

FCVS501 Series AC/AC Frequency Converter



Pure sinewave



Digital display



Variable output (VAC / Hz)



High frequency technology



Light weight, compact size



Full electronic protection

Applications

- Test Facilities
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

AC/AC Converters

FCVS501 Variable AC Power

Description

The FCVS501 Series is a variable AC power source designed to deliver power at a selectable frequency between 40Hz to 440Hz.

The unit uses PWM technology and generates a sine-wave output with typical distortion of less than 5%.

The output voltage is continuously adjustable from 0 to full scale. The input is power factor corrected.

The FCVS501 Series AC power source can be used as a compact AC/AC frequency converter, suitable for a wide range of applications.

It features full electronic protection, high efficiency and low output noise.

The unit is fan cooled. The use of components with established reliability results in a high demonstrated MTBF.

The FCVS501 is manufactured at our plant under strict quality control.

Customized versions are also available.

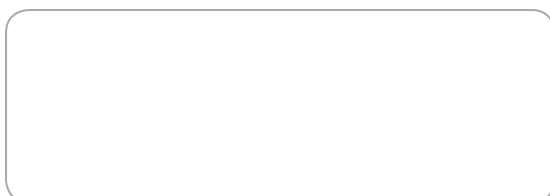
Features

- Variable output voltage & frequency
- Compact size, light weight
- Sinusoidal wave shape
- Digital meters for Vrms & frequency
- Isolated, floating output
- 500VA output power
- Full electronic protection
- High reliability
- Professional quality
- Field-proven design topology

Specifications (Specifications Subject to Change Without Notice)

Input Voltage	Universal 95 ... 264Vac 47 - 410Hz Input current 6.6A rms max.
Power Factor	Min. 0.97 at full load for the entire input range. Meets EN61000-3-2
Input Protection	Inrush current limiting Varistors Internal safety fuse Lower voltage than specified input min. will not damage unit
Isolation	2250VDC input to chassis 2250 VDC input to output 8mm spacing 2250VDC output to chassis
Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
EMI	EN 55022 Class A as a minimum
Output Voltage	0...264Vrms range; max. current 4Arms; max power 500VA
Output frequency	40...440Hz in one band 1Hz step 50, 100, 200, 400Hz 'hot' push buttons
Frequency Stability	±0.1%
Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Line / Load Regulation	Maximum ± 5% of Vout max. from no load to full load
Load Crest Factor	Maximum 3.0 at 90% load
Output Noise	High frequency ripple is better than 500mVrms (20MHz BW)
Output Overload Protection	Current limiting with short circuit protection Thermal shutdown with automatic recovery in case of insufficient cooling Hiccup at 4.8Arms
Output Overvoltage Protection	280Vac by internal supply voltage limiting
Efficiency	Typically 80% at full load
Operating Temperature Range	0°C to +50°C for full specification without derating derating linearly 2.5% per °C rise above +50°C to +70°C max. Extended temperature range available
Temperature Drift	0.05% per °C over operating temperature range
Cooling	Built-in fans draw air into the unit
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating as option
Humidity	5 - 95% non-condensing
MTBF	Min. 120,000 hours at 45°C Demonstrated MTBF is significantly higher Fan excluded
Indicators	Digital meters for output voltage and frequency
Control Input	Switch ON/OFF Frequency Up/down buttons Frequency Pre Select buttons Voltage Up/down buttons
Alarm Output	None
Package / Dimensions	185 x 141 x 356 mm enclosed case
Weight	4kg approx.
Connections	Input: IEC inlet connector Output: banana sockets on front-panel
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



RIPEnergy®

The power conversion company

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