



SP50U

50 WATT, Universal Input Fully Enclosed Switching Power Supply



FEATURES

- ✓ **UNIVERSAL INPUT (AC85-264V)**
- ✓ **BUILT-IN OVERVOLTAGE PROTECTION**
- ✓ **OVERCURRENT PROTECTION**
- ✓ **LIGHTWEIGHT CONSTRUCTION**
- ✓ **METAL CHASSIS WITH COVER**
- ✓ **COMPACT, LOW-PROFILE PACKAGES**
- ✓ **3 YEAR WARRANTY**

SAFETIES / EMI

CE TUV  C  FCC-B
EN 55022-B
VCCI-II

ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load.

INPUT SPECIFICATIONS

Input Voltage.....	AC 85V-264V DC 110V-340V
Input Frequency.....	47 ~ 63 Hz
Input Current.....	0.52 ~ 1.2A
Inrush Current (100/230VAC cold start)	16 ~ 45A

OUTPUT SPECIFICATIONS

Output Voltage.....	See Chart
Output Adjustment.....	± 10%
Efficiency.....	70 ~ 79%
Over-Voltage Protection.....	Zener Limiter
Over-Current Protection.....	Automatic Recovery (105% min)
Ripple and Noise.....	150 mVp-p max.
Hold-Up Time.....	20-210 mS typ
Line/Load Regulation.....	See Chart
Rise Time.....	100 mS max.
Leakage Current (100/230VAC).....	Vin= 100V 0.5mA max. Vin= 230V 0.75mA max.

GENERAL SPECIFICATIONS

MTBF @ 50°C	>184,000 Hours
Isolation Voltage	
Primary to Secondary.....	3000VAC
Primary to Case.....	1500VAC.
Secondary to Case.....	500VAC.
Isolation Resistance.....	100-Mohms min.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°-60°C Derates linearly 2.5%/°C after 50°C
Cooling.....	Convection
Temperature Coefficient.....	0.02% / °C
Humidity.....	20-85% Rh (non-condensing)
Storage Temperature.....	-20°C -- 85°C
Shock Vibration.....	Shock: 20G (3 directions each 3 times) Vibration: 10 ~ 55Hz

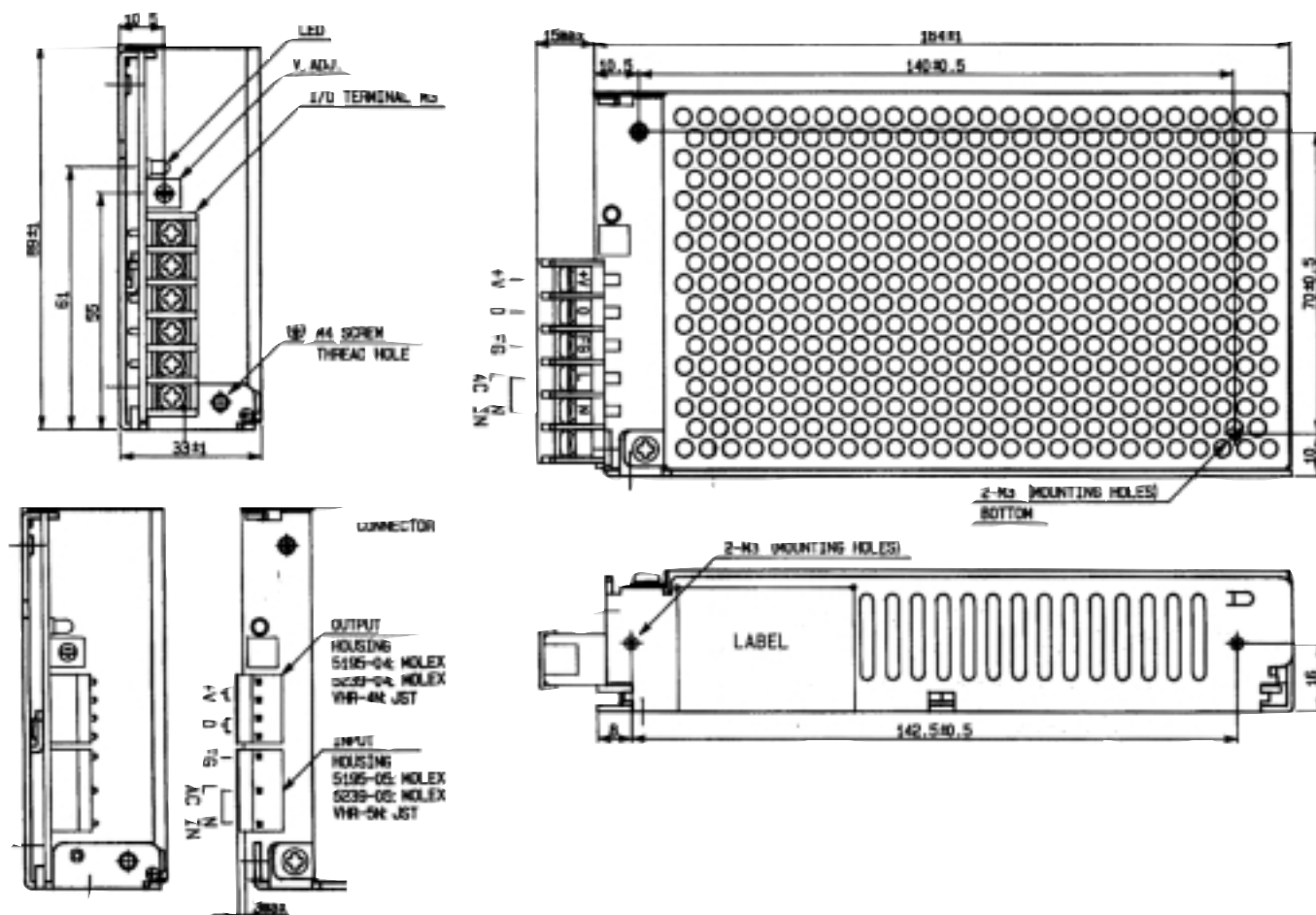
PHYSICAL SPECIFICATIONS

Metal Enclosed - Terminal Block

Series

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT		EFFICIENCY	LINE REGULATION	LOAD REGULATION
		@100V	@230V			
SP50U-03S	3.3 VDC	10.0 A	12.0 A	70%	20 mV max.	60 mV max.
SP50U-05S	5 VDC	10.0 A	12.0 A	72%	20 mV max.	60 mV max.
SP50U-12S	12 VDC	4.6 A	5.5 A	77%	20 mV max.	60 mV max.
SP50U-15S	15 VDC	3.7 A	4.4 A	77%	20 mV max.	60 mV max.
SP50U-24S	24 VDC	2.3 A	2.5 A	78%	30 mV max.	120 mV max.
SP50U-48S	48 VDC	1.2 A	1.4 A	78%	50 mV max.	180 mV max.

SP50U



NOTE:

All specifications typical and nominal / full load and 25°C unless otherwise noted.
Mounting screw length should not exceed 0.31 inches or 8 mm.
Avoid sustained operation in overload or dead short conditions.
Specifications subject to changes without notice.

- No. 6-32 mounting holes standard
- Dimensions in mm
- Terminal block or "pin" type connector available