

# POWER CONVERSION PRODUCTS



## Shipboard Series

### Part No.: VTA99030-00

### 1000W EMI/RFI Filter

#### FEATURES

- ❑ Filter, EMI/RFI Suppression
- ❑ DOD-STD-1399, Section 300A, 115Vac, L-L, Type I, 1Ø
- ❑ Withstand MIL-STD-901C Shock
- ❑ Low Leakage Current
- ❑ Input Power Factor > 0.8 @ 60Hz.

This EMI Filter used in a shipborne, automated communication system, features a stainless steel case of 18" L x 9.0" W x 3.55" H. Capable of continuous operation, without momentary interruption, it withstand intermittent input power transients as specified in MIL-STD-1399, paragraph 5.3.2.

#### **Input Specifications:**

Steady State Voltage ..... 107 to 123 VAC  
 Surge Voltage ..... 92 and 138 VAC  
 Frequency ..... 45 to 66 Hz  
 Capacitance Line-to-Ground..... < 0.1µF  
 Isolation Resistance ..... >100 megohms @ 500VDC

#### **Output Specifications:**

Nominal	Nominal	Power	Leakage	Maximum	Maximum
<u>Voltage</u>	<u>Current</u>	<u>Dissipation</u>	<u>Current</u>	<u>Current</u>	<u>Power</u>
115 VAC	8.6 A	< 45 W	< 3.0 mA	12 A	1380 W

#### **Insertion Loss (min):**

Frequency (MHz)	0.010	0.030	0.1	1.0	10.0
Common Mode (dB)	-6	-14	-30	-70	-70
Differential Mode (dB)	-15	-28	-48		

**Output Specifications:**

Temperature Rise..... < 55°C @ rated voltage, current and frequency.

**Physical Specifications:**

Weight..... < 25 lbs or 11.3 kgs  
Case..... stainless steel, 300 series  
Seal..... Filter section hermetically sealed  
Finish..... Electrically conductive  
Mounting Position..... Any orientation  
Connectors..... J1 (I/P): MS3102E16-10P  
..... J2 (O/P): MS3102R16-10S

**Environmental Specifications:**

Shock..... MIL-S-901C Grade A, Class 1  
Vibration..... MIL-STD-167-1, Type 1  
Air Temperature..... MIL-STD-810, Method 501.2, Procedure II.  
Operating: 0°C to +50°C  
..... MIL-STD-810, Method 502.2.  
Storage: -40°C to +71°C  
Humidity..... MIL-STD-810, Method 507.2, Procedure I.  
Dripproof..... MIL-STD-108, 15° inclination, 5 positions.  
Altitude..... Sea level to 12,000 ft. (operating)  
..... Sea level to 40,000 ft. (non-operating)  
EMI/EMC (MIL-STD-461C) ..... CE01, power leads, 30Hz to 15kHz  
..... CE03, power leads, 15kHz to 50MHz  
..... CS01, power leads, 30Hz to 50kHz  
..... CS02, power leads, 50Hz to 400MHz  
..... CS06, spikes, power leads  
..... RE01, magnetic field, 30Hz to 50kHz  
..... RE02, electric field, 14kHz to 10GHz  
..... RS01, magnetic field, 30Hz to 50kHz  
..... RS02, magnetic and elect. fields, spikes  
..... RS03, electric field, 14kHz to 10GHz

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VTA99030-00

Predicted Reliability (MIL-HDBK-217F)..... >100,000 hours NS @ 25°C

*Viable Power Conversion Technologies Inc.*

2044 St. Regis Boul.  
Dorval, Quebec, Canada,  
H9P 1H6

Tel: (514) 684-4141  
Fax: (514) 684-1276  
Web: [www.viablepower.com](http://www.viablepower.com)