

High Performance Power Inlet Filter

AMI-M12AK/AL Series

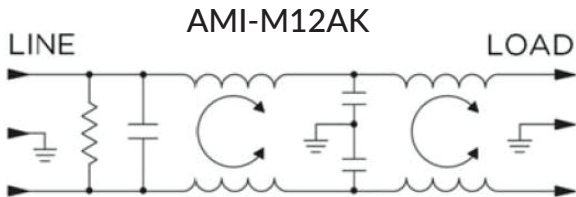


AMI Designation	Input/output Style		Current Rating	Inductance mH	Capacitance		Resistor KΩ	Leakage Current @ 120 VAC 60Hz/250 VAC 50 Hz	TIL Insertion Loss	Case Style
					Cx nF	Cy pF				
Available Part Numbers	6.3mm Spade Terminals	Wire Leads								
AMI-M12AK-1-1-B (3.72*100*3270*1500)	1	-	1	3.72	100	3270	1500	0.25mA/0.43mA	001	A
AMI-M12AK-1-3-B (1.99*100*3270*1500)	1	-	3	1.99	100	3270	1500	0.25mA/0.43mA	002	A
AMI-M12AK-1-6-B (0.93*100*3270*1500)	1	-	6	0.93	100	3270	1500	0.25mA/0.43mA	003	A
AMI-M12AK-1-10-B (0.36*100*3270*1500)	1	-	10	0.36	100	3270	1500	0.25mA/0.43mA	004	A
AMI-M12AK-1-15-B (0.2*100*3270*1500)	1	-	15	0.20	100	3270	1500	0.25mA/0.43mA	005	A
AMI-M12AL-1-20-B (0.083*100*2833*1500)	1	-	20	0.083	100	2833	1500	0.22mA/0.40mA	006	B
AMI-M12AK-8-1-B (3.72*100*3270*1500)	-	8	1	3.72	100	3270	1500	0.25mA/0.43mA	001	C
AMI-M12AK-8-3-B (0.083*100*3270*1500)	-	8	3	1.99	100	3270	1500	0.25mA/0.43mA	002	C
AMI-M12AK-8-6-B (0.93*100*3270*1500)	-	8	6	0.93	100	3270	1500	0.25mA/0.43mA	003	C
AMI-M12AK-8-10-B (0.36*100*3270*1500)	-	8	10	0.36	100	3270	1500	0.25mA/0.43mA	004	C
AMI-M12AK-8-15-B (0.2*100*3270*1500)	-	8	15	0.20	100	3270	1500	0.25mA/0.43mA	005	C
AMI-M12AL-8-20-B (0.083*100*2833*1500)	-	8	20	0.083	100	2833	1500	0.22mA/0.40mA	006	D

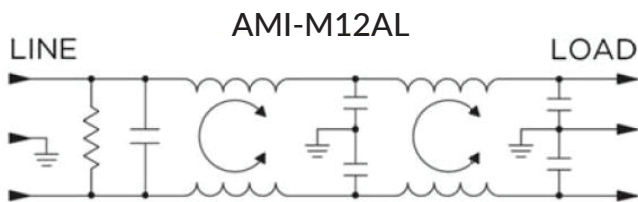
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Electrical Schematic

