

# Enhanced Differential Mode Performance RFI Line Filters



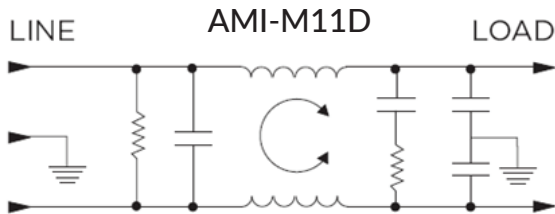
## AMI-M11D Series

### Metal Enclosure Single Phase Single Stage Filters

AMI Designation	Input/output Style			Current Rating	Inductance	Capacitance		Resistor	Leakage Current @ 120 VAC 60Hz/250 VAC 50 Hz	TIL Insertion Loss	Case Style
						mH	Cx				
Available Part Numbers	6.3mm Spade Terminals	Wire Leads	Threaded Bolts			nF	pF		mA		
AMI-M11D-1-1-B-1	1	-	-	1	1.86	740	4700	330	0.4/0.7	001	A
AMI-M11D-3-1-B-1	-	3	-	1	1.86	740	4700	330	0.4/0.7	001	B
AMI-M11D-1-3-B-1	1	-	-	3	1.76	940	5500	330	0.4/0.7	001	A
AMI-M11D-3-3-B-1	-	3	-	3	1.76	940	5500	330	0.4/0.7	001	B
AMI-M11D-1-6-B-1	1	-	-	6	0.516	940	5500	330	0.4/0.7	002	A
AMI-M11D-3-6-B-1	-	3	-	6	0.516	940	5500	330	0.4/0.7	002	A
AMI-M11D-3-10-B-1	-	3	-	10	0.495	940	5500	330	0.4/0.7	002	B
AMI-M11D-1-20-B-1	1	-	-	20	0.54	940	5500	330	0.4/0.7	002	C
AMI-M11D-6-20-B-1	-	-	6	20	0.54	940	5500	330	0.4/0.7	002	D
AMI-M11D-1-1-B-2	1	-	-	1	1.86	740	3000	330	0.22/0.38	003	A
AMI-M11D-3-1-B-2	-	3	-	1	1.86	740	3000	330	0.22/0.38	003	B
AMI-M11D-1-3-B-2	1	-	-	1	1.76	940	3000	330	0.22/0.38	003	A
AMI-M11D-3-3-B-2	-	3	-	3	1.76	940	3000	330	0.22/0.38	003	B
AMI-M11D-1-6-B-2	1	-	-	6	0.516	940	3000	330	0.22/0.38	004	A
AMI-M11D-3-6-B-2	-	3	-	6	0.516	940	3000	330	0.22/0.38	004	B
AMI-M11D-1-10-B-2	1	-	-	10	0.495	940	3000	330	0.22/0.38	004	A
AMI-M11D-3-10-B-2	-	3	-	10	0.495	940	3000	330	0.22/0.38	004	B
AMI-M11D-1-20-B-2	1	-	-	20	0.54	940	3000	330	0.22/0.38	004	C

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## Electrical Schematic



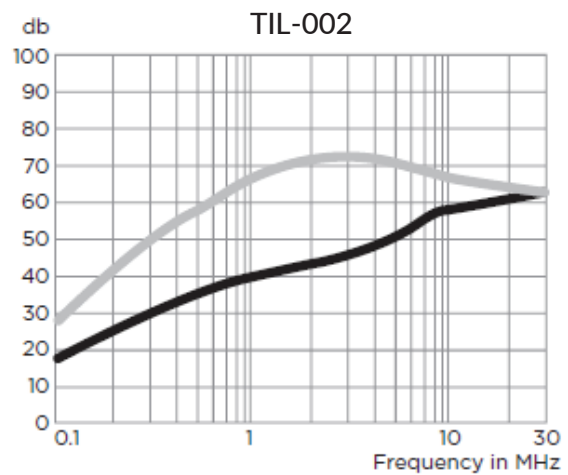
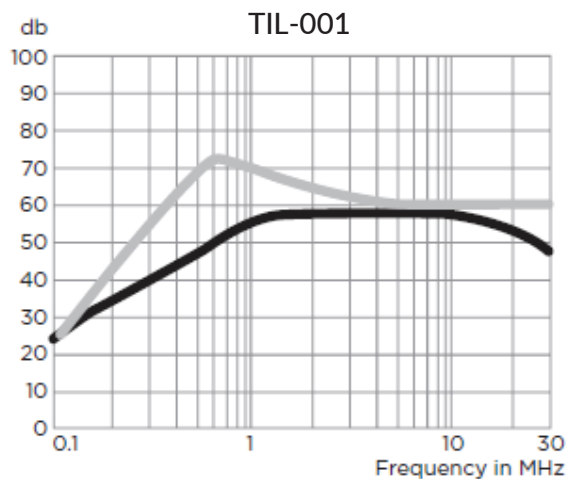
## Specifications:

- Rated Voltage (max): 250 VAC
- Operating Frequency: 50/60 Hz
- Operating Current: 1 to 20 A
- Hi-pot Rating (one minute): Line to Ground: 2250 VDC  
Line to Line: 1450 VDC
- Operating Ambient Temperature Range (at rated current  $I_r$ ):  $-10^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ . In an ambient temperature ( $T_a$ ) higher than  $+40^{\circ}\text{C}$  the maximum operating current ( $I_o$ ) is calculated as follows:  $I_o = I_r \sqrt{[(85 - T_a)/45]}$

## Performance Data

### Typical Insertion Loss

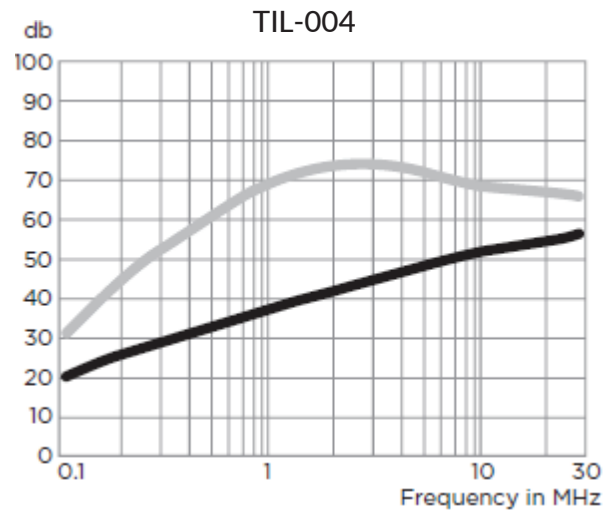
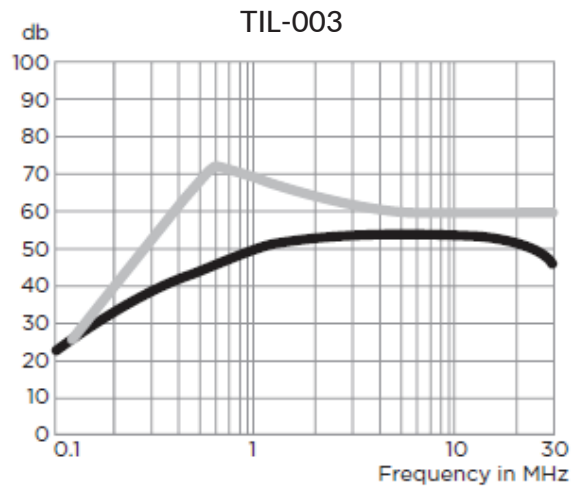
Measured in closed 50 Ohm system



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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)

## Minimum Insertion Loss

Measured in closed 50 Ohm system

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

Current Rating	Frequency-MHz					
	.15	.5	1	5	10	30
<i>AMI-M11D-X-B-1</i>						
1A, 3A	18	30	40	48	48	40
6A, 10A, 20A	10	22	30	39	44	51
<i>AMI-M11D-X-B-2</i>						
1A, 3A	17	27	33	45	45	40
6A, 10A, 20A	10	19	25	34	40	46

# Enhanced Differential Mode Performance RFI Line Filters

## Minimum Insertion Loss

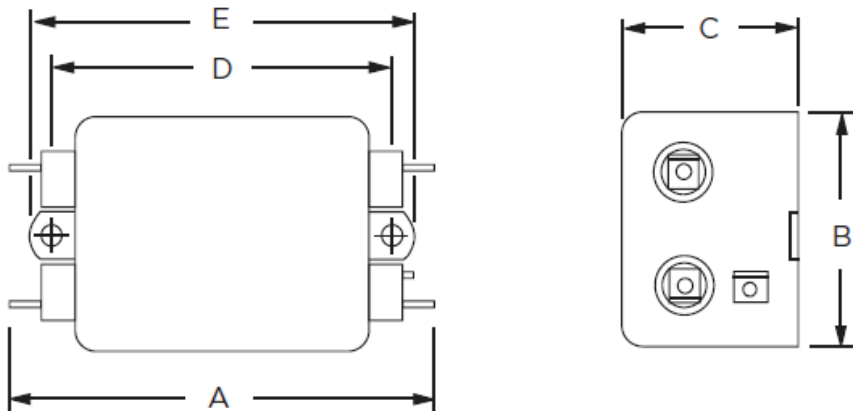
Measured in closed 50 Ohm system

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

Current Rating	Frequency-MHz					
	.15	.5	1	5	10	30
<i>AMI-M11D-X-B AMI-M11D-X-B-2 Models</i>						
1A, 3A	18	49	62	60	51	46
6A, 10A, 20A	22	41	55	64	61	56

## Case Styles

### STYLE A



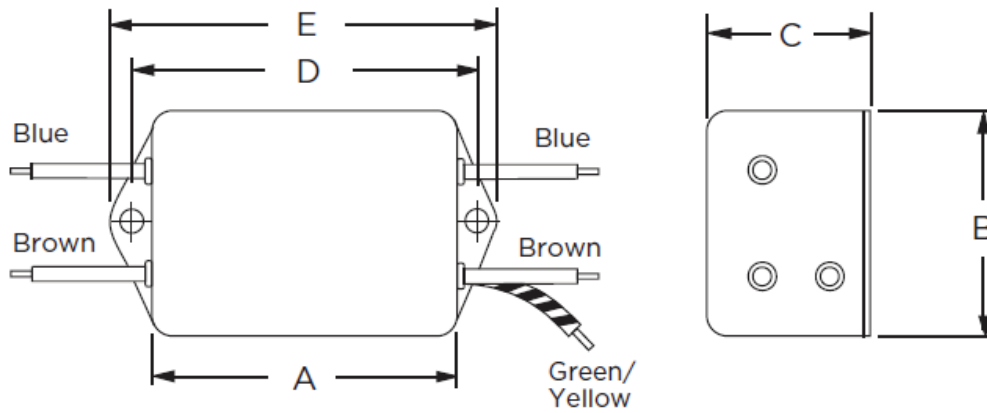
#### Typical Dimensions:

- 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): .188 [4.75] Dia.

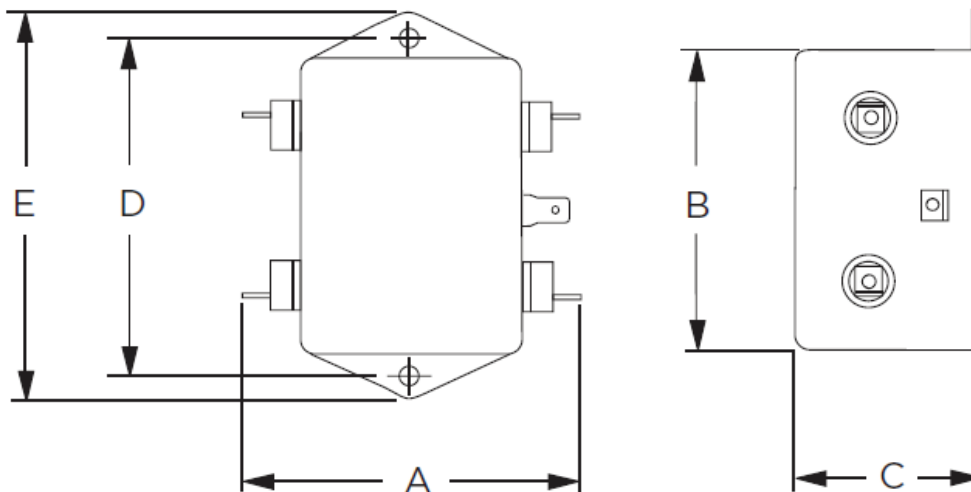
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## Case Styles

