



#### ■ 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

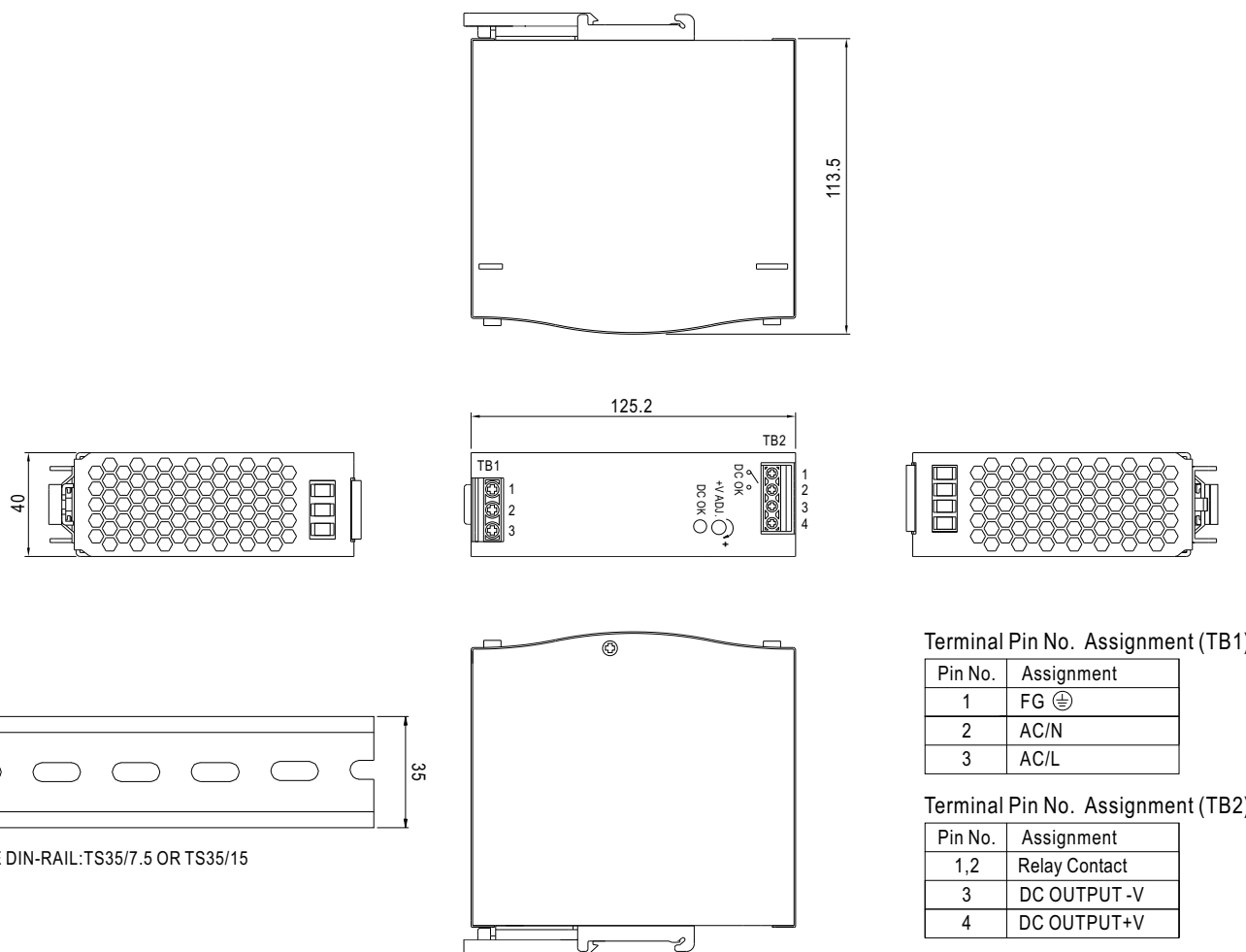


#### SPECIFICATION

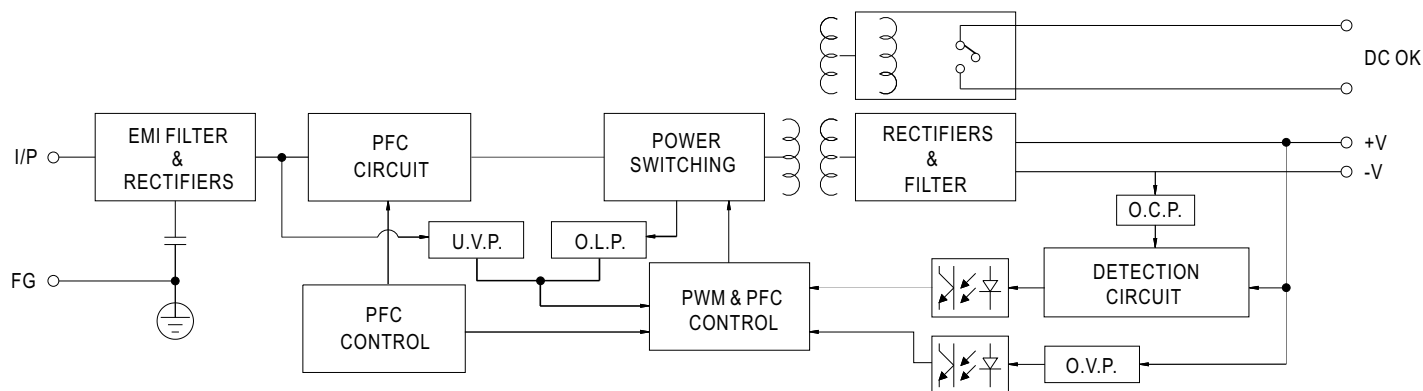
MODEL		SDR-120-12		SDR-120-24		SDR-120-48	
OUTPUT	DC VOLTAGE	12V		24V		48V	
	RATED CURRENT	10A		5A		2.5A	
	CURRENT RANGE	0 ~ 10A		0 ~ 5A		0 ~ 2.5A	
	RATED POWER	120W		120W		120W	
	PEAK CURRENT	15A		7.5A		3.75A	
	PEAK POWER <small>Note.6</small>	180W (3 sec.)					
	RIPPLE & NOISE (max.) <small>Note.2</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	
		Protection type : Shut down o/p voltage, re-power on to recover					
