

SDR-120 Series

120W Single Output Industrial DIN Rail with PFC Function



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
- BS EN/EN61000-6-2(BS EN/EN50082-2) industrial immunity level
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty



GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



SPECIFICATION

MODEL	SDR-120-12	SDR-120-24	SDR-120-48	
OUTPUT	DC VOLTAGE	12V	24V	48V
	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 <small>Note.6</small>	180W (3 sec.)		
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p	100mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE <small>Note.3</small>	± 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 <small>Note.7</small>	88 ~ 264VAC 124 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	0.93/230VAC 0.96/115VAC at full load		
	EFFICIENCY (Typ.)	89%	91%	90.5%
	AC CURRENT (Typ.)	1.4A/115VAC 0.7A/230VAC		
	INRUSH CURRENT (Typ.)	35A/115VAC 70A/230VAC		
LEAKAGE CURRENT	<1mA / 240VAC			
PROTECTION	OVERLOAD	Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage >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
	OVER TEMPERATURE	95 ± 5 (TSW) detect on heatsink of power switch Protection type : Shut down o/p voltage, re-power on to recover		
FUNCTION	DC OK REALY CONTACT RATINGS (max.)	60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load		
ENVIRONMENT	WORKING TEMP.	-25 ~ +70 (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +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, TUV BS EN/EN62368-1, AS/NZS 62368.1, EAC TP TC 004, BSMI CNS15598-1 approved;(meet BS EN/EN60204-1)		
	WITHSTAND VOLTAGE	I/P-O/P: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 / 70% RH		
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS15936 Class B		
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2), BS EN/EN61204-3, heavy industry level, EAC TP TC 020, SEMI F47 approved		
	MTBF	1764.6K hrs min. Telcordia SR-332 (Bellcore) ; 292.1K hrs min. MIL-HDBK-217F (25)		
	DIMENSION	40*125.2*113.5mm (W*H*D)		
	PACKING	0.67Kg; 20pcs/14.4Kg/1.02CUFT		
NOTE	<ol style="list-style-type: none"> 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 0.1μ F & 4μ F 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. (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) 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. In case the adjacent device is a heat source, 15mm clearance is recommended. 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. 8. 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). <p>Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>			

