

## 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  $\pm$  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  $\pm$  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.

**Enhancements to these general specifications and customizing can be accommodated upon request. Specifications subject to change.**

*Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility.*



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