


■ Features :

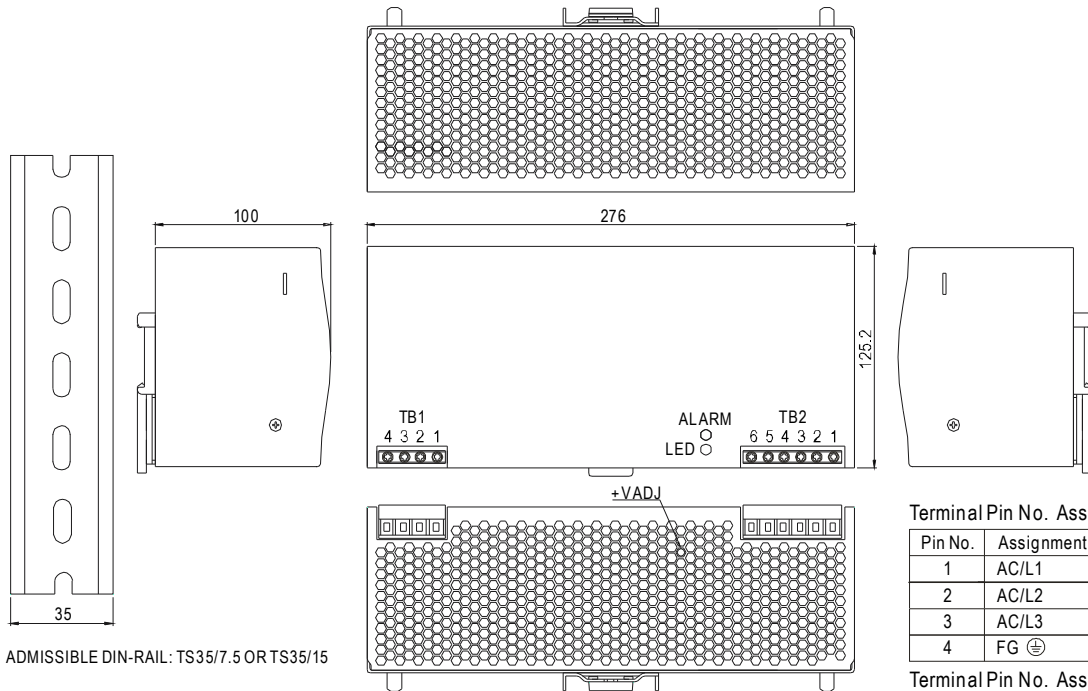
- Three-Phase AC 340 ~ 550V wide range input
- High efficiency 91% and low dissipation
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional parallel function(1+1)
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508(industrial control equipment)approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty


SPECIFICATION

| MODEL | DRT-960-24 | DRT-960-48 | |
|-----------------------|---|---|---------------------------------|
| OUTPUT | DC VOLTAGE | 24V | 48V |
| | RATED CURRENT | 40A | 20A |
| | CURRENT RANGE | 0 ~ 40A | 0 ~ 20A |
| | RATED POWER | 960W | 960W |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 80mVp-p |
| | VOLTAGE ADJ. RANGE | 24 ~ 28V | 48 ~ 55V |
| | VOLTAGE TOLERANCE Note.3 | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±0.5% | ±0.5% |
| | SETUP, RISE TIME | 200ms, 60ms/400VAC | 200ms, 60ms/500VAC at full load |
| HOLD UP TIME (Typ.) | 14ms/400VAC | 30ms/500VAC at full load | |
| INPUT | VOLTAGE RANGE | Three-Phase 340 ~ 550 VAC (Dual phase operation possible in connecting L1,L3,FG Note.5) | |
| | FREQUENCY RANGE | 47 ~ 63Hz | |
| | EFFICIENCY (Typ.) | 91% | 92% |
| | AC CURRENT (Typ.) | 2A/400VAC | 1.6A/500VAC |
| | INRUSH CURRENT (max.) | COLD START 50A | |
| | LEAKAGE CURRENT | <3.5mA / 530VAC | |
| PROTECTION | OVERLOAD | 105 ~ 125% rated output power Protection type : Constant current limiting, unit will shut down o/p voltage after 3 sec. , re-power on to recover | |
| | OVER VOLTAGE | 30 ~ 36V | 59 ~ 66V |
| | OVER TEMPERATURE | 110°C ±5°C (TSW1) detect on heatsink of power transistor 85°C ±5°C (TSW2) detect on heatsink of power diode Protection type : Shut down o/p voltage, recovers automatically after temperature goes down | |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +60°C (Refer to "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 | 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, UL60950-1, TUV EN60950-1 approved | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG: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 EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2,-3 | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61204-3, EN61000-6-2 (EN50082-2), heavy industry level, criteria A | |
| OTHERS | MTBF | 122.5K hrs min. MIL-HDBK-217F (25°C) | |
| | DIMENSION | 276*125.2*100mm (W*H*D) | |
| | PACKING | 3.3Kg; 4pcs/14.2Kg/1.14CUFT | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 400VAC 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. Dual phase operation(connecting L1,L3,FG)is allowed under certain derating to output load. Please refer to the derating curves for details. | | |

