500Watts Single Output With Active PFC PDF-500L-24

E232347

Features:

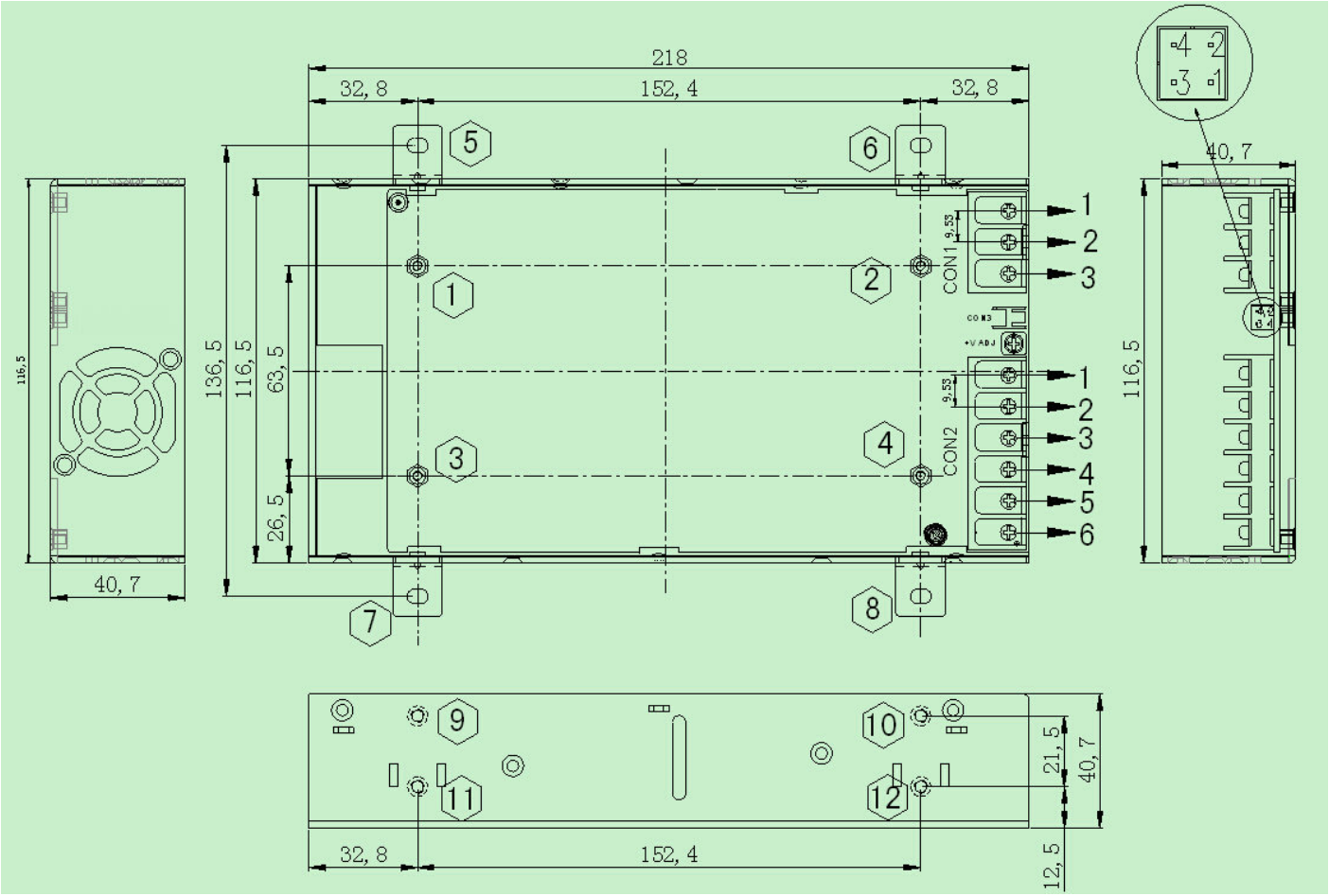
- Universal AC input(90~264Vac)
- Built-in active PFC function, PF>0.95
- High efficiency, long life and high reliability
- Output protection: OLP/OVP/OTP/SCP
- Wide operating ambient temperature (-30℃~70℃)
- 150%(750W) peak load capacity
- Constant current output
- Build in remote ON-OFF control
- 1 U low profile,40.7mm
- High efficiency up to 92%
- PCB soldering side with conformal coating
- Forces air cooling by DC Fan
- 3 years warranty

SPECIFICATION

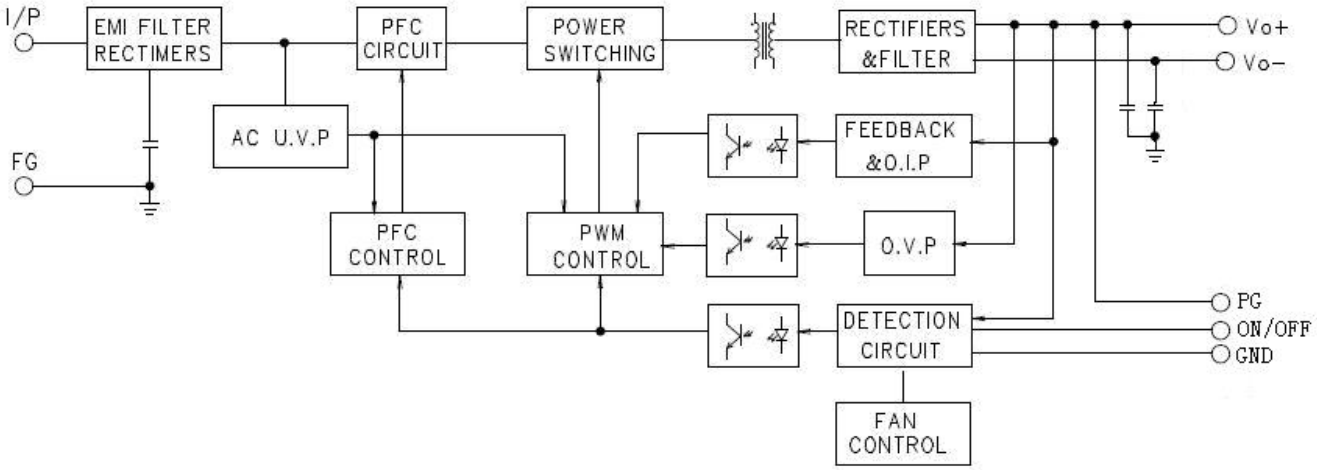
MODEL			PDF-500L-24
OUTPUT	DC Output		24V
	Rated Current		21A
	Ripple and Noise Note 2	0-70℃	≤240mV
		-30℃	≤480mV
	Voltage ADJ. Range		23.5~26.5V
	Voltage Accuracy		±3%
	Line Regulation		±1%
	Load Regulation		±2%
	Set-up Time		≤3S (230Vac input, Full load)
	Hold up Time		≥10mS /(230Vac input, Full load)
	Temperature Coefficient		±0.03%/℃
	Overshoot and Undershoot		<5.0%
INPUT	Voltage Range		90Vac~264Vac
	Frequency Range		47Hz--63Hz
	Power Factor(Typical)		PF＞0.98/115VAC PF＞0.95/230VAC
	Efficiency (Typical)		≥92% at 230Vac,full load
	AC Current (max.)		<8A
	Inrush Current (Typical)		<20A@115Vac ; <40A@230Vac Cold start
	Leakage Current		Input—output: ≤0.1mA Input—PG: ≤0.75mA
	Standby power consumption		<1.5W
PROTECTION	Over Load		≥25A, ≤31.2A,Constant current limiting for some time(31.2A, last ≥3S) then PS stop working for 7S,after 7S,if the load <=rated current, PS will work normally, auto recovery
	Over Voltage		29~34V, Constant voltage, auto recovery
	Over Temperture		95℃±5℃(detect on thermal protector temperature);shut down,auto recovery after the temperature goes down to 50℃
	Short Circuit		Long-term mode, constant current, auto recovery
ENVIRONMENT	Operating amb. Temp. & Hum.		-30℃~70℃; 20%~90%RH No condensing (refer to derating curve)
	Storage Temp. & Hum.		-40℃~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		10M ohms
	EMI Conduction&Radiation		Compliance to EN55022, FCC PART 15 CLASS B
	Harmonic Current		Compliance to EN61000-3-2, class D
	EMS 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)
	Remote control		Pls refer to below detailed description
	PG signal		POWER GOOD warning signal, normal: 5±0.3V; abnormal: 0-0.8V

	Dimension (L*W*H)	218*116.5*40.7mm
	Packing	6PCS/CTN, 8.0KGS, 0.04CBM
	Cooling method	Fored air cooling(Built-in DC Fan, controlled by temperature and load)
		Fan working: temperature controller up to 60±10℃ or Output Current >10±1A Fan stop working: temperature controller down to 40±10℃ or Output Current<9±1A
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 & 47uF 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.	

