



■ Features

- AC input 180~264VAC
- Withstand 300VAC surge input for 5 seconds
- Design against rain splash
- Protections: Short circuit / Overload / Over voltage/ Over temperature
- Cooling by free air convection
- LED indicator for power on
- Low cost, high reliability
- 100% full load burn-in test
- 3 years warranty

■ Applications

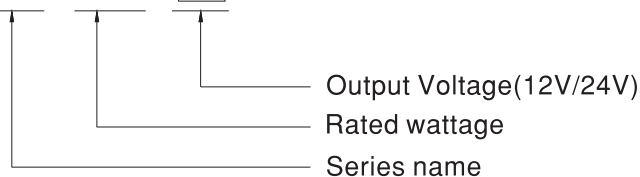
- LED strip lighting
- LED channel letters
- LED moving sign

■ Description

ERP-200 series is a 200W single output enclosed type AC/DC power supply . It adopts an aluminum case and the interior is semi-potted, protecting the internal electronic components from rain splash and dust. With the complete protection functions, ERP-200 is suitable for the applications such as outdoor LED channel letters, billboard, commercial signs, etc.

■ Model Encoding

ERP - 200 - 12



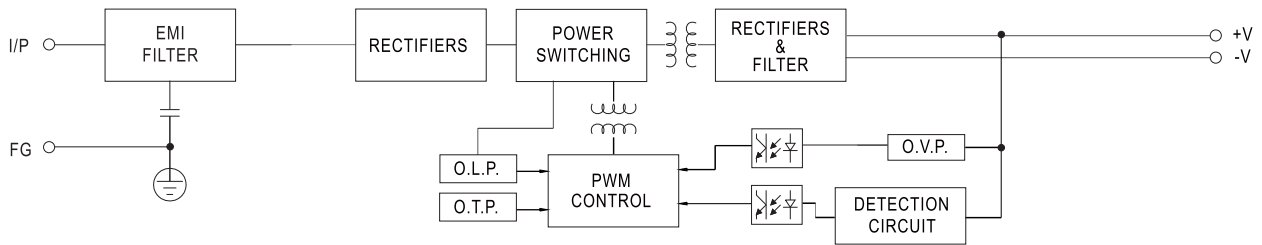


SPECIFICATION

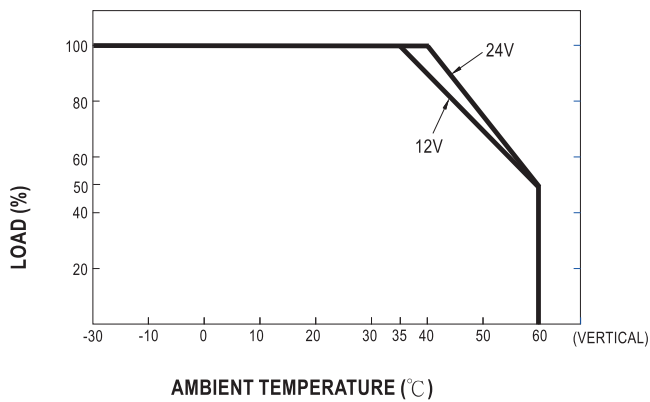
MODEL		ERP-200-12	ERP-200-24
OUTPUT	DC VOLTAGE	12V	24V
	RATED CURRENT	16.8A	8.33A
	CURRENT RANGE	0~16.8A	0~8.33A
	RATED POWER	200.4W	199.92W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	10.8 ~ 13.2V	21.6 ~ 26.4V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%
	SETUP, RISE TIME	1500ms, 200ms/230VAC	
	HOLD UP TIME (Typ.)	20ms/230VAC	
INPUT	VOLTAGE RANGE	180 ~ 264VAC 254 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	87%	89%
	AC CURRENT (Typ.)	4A/230VAC	
	INRUSH CURRENT (Typ.)	90A/230VAC	
	LEAKAGE CURRENT	<1mA / 240VAC	
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed	
	OVER LOAD	110 ~ 140% rated output power	
		Protection type : Constant current limiting, recovers automatically after fault condition is removed	
	OVER VOLTAGE	13.8 ~ 16.2V	27.6 ~ 32.4V
		Protection type : Hiccup mode, recovers automatically after fault condition is removed	
OVER TEMPERATURE	Shut down O/P voltage, recovers automatically after temperature goes down		
ENVIRONMENT	WORKING TEMP.	-30 ~ +60°C (Refer to output load derating curve)	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-30 ~ +85°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)	
	VIBRATION	10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes	
SAFETY & EMC	SAFETY STANDARDS	IEC/EN 62368-1, GB4943.1-2011(except for ERP-200-12), EAC TP TC 004 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC / 25°C / 70% RH	
	EMC EMISSION	Refer to EN55022 (CISPR22) class A, EAC TP TC 020	
	EMC IMMUNITY	Refer to EN61000-4-5;light industry level,criteria A, EAC TP TC 020	
OTHERS	MTBF	321.040Khrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	200*120*40mm (L*W*H)	
	PACKING	0.86Kg; 12 pcs/10.89Kg/0.58CUFT	
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>		

■ Block Diagram

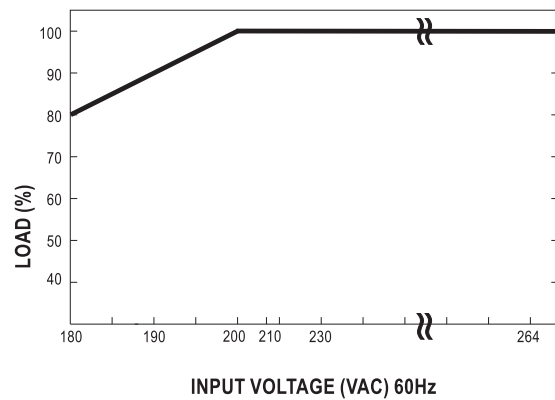
fosc : 90KHz



■ Derating Curve

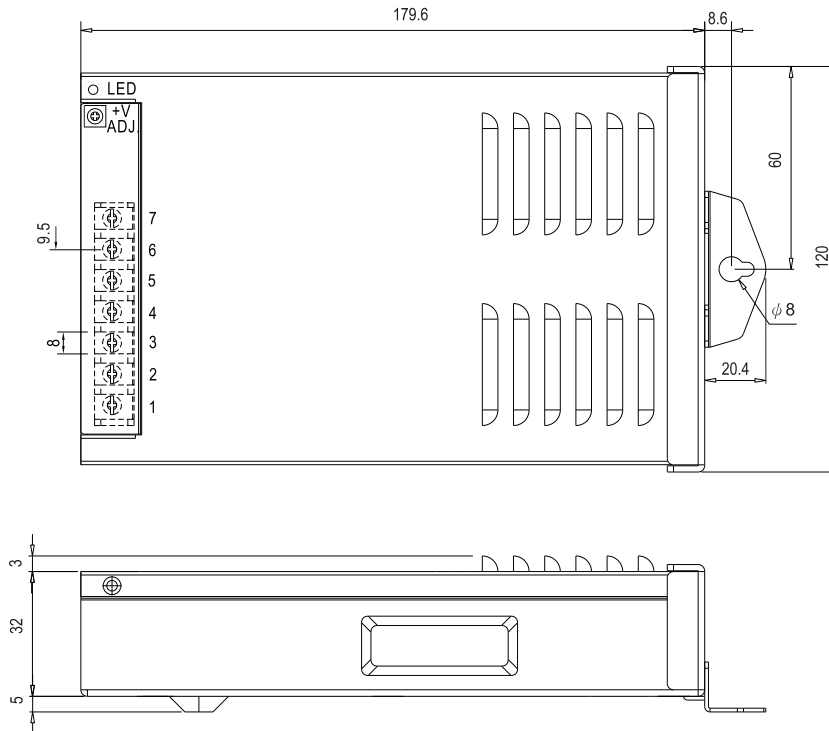


■ Static Characteristics



■ Mechanical Specification

Case No.273 Unit:mm

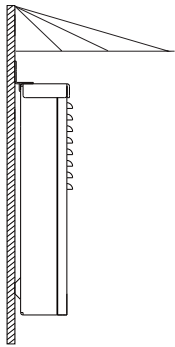


Terminal Pin No. assignment :

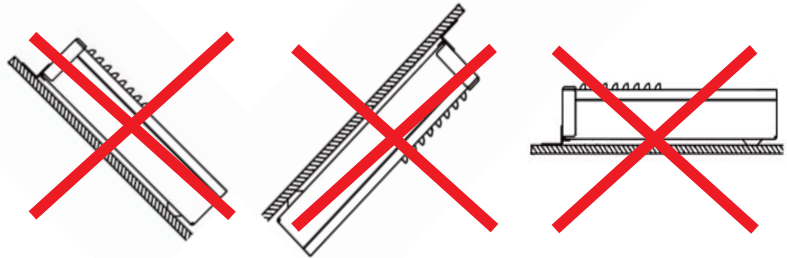
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4-5	DC OUTPUT -V
2	AC/N	6-7	DC OUTPUT +V
3	FG \perp		

■ Installation

- 1. ERP-200 is designed for outdoor application and should be installed in the place with shelter.
- 2. ERP-200 should be installed in an upright position, leaning forward, backward or lay flat are not allowed



Correct installation method



Faulty installation methods

- 3. For heat dissipation, at least 10cm installation distance around the PSU should be kept, shown as below:

