ZHONGYIGUANG GUANGZHOU TECHNOLOGY LTD,.

AC-DC Switching Power Supply

60W SM60 Series

CE

RoHS

Key features

- Universal input:90-265 VAC, 50/60 Hz
- Low ripple and noise, small size
- Output overload protection ,short circuit protection
- High efficiency, high density, fine quality and low price
- Industrial product design
- Lower power, RoHS
- 100% test and work
- 3 years product warranty

SM60 series --- a small size metal mesh switching power supply offered by Zhongyiguang. The output power of this series module power supply is 60W, with low leakage current,which is only 0.5mA, small size (86*59*35mm) and isolated pressure up to 3kv,etc. The product is safe and reliable, which has a good EMC. EMC and safety specifications meet the IEC/EN61000-4, CISPR22/EN55022, UL60950/EN60950/EN60601 and other related standards. This series of products are widely used in smart home, high-end decorative lighting, medical, industrial, office and civil industries, such as applied to a relatively harsh environment electromagnetic compatibility must refer to the application circuit.

Electrical specifications

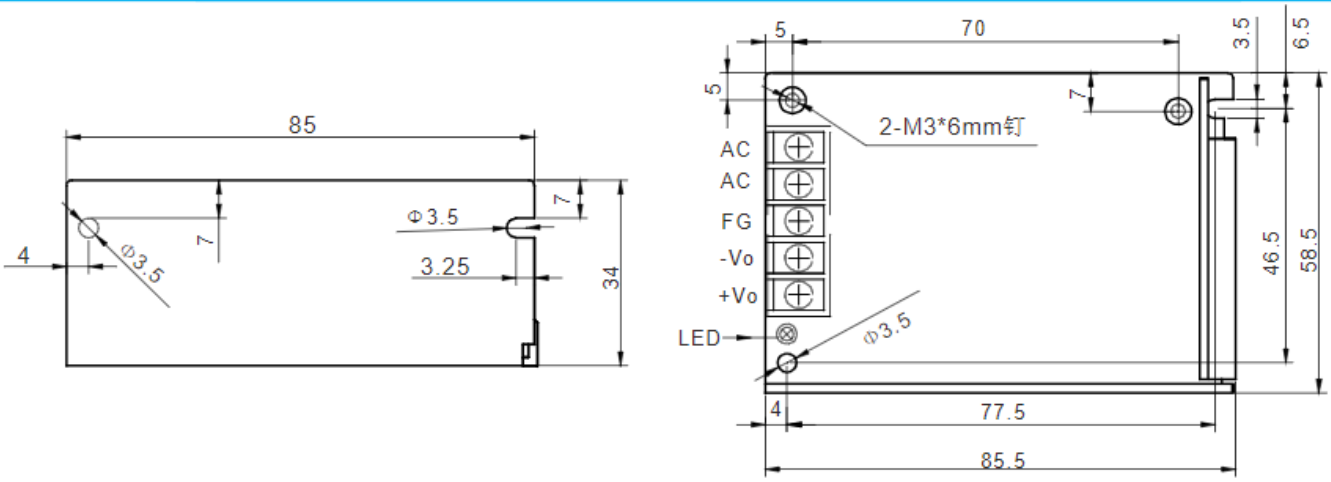
Model	Input voltage	Output Power(W)	Output voltage(V)	Output current(A)	Ripple(mv)	Efficiency (%)
SM60-S03	90 ~ 265VAC	60	3.3	9	80	74
SM60-S05	90 ~ 265VAC	60	5	9	100	80
SM60-S09	90 ~ 265VAC	60	9	6	100	83
SM60-S12	90 ~ 265VAC	60	12	5	100	85
SM60-S15	90 ~ 265VAC	60	15	4	100	86
SM60-S18	90 ~ 265VAC	60	18	3.3	100	86
SM60-S24	90 ~ 265VAC	60	24	2.5	100	87
SM60-S36	90 ~ 265VAC	60	36	1.66	100	88
SM60-S48	90 ~ 265VAC	60	48	1.2	100	88

General features

Output	Output voltage accuracy	±2.0% @100%load (SM60-S03,SM60-S05 Voltage accuracy is ±3%)
	Source effect	±1.0% @100%load
	Load effect	±1.0% @10-100%load (SM60-S03,SM60-S05Load affect is ±1.5%)
	Starting time (TYP)	10ms/230VAC @100%load
	Output hold time (TYP)	30ms/230VAC @100% load
Input	Input voltage range	90 ~ 265VAC (80-370VDC)
	Input frequency range	47 ~ 63Hz，440Hzmax
	Input current (TYP)	1.1A/115VAC 0.5 A / 230VAC
	Inrush current (TYP)	Cold boot 40 A / 220 VAC

	Leakage current(TYP)	<0.5mA at 230VAC/50Hz
Protection	Over-current protection: 110%--120% load, automatic recovery after troubleshooting; Over-temperature and short circuit protection, automatic recovery after troubleshooting	
Work environment	Operating Temperature	—40 ~ +70 ℃ (According to the output load derating)
	Humidity	10 ~ 85% RH
	Storage Temperature	-40 ~ +105,
	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	IEC60950,EN60950,UL60950
	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℃ 70% RH
	EMI / RFI conducted	EN55011, EN55022 (CISPR22) class B
	ESD	IEC/EN 61000-4-2 level 4 8kV/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	165K hrs min. MIL-HDBK-217F(25)
	Dimension	86*59*35mm (L*W*H)
Notes	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature	
	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	

Dimension



Block diagram