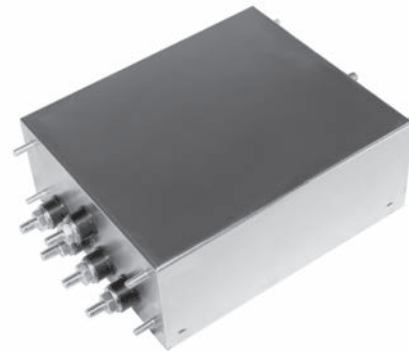


## High Performance 3-phase RFI Filters for WYE Applications

# A Series



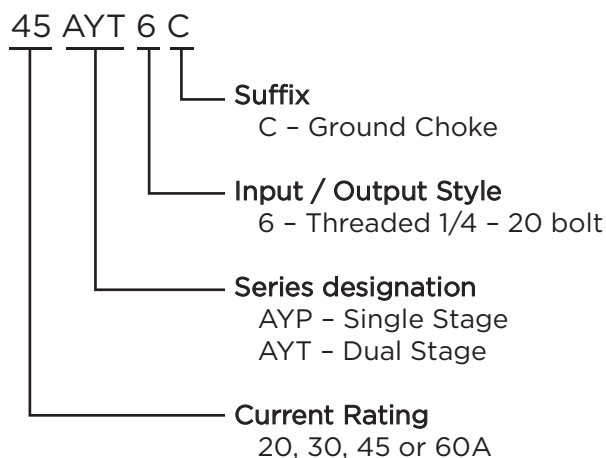
UL Recognized  
CSA Certified  
VDE Approved



## A Series

- For 3-phase, four wire, WYE Applications
- Filters each of the three lines plus the neutral and ground line
- Both common mode and differential mode suppression from 50kHz to 30MHz
- Effective for both balanced and unbalanced loads
- Ground choke included
- Optional end bell kits available to shield input and output terminals
- AYP single stage for lower noise environments
- AYT dual stage provides highest performance

## Ordering Information



## Specifications

### Maximum leakage current, each Line to Ground:

|                  |        |
|------------------|--------|
| @ 120 VAC 60 Hz: | 1.4 mA |
| @ 250 VAC 50 Hz: | 3.4 mA |

### Hipot rating (one minute):

|                    |          |
|--------------------|----------|
| Line to Ground:    | 1500 VAC |
| Neutral to Ground: | 1500 VAC |
| Line to Neutral:   | 1450 VDC |

### Rated Voltage (max):

|                            |         |
|----------------------------|---------|
| Phase to Phase:            | 440 VAC |
| Phase to Neutral / Ground: | 250 VAC |

### Operating Frequency:

50/60 Hz

### Rated Current:

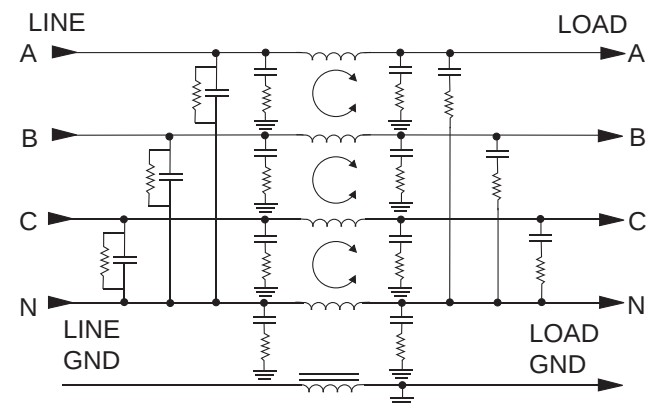
20 to 60A

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

## Electrical Schematics

### AYP6C Models

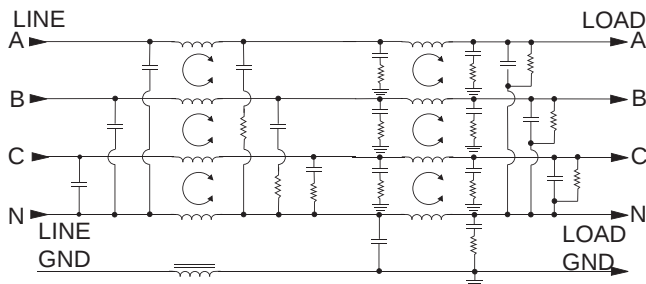


## High Performance 3-phase RFI Filters for WYE Applications *(continued)*

# A Series

## Electrical Schematics *(continued)*

### AYT6C Models



### Available Part Numbers

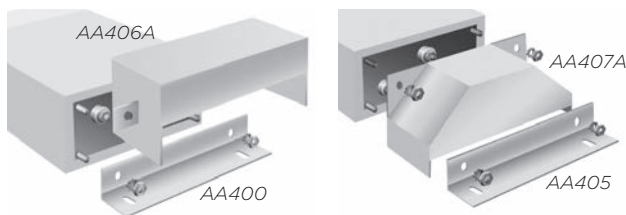
|         |         |
|---------|---------|
| 20AYP6C | 20AYT6C |
| 30AYP6C | 30AYT6C |
| 45AYP6C | 45AYT6C |
| 60AYP6C | 60AYT6C |

