



■ Features :

- High efficiency 91% 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

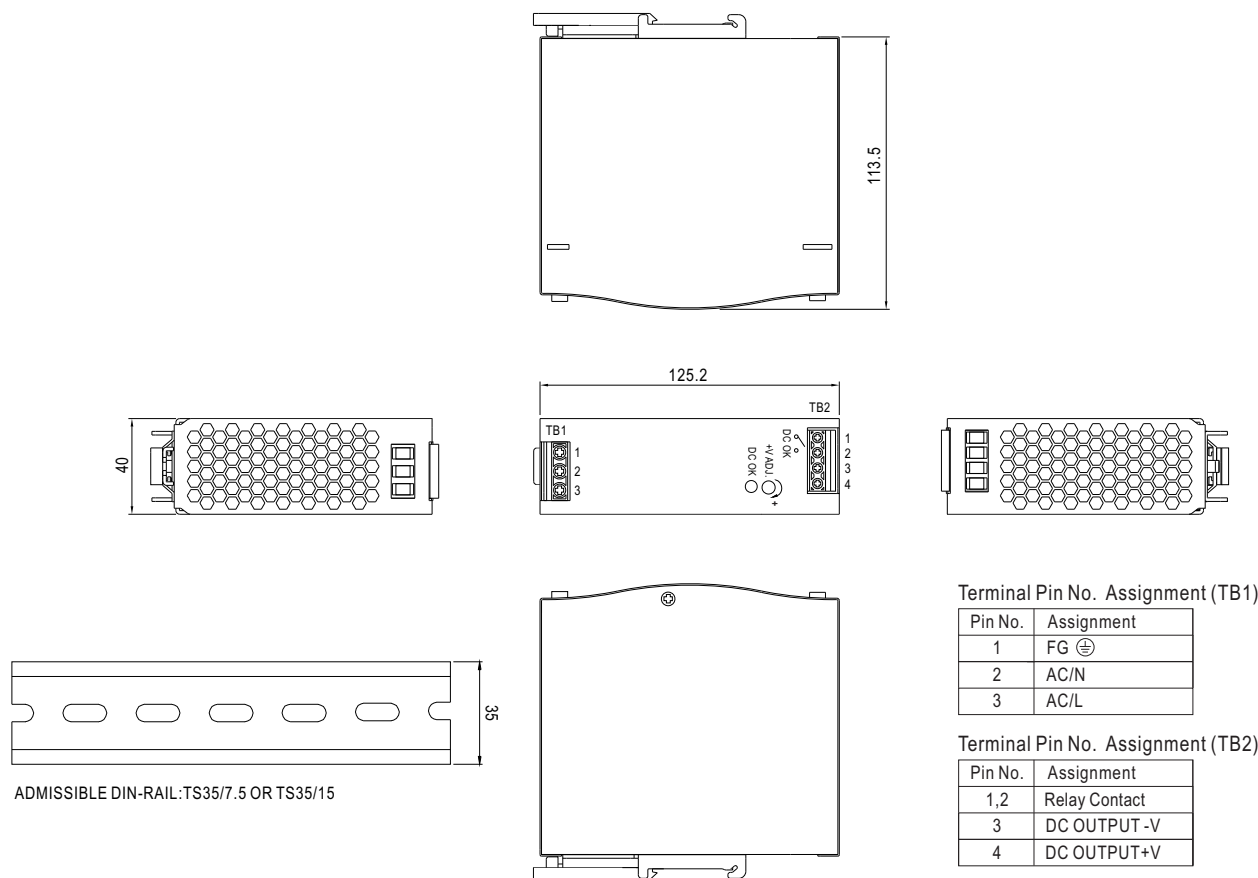


SPECIFICATION

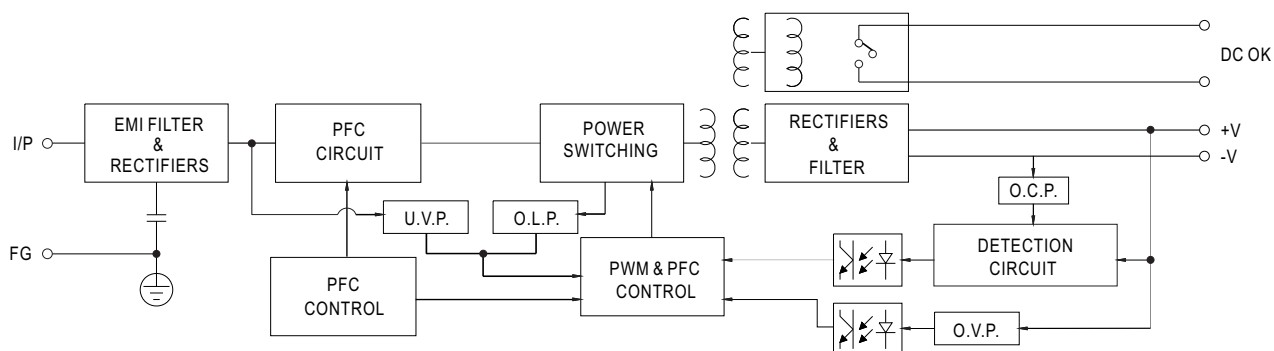
| MODEL | | SDR-120-12 | | SDR-120-24 | | SDR-120-48 | |
|---|--|--|--|--------------------------|--|------------|--|
| OUTPUT | DC VOLTAGE | 12V | | 24V | | 48V | |
| | RATED CURRENT | 10A | | 5A | | 2.5A | |
| | CURRENT RANGE | 0 ~ 10A | | 0 ~ 5A | | 0 ~ 2.5A | |
| | RATED POWER | 120W | | 120W | | 120W | |
| | PEAK CURRENT | 15A | | 7.5A | | 3.75A | |
| | PEAK POWER <small>Note.6</small> | 180W (3 sec.) | | | | | |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 100mVp-p | | 100mVp-p | | 120mVp-p | |
| | VOLTAGE ADJ. RANGE | 12 ~ 14V | | 24 ~ 28V | | 48 ~ 55V | |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ± 1.0% | | ± 1.0% | | ± 1.0% | |
| | LINE REGULATION | ± 0.5% | | ± 0.5% | | ± 0.5% | |
| | LOAD REGULATION | ± 1.0% | | ± 1.0% | | ± 1.0% | |
| | SETUP, RISE TIME | 1500ms, 60ms/230VAC 3000ms, 60ms/115VAC at full load | | | | | |
| HOLD UP TIME (Typ.) | 20ms/230VAC 20ms/115VAC at full load | | | | | | |
| INPUT | VOLTAGE RANGE <small>Note.7</small> | 88 ~ 264VAC | | 124 ~ 370VDC | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | POWER FACTOR (Typ.) | 0.93/230VAC | | 0.96/115VAC at full load | | | |
| | EFFICIENCY (Typ.) | 89% | | 91% | | 90.5% | |
| | AC CURRENT (Typ.) | 1.4A/115VAC | | 0.7A/230VAC | | | |
| | INRUSH CURRENT (Typ.) | 35A/115VAC | | 70A/230VAC | | | |
| | LEAKAGE CURRENT | <1mA / 240VAC | | | | | |
| PROTECTION | OVERLOAD | Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage >150% rated power, constant current limiting with auto-recovery within 3 seconds and shut down o/p voltage after 3 seconds | | | | | |
