

Source Control Document.

Model: FCP1K-EM-F7WT-U1076

COSD: XXXX

**Summary description: 1000VA Industrial Quality Frequency Converter
230Vac to 115Vac/400Hz**

Customer Name: Onrion/USA

Customer Part Number: Same as above



Product description:

This rugged AC/AC frequency converter uses field proven, microprocessor controlled high frequency PWM technology FCP1000 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 bus 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 by built-in high quality fans. 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, 115V, 400Hz output

SPECIFICATIONS

Input Voltage

230Vac nominal, 47-63Hz
196-264Vac operating range
Input current: 6.2Arms max
Power factor meets EN61000-3-2

Input Protection

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

Isolation

2250Vdc input to chassis/output
2250Vdc output to chassis

Standards

Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950-1

EMI

EN55032 Class A with margins

Output Voltage

115Vac/8.7Arms continuous, 400Hz
1000VA
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

2 at 90% 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

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 1 A&B

Humidity

5 - 95% non-condensing

MTBF

120,000 hours @ 45°C (Fans excluded)
Demonstrated MTBF is significantly higher

Indicators

Green OUTPUT ON LED installed visible through the cooling slots

Control Input

None

Alarm Output

Not installed

Package/Dimensions (WxHxL)

F7W: 280 x 66 x 361mm
(11" x 2.6" x 14.2")
Mounting holes are clear

Weight

Approx. 4kg (9 lbs)

Connections

Input: 6-pole terminal block, 3/8" spacing
Output: 12-pole terminal block with 3/8" spacing

RoHS Compliance

Compliant

Warranty

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

230VAC INPUT					
GND	GND	N	N	PH	PH
⊥	⊥	~	~	~	~
1	2	3	4	5	6

OUTPUT: 115VAC/400Hz											
GND	NOT USED	L1	L1	L2	L2	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	GND
⊥		~	~	~	~						⊥
1	2	3	4	5	6	7	8	9	10	11	12

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