



■ Features :

- AC input 180~264VAC only
- 130% peak load capability
- 110mm slim design
- Built-in active PFC function compliance to EN61000-3-2
- High efficiency 94% and low power dissipation
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 or 15
- UL508(industrial control equipment)approved
- EN61000-6-2(EN50082-2) industrial immunity level
- Current sharing up to 3840W(3+1)
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty

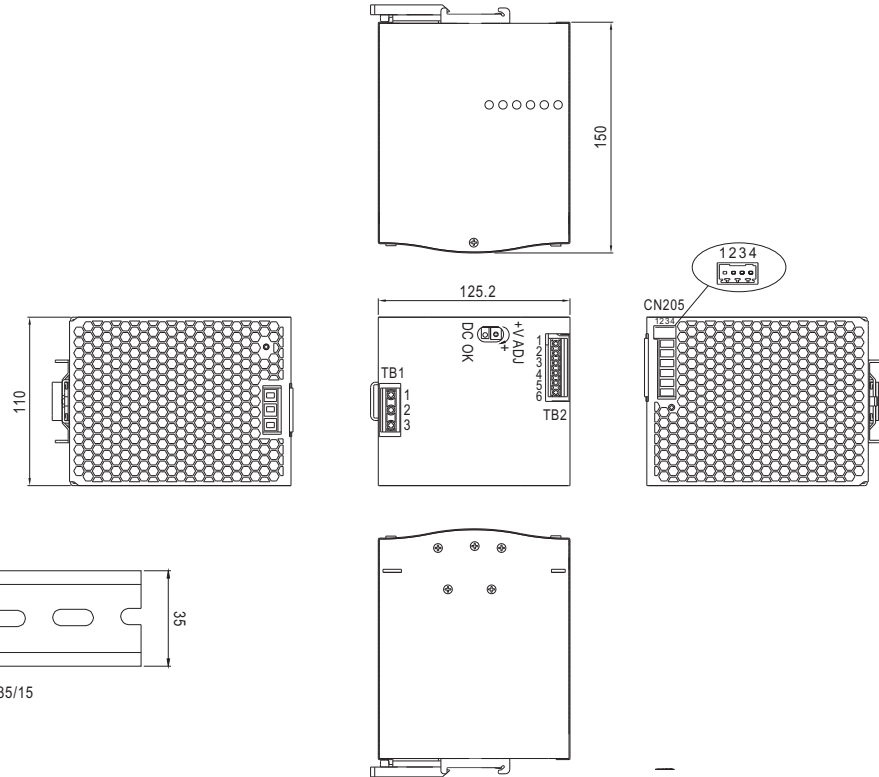


SPECIFICATION

| MODEL | SDR-960-24 | SDR-960-48 | |
|-----------------------|---|---|----------|
| OUTPUT | DC VOLTAGE | 24V | 48V |
| | RATED CURRENT | 40A | 20A |
| | CURRENT RANGE | 0 ~ 40A | 0 ~ 20A |
| | RATED POWER | 960W | 960W |
| | PEAK CURRENT | 52A | 26A |
| | PEAK POWER <small>Note.6</small> | 1248W (3sec.) | |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 180mVp-p | 250mVp-p |
| | VOLTAGE ADJ. RANGE | 24 ~ 28V | 48 ~ 55V |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1.0% | ±1.0% |
| SETUP, RISE TIME | 1000ms, 100ms/230VAC at full load | | |
| HOLD UP TIME (Typ.) | 14ms / 230VAC at full load | | |
| INPUT | VOLTAGE RANGE <small>Note.7</small> | 180 ~ 264VAC 254 ~ 370VDC | |
| | FREQUENCY RANGE | 47 ~ 63Hz | |
| | POWER FACTOR (Typ.) | PF ≥ 0.95/230VAC at full load | |
| | EFFICIENCY (Typ.) | 94% | |
| | AC CURRENT (Typ.) | 6A/230VAC | |
| | INRUSH CURRENT (Typ.) | COLD START 50A / 230VAC | |
| | LEAKAGE CURRENT | <3.5mA / 240VAC | |
| PROTECTION | OVERLOAD | Normally works within 105 ~ 130% rated output power for more than 3 seconds and then shut down o/p voltage with auto-recovery after 30 seconds if the peak load condition is removed Constant current limiting within 130 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage, re-power on to recover | |
| | OVER VOLTAGE | 29 ~ 33V | 56 ~ 65V |
| | OVER TEMPERATURE | 90°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 | |
| | CURRENT SHARING | Please refer to function manual | |
| ENVIRONMENT | WORKING TEMP. <small>Note.5</small> | -30 ~ +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 (Note 4) | SAFETY STANDARDS | UL508, TUV EN60950-1 approved | |
| | 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 <small>Note.8</small> | Compliance to EN55022 (CISPR22), EN61204-3 Conduction class B, Radiation class A, EN61000-3-2,-3 | |
| OTHERS | 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 | |
| | MTBF | 69.8K hrs min. MIL-HDBK-217F (25°C) | |
| | DIMENSION | 110*125.2*150mm (W*H*D) | |
| | PACKING | 2.47Kg ; 6pcs/15.8Kg/1.55CUFT | |
| NOTE | <ol style="list-style-type: none"> 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 peak power max. and the average output power should not exceed the rate power. 7. Derating may be needed under low input voltage. Please check the derating curve for more details. 8. Consult MEAN WELL for deployment of Radiation class B. | | |

