

Model: FCA-115.400-116.60-T9304

Summary description: 1500VA Frequency Converter
115Vac/400Hz to 115Vac / 60Hz



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. Two CAC modules convert the input voltage to an internal DC bus voltage, which feeds one MSI 1500 AC output modules. The built-in fans provide sufficient airflow for operation without de-rating to the specified temperature. The high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. The use of components with established reliability results in high MTBF. The unit is manufactured at our plant under strict quality control.

Special Features: Conformal coating, 400Hz input

SPECIFICATIONS

Input Voltage

115Vac nominal
97-132Vac operating range, 380..440Hz
Input Current: 27Arms max.

Input Protection

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

Isolation

2250Vdc input to chassis/output
Output neutral is connected to
the chassis internally

Standards

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

EMI

EN55032 Class A as with margins

Output Voltage

115Vac /60Hz/ 13Arms continuous
Output neutral is internally
connected to chassis

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

Maximum $\pm 6\%$ from no load to
full load

Load Crest Factor

Maximum 2.5 at 70% load

Output Noise

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

Output Overload Protection

Current limiting with short circuit
protection.
Thermal shutdown with automatic
recovery in case of insufficient cooling

Output Overvoltage Protection

140Vac by internal supply voltage
limiting

Efficiency

Min. 80% at full load

Operating Temperature Range

0°C to +50°C for full specification
with proper installation

Temperature Drift

0.05% per °C over operating
temperature range

Cooling

By built-in high quality fans

Environmental Protection

Basic ruggedizing
Conformal coating

Humidity

5 – 95% non-condensing

MTBF

110,000 hours at 45 °C (Fans not included)

Indicators

None

Control Input

Not requested

Alarm Output

Not installed

Package / Dimensions (W x H x L)

3U3: 187 x 132 x 407mm
(7.4" x 5.2" x 16")
Mounting holes are clear
Mounting brackets are removable and can
also be installed on the front and rear side

Weight

Approx. 7 kg (15 lbs)

Connections

Input: 3-pole terminal block with
13mm spacing
Output: 3-pole terminal block with
13mm spacing

RoHS Compliance

Not required, but accepted

Warranty

Two years subject to application
within good engineering practice
Contamination related failures and
shipping cost excluded



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