	OVER TEMPERATURE	95℃±5℃ (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℃ (Refer to output load 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 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					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25℃ / 70% RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	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℃)					
	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℃ 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.						

## Mechanical Specification

Case No.992A Unit:mm



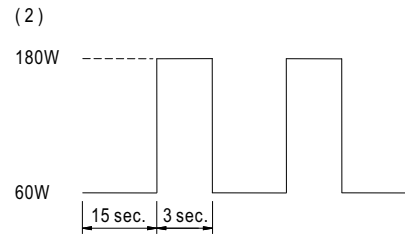
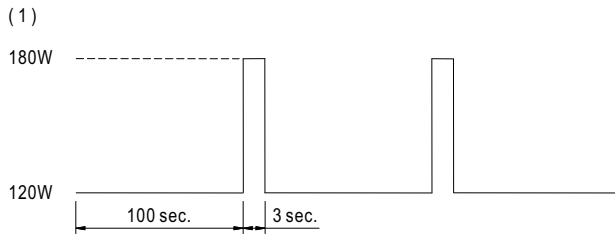
## Block Diagram



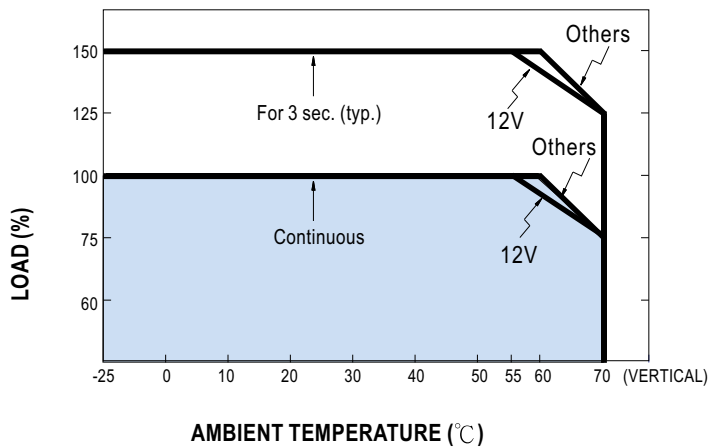
## DC OK Relay Contact

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

