



■ 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

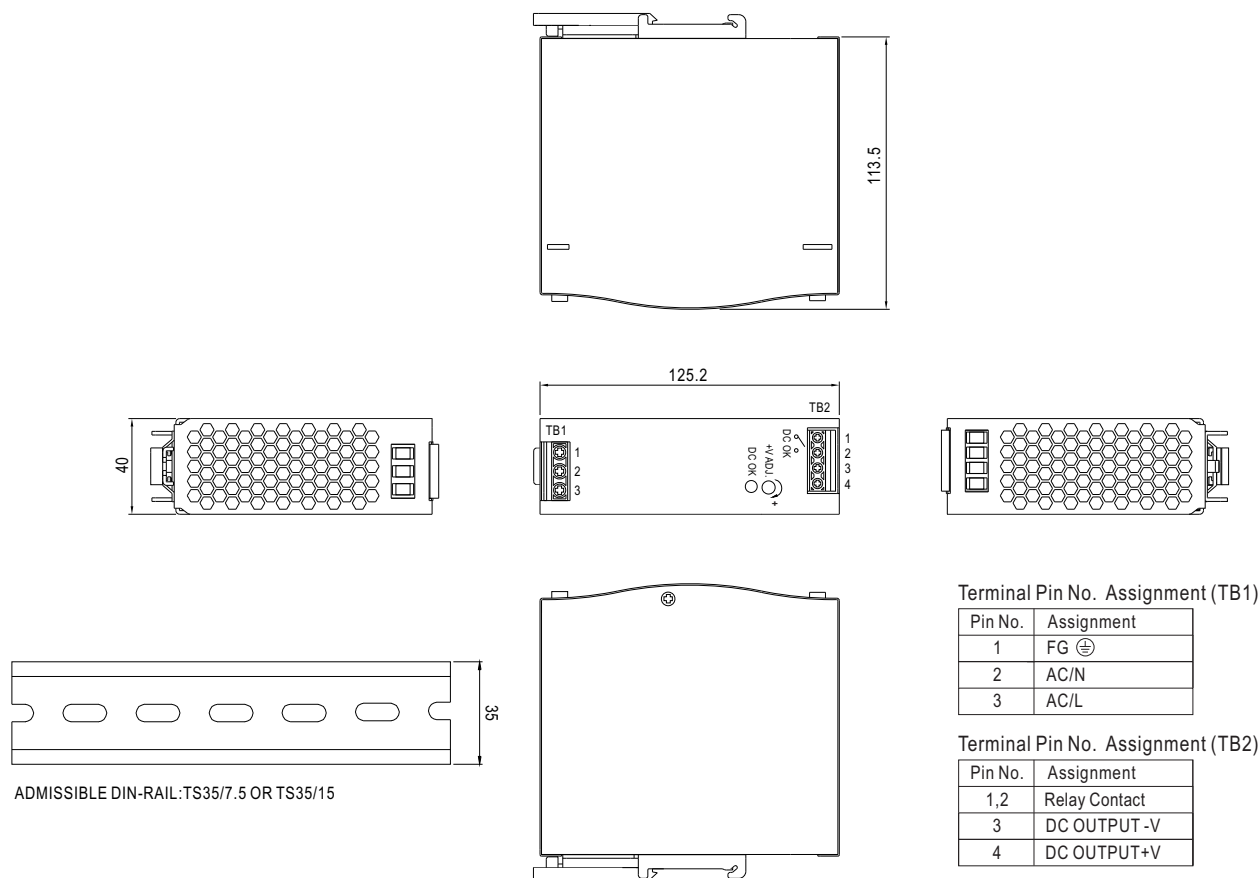


SPECIFICATION

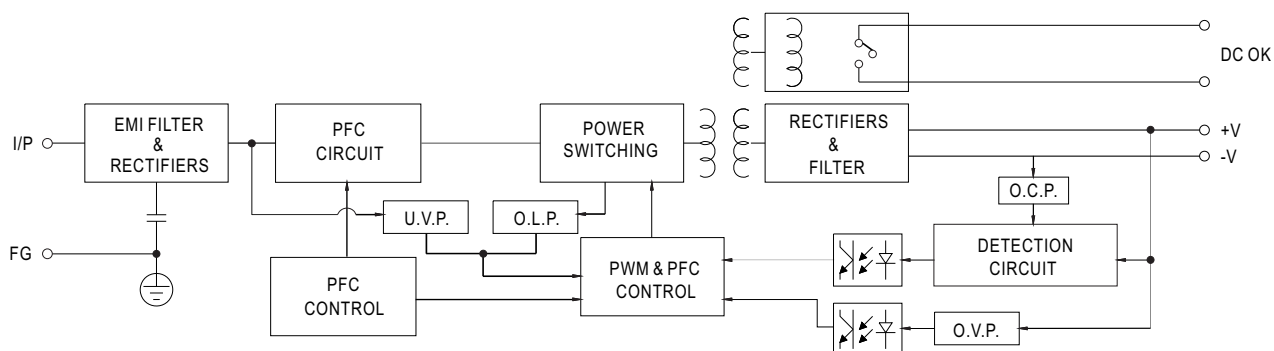
MODEL		SDR-120-12		SDR-120-24		SDR-120-48	
OUTPUT	DC VOLTAGE	12V		24V		48V	
	RATED CURRENT	10A		5A		2.5A	
	CURRENT RANGE	0 ~ 10A		0 ~ 5A		0 ~ 2.5A	
	RATED POWER	120W		120W		120W	
	PEAK CURRENT	15A		7.5A		3.75A	
	PEAK POWER Note.6	180W (3 sec.)					
	RIPPLE & NOISE (max.) Note.2	100mVp-p		100mVp-p		120mVp-p	
	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 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	
		Protection type : Shut down o/p voltage, re-power on to recover					
	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. 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 & EMC (Note 4)	SAFETY STANDARDS	UL508, TUV EN62368-1, EAC TP TC 004, BSMI CNS14336-1 approved;(meet 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°C / 70% RH					
