

**SPECIFICATION** 



#### 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



MODEL		SDR-120-12	SDR-120-24	SDR-120-48		
	DC VOLTAGE	12V	24V	48V		
	RATED CURRENT	10A	5A	2.5A		
	CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 2.5A		
ОИТРИТ	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				
	( ••• )	88 ~ 264VAC 124 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	0.93/230VAC				
INPUT	EFFICIENCY (Typ.)	89%	91%	90.5%		
• .	AC CURRENT (Typ.)	1.4A/115VAC 0.7A/230VAC	0.70	00.070		
	INRUSH CURRENT (Typ.)	35A/115VAC 70A/230VAC				
	LEAKAGE CURRENT	<1mA / 240VAC				
			utput power for more than 3 seconds and the	n shut down o/p voltage		
	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			1	00 000		
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover  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.)	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down  60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load				
FUNCTION	WORKING TEMP.	-25 ~ +70°C (Refer to output load derating curve)				
	WORKING HUMIDITY	20 ~ 95% RH non-condensing				
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH				
ENVIRONMENT	TEMP. COEFFICIENT					
	VIBRATION	±0.03%/°C (0 ~ 50°C )  Component: 10 ~ 500Hz 2G 10min /1cycle 60min each along X X 7 axes: Mounting: Compliance to IEC60068-2-6				
	SAFETY STANDARDS	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6				
	WITHSTAND VOLTAGE	UL508, TUV EN60950-1 approved				
045577.0	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:1.5RVAC				
SAFETY &	EMI CONDUCTION & RADIATION					
EMC (Note 4)	HARMONIC CURRENT	Compliance to EN55022 (CISPR22) Class B  Compliance to EN61000-3-2,-3				
(Note 4)	HARMONIC CORRENT	Compliance to EN61000-3-2,-3  Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level,				
	EMS IMMUNITY	Compilance to EN61000-4-2,3,4,5,6,6,11, EN V50204, EN55024, EN61000-6-2 (EN50062-2), EN61204-3, neavy industry level,   criteria A, SEMI F47 approved				
	MTBF	289.9Khrs min. MIL-HDBK-217F (25°C)				
OTHERS	DIMENSION	40*125.2*113.5mm (W*H*D)				
	PACKING	0.67Kg; 20pcs/14.4Kg/1.16CUFT				
NOTE	<ol> <li>All parameters NOT special</li> <li>Ripple &amp; noise are measure</li> <li>Tolerance: includes set up</li> </ol>	ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  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				

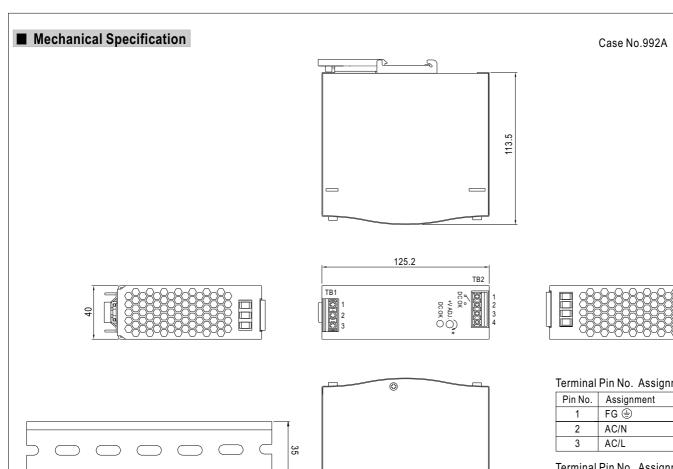
5. Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power.

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

In case the adjacent device is a heat source, 15mm clearance is recommended.

Unit:mm





#### Terminal Pin No. Assignment (TB1)

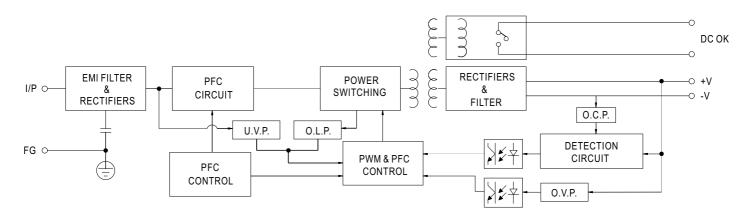
Pin No.	Assignment
1	FG 🖶
2	AC/N
3	AC/L

#### Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1,2	Relay Contact
3	DC OUTPUT -V
4	DC OUTPUT+V

# ■ Block Diagram

ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15

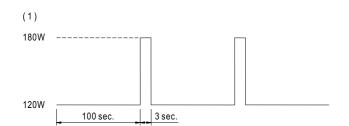


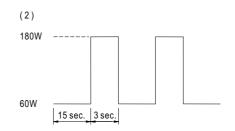
#### ■ DC OK Relay Contact

Contact Close	When the output voltage reaches the adjusted output voltage.	
Contact Open	When the output voltage drop below 90% output voltage.	
Contact Ratings (max.)	30V/1A resistive load	

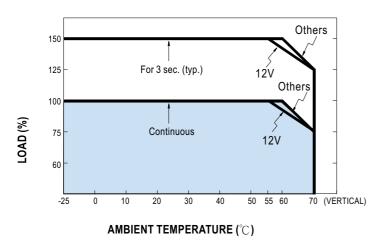


## ■ Peak Loading





### ■ Derating Curve



# ■ Output derating VS input voltage

