

PRODUCT OVERVIEW

'Output ON' and 'Overload' LED indicators

Up to 80V input



Compact size and easy mounting

Simple plug in wiring



The VCH10 Step Down series of Voltage Converters supplies up to 10 amps of output current at 12, 24, 36 or 48 volts from any higher voltage between 20 and 80 volts DC for use in automotive, heavy equipment, marine, industrial, rail or alternative energy environments.

All surface mount high frequency design offers higher reliability, higher efficiency (more than 92%), more power (up to 544 watts at 48 VDC Out) and minimum size.

The unit has reverse input protection, output current limiting and output over-voltage protection.

Available models:

Input (VDC)

20-80	30-80	40-80	45-80	60-80
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Output | Nominal (VDC)

12	24	32	36	48
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Output | Actual (VDC)

13.6	27.2	36.3	40.8	54.4
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Applications:



TECHNICAL SPECIFICATIONS

INPUT					
Model	VCH10-12	VCH10-24	VCH10-32	VCH10-36	VCH10-48
Input Volts	20 - 80 VDC	30 - 80 VDC	40 - 80 VDC	45 - 80 VDC	60 - 80 VDC

OUTPUT VOLTS					
Nominal	12 VDC	24 VDC	32 VDC	36 VDC	48 VDC
Actual	13.6 VDC	27.2 VDC	36.3 VDC	40.8 VDC	54.4 VDC

OUTPUT					
Output Amps	10 Amps				
Dissipation	12 Watts				
Efficiency	91.9%	95.8%	96.8%	97.1%	97.8%

ELECTRICAL	
Input Ripple & Noise	< 100 mV Peak to Peak
Output Ripple & Noise	< 50 mV Peak to Peak
Efficiency	< 300 mV for 50% Load Step Change
Regulation (Line & Load)	< +/- 0.5%

MECHANICAL	
Dimensions	4.85 in / 12.3 cm Long x 4.13 in / 10.5 cm Wide (incl. mounting flanges) x 1.03 in / 2.6 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	0.62 lb / 0.28 kg
Material & Finish	Marine grade aluminum with red anodize cover / black anodize chassis
Mounting	Wall or shelf mount
Connections	Pluggable Phoenix Combi-Com four position terminals

ENVIRONMENTAL AND SAFETY	
Operating Temperature Range	-25°C to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C (Optional -40°C wide temperature range available)
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Audible Noise	NONE 0db @ 3ft
Typical Service Life	> 10 years (87,600 hrs)
Isolation	>1500 VDC Input-Output, Input-Case, Output-Case
Warranty	Five years
Safety	Built to meet CSA 22.2.107.1 & UL458

OPTIONS:

- Heavy duty ruggedization with wide temperature range
- Paralleling diodes
- Custom output voltages available

FEATURES:



- Simple plug in wiring

DIMENSIONS:

