

FEATURES

SP60G Series

60W Open Frame Power Supply

- Universal Ac input 90~264Vac.
- 4"×2" miniature size.
- Operation from -20°C~50°C full load.
- Protections: SCP/OVP/OLP.
- No load power consumption <0.75W.
- 105°C Main electrolytic capacitor



SPECIFICATION

Model		SP60G-033	SP60G-05	SP60G-12	SP60G-15	SP60G-24	SP60G-48
Output	Rated Voltage	3.3V	5V	12V	15V	24V	48V
	Current Range	0-10A	0-10A	0-5A	0-4A	0-2.5A	0-1.25A
	Rated Power	33W	50W	60W	60W	60W	60W
	Efficiency	76%	80%	83%	84%	85%	86%
	Voltage Adjustment Range	3.1-3.6V	4.5-5.5V	10-13V	13.5-18V	22-27V	44-52V
	Ripple & Noise (2)	80mV	80mV	120mV	150mV	200mV	300mV
	Voltage Tolerance (3)	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 1.0%	± 1.0%
	Setup Time	500ms/230VAC; 500ms/115VAC at full load					
	Rise Time (Max.)	<30ms at full load					
Input	Hold Time	60ms/230VAC, 13ms/115VAC at Full Load					
	Voltage	90V ~ 264VAC / 127 ~ 370VDC (Refer to derating curve)					
	Frequency	47Hz ~ 63Hz					
	Leakage Current	< 0.75mA					
	AC Current (Max.)	1.5A / 115VAC 1A / 230VAC					
Protection	Inrush Current (Typ.)	Cold Start 30A / 115 VAC 60A / 230VAC					
	Over Load	115-150% of rated power Hiccup mode, recovers automatically after fault condition is removed					
	Over Voltage	3.8-4.3V	5.75-6.5V	13.5-15V	16.9-18.75V	27-30V	54-60V
	Short Circuit	Latching mode, recycle AC power to restart Hiccup mode, recovers automatically after fault condition is removed					
Environmental Conditions	Operating Temperature	-20°C ~ 50°C (Refer to derating curve)					
	Operating Humidity	20 ~ 90% RH non-condensing					
	Storage Temperature, Humidity	-40 ~ +80°C , 10~95% R.H.					
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.					

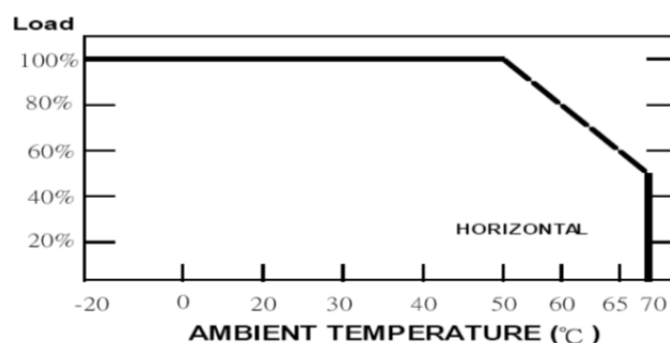
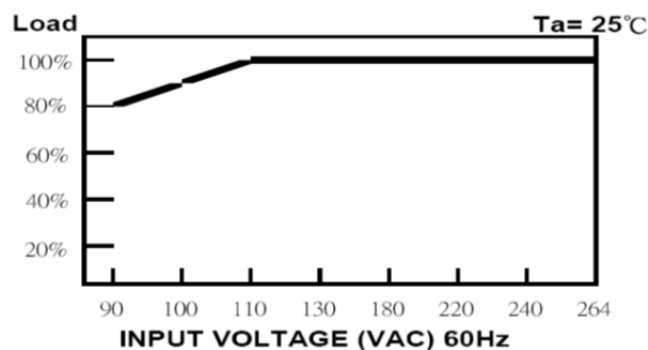
Model		SP60G-033	SP60G-05	SP60G-12	SP60G-15	SP60G-24	SP60G-48
Safety & EMC	Safety Certificates	UL/cUL60950 / TUV EN60950-1, Approved.					
	Withstand Voltage	I/P- O/P: 3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	Isolation Resistance	100M ohms / 500VDC at 25 °C : I/P-O/P, I/P-FG, O/P-FG					
	Radiated & Conducted EMI	EN55022 Class B, CISPR22 class B					
	Harmonic Current	EN61000-3-2,-3					
	EMS Immunity	EN61000-4-2,3,4,5,6,8,11 Light industry level, criteria A					
Others	MTBF	450K hours min. MIL-HDBK-217F(25°C)					
	Dimension (W*H*D)	101.6x50.8x30 mm [4x2x1.18 inches]					
	Packing	0.145KG/PC N.W: 15KG/Carton					

