

#### AC-DC Switching power supply 60W SD60 Series



### Key features

- Universal input: 90-265 VAC, 50/60 Hz
- Low ripple and noise
- Over load, short circuit and over temperature protection
- High efficiency, high density, up to 89%.
- Industrial design.
- Lower power, RoSH
- Ultra-thin design, height is only 42mm.
- 3 Years product warranty

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RoHS

SDM60 series --- is a guide rail type switching power supply offered by Zhongyiguang. The output power of this series module power supply is 60 W, with high efficiency, low loss, PCB adopts two-sided process design of material FR4, track installation. It features high reliability, high power density, convenient installation, good anti-interference ability and other characteristics, are widely used in industrial automation the industrial control, and other related industries.

Electronics specifications						
Model	Input voltage	Output power(W)	Output voltage(V)	Output current (A)	Ripple(mv)	Efficiency (%)
SDM60-S05	90-265Vac	50	5.0	10	150	79
SDM60-S12	90-265Vac	60	12	5	100	87
SDM60-S24	90-265Vac	60	24	2.50	100	88
SDM60-S36	90-265Vac	60	24	1.60	100	89
SDM60-S48	90-265Vac	60	48	1.25	100	89

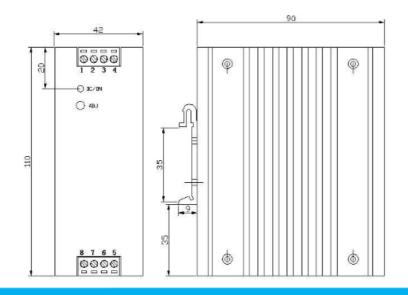
General characteristics				
Output	Output voltage accuracy	±5.0%		
	Source effect	±2.0%		
	Load effect	±1.0%		
	Starting time (TYP)	±1.0%		
	Output hold time (TYP)	10ms/230VAC at full load		
	Input voltage range	30ms/230VAC at full load		
Input	Input frequency range	90 ~ 265VAC		
	Input current (TYP)	47 ~ 63Hz		
	Output voltage accuracy	2.7 A / 115VAC 1.5 A / 230VAC		
	Source effect	Cold boot 40 A / 230 VAC		
	Leakage current (TYP)	<1mA at 230VAC/50Hz		
Protection	Over-voltage would be lock;			
	Over temperature protection, automatic recovery after troubleshooting;			
	Over-current protection, automatic recovery after troubleshooting.			
	Operating Temperature	$-40 \sim +70$ °C (According to the output load derating)		
	Humidity	85% .RH max		



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Work environment	Storage Temperature	-40 ~ +85, 10 ~ 95% RH			
	Temperature coefficient	0.03%/ (0~ 50℃)			
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes			
Safety and EMC (Note:3)	Safety Standard	Conform to UL60950,EN60950			
	I/O-Isolation voltage	I/P-O/P:3KVAC I/P-FG(CASE):1.5KVAC O/P-FG(CASE):0.5KVAC			
	Isolation 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) class B			
	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV (Note: See the application circuit for details)			
	RF	IEC/EN 61000-4-3 (Note: See the application circuit for details)			
	EFT	IEC/EN 61000-4-4 level 4 4kV (Note: See the application circuit for details)			
	SURGE	IEC/EN 61000-4-5 level 4 2kV			
	MTBF	≥100K hrs min. MIL-HDBK-217F(25)			
Others	Dimension	90X95X42mm (L*W*H)			
	Operating Temperature	300g			
	Humidity	360*300*250mm			
Notes	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature; The				
	efficiency is measured after 0.5h of the engine.				
	<ol> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor</li> </ol>				
	2. 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				

## **Dimension**



Pin	Function	
1	-V	
2	-V	
3	+V	
4	+V	
5	AC	
6	AC	
7	NC	
8	FG	

# **Block diagram**

