



## 30W Single Output Industrial DIN Rail Power Supply

# DR-30 series



### ■ Features :

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- Isolation class II
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty



### SPECIFICATION

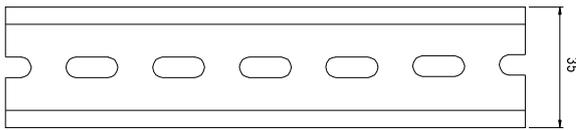
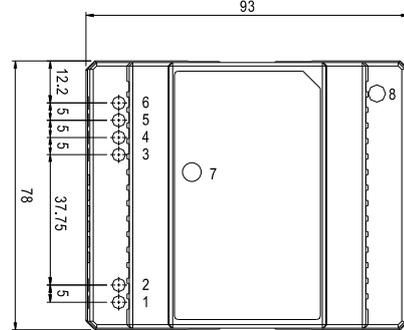
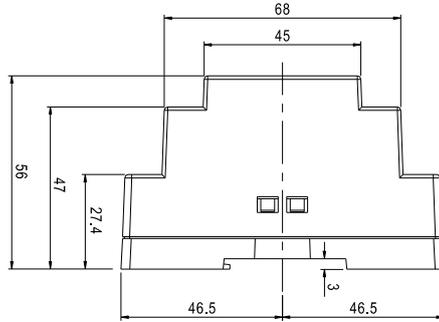
| MODEL                 |   | DR-30-5   | DR-30-12     | DR-30-15       | DR-30-24     |
|-----------------------|---|---|--------------|----------------|--------------|
| OUTPUT                | DC VOLTAGE  | 5V  | 12V          | 15V            | 24V          |
|                       | RATED CURRENT   | 3A  | 2A           | 2A             | 1.5A         |
|                       | CURRENT RANGE   | 0 ~ 3A  | 0 ~ 2A       | 0 ~ 2A         | 0 ~ 1.5A     |
|                       | RATED POWER   | 15W   | 24W          | 30W            | 36W          |
|                       | RIPPLE & NOISE (max.) Note.2  | 80mVp-p   | 120mVp-p     | 120mVp-p       | 150mVp-p     |
|                       | VOLTAGE ADJ. RANGE  | 4.75 ~ 5.5V   | 10.8 ~ 13.2V | 13.5 ~ 16.5V   | 21.6 ~ 26.4V |
|                       | VOLTAGE TOLERANCE Note.3  | ±2.0%   | ±1.0%        | ±1.0%          | ±1.0%        |
|                       | LINE REGULATION   | ±1.0%   | ±1.0%        | ±1.0%          | ±1.0%        |
|                       | LOAD REGULATION   | ±1.0%   | ±1.0%        | ±1.0%          | ±1.0%        |
|                       | SETUP, RISE TIME  | 100ms, 30ms/230VAC      100ms, 30ms/115VAC at full load   |              |                |              |
| HOLD UP TIME (Typ.)   | 100ms/230VAC      21ms/115VAC at full load  |   |              |                |              |
| INPUT                 | VOLTAGE RANGE   | 85 ~ 264VAC      120 ~ 370VDC   |              |                |              |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz   |              |                |              |
|                       | EFFICIENCY (Typ.)   | 74%   | 81%          | 82%            | 83%          |
|                       | AC CURRENT (Typ.)   | 0.88A/115VAC      0.48A/230VAC  |              |                |              |
|                       | INRUSH CURRENT (Typ.)   | COLD START 15A/115VAC      30A/230VAC   |              |                |              |
| PROTECTION            | OVERLOAD  | 105 ~ 160% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed |              |                |              |
|                       | OVER VOLTAGE  | 5.75 ~ 6.75V  | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V |
|                       |   | Protection type : Shut down o/p voltage, re-power on to recover   |              |                |              |
| ENVIRONMENT           | WORKING TEMP.   | -20 ~ +60°C (Refer to "Derating Curve")   |              |                |              |
|                       | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |              |                |              |
|                       | STORAGE TEMP., HUMIDITY   | -40 ~ +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  | UL60950-1, TUV EN60950-1 approved, Design refer to EN50178  |              |                |              |
|                       | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC   |              |                |              |
|                       | ISOLATION RESISTANCE  | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |              |                |              |
|                       | EMC EMISSION  | Compliance to EN55011, EN55022 (CISPR22) Class B, EN61000-3-2,-3  |              |                |              |
| OTHERS                | EMC IMMUNITY  | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A                       |              |                |              |
|                       | MTBF  | 441.5K hrs min.      MIL-HDBK-217F (25°C)   |              |                |              |
|                       | DIMENSION   | 78*93*56mm (W*H*D)  |              |                |              |
|                       | PACKING   | 0.27Kg; 48pcs/14Kg/1.02CUFT   |              |                |              |
| NOTE                  | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. 918B Unit:mm

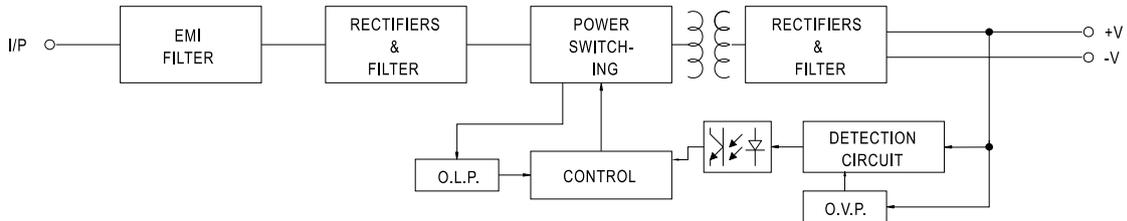
**Terminal Pin No. Assignment**

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|------------|
| 1       | AC/N       | 5,6     | -V         |
| 2       | AC/L       | 7       | LED        |
| 3,4     | +V         | 8       | +VADJ.     |

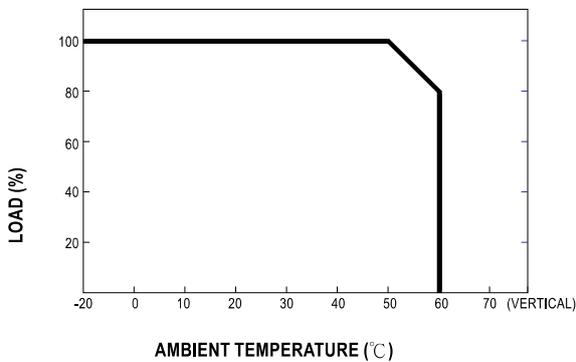


ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

**Block Diagram**



**Derating Curve**



**Output Derating VS Input Voltage**