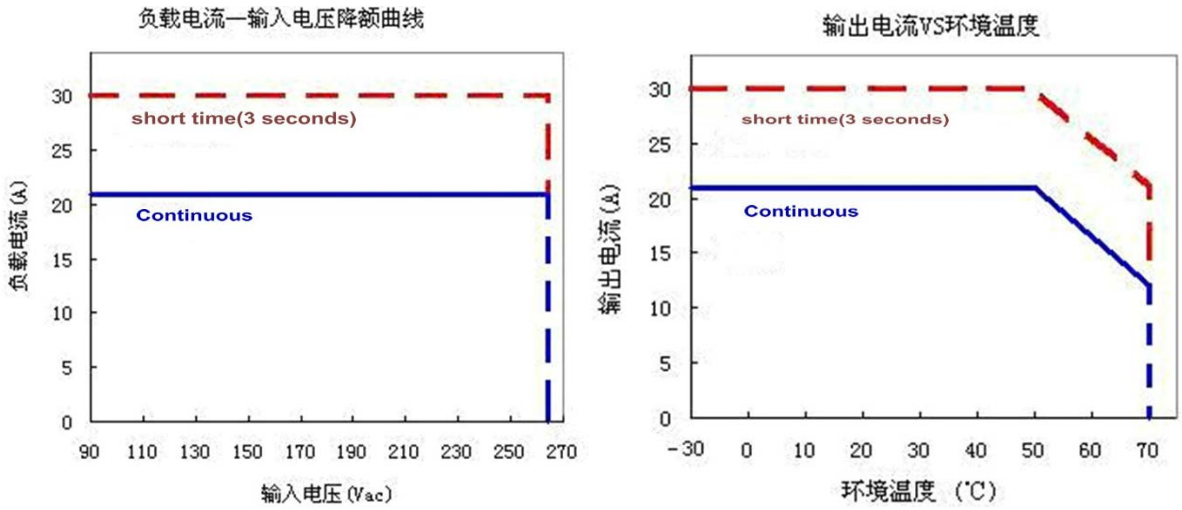
■ Mechanical Specification Unit:mm Tolerance:+1mm



■ Block Diagram



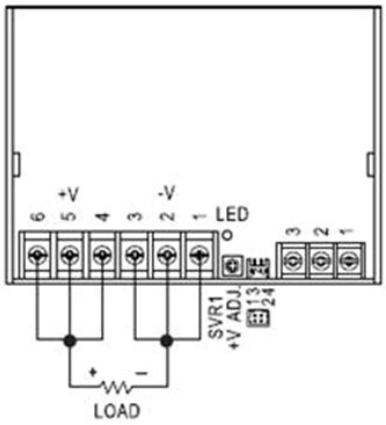
■ Derating Curve



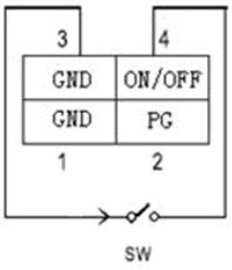
■ PG and remote function

Pin No.	Function	Description
1	GND	POWER GOOD warning signal GND
2	PG	POWER GOOD warning signal(Synchronization with output voltage) ,PS normal: 5±0.3 V, abnormal: 0-0.8V
3	GND	ON/OFF remote GND
4	ON/OFF	Two methods to realize: 1. A switch between Pin3 and Pin4, pls see pic1. 2. Power source between Pin3 and Pin4, pls see pic2.

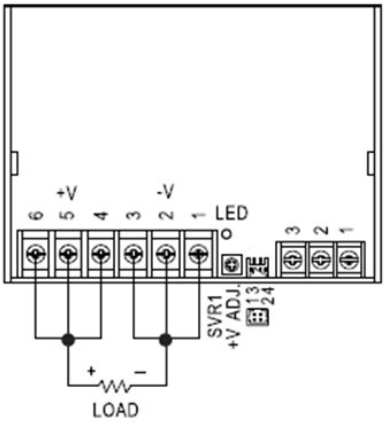
Pic 1:



Between Pin3 and Pin4	Status
SW Close	On
SW Open	Off



Pic 2:



Between Pin3 and Pin4	Status
Power Source (0~0.8V)	On
Power Source (4~10V)	Off