

50AYA6A Product Details



50AYA6A
(6609068-8)
TE Internal Number: 6609068-8

 Active

EMI/RFI Filters and Accessories

 Always EU RoHS/ELV Compliant (Statement of Compliance)

Product Highlights:

- Filter - EMI/RFI
- Filter Type = Power Line
- AYA (16-50 Amp) Series
- 3 Phase WYE Application
- Mount Style = Flanged

Documentation & Additional Information

Product Drawings:

- None Available

Additional Information:

- [Product Line Information](#)

Catalog Pages/Data Sheets:

- [1-1654250-1_CORCOM_EMI_RFI_QRG](#) (PDF, English)
- [1654001_Corcom_Product_Guide_AYA_Series](#) (PDF, English)
- [1773449-2_CORCOM_HIGH_CURRENT](#) (PDF, English)

Additional Product Images:

- [Insertion Loss/Specifications](#)

Product Specifications:

- None Available

Related Products:

- [Tooling](#)

Application Specifications:

- None Available

Instruction Sheets:

- None Available

CAD Files:

- None Available

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- Product Type = Filter - EMI/RFI
- Filter Type = Power Line
- Series = AYA (16-50 Amp)
- Filtered = Yes

Industry Standards:

- [RoHS/ELV Compliance](#) = RoHS compliant, ELV compliant
- [Lead Free Solder Processes](#) = Not relevant for lead free process
- [RoHS/ELV Compliance History](#) = Always was RoHS compliant
- [Approved Standards](#) = UL Recognized

Electrical Characteristics:

- [Current Rating \(A\)](#) = 50
- [Voltage \$\leq\$ \(VAC\)](#) = 480
- Leakage Current (Line-to-Ground) Max. @ 250 VAC 50 Hz (mA) = 2.82
- Leakage Current (Line-to-Ground) Max. @ 120 VAC 60 Hz (mA) = 1.62

Conditions for Usage:

- Facility Installation = No
- Need Min Size With IEC Connector = No
- Need Optional Switch, Fusing, Or Voltage Selector = No

Termination Features:

- [Terminal Input - Output Combination](#) = Stud - Stud

Operation/Application:

- [Application](#) = 3 Phase WYE

Body Features:

- Mount Style = Flanged

Other:

- Brand = Corcom

3-phase WYE RFI Power Line Filters

AYA Series



UL Recognized*



25AYA6A

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*

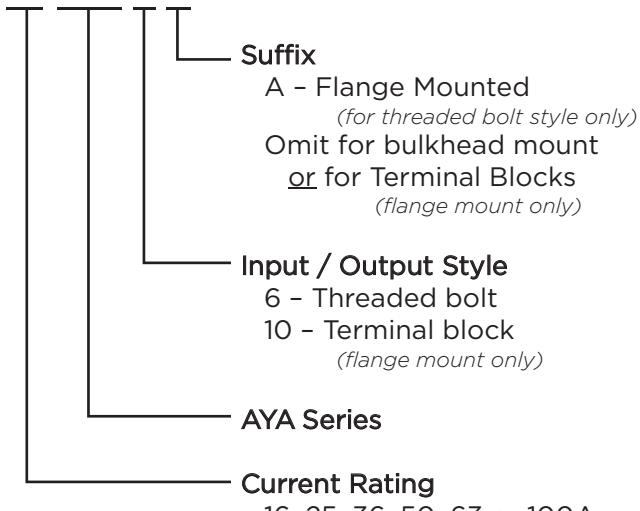
Operating Ambient Temperature Range

(at rated current I_r):

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

36 AYA 6 A



Available Part Numbers

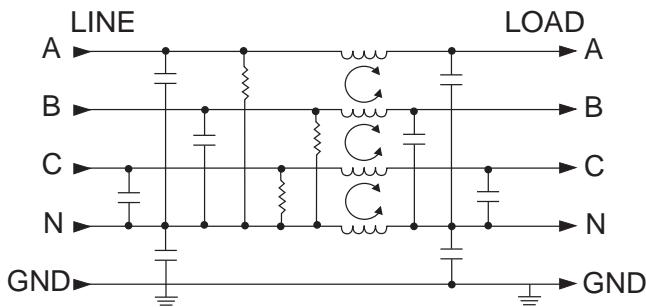
Flange Mount	Bulkhead Mount
16AYA6A	16AYA6
16AYA10	25AYA6
25AYA6A	36AYA6
36AYA6A	50AYA6
36AYA10	
50AYA6A	
63AYA6A	
63AYA10	
100AYA6A	

*UL Approvals for all models except: 16AYA10, 36AYA10, 63AYA10, 63AYA6, 63AYA6A and 100AYA6A