Mechanical Specification

Case No.214A 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 |

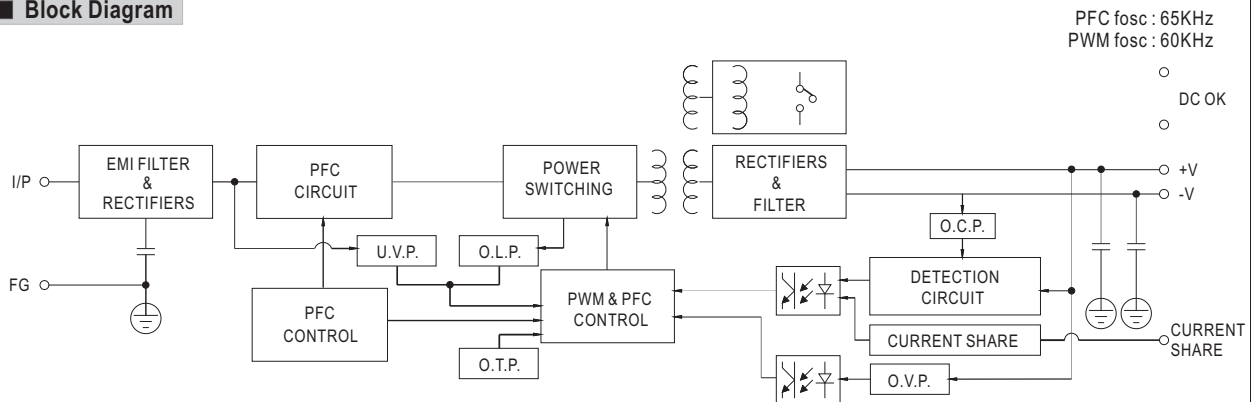
Terminal Pin No. Assignment (TB2)

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

Control Pin (CN205) : DINKLE ECH250R-04P or equivalent

| Pin No. | Assignment | Mating Housing | Wire Diameter |
|---------|---------------------|---|--|
| 1 | P-(Current Share) | DINKLE ESC250V-04P or equivalent (Including in the single package) | 0.081~0.517mm ² (28~20AWG) |
| 2 | P+(Current Share) | | |
| 3,4 | DC OK Relay Contact | | |

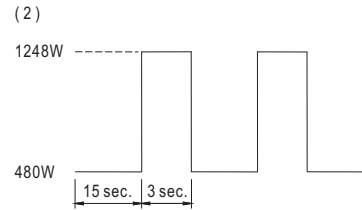
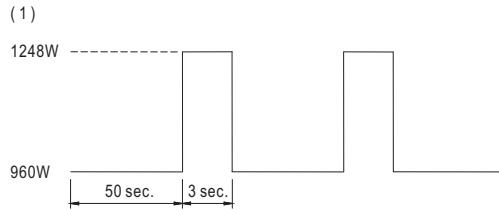
Block Diagram



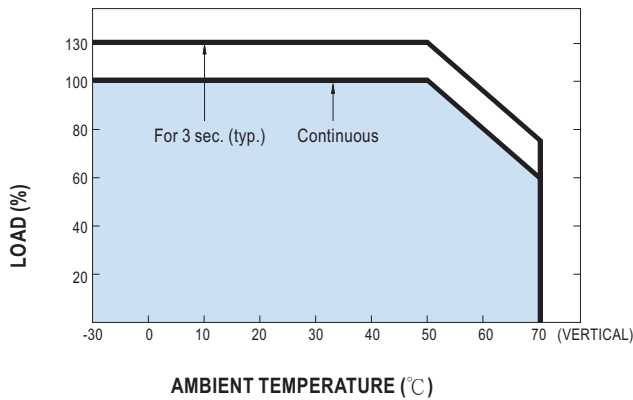
DC OK Relay Contact

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

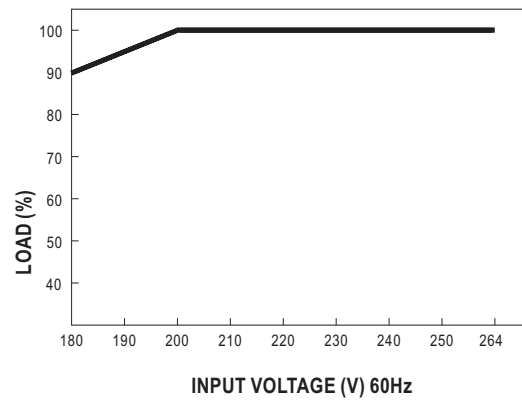
Peak Loading



Derating Curve



Output derating VS input voltage



Function Manual

1. Current sharing

- (1) Parallel operation is available by connecting the units shown as below (P+,P- are connected mutually in parallel).
- (2) Difference of output voltages among parallel units should be less than 0.2V.
- (3) The total output current must not exceed the value determined by the following equation (Output current at parallel operation)=(The rated current per unit) x (Number of unit) x 0.9.
- (4) In parallel operation 4 units is the maximum, please consult the manufacture for other applications.
- (5) The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- (6) When in parallel operation, the minimum output load should be greater than 5% of total output load.
(Min. load >5% rated current per unit x number of unit)
- (7) In parallel connection, maybe only one unit (master) operate if the total output load is less than 5% of rated load condition. The other PSUs (slaves) may go into standby mode and their output LEDs & relays will not turn on.
- (8) Some minor noise may be heard at light load condition under parallel operation.
This is a normal phenomenon and the performance of the PSU will not be influenced.

