

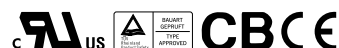


## 15W Single Output Industrial DIN Rail Power Supply

**DR-15 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
- No load power consumption<0.5W
- 100% full load burn-in test
- 3 years warranty



## SPECIFICATION

| MODEL                 |                              | DR-15-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DR-15-12     | DR-15-15       | DR-15-24     |
|-----------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------|--------------|
| OUTPUT                | DC VOLTAGE                   | 5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 12V          | 15V            | 24V          |
|                       | RATED CURRENT                | 2.4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.25A        | 1A             | 0.63A        |
|                       | CURRENT RANGE                | 0 ~ 2.4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0 ~ 1.25A    | 0 ~ 1A         | 0 ~ 0.63A    |
|                       | RATED POWER                  | 12W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 15W          | 15W            | 15.2W        |
|                       | 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             | 1000ms, 50ms/230VAC      1000ms, 50ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                |              |
|                       | HOLD UP TIME (Typ.)          | 70ms/230VAC      16ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                |              |
| INPUT                 | VOLTAGE RANGE                | 85 ~ 264VAC      120 ~ 370VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                |              |
|                       | FREQUENCY RANGE              | 47 ~ 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                |              |
|                       | EFFICIENCY (Typ.)            | 77%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 84%          | 83.5%          | 85%          |
|                       | AC CURRENT (Typ.)            | 0.88A/115VAC      0.48A/230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                |              |
|                       | INRUSH CURRENT (Typ.)        | COLD START 35A/115VAC      65A/230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                |              |
| PROTECTION            | OVERLOAD Note.5              | 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 off o/p voltage, clamping by zener diode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |                |              |
| ENVIRONMENT           | WORKING TEMP.                | -20 ~ +60°C (Refer to output load 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |                |              |
|                       | EMI CONDUCTION & RADIATION   | Compliance to EN55011, EN55022 (CISPR22), EN61204-3 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, EN61204-3, heavy industry level, criteria A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                |              |
| OTHERS                | MTBF                         | 1172.3K hrs min.      MIL-HDBK-217F (25°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |                |              |
|                       | DIMENSION                    | 25*93*56mm (W*H*D)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |                |              |
|                       | PACKING                      | 0.1Kg; 140pcs/15Kg/0.92CUFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                |              |
| 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.<br>5. Constant current operation region is within 60% ~100% rated output voltage. Protection type for short circuit is hiccup mode and will recover automatically after fault condition is removed. |              |                |              |

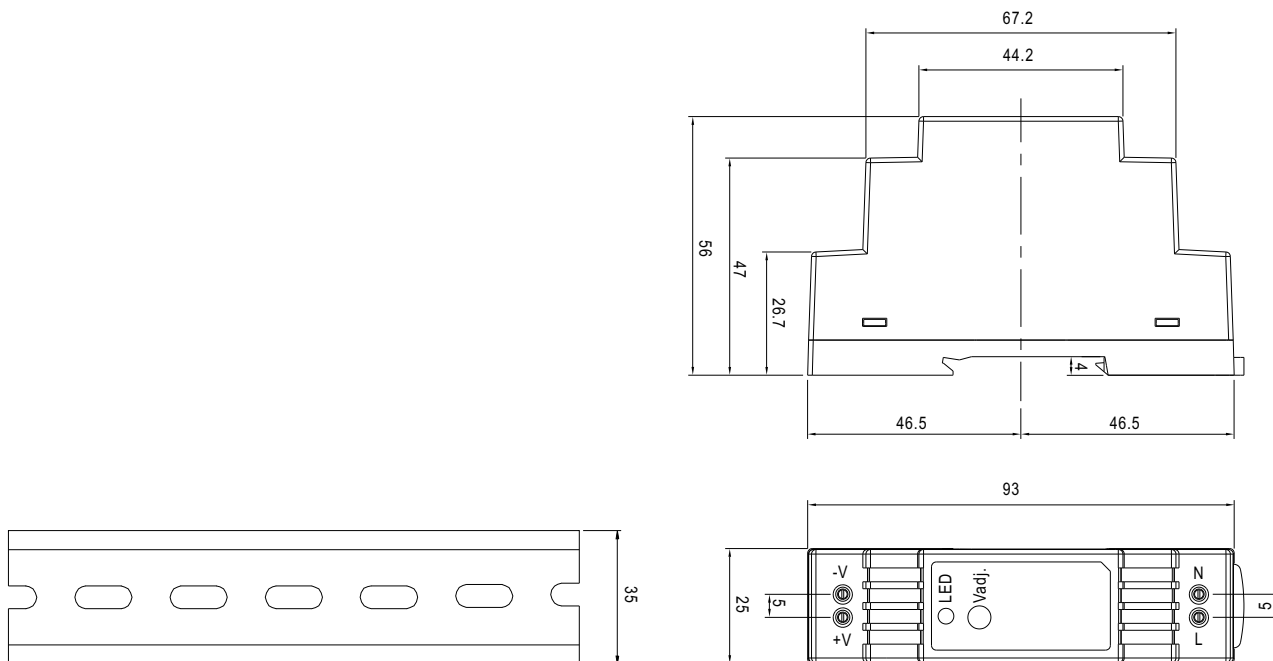


# 15W Single Output Industrial DIN Rail Power Supply

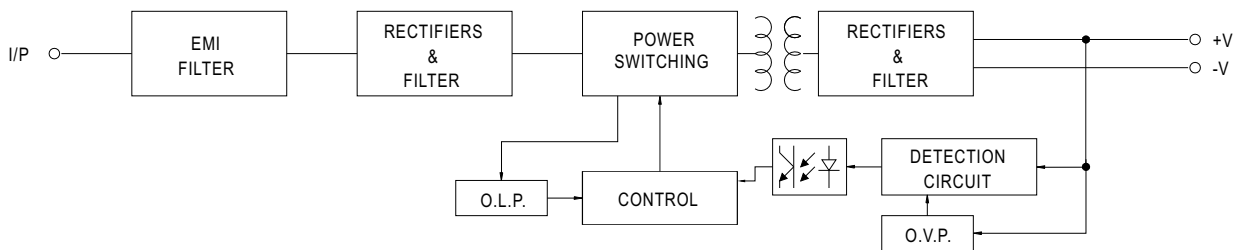
# DR-15 series

## Mechanical Specification

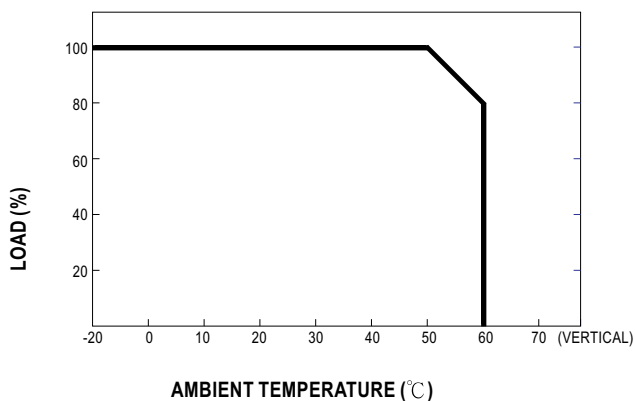
Case No.985A Unit:mm



## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage

