



PS-200W-12V

Enclosed AC-to-DC Power Supply

UNIT CODE	DESCRIPTION
PS-200W-12V	200 Watt, 12V DC, Single Output Enclosed Switching AC-to-DC Transformer

SPECIFICATIONS		
Input	Output	Agency Approvals
Universal AC input 88-132/176-264VAC@47-63Hz	+12VDC@0-16.7A	UL/CUL/TUV/CE/CB

Features at a Glance:

- 100% full-load burn-in
- No minimum load required
- Two-year warranty
- 3.3 watts/in³
- 105°C output capacitor
- Auto cooling fan
- 10° to +60°C working temperature
- Output voltage: +12VDC@0-16.7A
- Watts: 200
- Input voltage: 88-132/176-264VAC@47-63Hz
- Power density: 3.12W/in³
- Ripple & noise: 180mV p-p
- Load reg.: ±0.5%
- Line reg.: ±0.5%
- Isolation voltage: 3000
- Leakage current: 1.2mA @ 240V
- Rise time: 20ms
- Hold up time: 20ms
- Vibration: 10-500HZ; 2G
- Voltage adjustment: 10%
- Efficiency: 79%
- MTBF hours: 183,800
- Weight: 1.8 lbs (.85 Kgs)
- Dimensions: 7.8"L X 3.8"W X 1.96"H
199 X 99 x 50 mm



With a built-in Active PFC Function and cooling fan, the workhorse PS-200 produces 200 watts of power from -10°C to 50°C, with derated performance to °C and 60°C. The input features an auto-sensing circuit that switches between 88-132VAC and 176-264VAC. A novel soft-start circuit limits the AC surge current. Guaranteed safety standards comprise UL1950 and TUV EN60950, and these products carry the European CE mark. The DC output voltage can be adjusted ±10% of nominal rating.

Pricing: 1+ \$ 149.50
 10+ \$ 132.00
 100+ \$ 127.70
electracool.com



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■ Features :

- Universal AC input / full range
- Built-in active PFC function, PF>0.93
- Protections:Short circuit/Over load/Over voltage/Over temperature
- Built-in cooling fan speed control
- Built-in constant current limiting circuit
- Built-in fan speed control
- Remote ON-OFF control(Optional)
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

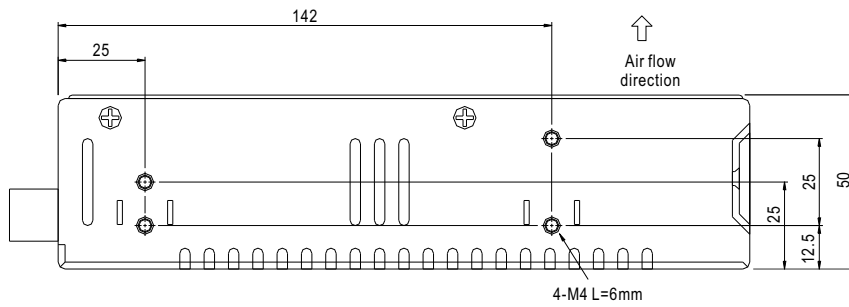
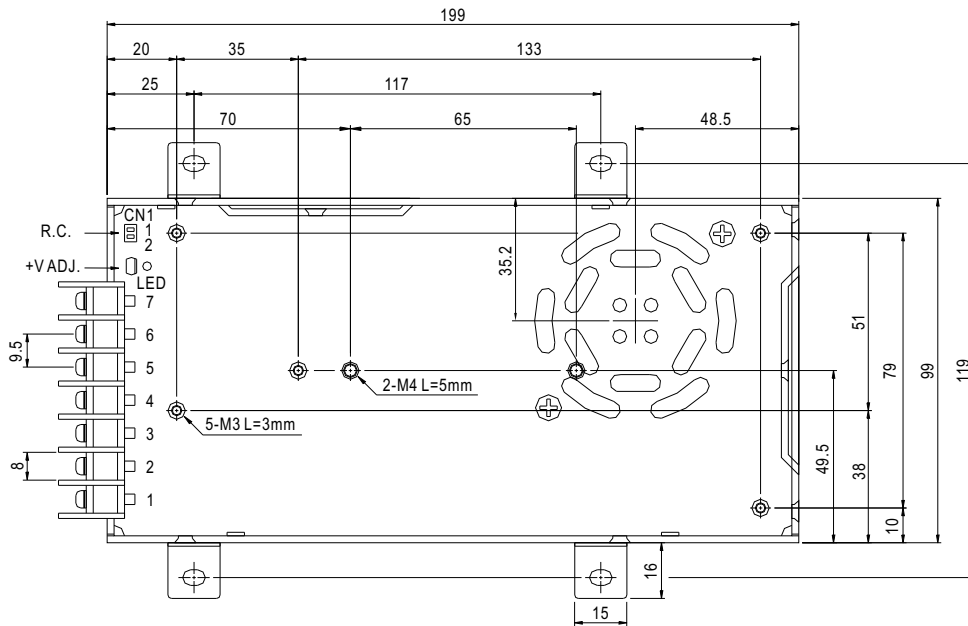


