



350W Single Output Switching Power Supply

ERP-350 series



■ 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



(except for 12V)

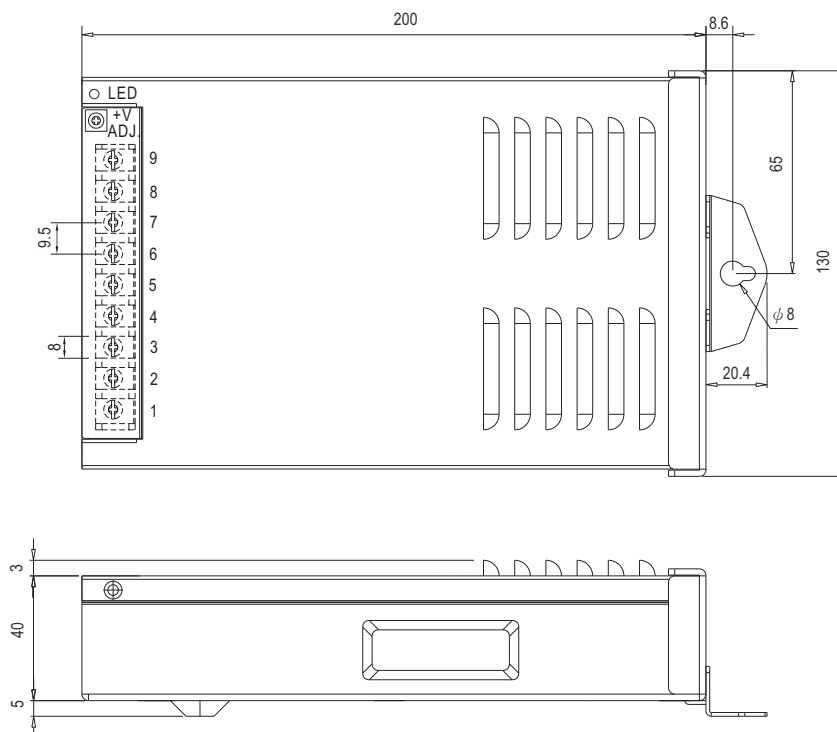


SPECIFICATION

| MODEL | | ERP-350-12 | ERP-350-24 | ERP-350-36 | ERP-350-48 |
|--------------|--|---|--------------|--------------|--------------|
| OUTPUT | DC VOLTAGE | 12V | 24V | 36V | 48V |
| | RATED CURRENT | 26.7A | 14.6A | 9.7A | 7.3A |
| | CURRENT RANGE | 0 ~ 26.7A | 0 ~ 14.6A | 0 ~ 9.7A | 0 ~ 7.3A |
| | RATED POWER | 320.4W | 350.4W | 349.2W | 350.4W |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 150mVp-p | 150mVp-p | 240mVp-p | 240mVp-p |
| | VOLTAGE ADJ. RANGE | 10.8 ~ 13.2V | 21.6 ~ 26.4V | 32.4 ~ 39.6V | 43.2 ~ 52.8V |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±0.5% | ±0.5% | ±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% | 90% | 90% |
| | AC CURRENT (Typ.) | 4A/230VAC | | | |
| | INRUSH CURRENT (Typ.) | 90A/230VAC | | | |
| | LEAKAGE CURRENT | <1mA / 240VAC | | | |
| PROTECTION | OVER LOAD | 110 ~ 140% rated output power 130 ~ 180% rated output power 120 ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | |
| | OVER VOLTAGE | 13.8 ~ 16.2V | 27.6 ~ 32.4V | 41.4 ~ 46.8V | 57.6 ~ 67.2V |
| | | 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℃ (Refer to output load derating curve) | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | |
| | STORAGE TEMP., HUMIDITY | -30 ~ +85℃, 10 ~ 95% RH | | | |
| | TEMP. COEFFICIENT | ±0.05%/℃ (0 ~ 50℃) | | | |
| | VIBRATION | 10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes | | | |
| SAFETY & EMC | SAFETY STANDARDS | UL60950-1,GB4943.1-2011(except for ERP-350-12) 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℃ / 70% RH | | | |
| | EMC EMISSION | Refer to EN55022 (CISPR22) class A | | | |
| OTHERS | EMC IMMUNITY | Refer to EN61000-4-5;light industry level,criteria A | | | |
| | MTBF | 321.040Khrs min. MIL-HDBK-217F (25℃) | | | |
| | DIMENSION | 220.4*130*48mm (L*W*H) | | | |
| | PACKING | 0.9Kg; 9 pcs/11Kg/0.63CUFT | | | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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. | | | | |

