

MajorVTC65 DC/DC Voltage Converter

MajorVTC65 Voltage Converters supply 13.6 or 27.2 VDC from 32, 48 or 72 VDC power systems.

Designed for use in heavy equipment, marine, industrial, or alternative energy environments, state-of-the-art switchmode design offers high reliability and efficiency in a very small package. **MajorVTC65** units are rugged, easy to use, and very economical.

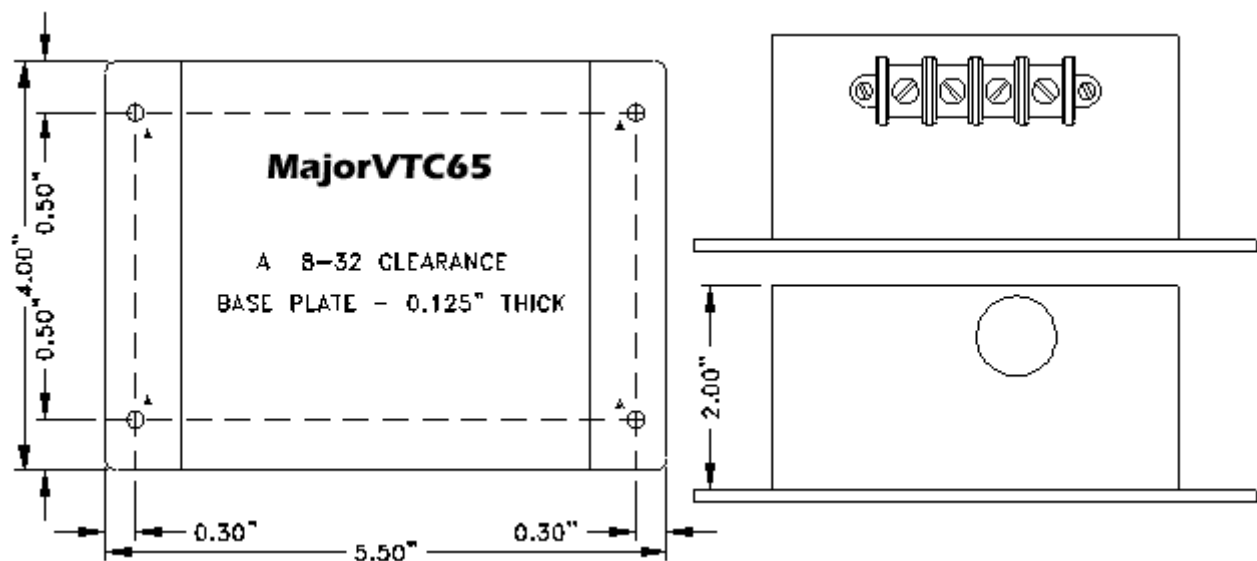
MajorVTC65 has reverse input protection, output current limiting and output overvoltage protection.



Product Features

- **Input Voltage Range**
 - ▶ Allows operation from 24 or 28 volt batteries
- **Protection**
 - ▶ Reverse input protection
 - ▶ Current limiting
 - ▶ Output over-voltage crowbar
- **Ultra-Quiet**
 - ▶ Low EMI operation
- **Wide Operating Temperature Range**
- **Remote ON-OFF Version Available**
- **Warranty**
 - ▶ 3-year parts and labour
- **Options**
 - ▶ Ruggedization against shock and vibration
 - ▶ Conformal coating
 - ▶ Can be built to Class 1, Division 2 Standards for Hazardous Duty
 - ▶ Extra wide Temperature Range -40°C to +70 °C

Mechanical Drawing



Product Specifications

Mechanical & Environmental	
Operating Temperature	-25 to +50°C @ Maximum Output
Range	Derate Linearly 2.5% per °C from 40°C
Humidity	0-95°C @ Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	None Ødb @ 3 feet
Typical Service Life	>10 years (87,600 hours)
Isolation	Any Input or Output to Case 1500 VDC Input to Output - Common Negative
Dimensions (L x W x H)	5.5 x 4.0 x 2.1 in / 14.0 x 10.2 x 5.3 cm
Physical	1 inch (2.5 cm) clearance all around; Marine grade aluminum; Black powder epoxy coat, 18-8 Stainless steel fastenings
Weight	0.8 lbs / 0.4 kg
Connections	4 contact output terminals
Warranty	3 years
Safety	CSA/UL Pending

Model Selection Guide

Model	MajorVTC65-32	MajorVTC65-48	MajorVTC65-72
Nominal Voltage	32	48	72
Voltage	20-45	40-65	65-100
Input Amps (Maximum)	5.4	2.7	5.4
Input Fuse	6	4	5.4
Noise on Input	< 10 mV	< 10 mV	< 10 mV

Output Nominal	12	24
Output Volts	13.6 ± 0.05 VDC	27.2 ± 0.05
Output Crowbar	16.5 ± 0.5 V	32.0 ± 1.0 V
Output Amps	5 continuous / 7 peak	2.5 continuous / 3.0 peak
Ripple & Noise	< 10 mV	< 10 mV
Transient Response	< 1 V for 50% Surge	< 1 V for 50% Surge
Line Load Regulation	< ± 0.5%	< ± 0.5%
Duty Cycle	Peak 20% for 10 min/max; Continuous 100% for 24 hours/day	Peak 20% for 10 min/max; Continuous 100% for 24 hours/day
Efficiency	> 88% @ Maximum Output	> 88% @ Maximum Output