

Model: FCA500-115/400-115/60

**Summary description: Frequency Converter with Sinewave Output
115Vac/400Hz to 115Vac/60Hz**



Product description:

This rugged AC/AC frequency converter uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. It is a mature design with a track record in numerous applications. The AC/DC input stage converts the input voltage to a DC voltage, which feeds the DC/AC inverter to generate the required AC output. The use of 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. Cooling is via base plate to a heat sinking surface and by natural convection. The use of components with established reliability results in high MTBF. The unit is manufactured at our plant under strict quality control.

Special Features: 400Hz input, conformal coating, terminal block cover

SPECIFICATIONS

Input Voltage

115Vac nominal, 400Hz
95-132Vac operating range
Input current: 9.5Arms max

Input Protection

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

Isolation

2250Vdc input to ground
2250Vdc input to output
2250Vdc output to chassis

Standards

Designed to meet EN60950-1 and related standards

EMI

EN 55022 Class A as a minimum

Output Voltage

115Vac/4.3Arms
60Hz continuous
Output is floating

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

± 5% from no load to full load

Load Crest Factor

Maximum 3.0 at 90% load

Output Noise

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

Output Overload Protection

Current limiting with short circuit protection. At approximately 600VA unit enter cycling (hiccup) mode. 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

Temperature Drift

0.05% per °C over operating temperature range

Cooling

Conduction/convection

Environmental Protection

Basic ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

110,000 hours @ 45°C

Indicators

LED not installed

Control Input

None

Alarm Output

None

Package / Dimensions (WxHxL)

FX: 152 x 67 x 357mm
(6" x 2.6" x 14")
Mounting holes are clear

Weight

2kg (4.4 lb)

Connections

12-pole barrier-type terminal block, 3/8" spacing. Snap-on cover included.

RoHS Compliance

Fully compliant

Warranty

Twelve months subject to application within good engineering practice

Terminal Block Pin-out

115VAC OUTPUT							115VAC INPUT				
L1	L2	NOT USED	GND	N	PH						
1	2	3	4	5	6	7	8	9	10	11	12



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