180W, Rugged, AC/DC Industrial Power Supply EOL 59 Series

- Rugged construction
- Industrial quality
- Single regulated and adjustable output
- 180W output power
- Full electronic protection
- Field-proven design
- Also available as plug-in module
- N+1 redundancy available
- Competitively priced



The EOL 59 Series AC/DC power supply uses a field proven high frequency push-pull topology to generate 180W output power. The EOL 59 is ruggedly constructed to ensure long operating life in demanding environments. The chassis-mount design features low component count and high efficiency. Cooling is by convection/conduction. The use of high quality components, large design headroom and rigorous quality control ensure outstanding reliability. The demonstrated MTBF exceeds 1,000,000 hours confirmed by a track record established in hundreds of applications. The EOL 59 is also available in Eurocard plug-in format.

SPECIFICATIONS

Input Voltage

115/230Vac +/- 15% 47 - 63Hz

Voltage selection by internal jumper

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 EN 60950 and corresponding UL and CSA standards

EMI

EN55022 Class A as a minimum

Switching Frequency

55 KHz +/-3KHz

Hold Up Time

Min. 5ms at full load for 5% drop of the output voltage

Output Voltage/Current

12V/16A; 24V/8A or 48V/4A are standard Consult factory for other voltages

Redundancy Diode

None. Available as option on customized designs

Line/Load Regulation

+/- 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

Less than 1% peak to peak or 0.2%rms of the output voltage (20MHZ BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)

Output Over-voltage Protection

Second regulator loop, completely stable and independent of main regulator loop

Efficienc

Output voltage dependent . Typically 80% at full load

Operating Temperature Range 0 to +50 °C for full specification

0 to+50 °C for full specification, Extended temp. range available

Temperature Drift

0.03% per °C over operating tempera range

Cooling

Convection and conduction cooling via a base-plate

Environmental Protection

Basic ruggedizing Full ruggedizing and conformal coating as option

MTRF

200,000 hours @ 45 °C (calculated) Demonstrated MTBF exceeds 1,000,000 hours at typical operating temperatures

Indicators

Only on plug-in version

Control Input

None

Alarm Output

None on standard version

Dimensions

Enclosed: F1: 112.5 x 50.8 x 201 mm (4.43" x 2" x 7.91") including terminal block and flanges Plug-in module:3Ux160mm x12HP

Weight

0.8kg (1.7lb) for enclosed version

Connections

F1 enclosed: 9-pole barrier type terminal block with 3/8" spacing Plug-in module: H15 DIN connector

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice.

