

AC to DC Converter (Rack Mounting) Universal AC to 24V DC 6.3 Amps, 150 Watts, 4 Fuse Protected Outputs

Description

Valiant's AC to DC converter may be used to convert 85V AC-264V AC, 47Hz-63Hz AC Mains Input Voltage to 24V DC output voltage. It may be also used to convert 120V DC - 370V DC Input Voltage to 24V DC Output Voltage. The AC to DC / DC to DC converter is designed for telecom applications requiring stable DC voltage with low EMI and EMC interference.



This is an external converter power supply which is available in a portable desktop and 19 inch rack mount version, with four fuse protected outputs in the rack mount version.

Features

- Converts universal AC Mains Input (85V DC - 264V AC, 47Hz - 63 Hz) to 24V DC, 6.3 Amps
- Converts 120V DC to 370V DC to 24V DC output current @ 24V DC=6.3 Amps
- Small and compact
- High quality and cost effective
- Auto ranging voltage
- UL, recognized, TUV approved, CSA certified
- Built-in inrush current, over current and over voltage protection circuits
- Harmonic attenuator, PFC (Complies with IEC61000-3-2)
- Rugged PCB type construction
- RoHS Compliant

Safety Agency Approvals

- Complies with DEN-AN
- UL6095
- C-UL (CSA60950) recognized
- TUV approved

EMC Compliance

- EN61000-4-2
- EN61000-4-3
- EN61000-4-4
- EN61000-4-5
- EN61000-4-6
- EN61000-4-8
- EN61000-4-11
- EN55022-B
- EN61000-3-2

EMI Compliance

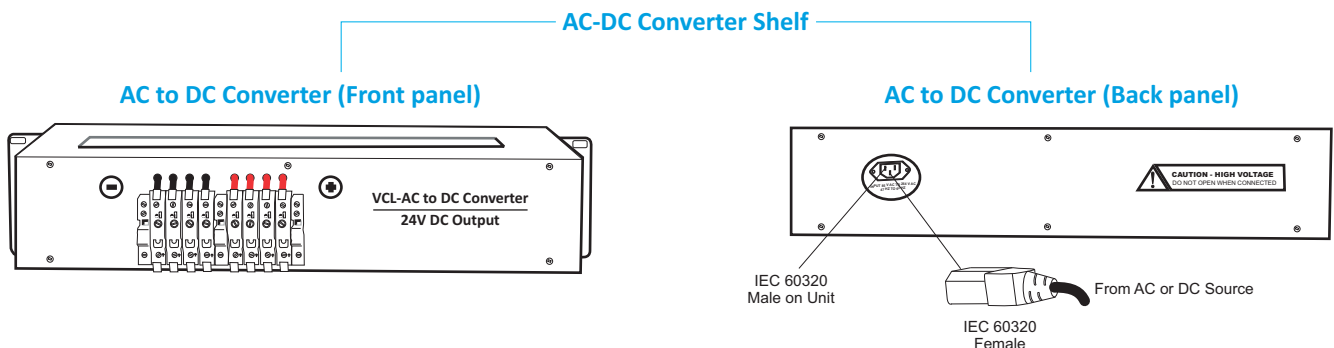
- FCC-B
- CISPR22-B
- EN55022-B
- VCCI-B

CE Marking

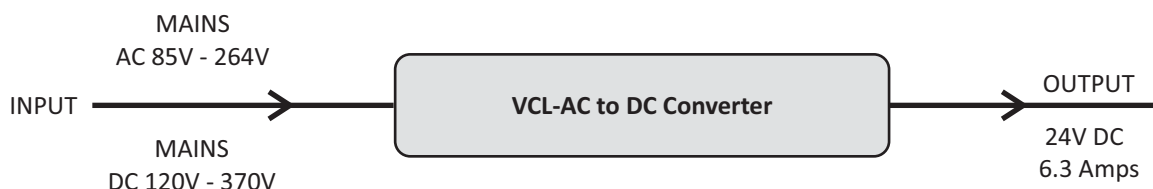
- Low Voltage Directive
- EMC Directive

Ordering Information (AC to DC Converter)

Part #	VCL-ACDC-24-150W-6.3A
Product	Power Supply (External)
Description	AC to DC Converter, DC to DC Converter, Desktop Version, 150 Watts External Converter. Converts Universal 85 V AC- 264 V AC, 47 Hz to 63 Hz Main Voltage, or 120V DC -370V DC to 24V DC Output 6.3 Amps



Application Diagram



Technical Specifications

Input Voltage	[V]	AC 85-264, 47 Hz - 63 Hz, DC 120 to 370
Current	[A] ACIN 100V ACIN 200V	2.0typ (Io=100%) 1.0typ (Io=100%)
Frequency AC	[Hz]	50/60 (47 to 63) or DC
Efficiency	[%] ACIN 100V ACIN 200V	82typ (Io=100%) 85typ (Io=100%)
Inrush Current	[A] ACIN 100V ACIN 200V	15typ (Io=100%) (At cold start) (Ta=25°C) 30typ (Io=100%) (At cold start) (Ta=25°C)
Leakage Current	[mA]	0.75max (60Hz,According to IEC60950 and DEN-AN)
Output Voltage	[V]	24V DC
Current	[A]	0 to 6.3A (Peak 12)
Line Regulation	[mV]	48 max
Load Regulation	[mV]	76 max
Ripple	0 to +45°C	120 max
[mVp-p]	-10 to 0°C	160 max
Ripple Noise	0 to +45°C	150 max
[mVp-p]	-10 to 0°C	180 max
Temperature	0 to +45°C	120 max
Regulation [mV]	-10 to 45°C	145 max
Drift	[mV]	48 max
Start-Up Time	[mS]	500 max (ACI 100,Io=100%)
Hold- Up Time [mS]		20typ (ACIN 100V,Io=100%)

Over current Protection	Works over 101% of rating (-H:peak) and recovers automatically
Over voltage Protection	Works at 115 to 140% of rating
Input- Output -RC Isolation	AC3000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)
Input-FG isolation	AC2000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)
Output -RC-FG Isolation	AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At Room Temperature)
Output -RC Isolation	AC100V 1minute, Cutoff current = 100mA, DC100V 10M Ω min (At Room Temperature)
Operating Temp., Humidity & altitude	-10 to +70°C, 20 to 90% RH (Non-condensing) 3000 m (10,000 feet) max
Storage Temp., altitude	-20 to +75°C, 20 to 90% RH (Non-Humidity & condensing) 9000 m (30,000 feet) max
Vibration	10 to 55Hz,19.6m/s ² (2G), 3 minutes period, 60 minutes each along X, Y and Z axis
Impact	196.1m/s ² (20G), 11ms, once each X, Y and Z axis
Safety Agency Approval	UL60950-1, C-UL, EN60950-1, En50178 Complies with DEN-AN and IEC60950-1 (At only AC input)
Cooling Method	Convection
Max Out. Wattage	151.2 (Peaks 288)

Technical specifications are subjects to chnage without notice.

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U.K.

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