

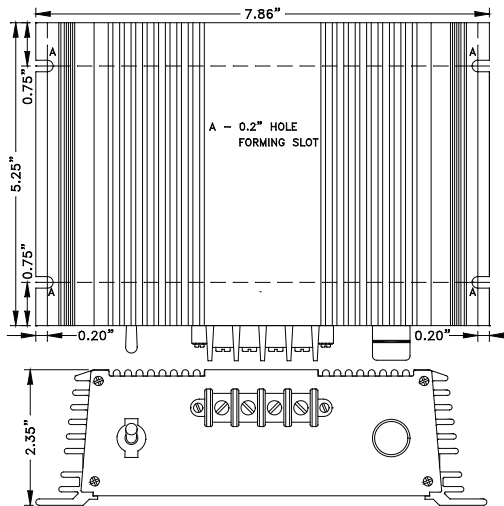


ANALYTIC SYSTEMS

Power Conversion Solutions

FULLY ISOLATED DC/DC CONVERTERS

MODEL VTC120i Series



Description

The VTC120i Series of Isolated Voltage Converters are variable duty cycle switching power supplies with precision linear regulator outputs. They can be configured to run from a 12V, 24V or 48VDC battery system to provide input/output voltages as shown below.

Applications include running 24V PLC controls from a 12 Volt battery system, or any other application requiring 24 VDC when only 12 VDC is available or to provide ground isolation between two 12 VDC or 24 VDC power systems, or between a 12 VDC and 24 VDC power system.

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

Benefits

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

Design 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
- Ultra-quiet low EMI operation
- Ideal for running 24V PLC controls from 12 VDC
- Many isolated versions including two high output for converting positive ground to negative ground or resolving other ground related problems
- Reverse input protection
- Short circuit protection
- Parallel output included
- Three year parts and labour warranty

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, 24, 32, 48V Equipment

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

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www.analyticsystems.com

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MODEL VTC120i Series

Isolated								
Model (VTC120)	i-12-12	i-12-24	i-24-12	i-24-24	i-48-05	i-48-12	i-48-24	i-48-48
Input Volts (DC)	11 – 15	11 – 15	22 - 30	22 - 30	40 – 60	40 – 60	40 – 60	40 – 60
Input Amps (max)	8.5	15	3.8	7.5	1	2.1	4.2	8.4
Input Fuse	AGC-10	AGC-20	MDA-6	AGC-10	MDA-2	MDA-3	MDA-5	MDA-10
Output Volts (DC)	12.0	24.0	12.0	24.0	5.0	12.0	24.0	48.0
Output Amps	5 Continuous / 5.5 Peak							2.5 Cont. / 5.5Peak
Isolation Input-Output	> 500 VDC							

Isolated (High)								
Model (VTC120)	ih-12-12	ih-12-15.6	ih-12-24	ih-24-12	ih-24-24	ih-36-15.6	ih-48-15.6	i-48-12
Input Volts (DC)	11 – 15	11 – 15	11 – 15	22 - 30	22 - 30	33 – 45	40 – 60	40 – 60
Input Amps (max)	11	14.2	21.8	6.2	10.9	4.8	3.9	3.0
Input Fuse	AGC-15	AGC-20	AGC-25	MDA-7	AGC-15	MDA-8	MDA-7	MDA-5
Output Volts (DC)	12.0	15.6	24.0	12.0	24.0	15.6	15.6	12.0
Output Amps	7.5 Continuous / 8.0 Peak							
Isolation Input-Output	> 500 VDC							

Electrical (General)	
Noise on Input	< 5 mV
Output Ripple & Noise	< 5 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	> 80% @ Maximum Output

Environmental Specification	
Operating Temp. Range	-25°C to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C - +55°C extra wide temp. operation avail.)
Humidity	0 - 95% Relative Humidity (non-condensing) with standard 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

Note: Specifications are subject to change without notice.



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