

Catalog: 1654001 Issue Date: 08.2010

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

## **A Series**



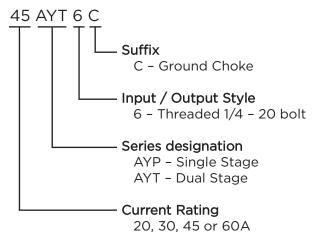
UL Recognized CSA Certified VDE Approved



### **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

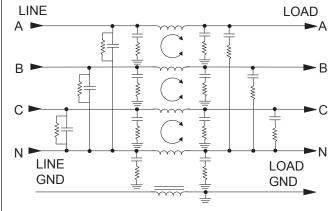
Rated Current: 20 to 60A

**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**



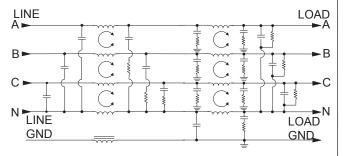


### High Performance 3-phase RFI Filters for WYE Applications (continued)

# **A Series**

### **Electrical Schematics** (continued)

### **AYT6C Models**



### **Available Part Numbers**

20AYP6C	20AYT6C
30AYP6C	30AYT6C
45AYP6C	45AYT6C
60AYP6C	60AYT6C

## **Mounting Hardware**

Mounting bracket kit with captive nuts:

AA400: 20A & 30A versions AA405: 45A & 60A versions

Protective cover for use with mounting bracket:

AA406A: 20A & 30A versions AA407A: 45A & 60A versions





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

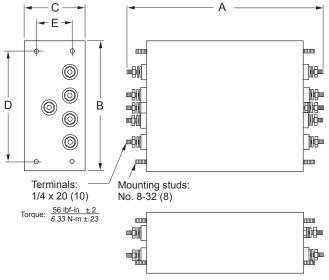
AA406: 20A & 30A versions AA407: 45A & 60A versions



AA406 / AA407 Kits includes both bracket and cover

Additional captive nuts: **AA401**: 10 nuts

### **Case Style**



### **Case Dimensions**

Part No.	<b>A</b> *	В	С	D	E
Part No.	(max.)	(max.)	(max.)	± .030 ± .76	± .015 ± .38
20 41/000	8.82	5.57	2.56	4.616	1.50
20AYP6C	224.0	141.5	65.0	117.2	38.1
70 AV/DCC	8.82	5.57	2.56	4.616	1.50
30AYP6C	224.0	141.5	65.0	117.2	38.1
45 AV/DCC	9.43	6.92	4.82	5.95	3.75
45AYP6C	239.5	175.8	122.4	151.1	95.3
60 AV/D66	9.43	6.92	4.82	5.95	3.75
60AYP6C	239.5	175.8	122.4	151.1	95.3
	13.82	5.57	2.56	4.616	1.50
20AYT6C	351.0	141.5	65.0	117.2	38.1
70.4)/700	13.82	5.57	2.56	4.616	1.50
30AYT6C	351.0	141.5	65.0	117.2	38.1
45 AV/TCC	13.83	6.92	4.82	5.95	3.75
45AYT6C	351.3	175.8	122.4	151.1	95.3
CO AVITCO	13.83	6.92	4.82	5.95	3.75
60AYT6C	351.3	175.8	122.4	151.1	95.3

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

45 & 60A: 6.45 [ 163.83 ]



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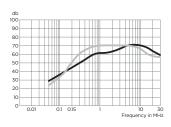
# **A Series**

### **Performance Data**

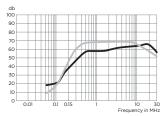
## **Typical Insertion Loss**

Measured in closed 50 Ohm system

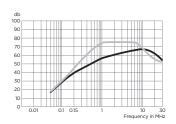
#### 20AYP6C



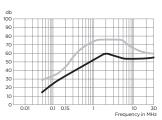
#### 30AYP6C



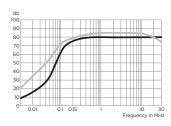
#### 45AYP6C



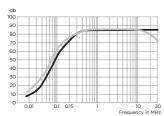
### 60AYP6C



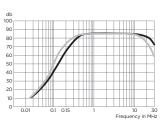
### 20AYT6C



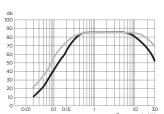
### 30AYT6C



### 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	Frequency –MHz							
Rating	.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	Frequency –MHz							
Rating	.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	Frequency –MHz							
Rating	.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			Fre	quen	cy –N	ИHz		
Rating	.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