NOTES:

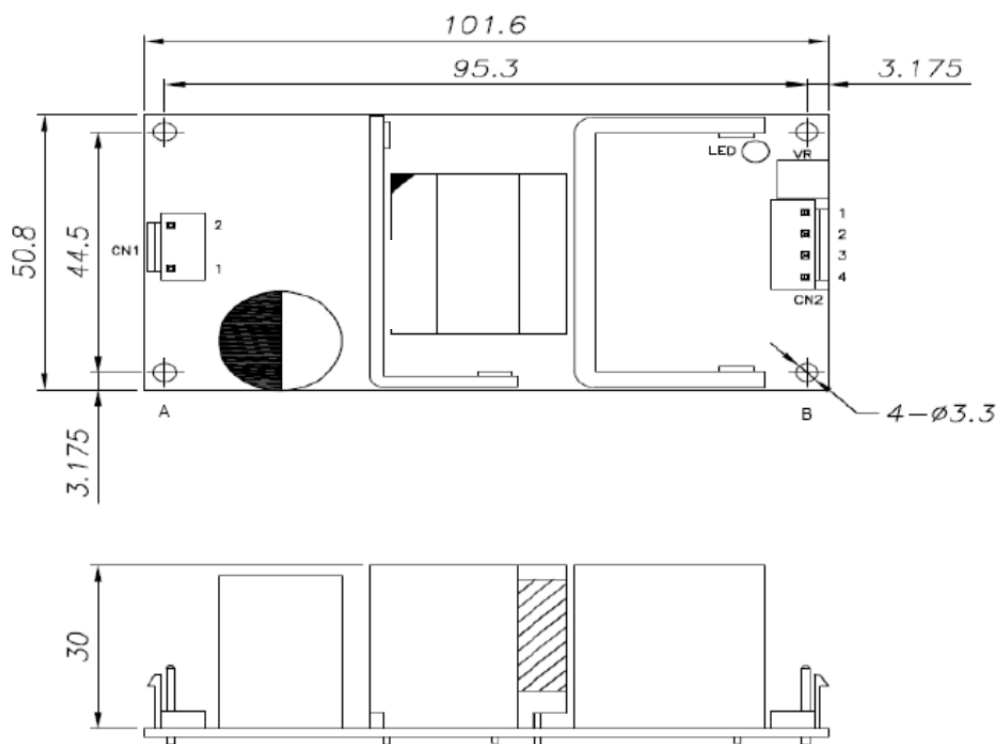
1. All parameters NOT specially described are measured at 230VAC input, rated load and a 25C ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final system. The final system must be retested to meet EMC directives.
5. Mounting Holes A, B must be grounded for EMI and safety purposes.
6. Specifications are subject to change without notice.
7. Autec is not responsible for issues arising from errors or omissions.



Derating Curves



Mechanical Drawing & Pin Configurations



AC Input Connector (CN1):WST M3-I39606S or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	WST P3-I39606 or equivalent	WST I39606PS-2 or equivalent
2	AC/L		

DC Output Connector (CN2):WST M4-I39606 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	+V	WST P4-I39606 or equivalent	WST I39606PS-2 or equivalent
3,4	-V		