100Watts Single Output with Active PFC without Fan — PWF-100L Series

E232347

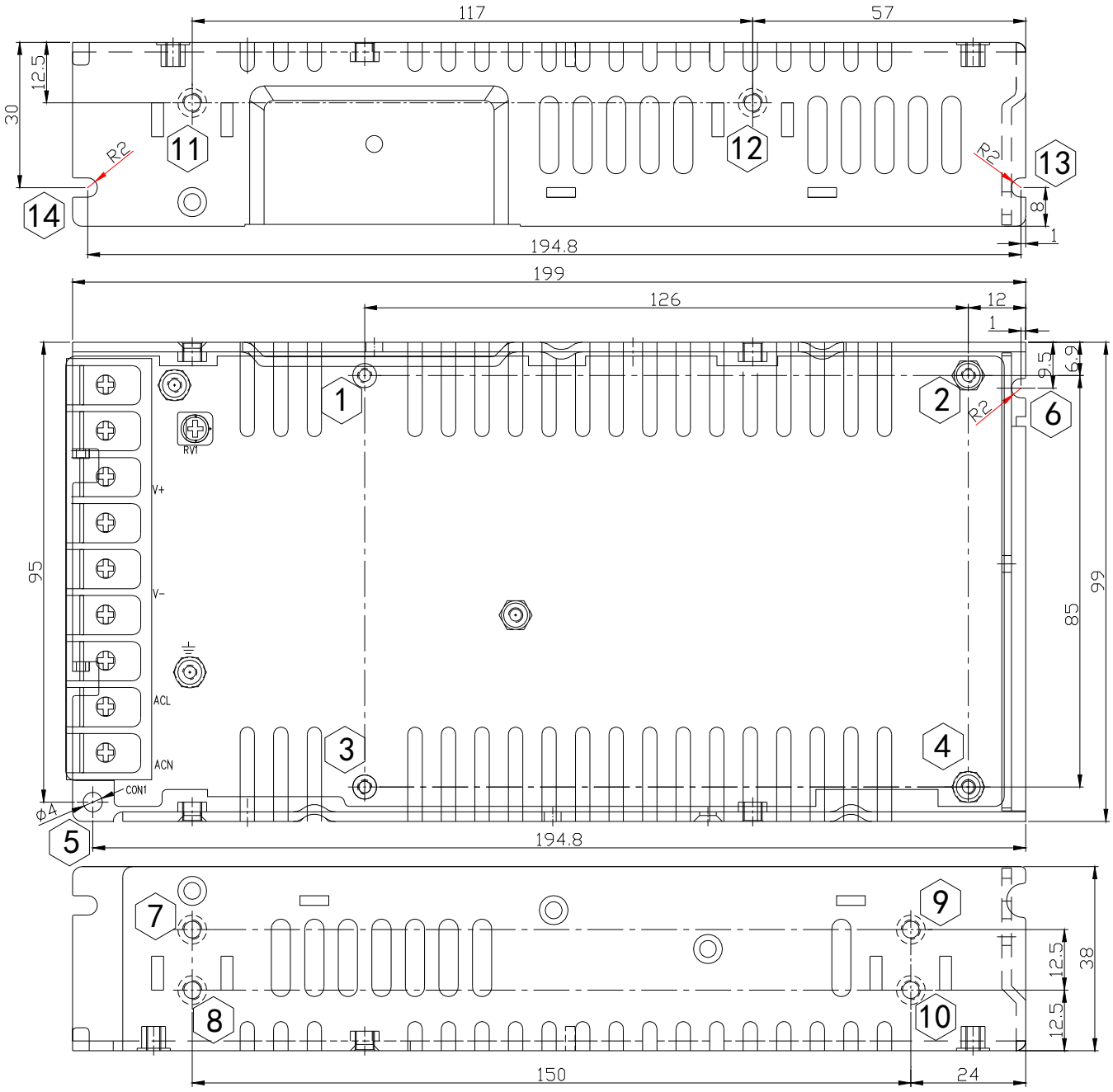
Features:

- Universal AC input range (85~264Vac)
- Built-in Active PFC function, PF>0.93
- Miniature size, high power density ,high efficiency, long life and high reliability
- Output protections: OLP/SCP/OPP
- Wide operating ambient temp (-20℃~65℃)
- Operating altitude up to 5000M
- 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