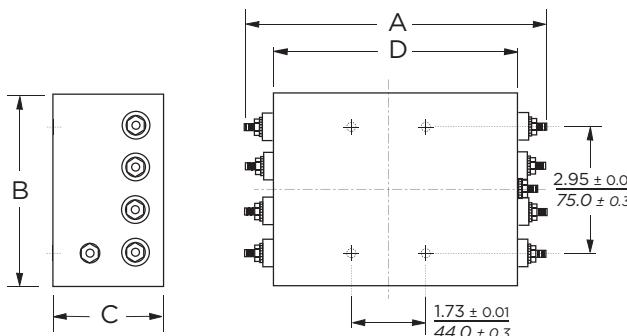
3-phase WYE RFI Power Line Filters (continued)

AYA Series

Electrical Schematic



AYA6 (Bulkhead mount with screw terminals)

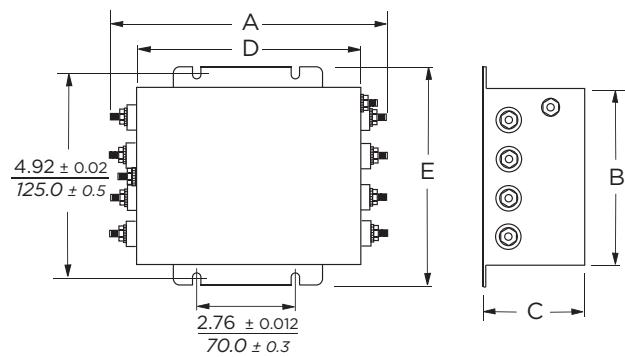


Typical Dimensions:

Threaded mounting holes(4): M5 x 8
16 & 25A Terminals(8): 8-32, Torque (max.) 26 lbf-in [2.94 N-m]
36A Terminals(8): 10-32, Torque (max.) 27 lbf-in [3.05 N-m]
50A Terminals(8): 1/4-20, Torque (max.) 56 lbf-in [6.33 N-m]

Case Style

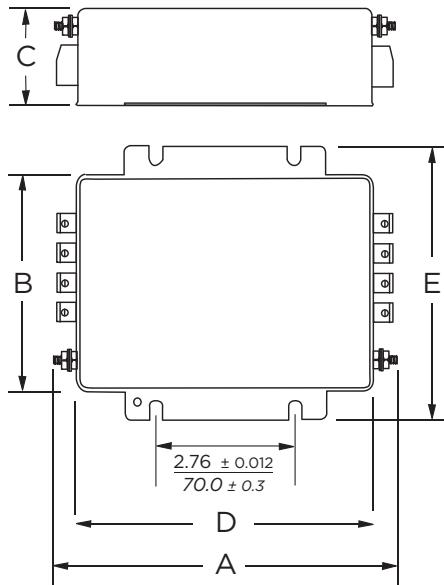
AYA6A (Flange mount with screw terminals)



Typical Dimensions:

Mounting slots (4):	.425 x .254 [10.8 x 6.6]
16 & 25A Terminals(8):	8-32, Torque (max.) 26 lbf-in [2.94 N-m]
36A Terminals(8):	10-32, Torque (max.) 27 lbf-in [3.05 N-m]
50, 63 & 100A Terminals(8):	1/4-20, Torque (max.) 56 lbf-in [6.33 N-m]

16AYA10



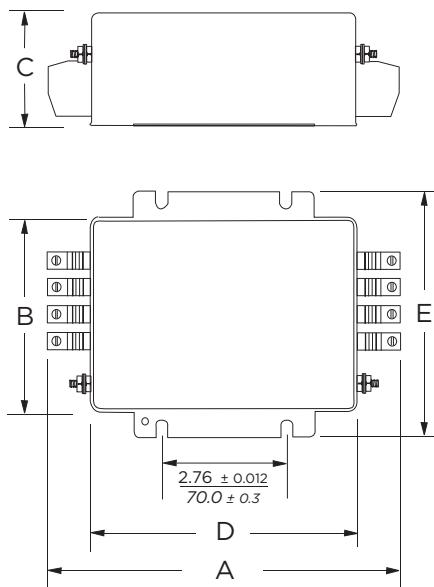
Typical Dimensions:

Mounting slots (4):	.425 x .254 [10.8 x 6.6]
Terminal blocks(8):	4 mm ² Torque (max.) 7.08 lbf-in [0.8 N-m]
Ground terminal(1):	M5, Torque (max.) 26.58 lbf-in [3.0 N-m]

3-phase WYE RFI Power Line Filters (continued)

