

# Compact Two Stage RFI Power Line Filters



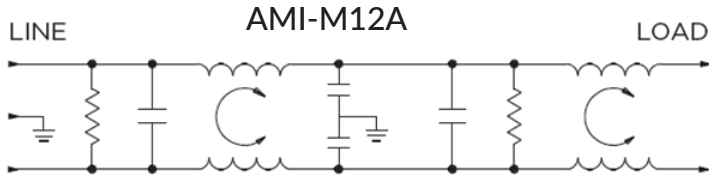
AMI-12A Series

Metal Enclosure Single Phase Two Stage

AMI Designation	Input/output Style			Current Rating	Inductance	Capacitance		Resistor	Leakage Current @ 120 VAC 60Hz/250 VAC 50 Hz	TIL Insertion Loss	Case Style
						Cx	Cy				
Available Part Numbers	6.3mm Spade Terminals	Wire Leads	Threaded Bolts	A	mH	nF	pF	KΩ			
AMI-M12A-1-3-B	1	-	-	3	1.58	1360	2800	340	0.21/0.43	001	A
AMI-M12A-1-6-B	1	-	-	6	1.56	1360	2800	340	0.21/0.43	002	A
AMI-M12A-1-10-B	1	-	-	10	1.48	2000	2800	235	0.21/0.43	003	A
AMI-M12A-1-15-C	1	-	-	15	1.04	3000	10000	117	0.73/1.52	004	A
AMI-M12A-1-20-C	1	-	-	20	0.84	4400	10000	94	0.73/1.52	005	A
AMI-M12A-3-3-B	-	3	-	3	1.58	1360	2800	340	0.21/0.43	001	B
AMI-M12A-3-6-B	-	3	-	6	1.56	1360	2800	340	0.21/0.43	002	B
AMI-M12A-3-10-B	-	3	-	10	1.48	2000	2800	235	0.21/0.43	003	B
AMI-M12A-3-15-C	-	3	-	15	1.04	3000	10000	117	0.73/1.52	004	B
AMI-M12A-6-10-B	-	-	6	10	1.48	2000	2800	235	0.21/0.43	003	C
AMI-M12A-6-15-C	-	-	6	15	1.04	3000	10000	117	0.73/1.52	004	C
AMI-M12A-6-20-C	-	-	6	20	0.84	4400	10000	94	0.73/1.52	005	C
AMI-M12A-6-30-C	-	-	6	30	0.88	4400	10000	94	0.73/1.52	006	D

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## Electrical Schematic



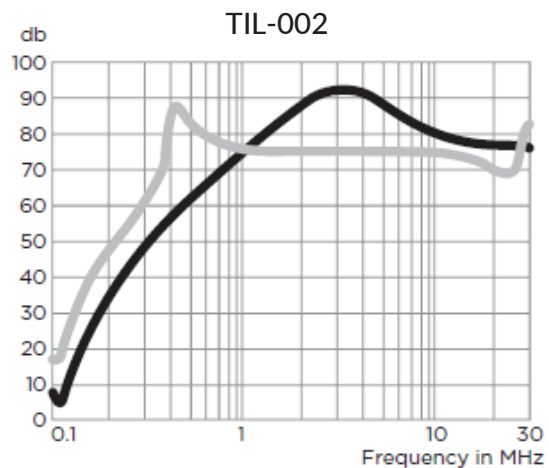
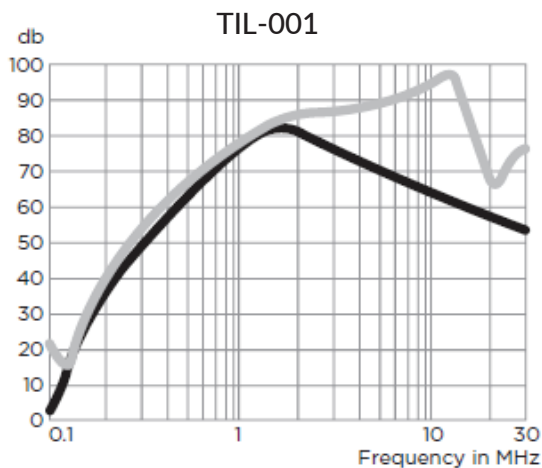
## Specifications:

- Rated Voltage (max): 250 VAC
- Operating Frequency: 50/60 Hz
- Operating Current: 3 to 30 A
- Hi-pot Rating (one minute): Line to Ground: 2250 VDC  
Line to Line: 1450 VDC
- Operating Ambient Temperature Range (at rated current  $I_r$ ): -10°C to +40°C. In an ambient temperature ( $T_a$ ) higher than +40°C the maximum operating current ( $I_o$ ) is calculated as follows:  $I_o = I_r \sqrt{[(85 - T_a)/45]}$

## Performance Data

### Typical Insertion Loss

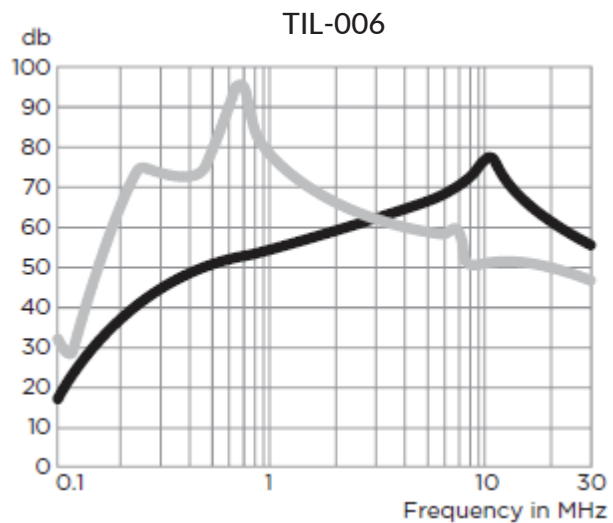
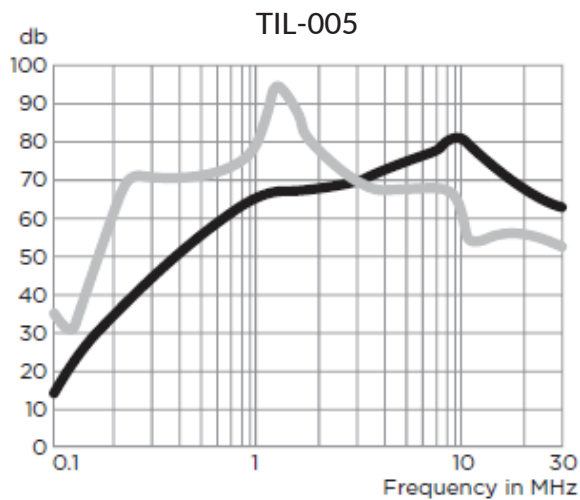
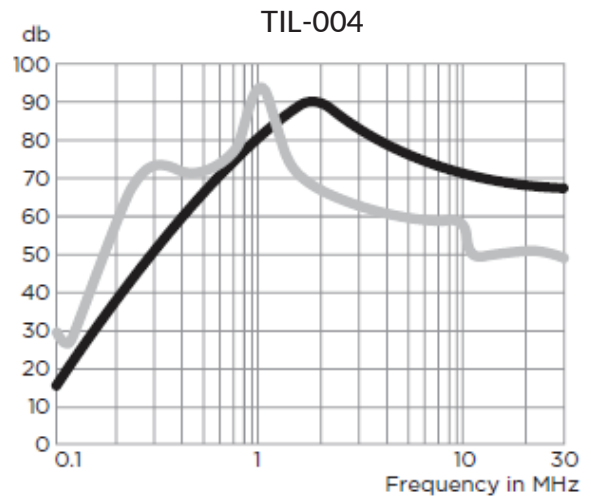
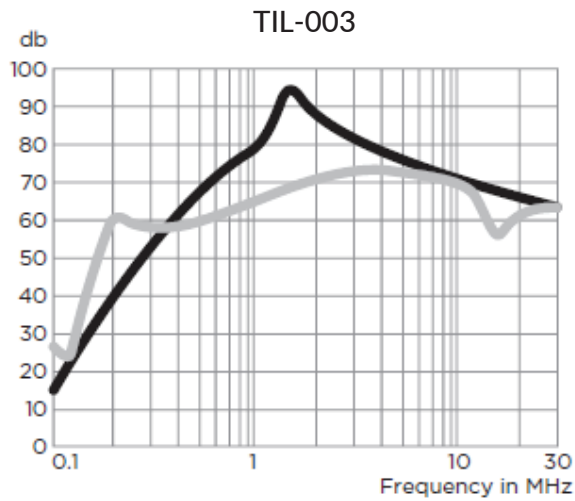
Measured in closed 50 Ohm system



