



Key features



- Universal input : 85-264 VAC, 50/60 Hz
- Low ripple and noise
- Over load and short circuit protection
- Optional of constant current mode of output
- Industrial/military design、 chassis type mounted;
- Lower power, RoSH , no-load loss <0.75W
- 100% test and work
- 3 Years product warranty

SPM (30) (36) (50) series --- a wiring module power supply offered by Zhongyiguang. The maximum output power is (30) (36) (50) W , high efficiency, low loss, and adopts the design of Europe and the United States first-line brand components. It has high reliability, small size, high power density, good anti-interference characteristics, and widely used in military industry, communications, industrial automation, industrial control and so on related high-end industry.

Electrical specifications

Model	Input voltage	Output Power(W)	Output voltage(V)	Output current(A)	Ripple(mv)	Efficiency (%)
SPM30-S05-EA	85 ~ 264VAC 90 ~ 370VDC	30	5	6.0	100	76
SPM30-S12-EA		30	12	2.5	100	82
SPM30-S24-EA		30	24	1.25	100	85
SPM30-S48-EA		30	48	0.625	100	86
SPM36-S05-EA	90 ~ 264VAC 100 ~ 370VDC	35	5	7.0	100	76
SPM36-S12-EA		36	12	3.0	100	82
SPM36-S24-EA		36	24	1.5	100	85
SPM36-S48-EA		36	48	0.75	100	86
SPM50-220S12-EA	220 (165~264)VAC	48	12	4	100	82
SPM50-220S24-EA		50	24	2.1	100	85
SPM50-220S48-EA		50	48	1.05	100	86
SPM50-220S50-EA		50	50	1.0	100	86

Description: due to the requirement of product naming standard, SPM50-220SXX-EA series products are originally called SPM50-SXX-EA

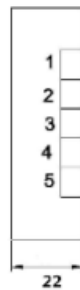
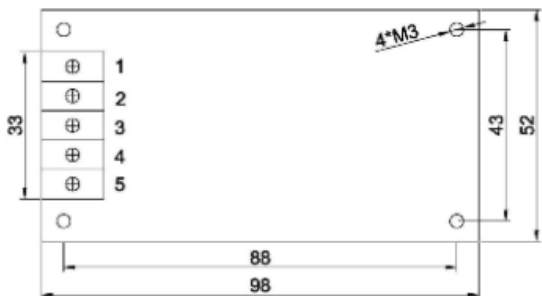
General features

Output	Output accuracy	±2.0%		
	Line regulation	±1.0%		
	Load regulation	±1.0%		
	Setup rise time(TYP)	100ms/230VAC	200ms/115VAC at full load	
	Output hold-up time(TYP)	40ms/230VAC	15ms/115VAC at full load	
Input	Input voltage range	SPM30-SXX-EA	85 ~ 264VAC	90 ~ 370VDC
		SPM36-SXX-EA	90 ~ 264VAC	100 ~ 370VDC
		SPM50-220SXX-EA	220(165~264)VAC	



	Input current (TYP)	SPM30-SXX-EA	0.55 A / 115VAC	0.28 A / 230VAC
		SPM36-SXX-EA	0.75 A / 115VAC	0.35 A / 230VAC
		SPM50-220SXX-EA	0.5 A / 230VAC	
	Input frequency	47 ~ 63Hz		
	Input current(TYP)	285m A / 115VAC	175m A / 230VAC	
	Inrush current(TYP)	Cool boot 30 A / 115 VAC	50A / 230 VAC	
	Recommended values for External Fuses	T2A / 250Vac (disconnected slowly)		
Leakage current(TYP)	< 1mA at 230VAC/50Hz			
Protection	Over current and short circuit protection, automatic recovery after troubleshooting.(hiccap mode)			
Working environment	Operating temperature	-40 ~ +70 °C (According to the output load derating)		
	Humidity	85% .RH max		
	Storage temperature	-40 ~ +85, 10 ~ 95% RH		
	Temperature coefficient	0.03%/ (0~ 50°C)		
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes		
Safety and EMC(Note:3)	Safety standards	Conform to UL1012,EN60950,UL60950		
	I/O-isolation voltage	I/P-O/P:2.5KVAC	I/P-FG:1.5KVAC	O/P-FG:0.5KVAC
	insulation resistance	I/P-O/P,I/P-FG,O/P-FG:> 100M Ohms/500VDC 25°C 70% RH		
	EMI / RFI conducted	Conform to EN55011, EN55022 (CISPR22)		
	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV		
	RS	IEC/EN 61000-4-3		
	EFT	IEC/EN 61000-4-4 level 4 4kV		
	Surge	IEC/EN 61000-4-5 level 4 2kV		
Others	MTBF	200K hrs min.	MIL-HDBK-217F(25)	
	Dimension	50.8*25.4*15.5mm,		
	Weight	215g		
	Packing box	360*300*250mm		
Notes	1. Unless otherwise indicated of the above data,Our products are tested in the condition of TA=25o°C, humidity <75%,230Vac nominal voltage input and rated load output.			
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.			
	3. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.			
	4. Mark " C " means that the product is stabilization of output current.For example: " SPM30-S12-EA-C " means Vo=12V, Io=2.5A, Io is stabilization.			

Dimension



Pin	Definition	
1	AC (L)	ACinput
2	AC (N)	ACinput
3	FG	Chassis ground
4	+Vo	Positive output
5	-Vo	Negative output

Product schematic diagram