480W Single Output Industrial DIN RAIL with PFC Function DRP-480 series



Features :

- Built-in passive PFC function compliance to EN61000-3-2
- High efficiency 89% and low 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
- UL 508(industrial control equipment)approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

User's Manual

UL508 UL60950-1 TPTC004

SPECIFICATION

MODEL		DRP-480-24	DRP-480-48
OUTPUT	DC VOLTAGE	24V	48V
	RATED CURRENT	20A	10A
	CURRENT RANGE	0 ~ 20A	0 ~ 10A
	RATED POWER	480W	480W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 53V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%
	SETUP, RISE TIME	1200ms, 40ms/230VAC at full load	
	HOLD UP TIME (Typ.)	16ms/230VAC at full load	
INPUT	VOLTAGE RANGE	180 ~ 264VAC 250 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR (Typ.)	≧0.7	
	EFFICIENCY (Typ.)	89%	
	AC CURRENT (Typ.)	4A/230VAC	
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC	
	LEAKAGE CURRENT	<3.5mA / 240VAC	
PROTECTION	OVERLOAD	105 ~ 150% rated output power	
		Protection type : Constant current limiting, recovers automatically after fault condition is removed	
	OVER VOLTAGE	30 ~ 36V	54 ~ 60V
		Protection type : Shut down o/p voltage, re-power on to recover	
	OVER TEMPERATURE	100℃±5℃ (TSW : detect on heatsink of power switch)	
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down	
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to "Derating Curve")	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)	
	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, EAC TP TC 004 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2.0KVAC O/P-FG:0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH	
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020	
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 (EN50082-2), heavy industry level, criteria A, EAC TP TC 020	
OTHERS	MTBF	180.9Khrs min. MIL-HDBK-217F (25℃)	
	DIMENSION	227*125.2*100mm (W*H*D)	
	PACKING	2.4Kg; 6pcs/15Kg/1.46CUFT	

NOTE

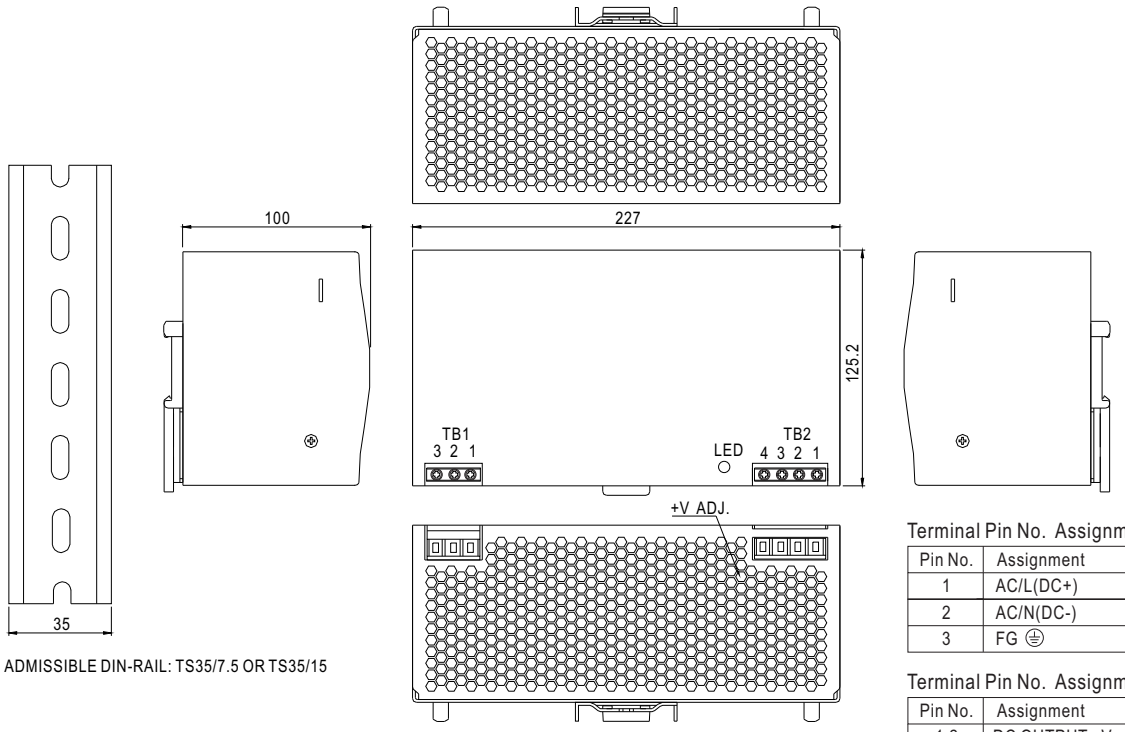
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation 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. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).

