250W, Rugged, AC/DC Industrial Power Supply OLC 59-FT Series

- Rugged industrial quality
- Field-proven design
- Single regulated and adjustable output
- Conduction/convection cooled
- Full electronic protection



The OLC 59 Series rugged, industrial quality AC/DC converter uses a field proven topology to generate 250W output power. It is a mature design with a track record in hundreds of applications. The series has large design headrooms and is rated for operation over a wide temperature range without derating. It is cooled by conduction via baseplate to a heatsinking surface and by natural convection. Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration, humidity, moisture, dust and insects. The use of components with established reliability results in a high demonstrated MTBF. The OLC 59 is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

115/230VAC ± 15% 47-420Hz Auto-ranging available Consult factory for other voltages

Input Protection

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

Isolation

2250VDC input to chassis 4300VDC input to output; 8mm spacing 500VDC output to chassis

Standards

Designed to meet EN60950 and related corresponding UL and CSA standards

EMI

EN55022 Class A as a minimum

Switching Frequency 55 KHz +/-3KHz

Hold-Up Time

Min. 10ms at full load for 5% drop in output voltage

Output Voltage/Current

12V/20A, 24V/10 or 48V/5A are standard Consult factory for other voltages

Redundancy Diode

None

Line/Load Regulation

 \pm 1% combined from zero load to full load

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple / Noise

Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage. (20MHz BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection. Thermal shutdown with automatic resetting

Output Over-voltage Protection

Second regulator loop.

Efficiency

Min. 83% at full load

Operating Temperature Range

0 to 50 °C for full specification installed on heat-sinking surface with good air flow

Temperature Drift

0.03% per °C over operating temperature range.

Cooling

Conduction to customer heatsink or chassis and natural convection

Environmental Protection

Basic ruggedizing Full ruggedizing and conformal coating as option

MTBF

160,000 hours @ 45 °C Demonstrated MTBF is significantly higher

Indicators

None

Control Input

None

Alarm Output

None on standard version

Package/Dimensions (W x H x L)

F1: 112.5 x 51 x 201 mm (4.4" x 2" x 7.9") including terminal block and flanges Mounting holes are clear

Weight

0.8kg (1.7lb)

Connections

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

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice.

