

VTC120 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

- Programmable Logic Controllers (PLC's)
- Rugged Mobile Environments
- Automotive / RV / Marine
- Electric Utilities and Substations
- Oil Patch
- Telecommunications Power
- Industrial Controls (OEM Applications)
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Security Systems Power
- Any 12 or 24 Equipment

DC/DC Converters

VTC120 Series (common negative)

Description

The VTC120 Series Voltage Converter is a variable duty cycle switching power supply with a precision linear regulator output. This model is common negative. This means that the input negative (ground) connection and the output negative (ground) connection are common or tied together.

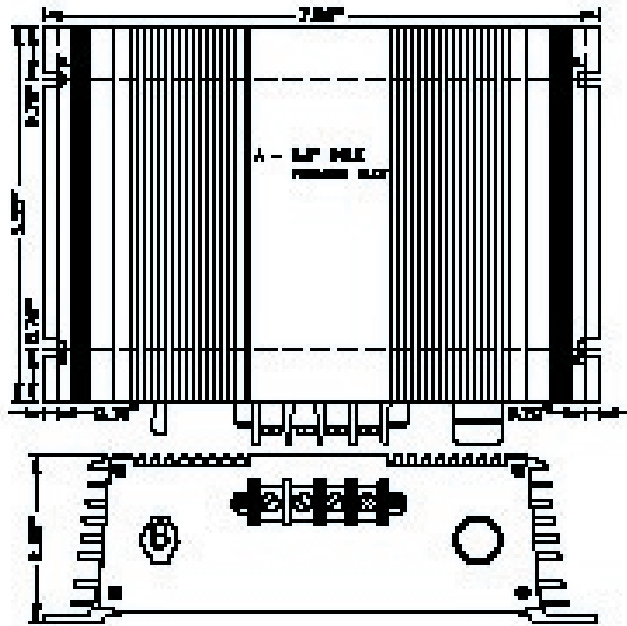
Applications include running 24V PLC controls or electronic equipment from a 12 Volt battery system, or any other application requiring 24 VDC when only 12 VDC is available.

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

Features

- Versatile design with wide variation of input and output combinations
- Precision linear regulator final stage for ultra clean output for all units
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Short circuit protection
- Ultra-quiet low EMI operation
- Reverse input protection
- Ideal for running 24V PLC controls from 12 VDC
- Can be built to Class 1, Division 2 Standards for Hazardous Duty
- 3 year parts and labour warranty

Mechanical Diagram



Specifications (Specifications Subject to Change Without Notice)

Electrical (Input)

Model - VTC120	-12-24	h-12-12
Input Volts (DC)	11-15	11-15
Input Amps (max)	15	11
Input Fuse (AGC)	20	15
Noise on Input	< 25 mV	

Environmental Specifications

Operating Temp. Range	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°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
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Any Input or Output to Case 500 VDC Input to Output – Common Negative

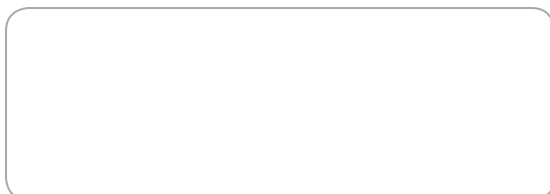
Electrical (Output)

Output Volts (DC)	24.0	12.0
Output Amps	5 Cont. / 5.5 Peak	7.5 Cont. / 8.0 Peak
Output Ripple & Noise	< 5 mV	
Transient Response	< 1V for 50% Surge	
Regulation (Line & Load)	< +/- 0.5%	
Duty Cycle	Peak 20% for 5 min maximum Continuous 100% for 24 hours per day	
Efficiency	> 80% @ Maximum Output	

Mechanical Specifications

Length	7.9 in / 20.1 cm
Width	6.0 in / 15.2 cm
Height	2.4 in / 6.1 cm
Material	Marine Grade Aluminium
Finish	Black Anodize / Black Powder Epoxy
Fastenings	All 18-8 Stainless Steel
Weight	2.5 lb / 1.1 kg
Connections	Four contact output terminal
Warranty	3 years

Available from:



RIPEnergy®

The power conversion company

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