AYA Series

36AYA10



Typical Dimensions:

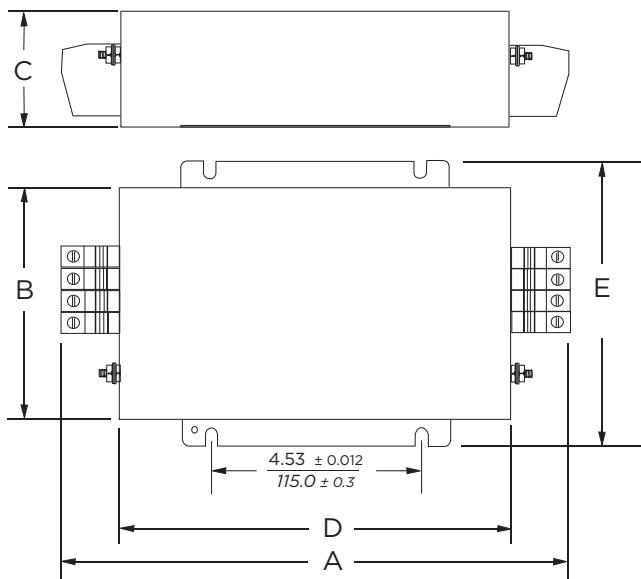
Mounting slots (4): .425 x .254 [10.8 x 6.6]
 Terminal blocks(8): 10 mm² Torque (max.) 15.93 lbf-in [1.8 N-m]
 Ground terminal(1): M5, Torque (max.) 26.58 lbf-in [3.0 N-m]

Case Dimensions

Part No.	A (max.)	B (max.)	C (max.)	D (max.)	E* (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
16AYA10	6.97	4.37	1.97	5.94	5.51
	177.0	111.0	50.0	151.0	140.0
36AYA10	7.88	4.37	2.56	5.94	5.51
	200.0	111.0	65.0	151.0	140.0
63AYA10	10.98	5.08	2.95	8.43	6.26
	279.0	129.0	75.0	214.0	159.0

*Does not apply for bulkhead models

63AYA10



Typical Dimensions:

Mounting slots (4): .425 x .254 [10.8 x 6.6]
 Terminal blocks(8): 16 mm² Torque (max.) 20.35 lbf-in [2.3 N-m]
 Ground terminal(1): M6, Torque (max.) 53.1 lbf-in [6.0 N-m]

3-phase WYE RFI Power Line Filters (continued)

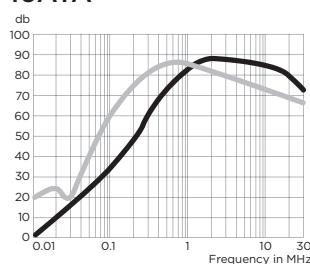
AYA Series

Performance Data

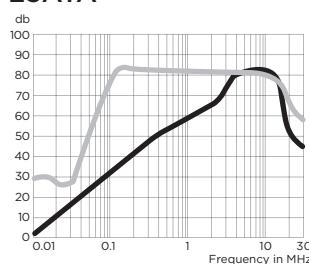
Typical Insertion Loss

Measured in closed 50 Ohm system

16AYA

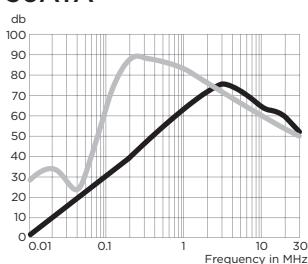


25AYA

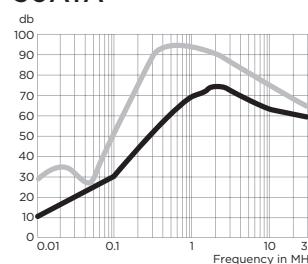


— Common Mode / Asymmetrical (L-G)
 — Differential Mode / Symmetrical (L-L)

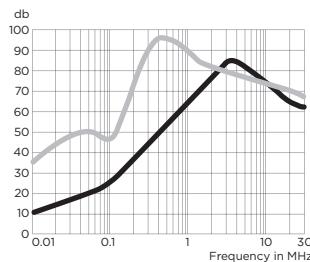
36AYA



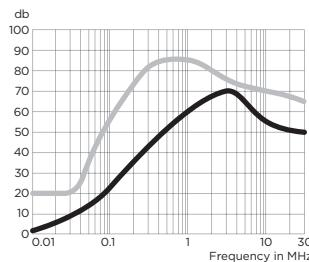
50AYA



63AYA



100AYA



Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency -MHz								
	.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 Rating	Frequency -MHz								
	.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	