

Catalog: 1654001 Issue Date: 06.2011

3-phase WYE RFI Power Line Filters

AYA Series



UL Recognized*



AYA Series

- For 3-phase, four wire, WYE applications
- Cost-effective, universal 3-phase filters
- Good attenuation over the complete frequency range of 10kHz to 30MHz
- Two different mounting styles available

Specifications

Maximum leakage current each Line to Ground:

@ 120 VAC 60 Hz: 1.62 mA @ 250 VAC 50 Hz: 2.82 mA

Hipot rating (one minute):

Line to Ground: 1500 VAC Line to Line: 1450 VDC

Rated Voltage (max):

Phase to Phase: 440 VAC
Phase to Ground: 250 VAC

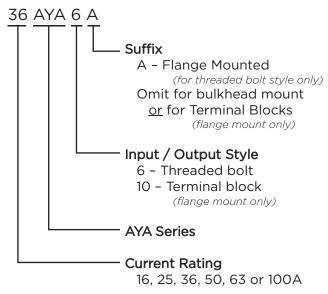
Operating Frequency: 50/60 Hz

Rated Current: 16 to 100A*

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: $I_o = I_r \sqrt{(85-T_a)/45}$

Ordering Information



Available Part Numbers

Flange Mount	Bulkhead Mount				
16AYA6A	16AYA6				
16AYA10	25AYA6				
25AYA6A	36AYA6				
36AYA6A	50AYA6				
36AYA10					
50AYA6A					
63AYA6A					
63AYA10					
100AYA6A					

*UL Approvals for all models except: 16AYA10, 36AYA10, 63AYA10, 63AYA10, 63AYA6A and 100AYA6A

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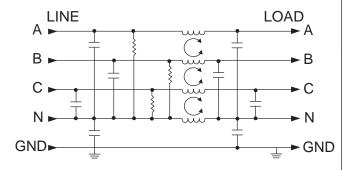
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3-phase WYE RFI Power Line Filters (continued)

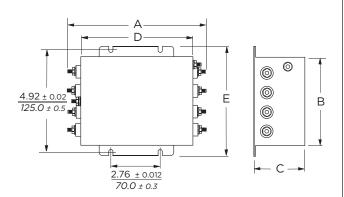
AYA Series

Electrical Schematic



Case Style

AYA6A (Flange mount with screw terminals)

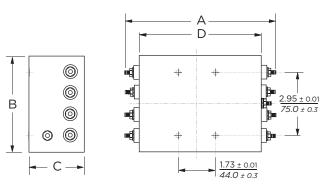


Typical Dimensions:

.425 x .254 [10.8 x 6.6] Mounting slots (4):

8-32, Torque (max.) 26 lbf-in [2.94 N-m] 10-32, Torque (max.) 27 lbf-in [3.05 N-m] 16 & 25A Terminals(8): 36A Terminals(8): 50, 63 & 100A Terminals(8): 1/4-20, Torque (max.) 56 lbf-in [6.33 N-m]

AYA6 (Bulkhead mount with screw terminals)

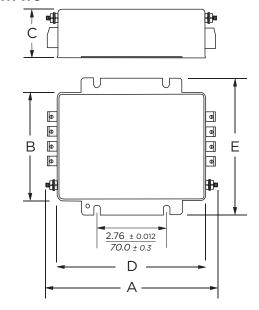


Typical Dimensions:

Threaded mounting holes(4): M5 x 8

16 & 25A Terminals(8): 8-32, Torque (max.) 26 lbf-in [2.94 N-m] 10-32, Torque (max.) 27 lbf-in [3.05 N-m] 36A Terminals(8): 50A Terminals(8): 1/4-20, Torque (max.) 56 lbf-in [6.33 N-m]

16AYA10



Typical Dimensions:

Mounting slots (4): Terminal blocks(8): .425 x .254 [10.8 x 6.6]

4 mm² Torque (max.) 7.08 lbf-in [0.8 N-m] M5, Torque (max.) 26.58 lbf-in [3.0 N-m] Ground terminal(1):



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3-phase WYE RFI Power Line Filters (continued)

AYA Series

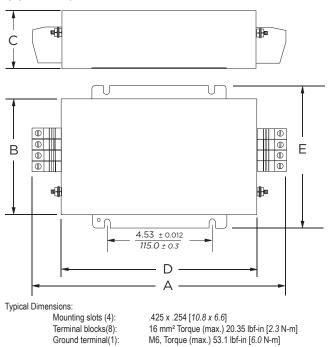
36AYA10 (I) 1 1 1 B 💵 **(III)** 1 HBm -2.76 ± 0.012 70.0 ± 0.3 D Typical Dimensions: .425 x .254 [10.8 x 6.6] 10 mm² Torque (max.) 15.93 lbf-in [1.8 N-m] M5, Torque (max.) 26.58 lbf-in [3.0 N-m] Mounting slots (4): Terminal blocks(8): Ground terminal(1):

Case Dimensions

Part No.	Α	В	С	D	E*	
Part No.	(max.)	(max.)	(max.)	(max.)	(max.)	
16AYA6 /A	7.91	4.37	1.97	5.94	5.51	
25AYA6 /A	201.0	111.0	50.0	151.0	140.0	
36AYA6 /A	7.91	4.37	2.56	5.94	5.51	
50AYA6 /A	201.0	111.0	65.0	151.0	140.0	
63AYA6 /A	7.91	4.37	2.56	5.94	5.51	
100AYA6A	201.0	111.0	65.0	151.0	140.0	
10 4)/4 10	6.97	4.37	1.97	5.94	5.51	
16AYA10	177.0	111.0	50.0	151.0	140.0	
70 41/410	7.88	4.37	2.56	5.94	5.51	
36AYA10	200.0	111.0	65.0	151.0	140.0	
67 4) (4 10	10.98	5.08	2.95	8.43	6.26	
63AYA10	279.0	129.0	75.0	214.0	159.0	

*Does not apply for bulkhead models

63AYA10





3-phase WYE RFI Power Line Filters (continued)

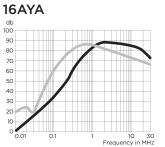
AYA Series

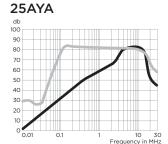
Performance Data

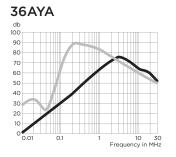
Typical Insertion Loss

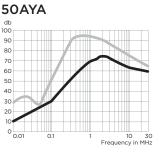
Measured in closed 50 Ohm system

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



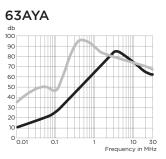


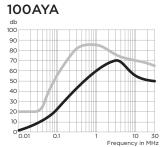




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Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current	Frequency –MHz							
Rating	.01	.05	.1	.5	1	5	10	30
16A	2	11	19	52	53	70	61	30
25A	2	12	19	46	49	64	54	27
36A	1	10	18	49	54	63	57	32
50A	1	8	14	43	47	63	53	29
63A	2	10	22	50	60	75	70	55
100A	1	15	22	55	60	65	55	50

Differential Mode / Symmetrical (Line to Line)

Current	Frequency –MHz							
Rating	.01	.05	.1	.5	1	5	10	30
16A	14	31	30	82	87	76	77	47
25A	20	36	38	85	81	68	69	33
36A	20	39	36	86	78	65	62	35
50A	20	30	38	85	82	67	66	38
63A	30	40	45	90	85	70	70	60
100A	20	35	45	80	80	65	60	55

Mouser Electronics

Authorized Distributor

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