Mechanical Specification

Case No.934 Unit:mm



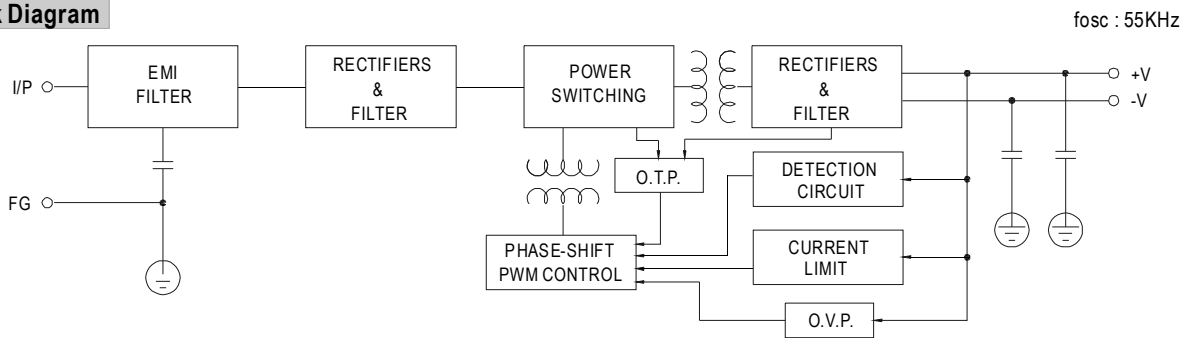
Terminal Pin No. Assignment (TB1)

| Pin No. | Assignment |
|---------|-------------|
| 1 | AC/L1 |
| 2 | AC/L2 |
| 3 | AC/L3 |
| 4 | FG \oplus |

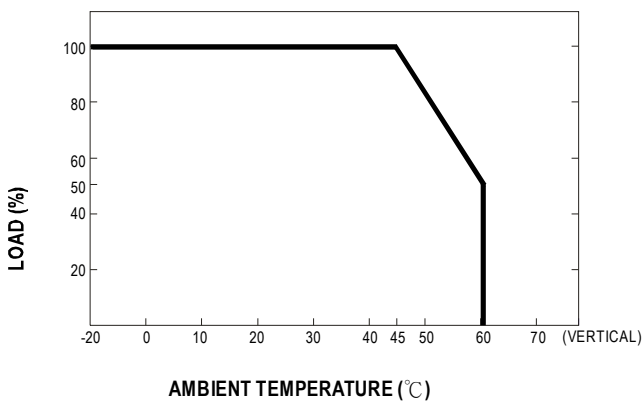
Terminal Pin No. Assignment (TB2)

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

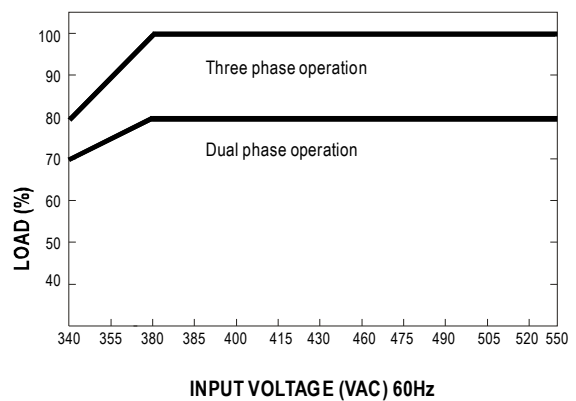
Block Diagram



Derating Curve

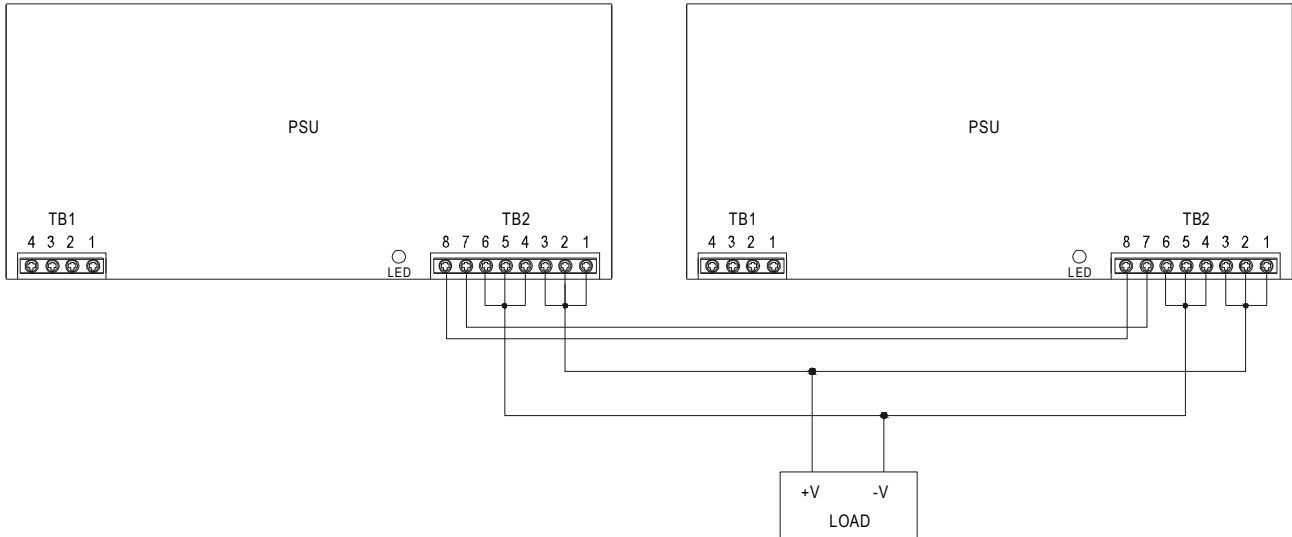


Static Characteristics



■ **Parallel Function (1+1)-Optional (Special order required)**

When in parallel operation, the minimum output load should be greater than 3% of total output load.
 (Min. load >3% rated current per unit x number of unit)



TB1 Terminal Pin No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1 | AC/L1 |
| 2 | AC/L2 |
| 3 | AC/L3 |
| 4 | FG |

TB2 Terminal Pin No. Assignment

| Pin No. | Assignment |
|---------|------------------|
| 1,2,3 | DC OUTPUT +V |
| 4,5,6 | DC OUTPUT -V |
| 7 | GND |
| 8 | P(Current Share) |

Note: Under parallel operation, if the load current is too small, only one PSU(master) would provide the power and hence the LED indicator of other PSUs may not light up.