

## 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:

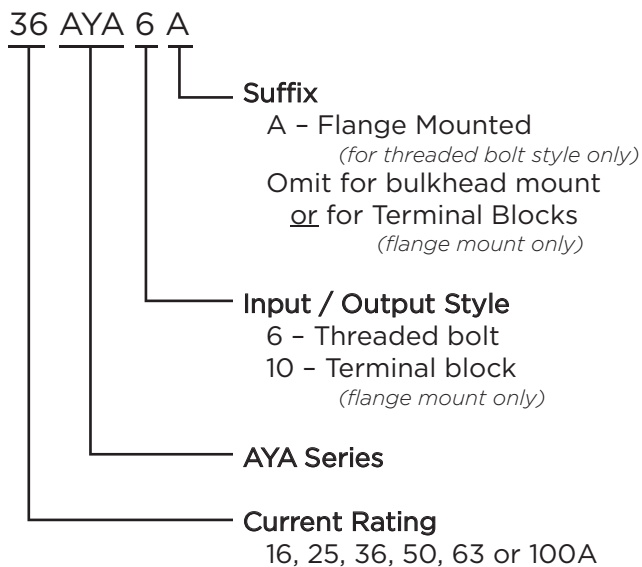
16 to 100A\*

### Operating Ambient Temperature Range

(at rated current  $I_r$ ): -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

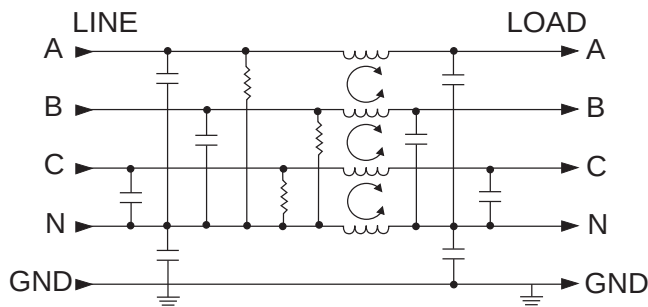
| Flange Mount | Bulkhead Mount |
|--------------|----------------|
| 16AYA6A      | 16AYA6         |
| 16AYA10      | 25AYA6         |
| 25AYA6A      | 36AYA6         |
| 36AYA6A      | 50AYA6         |
| 36AYA10      |                |
| 50AYA6A      |                |
| 63AYA6A      |            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

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

### 3-phase WYE RFI Power Line Filters (continued)

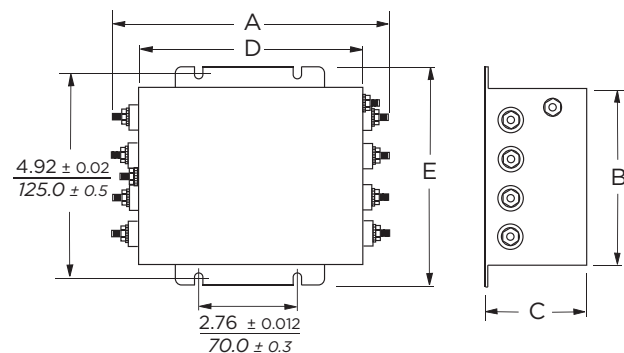
## AYA Series

### Electrical Schematic



### Case Style

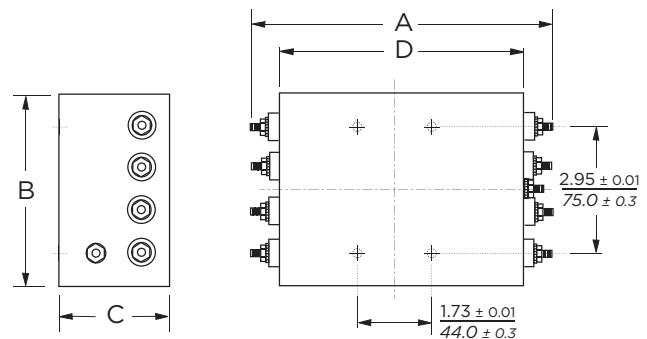
#### AYA6A (Flange mount with screw terminals)



#### 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] |

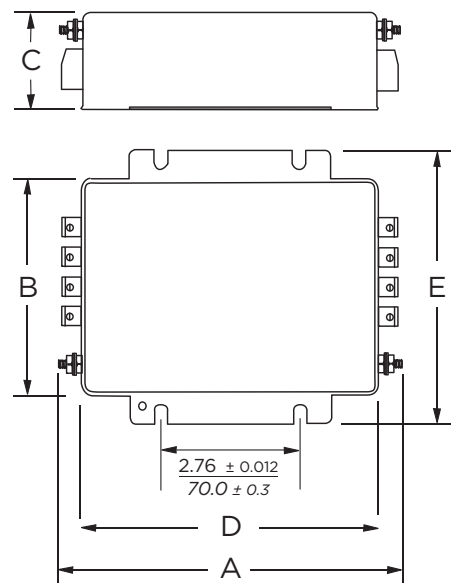
#### AYA6 (Bulkhead mount with screw terminals)



#### 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] |

#### 16AYA10



#### Typical Dimensions:

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

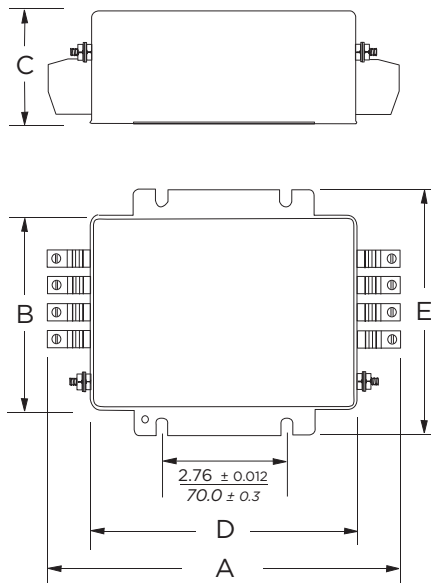
2

Three Phase Filters

### 3-phase WYE RFI Power Line Filters *(continued)*

## AYA Series

### 36AYA10



Typical Dimensions:

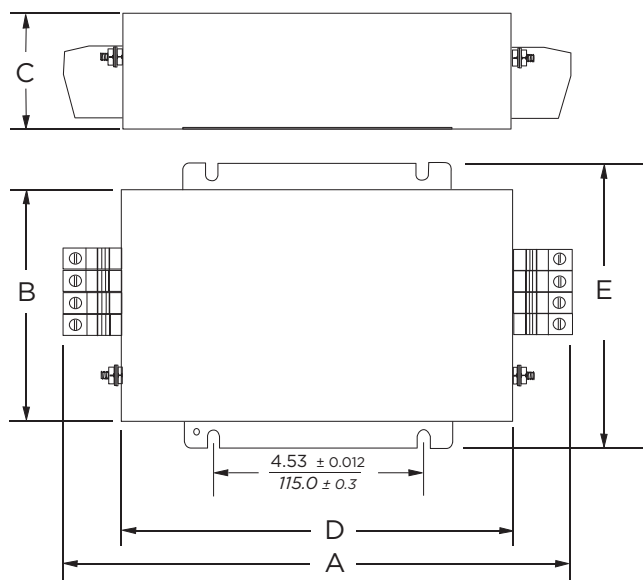
|                     |                                                         |
|---------------------|---------------------------------------------------------|
| Mounting slots (4): | .425 x .254 [10.8 x 6.6]                                |
| Terminal blocks(8): | 10 mm <sup>2</sup> Torque (max.) 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<br>(max.)  | B<br>(max.) | C<br>(max.) | D<br>(max.) | E*<br>(max.) |
|-----------|--------------|-------------|-------------|-------------|--------------|
| 16AYA6 /A | <b>7.91</b>  | <b>4.37</b> | <b>1.97</b> | <b>5.94</b> | <b>5.51</b>  |
| 25AYA6 /A | 201.0        | 111.0       | 50.0        | 151.0       | 140.0        |
| 36AYA6 /A | <b>7.91</b>  | <b>4.37</b> | <b>2.56</b> | <b>5.94</b> | <b>5.51</b>  |
| 50AYA6 /A | 201.0        | 111.0       | 65.0        | 151.0       | 140.0        |
| 63AYA6 /A | <b>7.91</b>  | <b>4.37</b> | <b>2.56</b> | <b>5.94</b> | <b>5.51</b>  |
| 100AYA6A  | 201.0        | 111.0       | 65.0        | 151.0       | 140.0        |
| 16AYA10   | <b>6.97</b>  | <b>4.37</b> | <b>1.97</b> | <b>5.94</b> | <b>5.51</b>  |
|           | 177.0        | 111.0       | 50.0        | 151.0       | 140.0        |
| 36AYA10   | <b>7.88</b>  | <b>4.37</b> | <b>2.56</b> | <b>5.94</b> | <b>5.51</b>  |
|           | 200.0        | 111.0       | 65.0        | 151.0       | 140.0        |
| 63AYA10   | <b>10.98</b> | <b>5.08</b> | <b>2.95</b> | <b>8.43</b> | <b>6.26</b>  |
|           | 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 mm <sup>2</sup> 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

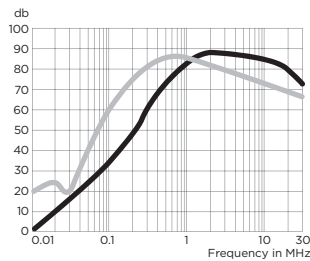
### Performance Data

#### Typical Insertion Loss

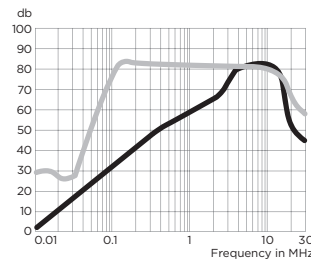
Measured in closed 50 Ohm system

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

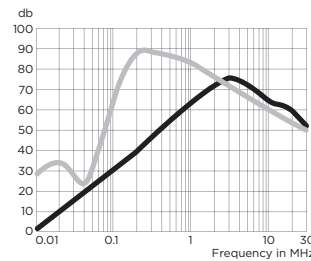
##### 16AYA



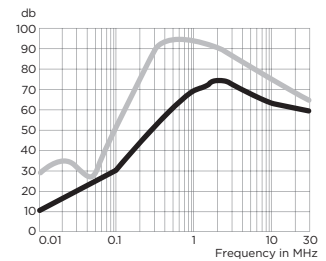
##### 25AYA



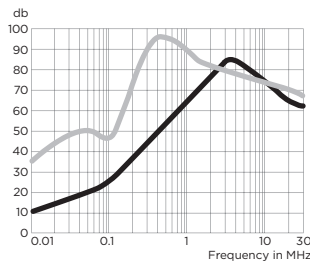
##### 36AYA



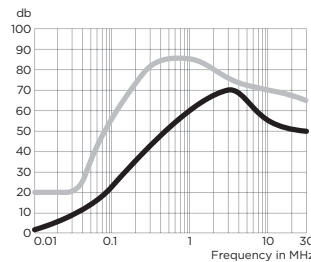
##### 50AYA



##### 63AYA



##### 100AYA



#### Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

| Current<br>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<br>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 |

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9