## Accessories

Mounting bracket kit with captive nuts:

**AA400:** 20A & 30A versions

**AA405:** 45A & 60A versions



Protective cover for use with mounting bracket:  
*(For Europe only. Limited availability in other regions)*

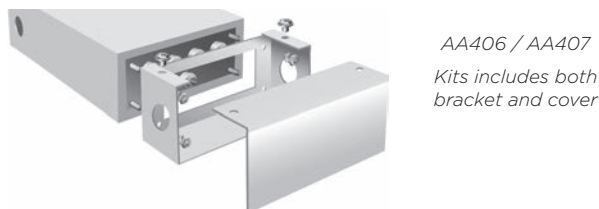
**AA406A:** 20A & 30A versions

**AA407A:** 45A & 60A versions

End bell kit (bracket and cover) with captive nuts:

**AA406:** 20A & 30A versions

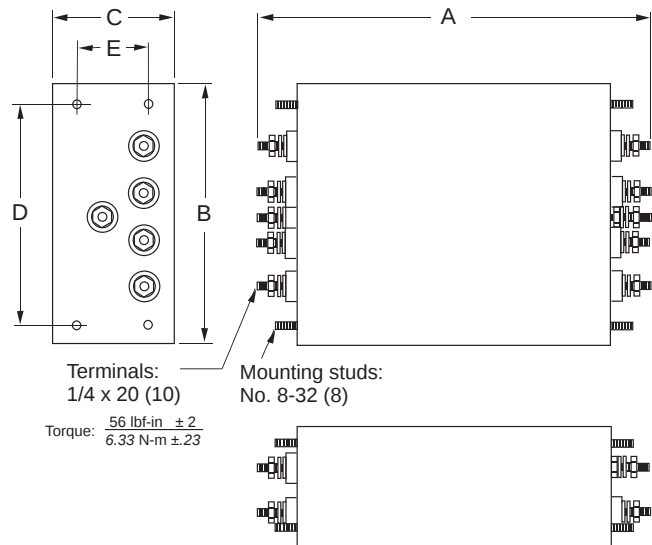
**AA407:** 45A & 60A versions



Additional captive nuts:

**AA401:** 10 nuts

## Case Style



## Case Dimensions

| Part No. | A*<br>(max.)   | B<br>(max.)   | C<br>(max.)   | D<br>$\pm 0.030$<br>$\pm 0.76$ | E<br>$\pm 0.015$<br>$\pm 0.38$ |
|----------|----------------|---------------|---------------|--------------------------------|--------------------------------|
| 20AYP6C  | 8.82<br>224.0  | 5.57<br>141.5 | 2.56<br>65.0  | 4.616<br>117.2                 | 1.50<br>38.1                   |
| 30AYP6C  | 8.82<br>224.0  | 5.57<br>141.5 | 2.56<br>65.0  | 4.616<br>117.2                 | 1.50<br>38.1                   |
| 45AYP6C  | 9.43<br>239.5  | 6.92<br>175.8 | 4.82<br>122.4 | 5.95<br>151.1                  | 3.75<br>95.3                   |
| 60AYP6C  | 9.43<br>239.5  | 6.92<br>175.8 | 4.82<br>122.4 | 5.95<br>151.1                  | 3.75<br>95.3                   |
| 20AYT6C  | 13.82<br>351.0 | 5.57<br>141.5 | 2.56<br>65.0  | 4.616<br>117.2                 | 1.50<br>38.1                   |
| 30AYT6C  | 13.82<br>351.0 | 5.57<br>141.5 | 2.56<br>65.0  | 4.616<br>117.2                 | 1.50<br>38.1                   |
| 45AYT6C  | 13.83<br>351.3 | 6.92<br>175.8 | 4.82<br>122.4 | 5.95<br>151.1                  | 3.75<br>95.3                   |
| 60AYT6C  | 13.83<br>351.3 | 6.92<br>175.8 | 4.82<br>122.4 | 5.95<br>151.1                  | 3.75<br>95.3                   |

