

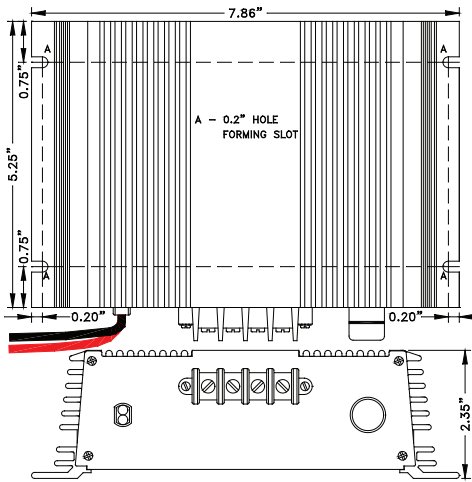


ANALYTIC SYSTEMS

Power Conversion Solutions

DC/DC CONVERTERS

MODEL VTC180MS SERIES



Description

The VTC180 Series of voltage converters are variable duty cycle switching power supplies. They can be configured to run from a 32V, 36V, 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 32, 36V, 48V, 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 Standard
- 2 years parts and labour warranty

Military Features

Most of the products manufactured by Analytic Systems can be adapted for military use (Commercial Off The Shelf).

We provide four different levels of ruggedization; most often, a product in military use will use the extra-wide temperature range components to allow operation to -55 degrees Celsius.

The printed circuit boards are also protected against condensation and are enhanced with vibration protection that meets or exceeds MIL-STD810F, Method 514-3 and Cat-1 Proc 1.

C.O.T.S. products are designed to meet various levels of EMC radiated and conducted emissions MIL-STD 461F.

All C.O.T.S. products are manufactured in accordance with IPC-A-610.

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

8128 River Way, Delta B.C. V4G 1K5 Canada T. 604.946.9981 F. 604.946.9983 TF. 800.668.3884 (US/CANADA)

www.analysissystems.com

DC/DC CONVERTER

MODEL VTC180MS SERIES

Electrical (Input)

Nominal Vac (ip)	110-220	
Actual (Vac)	100-130	200-260
Input Amps (max)	2.5A	
Input Fuse (AGC)	3A 2A (PWS120) 6.3A 4A (PWS240)	
Current Limit	16A (PWS120) 27A (PWS240)	
Input Frequency	45 – 65 Hz	
Noise on Input	< 25 mV	

Electrical (Output)

Output Nominal (op)	12	
Output Volts (DC)	13.8 ± 0.1	
Output Amps	10 cont. / 14 peak (PWS120)	23 cont. / 25 peak (PWS240)
Output Ripple & Noise	< 10 mV @ 10A out (PWS120)	< 15 mV @ 23A out (PWS240)
Transient Response	< 2V for 5A Surge	
Regulation (Line & Load)	< +/- 0.5%	
Duty Cycle	Peak 20% for 5 min max Continuous 100% for 24 hours per day	
Efficiency	> 80% @ Maximum Output	
EMC	Complies with FCC Part 15, Class B standards	

Environmental Specification

Temperature Rise	< 40 deg C @ 14 Amps Out
Input Isolation	Input-Case & Input-Output 1500 VDC, Output-Case 500VDC

Mechanical Specification

Length	7.5 in / 19.1 cm
Width	8.7 in / 21.8 cm
Height	2.4 in / 5.6 cm
Clearance	1 inch (2.5 cm) all around
Material	Marine Grade Aluminium
Finish	Black Anodize / Powder Epoxy Coat
Fastenings	All 18-8 Stainless Steel
Weight	3.0 lb / 1.4 kg (PWS120) 3.5 lb / 1.6 kg (PWS240)
Connections	Two Contact Output Banana Terminals
Warranty	2 years
Safety	UL listed to both USA & Canadian safety standards

Note: Specifications are subject to change without notice.



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