

POWER CONVERSION PRODUCTS	 Shipboard Series
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Part No.: VTA98008-00

225W AC/DC Power Supply

FEATURES

- ❑ Up to 225 Watts Output Power
- ❑ DOD-STD-1399, Section 300A compliant (115Vac, L-L, Type I, 1Ø)
- ❑ High Input/Output Isolation
- ❑ Low Output Ripple
- ❑ Continuous Short Circuit Protection
- ❑ Thermal Protection & Battle Short function

This AC/DC Power Supply designed for high current, high reliability and accuracy, features a low profile package of 13.65” L x 4.75” W x 4.7” H or 0.74Watt/in³. It has excellent load regulation, input filtering, and low output ripple as well as current limiting/thermal shutdown.

Input Specifications:

Steady State Voltage	103 to 127 VAC
Surge Voltage	92 and 138 VAC for 0.1s
Frequency	58.2 to 61.8 Hz
Inrush Current.....	< 6 A peak
Efficiency.....	> 60% @ rated load
Isolation Resistance	10 MΩ L1 or L2 to chassis @ 500 Vdc
Power Factor (full load)	> 0.95 @ full load

Output Specifications:

<u>Nominal Voltage</u>	<u>Nominal Current</u>	<u>DC Load Regulation</u>	<u>Adjustable O/P Range</u>	<u>Ripple & Noise</u>	<u>Nominal Power</u>
+ 5 VDC	15.0 A	±1%	4.5 to 6.0 VDC	< 50 mVp-p	75W
+15 VDC	3.0 A	±1%	12.0 to 20.0 VDC	< 150 mVp-p	45W
- 15 VDC	3.0 A	±1%	12.0 to 20.0 VDC	< 150 mVp-p	45W
Current Limiting			+5V Channel: 17.5 ± 1.5 A		
			+15V Channel: 3.6 ± 0.3 A		
			-15V Channel: 3.6 ± 0.3 A		

Output Specifications:

Over-voltage Protection Any channel 138% of nominal voltage

Load Transients Response..... Maximum $\pm 10\%$ peak of the output voltage for loads from 20% to 100%.

Thermal Protection..... PSU shuts down @ baseplate temperature of $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$. . Automatic restart upon cool down.

BITE Trip Point Trip when +5VDC channel is at +4.5VDC.

Physical Specifications:

Weight < 17 lbs or 7.7 kgs

Case Alluminum alloys

Finish..... Chromate finish (MIL-C-55441)

Mounting Position..... Any orientation

Connections TB1: Input Terminal Board, Kulka 599JJ2004-4.

..... TB2: Output Terminal Board, Kulka 599JJ2004-5.

..... TB3: Output Terminal Board, Kulka 599JJ2004-9

Cooling Method Conduction cooled

Environmental Specifications:

Shock..... MIL-STD-202, Method 213, Condition A.

Vibration..... MIL-STD-167-1, Type 1.

Air Temperature..... Operating: 0°C to $+71^{\circ}\text{C}$
Storage: -62°C to $+75^{\circ}\text{C}$

Humidity..... MIL-E-16400

Noise MIL-STD-740, Notice 1, Airborne noise, level C, Structure borne noise, Type 3.

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VTA98008-00

Environmental Specifications:

EMI/EMC (MIL-STD-461)..... CE03, power leads, 15kHz to 50MHz
..... CS06, spikes, power leads
..... RE02, electric field, 14kHz to 10GHz

Predicted Reliability (MIL-HDBK-217F)..... >70,000 hours NS @ 25°C

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