AMI-M12AK-1/8-1/3/6/10/15-B



AMI-M12AK-1/8-20-B



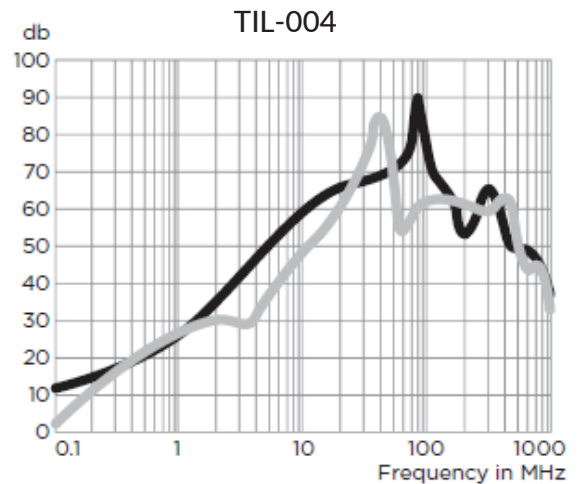
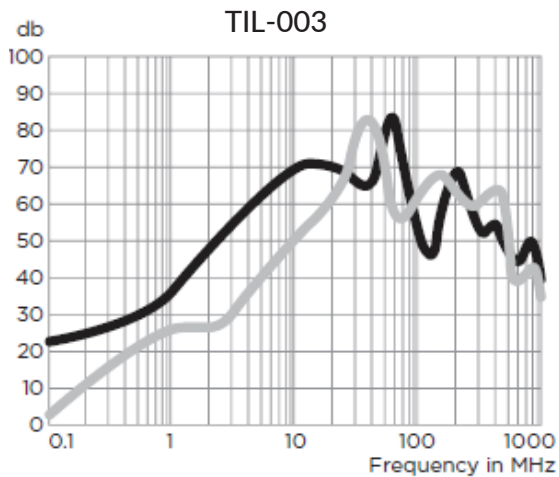
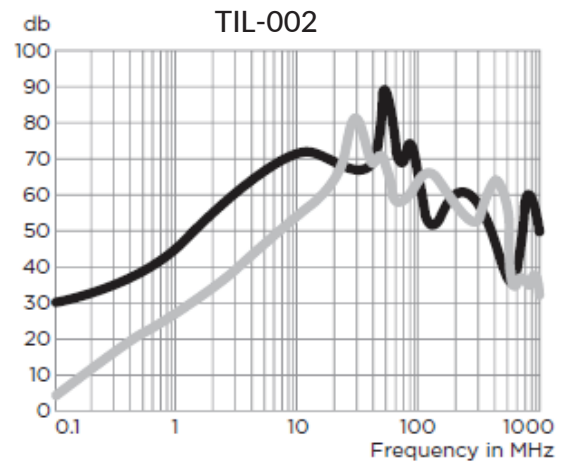
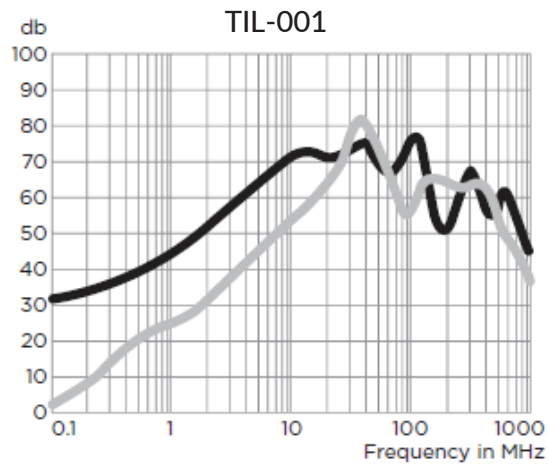
Specifications:

- Rated Voltage (max): 250 VAC
- Operating Frequency: 50/60 Hz
- Operating Current: 1 to 20A
- 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 $+40^{\circ}\text{C}$. In an ambient temperature (T_a) higher than $+40^{\circ}\text{C}$ the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{[(85 - T_a)/45]}$

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Performance Data Typical Insertion Loss

