

3-phase WYE RFI Power Line Filters for High Noise Applications

AYC Series



UL Recognized*

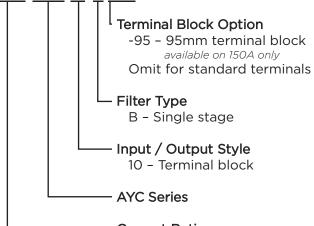


AYC Series

- For 3-phase, four wire, WYE applications
- Very high attenuation
- Low leakage current
- Ideal for EMC troubleshooting and refurbishing in the field
- Touch safe terminals provide easy connections and prevent inadvertent contact for safety in the most demanding applications

Ordering Information

150 AYC 10 B -95



Current Rating 16, 25, 36, 63, 80, 110, 150, 180 or 200A

Available Part Numbers

| 16AYC10B | 110AYC10B |
|----------|--------------|
| 25AYC10B | 150AYC10B |
| 36AYC10B | 150AYC10B-95 |
| 63AYC10B | 180AYC10B |
| 80AYC10B | 200AYC10B |
| | |

Specifications

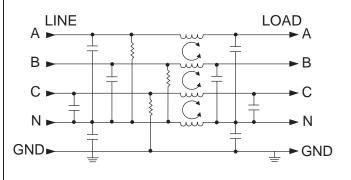
Maximum leakage current each Line to Ground:

| | <u>120 VAC 60Hz</u> | <u>277 VAC 50Hz</u> |
|-----------------------------|---------------------|---------------------|
| 16A | 62 mA | 106 mA |
| 25 & 36A | 68 mA | 118 mA |
| 63A | 74 mA | 128 mA |
| 80, 100 & 150A | 74 mA | 129 mA |
| 180, 200A | 111 mA | 192 mA |
| Hipot rating (one minut | te): | |
| Line to Ground: | | 1850 VDC |
| Line to Line: | | 1850 VDC |
| Line to Neutral: | | 1450 VDC |
| Rated Voltage (max): | | |
| Phase to Phase: | | 480 VAC |
| Phase to Ground: | | 277 VAC |
| Operating Frequency: | | 50/60 Hz |
| Rated Current: | | 16 to 200A |
| Operating Ambient Ter | nnoveture Dene | |

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 (I₀) is calculated as follows: $I_0 = I_r \sqrt{(85-Ta)/45}$

Electrical Schematic



*All except 200AYC10B

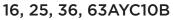
Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

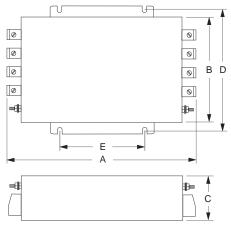


3-phase WYE RFI Filters for High Noise Applications (continued)

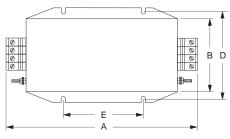
AYC Series

Case Styles



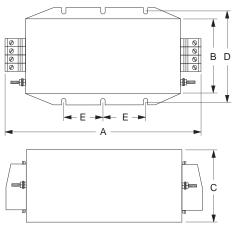


80, 110, 150AYC10B / -95





180, 200AYC10B



Case Dimensions

| (max.) 4.92 125.0 5.71 145.0 5.71 | ±.078 ±.2 2.76 70.0 4.53 115.0 |
|--|---|
| 125.0 5.71 145.0 | 70.0 4.53 115.0 |
| 5.71 145.0 | 4.53 115.0 |
| 145.0 | 115.0 |
| | |
| 5 71 | 4.50 |
| J./ I | 4.53 |
| 145.0 | 115.0 |
| 5.71 | 4.53 |
| 145.0 | 115.0 |
| 6.10 | 4.53 |
| 155.0 | 115.0 |
| 6.10 | 4.53 |
| 155.0 | 115.0 |
| | 3.25 |
| 6.10 | |
| | 6.10 155.0 6.10 |

