



SDR-480P-24 and SDR-480P-48 Power Supply 480W

SDR-480P-24 and SDR-480P-48 are a competitive and economical slim 480W din rail power supply which operates at 93% efficiency. This power supply can be installed on TS-35/7.5 or TS-35/15 mounting rails and the space-efficient dimensions allow space conservation within the cabinets. The entire series adopts the full range AC input from 90VAC to 264VAC and conforms to relevant industrial standards.

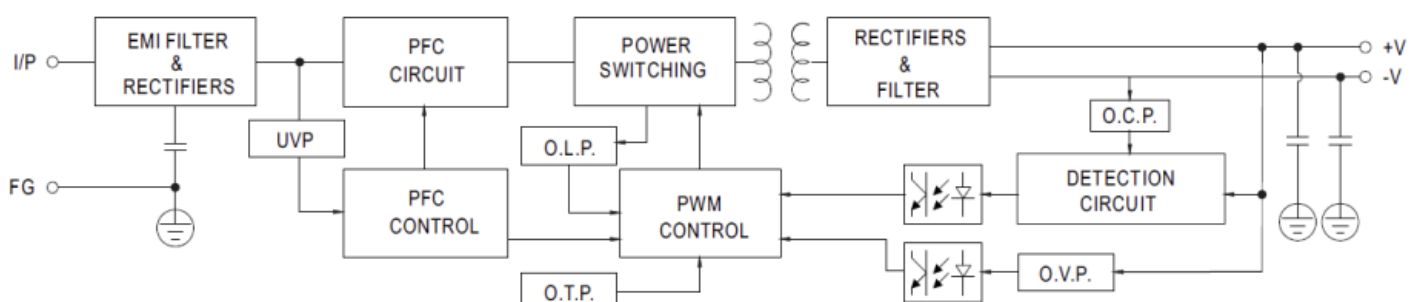


- Universal AC input/full range
- 93% Efficiency
- Compact/space-efficient design
- Built-in active PFC function
- Protections: Short circuit/overload/over voltage/over temperature
- Cooling by free air convection
- UL 508 approved (industrial control equipment)
- EN61000-6-2 (EN50082-2) industrial immunity level
- 100% Full load burn-in test

Ordering Info

Part Number	Description
SDR-480P-24	Power Supply 24V 20A
SDR-480P-48	Power Supply 48V 10A

