150W, Rugged, Industrial Power Supply with 5 Outputs OPF 84-FT Series

- Five fully regulated outputs
- Rugged, industrial quality
- Conduction/convection cooling, no fan
- Full electronic protection
- Field-proven design



The OPF 84 Series is a heavy-duty, AC/DC power supply with five outputs and utilizes a field-proven design to deliver 150W output power. Each output is highly regulated and individually current limited. A wide range of DC output combinations are possible. Cooling is by conduction via baseplate to a heatsinking surface and by natural convection. The unit features full electronic protection and low output noise. Low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. Additional ruggedizing and conformal coating are available for operation in extreme environments. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

115/230Vac ±15%; 47-63Hz Voltage selection by internal jumper Auto-ranging available Other voltages on request

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 standards Meets requirements for CE mark

EMI

EN 55022 Class A as a minimum

Switching Frequency 100KHz +/-10KHz

Hold Up Time

Minimum 5ms at full load for 5% drop of output voltage

Output Voltage/Current

Up to 24V for all outputs and up to 15A on the main output, up to 3A for second, third and fourth outputs and up to 1A for the fifth output.

Other outputs on request

Redundancy Diode

None

Line/Load Regulation

+/-1% combined

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)

Overload Protection

Rectangular current limiting with short circuit protection Thermal shutdown with automatic reset in case of insufficient airflow

Output Overvoltage Protection

Double regulator loop on main loop and transzorbs on other outputs

Efficiency

Typ.80% at full load, depending on output voltages

Operating Temperature

 $0\,^{\circ}$ C to $+50\,^{\circ}$ C for full specification with proper cooling Wider temperature ranges as option

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Conduction to customer heatsink or chassis and natural convection

Environmental Protection

Basic ruggedizing Optional heavy ruggedizing and conformal coating

MTBF

130,000 hours @ 45 °C Demonstrated MTBF is significantly higher.

Indicators

None Available as option

Alarm Outputs

None

Package/Dimensions (W x H x L)

F3: 132 x 62 x 300 mm (5.2" x 2.4" x 11.8") including terminals and mounting flanges Mounting holes are clear

Weight:

Approx. 2 kg (4.4 lbs)

Connections

Input/output: barrier-type terminal block, 3/8" spacing

RoHS Compliance

Fully compliant

Warranty:

Two years subject to application within good engineering practice



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