

ASTRODYNE

480W Single Output Industrial DIN RAIL with PFC Function(PFC function for DRP-480 only)

DRP-480S series



■ Features :

- Built-in passive PFC function compliance to EN61000-3-2
- High efficiency 89% and low dissipation
- Protections:Short circuit/Over load/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



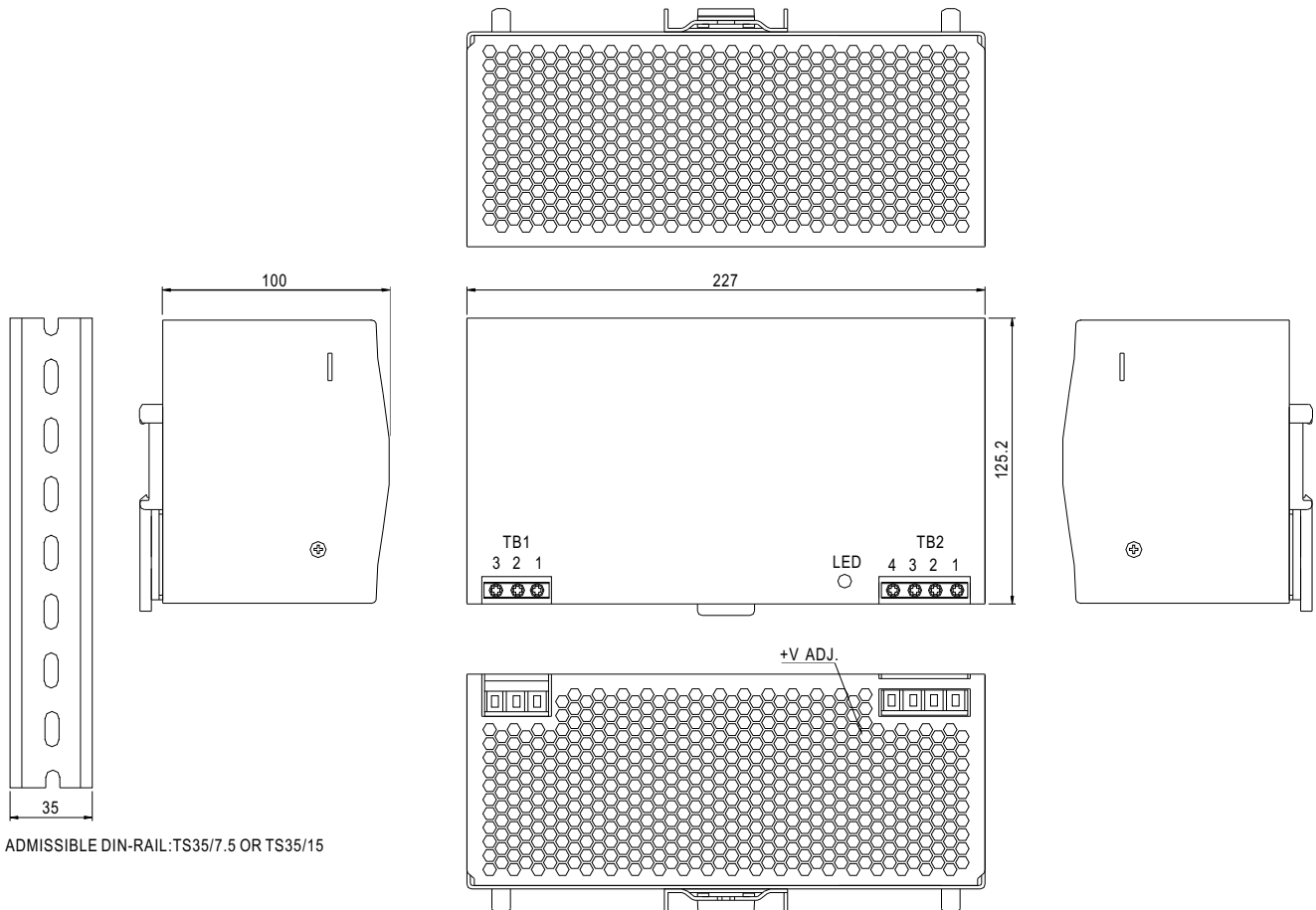
SPECIFICATION

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 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	OVER LOAD	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	
	OVER VOLTAGE	30 ~ 36V	54 ~ 60V
	OVER TEMPERATURE	100°C ±5°C (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°C (Refer to output load derating curve)	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)	
SAFETY & EMC (Note 4)	VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6	
	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	
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B	
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3	
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 (EN50082-2) Heavy industry level, criteria A	
	MTBF	180.9Khrs min. MIL-HDBK-217F (25°C)	
NOTE	DIMENSION	227*125.2*100mm (W*H*D)	
	PACKING	2.4Kg; 6pcs/15Kg/1.75CUFT	
<p>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.</p>			



