

## AC-DC Switching power supply 320W SMC320 Series



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**RoHS** 

### 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, fine quality and low price
- Industrial design
- Active power factor, PF≥0.95@230Vac
- Lower power, RoSH
- 3 Years product warranty

SMC320 series --- a ultra-thin switch switching power supply offered by Zhongyiguang. The maximum output power is 320 W, high efficiency, low loss, PCB material FR4 double-sided process design, with high reliability, high power density, good anti-jamming, widely used in industrial automation, industrial control and other related industries.

Electrical specifications									
Model	Input voltage	Output Power(W)	Output voltage(V)	Output current(A)	Ripple(mv)	Efficiency (%)			
SMC320-S05	90 ~ 265Vac	320	5	60	150	85			
SMC320-S12	90 ~ 265Vac	320	12	25	150	87			
SMC320-S15	90 ~ 265Vac	320	15	21.4	150	88			
SMC320-S24	90 ~ 265Vac	320	24	13.4	150	89			
SMC320-S36	90 ~ 265Vac	320	36	8.9	150	90			
SMC320-S48	90 ~ 265Vac	320	48	6.7	150	91			

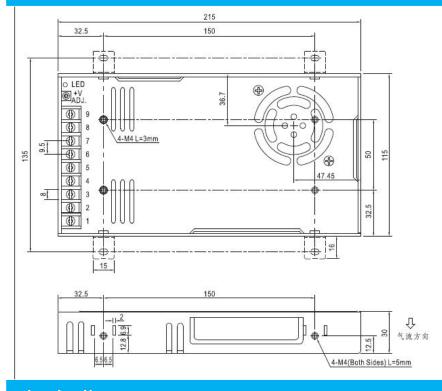
General features					
Output					
	Output accuracy	±2.0%			
	Line regulation	±1.0%			
	Load regulation	±1.0%			
	Setup rise time(TYP)	10ms/230VAC at full load			
	Output hold-up time(TYP)	30ms/230VAC at full load			
Input	Input voltage range	90 ~ 265VAC			
	Input frequency	47 ~ 63Hz			
	Input current(TYP)	2.7A /115VAC 1.5A / 230VAC			
	Inrush current(TYP)	Cold boot 40 A / 230 VAC			
	Leakage current(TYP)	<1mA at 230VAC/50Hz			
Protection	Over-current protection	110130%, automatic recovery after troubleshooting.			
	Over temperature protection	Automatic recovery after troubleshooting.			
	Over-voltage protection	Yes, the constant pressure method is less than 1.5*Vout			
Working environment	Operating temperature	$-40 \sim +70$ °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)			



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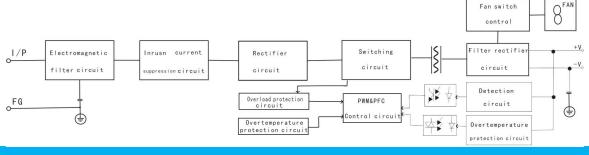
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes			
Safety and EMC(Note:3)	Safety standards	UL60950,EN60950			
	I/O-isolation voltage	I/P-O/P:3KVAC I/P-FG(CASE):1.5KVAC O/P-FG(CASE):0.5KVAC			
	insulation resistance	I/P-O/P,I/P-FG,O/P-FG:>100M Ohms/500VDC 25°C 70% RH			
	EMI / RFI conducted	EN55011, EN55022 (CISPR22) CLASS B			
	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV			
	RS	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	≥100K hrs min. MIL-HDBK-217F(25)			
	Dimension	215X115X30mm (L*W*H)			
Notes	1.All data except where noted, above is the TA = $25$ °C, humidity < $75\%$ , the nominal voltage $230$ vac input and output rated load measured; The efficiency is measured after $0.5$ h of the engine.				
	2.The ripple and the noise are in the case of the bandwidth of 20MHz, with 300mm double stranded wire, and the terminal parallel with a 0.1uf high frequency ceramic capacitor and a 100uF electrolytic capacitor.				
	3. The power supply is regarded as a component in the system, and the electromagnetic compatibility of the terminal equipment is required.				

### **Dimension**



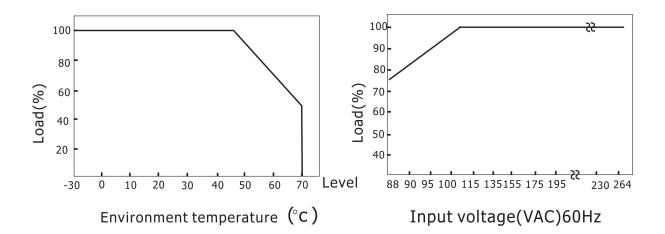
Pinumbern	Pin function	Pinumbern	Pin function
1	AC(L)	4-6	-V
2	AC(N)	7-9	+V
3	FG≟		

## Block diagram



### **Output derating**

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