

**Compact Low Current 3-phase WYE RFI Filters**

# AYO Series



UL Recognized  
CSA Certified  
VDE Approved



## AYO Series

- For 3-phase, four wire, WYE applications
- Filters each of the three lines plus neutral
- Good for attenuation beginning at 100kHz
- Space saving design
- Low leakage current
- Easy to connect terminals

## Ordering Information



## Available Part Numbers

3AYO1	6AYO1
10AYO1	20AYO1

## Specifications

**Maximum leakage current each Line to Ground:**

	<u>3, 6, 10A</u>	<u>20A</u>
@ 120 VAC 60 Hz:	2.0 mA	3.5 mA
@ 250 VAC 50 Hz:	3.0 mA	5.5 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 Neutral / Ground:	250 VAC

**Operating Frequency:**

50/60 Hz

**Rated Current:**

3 to 20A

**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 Schematic



2  
Three Phase Filters

**Compact Low Current 3-phase WYE RFI Filters** *(continued)*

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## Case Style



Typical Dimensions:

- Line/Load Terminals (8): .250 [6.3] with .07 [1.8] Dia. hole
- Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot
- Mounting Holes (2): .188 [4.78] Dia.

## Case Dimensions

Part No.	A (max.)	B (max.)	C (max.)	D $\pm 0.15$ $\pm .38$	E (max.)
AYO Series	3.37	2.07	1.53	2.938	3.35
	85.6	52.5	38.7	74.63	85.1

## Performance Data

### Typical Insertion Loss

Measured in closed 50 Ohm system

**3AYO1**



**6AYO1**



**10AYO1**



**20AYO1**



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

### Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency –MHz					
	.15	.5	1	5	10	30
3A	12	23	29	33	38	35
6A	7	23	30	40	50	30
10A	-	-	5	16	28	15
20A	-	7	11	32	23	12

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency –MHz					
	.15	.5	1	5	10	30
3A	-	12	20	50	35	30
6A	10	18	24	31	28	28
10A	10	18	24	42	28	22
20A	10	18	24	42	38	23