Source Control Document.

Model: FCP300-UA-FXT-T2233
COSD: XXXX
Summary description: 300VA Rugged Frequency Converter Universal AC with PFC to 115Vac/60Hz
Customer Name: ONRION/NJ
Customer Part Number: Same as above

Product description:

This rugged AC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. The AC/DC input stage boosts the input voltage to a higher 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 baseplate to a heatsinking 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: PFC input with universal range. Conformal coating

SPECIFICATIONS

Input Voltage
95-264Vac universal
47-420Hz
Input Current: 4A max
Power factor is min 0.97 at full load for the entire input range

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
4300Vdc input to output
8mm spacing
2250Vdc output to chassis

Standards
C22.2 No. 107.1 - 01,
UL 458, EN60950-1

EMI
EN 55022 Class A with margins

Output Voltage
115Vac / 2.6Arms / 60Hz
300VA continuous
Output is floating, either terminal can be grounded

Output Wave Form
Sinusoidal

Total Harmonic Distortion
Less than 5% at full load

Line/Load Regulation
Maximum ± 2% from no load to full load.

Load Crest Factor
Maximum 2 at 90% load

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

Efficiency
80% at full load

Operating Temperature Range
0^{o}C to +50°C

Temperature Drift
0.05% per °C over operating temperature range

Cooling
Conduction via base plate to customer heatsink or chassis and by natural convection

Environmental Protection
Basic ruggedizing
Conformal coating

Shock/Vibration
IEC 61373 Cat1 A&B

Humidity
5 - 95% non-condensing

MTBF
110 000 hours at 45°C
Demonstrated MTBF is significantly higher.

Indicators
None

Control Input
None

Alarm Output
Not installed

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

Weight
2.2 kg (5 lbs)

Connections
12-pole barrier type terminal block with 3/8" spacing

RoHS Compliance
Not required but accepted

Warranty
Two years subject to application within good engineering practice

Terminal Block Pin-out

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

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