

**FEATURES**

**SP45G Series**

**45W Open Frame Power Supply**

Universal AC input (90-264)  
 Overload, Short Circuit and Over Voltage Protections  
 Convection Cooled with Operating Temperatures of up to 70 C  
 High Efficiency Up To 86%  
 UL/cUL60950, TUV60950 and CE Certifications  
 105°C Long Life Electrolytic Capacitors  
 Compact 2x4x1.2 Size



**SPECIFICATION**

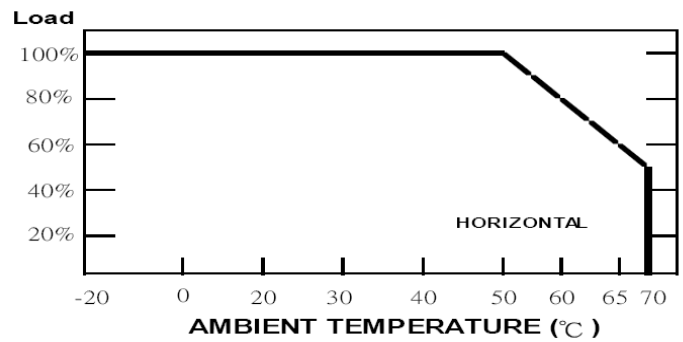
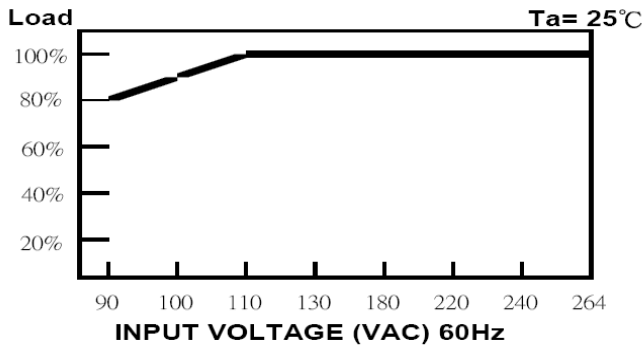
Model		SP45G-033	SP45G-05	SP45G-12	SP45G-15	SP45G-24	SP45G-48
<b>Output</b>	Rated Voltage	3.3V	5V	12V	15V	24V	48V
	Current Range	0-8A	0-8A	0-4A	0-3.2A	0-2A	0-1A
	Rated Power	26.5W	40W	48W	48W	48W	48W
	Efficiency	76%	80%	83%	84%	85%	86%
	Voltage Adjustment Range	3.1-3.6V	4.5-5.5V	10-13V	13.5-18V	22-27V	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					
	Hold Time	60ms/230VAC, 13ms/115VAC at Full Load					
<b>Input</b>	Voltage	90V ~ 264VAC / 127 ~ 370VDC (Refer to derating curve)					
	Frequency	47Hz ~ 63Hz					
	Leakage Current	< 0.75mA					
	AC Current (Max.)	1.5A / 115VAC 1A / 230VAC					
	Inrush Current (Typ.)	Cold Start 30A /115 VAC 65A / 230VAC					
<b>Protection</b>	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
		Latching mode, recycle AC power to restart					
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed					
<b>Environmental Conditions</b>	Operating Temperature	-20°C ~ 70°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.					

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<b>Safety &amp; EMC</b>	Safety Certificates	UL/cUL60950 / TUV EN60950 / CE / CB				
	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				
	<b>Others</b>	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				

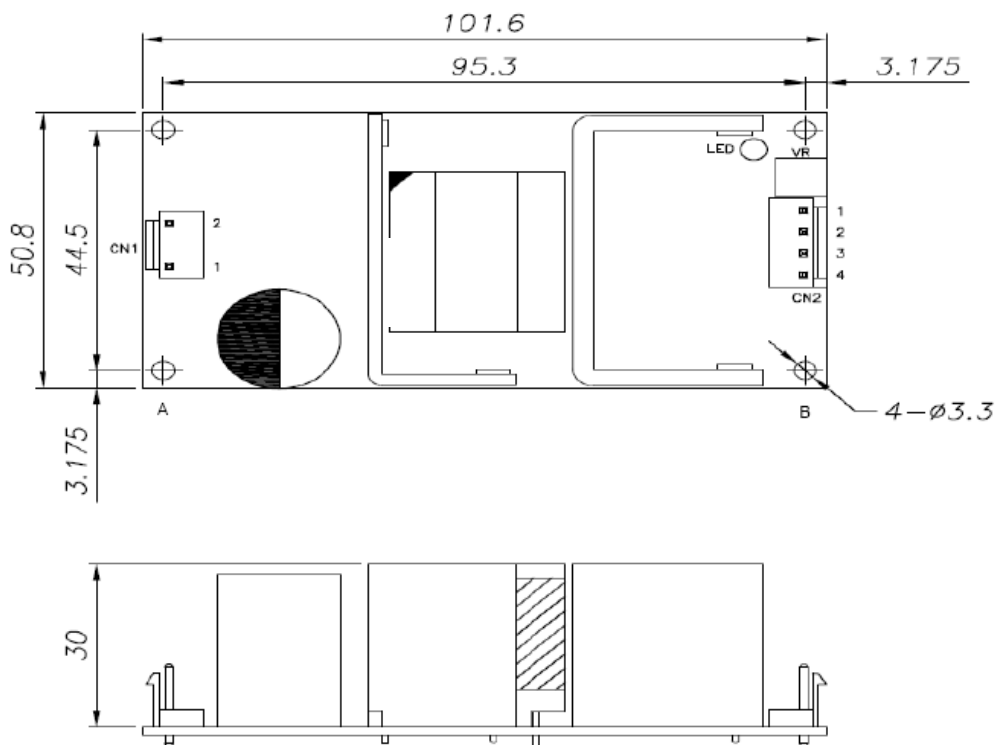
**NOTES:**

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		