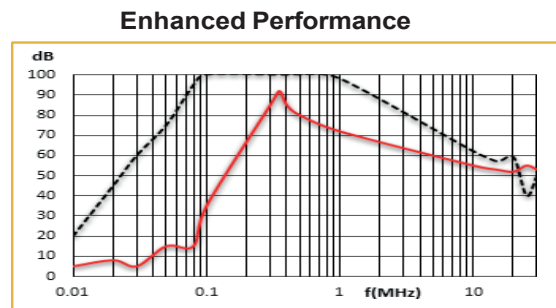
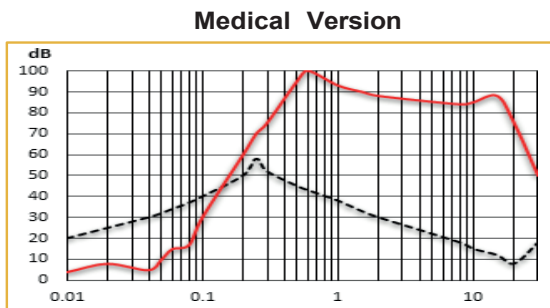
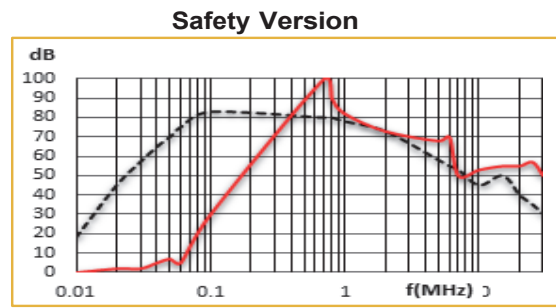
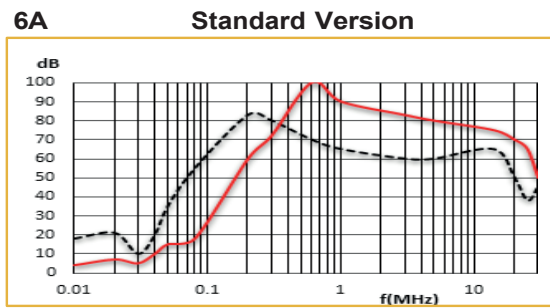
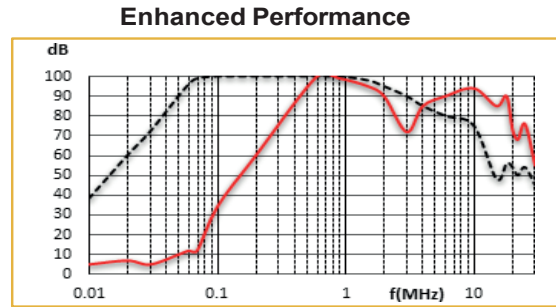
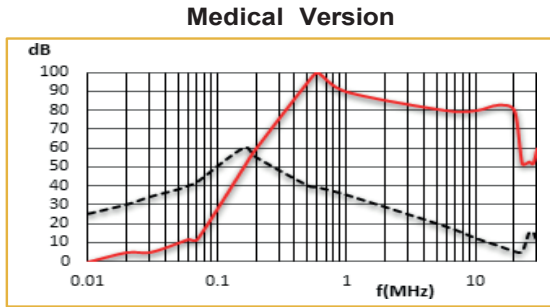
Safety Version



Typical Insertion Loss

According to CISPR17 in 50 Ω system

— Common Mode / Asymmetrical (L-G)
 — Differential Mode / Symmetrical (L-L)

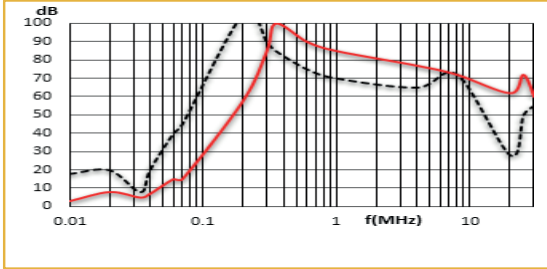


Typical Insertion Loss

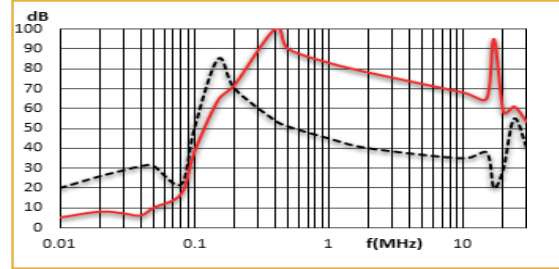
According to CISPR17 in 50 Ω system

— Common Mode / Asymmetrical (L-G)
 — Differential Mode / Symmetrical (L-L)

