

Model: FCA1000-115.60-115.400-T8486
Summary description: 1000VA Frequency Converter
Universal AC to 115Vac / 400Hz



Product description:

This rugged, AC/AC frequency converter system uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. The frequency converter is built with internal power modules, one CAP 1200 module converts input voltage to an internal DC voltage, which feeds the one MSI 1500 AC output module. Built-in fans provide sufficient airflow for operation without de-rating within the specified temperature range. High frequency conversion enables compact construction, low weight and high efficiency. The unit has full electronic protection. Input and output are filtered for low noise. The use of components with established reliability results in a high MTBF. The unit is manufactured at our plant under strict quality control

SPECIFICATIONS

Input Voltage

95-264Vac, universal PFC, 47-63Hz
Input current: 15Arms max.
Power factor is min 0.98 at full load for the entire input range
Meets EN61000-3-2.

Input Protection

Inrush current limiting
Varistor
Internal safety fuse
Lower voltage than specified input min. will not damage unit

Isolation

Input to chassis: 2250Vdc
Output neutral is connected to the chassis internally

Standards

Designed to meet
C22.2 No. 107.1 – 01,
UL 458 and EN 60950-1
CE marking

EMI

EN55022 Class A with margins

Output Voltage

115Vac / 400Hz @ 8.7Arms continuous
Output neutral is internally connected to chassis

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

± 6% from no load to full load

Load Crest Factor

2 at 90% load

Output Noise

High frequency ripple is less than 500mVrms (20MHz BW)

Output Overload Protection

Current limiting with short circuit protection. At 1200VA, unit enters cycling (hiccup) mode.
Thermal shutdown with automatic recovery in case of insufficient cooling

Output Overvoltage Protection

140Vac by internal supply voltage limiting

Efficiency

85% at full load

Operating Temperature Range

0°C to +50°C

Temperature Drift

0.05% per °C over operating temperature range

Cooling

By built-in high quality fans

Environmental Protection

Basic ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1A&B

Humidity

5 - 95% non-condensing

MTBF

95,000 hours at 45°C (Fans not included)

Indicators

None

Control Input

None

Alarm Output

None

Package / Dimensions (W x H x L)

3U2: 132 x 132 x 407mm
(5.2"x5.2"x16")
Chassis mount

Weight

6kg (13 lbs)

Connections

Input: 3-pole terminal block with 1/2" spacing
Output: 3-pole terminal block with 1/2" spacing

RoHS Compliance

Not required but accepted

Warranty

Two years subject to application within good engineering practice



ANALYTIC SYSTEMS
Power Conversion Solutions

Analytic Systems Ware (1993) Ltd.
101-8128 River Way, Delta, BC V4G 1K5 Canada
t. 604.946.9981 tf. 800.662.3884 f. 604.946.9983
e. info@analyticsystems.com | www.analyticsystems.com