# 240W Single Output Industrial DIN RAIL Power Supply DRP-240 series


■ Features :

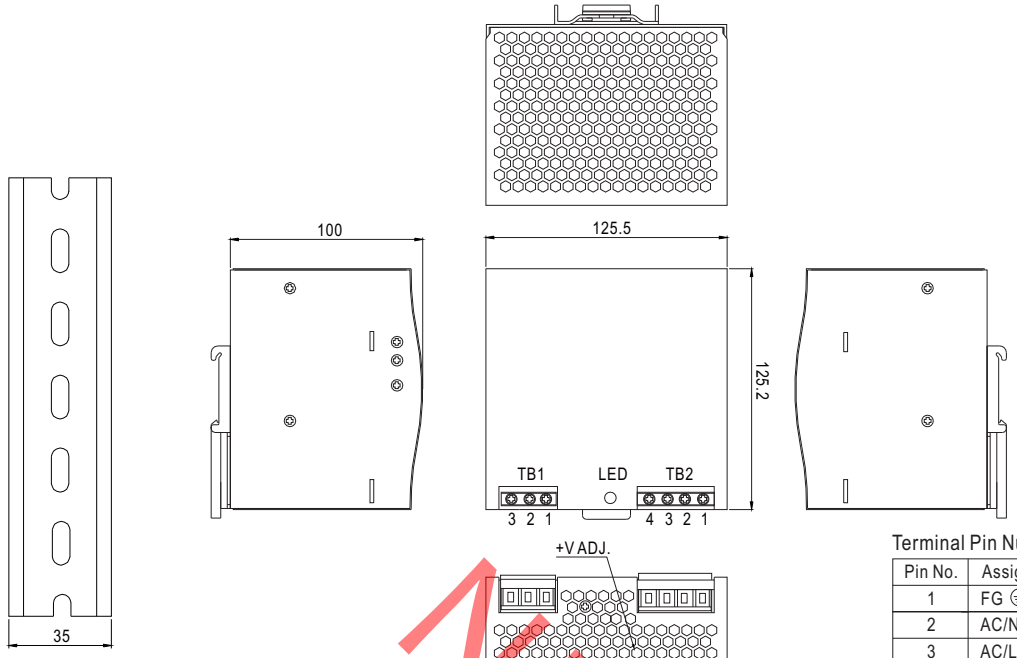
- Universal AC input / Full range
- Built in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508(industrial control equipment)approved
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 100KHz
- 3 years warranty

## SPECIFICATION

| MODEL | | DRP-240-24 | DRP-240-48 |
|---|---|---|---|
| OUTPUT | DC VOLTAGE | 24V | 48V |
| | RATED CURRENT | 10A | 5A |
| | CURRENT RANGE | 0 ~ 10A | 0 ~ 5A |
| | RATED POWER | 240W | 240W |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 150mVp-p |
| | VOLTAGE ADJ. RANGE | 24 ~ 28V | 48 ~ 53V |
| | VOLTAGE TOLERANCE Note.3 | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1.0% | ±1.0% |
| | SETUP, RISE TIME | 800ms, 40ms/230VAC 800ms, 40ms/115VAC at full load | |
| | HOLD UP TIME (Typ.) | 24ms/230VAC 24ms/115VAC at full load | |
| INPUT | VOLTAGE RANGE Note.5 | 85 ~ 264VAC 120 ~ 370VDC | |
| | FREQUENCY RANGE | 47 ~ 63Hz | |
| | POWER FACTOR (Typ.) | 0.96/230VAC 0.99/115VAC at full load | |
| | EFFICIENCY (Typ.) | 84% | 85% |
| | AC CURRENT (Typ.) | 2.8A/115VAC 1.4A/230VAC | |
| | INRUSH CURRENT (Typ.) | COLD START 27A/115VAC 45A/230VAC | |
| | LEAKAGE CURRENT | <3.5mA / 240VAC | |
| PROTECTION | OVERLOAD | 105 ~ 150% rated output power | |
| | | Protection type : Constant current limiting, recovers automatically after fault condition is removed | |
| | OVER VOLTAGE | 30 ~ 36V | 54 ~ 60V |
| | | Protection type : Shut down o/p voltage, re-power on to recover | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +70℃ (Refer to "Derating Curve") | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85℃, 10 ~ 95% RH | |
| | TEMP. COEFFICIENT | ±0.03%/℃ (0 ~ 50℃) | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL508, UL60950-1, TUV EN60950-1, 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 | |
| | EMC EMISSION | Compliance to EN55011,EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020 | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A, EAC TP TC 020 | |
| OTHERS | MTBF | 289.9Khrs min. MIL-HDBK-217F (25℃) | |
| | DIMENSION | 125.5*125.2*100mm (W*H*D) | |
| | PACKING | 1.2Kg; 12pcs/15.5Kg/1.29CUFT | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>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.<br>5. Derating may be needed under low input voltages. Please check the derating curve for more details.<br>6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). | |