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## Performance Data Typical Insertion Loss

Measured in closed 50 Ohm system



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

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## Minimum Insertion Loss

### Common Mode/Asymmetrical (Line to Ground)

Current Rating	Frequency-MHz								
	.05	.07	.11	.15	1	2	10	20	30
3A	6	6	3	16	65	66	62	60	59
6A	6	6	2	15	65	67	65	62	63
10A	5	2	13	24	72	72	56	50	48
15A	3	1	12	22	70	68	57	54	53
20A	2	2	11	21	58	57	63	55	52
30A	2	2	14	22	47	52	60	48	43

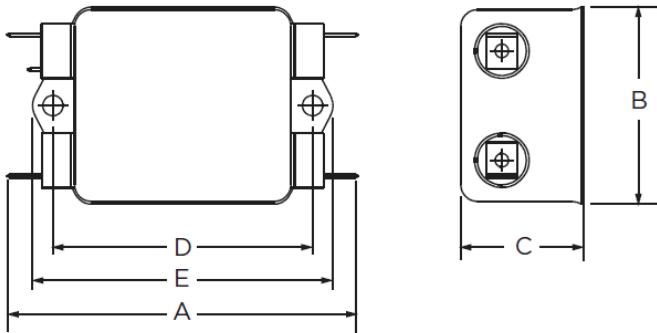
### Differential Mode/Symmetrical (Line to Line)

Current Rating	Frequency-MHz								
	.05	.07	.11	.15	1	2	10	20	30
3A	12	13	7	18	64	69	65	60	52
6A	12	12	8	27	61	61	59	56	54
10A	14	15	12	33	54	58	47	34	36
15A	16	16	13	34	61	52	36	36	23
20A	17	19	15	37	67	62	36	32	30
30A	17	18	14	40	62	53	30	28	26

# Compact Two Stage RFI Power Line Filters

## Case Styles

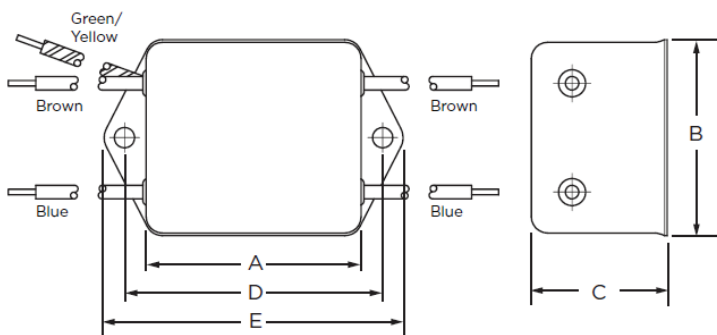
### STYLE A



#### Typical Dimensions:

Line/Load Terminals (4):	.250 [6.3] with .07 [1.8] Dia. hole
Ground Terminal (1):	.250 [6.3] with .07 x .16 [1.8 x 3.8] slot
Mounting Holes (2):	.187 ±.008 [4.75 ±.20] Dia.

