

PO Box 429 | 805 Greenlawn Rd. | Murphy, NC 28906 USA | +1 (828) 837-4029 | www.aegispower.com

(Document Rev A03, 4/25/24)

GTA401C With Connector Reinforcement

Product Revision Rev C01

Overview

AC-DC Power Supply Single Phase 47- 440Hz 95/250Vac Input Dual Output, 200W Max Total

Market(s) Military, Industrial

Typical Application(s) Electronic Equipment Rack

Product Highlights

This chassis mounted filtered AC-DC power converter has Power Factor Correction, 18ms holdup, and wide input voltage range. The two factory configured outputs (+3.8Vdc, +5.6Vdc) provide 200W max total combined output. This COTS solution is designed for rugged applications and is designed to meet portions of Mil-Std-704F input, MIL-STD-810F vibration and shock, and MIL-STD-461E EMI requirements.

Features

- 95/250Vac input.
- MIL-Std-704F*
- Dual Output, 200W.
- Mil-Std-810F environmental specs. *
- Mil-Std-461F EMI specifications. *

* Designed to meet applicable portions of this standard. Contact Aegis Power Systems, Inc. for specific details.

Table 1: Maximum Continuous Operating Ratings

Parameter	Rating	Unit	Notes
Vin max range	95 to 250	Vac	
Temperature range	-40 to +85	°C	
Output power	200	W	
Input power	240	W	
+3.8Vdc output	100	W	
+5.6Vdc output	100	W	

About Us

Aegis Power Systems, Inc. specializes in the design, development, and manufacture of AC-DC and DC-DC power supplies for high-performance, rugged, critical, and specialty applications. Markets served include defense, industrial, communications, aircraft, shipboard, rack mount, embedded computing, and electric vehicle applications.

<u>Contact us</u> to find out if this item can be configured or redesigned to meet your specific technology need.





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SPECIFICATIONS	(Typical at 25°C, nominal line and 100% load, unless otherwise specified.)
Parameter	Notes
Input Voltage	Normal 95VAC to 250VAC, 47Hz to 440Hz (Optimized for 400Hz) Transient 70VAC to 270VAC, 100ms MIL-STD-704F Normal and abnormal range
Input Current	2.1A @ 115Vac.
Input Power	243W@ 115Vac.
Power factor	0.97 typical 360-440Hz.
Total Output Power	200W Max. All outputs combined.
Holdup time	18ms typical.
Output Voltages	See table 2 for details. (Output returns are tied to Chassis GND)
Efficiency	(76% Min. @115VAC, 400Hz, full load.) (76% Min. @ 115VAC, 60Hz, full load)
Output Ripple	See table 2 for details.
Current Limit	Short circuit protected with automatic recovery.
Start-Up Time	500 millisecond Max.
Voltage Set Point	± 2%.
Line/Load Regulation	± 2%.
Temperature Regulation	± 0.02% / °C.
Temperature	-40°C to +85°C Operating40°C to +120°C Non-Operating.
Cooling	Customer provided forced fan cooling across attached Heatsink.
Package	Chassis mounted enclosed metal case.
Dimensions	9" x 5" x 1.5" see mech dwg.
Weight	2.45 lbs. Typical.
Connector	Molex Minifit Jr. 39-30-0040 (Input Power) Molex Minifit Jr. 39-30-0120 (Output Power)
Vibration	MIL-STD-810F, Method 514.5, Procedure 1
Shock	MIL-STD-810F, Method 516.5, Procedure 1
Humidity	0 – 95% non-condensing.
EMI	MIL-STD-461F, CE102, CS101

Specifications subject to change without notice.



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Table 2: Voltage Output (Nominal)

	V1	V2				
Voltage	+3.8Vdc	+5.6Vdc				
Current	26.8A	17.3A				
Power	100W**	100W**				
Ripple	20mVpk-pk*	25mVpk-pk*				
	Maximum total output power is 200W (all DC outputs combined). (Output returns are tied to Chassis GND)					

* 20MHz Bandwidth Limited.

Figure 1: Power Derating for Temperature and Input Voltage

Power Derating for Temperature and Input Voltage per below Graph



Forced Air Cooling 600LFM

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3. FINISH: CHEMICAL FILM PER MIL-DTL-5541F, CLASS 3, TYPE II, COLOR CLEAR

TG-AH486-35-10-7.0-0

Digi-Key Part Number

1168-T0-AH486-35-10-7.0-0-ND

t-Global Technology TG-AH48635-10-7.0-0 THERM PAD 35MMK10MM GRAV GTA401-C Rev C01 with connector reinforcement and ripple voltage improvements.

Product Start date 3/31/22

Product sales order 9209 through 9211, SN:22010160 and following, shall have connector reinforcement Per GTA401-C, and ripple voltage improvements per Rev C01.

All sales orders after 3/31/22 shall have connector reinforcement Per GTA401-C and ripple voltage improvements per Rev C01.



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