	EMC EMISSION	Compliance to EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020, CNS13438 Class B					
	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, EAC TP TC 020, SEMI F47 approved					
OTHERS	MTBF	289.9K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	40*125.2*113.5mm (W*H*D)					
	PACKING	0.67Kg; 20pcs/14.4Kg/1.16CUFT					
NOTE	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. 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°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).						

Case No.992A Unit:mm

Mechanical Specification



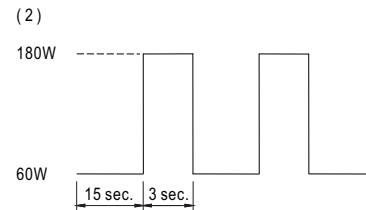
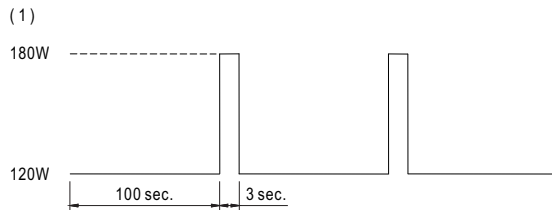
Block Diagram



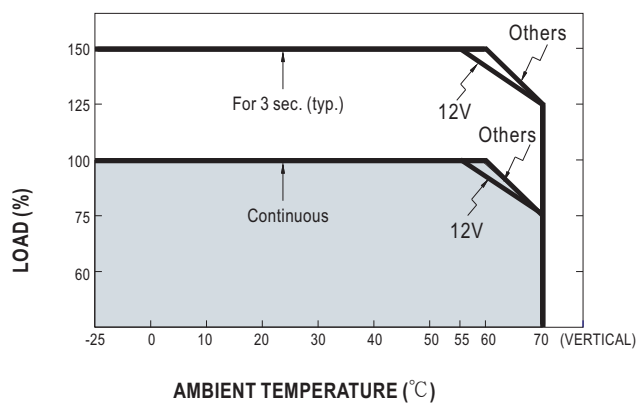
DC OK Relay Contact

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

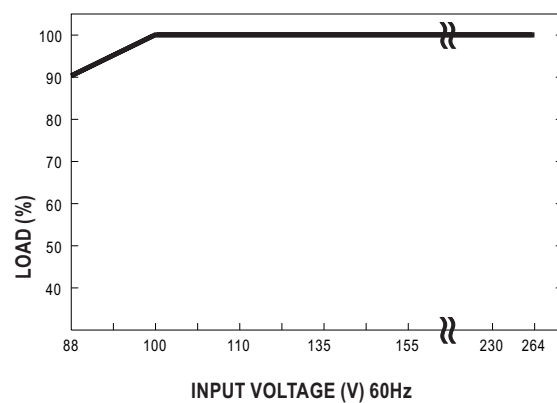
■ Peak Loading



■ Derating Curve



■ Output derating VS input voltage



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advantech:](#)

[BB-SDR-120-48](#)