



## 240W Single Output Industrial DIN RAIL Power Supply

## DRP-240 series



### ■ Features :

- Universal AC input / Full range
- Built in active PFC function, PF>0.95
- Protections: Short circuit/Over load/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

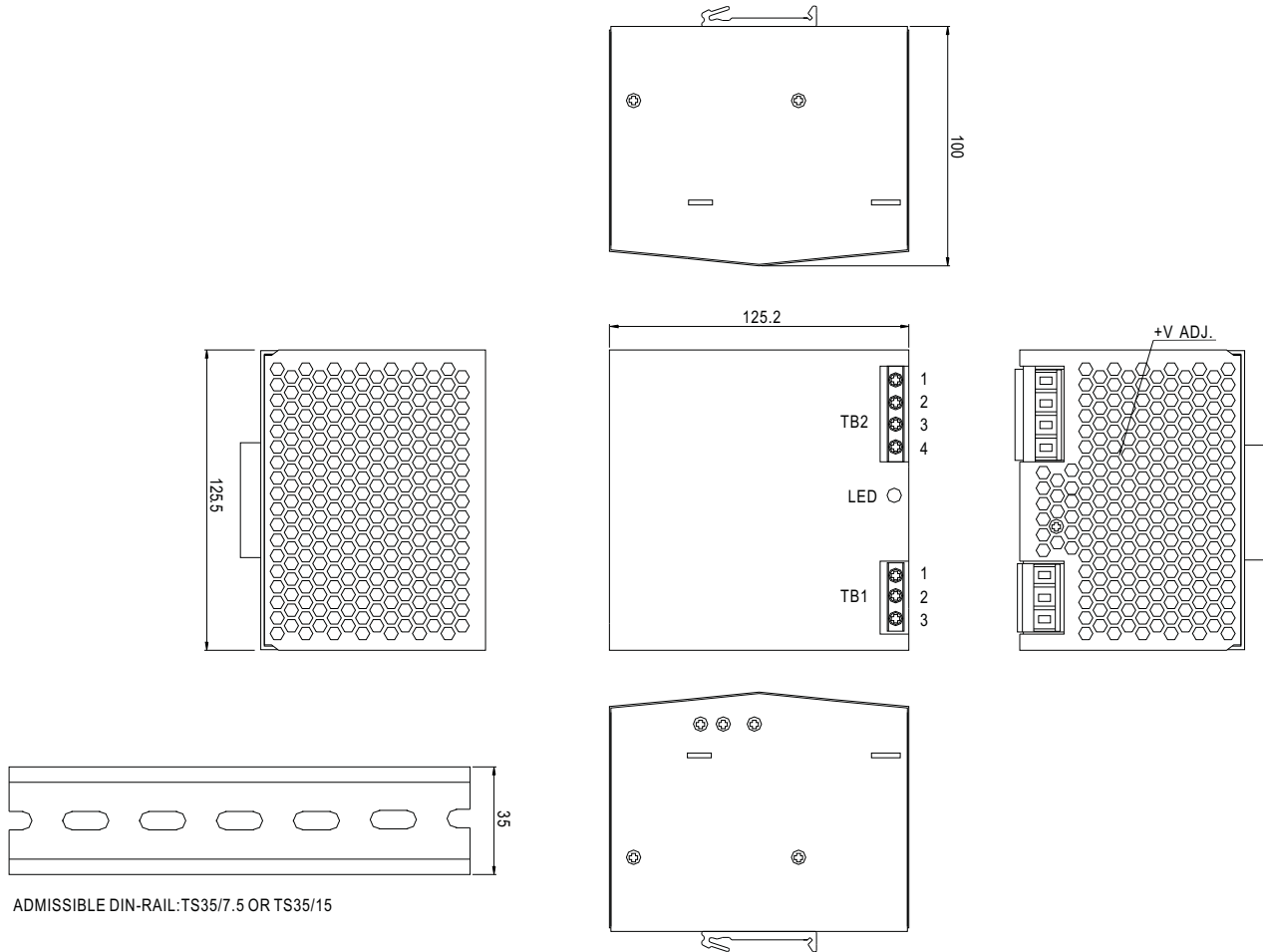


### SPECIFICATION

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|--------------------------|--|--|------------|
| MODEL                    |  | DRP-240-24   | DRP-240-48 |
| OUTPUT                   | DC VOLTAGE   | 24V  |            |
|                          | DC VOLTAGE   | 48V  |            |
|                          | RATED CURRENT  | 10A  |            |
|                          | RATED CURRENT  | 5A   |            |
|                          | CURRENT RANGE  | 0 ~ 10A  |            |
|                          | CURRENT RANGE  | 0 ~ 5A   |            |
|                          | RATED POWER  | 240W   |            |
|                          | RATED POWER  | 240W   |            |
|                          | RIPPLE & NOISE (max.) Note.2   | 80mVp-p  |            |
|                          | RIPPLE & NOISE (max.) Note.2   | 150mVp-p   |            |
| VOLTAGE ADJ. RANGE       | 24 ~ 28V   |  |            |
| VOLTAGE ADJ. RANGE       | 48 ~ 53V   |  |            |
| VOLTAGE TOLERANCE Note.3 | ±1.0%  |  |            |
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| LINE REGULATION          | ±0.5%  |  |            |
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| LOAD REGULATION          | ±1.0%  |  |            |
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| SETUP, RISE, HOLD TIME   | 800ms, 40ms, 20ms/230VAC      800ms, 40ms, 20ms/115VAC at full load  |  |            |
| INPUT                    | VOLTAGE RANGE  | 85 ~ 264VAC      120 ~ 370VDC  |            |
|                          | VOLTAGE RANGE  | 85 ~ 264VAC      120 ~ 370VDC  |            |
|                          | FREQUENCY RANGE  | 47 ~ 63Hz  |            |
