

## 75W Single Output Industrial DIN Rail Power Supply

## DR-75 series



### ■ Features :

- Universal AC input / Full range
- 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
- Fix switching frequency at 50KHz
- 3 years warranty

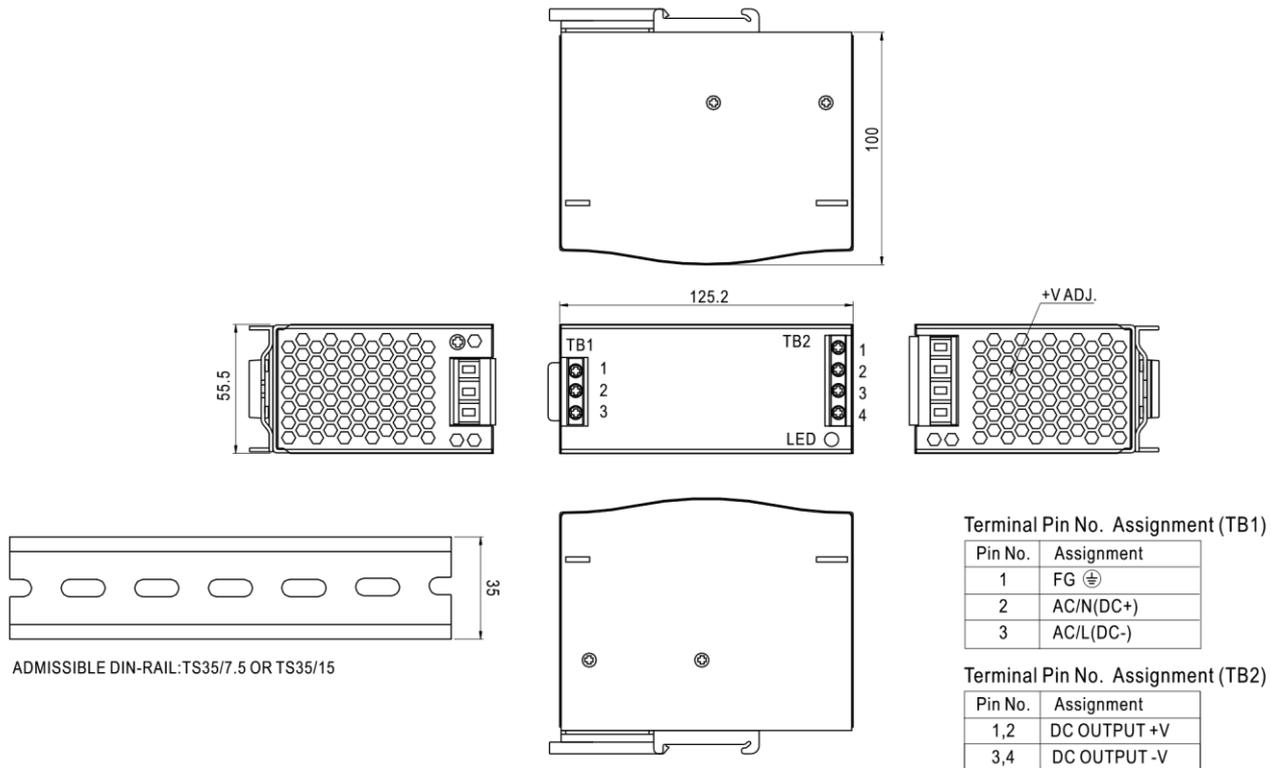


### SPECIFICATION

| MODEL                 | DR-75-12  | DR-75-24  | DR-75-48 |          |
|-----------------------|---|---|----------|----------|
| OUTPUT                | DC VOLTAGE  | 12V   | 24V      | 48V      |
|                       | RATED CURRENT   | 6.3A  | 3.2A     | 1.6A     |
|                       | CURRENT RANGE   | 0 ~ 6.3A  | 0 ~ 3.2A | 0 ~ 1.6A |
|                       | RATED POWER   | 76W   | 76.8W    | 76.8W    |
|                       | RIPPLE & NOISE (max.) Note.2  | 100mVp-p  | 150mVp-p | 240mVp-p |
|                       | VOLTAGE ADJ. RANGE  | 12 ~ 14V  | 24 ~ 28V | 48 ~ 53V |
|                       | VOLTAGE TOLERANCE Note.3  | ±2.0%   | ±1.0%    | ±1.0%    |
|                       | LINE REGULATION   | ±0.5%   | ±0.5%    | ±0.5%    |
|                       | LOAD REGULATION   | ±1.0%   | ±1.0%    | ±1.0%    |
|                       | SETUP, RISE TIME  | 1000ms, 60ms/230VAC    1800ms, 60ms/115VAC at full load   |          |          |
| HOLD UP TIME (Typ.)   | 60ms/230VAC    12ms/115VAC at full load   |   |          |          |
| INPUT                 | VOLTAGE RANGE   | 85 ~ 264VAC    120 ~ 370VDC   |          |          |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz   |          |          |
|                       | EFFICIENCY (Typ.)   | 76%   | 80%      | 81%      |
|                       | AC CURRENT (Typ.)   | 1.6A/115V    0.96A/230V   |          |          |
|                       | INRUSH CURRENT (Typ.)   | COLD START 20A/115VAC    40A/230VAC   |          |          |
