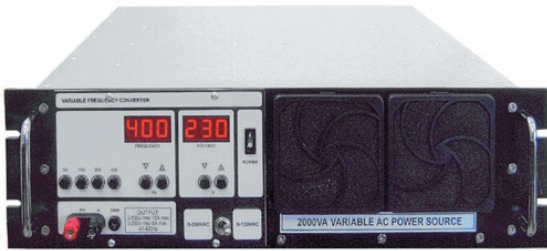


FCVS1000 Series AC/AC Frequency Converter



Benefits

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

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

FCVS1000 Variable AC Power

Description

The FCVS1000 Series is a variable AC power source with an adjustable output of 0 ... 132Vrms (maximum current 8Arms) and 0...264Vrms (maximum current 4Arms).

The unit uses PWM technology to generate a 1000VA sine-wave output with a total harmonic distortion less than 5% at full load.

The FCVS1000 Series AC power source is suitable for a diverse range of industrial, engineering and academic or laboratory applications.

It can also be used as an AC frequency converter. The unit is fan cooled and features full electronic protection, high efficiency and low output noise.

Features

- Variable output voltage & frequency
- Compact size
- Sinusoidal wave shape
- Digital meters for voltage & frequency
- Isolated, floating output
- 1000VA output power
- Full electronic protection
- High reliability
- Professional quality
- Field-proven design topology

Specifications (Specifications Subject to Change Without Notice)

Electrical (Input)

Input Voltage VAC	95 ... 264
Frequency Hz	47 ... 410
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 the specified minimum input will not damage the unit

Electrical (Output)

Output Voltage VAC	0...132Vrms range; max current 8Arms 0...264Vrms range; max current 4Arms
Output Frequency Hz	47 440 (50, 100, 200, 400Hz ,hot' push buttons)
Output Overload Protection	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient airflow. Hiccup at about 120% of output max. current
Output Overvoltage Protection	140Vac in low range and 280Vac in high range by internal supply voltage limiting
Output Ripple Noise	High frequency ripple is less than 500mVrms (20 MHz BW)
Wave Form	Sinusoidal

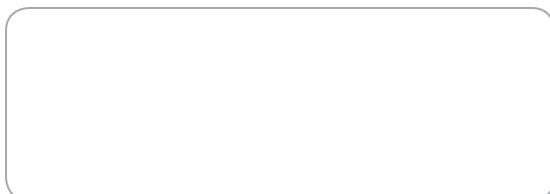
Indications & Electrical

Total Harmonic Distortion	Less than 5% at full load
Efficiency	Min 80% at full load
Line Load Regulation	Max. \pm 5% of Vout max from no load to full load
Load Crest Factor	Maximum 3.0 at 90% load
Operating Temperature Range	0° - 50°C for full specification without derating
Frequency Stability	\pm 0.1%
Temperature Drift (for output voltage level)	0.05% per °C over operating temperature range
Cooling	Built-in fans drawing air into the unit
Environmental Protection	Basic ruggedizing. Full ruggedizing and conformal coating as option
Humidity	5 - 95% non-condensing
MTBF	Min. 95,000 hours at 45°C Demonstrated MTBF is significantly higher. Fans 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, Remote shutdown as option
Alarm Output	None
EMI	EN 55022 Class A as a minimum
Isolation	2250VDC input to chassis / 2250 VDC input to output / 8mm spacing 2250VDC output to chassis

Mechanical Specifications

Length	45.8 cm
Width	19"
Height	3 U
Weight	31.5 lb / 14 kg
Connections	Input: Terminal Block, Output: binding posts on front panel AC receptacle on rear panel optional
RoHS Compliance	Fully compliant
Warranty	2 years
Safety	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950

Available from:



RIPEnergy®

The power conversion company

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