## ■ Mechanical Specification

Case No. 922A Unit:mm




ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

Terminal Pin Number Assignment (TB1)

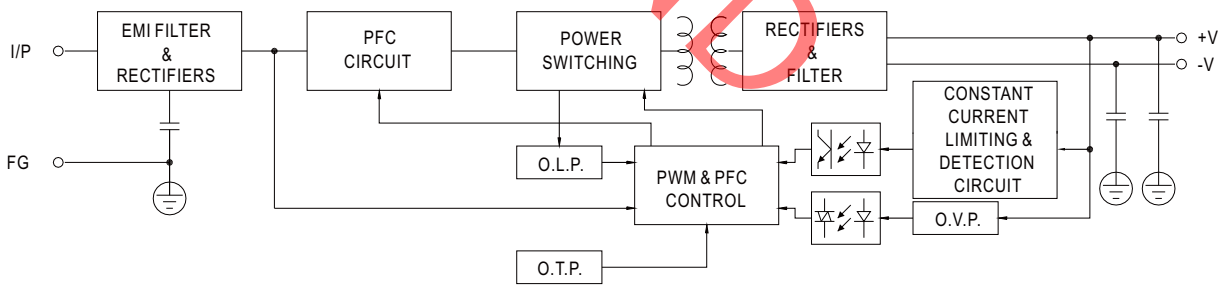
| Pin No. | Assignment |
|---|---|
| 1 | FG ⏚ |
| 2 | AC/N |
| 3 | AC/L |

Terminal Pin Number Assignment (TB2)

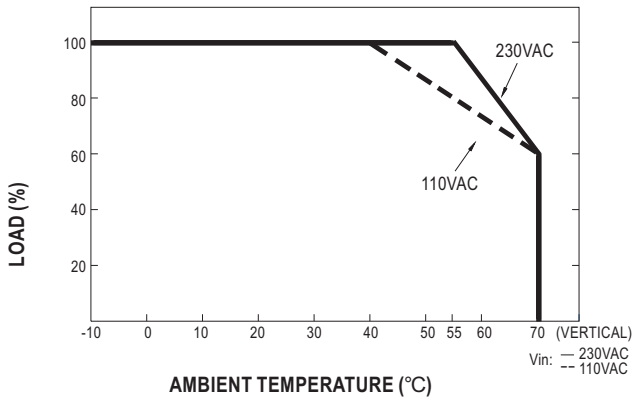
| Pin No. | Assignment |
|---|---|
| 1,2 | DC OUTPUT +V |
| 3,4 | DC OUTPUT -V |

## ■ Block Diagram

fosc : 100KHz

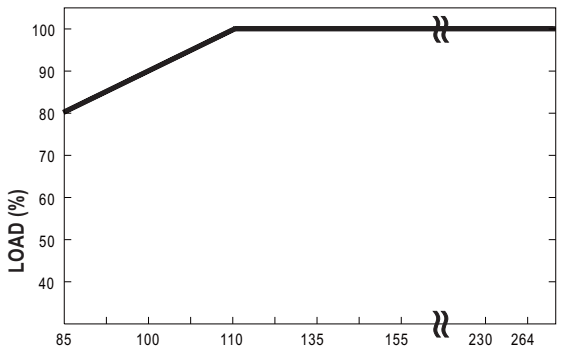



## ■ Derating Curve




AMBIENT TEMPERATURE (℃)

## ■ Output derating VS input voltage




INPUT VOLTAGE (V) 60Hz