Mechanical Specification

Case No.230 Unit:mm

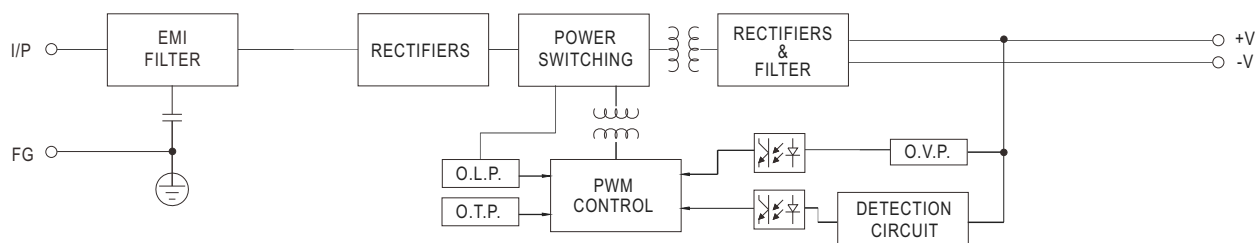


Terminal Pin No. assignment :

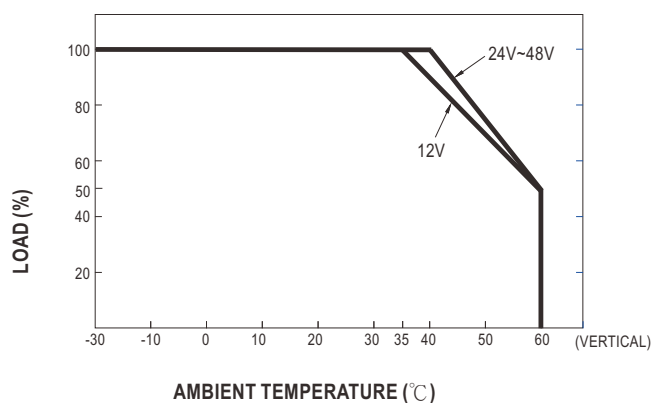
| Pin No. | Assignment | Pin No. | Assignment |
|---------|-------------|---------|--------------|
| 1 | AC/L | 4~6 | DC OUTPUT -V |
| 2 | AC/N | 7~9 | DC OUTPUT +V |
| 3 | FG \equiv | | |

Block Diagram

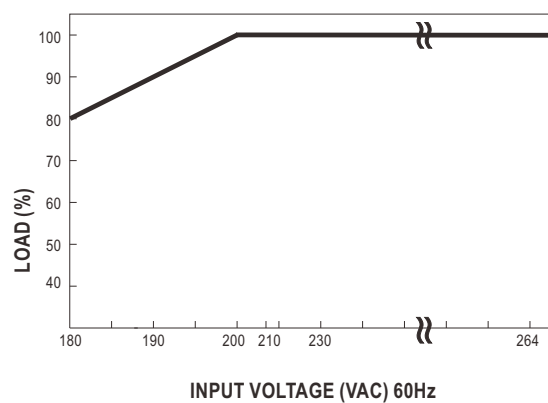
fosc : 90KHz



Derating Curve

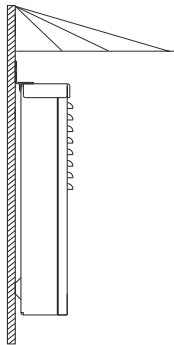


Static Characteristics

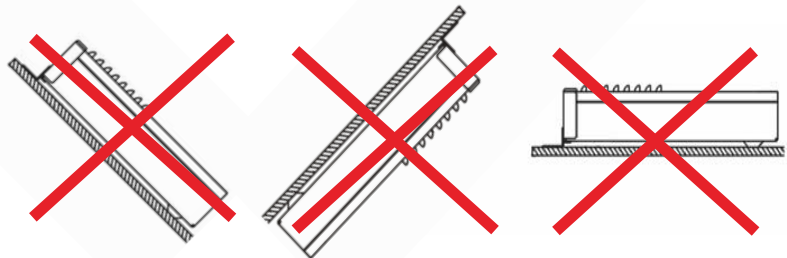


■ Installation

1. ERP-350 is designed for outdoor application and should be installed in the place with shelter.
2. ERP-350 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:

