



960W Three Phase Industrial DIN RAIL Power Supply

DRT-960 series



■ 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

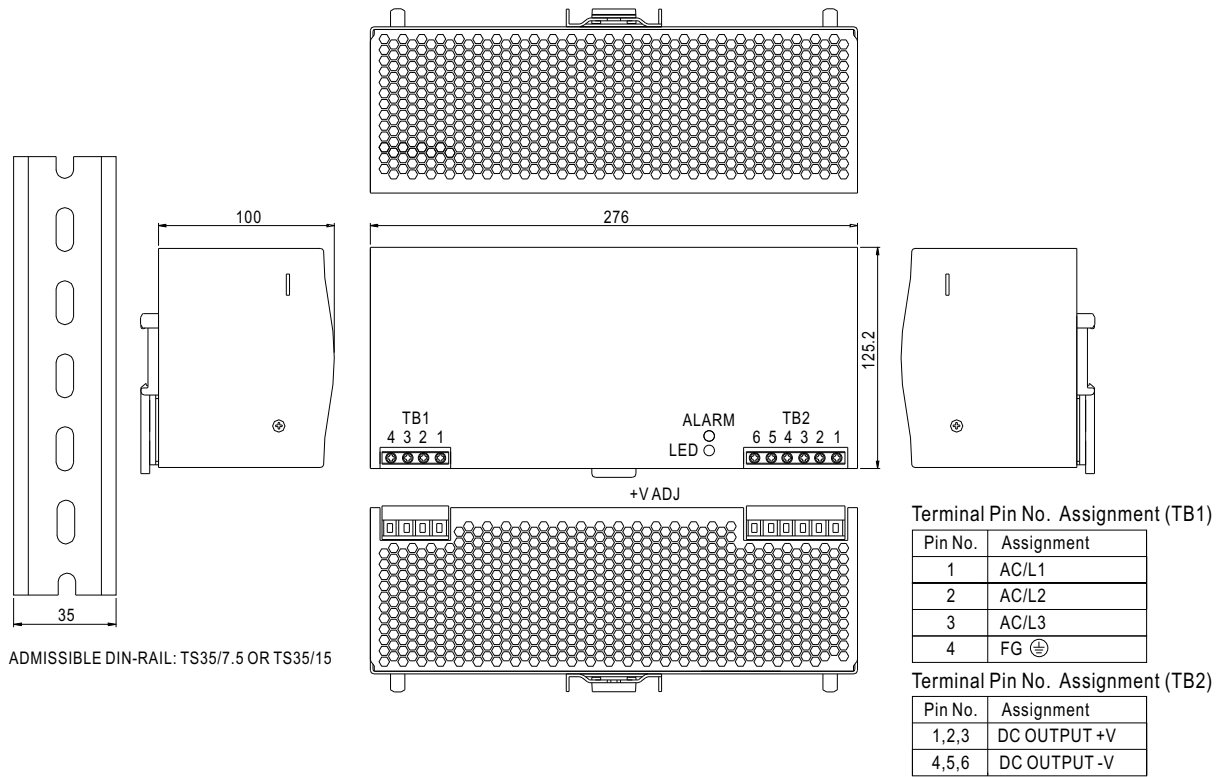


SPECIFICATION

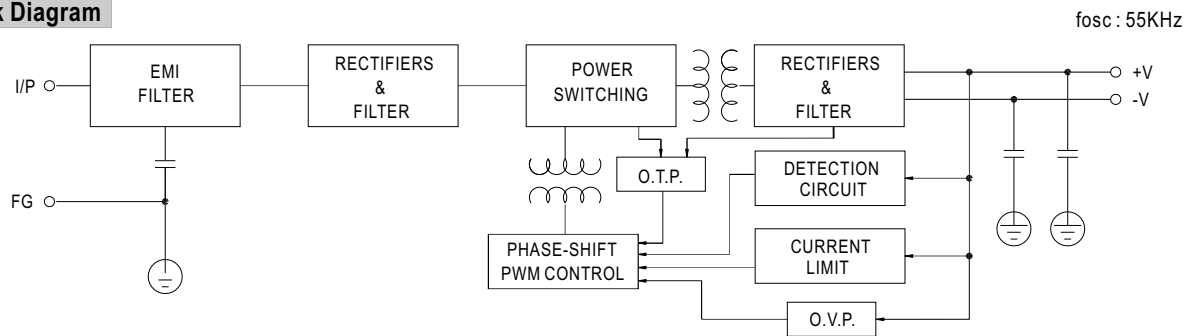
MODEL		DRT-960-24		DRT-960-48	
OUTPUT	DC VOLTAGE	24V		48V	
	RATED CURRENT	40A		20A	
	CURRENT RANGE	0 ~ 40A		0 ~ 20A	
	RATED POWER	960W		960W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p		80mVp-p	
	VOLTAGE ADJ. RANGE	24 ~ 28V		48 ~ 55V	
	VOLTAGE TOLERANCE Note.3	±1.0%		±1.0%	
	LINE REGULATION	±0.5%		±0.5%	
	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 ~ 550VAC (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 output load 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:1.5KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH			
	EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B			
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61204-3, EN61000-6-2 (EN50082-2), heavy industry level, criteria A			
OTHERS	MTBF	122.5Khrs 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

