

## General Specification Model 6948 DC-DC Converter

### Revision Level History


REV	Changes	Prepared by	Date	Initials
A	Initial Release	CJ	06/16/11	
B				
C				

### Electrical Specifications:

Output Voltage:	48.0 Nominal (Internally adjustable)
Output Voltage Regulation:	Better than 0.20 V (No Load to Full Load)
Output Voltage Adjust Range	47.0 Vdc to 50.0 Vdc
Continuous Max Load Amps:	25 ADC @ 40C ambient (Output 48.0) 15 ADC @ 60C ambient
Maximum Power Dissipation:	90 Watts @ Full Load (25A, 48.0 Vdc out)
Maximum Input Current:	115 A (12 VDC in)
Overload Protection:	Electronically current limited (primary protection) Magnetic Circuit Breakers at the Input (secondary protection)
Cooling:	Convection or Forced Air Thermostat Controlled Fan
Thermal Protection:	Thermostat shutdown when skin temperature exceeds 70C +,-5C
Output Ripple Voltage:	20 mV RMS (20C to 75C) 100 mV RMS (-30C)
Input Voltage Range:	11 VDC to 15 VDC
Input Output Isolation:	Common Input and Output Returns
<b>Low Voltage Cutout Circuit:</b>	
Low Voltage cutout point:	Adjustable from 10.5 VDC to 13 VDC (internally) When input voltage falls below cutout setting, unit turns off (Output falls to 0 Volts)
Low Voltage cutout Hysteresis:	1.2 Vdc @ 13.0 V/ 0.9 Vdc @ 10.5 Vdc

### Activation Circuits:


- 1) The unit may be activated through the command terminal #1 of terminal block TBA which when connected to +12 Vdc of the vehicle will turn on the converter.
- 2) The converter may be turned on in sections by using the circuit breakers on the front panel.

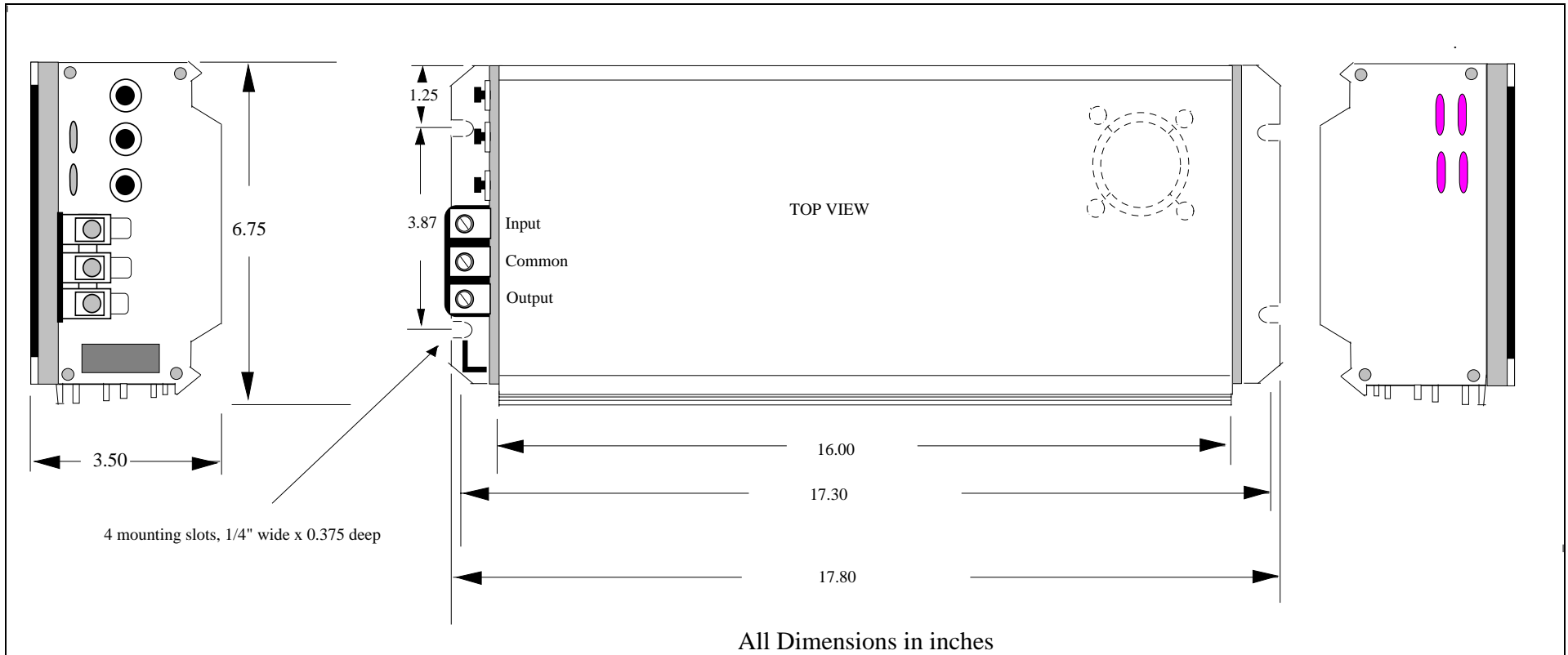
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Ambient Operating Temperature: -30C to + 60C  
 Maximum Humidity: 90% non condensing  
 Maximum Elevation: 6000 meters above sea level

**Mechanical Specifications:**

Activity Light: (1) Green, will illuminate with 48V (output) presence  
 Dimensions: 17.8 L x 7.0W x 3.5 H (inches overall maximum)  
 Shipping Weight: 15 lb.  
 Construction: Aluminum housing with painted steel wrap around  
 Encapsulated PCB  
 Mounting Method: #12 Hardware via front and rear mounting flanges  
 Mounting Centers: 17.3 x 3.87 (inches)  
 Hook Up: 3 Position Splicer Terminal Blocks

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<b>SEC America, LLC</b> S. Burlington, VT 05407			
Mat'l	N/A	Scale NTS	Drawn by: CJ Approved by: EH
Title 6948 DC-DC Converter Line Drawing			
Date	06/17/2011	Drawing No.	93-6948