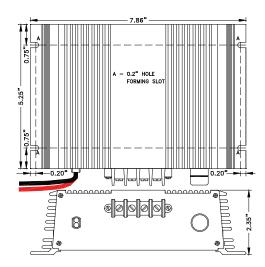


DC/DC CONVERTER

MODEL VTC180





Description

The VTC180 Series of voltage converters are variable duty cycle switching power supplies. They can be configured to run from a 24V, 32V, 48V or 72 VDC power systems to provide output voltages as shown below.

The VTC180 Series Voltage Converter features reverse input protection, current limiting, output over-voltage protection, ultra quiet low EMI operation and a wide operating temperature range.

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

Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

Design Features

- Input voltage range allows operation from 24, 32, 48, or 72VDC power systems
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Inrush protection
- Current limiting protection
- · Reverse input protection
- · High Efficiency
- Output over-voltage crowbar
- Remote control option
- Wide-Temperature operation Available
- Conformal Coating and/or Harsh Environment Ruggedization available
- 3 year parts and labour warranty

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)

An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters



Electrical (Input)					
Input Volts (ip)	32	48	72		
Actual (Vdc)	20-45*	40-65	65-100		
Input Amps (max)	13.6	6.8	4.3		
Input Fuse (MDA)	15	10	5		
Noise on Input	< 10 mV				
Electrical (Output)					
Output Nominal (op)	12	24			
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05			
Output Amps	15 cont. / 18 peak	7.5 cont. / 9.0 p	eak		
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V			
Output Ripple & Noise	< 10 mV				
Transient Response	< 1V for 50% Surge				
Regulation (Line & Load)	<+/- 0.5%				
Duty Cycle		Peak 20% for 10 min maximum Continuous 100% for 24 hours per day			
Efficiency		> 90% @ Maximum Output			
·	7 00 /0 C (Maximum)	Satpat			
Environment Specification					
Operating Temp. Range	Derate Linearly 2.5%	-25° to +50°C @ maximum output Derate Linearly 2.5% per °C from 50°C (Optional -40°C extra wide temp. operation avail.)			
Humidity		0 - 95% Relative Humidity (non-condensing) with optional conformal coating			
Audible Noise	NONE Ødb @ 3 ft	NONE Ødb @ 3 ft			
Typical Service Life	> 10 yrs. (87,600 hrs)	> 10 yrs. (87,600 hrs)			
Isolation		Input to Case 1500VDC (500VDC @ 32V Input) 500VDC Output to Case			
Mechanical Specification	2004DC Outhut to ca				
Length	7.9 in / 20.1 cm				
Width	6.0 in / 15.2 cm	6.0 in / 15.2 cm			
Height	2.4 in / 6.1 cm	2.4 in / 6.1 cm			
Material	Marine Grade Alumir	Marine Grade Aluminium			
Finish	Black Anodize	Black Anodize			
Fastenings	All 18-8 Stainless Ste	eel			
Weight	4.0 lb / 1.8 kg	4.0 lb / 1.8 kg			
Connections	Four contact output t	Four contact output terminals			
Warranty	3 years				

Note: Specifications are subject to change without notice.



An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

 $[\]ensuremath{^*}$ 30-45 Vdc input range for a 24 Vdc output