



SDR-240 series





■ Features :

- High efficiency 94% and low power dissipation
- 150% peak load capability
- Built-in active PFC function, PF>0.93
- 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
- EN61000-6-2(EN50082-2) industrial immunity level
- * Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty

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SPECIFICATION MODEL SDR-240-24 SDR-240-48 DC VOLTAGE 24V 48V RATED CURRENT 10A 5A **CURRENT RANGE** 0 ~ 10A 0 ~ 5A RATED POWER 240W 240W **PEAK CURRENT** 15A 7.5A PEAK POWER Note.6 360W (3sec.) OUTPUT RIPPLE & NOISE (max.) Note.2 50mVp-p 50mVp-p VOLTAGE ADJ. RANGE 24 ~ 28V 48 ~ 55V VOLTAGE TOLERANCE Note.3 $\pm 1.0\%$ $\pm 1.0\%$ LINE REGULATION $\pm 0.5\%$ $\pm 0.5\%$ LOAD REGULATION $\pm 1.0\%$ $\pm 1.0\%$ SETUP, RISE TIME 1300ms, 60ms/115VAC at full load 650ms, 60ms/230VAC **HOLD UP TIME (Typ.)** 20ms/115VAC at full load 20ms/230VAC 124 ~ 370VDC 88 ~ 264VAC **VOLTAGE RANGE** 47 ~ 63Hz FREQUENCY RANGE 0.94/230VAC 0.99/115VAC at full load POWER FACTOR (Typ.) INPUT EFFICIENCY (Typ.) Note.8 94% 2.6A/115VAC 1.3A/230VAC AC CURRENT (Typ.) 33A/115VAC 55A/230VAC INRUSH CURRENT (Typ.) LEAKAGE CURRENT <1mA / 240VAC Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage with auto-recovery OVERLOAD >150% rated power, constant current limiting with auto-recovery within 2 seconds and may cause to shut down if over 2 seconds 29 ~ 33V 56 ~ 65V PROTECTION OVER VOLTAGE Protection type: Shut down o/p voltage with auto-recovery $95^{\circ}\text{C} \pm 5^{\circ}\text{C}$ (TSW: detect on heatsink of power switch) OVER TEMPERATURE Protection type: Shut down o/p voltage, recovers automatically after temperature goes down 60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load FUNCTION DC OK REALY CONTACT RATINGS (max.) -25 ~ +70°C (Refer to "Derating Curve") WORKING TEMP. 20 ~ 95% RH non-condensing WORKING HUMIDITY ENVIRONMENT STORAGE TEMP., HUMIDITY -40 ~ +85°C, 10 ~ 95% RH TEMP. COEFFICIENT ±0.03%/°C (0 ~ 50°C) VIBRATION Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 SAFETY STANDARDS UL508, TUV EN60950-1, EAC TP TC 004 approved; (meet EN60204-1) WITHSTAND VOLTAGE I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC **SAFETY &** ISOLATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH **FMC EMC EMISSION** Compliance to EN55011, EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020 (Note 4) Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, **EMC IMMUNITY** EAC TP TC 020, SEMI F47, GL approved MTBF 169.3K hrs min. MIL-HDBK-217F (25°C) **OTHERS DIMENSION** 63*125,2*113,5mm (W*H*D) **PACKING** 1.03Kg; 12pcs/13.4Kg/1.06CUFT All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. NOTE 2. Ripple & 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 a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
- 5. Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.
- 6. 3 seconds max., please refer to peak loading curves.
- 7. Derating may be needed under low input voltage. Please check the derating curve for more details.
- 8. After 30 minutes of burn-in.
- 9. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

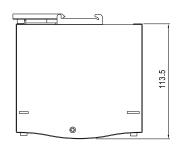


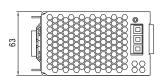


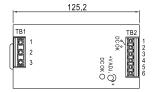


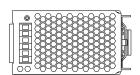
■ Mechanical Specification

Case No. 979A Unit:mm











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



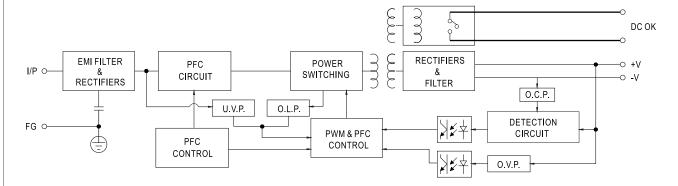
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1,2	Relay Contact
3,4	DC OUTPUT +V
5,6	DC OUTPUT -V

■ Block Diagram



■ DC OK Relay Contact

Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.