| LEAKAGE CURRENT       | <1mA / 240VAC   |   |          |          |
| PROTECTION            | OVERLOAD  | 105 ~ 150% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed                   |          |          |
|                       | OVER VOLTAGE  | 15 ~ 16.5V  | 29 ~ 34V | 58 ~ 65V |
|                       | OVER TEMPERATURE  | 85°C ±5°C (TSW1) detect on heat sink of power transistor<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down |          |          |
| ENVIRONMENT           | WORKING TEMP.   | -10 ~ +60°C (Refer to output load derating curve)   |          |          |
|                       | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |          |          |
|                       | STORAGE TEMP., HUMIDITY   | -20 ~ +85°C, 10 ~ 95% RH  |          |          |
|                       | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C)  |          |          |
|                       | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6   |          |          |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS  | UL508, TUV EN60950-1 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  |          |          |
|                       | EMS IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A                                    |          |          |
| OTHERS                | MTBF  | 123.1K hrs min.    MIL-HDBK-217F (25°C)   |          |          |
|                       | DIMENSION   | 55.5*125.2*100mm (W*H*D)  |          |          |
|                       | PACKING   | 0.6Kg; 20pcs/13Kg/1.29CUFT  |          |          |
| NOTE                  | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> </ol> |   |          |          |

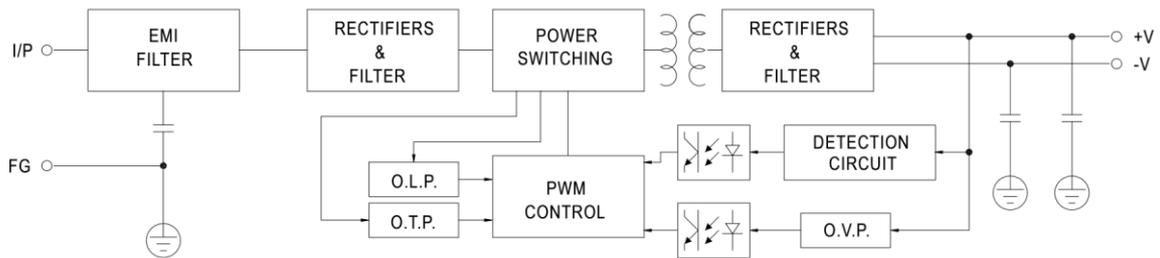
## Mechanical Specification

Case No. 923 Unit:mm



## Block Diagram

fosc : 50KHz



## Output Derating

## Output Derating Vs Input Voltage

