

100 Watts Single Output IT-EMC-100PFC Series



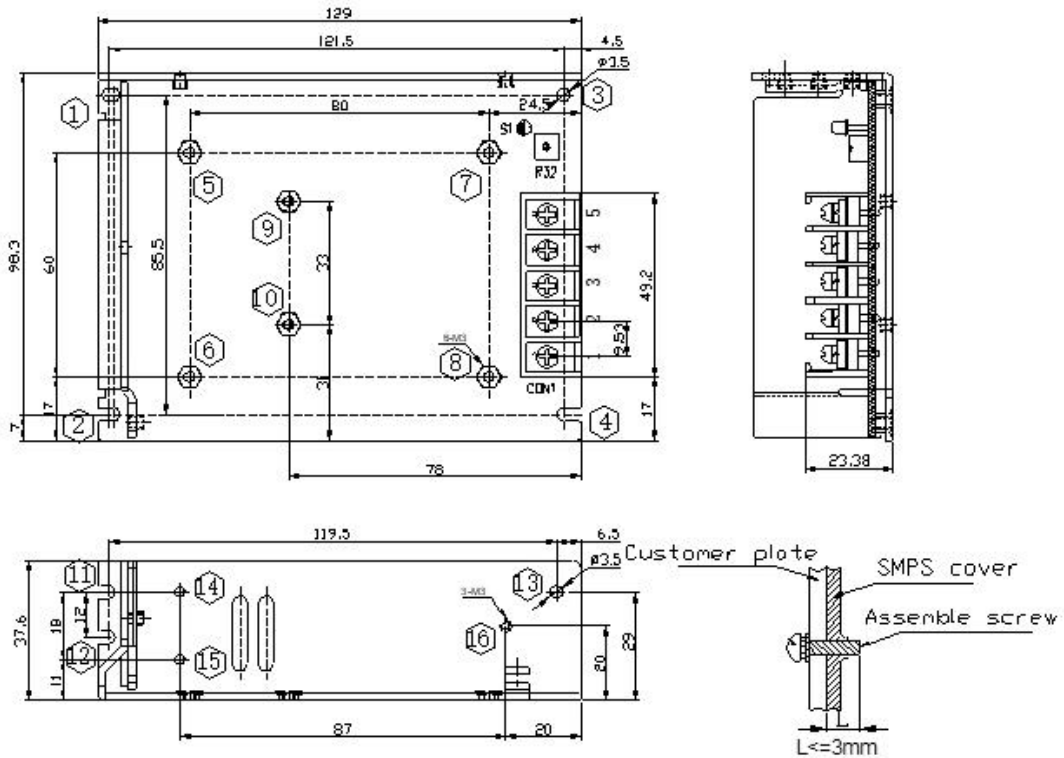
FEATURES:

- Universal AC input range
- Built-in Active PFC function, PF>0.93
- Miniature size, high power density, high efficiency, long life and high reliability
- Withstand 300VA surge input for 5 secs.
- Output protections: OLP/SCP/OPP
- Wide operating ambient temp (-20°C~60°C)
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- Easy assembling from top side
- PCB soldering side with conformal coating
- Suitable for critical applications
- 3 years warranty

