新星 POWERLD®

600Watts Single Output With Active PFC PDF-600-C Series

E232347

Features:

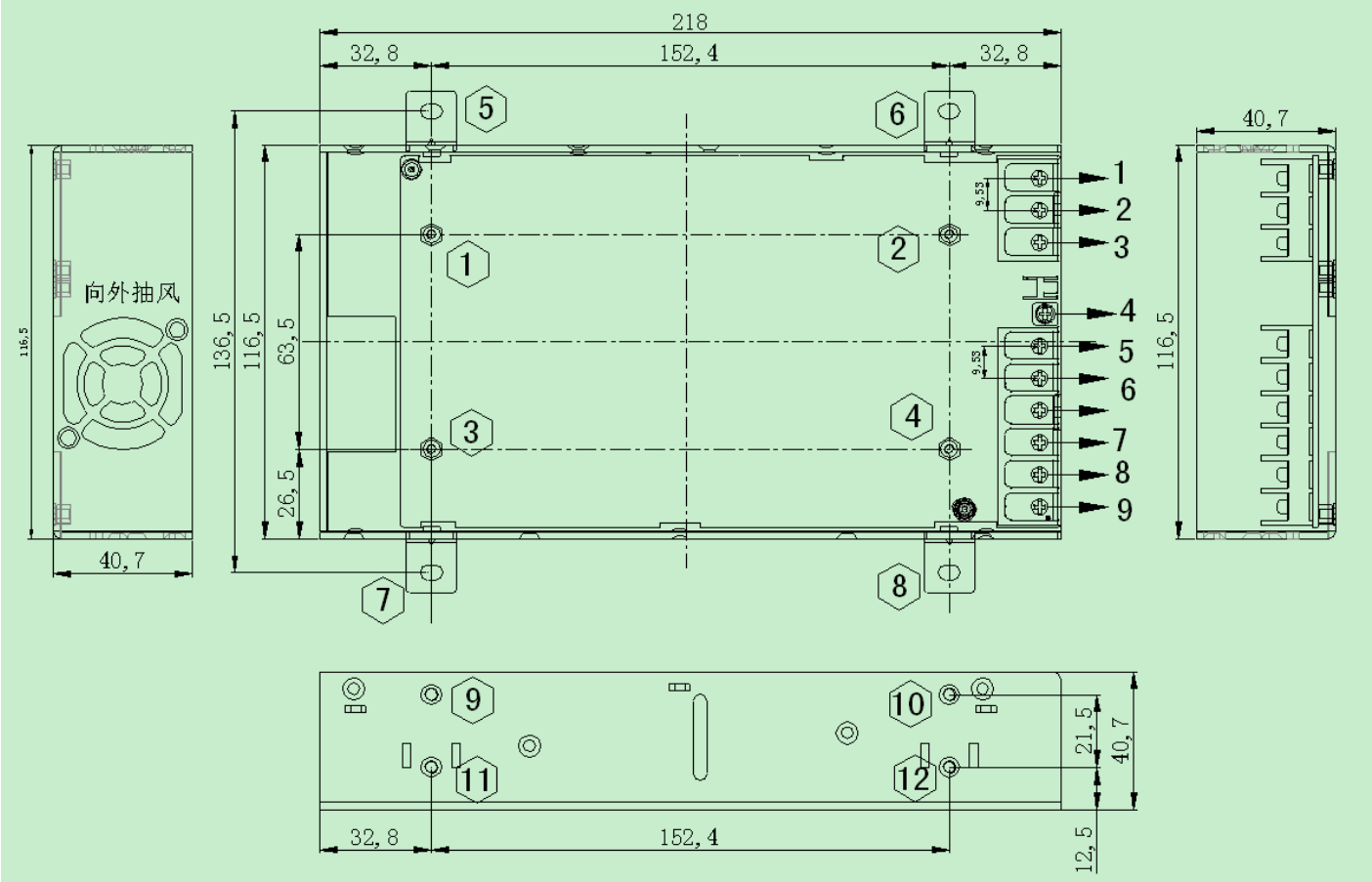
- Universal AC input(90~264Vac)
- Built-in active PFC function, PF>0.95
- High efficiency, long life and high reliability
- High efficiency up to 93.8%
- Output protection: OLP/OVP/OTP/SCP
- Wide operating ambient temperature (-20℃~70℃)
- Altitude up to 5000m
- PCB soldering side with conformal coating
- 1 U low profile,40.7mm
- 3 years warranty