| | OVER VOLTAGE | 14 ~ 17V | | 29 ~ 33V | | 56 ~ 65V | |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | |
| | OVER TEMPERATURE | 95°C ±5°C (TSW) detect on heatsink of power switch | | | | | |
| | | Protection type : Shut down o/p voltage, recovers automatically after temperature goes down | | | | | |
| FUNCTION | DC OK REALY CONTACT RATINGS (max.) | 60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load | | | | | |
| ENVIRONMENT | WORKING TEMP. | -25 ~ +70°C (Refer to "Derating Curve") | | | | | |
| | WORKING HUMIDITY | 20 ~ 95% RH non-condensing | | | | | |
| | 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 & EMC <small>(Note 4)</small> | SAFETY STANDARDS | UL508, TUV EN62368-1, EAC TP TC 004, BSMI CNS14336-1 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 | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH | | | | | |
| | EMC EMISSION | Compliance to EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020, CNS13438 Class B | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, EAC TP TC 020, SEMI F47 approved | | | | | |
| OTHERS | MTBF | 289.9K hrs min. MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 40*125.2*113.5mm (W*H*D) | | | | | |
| | PACKING | 0.67Kg; 20pcs/14.4Kg/1.16CUFT | | | | | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 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. 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). | | | | | | |

Case No.992A Unit:mm

Mechanical Specification



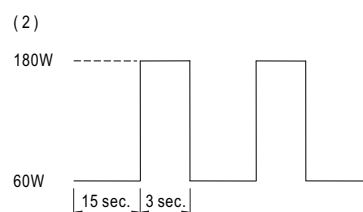
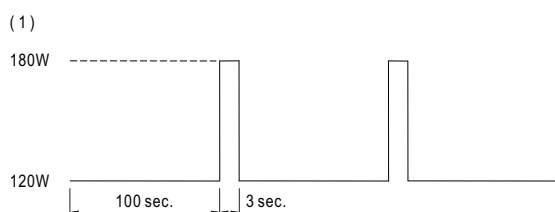
Block Diagram



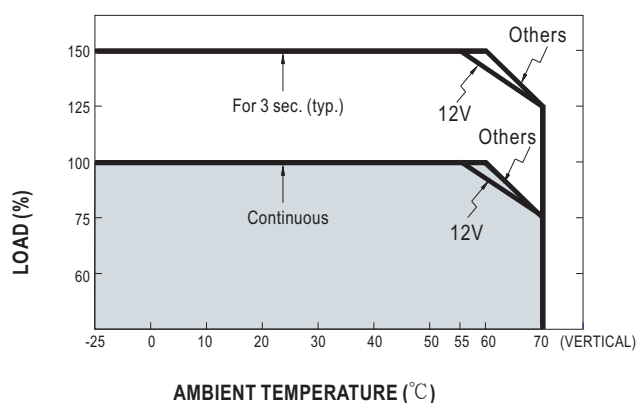
DC OK Relay Contact

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

■ Peak Loading



■ Derating Curve



■ Output derating VS input voltage

