

SDR-240 Series

240W Single Output Industrial DIN RAIL with PFC Function Power Supply



Case No: 8010AE
125.2 x 113.5 x 63 mm

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
- EN61000-6-2(EN50082-2) industrial immunity level
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty



Specification

INPUT	Voltage	88V ~ 264VAC	124 ~ 370VDC
	Frequency	47 ~ 63 Hz	
	Power Factor	0.93/230VAC	0.99/115VAC at full load
	Current	2.6A@115VAC	1.3A@230VAC
	Inrush Current (Typ.)	33A@115VAC	65A@230VAC
	Leakage Current	<1mA@240VAC	
	Efficiency	94%	94%
	MODEL No.	SDR-240-24	SDR-240-48
OUTPUT	Voltage	24V	48V
	Rated Current	10A	5A
	Current Range	0 ~ 10A	0 ~ 5A
	Rated Power	240W	240W
	Peak Current	15A	7.5A
	Peak Power	360W (3sec)	
	Ripple Noise MAX	100mVp-p	120mVp-p
	Voltage Adj. Range	24 ~ 28V	48 ~ 55V
	Voltage Tolerance	± 1.0%	± 1.0%
	Line Regulation	± 0.5%	± 0.5%
	Load Regulation	± 1.0%	± 1.0%
Setup Rise Time	1500ms, 60ms / 230VAC	3000ms, 60ms / 115VAC at full load	
Holdup Time (Typ.)	20ms / 230VAC	20ms / 115VAC at full load	
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 shut down if over 2 seconds	
	Over Voltage	29~33V	56~65V
	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 Relay 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. Co-efficient	±0.03% / °C (0~50°C)	
	Vibration	Component: 10~500Hz, 2G 10min./1cycle, 60 min. each along X, Y, Z axes; mounting: Compliance to IEC60068-2-6	
SAFETY & EMC	Safety Standards	UL508, TUV EN60950-1 approved, (Meets 60204-1)	
	Withstand Voltage	I/P-OP: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 EN55011, EN55022 (CISPR22). EN61204-3 Class B, EN61000-3-2,-3	
	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 SEMI F47, GL approved	
OTHERS	MTBF	169.3K hrs min. MIL-HDBK-217F (25°C)	
	Packaging	1.03Kg; 12pcs/13.4Kg/1.06CUFT	

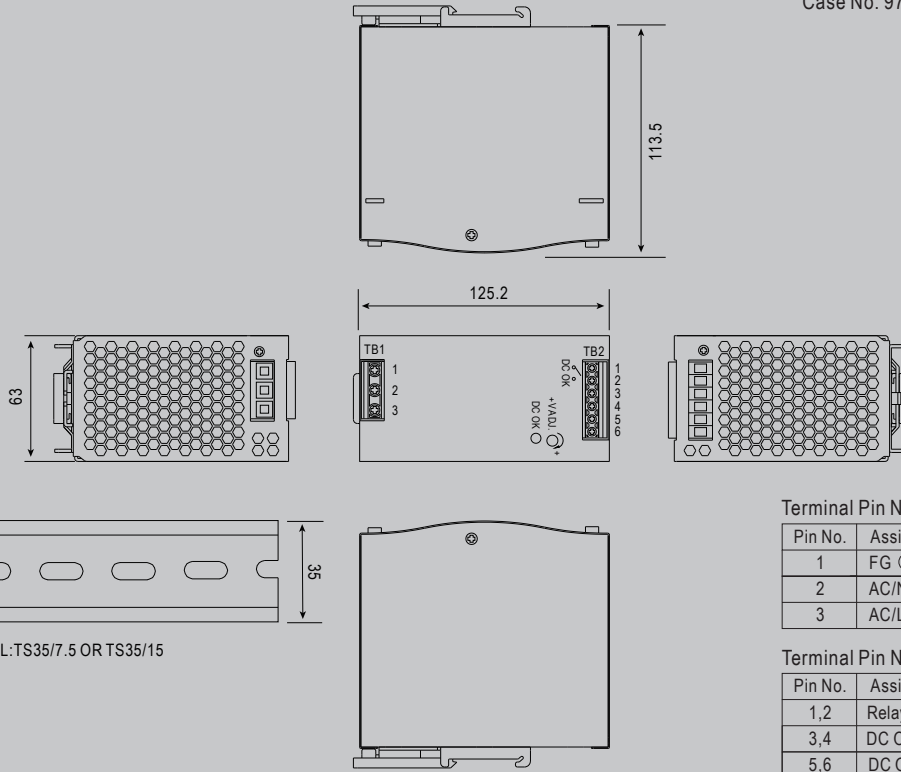
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line 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.
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.

