

120W Single Output Industrial DIN RAIL with PFC Function

SDR-120 series



Features :

- High efficiency 91% and low power dissipation
- 150% peak load capability
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 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

MODEL		SDR-120-12	SDR-120-24	SDR-120-48
	DC VOLTAGE	12V	24V	48V
OUTPUT	RATED CURRENT	10A	5A	2.5A
	CURRENT RANGE	0~10A	0~5A	0~2.5A
	RATED POWER	120W	120W	120W
	PEAK CURRENT	15A	7.5A	3.75A
	PEAK POWER Note.6	180W (3 sec.)		
	RIPPLE & NOISE (max.) Note.2		100mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	1500ms, 60ms/230VAC 3000ms, 60ms/115VAC at full load		
	HOLD UP TIME (Typ.)	20ms/230VAC 20ms/115VAC at full load		
INPUT	VOLTAGE RANGE Note.7	88 ~ 264VAC 124 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	0.93/230VAC 0.96/115VAC at full loa	d	
	EFFICIENCY (Typ.)	89%	91%	90.5%
	AC CURRENT (Typ.)	1.4A/115VAC 0.7A/230VAC	1	1
	INRUSH CURRENT (Typ.)	35A/115VAC 70A/230VAC		
	LEAKAGE CURRENT	<1mA/240VAC		
PROTECTION	Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage			
	OVERLOAD	>150% rated power, constant current limiting with auto-recovery within 3 seconds and shut down o/p voltage after 3 seconds		
	OVER VOLTAGE	14 ~ 17V	29 ~ 33V	56~65V
		Protection type : Shut down o/p voltage, re	-power on to recover	1
		$95^{\circ}C \pm 5^{\circ}C$ (TSW : detect on heatsink of power switch)		
	OVER TEMPERATURE	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		
	WORKING TEMP.	-25 ~ +70 $^{\circ}$ C (Refer to output load 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./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
	SAFETY STANDARDS	UL508, TUV EN60950-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC		
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH Compliance to EN55022 (CISPR22) Class B		
EMC	EMI CONDUCTION & RADIATION			
(Note 4)	HARMONIC CURRENT	Compliance to EN61000-3-2,-3		
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, SEMI F47, GL approved		
OTHERS	MTBF	289.9Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	40*125.2*113.5mm (W*H*D)		
	PACKING	0.67Kg; 20pcs/14.4Kg/1.16CUFT		
NOTE	 Ripple & noise are measure Tolerance : includes set up The power supply is consid EMC directives. Installation clearances : 40r In case the adjacent device 3 seconds max., please refi 	ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. red at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. to tolerance, line regulation and load regulation. dered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. e is a heat source, 15mm clearance is recommended. fer to peak loading curves. inder low input voltage. Please check the derating curve for more details.		



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