|                          | POWER FACTOR   | PF>0.95/230VAC      PF>0.98/115VAC at full load  |            |
|                          | EFFICIENCY (Typ.)  | 84%  | 85%        |
|                          | AC CURRENT   | 3.5A/115VAC      1.8A/230VAC   |            |
|                          | INRUSH CURRENT (max.)  | COLD START 30A/115VAC      50A/230VAC  |            |
| LEAKAGE CURRENT          | <3.5mA / 240VAC  |  |            |
| PROTECTION               | OVER LOAD  | 105 ~ 150% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed                |            |
|                          | OVER VOLTAGE   | 30 ~ 36V   | 54 ~ 60V   |
|                          | OVER TEMPERATURE   | 100℃±5℃ (TSW1)Detect on heat sink of power transistor<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down |            |
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| ENVIRONMENT              | WORKING TEMP.  | -10 ~ +70℃ (Refer to output load 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   |            |
| SAFETY & EMC (Note 4)    | SAFETY STANDARDS   | UL508, UL60950-1, TUV EN60950 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 EN55011,EN55022 (CISPR22) Class B  |            |
|                          | HARMONIC CURRENT   | Compliance to EN61000-3-2,-3   |            |
| OTHERS                   | MTBF   | 105.5Khrs min.    MIL-HDBK-217F (25℃)  |            |
|                          | DIMENSION  | 125.5*125.2*100mm (W*H*D)  |            |
|                          | PACKING  | 1.2Kg; 20pcs/14.4Kg/1.2CUFT  |            |
| 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. |  |            |

## Mechanical Specification

Case No. 922 Unit:mm



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

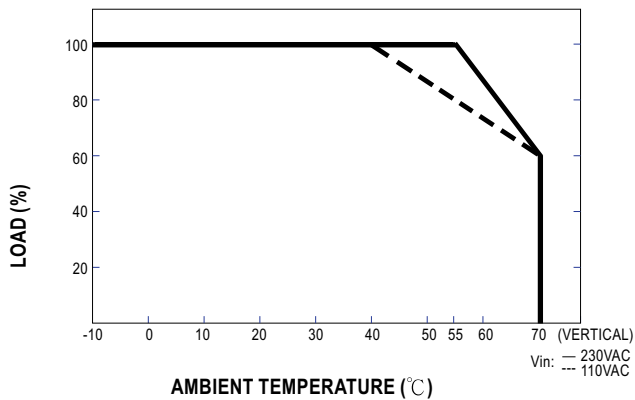
Terminal Pin. No Assignment (TB1)

| Pin No. | Assignment  |
|---------|-------------|
| 1       | FG $\oplus$ |
| 2       | AC/N        |
| 3       | AC/L        |

Terminal Pin. No Assignment (TB2)

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

## Output Derating



## Output derating VS input voltage

