



■ 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

User's Manual



SPECIFICATION

 AS/NZS62368-1
TPTC004

 EAC
EAC

 cUL US
UL508

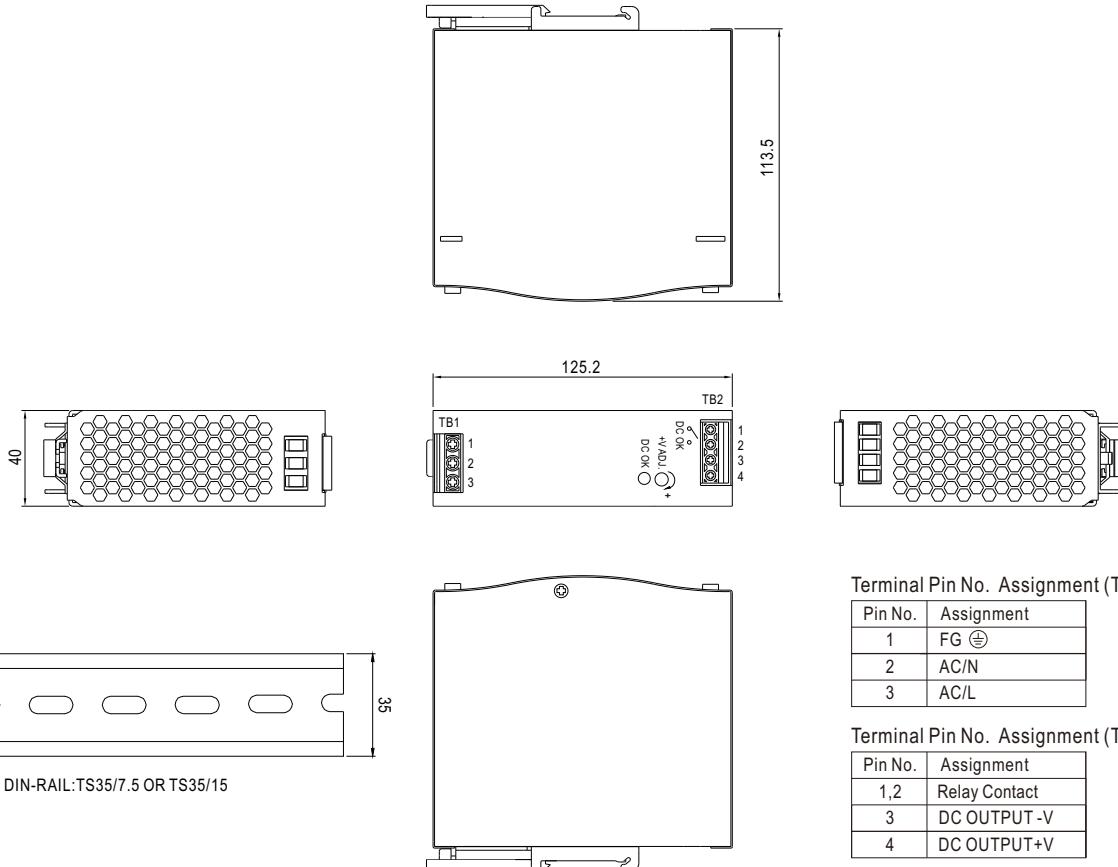
 BS EN/EN62368-1
IEC62368-1

 CB CE UK
CA

MODEL	SDR-120-12	SDR-120-24	SDR-120-48
OUTPUT	DC VOLTAGE	12V	24V
	RATED CURRENT	10A	5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A
	RATED POWER	120W	120W
	PEAK CURRENT	15A	7.5A
	PEAK POWER Note.6	180W (3 sec.)	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%
INPUT	LOAD REGULATION	±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
	VOLTAGE RANGE Note.7	88 ~ 264VAC	124 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR (Typ.)	0.93/230VAC	0.96/115VAC at full load
PROTECTION	EFFICIENCY (Typ.)	89%	91%
	AC CURRENT (Typ.)	1.4A/115VAC	0.7A/230VAC
	INRUSH CURRENT (Typ.)	35A/115VAC	70A/230VAC
	LEAKAGE CURRENT	<1mA / 240VAC	
	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
FUNCTION	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover	
	PROTECTION	95°C ±5°C (TSW) detect on heatsink of power switch	
	FUNCTION	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down	
	DC OK RELAY CONTACT RATINGS (max.)	60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load	
	WORKING TEMP.	-25 ~ +70°C (Refer to "Derating Curve")	
ENVIRONMENT	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 BS EN/EN62368-1, AS/NZS 62368.1, EAC TP TC 004, BSMI CNS14336-1 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°C / 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, CNS13438 Class B	
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024, BS EN/EN61000-6-2 (BS EN/EN50082-2), BS EN/EN61204-3, heavy industry level, criteria A, EAC TP TC 020, SEMI F47 approved	
OTHERS	MTBF	289.9 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). * Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx		

■ Mechanical Specification

Case No.992A Unit:mm



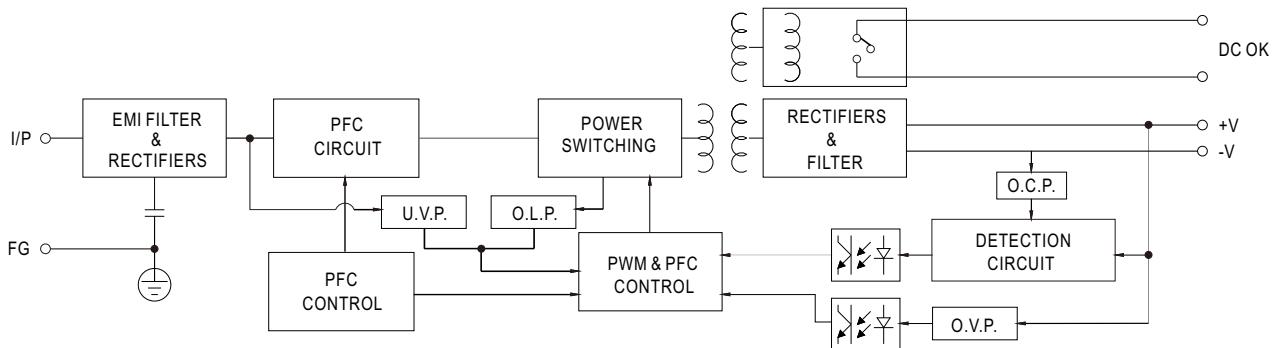
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG (Ground)
2	AC/N (Neutral)
3	AC/L (Live)

Terminal Pin No. Assignment (TB2)

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

■ Block Diagram

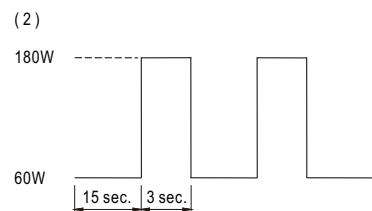
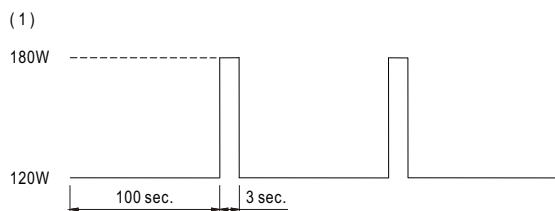
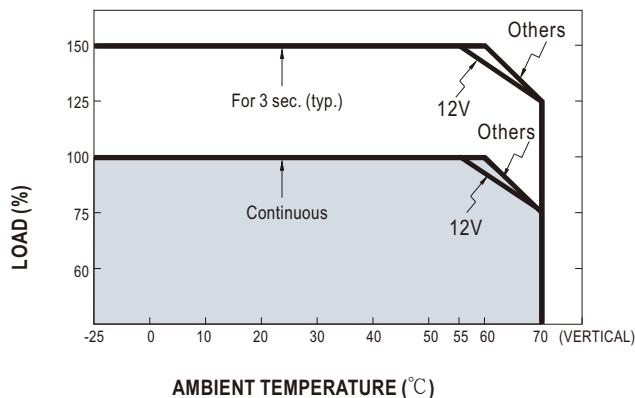


■ DC OK Relay Contact

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



120W Single Output Industrial DIN RAIL with PFC Function

SDR-120 series**■ Peak Loading****■ Derating Curve****■ Output derating VS input voltage**