## **DR-100 Series**

100W Single Output Industrial DIN Rail Power Supply





## **Features**

- Universal AC input / Full range
- Protections: Short Circuit / Overload / Over voltage / Over Temperature
- Can be installed on DIN rail TS-35/7.5 or 15
- Isolation Class II
- Cooling by free air convection
- LED indicator for power on
- No load power consumption <1W</li>
- 100% full load burn-in test
- 3 years warranty



## Specification

| specificatio | <b>'11</b>               |   |  |                        |                                       |       |
|--------------|--------------------------|---|--|------------------------|---------------------------------------|-------|
|              | Voltage                  | 88V~264VAC  | 124~370VDC   | (DC input operation po | ssible by connecting AC/L (+), AC/N ( | (-) ) |
| INPUT        | Frequency                | 47 ~ 63 Hz  |  |                        |                                       |       |
|              | Efficiency               | 87%   |  | 87%                    | 89%                                   |       |
|              | AC Current (Typ.)        | 3A/115VAC 1   | .6A/230VAC   |                        |                                       |       |
|              | Inrush Current (Typ.)    | Cold start 30A/   | 115VAC 45A   | A/230VAC               |                                       |       |
| OUTPUT       | MODEL No.                | DR-100-1  | 2  | DR-100-15              | DR-100-24                             |       |
|              | Voltage                  | 12V   |  | 15V                    | 24V                                   |       |
|              | Rated Current            | 7.5A  |  | 6.5A                   | 4.2A                                  |       |
|              | Current Range            | 0~7.5A  |  | 0~6.5A                 | 0~4.2A                                |       |
|              | Rated Power              | 90W   |  | 97.5W                  | 100.8W                                |       |
|              | Ripple Noise MAX.        | 120mVp-   | р  | 120mVp-p               | 150mVp-p                              |       |
|              | Voltage Adjustment Range | 12 ~ 15\  | l  | 15 ~ 18V               | 24 ~ 29V                              |       |
|              | Voltage Tolerance        | ± 2.0%  |  | ± 1.0%                 | ± 1.0%                                |       |
|              | Line Regulation          | ± 1.0%  |  | ± 1.0%                 | ± 1.0%                                |       |
|              | Load Regulation          | ± 1.0%  |  | ± 1.0%                 | ± 1.0%                                |       |
|              | Setup Rise Time          | 270ms, 80ms/230VAC 2700ms, 80ms/115VAC at full load   |  |                        |                                       |       |
|              | Holdup Time (Typ.)       | 50ms/230VAC 18ms/115VAC at full load  |  |                        |                                       |       |
| PROTECTION   | Over Load                | 105 ~ 135% rated output power   |  |                        |                                       |       |
|              |                          | Protection Type: Constant current limiting, recovers automatically after fault condition is removed |  |                        |                                       |       |
|              | Over Voltage             | 16 ~ 20\  | 1  | 19 ~ 23V               | 30 ~ 35V                              |       |
|              |                          | Protection Type: Shut down o/p voltage, re-power onto recover                                       |  |                        |                                       |       |
|              | Over Temperature         | Shut down o/p   | Shut down o/p voltage, re-power on to recover  |                        |                                       |       |
| ENVIRONMENT  | Working Temperature      | -20 ~ +60°C (Refer to "Derating Curve")   |  |                        |                                       |       |
|              | Working Humidity         | 20 ~ 90% RH non-condensing  |  |                        |                                       |       |
|              | Storage Temp., Humidity  | -40 ~ +85°C, 10-95%RH   |  |                        |                                       |       |
|              | Temp. Co-efficient       | ±0.03% / °C (0~50°C)  |  |                        |                                       |       |
|              | Vibration                |   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60 min. each along X, Y, Z axes; Mounting: compliance to IEC60068-2-6 |                        |                                       |       |
| SAFETY & EMC | Safety Standards         | UL60950-1, TUV EN60950-1 approved, design refer to EN50178  |  |                        |                                       |       |
|              | Withstand Voltage        | I/P-0/P:3KVAC   |  |                        |                                       |       |
|              | Isolation Resistance     | I/P-OP: 100M 0hms/500Vdc/25°C/70% RH  |  |                        |                                       |       |
|              | EMC Emission             | Compliance to EN61204-3, EN55032 Class B, EN61000-3-2,-3  |  |                        |                                       |       |
|              | EMC Immunity             |   | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, EN61204-3, Heavy industry level, criteria A      |                        |                                       |       |
| OTHERS       | M.T.B.F.                 | 486K hrs min. MIL-HDBK-217F (25°C)  |  |                        |                                       |       |
|              | Packaging                | 0.35Kg; 36pcs/13.6Kg/0.89CUFT   |  |                        |                                       |       |

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- 2. Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- 4. The power supply is considered as a component which will be installed with final equipment. The final equipment must re-confirmed that it still meets EMC Directives.
- 5. Harmonic current test at 90% load.
- 6. Under short circuit or overload >150% conditions, output voltage may shut down for 5 seconds and then go into constant current protection mode.

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