



IS 13252(Part 1)/
IEC 60950-1
[8]
R-41070483



■ 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

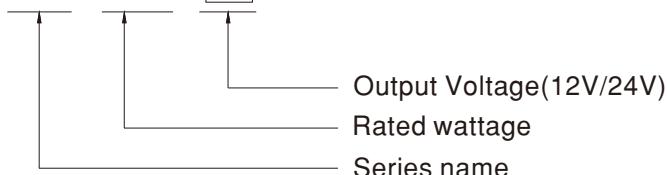
- LED strip lighting
- LED channel letters
- LED display

■ 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 display, etc.

■ Model Encoding

ERP - 200 - 12





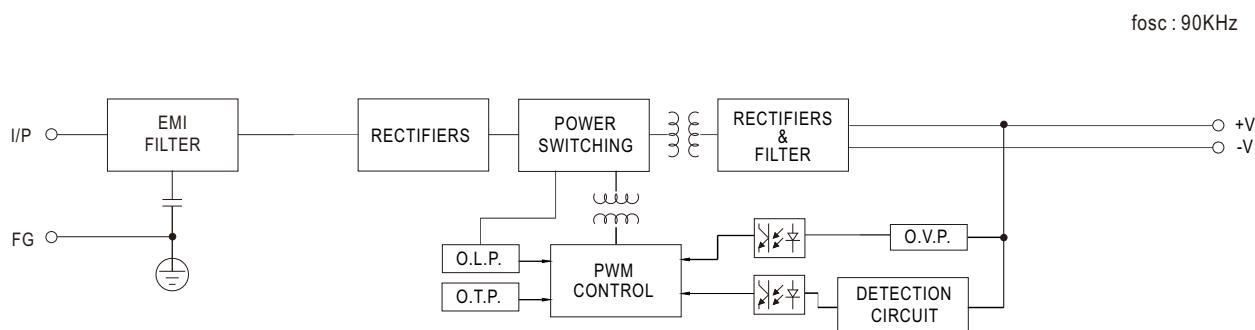
200W Single Output Switching Power Supply

ERP-200 series

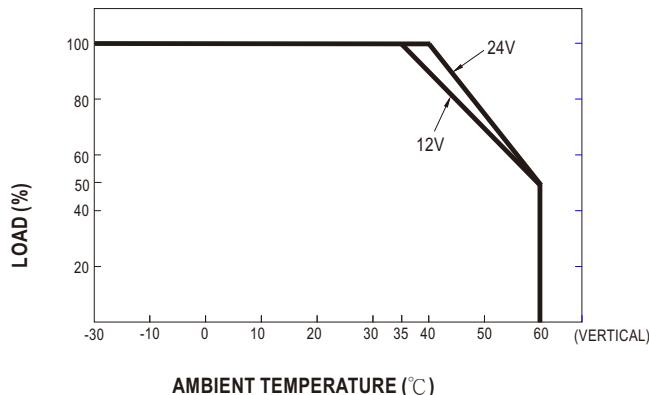
SPECIFICATION

MODEL	ERP-200-12	ERP-200-24
OUTPUT	DC VOLTAGE	12V
	RATED CURRENT	16.8A
	CURRENT RANGE	0~16.8A
	RATED POWER	200.4W
	RIPPLE & NOISE (max.) Note.2	150mVp-p
	VOLTAGE ADJ. RANGE	10.8 ~ 13.2V
	VOLTAGE TOLERANCE Note.3	±1.0%
	LINE REGULATION	±0.5%
	LOAD REGULATION	±0.5%
	SETUP, RISE TIME	1500ms, 200ms/230VAC
INPUT	HOLD UP TIME (Typ.)	20ms/230VAC
	VOLTAGE RANGE	180 ~ 264VAC 254 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz
	EFFICIENCY (Typ.)	87% 89%
	AC CURRENT (Typ.)	4A/230VAC
PROTECTION	INRUSH CURRENT (Typ.)	90A/230VAC
	LEAKAGE CURRENT	<1mA / 240VAC
	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
ENVIRONMENT	OVER TEMPERATURE	Shut down O/P voltage, recovers automatically after temperature goes down
	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)
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes
	SAFETY STANDARDS	IEC/BS EN/EN 62368-1,GB4943.1-2011(except for ERP-200-12),EAC TP TC 004,IS13252(Part1) 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 BS EN/EN55022 (CISPR22) class A, EAC TP TC 020
OTHERS	EMC IMMUNITY	Refer to BS EN/EN61000-4-5;light industry level, criteria A, EAC TP TC 020
	MTBF	321.040Khrs min. MIL-HDBK-217F (25°C)
	DIMENSION	200*120*40mm (L*W*H)
NOTE	PACKING	0.86Kg; 12 pcs/10.89Kg/0.58CUFT
	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx	

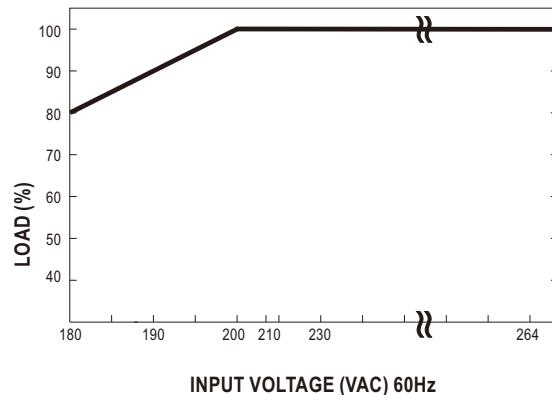
■ Block Diagram



■ Derating Curve

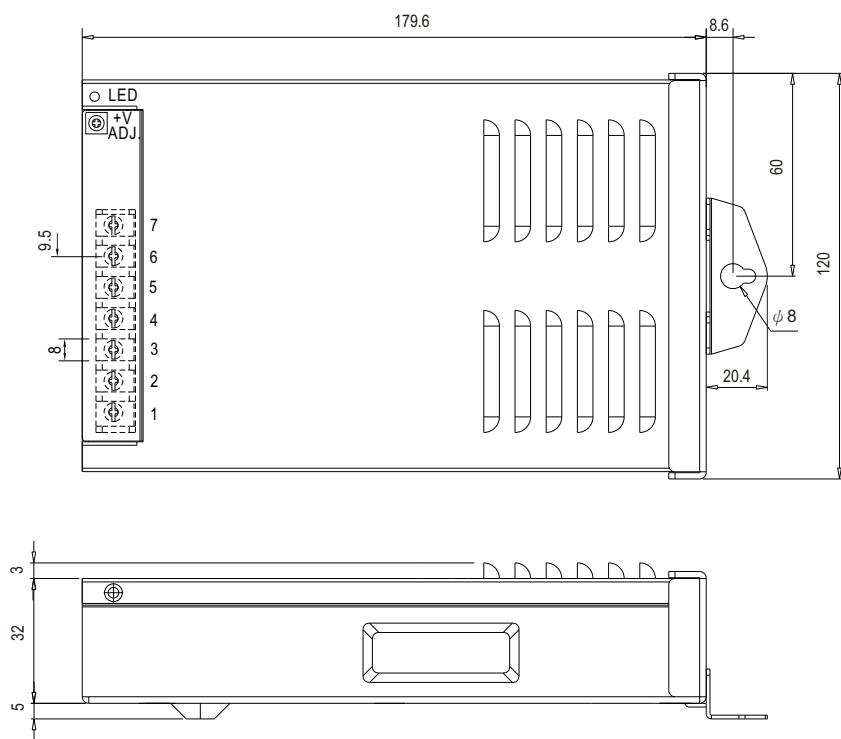


■ Static Characteristics



■ Mechanical Specification

Case No.273 Unit:mm

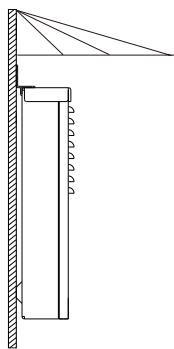


Terminal Pin No. assignment :

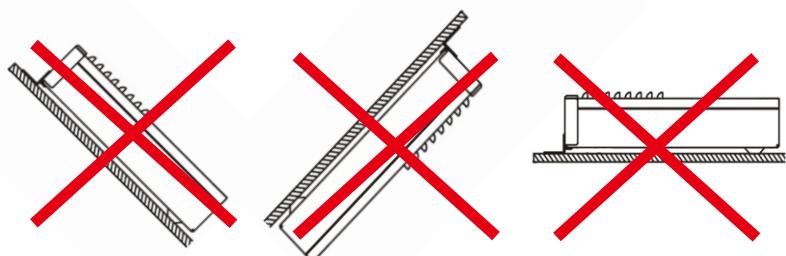
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4~5	DC OUTPUT -V
2	AC/N	6~7	DC OUTPUT +V
3	FG \pm		

■ 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:

