



ANALYTIC SYSTEMS

Power Conversion Solutions

AC/AC Frequency
Converters

Model
FCA4000R



Description

The FCA4000R Series is a compact AC/AC frequency converter that uses established design techniques to ensure high reliability. Suitable for a wide range of applications, the FCA4000R features full electronic protection, high efficiency and low output noise.

The built-in fan provides sufficient airflow for operation without de-rating up to 50°C ambient temperature. Extended operating temperature (-40 to +65°C) is available.

The converter can be loaded with a fluorescent lamp load up to the full specified output power.

Benefits

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

Design Features

- ◆ Input is filtered to EN 55022 Class B
- ◆ Very low 60Hz input ripple current
- ◆ Modular design, light weight
- ◆ Sinusoidal wave shape
- ◆ Multiple input and output voltages available
- ◆ 4000VA of output power
- ◆ Full electronic protection
- ◆ Field-proven design topology

Applications

- ◆ Marine / Automotive / RV
- ◆ 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 Frequency Converters FCA4000R

Input Voltage	115 or 230VAC, 48...410Hz +/-20% are standard Other inputs available, please consult factory
Input Protection	Thermal fuse, Inrush current limiting, Reverse polarity protection
Isolation	2250 VDC input to chassis / 2250 VDC input to output / 2250 VDC output to chassis
Output Voltage	115VAC / 60Hz / 34.7A or 115VAC / 400Hz / 34.7A or 230VAC 50Hz / 17A continuous with grounded neutral Isolated floating output optional (Consult factory for other voltages and frequencies)
Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Efficiency	Min 80% at full load
Line Regulation	Maximum 0.5%
Load Regulation	Maximum +/-6% from 10% load to full load
Output Protection	Current limiting with short circuit protection, thermal shutdown with automatic recovery in case of continuous overload or insufficient airflow
EMI	Meets EN 55022 Class A. Custom filtering is available as an option
Load Crest Factor	Maximum 3.0 at 90% load
Operating Temperature Range	0° C to +50° C Extended range available (Consult factory)
Humidity	5 - 95% non-condensing
Temperature Drift	0.05% per °C over operating temperature range
Dimensions	<u>6U package for 115Vac output:</u> 6U (10.5") x 19" x 19" 265 x 482.6 x 482.6 mm <u>4U package for 230Vac output:</u> 4U (6.97") x 19" x 19" 177 x 482.6 x 482.6 mm
Connections	Input: Compression-type terminal Output: Terminal block
Weight	24kg (53lb) max for 115 Vac output 16 kg (35 lb) max for 230 Vac output
Safety	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
Options	Output Fail Alarm (Form C) Remote Inhibit: By connecting DC voltage (as specified) to the inhibit terminals

Warranty: Twelve months subject to application within good engineering practice Enhancements to these general specifications can be accommodated upon request Designed to meet common approval requirements. Specifications Subject to Change Without Notice Designed and Manufactured in Canada



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