SPECIFICATION

MODEL	SP-200-3.3	SP-200-5	SP-200-7.5	SP-200-12	SP-200-13.5	SP-200-15	SP-200-24	SP-200-27	SP-200-48		
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V	
	RATED CURRENT	40A	40A	26.7A	16.7A	14.9A	13.4A	8.4A	7.5A	4.2A	
	CURRENT RANGE	0 ~ 40A	0 ~ 40A	0 ~ 26.7A	0 ~ 16.7A	0 ~ 14.9A	0 ~ 13.4A	0 ~ 8.4A	0 ~ 7.5A	0 ~ 4.2A	
	RATED POWER	132W	200W	200.2W	200.4W	201.1W	201W	201.6W	202.5W	201.6W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	250mVp-p	
	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	11.4 ~ 13.2V	12.8 ~ 14.9V	14.3 ~ 16.5V	22.8 ~ 26.4V	25.7 ~ 29.7V	45.6 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	600ms, 30ms at full load									
HOLD TIME (Typ.)	20ms at full load										
INPUT	VOLTAGE RANGE	85 ~ 264VAC		120 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR (Typ.)	PF>0.93/230VAC			PF>0.98/115VAC at full load						
	EFFICIENCY (Typ.)	65%	71%	76%	79%	80%	81%	83%	83%	84%	
	AC CURRENT (Typ.)	3.5A/115VAC		1.7A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC									
	LEAKAGE CURRENT	<2mA / 240VAC									
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed									
	OVER VOLTAGE	3.63 ~ 4.46V	5.5 ~ 6.75V	8.25 ~ 10.13V	13.2 ~ 16.2V	14.85 ~ 18.2V	16.5 ~ 20.25V	26.4 ~ 32.4V	29.7 ~ 36.45V	52.8 ~ 64.8V	
	OVER TEMPERATURE	95°C ±5°C (TSW1 : Detect on heatsink of power transistor) Protection type : Shut down o/p voltage, recovers automatically after temperature goes down									
FUNCTION	REMOTE CONTROL(OPTION)	CN1:4 ~ 10VDC POWER ON, <0 ~ 0.8VDC POWER OFF									
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes									
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 and S-MARK J60950 Approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC			I/P-FG:1.5KVAC		O/P-FG:0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC									
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B									
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3									
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A									
	MTBF	183.8K hrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	199*99*50mm (L*W*H)									
	PACKING	0.85Kg; 20pcs/17.9Kg/1.28CUFT									
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</p>										

Mechanical Specification

Case No. 916B Unit:mm



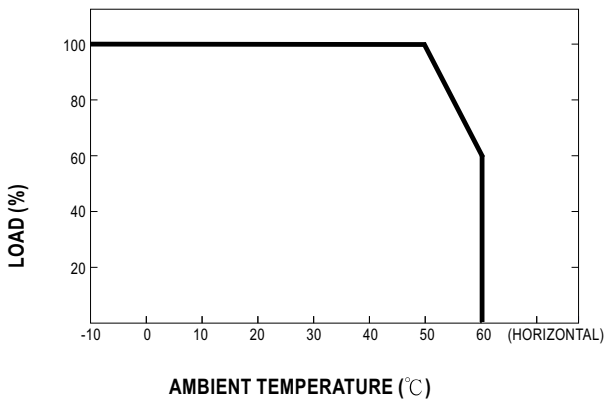
Terminal pin number assignment :

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG \perp		

Remote ON/OFF(CN1):JST S2B-XH or equivalent(optional)

Pin No.	Assignment	Mating Housing	Terminal
1	RC+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RC-		

Derating Curve



Output Derating VS Input Voltage

