HDP-600 Series

600 Watt Embedded Power Supply

Features

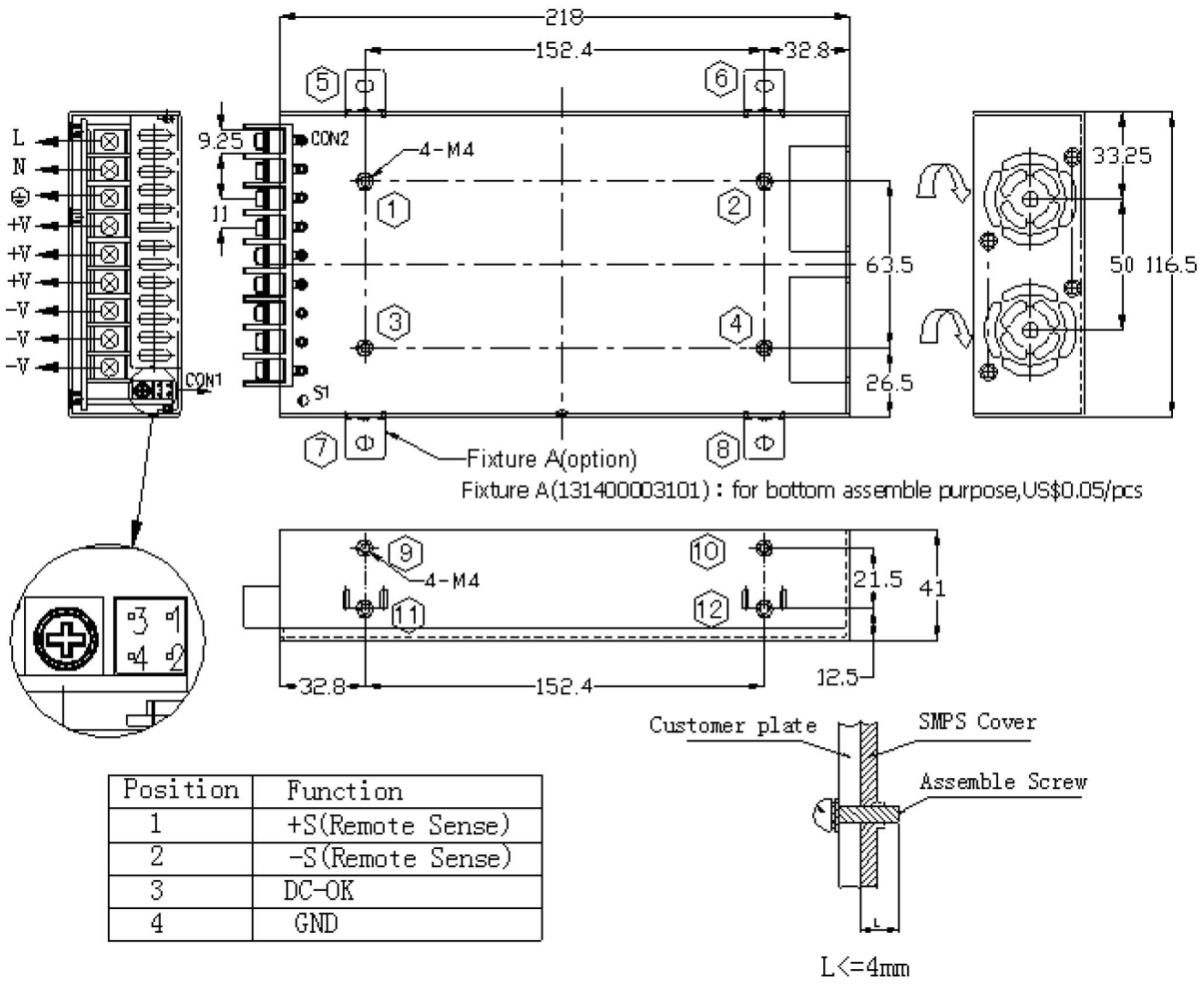
- Universal AC input range
- Built-in Active PFC function, PF > 0.96
- Using ZVS technology to reduce power dissipation.
- Built in fan speed control and over temp. protection
- Built in AC inrush current limiting circuit (<20A)
- Built in constant current limiting circuit
- Built in Remote Sense Function
- Built in DC OK signal
- Wide operating ambient temperature (-30°C ~ 70°C)
- 1U low profile, 41mm
- 3 year warranty

Specifications

			HDP-600-12	HDP-600-24	HDP-600-36	HDP-600-48
OUTPUT	DC Output		12V	24V	36V	48V
	Rated Current (100 ~ 127Vac) (NOTE 1)		34A	22A	14A	11A
	Rated Current (128~ 264Vac)		42A	26.5A	17.5A	13.6A
	Ripple and Noise (NOTE 2)	0 ~ 70ºC	120mV	150mV	150mV	200mV
		-30ºC	180mV	150mV	150mV	200mV
	Voltage ADJ. Range		-5% ~ +10% of rated output voltage			
	Voltage Accuracy		±2.0%	±2.0%	±2.0%	±2.0%
	Line Regulation		±0.5%	±0.5%	±0.5%	±0.2%
	Load Regulation		±1.0%	±1.0%	±1.0%	±1.0%
	Set-up Time		< 1.5S (230Vac input, Full load) < 3S (115Vac input, Full load)			
	Hold-up Time		> 16mS (230Vac input, Full load)			
	Temperature Coefficient		±0.05%/°C			
	Overshoot and Undershoot		< 5.0%			
INPUT	Voltage Range		90Vac ~ 264Vac			
	Frequency Range		47Hz – 63Hz			
	Efficiency (Typical)		88%	89%	90%	90%
	AC Current (Max.)		< 7A			
	Inrush Current (Typical)		< 20A@120Vac Cold Start			
	Leakage Current		Input – output: ≤ 0.1mA Input – PG: ≤ 0.75mA			
PROTECTION	Over Load		110% ~ 135% of rated output current, constant current			
	Over Temperature		105°C + 5°C (detect on Mosfet temperature); shut down, auto recovery at 75°C			
	Over Voltage		110% ~ 150% of rated voltage, constant voltage			
	Short Circuit		Long–term mode, constant current, auto recovery			
ENVIRONMENT	Operating Ambient Temp. & Hum.		-30°C ~ 70°C; 20% ~ 90%RH No Condensing (refer to the derating curve)			
	Storage Temp. & Hum.		-40°C ~ 85°C; 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: 0.5KVac; ≤10mA			
	Isolation Resistance		≥100M ohms			
	EMI Conduction & Radiation		Compliance to EN55022, 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°C, Full load)			
	Dimension (L*W*H)		218 x 116.5 x 41 mm			
	Packing		6PCS/CTN, 8.7KGS, 0.04CBM			
	Cooling Method		Forced air cooling (Built-in fan)			
NOTE	1. All parameters NOT specially mentioned are measured at rated 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 & 47uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re–confirmed that it still meets EMC directives					

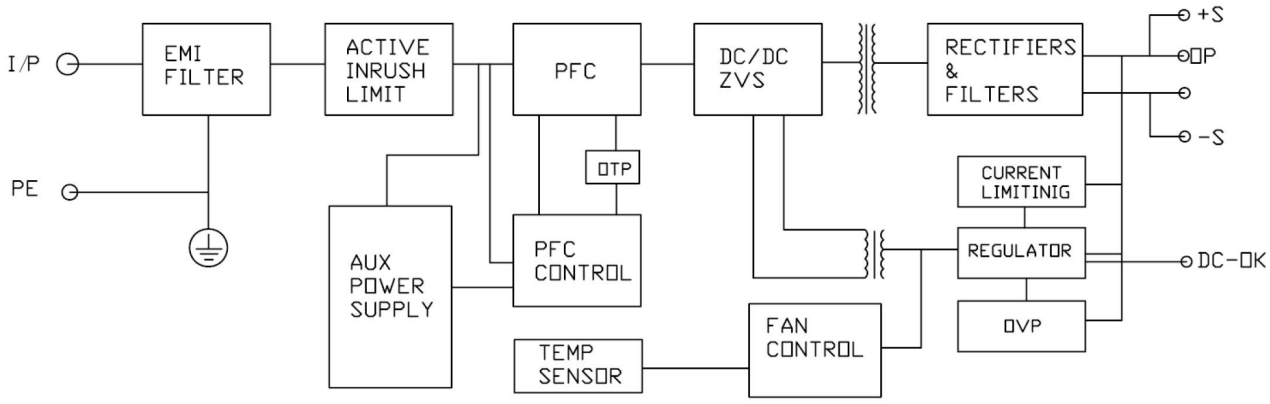
Mechanical Specification

Unit: mm (Tolerance is ±1mm)



Position	Function
1	+S(Remote Sense)
2	-S(Remote Sense)
3	DC-OK
4	GND

Block Diagram



Derating Curve