Terminals

| Part No. | Terminal | Size | Torque max. Ibf-in [N-m] | |
|------------------------|-------------|-------------------------------------|-----------------------------|--|
| 10 41/0100 | Ground | M5 | 26.58 [<i>3.0</i>] | |
| 16AYC10B | Line / Load | 4mm ² terminal block | 7.08 [<i>0.8</i>] | |
| 05 AV(010 D | Ground | M5 | 26.58 [<i>3.0</i>] | |
| 25AYC10B | Line / Load | 6mm ² terminal block | 15.93 [<i>1.8</i>] | |
| 76 41/0100 | Ground | M5 | 26.58 [<i>3.0</i>] | |
| 36AYC10B | Line / Load | 10mm ² terminal block | 15.93 [<i>1.8</i>] | |
| 67 AV(C10 D | Ground | M6 | 53.1 [6.0] | |
| 63AYC10B | Line / Load | 16mm ² terminal block | 20.35 [<i>2.3</i>] | |
| 80, 110, | Ground | M10 | 177.0 [<i>20.0</i>] | |
| 150AYC10B | Line / Load | 50mm ² terminal block | 70.80 [<i>8.0</i>] | |
| 150AYC10B-95 | Ground | M10 | 177.0 [20.0] | |
| 180AYC10B 200AYC10B | Line / Load | 95mm ² terminal block | 177.0 [<i>20.0</i>] | |

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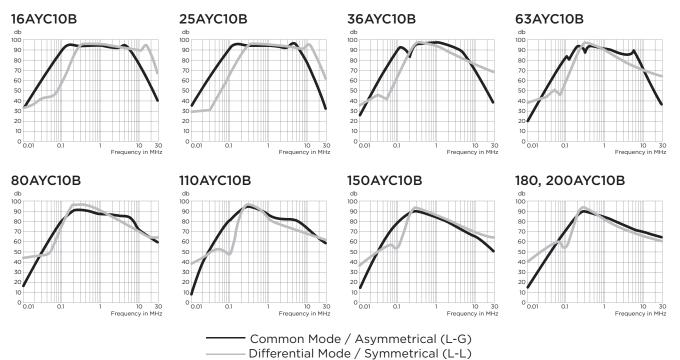
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Performance Data

Typical Insertion Loss

Measured in closed 50 Ohm system



Minimum Insertion Loss

Measured in closed 50 Ohm system

| Frequency –MHz | | | | | | | | |
|----------------|-----|-----|----|----|----|----|----|----|
| Part No. | .01 | .05 | .1 | .5 | 1 | 5 | 10 | 30 |
| 16AYC10B | 23 | 66 | 82 | 88 | 82 | 79 | 55 | 21 |
| 25AYC10B | 26 | 68 | 83 | 93 | 88 | 68 | 45 | 4 |
| 36AYC10B | 18 | 61 | 78 | 96 | 91 | 71 | 49 | 7 |
| 63AYC10B | 11 | 57 | 72 | 90 | 86 | 68 | 44 | 4 |
| 80AYC10B | 10 | 57 | 75 | 84 | 77 | 75 | 62 | 45 |
| 110AYC10B | 10 | 51 | 60 | 88 | 84 | 74 | 50 | 12 |
| 150AYC10B | - | 50 | 57 | 82 | 79 | 75 | 51 | 7 |
| 150AYC10B-95 | 1 | 51 | 55 | 85 | 82 | 84 | 51 | 11 |
| 180, 200AYC10B | 3 | 53 | 55 | 97 | 89 | 81 | 56 | 20 |

| Common Mode / Asymmetrical (Line to Ground) | Differential Mode / Symmetrical (Line to Line) |
|---|--|
|---|--|

| | Frequency –MHz | | | | | | | |
|----------------|----------------|-----|----|-----|----|----|----|----|
| Part No. | .01 | .05 | .1 | .5 | 1 | 5 | 10 | 30 |
| 16AYC10B | 21 | 32 | 54 | 90 | 86 | 73 | 72 | 47 |
| 25AYC10B | 23 | 33 | 60 | 100 | 95 | 87 | 70 | 38 |
| 36AYC10B | 25 | 37 | 51 | 94 | 87 | 69 | 58 | 17 |
| 63AYC10B | 27 | 45 | 41 | 84 | 77 | 63 | 61 | 43 |
| 80AYC10B | 37 | 42 | 67 | 87 | 80 | 66 | 60 | 50 |
| 110AYC10B | 27 | 35 | 39 | 75 | 72 | 51 | 44 | 31 |
| 150AYC10B | 28 | 37 | 42 | 74 | 67 | 52 | 45 | 30 |
| 150AYC10B-95 | 28 | 40 | 42 | 73 | 66 | 51 | 44 | 31 |
| 180, 200AYC10B | 30 | 41 | 50 | 70 | 64 | 49 | 42 | 26 |