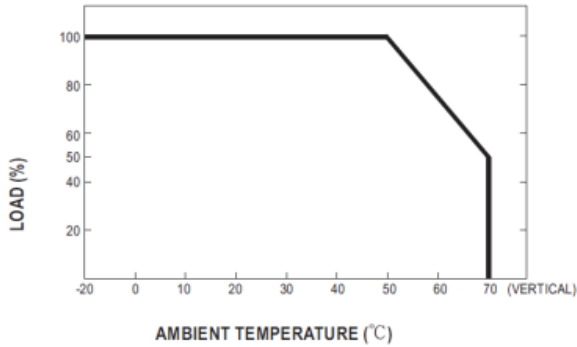
Block Diagram



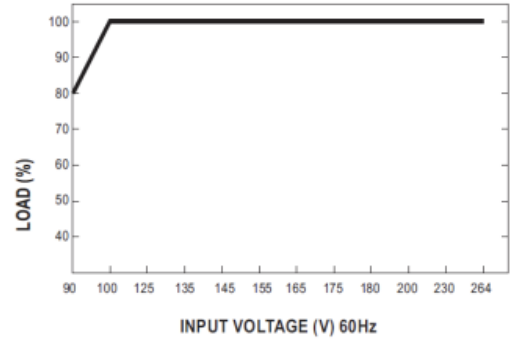
Revision 2.0

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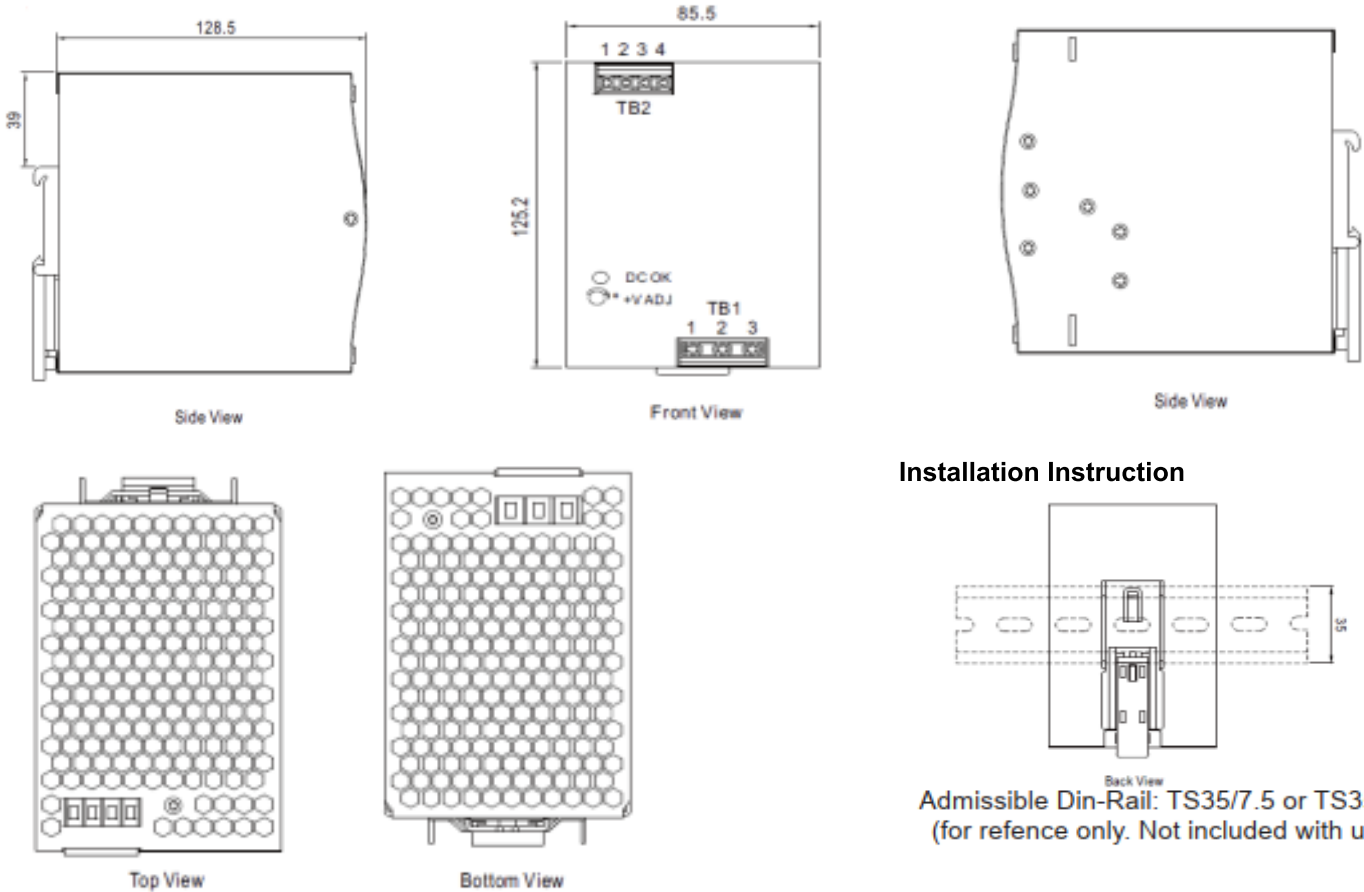
Derating Curve



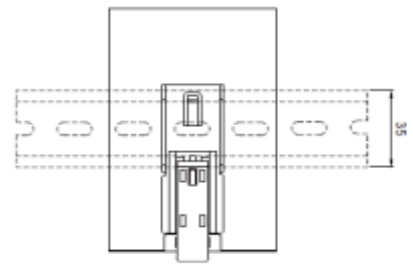
Output Derating VS Input Voltage



Mechanical Specification



Installation Instruction



Admissible Din-Rail: TS35/7.5 or TS35/15
(for reference only. Not included with unit)

Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG
2	AC/N or DC-
3	AC/L or DC+

Terminal Pin No. Assignment (TB2)

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

SDR-480P-24 and SDR-480P-48

Power Supply 480W



Model		SDR-480P-24	SDR-480P-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)	150mVp-p	150mVp-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	1500ms, 100ms/230VAC	3000ms,100ms/ 115VAC at full load
Hold Up Time (Typ.)	16ms/230VAC	16ms/115VAC at full load	
Input	Voltage Range (Note.6)	90 ~ 264VAC	127 ~ 370VDC
	Frequency Range	47 ~ 63Hz	
	Power Factor (Typ.)	PF>0.98/115VAC	PF>0.94/230VAC at full load
	Efficiency (Typ.)	92.5%	
	AC Current (Typ.)	4.8A/115VAC	2.4A/230VAC
	Inrush Current (Typ.)	20A/115VAC	35A/230VAC
	Leakage Current	<2mA/240VAC	
Protection	Overload	105 ~ 130% rated output power Protection type: Constant current limiting, unit will shut down after 3 sec., re-power on to recover	
	Over Voltage	Protection type: Shut down o/p voltage, re- power on to recover	
	Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down	
Environment	Working Temp.	-20 ~ +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./1 cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6	
Safety & EMC	Safety Standards	UL508, 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 EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2,-3	
	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	146.8K hrs min. MIL-HDBK-217F (25°C)	
	Dimension Packing	85.5 x 125.2 x 128.5mm (W x H x D) 1.5Kg; 8pcs/13Kg/0.9CUFT	

Note

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.
- Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
- Tolerance: includes set up tolerance, line regulation and load regulation.
- 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.
- Derating may be needed under low input voltage. Please check the derating curve for more details.
- The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.
- For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
- The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).