

Medical PSU FSP042-3K90M1

DESCRIPTION

This series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 30-48 watts of continuous output power at convection cooling. They operate at 90-264 VAC input voltage ithout the need of voltage ion, and are suited for medical, information technology and industrial applications. Approval to both EN60601-1 and EN60950-1 Safety Standards improves design-in time and reduces end equipment compliance

FEATURES

- Medical and ITE approvals Compact size 2" x4" x1.18" Single, dual and triple outputs
- Wide-range input 90-264 VAC
- Low earth leakage current Level B emissions
- RoHS compliant

WATTAGE

Wattage: 40W

DIMENSION

101.6mm(L) x 50.8mm(W) x **Dimension:**

30.0mm(H)

INPUT SPECIFICATION

Input Range: 90-264 Vdc **Input Frequency:** 47-63 Hz

Input Current: 0.9A(rms) for100VAC,

0.5A(rms) for240VAC

150 μA max. @ 264 VAC,63 Leakage Current:



SAFETY STANDARD APPAOVAL



OUTPUT SPECIFICATION

Ripple & Noise:

Maximum excursion of 4% better on all models recovering to 1% of final value within 500 us after a 25% step load change All outputs protected to short circuit conditions.

Over Current **Protection:**

Efficiency: 80-88 %

25A @ 115 VAC, or 50A @ 230 VAC, at 25"C cold start **Inrush Current:**

ENVIRONMENTAL **SPECIFICATION**

TEMP.Range: Operating Temperature:-10°C to

Storage Temperature: -40°C to + 85℃

400,000 hours at fullI load at 25"C

MTBF:

ambient, calculated per MIL-HDBK-

*Output Voltage and Current Rating

	+5V	-12V	+24V
Ripple-Noise(R-P) mV	100mV	120mV	240mV
Regulation Load %	±3%	±4%	±5%
Output Max.(A)	6A	0.3A	1A
Output Min.(A)	0.5A	0A	0.1A

NOTES

- Safety approvals are for PCB form only. To order unit with cover fitted, change suffix "A" to "C
- 2. The output voltages of a multiple output model may go outside of the stated tolerance when an output load current is out of stated limits. All models may be operated at no-load without damage.
- 3. Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 10 μ F tantalum capacitor in parallel with a 0.1 μ F ceramic capacitor across the

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