

# VTC300 Series DC/DC Voltage Converter



A product of:



## Benefits

- Ultra-Quiet
- Convection cooled, no noisy fan
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

## Applications

- Marine & other rugged environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- Industrial Controls (OEM Applications)
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Backup Power (UPS)

## DC/DC Converters

VTC300 Series (common negative)

### Description

This all new single board design incorporates state of the art switchmode technology for unmatched efficiency and ultra-quiet operation.

Multiple stages of filtering reduce radiated or conducted noise to very low levels. Extra features include adjustable output voltage, audible and visual indicators for low input voltage, low output voltage, over temperature and overload.

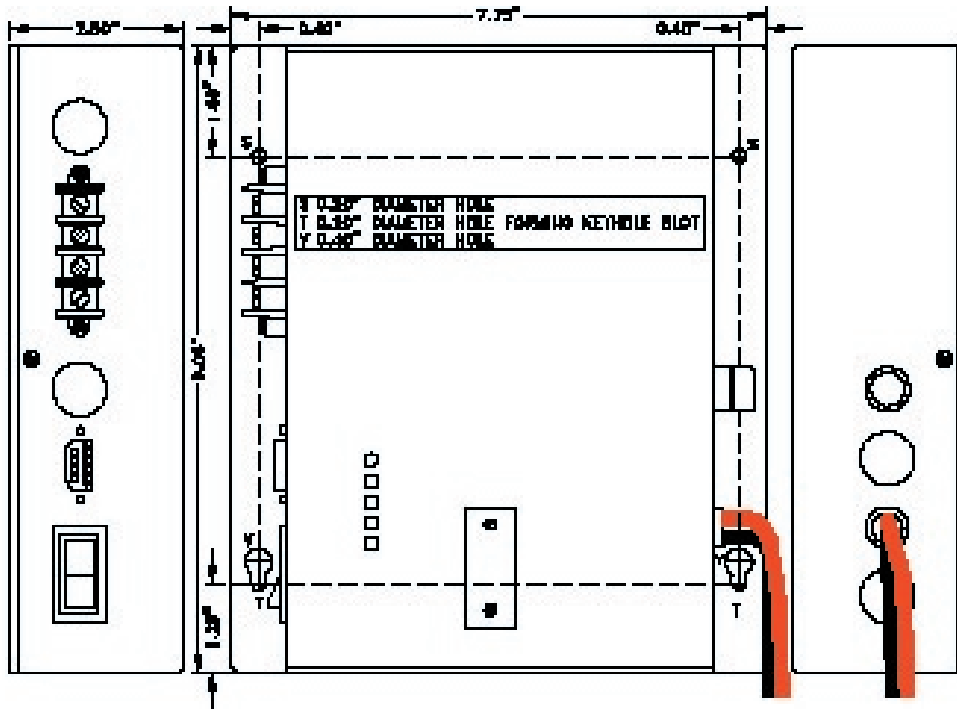
Safety features include reverse input protection, over-temperature shutdown, current limiting, short circuit shutdown, a dry contact alarm relay output and output overvoltage crowbar. Optional features include a remote panel monitoring with On-Off control.

We are confident that you will get many years of reliable service from this Voltage Converter.

### Features

- Adjustable output voltage
- Audible & visual indicators for constant current, low input voltage, low output voltage & over-temperature
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Current limiting protection
- Reverse input protection
- Output over-voltage crowbar
- Dry contact output fail relay
- Remote control option
- Wide-Temperature operation Available
- Parallel output diodes available
- Conformal Coating and/or Harsh Environment Ruggedization Available
- 3 year parts and labour warranty

## Mechanical Diagram



## Specifications ( Specifications Subject to Change Without Notice )

### Electrical (Input)

<b>Model Number</b>	<b>VTC300-32-12</b>	<b>VTC300-32-24</b>
<b>Input Volts (DC)</b>	20 – 45	30 – 45
<b>Input Amps (max)</b>	20	22
<b>Input Fuse (AGC)</b>	25A	
<b>Noise on Input</b>	< 25 mV	

### Environmental Specifications

<b>Operating Temp. Range</b>	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.)
<b>Humidity</b>	0 - 95% Relative Humidity (non-condensing) with optional conformal coating
<b>Audible Noise</b>	NONE Ødb @ 3 ft
<b>Typical Service Life</b>	> 10 yrs. (87,600 hrs)
<b>Isolation</b>	Any Input or Output to Case 500 VDC Input to Output – Common Negative

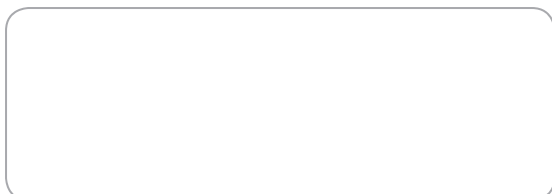
### Electrical (Output)

<b>Output Nominal (op)</b>	12	24
<b>Output Volts (DC)</b>	13.6 ± 0.05	27.2 ± 0.05
<b>Output Amps</b>	25 cont./ 30 peak	20 cont. / 25 peak
<b>Output Adjustment</b>	± 0.5	
<b>Output Crowbar</b>	16.0 ± 0.5V	32.0 ± 1.0V
<b>Output Ripple &amp; Noise</b>	< 25 mV	
<b>Transient Response</b>	< 1V for 50% Surge	
<b>Regulation (Line &amp; Load)</b>	< +/- 0.5%	
<b>Duty Cycle</b>	Peak 20% for 10 min maximum Continuous 100% for 24 hours per day	
<b>Efficiency</b>	> 90% @ Maximum Output	

### Mechanical Specifications

<b>Length</b>	9.1 in / 23.1 cm
<b>Width</b>	7.8 in / 19.8 cm
<b>Height</b>	2.5 in / 6.4 cm
<b>Material</b>	Marine Grade Aluminium
<b>Finish</b>	Black Anodize / Powder Epoxy Coat
<b>Fastenings</b>	All 18-8 Stainless Steel
<b>Weight</b>	4.0 lb / 1.8 kg
<b>Connections</b>	#12 AWG Input Wires (Positive & Negative) Four contact output terminal
<b>Warranty</b>	3 years

Available from:



# RIPEnergy

The power conversion company

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