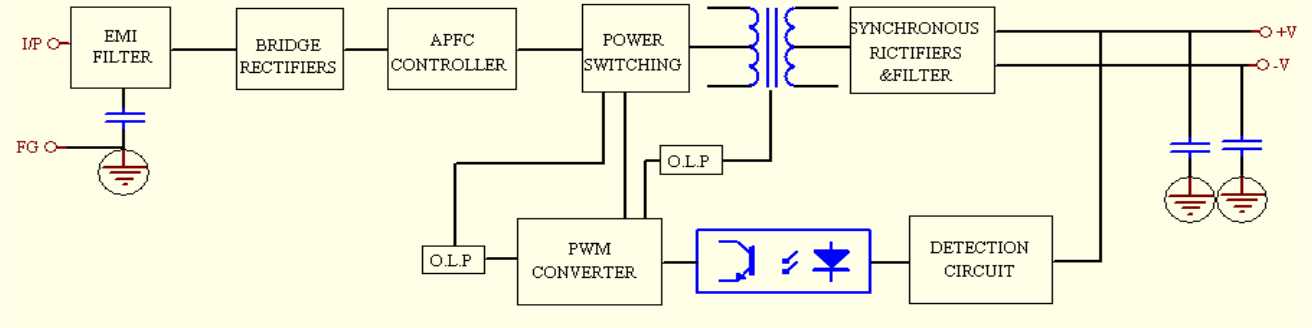
MODEL			PWF-100L-12	PWF-100L-24	PWF-100L-36	PWF-100L-48
OUTPUT	DC Output		12V	24V	36V	48V
	Rated Current		8.5A	4.2A	2.75A	2.15A
	Current Range Note 1		0~8.5A	0~4.2A	0~2.75A	0~2.15A
	Ripple and Noise Note 2	0~65℃	≤100mV	≤150mV	≤250mV	≤250mV
		-20~0℃	≤200mV	≤300mV	≤500mV	≤500mV
	Voltage ADJ. Range		±10% of rated output voltage			
	Voltage Accuracy		±2.0%	±1.0%	±1.0%	±1.0%
	Line Regulation		±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation		±0.5%	±0.5%	±1.0%	±0.5%
	Set-up Time		≤2S (230Vac input, full load)			
	Hold up Time		≥20mS (230Vac input, Full load)			
	Temperature Coefficient		±0.03%/℃			
	Overshoot and Undershoot		<5.0%			
INPUT	Voltage Range		85Vac~264Vac			
	Frequency Range		47Hz~63Hz			
	Power factor (typical)		PF＞0.93@230Vac			
	Efficiency (Typical) 230Vac input		≥85%	≥86%	≥86%	≥87%
	Efficiency (Typical) 120Vac input		≥83%	≥83%	≥83%	≥84%
	AC Current (max.)		1.7A/115Vac 0.8A/230Vac			
	Inrush Current (Typical)		<50A@230Vac Cold start			
	Leakage Current		Input—output: ≤0.25mA Input—PG: ≤3.5mA			
PROTECTION	Over Load		105%~200% of rated output current, hiccup mode, auto recovery			
	Over power		105%~200% of rated output current, hiccup mode, auto recovery			
	Short Circuit		Long-term mode, auto recovery			
ENVIRONMENT	Operating amb. Temp. & Hum.		-20℃~65℃; 20%~90%RH No condensing (refer to the derating curve)			
	Storage Temp. & Hum.		-20℃~85℃; 10%~95%RH No condensing			
SAFETY &EMC Note 3	Safety Standards		UL60950-1 2nd Ed; IEC 60950-1:2005(2nd 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, EN55024, FCC PART 15 CLASS B			
	Harmonic Current		Compliance to EN61000-3-2, Class D			
	EMC Immunity		Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level			
OTHERS	MTBF (MIL-HDBK-217F)		More than 200,000Hrs (25℃, Full load)			
	Dimension (L*W*H)		199×99×38mm			
	Packing		20PCS/CTN, 14.5KGS, 0.04CBM			
	Cooling method		Cooling by free air convection			
NOTE	1. All parameters NOT specially mentioned are measured at rated input, rated load and 25℃ 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. 3. The power supply is considered as a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies" on http://www.powerld.com.cn					

■ Mechanical Specification Unit: mm



1 — 4	M3	2.5mm	6.5Kgf.cm (max)
5 — 6	M3	4mm	6.5Kgf.cm (max)
7 — 10 11 — 12	M3	4mm	6.5Kgf.cm (max)
13 — 14	M4	4mm	12Kgf.cm (max)

■ Block Diagram



■ Derating Curve