SPECIFICATION

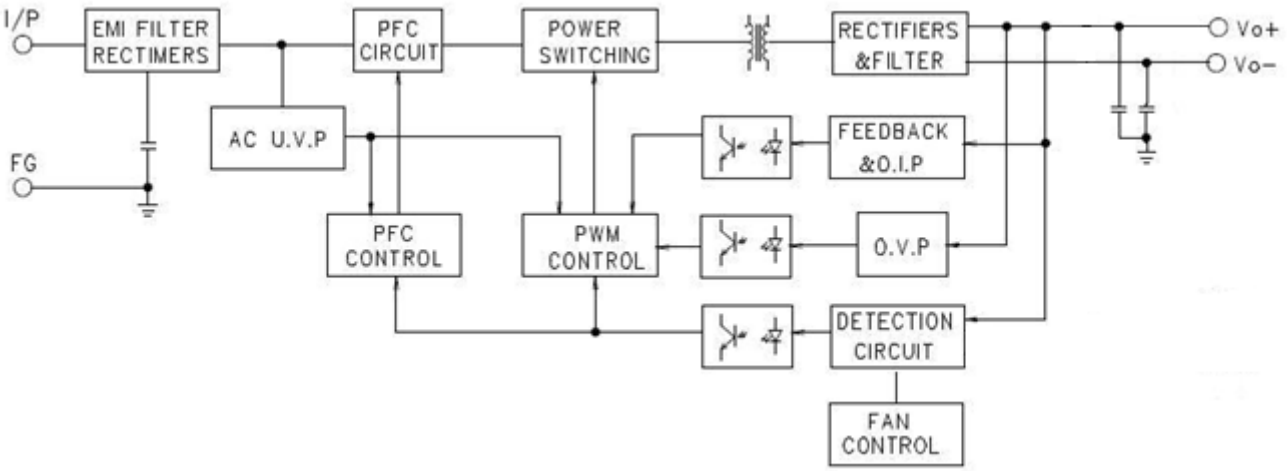
MODEL			PDF-600-C12	PDF-600-C24	PDF-600-C48
OUTPUT	DC Output		12V	24V	48V
	Rated Current (90~175Vac)		35A	20A	10A
	Rated Current (176~264Vac)		50A	25A	12.5A
	Ripple and Noise	0-70℃	≤120mV	≤150mV	≤480mV
	Note 2	-20-0℃	≤240mV	≤240mV	≤480mV
	Voltage ADJ. Range		11.8~13.2V	23.4~26.4V	47.5~52.8V
	Voltage Accuracy		±3%	±2%	
	Line Regulation		±1%	±0.5%	
	Load Regulation		±2%	±1.0%	
	Set-up Time		≤2S (220Vac input, Full load)	≤2.5S/110Vac ≤1.5S/220Vac , full load	
	Hold up Time		≥10mS /(220Vac 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＞0.95/220Vac, full load	＞0.98/110Vac ＞0.95/220Vac full load	
	Efficiency (Typical) @220Vac		90%	91.8%	93.8%
	AC Current (max.)		<5A	<6A	
	Inrush Current (Typical)		<40A@220Vac Cold start	＜15A/110Vac ＜30A/220Vac cold start	
	Leakage Current		Input—output: ≤0.25mA Input—PG: ≤3.5mA (264Vac, 63Hz)		
	Standby power consumption		<5W		
PROTECTION	Over Load		52.5~65A	26.25~32.5A	
			Protection type: 12V: Intermittent working, working time>0.1s, recovery time >2s 24V / 48V: Hiccup mode, auto recovery		
	Over Voltage		13.6~16V,	28~32V	54~60V
			Protection type: Constant voltage, auto recovery		
	Over Temperture		95℃±5℃(detect on thermal protector on PFC mosfet);shut down,auto recovery after the temperature goes down to 40℃		
	Short Circuit		Long-term mode, constant current, auto recovery		
ENVIRONMENT	Operating amb. Temp. & Hum.		-20℃~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)		
	Dimension (L*W*H)		218*116.5*40.7mm		
	Packing		6PCS/CTN, 8.0KGS, 0.04CBM		

	Cooling method	12V: Fan working: temperature controller up to 55±10℃ or Output Current >17-22A Fan stop working: temperature controller down to 40±10℃ or Output Current<15-20A 24V /48V: Fan working: temperature controller up to 55±10℃ or Output Current > 40%~60% of rated current Fan stop working: temperature controller down to 40±10℃ or Output Current<30%~50% of rated current
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

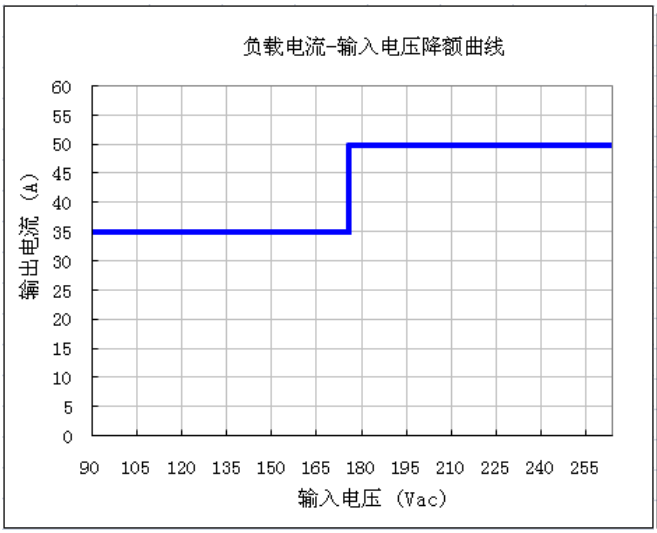


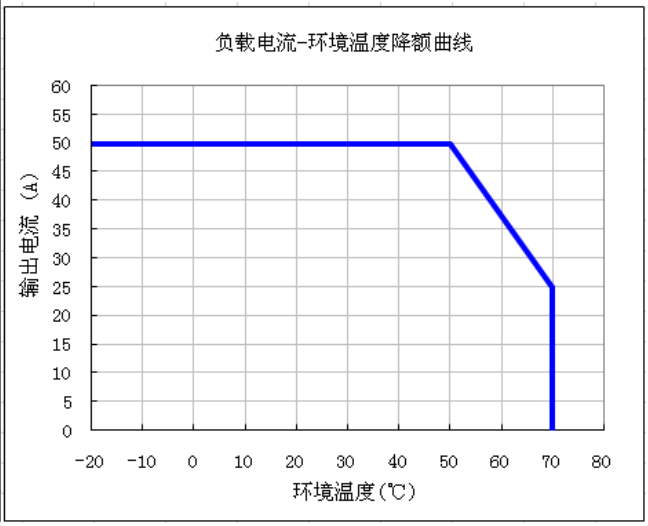
■ Block Diagram



■ Derating Curve

PDF-600-C12





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