



240W Single Output Industrial DIN RAIL with PFC Function

SDR-240 series



■ Features :

- High efficiency 94% 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

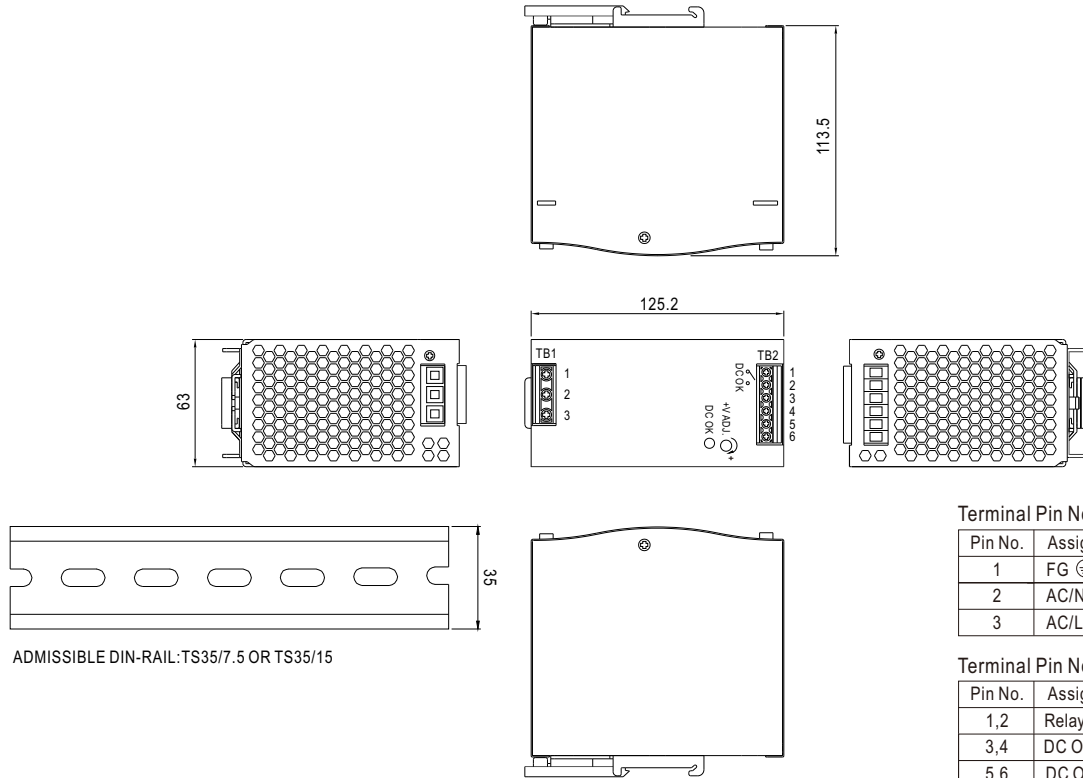


SPECIFICATION

MODEL		SDR-240-24		SDR-240-48	
OUTPUT	DC VOLTAGE	24V		48V	
	RATED CURRENT	10A		5A	
	CURRENT RANGE	0 ~ 10A		0 ~ 5A	
	RATED POWER	240W		240W	
	PEAK CURRENT	15A		7.5A	
	PEAK POWER <small>Note.6</small>	360W (3sec.)			
	RIPPLE & NOISE (max.) <small>Note.2</small>	50mVp-p		50mVp-p	
	VOLTAGE ADJ. RANGE	24 ~ 28V		48 ~ 55V	
	VOLTAGE TOLERANCE <small>Note.3</small>	± 1.0%		± 1.0%	
	LINE REGULATION	± 0.5%		± 0.5%	
	LOAD REGULATION	± 1.0%		± 1.0%	
	SETUP, RISE TIME	650ms, 60ms/230VAC 1300ms, 60ms/115VAC at full load			
HOLD UP TIME (Typ.)	20ms/230VAC 20ms/115VAC at full load				
INPUT	VOLTAGE RANGE	88 ~ 264VAC 124 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR (Typ.)	0.94/230VAC 0.99/115VAC at full load			
	EFFICIENCY (Typ.) <small>Note.8</small>	94%			
	AC CURRENT (Typ.)	2.6A/115VAC 1.3A/230VAC			
	INRUSH CURRENT (Typ.)	33A/115VAC 55A/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 with auto-recovery >150% rated power, constant current limiting with auto-recovery within 2 seconds and may cause to shut down if over 2 seconds			
	OVER VOLTAGE	29 ~ 33V		56 ~ 65V	
		Protection type : Shut down o/p voltage with auto-recovery			
	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. <small>Note.5</small>	-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 <small>(Note 4)</small>	SAFETY STANDARDS	UL508, TUV BS EN/EN62368-1, AS/NZS 62368.1, EAC TP TC 004 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			
	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	169.3K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	63*125.2*113.5mm (W*H*D)			
	PACKING	1.03Kg; 12pcs/13.4Kg/1.22CUFT			
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. After 30 minutes of burn-in. 9. 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. 979A Unit:mm