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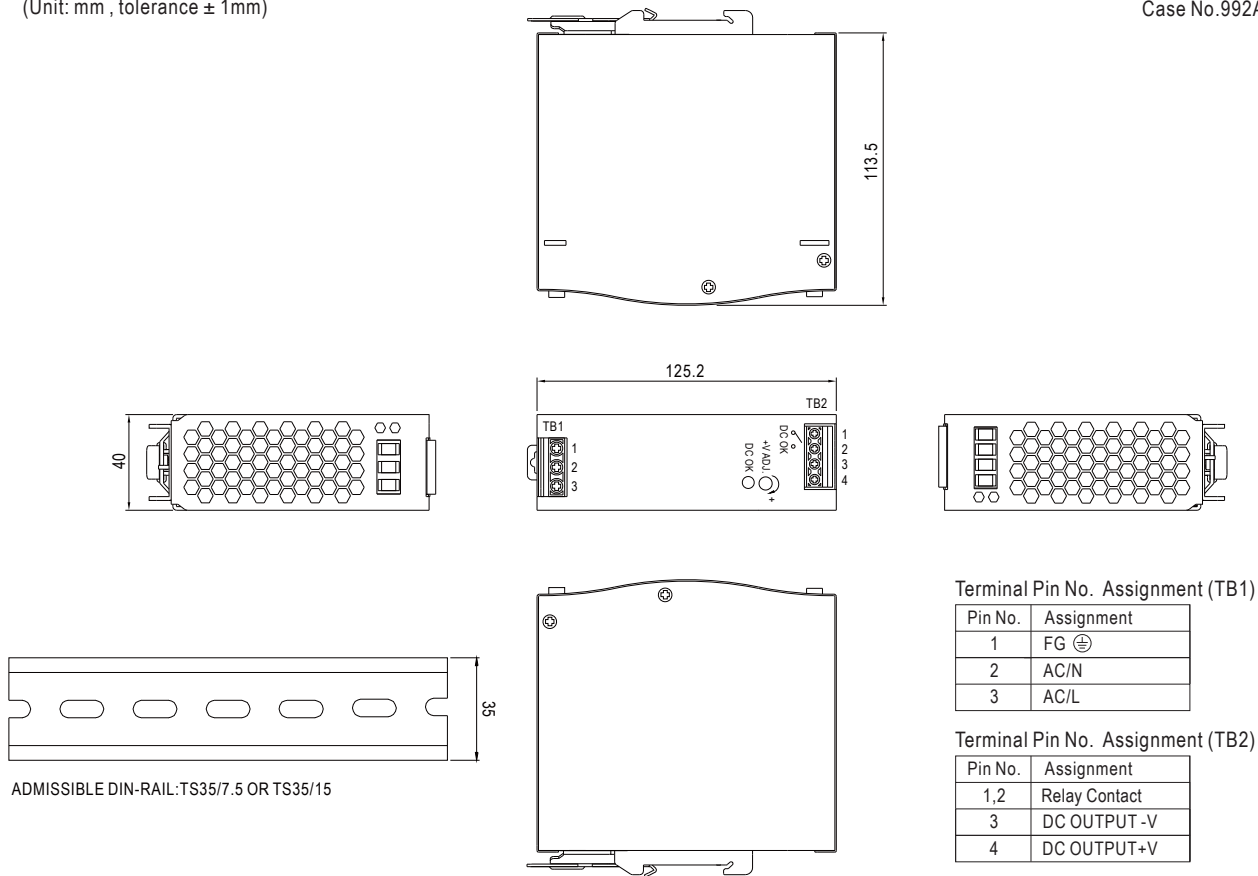
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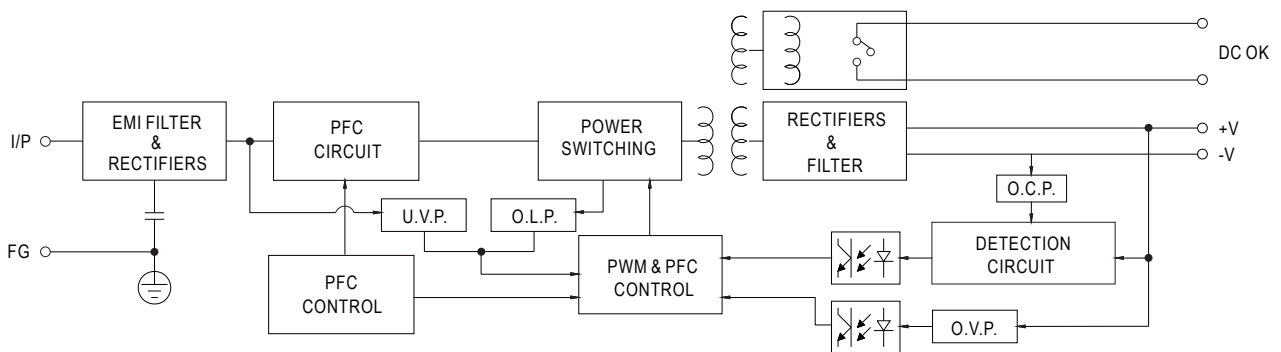
Mechanical Specification

(Unit: mm , tolerance ± 1 mm)

Case No.992A



Block Diagram



DC OK Relay Contact

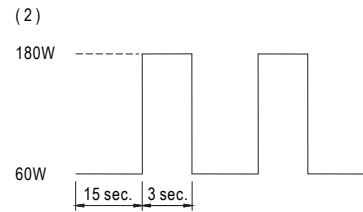
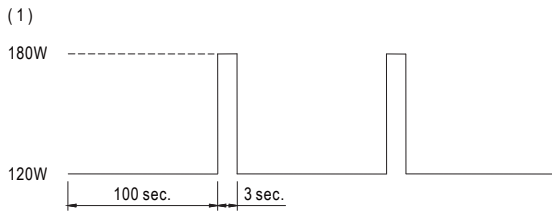
Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

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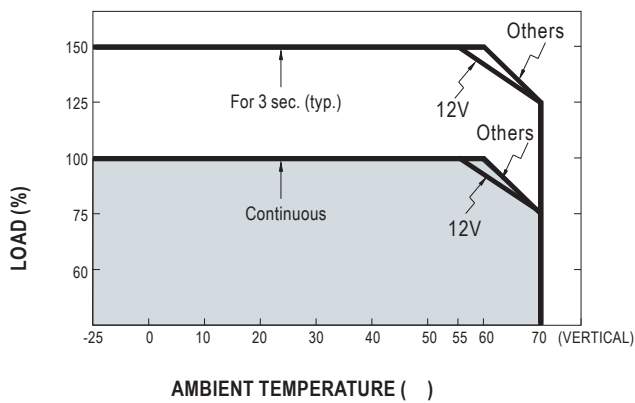
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Peak Loading



Derating Curve



Output derating VS input voltage