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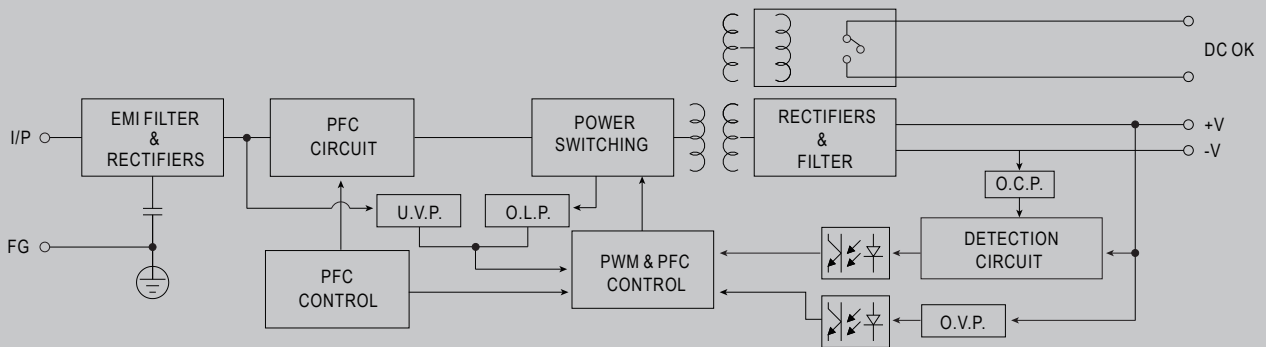
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Power Supply

Mechanical Specification

Case No. 979A Unit:mm



Block Diagram

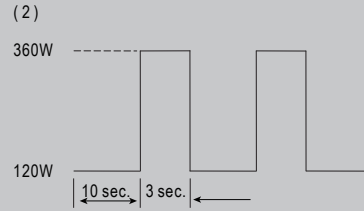
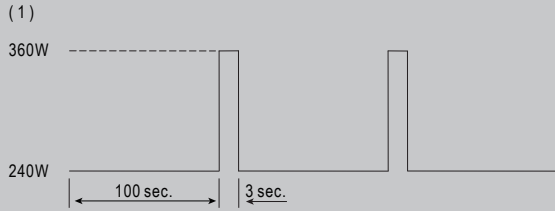


Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

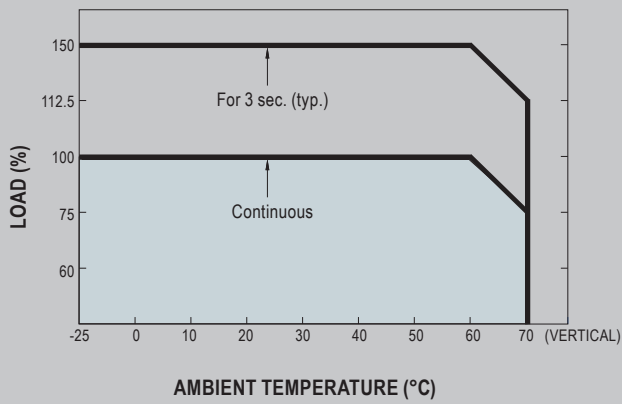
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Peak Loading



Derating Curve



Output derating VS input voltage