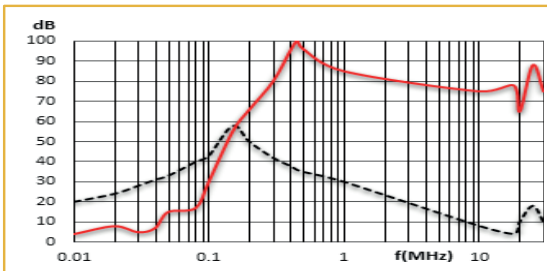
10A Standard Version



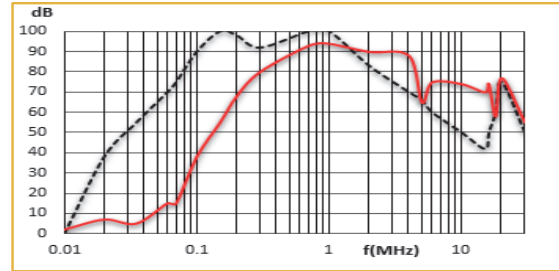
Safety Version



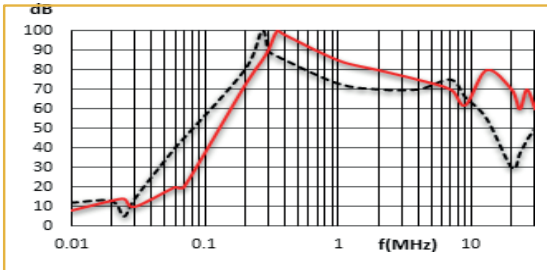
Medical Version



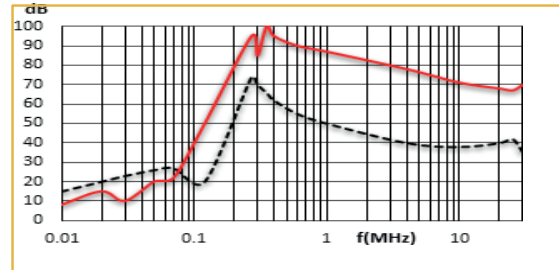
Enhanced Performance



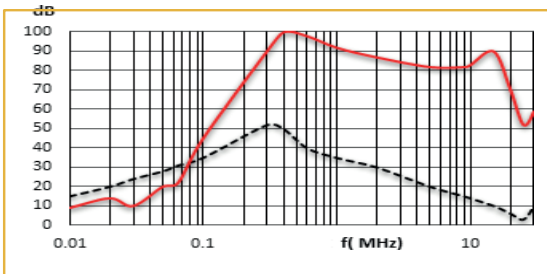
12A Standard Version



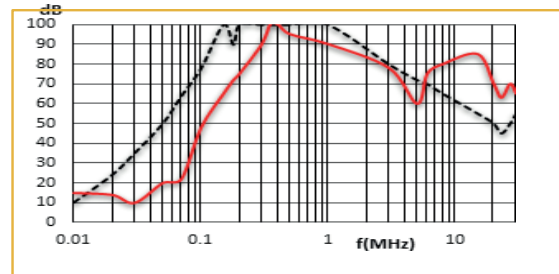
Safety Version



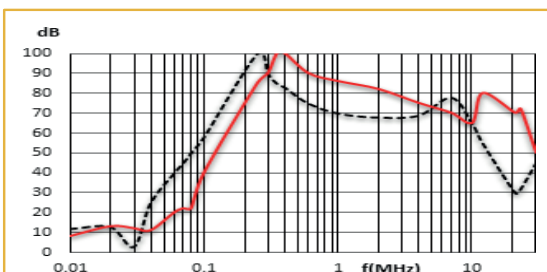
Medical Version



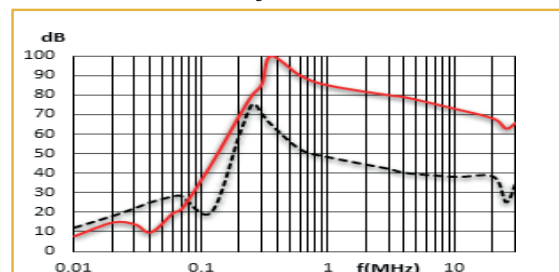
Enhanced Performance



16A Standard Version



Safety Version



Typical Insertion Loss

According to CISPR17 in 50 Ω system

— Common Mode / Asymmetrical (L-G)
 — Differential Mode / Symmetrical (L-L)

