## SDR-480 Series

480W Single Output Industrial DIN RAIL with PFC Function Power Supply



## **Features**

- High efficiency 94% and low power dissipation
- 150% peak load capability
- Built-in active PFC function, PF>0.94
- Protections: Short circuit / Overload / Over Voltage Over Temperature
- Built-in constant current limiting
- 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
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty









## **Specification**

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INPUT	Voltage	90V ~ 264VAC 124 ~ 370VDC
	Frequency	47 ~ 63 Hz
	Power Factor	0.94/230VAC 0.99/115VAC at full load
	Current	5A@115VAC 2.5A@230VAC
	Inrush Current (Typ.)	40A@115VAC 80A@230VAC
	Leakage Current	<0.8mA@240VAC
	Efficiency	94% 94%
	MODEL No.	SDR-480-24 SDR-480-48
OUTPUT	Voltage	24V 48V
	Rated Current	20A 10A
	Current Range	0 ~ 20A
	Rated Power	480W 480W
	Peak Current	30A 15A
	Peak Power	720W (3sec)
	Ripple Noise MAX	100mVp-p 120mVp-p
	Voltage Adj. Range	24 ~ 28V 48 ~ 55V
	Voltage Tolerance	± 1.2% ± 1.0%
	Line Regulation	± 0.5% ± 0.5%
	Load Regulation	± 1.0% ± 1.0%
	Setup Rise Time	1500ms, 150ms / 230VAC 3000ms, 150ms / 115VAC at full load
	Holdup Time (Typ.)	14ms / 230VAC at full load
PROTECTION		Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage with auto-recovery
	0verload	>150% rated power, constant current limiting with auto-recovery within 2 seconds and may cause shut down if over 2 seconds
	Over Voltage	29~33V 56~65V
		Protection Type: Shut down o/p voltage with auto-recovery
	Over Temperature	95° C ± 5°C (TSW: detect on heatsink of power switch)
		Protection Type: Shut down o/p voltage, recovers automatically after temperature goes down
FUNCTION	DC OK Realy contact ratings (max.)	60Vdc/0.3A, 30Vdc/1A, 30VAC/0.5A resistive load
ENVIRONMENT	Working Temp.	-25~+70°C (Refer to "Derating Curve")
	Working Humidity	20~95% RH non-condensing
	Storage Temp., Humidity	-40~+85°C, 10~95%RH
	Temp. Co-efficient	±0.03% / °C (0~50°C)
	Vibration	Component: 10~500Hz, 2G 10min./1cycle, 60 min. each along X, Y, Z axes; mounting: Compliance to IEC60068-2-6
SAFETY & EMC	Safety Standards	UL508, TUV EN60950-1 approved, (Meets EN60204-1)
	Withstand Voltage	I/P-OP:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK: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, 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
		SEMI F47, GL approved
OTHERS	MTBF	112.9K hrs min. MIL-HDBK-217F (25°C)
	Packaging	1.6Kg; 8pcs/13.8Kg/0.9CUFT

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

  2. Ripple and 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. Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power.

  6. 3 seconds max, please refer to peak loading curves.

  7. Derating may be needed under low input voltage. Please check the derating curve for more details.

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