



### **Features:**

- 1. Wide input range (90-264VAC)
- 2. Size 140\*68\*35.5mm
- 3. Protection type: short circuit/over load/over voltage/ over temperature
- 4. Operating temperature range: -30°C to +70°C
- 5. 3000V isolation voltage
- 6. Semi-potted fanless design
- 7. Active PFC function
- 8. 100% high temperature burn-in and function test
- 9. 3 years warranty









# **Selection Guide**

Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Voltage Adjustable Range (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
SMP150-S12		150	12	11.4-12.6	12.5	150	86
SMP150-S15	90-264VAC	150	15	14.3-15.8	10	150	86
SMP150-S24		150	24	22.8-25.2	6.25	150	87
SMP150-S36		150	36	34.2-37.8	4.16	150	88
SMP150-S48		150	48	45.6-50.4	3.125	150	89



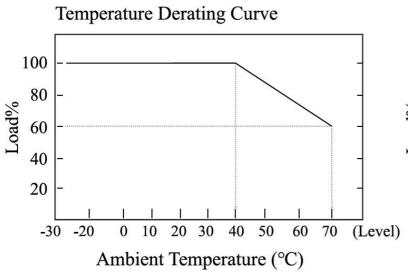
# **AC-DC Converter**

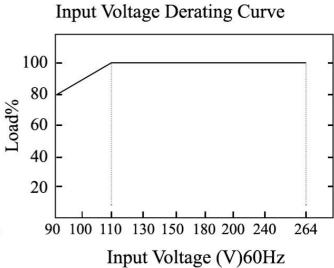
	Voltage Tolerance	±2.0%						
OUTPUT	Line Regulation	±0.5%						
	Load Regulation	±1.5%						
	Setup, Rise Time (Max.)	2500ms, 50ms/230VAC at full load						
	Hold Up Time (Min.)	20ms/230VAC at full load						
	Voltage Range 90-264VAC							
INPUT	Frequency	47-63Hz						
	Power Factor (Typ.)	PF≥0.94/230VAC PF≥0.98/115VAC at full load						
	Current (Typ.)	2A/115VAC 1A/230VAC						
	Inrush Current (Typ.)	Cold boot 60A/230VAC						
	Leakage Current (Typ.)	<1mA/240VAC						
	Over Load	≥110% load, recovers automatically after fault condition is removed						
PROTECTION	Short Circuit	Hiccup mode	, recovers auto	matically after	fault condition	is removed		
	Over Temperature	Turn off the output voltage, and it can automatically recover after the temperature drops						
		Turn off the output voltage						
	Over Voltage	Voltage	12VDC	15VDC	24VDC	36VDC	48VDC	
		Range	≤16VDC	≤20VDC	≤32VDC	≤48VDC	≤60VD0	
ENVIRONMENT	Working Temp.	-30°C to +70°C (Refer to "Derating curve")						
	Working Humidity	20-90%RH max						
	Storage Temp., Humidity	-40°C to +80°C						
	Temp. Coefficient	0.03%/ (0-50°C)						
	Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes						
	Safety Standards	EN62368, UL62368						
	Isolation Voltage	I/P-O/P: 3000VAC I/P-FG(CASE): 1500VAC O/P-FG(CASE): 500VAC						
SAFETY & EMC (NOTE	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms/500VDC 25°C 70% RH						
3.)	EMC Emission & Immunity	EN55011, EN55032 (CISPR32)						
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV						
	RF	IEC/EN 61000-4-3 level 4						
	EFT	IEC/EN 61000-4-4 level 4 4kV						
	Surge	IEC/EN 61000-4-5 level 4 2kV						
OTHERS	MTBF 150K hrs min. MIL-HDBK-217F (25°C)							
	Product Dimension	140*68*35.5mm (L*W*H)						
	Weight	348g						
	Package	24pcs/carton, G.W. 9KG/carton						
	Carton Size	arton Size 360*300*250mm						
NOTE	1. All parameters not specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.							
NOIL	2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1u & 47uF parallel capacitor.							
	The power supply is co the whole system complies w			unit, but the fir	nal equipment	still need to re	-confirm	



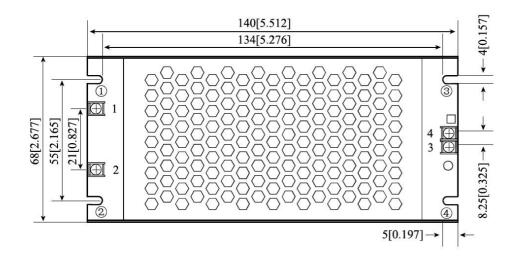
# **Series**

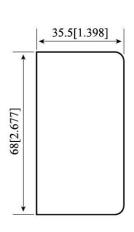
# **Derating Curve**

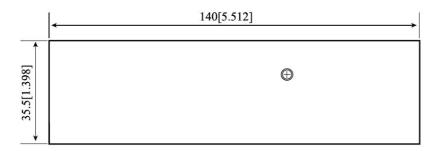




## **Dimensions & Function**







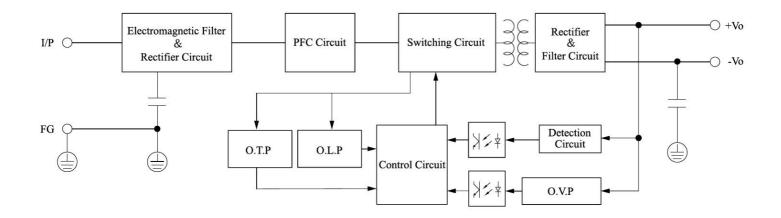
Pin	Function		
1	AC(L)		
2	AC(N)		
3	-Vo		
4	+Vo		

Installation location	Screw Specifications	L (Suggestion)	Torque (max)
1-4	M3	1.5mm	0.4N·m

NOTE: Unit size: mm[inch] Unmarked tolerances: ±0.5mm



#### **Product Schematic**



#### **Notes:**

- 1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
- 2. The maximum capacitive load is tested under the input voltage range and full load condition;
- 3. Unless otherwise stated, all indexes in this manual are measured at Ta=25°C, humidity <75%RH, nominal input voltage and rated output load;
- 4. All index testing methods in this manual are based on the enterprise standards of the company;
- 5. Our company can provide product customization, specific needs can directly contact our technical staff;
- 6.AMCHARD reserves the right to make changes to the product at any time without notice.

## **GUANGZHOU AMCHARD-POWER TECHNOLOGY CO., LTD.**