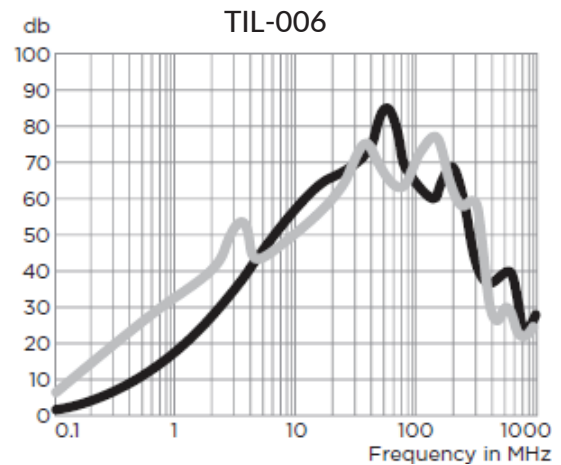
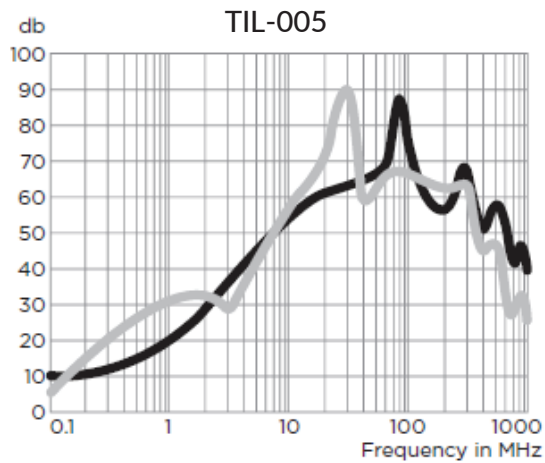
Measured in closed 50 Ohm system



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Performance Data Typical Insertion Loss

Measured in closed 50 Ohm system



Minimum Insertion Loss

Common Mode/Asymmetrical (Line to Ground)

Current Rating	Frequency-MHz							
	.15	.5	1	5	10	30	100	1000
1A	27	33	40	59	65	65	61	14
3A	22	30	34	57	63	69	61	10
6A	13	21	27	51	60	65	59	14
10A	7	14	21	43	52	61	61	14
15A	4	10	15	38	48	63	63	14
20A	-	8	15	42	50	60	58	14

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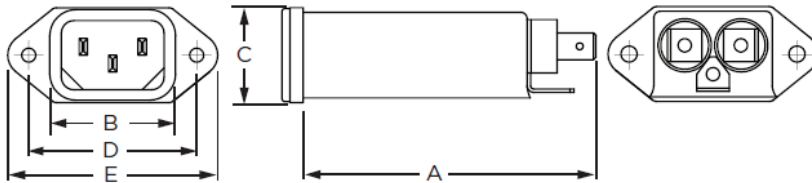
Minimum Insertion Loss

Differential Mode/Symmetrical (Line to Line)

Current Rating	Frequency-MHz							
	.15	.5	1	5	10	30	100	1000
1A	10	20	23	43	52	65	45	14
3A	10	20	24	41	51	59	52	17
6A	10	21	24	37	48	65	5535	20
10A	10	21	25	28	44	63	61	18
15A	10	20	26	25	36	56	45	23
20A	9	20	26	40	35	48	50	10

Case Styles

STYLE A



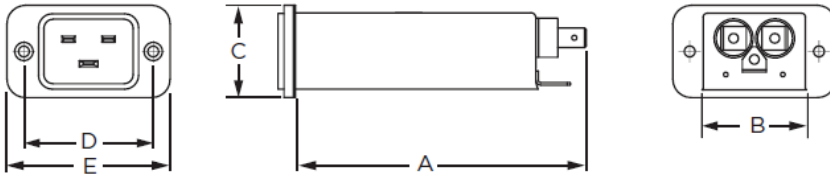
Typical Dimensions:

Mounting holes (2):	.132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
Line Inlet (1):	IEC 60320-1 C14
Load Terminals (2):	.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

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Case Styles

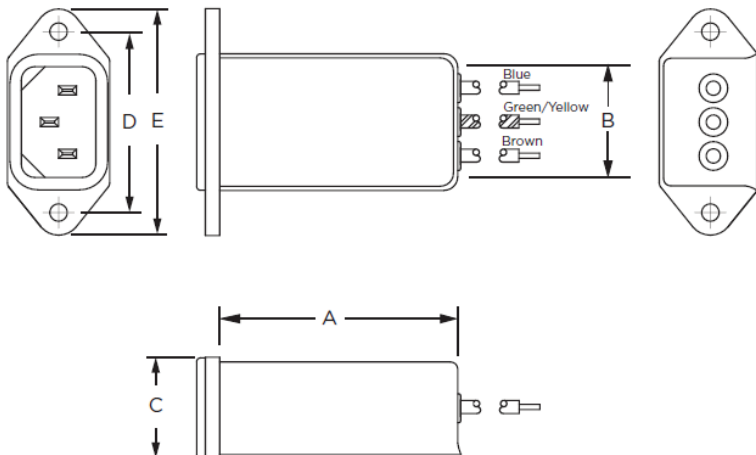
STYLE B



Typical Dimensions:

Mounting holes (2):	.126 [3.20] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
Line Inlet (1):	IEC 60320-1 C20
Load Terminals (2):	.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

STYLE C



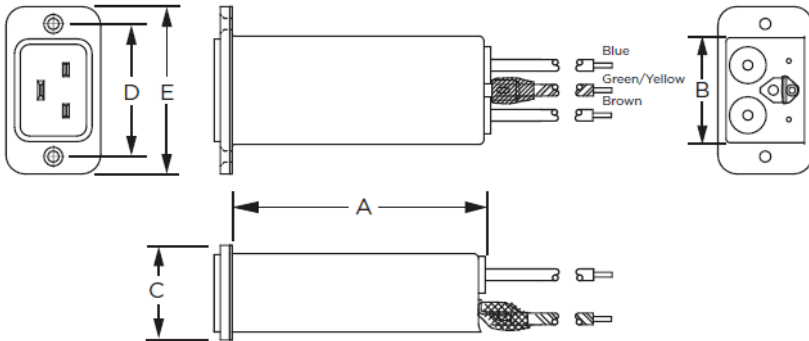
Typical Dimensions:

Mounting holes (2):	.132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
Line Inlet (1):	IEC 60320-1 C14
Wire Leads:	4.0 [101.6] Min., 18AWG, UL1015

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Case Styles

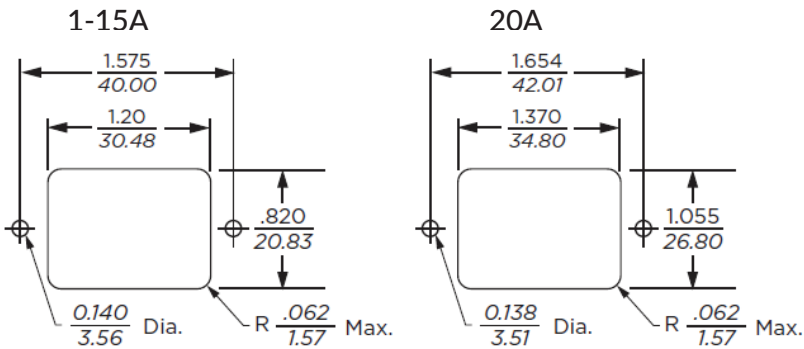
STYLE D



Typical Dimensions:

Mounting holes (2):	.126 [3.20] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
Line Inlet (1):	IEC 60320-1 C20
Wire Leads:	4.0 [101.6] Min., 14AWG, UL1015

Recommended Panel Cutouts



Front Mount Only
Tolerance ± 0.005 [13]

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Case Dimensions:

Model Number	A max	B max	C max	D $\begin{smallmatrix} \pm .015 \\ \pm .38 \end{smallmatrix}$	E max
AMI-M12AK-1-X-B	2.7"/69.6mm	1.19"/30.2mm	0.875"/22.2mm	1.575"/40.0mm	1.98"/50.3mm
AMI-M12AK-8-X-B	2.1"/53.3mm	1.19"/30.2mm	0.875"/22.2mm	1.575"/40.0mm	1.98"/50.3mm
AMI-M12AL-20-B	3.38"/96.52mm	1.35"/34.29mm	1.18"/29.99mm	1.654"/42.01mm	2.087"/53.0mm
AMI-M12AL-8-20-B	3.2"/81.28mm	1.35"/34.29mm	1.18"/29.99mm	1.654"/42.01mm	2.087"/53.0mm