### STYLE B



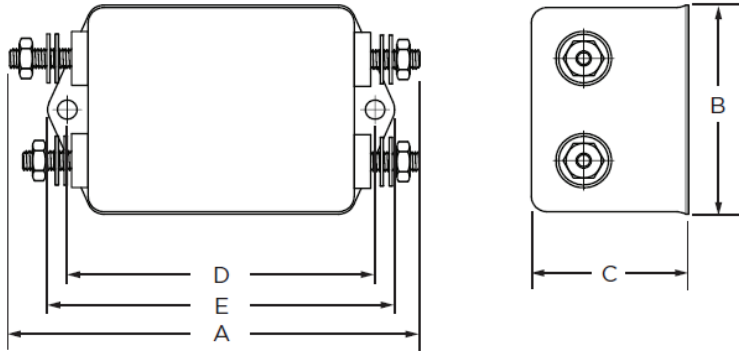
#### Typical Dimensions:

Wire leads (5):	4.0 [101.6] Min., AWG18 (AWG16 for 15A)
Mounting Holes (2):	.187 ±.008 [4.75 ±.20] Dia.

# Compact Two Stage RFI Power Line Filters

## Case Styles

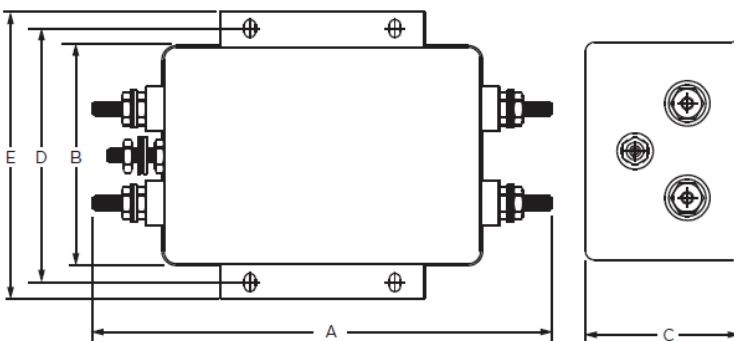
### STYLE C



Typical Dimensions:

Terminals (5): 8-32, Torque 18 lbf-in. [2.03 N-m] max.  $\pm 2$  [.22]  
Mounting Holes (4):  $.187 \pm .008$  [4.75  $\pm$  .20] Dia.

### STYLE D



Typical Dimensions:

Terminals (5): 10-32, Torque 27 lbf-in. [3.05 N-m] max.  $\pm 3$  [.34]  
Mounting Slots (4):  $.203 \times .156$  [5.16 x 3.96]

# Compact Two Stage RFI Power Line Filters

## Case Dimensions:

Model Number	A max	B max	C max	D $\begin{smallmatrix} \pm .15 \\ \pm .38 \end{smallmatrix}$	E max
AMI-M12A-1-3	3.35"/85.1mm	1.81"/46mm	1.16"/29.5mm	2.375"/60.3mm	2.78"/70.6mm
AMI-M12A-1-6	3.85"/97.8	2.07"/52.6mm	1.16"/29.5mm	2.938"/74.6mm	3.35"/85.1mm
AMI-M12A-1-10	3.85"/97.8	2.07"/52.6mm	1.53"/38.91mm	2.938"/74.6mm	3.35"/85.1mm
AMI-M12A-1-15/20	4.97"/126.2mm	2.25"/57.2mm	1.78"/45.2mm	4.063"/103.2mm	4.46"/113.3mm
AMI-M12A-3-3	2.07"/52.6mm	1.81"/46mm	1.16"/29.5mm	2.375"/60.3mm	2.78"/70.6mm
AMI-M12A-3-6	2.56"/65mm	2.07"/52.6mm	1.16"/29.5mm	2.938"/74.6mm	3.35"/85.1mm
AMI-M12A-3-10	2.56"/65mm	2.07"/52.6mm	1.53"/38.91mm	2.938"/74.6mm	3.35"/85.1mm
AMI-M12A-3-15	3.69"/93.7mm	2.25"/57.2mm	1.78"/45.2mm	4.063"/103.2mm	4.47"/113.5mm
AMI-M12A-6-10	3.94"/99.9mm	2.07"/52.6mm	1.53"/38.91mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M12A-6-15/20	5.09"/129.3mm	2.25"/57.2mm	1.78"/45.2mm	4.063"/103.2mm	4.47"/113.5mm
AMI-M12A-6-30	6.05"/153.7mm	3.12"/79.2mm	2.18"/55.4mm	3.5"/88.9mm	3.96"/100.6mm