Mechanical Specification

Case No.930 Unit:mm



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

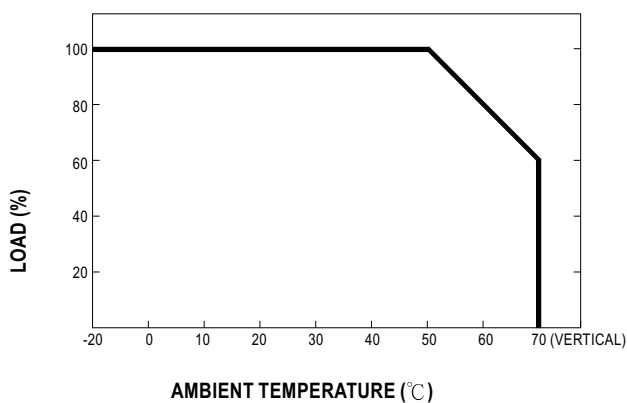
TB1 Terminal Pin. No Assignment

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

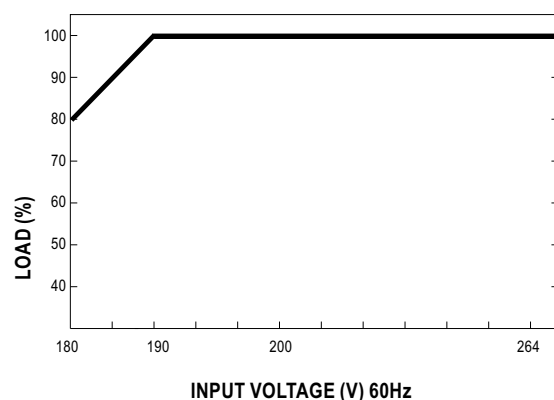
TB2 Terminal Pin. No Assignment

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

Derating Curve



Output Derating VS Input Voltage





■ Features :