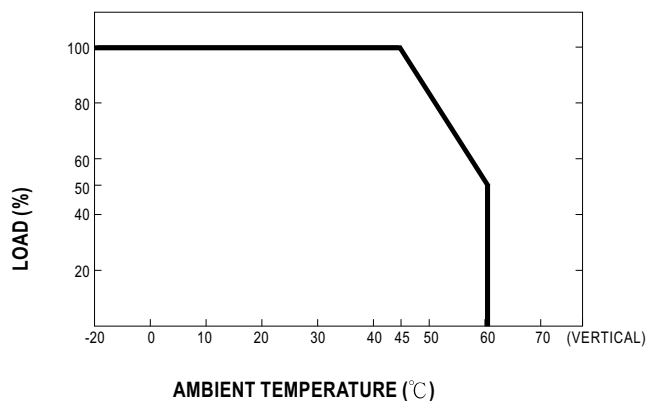
Case No.934 Unit:mm



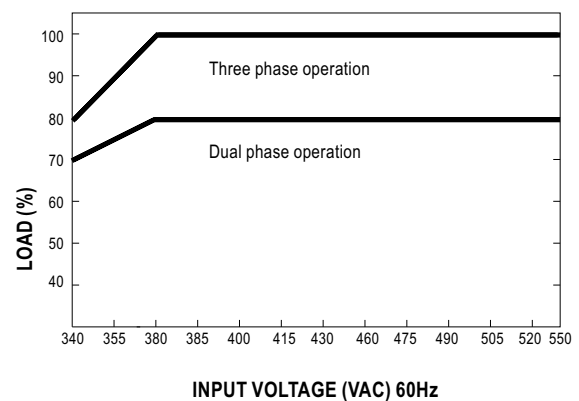
Block Diagram



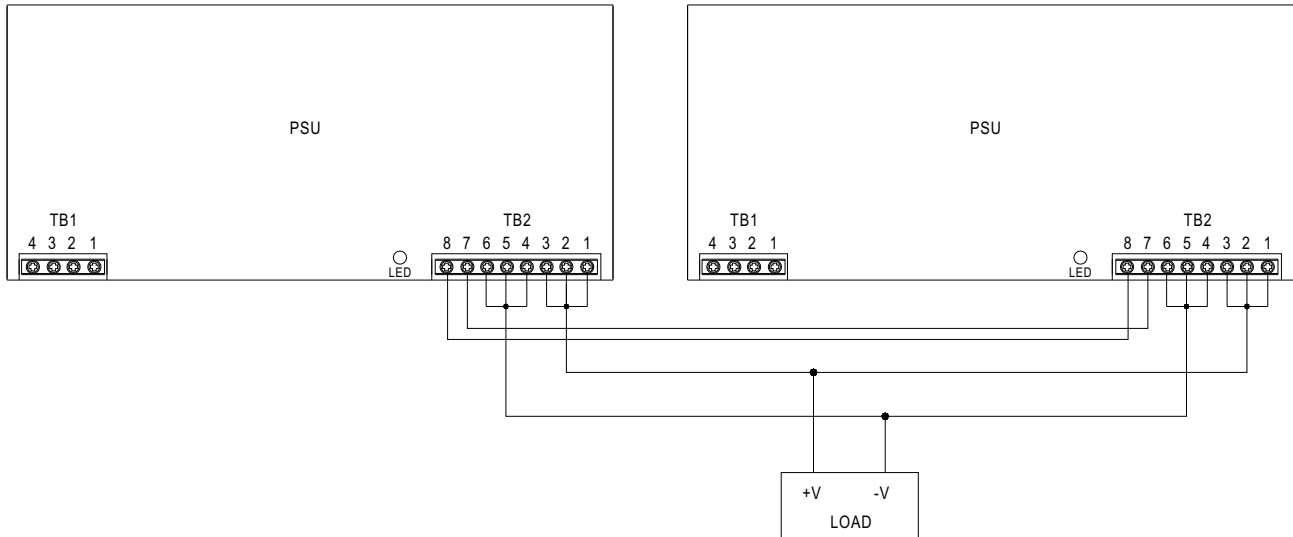
Derating Curve



Static Characteristics



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



TB1 Terminal Pin No. Assignment

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

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.