※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

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■ Mechanical Specification

Case No.930 Unit:mm



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

Terminal Pin No. Assignment (TB1)

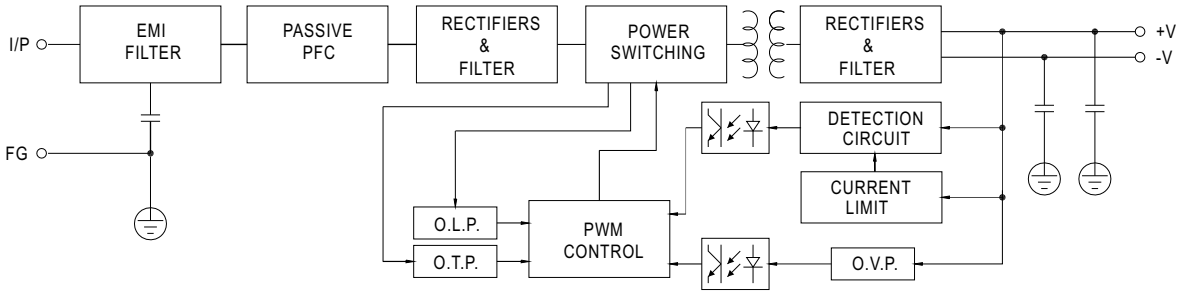
Pin No.	Assignment
1	AC/L(DC+)
2	AC/N(DC-)
3	FG ⏚

Terminal Pin No. Assignment (TB2)

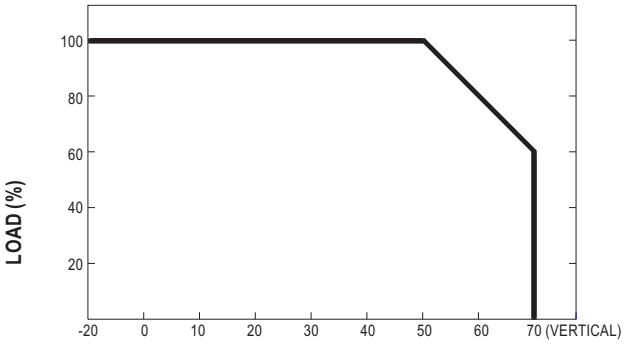
Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

■ Block Diagram

fosc : 70KHz

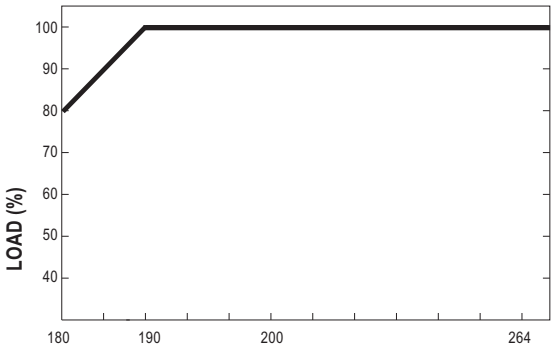


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage



INPUT VOLTAGE (V) 60Hz

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