- AC input range selectable by switch
- Built-in passive PFC function compliance to EN61000-3-2
- High efficiency 89% and low dissipation
- Protections: Short circuit/Over load/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
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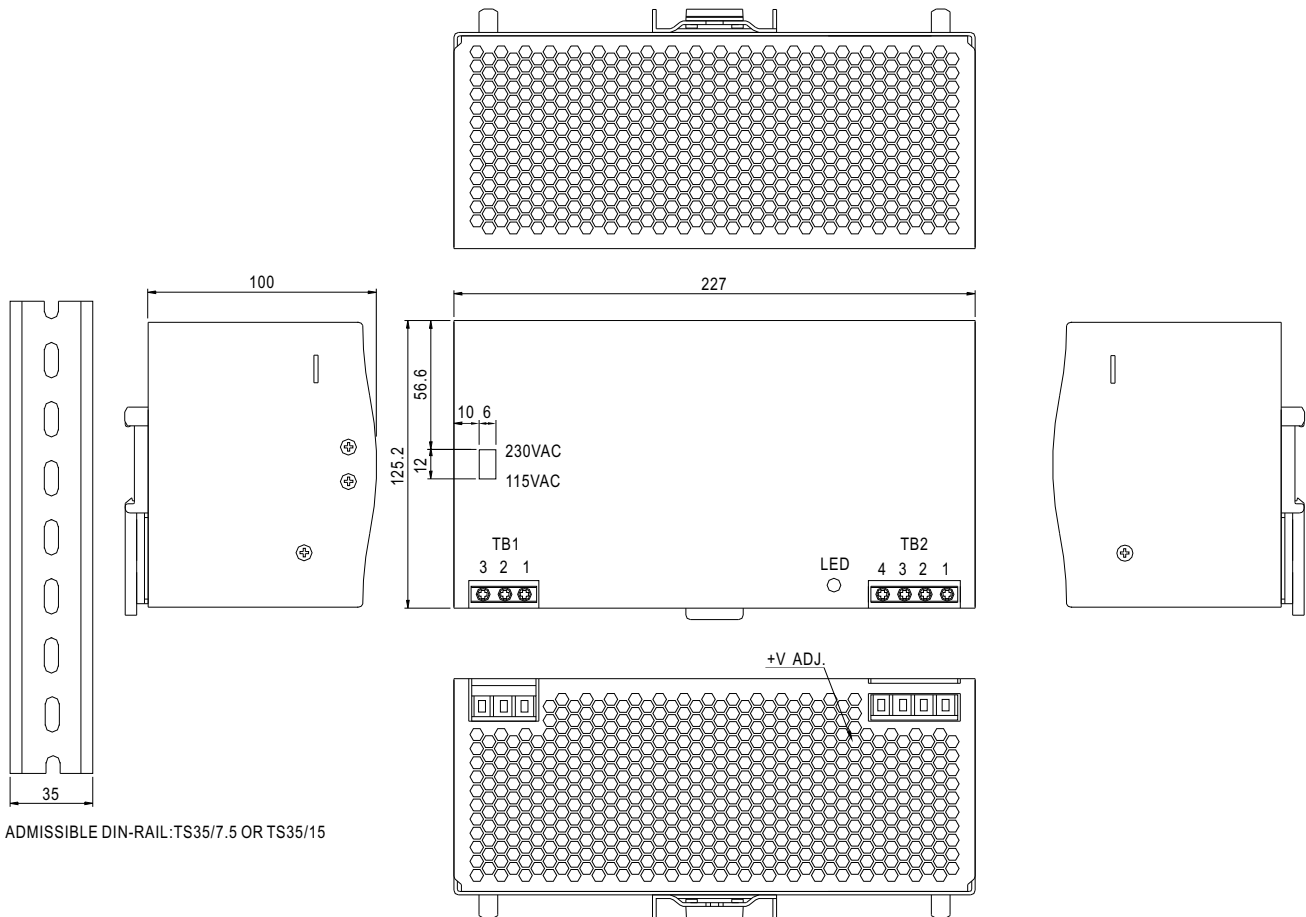


SPECIFICATION

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	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 ~ 55V	
	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, 115VAC at full load		
HOLD TIME (Typ.)	23ms/230VAC, 115VAC at full load			
INPUT	VOLTAGE RANGE	90 ~ 132VAC/180 ~ 264VAC by switch	254 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	≥ 0.7/230VAC only		
	EFFICIENCY (Typ.)	89%		
	AC CURRENT (Typ.)	8A/115VAC	3.2A/230VAC	
	INRUSH CURRENT (Typ.)	COLD START 27A/115VAC	45A/230VAC	
LEAKAGE CURRENT	<3.5mA / 240VAC			
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	30 ~ 36V	59 ~ 66V	
	OVER TEMPERATURE	100°C ±5°C (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°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)		
SAFETY & EMC (Note 4)	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
	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		
	EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B		
	HARMONIC CURRENT	Compliance to EN61000-3-2, -3		
OTHERS	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		
	MTBF	187.9Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	227*125.2*100mm (W*H*D)		
NOTE	PACKING	2.6Kg; 6pcs / 16.6Kg / 1.75CUFT		
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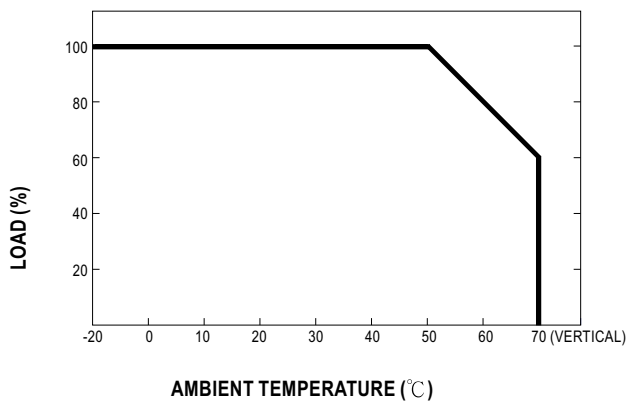
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Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

Derating Curve



Output Derating VS Input Voltage