### STYLE B



### STYLE C



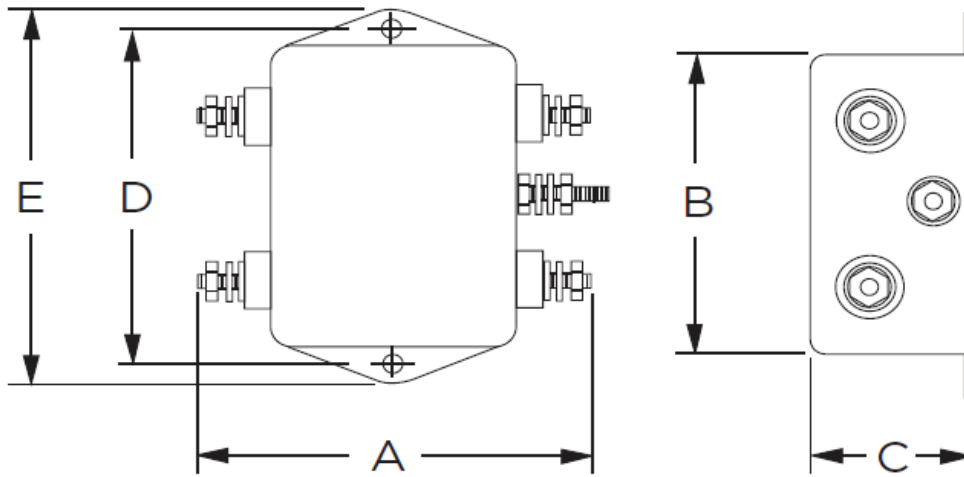
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Line/Load Terminals (4):	.250 [6.3] with .07 [1.8] Dia. hole
Ground Terminal (1):	.250 [6.3] with .07 x .16 [1.8 x 3.8] slot
Mounting Holes (4):	.188 [4.75] Dia.

# Enhanced Differential Mode Performance RFI Line Filters

## Case Styles

### STYLE D



#### Typical Dimensions:

Terminals (5):

Mounting Holes (2):

8-32, Torque 18 lbf-in. [2.03 N-m] max.  $\pm 2$  [.22]

.188 [4.75] Dia.

## Mechanical Dimensions:

Model Number	A max	B max	C max	D $\begin{smallmatrix} \pm .15 \\ \pm .38 \end{smallmatrix}$	E max
AMI-M11D-1-1	3.35"/85.1mm	2.07"/52.6mm	1.16"/29.5mm	2.375"/60.33mm	2.81"/71.4mm
AMI-M11D-3-1	2.07"/52.6mm	2.07"/52.6mm	1.16"/29.5mm	2.375"/60.33mm	2.81"/71.4mm
AMI-M11D-1-3/6	3.85"/97.8mm	2.07"/52.6mm	1.16"/29.5mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M11D-3-3/6	2.56"/65.0mm	2.07"/52.6mm	1.16"/29.5mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M11D-1-10	3.85"/97.8mm	2.07"/52.6mm	1.32"/33.5mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M11D-3-10	2.57"/65.3mm	2.07"/52.6mm	1.32"/33.5mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M11D-1-20	3.85"/97.8mm	2.58"/65.5mm	1.78"/45.2mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M11D-6-20	3.46"/87.8mm	2.58"/65.5mm	1.78"/45.2mm	2.938"/74.63mm	3.35"/85.1mm

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