\*For end bell covering terminals and connections, add:  
20 & 30A: 5.57 [ 141.48 ]  
45 & 60A: 6.45 [ 163.83 ]

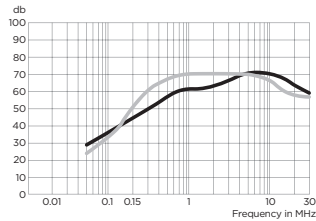
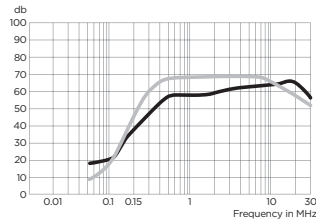
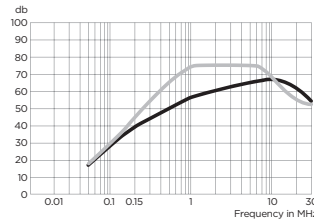
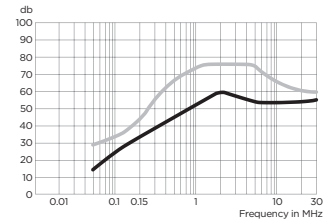
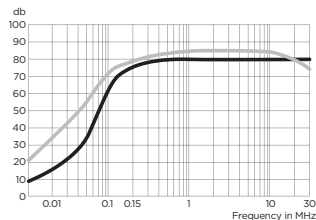
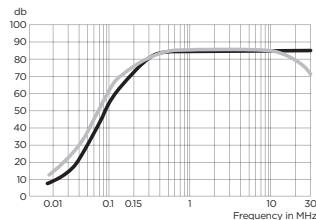
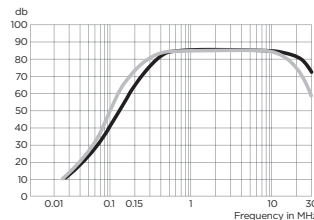
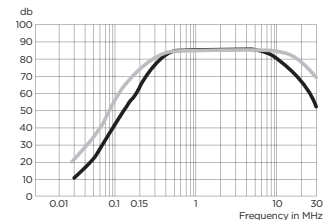
## High Performance 3-phase RFI Filters for WYE Applications *(continued)*

# A Series

## Performance Data

### Typical Insertion Loss

Measured in closed 50 Ohm system

**20AYP6C**

**30AYP6C**

**45AYP6C**

**60AYP6C**

**20AYT6C**

**30AYT6C**

**45AYT6C**

**60AYT6C**


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

## Minimum Insertion Loss

Measured in closed 50 Ohm system

### AYP6C

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency –MHz |    |     |    |    |    |    |    |
|----------------|----------------|----|-----|----|----|----|----|----|
|                | .05            | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 20A            | 22             | 32 | 39  | 55 | 56 | 65 | 65 | 54 |
| 30A            | 15             | 24 | 30  | 55 | 55 | 61 | 63 | 50 |
| 45A            | 8              | 19 | 25  | 49 | 49 | 56 | 58 | 45 |
| 60A            | 5              | 16 | 22  | 50 | 50 | 54 | 54 | 47 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency –MHz |    |     |    |    |    |    |    |
|----------------|----------------|----|-----|----|----|----|----|----|
|                | .05            | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 20A            | 20             | 38 | 50  | 65 | 65 | 65 | 60 | 52 |
| 30A            | 18             | 28 | 43  | 65 | 65 | 65 | 59 | 48 |
| 45A            | 8              | 20 | 27  | 60 | 65 | 65 | 56 | 43 |
| 60A            | 20             | 24 | 27  | 60 | 65 | 65 | 56 | 50 |

### AYT6C

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency –MHz |    |     |    |    |    |    |    |
|----------------|----------------|----|-----|----|----|----|----|----|
|                | .05            | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 20A            | 45             | 63 | 70  | 75 | 75 | 75 | 75 | 65 |
| 30A            | 29             | 53 | 61  | 75 | 75 | 75 | 75 | 60 |
| 45A            | 15             | 36 | 43  | 75 | 75 | 75 | 75 | 50 |
| 60A            | 12             | 37 | 46  | 75 | 75 | 75 | 70 | 45 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency –MHz |    |     |    |    |    |    |    |
|----------------|----------------|----|-----|----|----|----|----|----|
|                | .05            | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 20A            | 27             | 56 | 65  | 70 | 70 | 70 | 70 | 70 |
| 30A            | 17             | 46 | 55  | 75 | 75 | 75 | 75 | 70 |
| 45A            | 14             | 41 | 50  | 75 | 75 | 75 | 75 | 65 |
| 60A            | 26             | 50 | 58  | 75 | 75 | 75 | 75 | 60 |