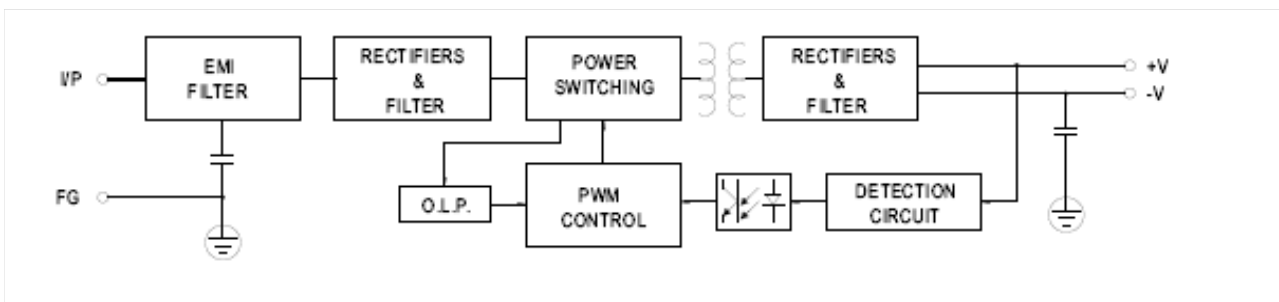
SPECIFICATION

MODEL		IT-EMC-100PFC-5	IT-EMC-100PFC-12	IT-EMC-100PFC-24	IT-EMC-100PFC-48	
OUTPUT	DC Output	5V	12V	24V	48V	
	Rated Current	20A	8.5A	4.2A	2.2A	
	Current Range	0~20A	0~8.5A	0~4.2A	0~2.2A	
	Ripple and Noise Note 2	0~70°C	≤150mV	≤150mV	≤150mV	≤150mV
		-20~0°C	≤150mV	≤150mV	≤150mV	≤200mV
	Voltage ADJ. Range	3.3V—5.5V	10~15V	21~27V	43.2~52.8V	
	Voltage Accuracy	±2.0%	±2.0%	±1.0%	±1.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	
	Load Regulation	±2.0%	±2.0%	±1.0%	±1.0%	
	Set-up Time	≤4S @115Vac, ≤2S @230Vac				
	Hold up Time	≥12mS (230Vac input, Full load)				
	Temperature	±0.03%/°C				
	Overshoot and Undershoot	<5.0%				
INPUT	Voltage Range	90Vac~264Vac				
	Frequency Range	47Hz~63Hz				
	Power factor (typical)	PF>0.98@115Vac, PF>0.93@230Vac				
	Efficiency (Typical) 230Vac input	≥84%	≥87%	≥88%	≥88%	
	AC Current (max.)	<1.5 A				
	Inrush Current (Typical)	<30@115Vac,<50A@230Vac Cold start				
	Leakage Current	Input—output: ≤0.25mA Input—PG: ≤3.5mA				
PROTECTION	Over Load	110%~150% of rated output current, hiccup mode, auto recovery				
	Over power	110%~150% of rated output current, hiccup mode, auto recovery				
	Short Circuit	Long-term mode, auto recovery				
ENVIRONMENT	Operating amb. Temp.	-20°C~60°C; 20%~90%RH No condensing (refer to the derating curve)				
	Storage Temp. & Hum.	-30°C~85°C; 10%~95%RH No condensing				
SAFETY & EMC Note 3	Safety Standards	UL60950-1 2 nd Ed; IEC 60950-1:2005(2 nd Ed) ;EN60950-1:2006				
	Withstand Voltage	Primary-Secondary: 3.0KVac; ≤10mA .Primary-PG: 1.5KVac; ≤10mA. Secondary-PG: 0.5KVDC; ≤10mA.				
	Isolation Resistance	100M ohms				
	EMS Emission	Compliance to EN55022 Class B				
	Harmonic Current	Compliance to EN61000-3-2, Class A				
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level				
OTHERS	MTBF	More than 200,000Hrs (25°C, Full load)				
	Dimension (L*W*H)	129×98.3×37.6mm				
	Packing	30PCS/CTN, 14.6KGS, 0.04CBM				
	Cooling method	Cooling by free air convection				
NOTE	1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25°C of ambient temperature. 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor.					

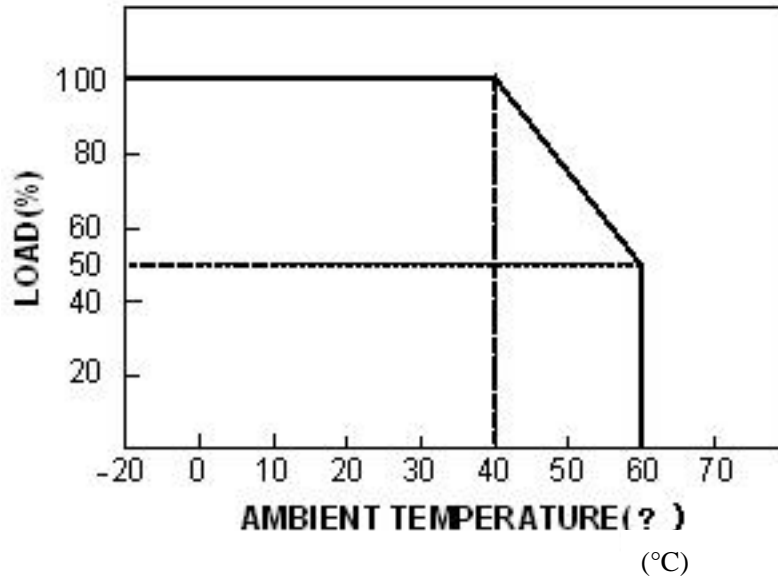
■ **Mechanical Specification** Unit:mm



■ **Block Diagram**



■ Derating Curve



All products, product specifications and data are subject to change without notice.