



Key features

- Universal input: 90-265 VAC, 50/60 Hz
- Low ripple and noise
- Output overload protection ,short circuit protection and over-temperature protection
- High efficiency, high density, up to 90%
- Industrial design
- Lower power, RoHS
- Ultra-thin design, height of only 30mm
- 3 years product warranty

SF50-CX series --- a switching power supply with three ways output offered by Zhongyiguang. The output power of this series module power supply is 50W, with high efficiency, low loss, PCB adopts double sided process design of material FR4, has the advantages of high reliability, small size, high power density, good anti-jamming and other characteristics, are widely used in industrial automation, industrial control etc. related industries.

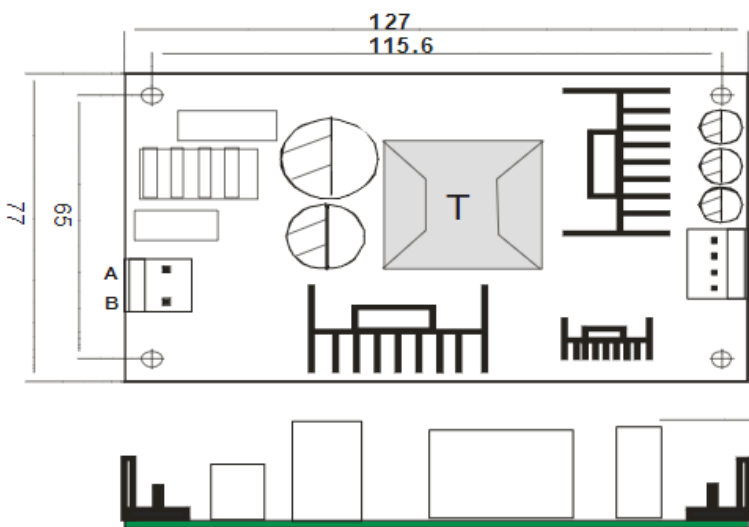
Electrical specifications

	Model	SF50-CA			SF50-CB		
		Vo1	Vo2	Vo3	Vo1	Vo2	Vo3
Output	Output voltage	12V	-12V	5.2V	15V	-15V	5.2V
	Output current	2A	0.5A	3A	2A	0.5A	3A
	Ripple and noise (TYP) (Note2)	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p
	Output voltage accuracy	±2.0%	±3.0%	±2.0%	±3.0%	±3.0%	±3.0%
	Efficiency (TYP)	78%			79%		
	Source effect	Vo: ±1.0%					
	Load effect	Vo: ±1.0%					
Input	Starting time (TYP)	10ms/230VAC			at full load		
	Output hold time (TYP)	50ms/230VAC			at full load		
	Input voltage range	90 ~ 265VAC					
	Nominal input	100--240VAC					
	Input frequency range	47 ~ 63Hz					
	Input current (TYP)	2.7A /115VAC 1.5A / 230VAC					
Protection	Inrush current (TYP)	Cold boot 40 A / 230 VAC					
	Leakage current (TYP)	< 1mA at 230VAC/50Hz					
	Over-current protection	120--150% loading, automatic recovery after troubleshooting					
	Over-voltage protection	Yes, over-voltage lock					
Work 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)	Cooling method	Natural cooling					
	Safety Standard	UL60950,EN60950					
	Security classification	CLASS I					
	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
	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
	Harmonic current	EN61000-3-2
Others	MTBF	≥100K hrs min. MIL-HDBK-217F(25)
	Dimension	127*77*30mm (L*W*H)
	Weight	220g
	Package	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 the heat engine 0.5h,	
	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



Pin definition	
A	AC(L)
B	AC(N)
1	GND
2	+Vo1
3	-Vo2
4	+Vo3

	Pin pitch	Receptacle
Pin(1-4)	3.96	Molex 5273-13pin
Pin(A-B)	7.92	Molex 5273-3pin

Block diagram