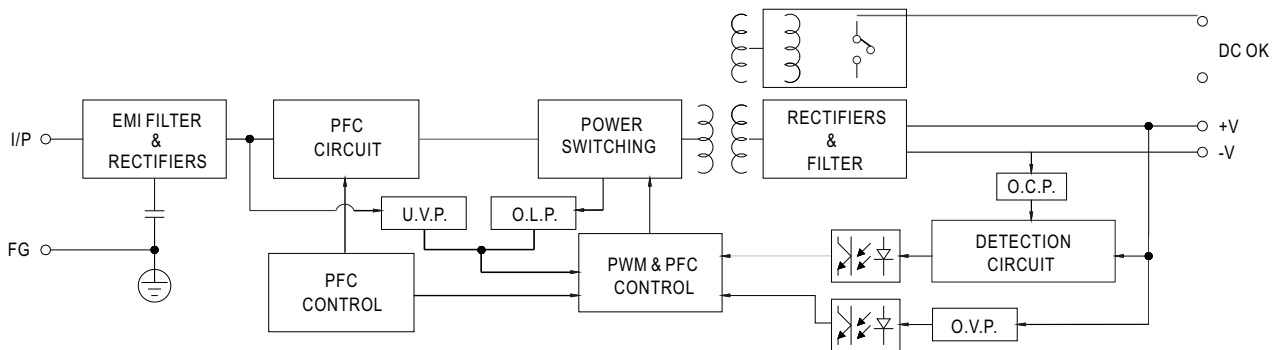
Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1,2	Relay Contact
3,4	DC OUTPUT +V
5,6	DC OUTPUT -V

Block Diagram



DC OK Relay Contact

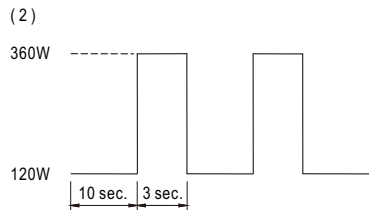
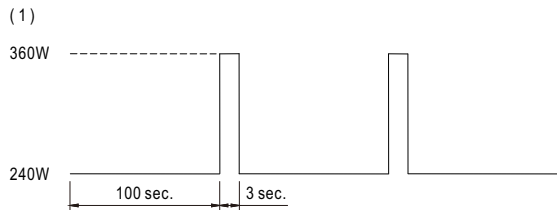
Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.



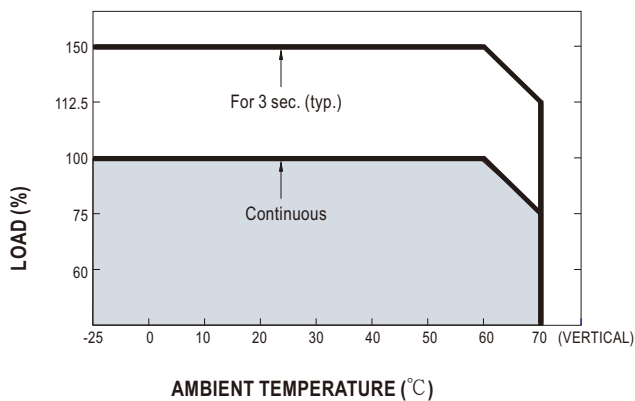
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■ Peak Loading



■ Derating Curve



■ Output derating VS input voltage

